Corporate Commitment to Diversity, Equity, and Inclusion and Employee Productivity*

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February 2022

Abstract:

Using corporate disclosures of diversity, equity, and inclusion (DEI) related objectives and measures in 10-K filings, we show that a commitment to DEI at the employee level is positively related to employee productivity and that this relation decreases with financial constraints. We provide evidence that the positive effects of DEI commitment on employee productivity are likely attributable to increased employee satisfaction and greater corporate innovation. Additional analyses show that our results are not driven by higher profitability, self-selection, or board-level diversity. Our findings provide novel evidence on the positive economic implications of committing to DEI at the employee level and shed light on the recent focus on environmental, social, and governance issues.

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1. Introduction

Recent years have witnessed U.S. corporations making significant strides towards enhancing diversity, equity, and inclusion (DEI) due to the growing emphasis on environmental, social, and governance (ESG) issues. For example, a Bureau of Labor Statistics (2019) report shows that the difference in unemployment rates and wages in the U.S. between people who are white and other ethnicities has significantly narrowed from 1973 to 2018. Additionally, 51 companies in the S&P 500, including Starbucks, McDonald's, and Raytheon Technologies, recently introduced a DEI component to their executive pay programs (SHRM 2021). Despite these efforts, there is still significant inequality in the U.S. workforce (Roberts and Mayo 2019; Livingston 2020). Furthermore, our understanding of the economic implications of a commitment to workforce DEI is limited because of the difficulty in identifying such a commitment at the employee level.

In this study, we take advantage of corporate human capital management disclosures recently mandated by the Securities and Exchange Commission (SEC) to identify DEI-related commitment. Recognizing the human capital as a focus of management and an important driver of performance (SEC 2020), effective November 9, 2020, the SEC mandates a registrant provide principles-based information regarding its material human capital measures or objectives that the registrant focuses on in managing the business (SEC 2020). In the subsequent human capital management disclosures firms filed with the SEC, measures and objectives related to DEI in the workforce are among the most disclosed items, and they are often more prominent than other common material employment matters such as safety, labor relations, compensation, or oversight

(EY 2021; PwC 2021). Because the principles-based rule requires disclosing human capital measures or objectives that the firm deems to be material, we view a firm's decision to include DEI in these disclosures as a unique opportunity to identify a firm's commitment to DEI at the employee level.

We specifically examine the relation between corporate DEI commitment and employee productivity. Practitioners posit that business organizations receive significant benefits from a commitment to DEI, such as engaged and energized talent, better connections with external entities across the supply chain and their customer base, stronger innovation, a better brand, and improved business performance (Kick 2019; Mercer 2020). A limited set of academic studies also document that firms' commitment to DEI can lead to higher employee satisfaction (Williams and Bauer 1994; Dwertmann, Nishii, and Knippenberg 2016; Rabl, Triana, Byun, and Bosch 2020). Another line of research suggests that diversity brings in a different background, perspective, knowledge, and experience. These differences facilitate innovation (Phillips 2014), which can increase corporate competitive advantages and production efficiencies. With these benefits, we expect that a firm's DEI commitment positively affects employee productivity.

This prediction is not without tension. While research on DEI is relatively limited, prior evidence on the effects of corporate social responsibilities (CSR) commitments on firm performance or value is mixed (Christiensen, Hail, and Leuz 2021).[1] Some studies highlight that investing in CSR activities involves substantial direct costs and hence requires financial flexibility. These studies show that financially constrained firms are less likely to engage in CSR activities (Hong, Kubik, and Sheinkman 2012). Given that DEI commitment can be financially costly, firms with DEI commitment but limited financial flexibility may not realize productivity benefits.

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[1] Similar to Christiensen, Hail, and Leuz 2021, we use CSR and/or ESG to broadly refer to sustainability and social activities.

Furthermore, CSR-related activities may induce agency problems (Benabou and Tirole 2010; Masulis and Reza 2015), may lower firm value (Manchiraju and Rajgopal 2017), and may lower financial flexibility necessary to respond to macroeconomic shocks (Becchetti, Ciciretti, and Hasan 2015). These potential costs suggest that committing to DEI may not lead to higher employee productivity.

We test our research hypothesis using a sample of 2,228 publicly-listed U.S. firms with at least 100 employees. For each firm, we parse out the human capital disclosure in its 2020 10-K form and use a keyword search to identify firms with explicit reference to DEI issues within their disclosure. As discussed earlier, we consider these firms to view DEI as a priority and commit to DEI. We identify 80.1% of our sample firms commit to DEI, which is in line with several practitioner studies of the human capital disclosures (Aon 2021; EY 2021; PwC 2021). Determinant analyses show that firms with larger size, greater growth opportunities, lower gross profit margin, higher intangible intensity, and larger workforce are more likely to commit to DEI. These results suggest that business resources and the nature of the labor force are important determinants of corporate DEI commitment.

One concern for our approach to identify DEI commitment at the employee level is that it is based on firms' self-disclosed information. It is not clear if these disclosures credibly reflect a firm's true actions related to DEI.[2] Before proceeding to test our hypothesis, we first validate our measure by examining its association with employees' perceived DEI strength (obtained via Glassdoor). We find a positive and significant association, suggesting the validity of our DEI measure.

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[2] See SEC (2020) for a summary of the numerous comment letters that question the informativeness and credibility of the proposed human capital disclosures.

Under the assumption that firms' human capital policies are relatively stable over a short period, we use both 2019 and 2020 data to test our hypothesis to mitigate the concern that the year 2020 is unduly affected by the COVID-19 pandemic.[3] We use the log of sales per employee to proxy for employee productivity (Cronqvist, Heyman, Nilsson, Svaleryd, and Vlachos 2009). We provide evidence of a positive association between the DEI commitment and employee productivity in a model that includes industry fixed effects as well as numerous firm characteristics. We estimate that the incremental increase in employee productivity associated with a commitment to DEI ranges between 18% and 22% of the standard deviation of employee productivity. Thus, our findings are both statistically and economically significant.

Hong, Kubik, and Sheinkman 2012 suggest that financial constraint is critical in firms' decisions to engage in socially responsible activities. Specifically, financially constrained firms may not be able to properly invest in CSR activities because they can be costly to implement (Asare 2020). Accordingly, we posit that firms with sufficient financial slack are more likely to implement the commitment effectively and enjoy the productivity benefits, whereas those without sufficient slack do not. Consistent with this expectation, we find that the positive relation between diversity policy and employee productivity significantly decreases with financial constraints. This result underscores the financial costs of effectively implementing a human capital management policy that commits to DEI.

To shed light on the mechanism by which a commitment to DEI may affect employee productivity, we explore the relation between a commitment to DEI and (i) employee satisfaction

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[3] During the COVID-19 pandemic the workforce and workplace significantly changed, and it generally came at a greater cost to more diverse workforce with more minorities or women (Adams-Prassl, Boneva, Golin, and Rauh 2020; Couch, Fairlie, and Xu 2020). We find that COVID-19 significantly decreases employee productivity. There is also some evidence that the positive effects of the diversity policy on employee productivity decreases in 2020 with the shock of the pandemic. However, the effects of DEI commitment on employee productivity remain significant whether we examine 2019 and 2020 separately or combined.

(Williams and Bauer 1994; Dwertmann, Nishii, and Knippenberg 2016; Rabl, Triana, Byun, and Bosch 2020) and (ii) innovation activities (Phillips 2014). Using employee ratings of their employers on Glassdoor and R&D expenditures as our proxies for employee satisfaction and innovation activities, respectively, we find support for both mechanisms.

We consider two alternative explanations to our findings. First, firms commit to DEI only when they are more profitable,[4] which also manifests in higher employee productivity. We thus examine if firms with a DEI commitment have higher contemporaneous ROA. While this is true, we find that the significant relation between DEI commitment and ROA disappears once we control for contemporaneous employee productivity, indicating that DEI commitment affects ROA only through employee productivity. This result is important because if ROA drives the DEI commitment, then the relation between them should be significant regardless of the employee productivity. Second, firms' disclosures of DEI-related objectives and measures are endogenous, and our results could be attributable to self-selection. We address this alternative explanation by employing an exogenous instrumental variable based on state-level diversity index compiled by the Census Bureau in a two-stage least-squares analysis. Our inferences remain unchanged.

Our final analyses examine the relation among board diversity, commitment to DEI at the employee level, and employee productivity. We find that board diversity is not associated with commitment to DEI, while board independence and board size are positively associated with this commitment. Furthermore, board diversity does not affect employee productivity. Importantly, we continue to find a significantly positive association between DEI commitment and employee productivity even after controlling for board diversity and other board characteristics.

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[4] That is, instead of "doing well by doing good," firms "do good only when doing well." (Hong, Kubik, and Sheinkman 2012).

This paper contributes to the emerging ESG/CSR literature by examining firms' commitment to DEI at the workplace. An important social component of ESG and CSR issues, DEI has become a crucial and transformational factor in the workplace and society. Recent academic research has started to perform large sample analyses of diversity-related issues. However, this line of research has primarily focused on diversity on the board or in the C-suite (Harjoto, Laksmana, and Lee 2015; Bernile, Bhagway, and Yonker 2018; Griffin, Li, and Xu 2021). Research at the employee level is scarce and often based on experiments or surveys (Williams and Bauer 1994; Rabl, Triana, Byun, and Bosch 2020), largely due to the lack of a large sample of employee-level data on DEI policy or DEI management.[5] Using the recently mandated human capital disclosures, we provide a novel way to capture the degree to which firms prioritize DEI in human capital management, an important and material consideration that can have wide-ranging effects (EY 2021; SHRM 2021). Our evidence that firms with a material commitment to DEI have higher employee productivity suggests positive economic implications of committing to a diverse, equal, and inclusive workforce. Furthermore, our evidence related to financial flexibility provides important insights on the costs of DEI commitment, and our results on employee satisfaction and R&D investments shed light on the mechanisms through which such a commitment benefits employee productivity.

Our research also illuminates the recently mandated human capital disclosure that is part of the SEC's continuing effort to improve regulations on ESG related issues. This new disclosure mandate adopts a principles-based approach, which has been subject to much debate. Opponents express concerns that the principles-based approach would not likely elicit meaningful information

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[5] For example, data from MSCI KLD STATS only provides diversity strength and concerns on board diversity. KLD discontinued its coverage of diversity issues in executive promotion in 2011; another index on controversies on diversity issues is poorly populated, with less than 1% of observations indicating the existence of diversity-related controversies.

about human capital practices or provide sufficiently comparable disclosure unless grounded in standardized metrics (SEC 2020). In response to the call in Christiensen, Hail, and Leuz 2021 for economic analysis on mandatory ESG disclosure requirements, our study documents the informativeness of DEI disclosures under the principles-based approach. This result supports the premise by the SEC that the principles-based approach improves the ability of each firm to tailor its disclosure to discuss only issues of particular importance to the firm (SEC 2020).

Our findings are informative to the SEC, which is already in the process of designing a follow-up rule that could potentially require firms to provide more quantitative information about DEI (Johnson 2021). Our results suggest that our sample firms' first-year human capital disclosures appear to be principles-based in nature and credibly reflect material DEI-related human capital measures and objectives. We do caution, however, that because of the difficulty of verification, assurance, and enforcement under a principles-based disclosure approach, as time goes by, firms could provide boilerplate DEI disclosures not because they view DEI as a priority but because of pressures from various stakeholders or peer disclosures. Standard setters need to consider ways to decrease the likelihood of boilerplate or immaterial disclosures; more detailed, quantitative disclosures may substantiate the DEI disclosures and enhance financial statement users' understanding of firms' commitment to DEI.

2. Background and Hypothesis

2.1 Mandatory Human Capital Disclosure

Before the issuance of the rule "Modernization of Regulation S-K Items 101, 103, and 105" (SEC 2020), Item 101(c)(1)(xiii) under Regulation S-K only requires disclosure of the number of persons employed by the registrant on human capital related issues. Under the new rule, Regulation

S-K Item 101(c)(2)(ii) requires a description of the registrant's human capital resources, including the number of persons employed by the registrant and any human capital measures or objectives that the registrant focuses on in managing the business. In particular, firms must disclose "a description of the registrant's human capital resources to the extent such disclosures would be *material* to an understanding of the registrant's business" (SEC 2020, Item 101(c)).

The majority of the comment letters on the rule at its proposal stage supported the inclusion of human capital as a disclosure topic under Regulation S-K. However, *what* specific disclosures the SEC should require in the final rule is where many comment letter writers differed, especially on the "principles-based" approach of the proposal. This approach reflects the SEC's long-standing commitment to a principles-based, registrant-specific approach to disclosure. The SEC states that the disclosure requirements are rooted in materiality and facilitate understanding a registrant's business, financial condition, and prospects (SEC 2020). [6] Many respondents felt as though following a more "principles-based' approach to the disclosure requirements would maximize the effectiveness and efficiency of these disclosures. For example, General Motors 2019 noted, "Given the more qualitative nature of human capital disclosures, a principles-based approach would be more appropriate than a static, prescriptive regime that may be rendered less relevant or obsolete by market trends and/or evolving investor understanding of the most probative aspects of human capital management."

Others, however, expressed concerns about using a principles-based approach and instead supported a more "rules-based" or "prescriptive" approach. They suggested that the principles-based approach might lead to immaterial disclosures (Society for Human Resource Management, FedEx, and U.S. Chamber of Congress), a lack of meaningful information about human capital

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[6] The SEC (2020) also believes that these principles-based disclosures on Items 101, 103, and 105 will result in improved disclosure, tailored to reflect registrants' particular circumstances, and reduce disclosure costs.

practices (Domini, Radiant Value Management, CalPERS, NYC Comptroller, among others), confusion among investors given the wide array of other human capital information disclosed (Los Angeles County Employees Retirement Association, Coalition, New York State Common Retirement Fund, among others), and lower overall disclosure level on this topical information relative to a prescriptive approach (Human Capital Management Coalition, Financial Executives International, among others).[7] Ultimately, the SEC adopted the principles-based disclosure requirements similar to what they proposed and emphasized that firms must disclose any human capital aspects that are material to understanding how the firm operates. Specifically, the SEC 2020 states:[8]

> "we did not include more prescriptive requirements because we recognize that the exact measures and objectives included in human capital management disclosure may evolve over time and may depend, and vary significantly, based on factors such as the industry, the various regions or jurisdictions in which the registrant operates, the general strategic posture of the registrant, including whether and the extent to which the registrant is vertically integrated, as well as the then-current macroeconomic and other conditions that affect human capital resources, such as national or global health matters."

Given the principles-based approach of this requirement, firms have considerable discretion in what they determine to be material and what they ultimately discuss.[9] Possibly

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[7] Whether principles-based vs. rules-based disclosures and accounting standards are more informative to external financial statement users has been extensively considered by accounting researchers. For example, Altamuro, Beatty, and Weber (2005) find that a standard that allows greater discretion in determining their accounting for revenues provides more value relevant information to investors. Goldman, Liu, and Zhang (2021) provide evidence that firms materially affected by the new principles-based revenue recognition standard have a stronger revenue information environment. However, Folsom, Hribar, Mergenthaler, and Peterson (2017) document that greater discretion under a principles-based standard can lead to accounting manipulation. Schipper (2003) suggests that principles-based accounting can decrease comparability. Thus, ex-ante, it is unclear whether more principles-based human capital disclosures would provide higher vs. lower quality disclosures than if the disclosures were more rules-based.

[8] Despite the noteworthy advancements of the principles-based disclosure requirements, leaving the decision on whether the information is material up to the firms can lead to spotty and non-standardized information when it comes to DEI disclosures (Lee 2020). In fact, the SEC only narrowly passed the final rule with Commissioner Lee citing that the disclosure rules needed more structure surrounding matters like DEI (Thomson Reuters 2020). The SEC is already working on additional requirements that potentially include more prescriptive human capital disclosure requirements for firms to enhance these disclosures (Johnson 2021).

[9] In their review of the CSR reporting literature, Christiensen, Hail, and Leuz (2021) identify materiality as an important implementation issue and suggest that defining and assessing materiality can be difficult, especially when the scope of the CSR standards is broad and encompasses reporting on firms' impacts on the environment and society.

reflecting different priorities on human capital management, there have been substantial variations in the topics discussed in these new disclosures, including the impacts of COVID-19, employee demographics, employee lifecycle, safety, total rewards, labor relations, and employee feedback (PwC 2021). However, one of the most frequently disclosed categories in the mandatory human capital disclosures is DEI (e.g., gender, sexual orientation, ethnicity, veteran status, culture, strategy, age, or religion).

Appendix A provides several examples of firms' DEI disclosures in the mandated human capital disclosure section. For example, in Abbott Laboratories' human capital disclosure, they have sections for 'Health and Safety', 'Talent Management', 'Diversity and Inclusion', and 'Compensation and Benefits'. Specifically, within their 'Diversity and Inclusion' section, they highlight important specific details about their commitment to DEI, such as how Abbott ties executive compensation to diversity outcomes, their use of employee networks, and professional development programs. McDonalds also has an extended and specific discussion on DEI, Chemed Corporation has a much less robust DEI disclosure, whereas firms like TherapeuticsMD, Inc. do not discuss DEI. As evidenced from these examples, the extent of details in these disclosures can vary, and when firms do disclose about DEI, the disclosures are not boilerplate.

Though the literature on corporate social responsibility has grown substantially, prior studies often focus on overall CSR efforts and lack specific insights on DEI among the workforce. The limited research on DEI primarily examines diversity at the board or executive level (e.g., Bernile, Bhagwat, and Yonker 2018; Green and Hand 2021). Even though these are important issues on their own, DEI issues at the employee level potentially have broader and more significant economic and social implications because of the importance of the workforce in the economy and

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In the mandatory human capital disclosure, the SEC (2020) focuses on information that is material "to an understanding of the registrant's business taken as a whole."

society. Our understanding of these issues, however, is limited, primarily due to a lack of data. The recent mandatory human capital disclosures offer a unique setting for us to examine the causes and consequences of firms' DEI focus and commitment.

2.2 Hypothesis Development

Prior literature on DEI is relatively limited; therefore, in developing our hypothesis, we draw from both the broad literature on CSR and studies that examine employee welfare and policies or DEI specifically. Prior research documents various benefits of aggregate CSR activities in terms of profitability (Orlitzky, Schmidt, and Rynes 2003; Margolis, Eifenbein, and Walsh 2007),[10] the cost of equity capital (El Ghoul, Guedhami, Kwok, and Mishra 2011; Dhaliwal, Li, Tsang, and Yang 2011), customer loyalty (Luo and Battacharya 2006); firm risk (Albuquerque, Koskinen, and Zhang 2019), and employee productivity (Flammer 2015; Sanchez and Benito-Hernandez 2015). A limited set of studies focus on more specific issues related to employee welfare, such as corporate wellness programs (Gubler, Larkin, and Pierce 2018) or employee satisfaction (Edmans 2011). These studies document positive implications, including more productive employees or positive earnings surprises and announcement returns, suggesting economic benefits of employers treating employee welfare as a business priority.

Despite the significant interest in understanding the benefits of commitment to CSR and employee welfare, the literature is relatively scarce regarding the benefits and consequences of DEI specifically. [11] Among the studies that consider DEI specifically, Williams and Bauer (1994)

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[10] As noted by Christiensen, Hail, and Leuz (2021), these two studies employ a meta-analysis, which can be difficult to interpret because many of the studies they include in their analysis examine different aspects of CSR performance. Additionally, the evidence they consider is not causal and could be explained by reverse causality. Nonetheless, the evidence resulting from the meta-analysis tends to still favor a positive relation between CSR and firm profitability.

[11] Numerous studies examine the role of board diversity on firm outcomes (Harjoto, Laksmana, and Lee (2015); Bernile, Bhagwat, and Yonker (2018); Griffin, Li, and Xu (2021), among others). Ex ante, it is not clear how board

provide experimental evidence that a firm with a commitment to DEI has significantly higher organization attractiveness ratings. Rabl, Triana, Byun, and Bosch (2020) provide survey evidence that employees' perceptions of an organizational integration and learning approach to diversity are positively related to organizational virtue. Research also suggests that diversity brings in a different background, perspective, knowledge, and experience, thereby facilitating innovation (Phillips 2014). Anecdotal evidence from Mercer (2020) suggests that when firms commit to DEI, their employees are more engaged and energized, form better connections with external entities across the supply chain and customer base, and have greater innovation. Kick (2019) suggests that a commitment to DEI helps companies attract and retain talent and increase authentic engagement among its employees. These insights collectively suggest that employees of a firm that commits to DEI have higher employee satisfaction and greater attachment and morale with the employer. These employees are more likely to exert greater effort and become more innovative in their work, thus achieving greater productivity.[12]

The evidence on the implications of CSR on firm performance or value, however, is mixed at the same time (Kitzmueller and Shimshack 2012; Christiensen, Hail, and Leuz 2021). The CSR literature documents various negative economic implications of CSR activities or commitments. Investing in CSR can have substantial direct costs (Evans 2010). Consistently, Hong, Kubik, and Sheinkman (2012) provide evidence that financially constrained firms are less likely to engage in CSR activities. CSR may also incur agency costs as managers may use CSR to enhance the manager's own personal utility (Masulis and Reza 2015). For example, managers may adopt

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diversity relates to a firm's commitment to DEI at the employee level, which we examine in Section 4.6.3. Nevertheless, many of the theories in these studies about why and how board diversity affects firm outcomes would also apply to our hypothesis.

[12] For example, Mercer (2020) specifically documents that more diverse sales teams have greater successes on sales calls.

employee-friendly policies in order to decrease the effort in bargaining with aggressive labor unions (Cronqvist, Heyman, Nilsson, Svaleryd, and Vlachos 2009) or to motivate the workforce to help underperforming managers avoid dismissal (Atanassov and Kim 2009). Becchetti, Ciciretti, and Hasan (2015) also show that firms investing in CSR have lower flexibility in responding to positive and negative events, incurring opportunity costs in bypassing positive net present value (NPV) investment opportunities or cutting negative NPV projects.

We expect these costs to also apply to commitment to DEI. Committing to DEI is likely to involve various direct costs. For example, to maintain a diverse, equal, and inclusive workforce, firms need to employ DEI practitioners and consultants to help successfully navigate and monitor the implementation of diversity initiatives; DEI commitment also requires tangible financial support for equal compensation and adequate recruiting and training (Asare 2020). Thus, if firms do not provide adequate financial support for the DEI engagement, they may not realize the productivity benefits. Firms may also incur agency costs if they commit to DEI only for managers' private benefit (e.g., a lower likelihood of dismissal) or to satisfy their quest for social prestige or the enhancement of self-image (Bénabou and Tirole 2010). Overall, the productivity benefits from DEI may be overwhelmed by direct costs or liquidity concerns, agency costs, and opportunity costs, making the net effects on employee productivity unclear *ex ante*.

We identify firms' commitment to DEI through the recent mandatory human capital disclosures. Thus, our hypothesis, by nature, is a joint hypothesis of the informativeness or the credibility of the DEI disclosures and the effects of DEI on employee productivity. Many of the SEC comment letter respondents voiced concerns about whether the human capital disclosures would be meaningful and informative (SEC 2020) because the flexibility in defining and assessing materiality and the use of boilerplate language can diminish the informativeness or the credibility

of these disclosures (Christiensen, Hail, and Leuz 2021). We note that prior studies highlight significant costs associated with firms not sincerely committing to DEI (Thomas and Ely 1996; McKay and Avery 2005). Kick (2019) suggests that "businesses that preach diversity on paper but do little to make inclusion a daily workplace value at every level leave themselves vulnerable to many of the same problems. In fact, in some ways, a half-hearted approach to diversity and inclusion can set you up to lose bigger, as the organization comes away looking either disconnected from its values or like a fraud." As a result, firms that disclose commitment to DEI in the human capital disclosures but have no substantial actions may be subject to significant negative effects when it comes down to employee productivity.

Overall, the above discussion leads to our hypothesis stated in the null form as follows:

H1: A firm's commitment to DEI is not associated with employee productivity.

3. Research Design

3.1 Sample

The new human capital disclosure requirement became effective on November 9, 2020. Thus, December fiscal year-end firms start to provide human capital disclosures in 2020 10-K forms filed in early 2021. We start with December fiscal year-end firms with positive sales, positive total assets, and non-missing CIK and SIC in Compustat for the fiscal year 2020. To keep the data collection effort manageable, we require firms to have a minimum of 100 employees as of December 31 of 2020. This requirement also helps us focus on firms with more human capital, which is likely to play a more important role in business operations.

We next require 2020 10-K metadata information available in WRDS SEC suites and the 10-K form to be filed within 100 days after 12/31/2020 to avoid including significantly delayed

10-K filings. We also require information available for our test models discussed in Section 3.2. These requirements result in a final sample of 2,228 individual firms in 2020. Although the human capital disclosure is for the fiscal year 2020, our analyses employ data in both 2019 and 2020 (4,335 firm-years) for the sample firms to mitigate the concern that the financial outcome of 2020 is unduly affected by the COVID-19 pandemic. Human capital policies are likely to be relatively stable over a short horizon, and thus it is reasonable to expect similar DEI policies from 2019 to 2020. We do, however, perform our main analyses for 2019 and 2020 both combined and separately. We obtain financial data for the sample from Compustat. Table 1 describes the detailed sample selection process.

We access 10-K filings through the SEC EDGAR filing archives. Because firms structure Item 1 and the specific human capital disclosures differently, we manually parse these disclosures in the 10-K filings. To identify the DEI policies, we use a keyword search approach. Specifically, we first identify all individual words used in the human capital disclosures by our sample firms. We review these words by frequency and then identify the individual words that are more likely to be related to DEI topics: diversity, inclusion, equity, underrepresented, inclusive, inclusiveness, inclusions, diverse, women, gender, female, race, equal. We consider a firm that includes at least one of these keywords in the human capital disclosures as having DEI commitment as a material human capital objective or measure and code an indicator variable *CommitDEI* = 1; otherwise, we code *CommitDEI* = 0. This keyword search approach identifies 80.1% of our sample firms as having DEI commitment and 19.9% not having DEI commitment. To verify the classification based on the keyword search, we manually checked 200 random observations. We find that in each

of the 200 observations, the keyword search appropriately categorizes observations as having or

not having DEI-related references in their human capital disclosures.[13]

3.2 Testing Models

We first examine the determinants of commitment to DEI. To do so, we estimate the

following probit model:

$$CommitDEI_i = f(\alpha_0 + \beta_1 \times Size_{i,t-1} + \beta_2 \times Q_{i,t-1} + \beta_3 \times ROA_{i,t-1} + \beta_4 \times Margin_{i,t-1} + \beta_5 \times Leverage_{i,t-1} + \beta_6 \times Intangibles_{,t-1} + \beta_7 \times PPE_{i,t-1} + \beta_8 \times LaborSize_{i,t-1} + \beta_9 \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t})$$ *(1)*

Our dependent variable is *CommitDEI*, as defined above. We include firm fundamental

variables size (*Size*) and growth opportunities (*Q*). We include proxies for profitability, namely

return on assets (*ROA*) and gross margin on sales (*Margin*), to examine if more profitable firms

are more likely to commit to DEI. We also include leverage (*Leverage*), intangible assets

(*Intangibles*), fixed assets (*PPE*), number of employees (*LaborSize*), and the age of the firm (*Age*).

We define each of our variables in detail in Appendix B. We include Fama-French 12-industry

fixed effects and cluster standard errors by industry.

To test our hypothesis on whether a firm's commitment to DEI is associated with higher

employee productivity, we estimate the following OLS regression:

$$EmpProd_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times Size_{i,t-1} + \beta_3 \times Q_{i,t-1} + \beta_4 \times ROA_{i,t-1} + \beta_5 \times Margin_{i,t-1} + \beta_6 \times Leverage_{i,t-1} + \beta_7 \times Intagibles_{i,t-1} + \beta_8 \times PPE_{i,t-1} + \beta_9 \times LaborSize_{i,t-1} + \beta_{10} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t}$$ *(2)*

Our dependent variable is *EmpProd*, which captures employee productivity. We calculate this

variable as the log of total sales divided by average total employees following Cronqvist, Heyman,

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[13] As a robustness check, we perform our tests after removing observations for 125 individual firms whose human capital disclosures include only one distinct DEI-related keyword to avoid potential ambiguity in DEI reference. Our inferences are qualitatively unchanged.

Nilsson, Svaleryd, and Vlachos (2009). Our independent variable of interest is *CommitDEI*. We include the determinant variables in equation (1) as control variables. As in equation (1), we include industry fixed effects and cluster our standard errors by industry.

4. Primary Analysis

4.1 Descriptive Statistics

Table 2 Panel A presents descriptive statistics of the sample firms for the sample period of 2019-2020. We winsorize all continuous variables at 1% and 99%. As discussed earlier, our primary independent variable of interest, *CommitDEI*, has a mean value of 0.801. This statistic suggests that approximately 80.1% of observations explicitly commit to DEI in their new human capital disclosures. The key dependent variable, employee productivity (*EmpProd*), has a mean of 5.979 and a median 5.874. The average firm size (*Size*) is 7.686, equivalent to approximately $2.1B in total assets. The average Q is 1.609, suggesting that our sample firms tend to be more mature. The average *ROA* is about -0.7% and the average *Margin* is 0.314. On average, our sample firms have leverage of 0.286, and intangible assets and fixed assets representing 18.3% and 20.9% of total assets, respectively. In terms of *LaborSize*, the average firm has a value of 0.747, which equates to 2,110 employees. The average firm *Age* is 2.892, which equates to 18 years old.

Table 2 Panel B breaks down our sample by Fama-French 12-industry classification. The most represented industry in our sample is finance (1,271 observations), followed by business equipment (573 observations), mines, construction, hotels, entertainment (548 observations), and healthcare (544 observations). In terms of the percentage of observations in each industry with *CommitDEI* = 1, we note that utilities have the highest percentage (95%), followed by

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manufacturing (85%) and business equipment (84%). Finance (77%), telephone and television transmission (76%), and consumer nondurables (76%) have the lowest percentages.

4.2 Determinants Of Firms' Commitment To DEI

Table 3 presents our determinants model (equation (1)) for firms' commitment to DEI. Columns (1), (2), and (3) present our estimation using observations from both 2019 and 2020, 2019 only, and 2020 only, respectively. The results are consistent across the three columns; thus, we only discuss column (1) results. We find a positive relation between *CommitDEI* and *Size* (coef. = 0.3695, p < 0.01), *Q* (coef. = 0.1680, p < 0.01), *Intangibles* (coef. = 0.7220, p < 0.05), and *LaborSize* (coef. = 0.1027, p < 0.05). We find a negative relation between *CommitDEI* and *Margin* (coef. = -0.0685, p < 0.10) and *Age* (coef. = -0.0842, p < 0.05). To the extent that larger firms with more growth opportunities have greater business resources in general, and that firms with more intangible intensity and a larger labor force rely more on human capital (either innovation intensive or labor intensive), these results suggest that business resources and the nature of human capital are important drivers for DEI commitment.

4.3 Validation Of CommitDEI Measure

To mitigate concerns about the informativeness or the credibility of the self-disclosed DEI commitment, we validate our measure of firms' commitment to DEI by examining how it relates to employees' rating of their employers' DEI strengths. Glassdoor, a social media platform where employees review and rate their employers, launched a Diversity and Inclusion rating in 2020 "to help shine a light on inequities in the workplace." This rating is provided by employees, thus reflecting employees' perceptions and perspectives and providing a relevant and independent

assessment of a firm's workforce-related strengths on diversity and inclusion. We estimate the following model to validate our *CommitDEI* measure:

$$EmpDEIRating_i = \alpha_0 + \beta_1 \times CommitDEI_{i,t} + \beta_2 \times Size_{i,t-1} + \beta_3 \times Q_{i,t-1} + \beta_4 \times ROA_{i,t-1}$$
$$+ \beta_5 \times Margin_{i,t-1} + \beta_6 \times Leverage_{i,t-1} + \beta_7 \times Intangibles_{i,t-1} + \beta_8 \times PPE_{i,t-1} + \beta_9 \times LaborSize_{i,t-1}$$
$$+ \beta_{10} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t} \qquad (3)$$

The dependent variable is *EmpDEIRating* based on employee ratings of corporate diversity and inclusion on Glassdoor. As smaller firms are less likely to have a Glassdoor profile or have a reliable number of reviews, we focus on our sample firms with at least 1,000 employees. We obtain all Glassdoor employee reviews made in 2020 for 1,300 sample firms, among which 1,232 firms have Diversity and Inclusion ratings. We calculate *EmpDEIRating* based on the average of the diversity and inclusion ratings in 2020 and also *EmpRating* (which we analyze in Table 7) as the average of the overall ratings of the firm in 2020 and merge with our sample.

As shown in Table 2 Panel A, the mean and median *EmpDEIRating* are 3.655 and 3.750, respectively. Table 4 presents the estimation of our validation regression (equation (3)). Column (1) presents our estimation for the full sample; column (2) is based on 2020 observations only given that the Diversity and Inclusion ratings are made in 2020. We find a significantly positive relation between *EmpDEIRating* and *CommitDEI* (column (1): coef. = 0.1750, $p < 0.05$; column (2): coef. = 0.1785, $p < 0.05$). These results suggest that employees of firms that discuss DEI in their new human capital disclosures perceive better diversity and inclusion at the workplace, providing important credence and validation for our proxy of commitment to DEI.[14]

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[14] While both *EmpDEIRating* and *CommitDEI* provide reasonable proxies for firms' commitment to DEI, we believe that *CommitDEI* is the more appropriate measure for our empirical tests. This is because *CommitDEI* is based on mandatory corporate disclosures on human capital management in annual filings; it is thus more broadly available and also reflects a firm's official position, if any, on prioritizing DEI. Firms are more likely to substantiate such an official position with specific DEI programs and investments, thus realizing the associated benefits.

4.4 Firms' Commitment To DEI And Employee Productivity

Table 5 presents our primary multivariate test (equation (2)) examining our H1, the relation between firms' commitment to DEI and employee productivity. Column (1) is based on a reduced equation (1) where we do not include industry fixed effects and apply robust standard errors. Columns (2)-(4) estimate equation (2) but are based on the full sample (2019 and 2020), 2019 sample, and 2020 sample, respectively.

Between columns (1) and (2) (with different model specifications based on the full sample), we consistently observe a positive and significant coefficient on *CommitDEI* (column (1): coef. = 0.2063, $p < 0.01$; column (2): coef. = 0.1997, $p < 0.01$). Relative to the standard deviation of *EmpProd* of 0.979, these coefficients suggest that *ceteris paribus*, committing to DEI is associated with a 21.1% and 20.4% higher employee productivity in columns (1) and (2), respectively, compared to firms that do not explicitly commit to DEI in their human capital disclosures. In terms of our control variables, across both specifications, we find a positive and significant coefficient on *Size, ROA,* and *Leverage*, and a negative and significant coefficient on *LaborSize*. These results suggest that larger firms with more leverage and higher profitability have higher employee productivity. Meanwhile, employee productivity decreases with labor size.

The coefficient of *CommitDEI* remains significantly positive in columns (3) and (4) when we examine 2019 (coef. = 0.2146, $p < 0.01$) and 2020 (coef. = 0.1812, $p < 0.01$) separately. The magnitudes represent about 21.9% and 18.5% relative to the standard deviation of *EmpProd.* The significant effects in both years suggest that the COVID-19 pandemic did not fundamentally change how DEI commitment is associated with workforce productivity. However, the magnitude of the coefficient does decrease from 2019 to 2020. COVID-19, which affected most of 2020, significantly reshaped the workforce by changing essential employee operations, working

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arrangements, and travel. Several studies document that some genders and ethnicities were more adversely affected in the workplace by COVID-19 than others (Adams-Prassl, Boneva, Golin, and Rauh 2020; Couch, Fairlie, and Xu 2020). Thus, one might expect that the relation between firms' commitment to DEI and employee productivity significantly changes from 2019 to 2020. To test this possibility, we estimate the following regression:

$$EmpProd_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times Post_t + \beta_3 \times CommitDEI_i \times Post_t + \beta_4 \times Size_{i,t-1} + \\ \beta_5 \times Q_{i,t-1} + \beta_6 \times ROA_{it-1} + \beta_7 \times Margin_{i,t-1} + \beta_8 \times Leverage_{i,t-1} + \beta_9 \times Intangibles_{i,t-1} + \\ \beta_{10} \times PPE_{i,t-1} + \beta_{11} \times PPE_{i,t-1} + \beta_{12} \times LaborSize_{i,t-1} + \beta_{13} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t} \qquad (4)$$

Equation (4) adds to equation (2) the year 2020 indicator (*Post,* which equals 1 for 2020 observations and 0 otherwise) and its interaction with *CommitDEI*. The interaction of *CommitDEI×Post* captures the incremental effect of the onset of COVID-19 on the relation between *EmpProd* and *CommitDEI*.

We present our results in column (5) of Table 5. We continue to find a positive and significant coefficient on *CommitDEI* (coef. = 0.2242, $p < 0.01$). We also find a negative and significant coefficient on *Post* (coef. = -0.0556, $p < 0.10$). These two results are consistent with the expectation that, before COVID-19, committing to DEI is positively associated with employee productivity; following the onset of COVID-19, there was a decline in overall employee productivity. The coefficient on the interaction term is negative and significant (coef. = -0.0538, $p < 0.05$), consistent with the notion that the incremental benefits of commitment to DEI slightly declined during the pandemic. Despite this decline in the strength of the relation, we note that the total effect remains significantly posistive in 2020 (untabulated, *CommitDEI* + *CommitDEI×POST* = 0.1704, $p < 0.01$), which suggests that the effect remains positive in each year. Thus, consistent with columns (3) and (4), the onset of COVID-19 does not qualitatively change the relation between *CommitDEI* and *EmpProd*. Overall, our results in Table 5 combine to reject the null

hypothesis; instead, they suggest that firms that commit to DEI are associated with a significantly more productive workforce.

4.4 Role Of Financial Constraints

As noted in our hypothesis development in section 2.2, committing to DEI is not costless. Firms often cut DEI budgets when they are financially constrained (Asare 2020). Thus, if a firm commits to DEI but is financially constrained, it faces a greater risk of not genuinely or effectively investing for its commitment, thus decreasing the productivity benefit. Moreover, as suggested by Thomas and Ely (1996), McKay and Avery (2005), and Kick (2019), these half-hearted attempts may offset the benefits of commitment to DEI as it can make the firm's actions appear disingenuous or fraudulent. While we expect that most firms that commit to DEI make satisfactory attempts to back up their commitments with appropriate actions (as reflected by higher employee DEI ratings shown in Table 4), we also realize that there can be significant variation in firms' abilities to match their commitments and actions. Based on the prior studies (Hong, Kubik, and Sheinkman 2012), we expect that financially constrained firms are less likely to effectively invest the appropriate amount into their DEI activities and fully enjoy the productivity benefits relative to unconstrained firms.

To examine this possibility, we estimate the following regressions:

$$EmpProd_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times Leverage_{i,t-1} + \beta_3 \times CommitDEI \times Leverage_{i,t-1} + \beta_4 \times Size_{i,t-1} + \beta_5 \times Q_{i,t-1} + \beta_6 \times ROA_{it-1} + \beta_7 \times Margin_{i,t-1} + \beta_8 \times Intangibles_{i,t-1} + \beta_9 \times PPE_{i,t-1} + \beta_{10} \times LaborSize_{i,t-1} + \beta_{11} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t} \qquad (5)$$

$$EmpProd_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times KZ_{i,t-1} + \beta_3 \times CommitDEI \times KZ_{i,t-1} + \beta_4 \times Size_{i,t-1} + \beta_5 \times Q_{i,t-1} + \beta_6 \times ROA_{it-1} + \beta_7 \times Margin_{i,t-1} + \beta_8 \times Intangibles_{i,t-1} + \beta_9 \times PPE_{i,t-1} + \beta_{10} \times LaborSize_{i,t-1} + \beta_{11} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t} \qquad (6)$$

Similar to Christensen and Nikolaev (2012), we use both *Leverage* and a more comprehensive measure, the KZ index following Kaplan and Zingales (1997) and Baker, Stein, and Wurgler (2003), as our proxies for financial constraints. We interact *Leverage* and *KZ,* respectively, with *CommitDEI* in equations (5) and (6) to capture the incremental effect financial constraints have on the relation between committing to DEI and employee productivity.

Table 6 presents our results from estimating equations (5) (column (1)) and (6) (column (2)). We first note a positive and significant coefficient on *CommitDEI* in both specifications (column (1): coef. = 0.3269, $p < 0.01$; column (2) coef. = 0.2605, $p < 0.01$), consistent with our primary results. Importantly, we find a significantly negative coefficient on its interaction terms with financial constraints in both columns (column (1): coef. = -0.5338, $p < 0.01$; column (2): coef. = -0.0582, $p < 0.01$). These results are consistent with the notion that financially constrained firms are less able to support their commitment to DEI with the appropriate investment relative to unconstrained firms, which offsets the benefits of committing to DEI on employee productivity.

4.5 Mechanism Analyses

To better hone in on the relation between committing to DEI and employee productivity, we next perform two tests to shed light on the underlying mechanism. First, we examine if committing to DEI is associated with higher employee satisfaction (Williams and Bauer 1994). Prior literature provides evidence that happier employees tend to be more productive (Wright and Cropamzano 2004; Zelenski, Murphy, and Jenkins 2008). Thus, if committing to DEI increases employee satisfaction, our findings can be explained through an employee satisfaction channel. Second, Phillips (2014) suggests that diverse opinions facilitate more innovative ideas. Thus, committing to DEI can also be an avenue that fuels innovation. Prior literature supports the notion

that innovation can increase productivity (Hall 2011; Foster, Grim, Haltiwanger, and Wolf 2018).

Thus, innovation could be another channel through which DEI commitment enhances employee

productivity.

We test these two channels using the following multivariate regression models:

$$EmpRating_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times Post_t + \beta_3 \times CommitDEI_i \times Post_t + \beta_4 \times Size_{i,t-1} + \beta_5 \times Q_{i,t-1} + \beta_6 \times ROA_{it-1} + \beta_7 \times Margin_{i,t-1} + \beta_8 \times Leverage_{i,t-1} + \beta_9 \times Intangibles_{i,t-1} + \beta_{10} \times PPE_{i,t-1} + \beta_{11} \times LaborSize_{i,t-1} + \beta_{12} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t}$$ (7)

$$R\&D_{i,t} = \alpha_0 + \beta_1 \times CommitDEI_i + \beta_2 \times Post_t + \beta_3 \times CommitDEI_i \times Post_t + \beta_4 \times Size_{i,t-1} + \beta_5 \times Q_{i,t-1} + \beta_6 \times ROA_{it-1} + \beta_7 \times Margin_{i,t-1} + \beta_8 \times Leverage_{i,t-1} + \beta_9 \times Intangibles_{i,t-1} + \beta_{10} \times PPE_{i,t-1} + \beta_{11} \times LaborSize_{i,t-1} + \beta_{12} \times Age_{i,t-1} + F.E. + \varepsilon_{i,q,t}$$ (8)

While there is no direct measure of employee satisfaction, we follow prior research (Hales, Moon,

and Swenson 2018; Lee, Ng, Shevlin, and Venkat 2021) and use employee ratings from Glassdoor

as our proxy. As discussed earlier, Glassdoor collects an "Overall Rating" from employees about

their employers on a scale of one through five. We calculate *EmpRating* as the average of the

overall ratings in 2020 for the 1,300 sample firms with the ratings available. As reported in Table

2, the mean and median *EmpRating* are 3.584 and 3.60, respectively. We use *EmpRating* as our

dependent variable in equation (7).[15] We proxy for corporate innovation using R&D expenditures

(Hirshleifer, Low, and Teoh 2012) and use it as our dependent variable in equation (8). We

continue to include the same control variables as in equation (2), with industry fixed effects and

standard errors clustered by industry.

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[15] In untabulated analysis, we also use another proxy of employee satisfaction based on "the Best Company to Work For list" by the Fortune Magazine and Glassdoor. Each year these two firms identify 100 firms for this list. The Fortune list is based on employee surveys while the Glassdoor list is based on employee feedback provided on Glassdoor. The disadvantage of this proxy is that it is relatively coarse and may potentially bias for large firms. We find that 74 (128) of our sample firm-years are on either 2020 or 2021 Best Company list based on Fortune only (Fortune and Glassdoor). Importantly, all these firms have *CommitDEI* equal to one, suggesting that *CommitDEI* is an important contributor for employee satisfaction.

Table 7, Panel A presents our estimation of equation (7) for the mechanism of employee satisfaction. Columns (1) and (2) are based on the full and 2020 samples, respectively. Consistent with an employee satisfaction mechanism, we find a positive and significant coefficient on *CommitDEI* (column (1): coef. = 0.0747, $p < 0.05$; column (2): coef. = 0.0700, $p < 0.10$). These coefficients suggest that firms that commit to DEI have a higher employee satisfaction on average. Panel B presents our estimation of equation (8) on the relation between *CommitDEI* and *R&D*. Column (1) is based on the full sample and shows a positive and significant coefficient on *CommitDEI* (coef. = 0.0128, $p < 0.10$). Koh and Reeb (2015) show that missing R&D in Compustat cannot be reliably interpreted as zero R&D expenditure. Thus, in column (2), we exclude observations with missing R&D (about 53% of the sample) and re-estimate equation (8). Our result on *CommitDEI* becomes even stronger (coef. = 0.0170, $p < 0.01$). Collectively, both columns in Penal B of Table 7 suggest that firms that commit to DEI are associated with a higher level of R&D expenditures, thus supporting an innovation channel. Overall, Table 7 sheds further light on the relation between committing to DEI and higher employee productivity by providing evidence of positive effects on committing to DEI on two channels through which employee productivity can be enhanced: employee satisfaction and corporate innovation.

4.6 Additional Analyses

4.6.1. DEI commitment and firm profitability

One of the concerns about the economic implications of CSR or DEI is potential endogeneity. That is, whatever causes firms to engage in CSR or DEI voluntarily and then report those activities also increases financial performance, or that firms with better performance are more likely to commit to CSR or DEI. For example, Lys, Naughton, and Wang (2015) suggest that

firms that anticipate better performance are more likely to engage in CSR investments and signal through CSR reporting. Our main results on the relation between DEI commitment and employee productivity could be subject to this alternative explanation and thus attributable to better performance. In this subsection, we test how DEI commitment relates to operating performance.

Specifically, we replace the dependent variable in equation (2) with firm profitability. Because our results in Table 7 Panel B show that *CommitDEI* is positively associated with R&D and R&D negatively affects net income, we use R&D adjusted return on assets (*AdjROA*) following Sougiannis (1994) as our dependent variable in this specification. We present the estimation results in column (1) of Table 8. The coefficient on *CommitDEI* is positive and significant (coef. = 0.0255, $p < 0.05$), which suggests that committing to DEI is associated with higher profitability.

Importantly, in column (2), we control for concurrent employee productivity (*EmpProd*, our main dependent variable). If DEI commitment and firm performance are endogenously related, we expect the coefficient on *CommitDEI* to remain statistically significant even after we control for concurrent employee productivity. [16] However, the coefficient on *CommitDEI* becomes insignificant once we control for *EmpProd*. The results in columns (1) and (2) collectively suggest that committing to DEI affects ROA, but only through employee productivity. Thus, it is unlikely that it is ROA that drives firms' commitment to DEI.

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[16] We note that a positive effect of *CommitDEI* on employee productivity does not necessasrily imply a positive effect of *CommitDEI* on *ROA* because employee productivity does not consider business costs and resources (e.g., human capital costs, or total assets employed) used to increase productivity. Thus, despite our earlier evidence of significant relation between DEI commitment and employee productivity, the effects of DEI commitment on overall operating performance is not clear, ex ante.

4.6.2 Two-Stage Least Squares Analysis

Committing to DEI is not randomly assigned, which can present endogeneity concerns associated with self-selection (see Heckman 1979; Lennox, Francis, and Wang 2012). Christiensen, Hail, and Leuz (2021) suggest that broader endogeneity concerns could make the association between CSR reporting/actions and economic outcomes spurious. We acknowledge that lacking a true exogenous shock on corporate DEI policies, it is challenging, if not impossible, to establish causality. Our study only provides some of the initial evidence on the association between DEI commitment and employee productivity.

Nevertheless, to mitigate these concerns, we implement a two-stage least squares (2SLS) approach. Wooldridge (2010) suggests that when there is self-selection with an endogenous binary event variable, one can mitigate the endogenous concern by using a predicted probability of the event as an instrumental variable in a 2SLS regression. Such an approach requires an exogenous instrumental variable that satisfies the exclusion restriction but is partially correlated with the endogenous variable. We employ a state-level diversity index based on population demographics as our exogenous variable. Theoretically, a state's demographic diversity is expected to affect a firm's prioritizing DEI-related issues but is unlikely to affect employee productivity at each firm directly.

The Census Bureau compiles a Diversity Index based on 2020 census data to measure the probability that two people chosen at random will be from different racial and ethnic groups.[17] We obtain this index and merge it with our sample based on the state of the headquarters. Because the raw diversity index is relatively skewed, we rank our sample firms' diversity index into quintiles and create our exogenous variable *DIndex5*.[18] Column (1) of Table 9 reports the first-stage probit

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[17] See https://www.census.gov/library/visualizations/2021/dec/racial-and-ethnic-diversity-index.html.
[18] Due to the data limitations for *DIndex5*, we note minor sample attrition (N = 4,141) when implementing this test.

model where we estimate a modified equation (1) that includes *DIndex5* as an additional independent variable. As predicted, the coefficient on *DIndex5* is significantly positive (coef. = 0.0806, p < 0.05), satisfying the relevance conditions. Untabulated results also show that *DIndex5* is not significant when we regress *EmpProd* on *DIndex5* and other determinant variables in equation (1), satisfying the exclusion condition.

We then use the predicted likelihood from column (1) as an instrumental variable for *CommitDEI* in a 2SLS regression of equation (2). We report the second stage of the 2SLS in column (2) of Table 9. We continue to find a significantly positive coefficient on *CommitDEI* (coef. = 0.2523, p < 0.05). Thus, consistent with our expectations, our findings do not appear to be significantly affected by a selection bias.

4.6.3. DEI commitment and board diversity

Our study focuses on firms' commitment to workforce DEI. Another important aspect of corporate commitment to DEI addresses diversity issues at the board. For example, recently, the SEC approved a new listing rule by the Nasdaq Stock Market LLC to advance board diversity through a "comply or disclose" framework.[19] A natural question that one might ask is the association between board diversity and a firm's commitment to DEI at the employee level. We employ data from Institutional Shareholder Services (ISS) on board characteristics for our sample firm-years to address this question. We consider two variables on board diversity, *BoardDiversity_E* and *BoardDiversity_G*, to capture the ethnicity and gender diversity of the board, respectively. We also include board size (*BoardSize*) and board independence (*BoardInd*). We note a significant reduction in sample size because of the more limited data available for the

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[19] See https://listingcenter.nasdaq.com/assets/Board%20Diversity%20Disclosure%20Five%20Things.pdf.

board of directors in ISS. In Panel A of Table 10, we examine if board characteristics are related to a firm's commitment to DEI at the employee level (*CommitDEI*). In columns (1) - (3), we examine the two board diversity variables separately and together. *BoardDiversity_E* is consistently insignificant, whereas *BoardDiversity_G* is positive and significant (column (2): coef. = 1.1632, $p < 0.01$; column (3): coef. = 1.1211, $p < 0.05$). In column (4), when we additionally include *BoardInd* (coef. = 1.4477, $p < 0.01$) and *BoardSize* (coef. = 0.0852, $p < 0.05$), we find that they are each positively and significantly associated with *CommitDEI*, although the board diversity variables are both insignificant. Overall, these results suggest that the board's independence and board size are important determinants of firms' explicit commitment to DEI at the employee level. In contrast, a firm's board diversity may not significantly affect the commitment.

Finally, in Panel B of Table 10, we examine how board characteristics are related to employee productivity. In columns (1) through (4), we re-estimate equation (2) after we use different board characteristic variables to replace our main test variable *CommitDEI*. The results consistently show that none of these board characteristics variables are significantly related with employee productivity. In column (5), we include our main test variable, *CommitDEI*, along with all four board variables. We continue to find the coefficient on *CommitDEI* to be significantly positive (coef. = 0.1685, $p < 0.01$), despite the smaller sample size and the controls for board characteristics. Overall, these results suggest that commitment to DEI at the employee level, as opposed to board diversity, has a more salient effect on employee productivity.

5. Conclusion

We provide robust evidence of a statistically and economically significant positive relation between firms' commitment to DEI at the employee level and employee productivity, suggesting

that employees respond positively to firms putting social issues like DEI at the forefront of their human resources platform. This positive relation is mitigated by financial constraints, consistent with the notion that investing in DEI can be financially costly. We also provide evidence of two mechanisms through which DEI commitment can increase employee productivity: employee satisfaction and corporate innovation.

Our research contributes to the CSR and ESG literature by providing evidence on the positive economic implications of corporate commitment to DEI issues. We also shed light on the informativeness of the new mandatory human capital disclosures, which have been subject to great debate given their principles-based nature. Our results have implications for the SEC's ongoing deliberation on the potential expansion of the human capital disclosures (Johnson 2021).

Christiensen, Hail, and Leuz (2021) suggest that the scope of CSR reporting or disclosures could be narrow or broad where the narrower scope refers to the implications for shareholders' investment decisions, while the broader scope refers to the implications for a diverse set of stakeholders (e.g., consumers, employees, or local communities). To the extent that employee productivity reflects both firm performance and employee engagement, our study provides some initial evidence on both of these scopes on DEI-related issues. Future research could examine the externality consequences of such commitment on broader matters such as supply chain operations or social welfare.

We also note that one important motivation for "regulation through disclosure" is that disclosure could have real effects (Leuz and Wysocki 2016). We are limited to the first year of the human capital disclosures, thus are not able to examine the long-term implications of such a mandate. It is of interest for future research to examine in the long-run, whether and how the

mandatory human capital disclosures affect firms' DEI decisions at the workplace because of the

increased disclosure and hence enhanced monitoring.

REFERENCES:

Adams-Prassl, A., Boneva, T., Golin, M., Rauh, C. 2020. Inequality in the impact of the coronavirus shock: Evidence from real time surveys. J. Public Econ. 189, 104245.

Albuquerque, R., Koskinen, Y., Zhang, C. 2019. Corporate social responsibility and firm risk: Theory and empirical evidence. Manage. Sci. 65, 4451-4469.

Altamuro, J., Beatty, A. L., Weber, J. 2005. The effects of accelerated revenue recognition on earnings management and earnings informativeness: Evidence from SEC Staff Accounting Bulletin No. 101. Account. Rev. 80, 373-401.

Aon. U.S. companies focus on four areas of human capital management disclosure. 2021. https://humancapital.aon.com/insights/articles/2021/u-s-companies-focus-on-four-areas-of-human-capital-management-disclosure

Asare, J.G. If you really care about equity and inclusion, stop cutting your diversity budget. Forbes. 2020. https://www.forbes.com/sites/janicegassam/2020/08/30/if-you-really-care-about-equity-and-inclusion-stop-cutting-your-diversity-budget/?sh=76f5128f4549

Atanassov, J., Kim, E. H. 2009. Labor and corporate governance: International evidence from restructuring decisions. J Finance 64, 341-374.

Baker, M., Stein, J. C., Wurgler, J. 2003. When does the market matter? Stock prices and the investment of equity-dependent firms. Q J Econ 118, 969-1005.

Becchetti, L., Ciciretti, R., Hasan, I. 2015. Corporate social responsibility, stakeholder risk, and idiosyncratic volatility. J. Corp. Finance 35, 297-309.

Bénabou, R., Tirole, J. 2010. Individual and corporate social responsibility. Economica *77*, 1-19.

Bernile, G., Bhagwat, V., Yonker, S. 2018. Board diversity, firm risk, and corporate policies. J. Financ. Econ. 127, 588-612.

Bureau Of Labor Statistics. Labor force characteristics by race and ethnicity, 2018. 2019. https://www.bls.gov/opub/reports/race-and-ethnicity/2018/home.htm.

Christensen, H. B., Hail, L., Leuz, C. 2021. Mandatory CSR and sustainability reporting: economic analysis and literature review. Rev. Account. Stud 26, 1176-1248.

Christensen, H. B., Nikolaev, V. V. 2012. Capital versus performance covenants in debt contracts. J. Account. Res. 50, 75-116.

Couch, K. A., Fairlie, R. W., Xu, H. 2020. Early evidence of the impacts of COVID-19 on minority unemployment. J. Public Econ. 192, 104287.

Cronqvist, H., Heyman, F., Nilsson, M., Svaleryd, H., Vlachos, J. 2009. Do entrenched managers pay their workers more?. J. Finance 64, 309-339.

Dhaliwal, D. S., Li, O. Z., Tsang, A., Yang, Y. G. 2011. Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. Account. Rev. 86, 59-100.

Dwertmann, D. J., Nishii, L. H., Van Knippenberg, D. 2016. Disentangling the fairness & discrimination and synergy perspectives on diversity climate: Moving the field forward. J. Manage. 42, 1136-1168.

Edmans, A. 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. J. Financ. Econ. 101, 621-640.

El Ghoul, S., Guedhami, O., Kwok, C. C., Mishra, D. R. 2011. Does corporate social responsibility affect the cost of capital?. J. Bank. Financ. 35, 2388-2406.

Evans, J. 2010. The credit crisis has compelled companies to take a more holistic view of social responsibility. Wall Street Journal: February 3.

EY. 2021. How do you value your social and human capital? Human capital disclosures findings from 2020 10-Ks. https://www.ey.com/en_us/assurance/accountinglink/how-do-you-value-your-social-and-human-capital.

Flammer, C. 2015. Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. Manage. Sci. 61, 2549-2568.

Folsom, D., Hribar, P., Mergenthaler, R. D., Peterson, K. 2017. Principles-based standards and earnings attributes. Manage. Sci. 63, 2592-2615.

Foster, L., Grim, C., Haltiwanger, J. C., Wolf, Z. 2018. Innovation, productivity dispersion, and productivity growth. Working Paper, National Bureau of Economic Research.

General Motors. 2019. Comment Letter: SEC File No. S7-11-19 Modernization of Regulation S-K Items 101, 103, and 105. SEC Comment Letter.

Goldman, N. C., Liu, B., Zhang, Y. 2021. The New Revenue Recognition Standard ASC 606 and the Properties of Analyst Revenue Forecast. Working Paper, Unitersity of Texas at Dallas.

Green, J., Hand, J. R. 2021. Diversity matters/delivers/wins revisited in S&P 500 firms. Working Paper, Texas A&M University.

Griffin, D., Li, K., Xu, T. 2021. Board gender diversity and corporate innovation: International evidence. J. Financial Quant. Anal. 56, 123-154.

Gubler, T., Larkin, I., Pierce, L. 2016. Motivational spillovers from awards: Crowding out in a multitasking environment. Organ. Sci. 27, 286-303.

Hales, J., Moon Jr, J. R., Swenson, L. A. 2018. A new era of voluntary disclosure? Empirical evidence on how employee postings on social media relate to future corporate disclosures. Account. Organ. Soc. 68, 88-108.

Hall, B. H. 2011. Innovation and productivity. Working Paper, National Bureau of Economic Research.

Harjoto, M., Laksmana, I., Lee, R. 2015. Board diversity and corporate social responsibility. J. Bus. Ethics 132, 641-660.

Heckman, J. J. 1979. Sample selection bias as a specification error. Econometrica. 153-161.

Hirshleifer, D., Low, A., Teoh, S. H. 2012. Are overconfident CEOs better innovators?. J. Finance 67, 1457-1498.

Hong, H., Kubik, J. D., Scheinkman, J. A. 2012. Financial constraints on corporate goodness. Working Paper, National Bureau of Economic Research.

Johnson, K. 2021. Reuters. Analysis: U.S. SEC prepares to take on corporate America over workforce disclosures. https://www.reuters.com/world/us/us-sec-prepares-take-corporate-america-over-workforce-disclosures-2021-08-16/.

Kaplan, S. N., Zingales, L. 1997. Do investment-cash flow sensitivities provide useful measures of financing constraints?. Q. J. Econ. 112, 169-215.

Kick, C. 2019. The Real Cost of Getting Workplace Diversity & Inclusion Wrong. https://www.launchways.com/the-real-cost-of-getting-workplace-diversity-inclusion-wrong/

Kitzmueller, M., Shimshack, J. 2012. Economic perspectives on corporate social responsibility. J. Econ. Lit. 50, 51-84.

Koh, P. S., Reeb, D. M. 2015. Missing R&D. J. Account. Econ. 60, 73-94.

Lee, A. H. 2020. SEC Speech. Diversity Matters, Disclosure Works, and the SEC Can Do More: Remarks at the Council of Institutional Investors Fall 2020 Conference.

Lee, Y., Ng, S., Shevlin, T., Venkat, A. 2021. The effects of tax avoidance news on employee perceptions of managers and firms: Evidence from glassdoor. com ratings. Account. Rev. 96, 343-372.

Lennox, C. S., Francis, J. R., Wang, Z. 2012. Selection models in accounting research. Account. Rev. 87, 589-616.

Leuz, C., Wysocki, P. D. 2016. The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. J. Account. Res. 54, 525-622.

Livingston, R. 2020. How to Promote Racial Equity in the Workplace. Harv. Bus. Rev, 64-73.

Luo, X., Bhattacharya, C. B. 2006. Corporate social responsibility, customer satisfaction, and market value. J. Mark. 70, 1-18.

Lys, T., Naughton, J. P., Wang, C. 2015. Signaling through corporate accountability reporting. J. Account. Econ. 60, 56-72.

Manchiraju, H., Rajgopal, S. 2017. Does corporate social responsibility (CSR) create shareholder value? Evidence from the Indian Companies Act 2013. J. of Account. Res. 55, 1257-1300.

Margolis, J. D., Elfenbein, H. A., Walsh, J. P. 2007. Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. Working Paper, University of Michigan.

Masulis, R. W., Reza, S. W. 2015. Agency problems of corporate philanthropy. Rev. Financ. Stud. 28, 592-636.

McKay, P. F., Avery, D. R. 2005. Warning! Diversity recruitment could backfire. J. Manag. Inq. 14, 330-336.

Mercer. 2020. The time is now: Addressing diversity, equity and inclusion in the workplace. https://www.mercer.us/content/dam/mercer/attachments/north-america/us/us-2020-mercer-dei-perspective.pdf.

Orlitzky, M., Schmidt, F. L., Rynes, S. L. 2003. Corporate social and financial performance: A meta-analysis. Organ. Stud. 24, 403-441.

Phillips, K.W. 2014. How diversity makes us smarter. Scientific American, 43-47.

PwC. 2020. New human capital disclosure rules; Getting your company ready. https://viewpoint.pwc.com/dt/us/en/pwc/in_the_loop/in_the_loop_US/New-human-capital-disclosure-rules-Getting-your-company-ready.html.

Rabl, T., Triana, M., Byun, S. Y., Bosch, L. 2020. Diversity management efforts as an ethical responsibility: How employees' perceptions of an organizational integration and learning approach to diversity affect employee behavior. J. Bus. Ethics 161, 531-550.

Roberts, L.M., Mayo, A. J. 2020. Toward a racially just workplace." Harv. Bus. Rev. https://hbr.org/2019/11/toward-a-racially-just-workplace.

Sánchez, P. E., Benito-Hernández, S. 2015. CSR policies: Effects on labour productivity in Spanish micro and small manufacturing companies. J. Bus. Ethics 128, 705-724.

Schipper, K. 2003. Principles-based accounting standards. Account. Horiz. 17, 61.

Securities And Exchange Commission. 2020. Final Rule: Modernization of Regulation S-K Items 101, 103, and 105. https://www.sec.gov/rules/final/2020/33-10825.pdf.

SHRM. 2021. More Companies Use DE&I as Executive Compensation Metric. https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/dei-as-executive-compensation-metric.aspx.

Sougiannis, T. 1994. The Accounting Based Valuation of Corporate R&D. Account. Rev. 69, 44-68.

Thomas, D. A., Ely R. J. 1996. Making differences matter. Harv. Bus. Rev. 74.

Thomson Reuters. 2020. SEC Adopts Disclosure Rule on Human Capital Management. https://tax.thomsonreuters.com/news/sec-adopts-disclosure-rule-on-human-capital-management/.

Williams, M. L., Bauer, T. N. 1994. The effect of a managing diversity policy on organizational attractiveness. Group Organ. Manag. 19, 295-308.

Wooldridge, J. M. 2010. Econometric analysis of cross section and panel data. MIT Press.

Wright, T. A., Cropanzano, R. 2004. The role of psychological well-being in job performance: a fresh look at an age-old quest. Organizational Dynamics 33, 338-351.

Zelenski, J. M., Murphy, S. A., & Jenkins, D. A. (2008). The happy-productive worker thesis revisited. J Happiness Stud. 9, 521-537.

APPENDIX A:

SAMPLE HUMAN CAPITAL DISCLOSURES

Abbott Laboratories (full human capital disclosure)

Human Capital

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

As of December 31, 2020, Abbott employed approximately 109,000 people, 70% of whom were employed outside of the U.S. Women represented 47% of Abbott's U.S. workforce, 45% of its global workforce, and 39% of its managers.

Health and Safety

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

Abbott takes a holistic approach to employee well-being. Abbott's global wellness programs are designed to meet the unique needs of employees across businesses and geographies and offer a wide range of programs, including supporting the mental, financial and physical health of employees and their families. For example, for over 20 years, Abbott has annually offered Exercise Across Abbott, which is a four-week physical wellness program that encourages employees to team up with colleagues and track how many minutes they exercise each day. Over 22,000 Abbott employees across 72 countries took part in 2020.

During the COVID-19 pandemic, Abbott has taken aggressive steps to limit exposure and enhance the safety of facilities for its employees, including implementing mandatory temperature screening and social distancing, providing and requiring the use of personal protective equipment, and at most U.S. facilities, onsite COVID-19 testing.

Talent Management

Abbott has an integrated global talent management process that is designed to identify and assess talent across the organization and provide equal and consistent opportunities for employees to develop their skills. All levels of employees participate in Abbott's annual performance management process to create development plans that support their particular career objectives, and Abbott provides a broad range of training, mentoring and other development opportunities to help its employees meet these objectives. The board of directors conducts an annual Talent Management Review, focusing on development of talent, diversity, and succession planning for critical positions. Similar reviews take place at every level of Abbott to develop talent and diversity across the organization.

Diversity and Inclusion

Abbott is committed to developing a workplace that is inclusive for all. Abbott ties executive compensation to human capital management, including diversity outcomes, to sustain an inclusive culture and the fair and balanced treatment of Abbott's employees.

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

Abbott offers professional development programs, which provide recent college graduates the opportunity to rotate through different areas of Abbott, often with the chance to work outside their home country. In 2020, 52% of the participants were women. Also, Abbott hosts hundreds of college students for paid internships. In 2020, 55% of the U.S. interns were women and 39% were minorities. Further, Abbott has operated a STEM internship program for high school students in the U.S. since 2012. The program's objective is to increase the number of students pursuing STEM-related careers and contribute to a more diverse talent pipeline for Abbott. In 2020, 58% of the STEM interns were women and 71% were minorities.

Compensation and Benefits

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

McDonald (DEI section only)

Diversity, Equity and Inclusion ("DEI")
At McDonald's, our aspiration is that no matter where you are in the world, when you interact with McDonald's, inclusivity and equity are evident. We believe that a diverse workforce is critical to McDonald's success, and we are committed to making this a continued priority for our Company. Our Board of Directors reflects this commitment as half of the 12 members are women or racially diverse, including the Chairman of the Board. With this leadership, the Company recently launched a new global DEI strategy designed to drive accountability across the System to better represent the diverse communities in which McDonald's operates, to accelerate cultures of inclusion and belonging, and to further dismantle barriers to economic opportunity.

The Company's enhanced DEI strategy builds on existing initiatives from across the business, including:

•the ongoing initiative to improve the representation of women at all levels of the Company,
•long-standing work designed to encourage franchisees and suppliers to create greater diversity in their own operations,
•upholding human rights and cultivating a respectful workplace that is ethical, truthful and dependable, and
•our commitment to equitable pay among Company employees with comparable job responsibilities, experience, performance and contributions.

While McDonald's is proud of our more than 65-year history as an employer, we expect our global DEI strategy to represent a step change in how we view equitable opportunity across our System and we are committed to accelerating the representation, inclusion and opportunity for historically underrepresented groups throughout our business. Aligned with our purpose, mission and values, this strategy will shape our future as a leading employer.

Beginning in 2021, the Company is incorporating quantitative human capital management related metrics to annual incentive compensation for its executives. In addition to the Company's financial performance, executives will be measured on their ability to champion our core values, improve diversity representation within leadership roles for both women and historically underrepresented groups, and create a strong culture of inclusion within the Company.

Chemed Corporation (DEI section only)

Maintaining a diverse and inclusive workforce is necessary to continue our success. Diverse perspectives help foster continued innovation. Moreover, as a provider of services, our businesses understand that a diverse and inclusive workforce is necessary to best identify and build relationships with our equally diverse customers and patients. Both Roto-Rooter and VITAS have established and maintained diverse workforces that are constantly evolving to better resemble the communities and populations that we serve.

APPENDIX B:

VARIABLE DEFINITIONS

CommitDEI	1 if the human capital disclosures include one of the keywords *diversity, inclusion, equity, underrepresented, inclusive, inclusiveness, inclusions, diverse, women, gender, female, race, equal*, and 0 otherwise.
EmpProd	Log (sales / average number of employees).
R&D	R&D expenditure / average total assets.
AdjROA	(Net income + R&D expenditure) / average total assets.
Size	Log of total assets.
Q	Tobin's Q.
ROA	Net income / average total assets.
Margin	(Total sales - the cost of goods sold) / total sales.
Leverage	(Current debt + long-term debt) / total assets
KZ	The five-factor Kaplan and Zingales (1997) index calculated as -1.002(CashFlow/TA)-39.368(Dividend/TA)-1.315(Cash/TA) +3.139(Leverage) +0.283(Q)
LaborSize	Log of the total number of employees
Intangibles	Intangible assets / total sales.
PPE	Net property plant and equipment / total assets.
Age	Log of the number of years the firm has been listed in CRSP.
EmpDEIRating	Average employee Diversity and Inclusion rating in 2020 on Glassdoor.
EmpRating	Average employee overall rating in 2020 on Glassdoor.
DIndex5	Quintile rankings for our sample firms' Diversity Index based on the state of the firms' headquarter, where the Diversity Index is compiled by the Census Bureau based on 2020 census.
BoardSize	The number of directors who serve on the board of directors.
BoardInd	Percentage of independent directors on the board of directors.
BoardDiversity_E	Percentage of diverse directors on the board of directors.
BoardDiversity_G	Percentage of female directors on the board of directors.

TABLE 1
Sample Selection

	# of distinct firms
December fiscal year end firms with sale>0 and at>0, and non-missing CIK and SIC for fiscal year 2020	4,408
Require at least 100 employees as of 12/31/2020	3,324
Require 2020 10-K metadata available in WRDS SEC suites	2,603
Require 10-K filing date within 100 days after 12/31/2020	2,579
Require non-missing information for equation (2) in either 2019 or 2020	2,228
	(4,335 firm-years)

Note: Table 1 describes the sample selection process. Financial data is from Compustat and 10-K filing metadata is from WRDS SEC Suite.

TABLE 2
Panel A: Descriptive Statistics

Variable	N	Mean	StdDev	P25	P50	P75
CommitDEI	4,335	0.801	0.399	1.000	1.000	1.000
EmpProd	4,335	5.979	0.979	5.447	5.874	6.549
R&D	4,335	0.035	0.086	0	0	0.022
ADJROA	4,335	0.018	0.152	-0.002	0.020	0.070
Size$_{t-1}$	4,335	7.687	1.946	6.448	7.645	8.931
Q$_{t-1}$	4,335	1.609	1.689	0.629	1.076	1.884
Margin$_{t-1}$	4,335	0.314	0.999	0.237	0.406	0.687
ROA$_{t-1}$	4,335	-0.007	0.153	-0.005	0.017	0.059
Leverage$_{t-1}$	4,335	0.286	0.239	0.081	0.248	0.430
Intangibles$_{t-1}$	4,335	0.183	0.218	0.010	0.076	0.314
PPE$_{t-1}$	4,335	0.209	0.248	0.022	0.103	0.298
LaborSize$_{t-1}$	4,335	0.747	1.851	-0.790	0.660	2.094
Age$_{t-1}$	4,335	2.892	0.845	2.197	3.045	3.497
EmpDEIRating	2,426	3.655	0.645	3.308	3.750	4.023
EmpRating	2,561	3.584	0.509	3.313	3.600	3.917
BoardDiversity_E	1,835	0.145	0.134	0.000	0.125	0.222
BoardDiversity_G	1,835	0.223	0.106	0.143	0.222	0.286
BoardInd	1,835	0.811	0.104	0.750	0.846	0.889
BoardSize	1,835	9.594	2.151	8.000	10.000	11.000

Panel B: Commitment to DEI by Industry

Industry	Observations	% with *CommitDEI* = 1
Utilities	120	95%
Manufacturing	394	85%
Business equipment	573	84%
Mines, construction, hotels, entertainment etc.	548	82%
Consumer durables	93	80%
Healthcare, medical equipment, and drugs	544	79%
Chemicals and allied products	116	79%
Wholesale, retail, and some services	242	78%
Oil, gas, and coal extraction and products	199	76%
Finance	1271	77%
Telephone and television transmission	103	76%
Consumer nondurables	132	76%
Total	**4,335**	**80%**

Notes: Table 2 Panel A presents the descriptive statistics for our testing variables; Panel B provides sample distribution by industry (Fama-French 12). We define all variables in Appendix B.

TABLE 3
Determinants of Commitment to DEI

DV =	(1) Coef. (S.E.) CommitDEI	(2) Coef. (S.E.) CommitDEI 2019	(3) Coef. (S.E.) CommitDEI 2020
Intercept	-2.2293***	-2.1040***	-2.4238***
	(0.1986)	(0.1645)	(0.2416)
$Size_{t-1}$	0.3695***	0.3598***	0.3857***
	(0.0318)	(0.0322)	(0.0320)
Q_{t-1}	0.1680***	0.1795***	0.1609***
	(0.0346)	(0.0388)	(0.0316)
ROA_{t-1}	0.1442	0.2524	0.0777
	(0.3408)	(0.4537)	(0.2974)
$Margin_{t-1}$	-0.0685*	-0.1103*	-0.0484*
	(0.0370)	(0.0579)	(0.0287)
$Leverage_{t-1}$	0.1359	0.0664	0.2276
	(0.2293)	(0.2306)	(0.2425)
$Intangibles_{t-1}$	0.7220**	0.7163**	0.7426**
	(0.3114)	(0.3213)	(0.3209)
PPE_{t-1}	-0.0017	-0.0565	0.0951
	(0.2944)	(0.2620)	(0.3450)
$LaborSize_{t-1}$	0.1027**	0.1129***	0.0871**
	(0.0406)	(0.0367)	(0.0439)
Age_{t-1}	-0.0842**	-0.0962**	-0.0724
	(0.0420)	(0.0381)	(0.0465)
N	4,335	2,108	2,227
Pseudo R-sq	0.245	0.246	0.248
Fixed Effects	Industry	Industry	Industry
Clustered Standard Errors	Industry	Industry	Industry

Notes: Table 3 presents probit estimation of equation (1), examining the determinants of firms' committing to DEI. The dependent variable *CommitDEI* is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 4

Validating *CommitDEI* with Employee Ratings of DEI

DV =	(1) Coef. (S.E.) *EmpDEIRating*	(2) Coef. (S.E.) *EmpDEIRating* 2020
Intercept	2.9274***	2.9255***
	(0.1180)	(0.1289)
CommitDEI	**0.1750****	**0.1785****
	(0.0738)	**(0.0746)**
Size$_{t-1}$	0.0560***	0.0599***
	(0.0153)	(0.0151)
Q$_{t-1}$	0.0900***	0.0791***
	(0.0071)	(0.0074)
ROA$_{t-1}$	-0.0754	0.1375
	(0.1562)	(0.2103)
Margin$_{t-1}$	-0.0198	-0.0279
	(0.0456)	(0.0433)
Leverage$_{t-1}$	0.0046	0.0379
	(0.0922)	(0.0820)
Intangibles$_{t-1}$	-0.2207**	-0.2310***
	(0.0782)	(0.0738)
PPE$_{t-1}$	-0.1893	-0.1855
	(0.1163)	(0.1161)
LaborSize$_{t-1}$	0.0400**	0.0352*
	(0.0182)	(0.0190)
Age$_{t-1}$	-0.0107	-0.0193
	(0.0284)	(0.0290)
N	2,426	1,232
adj. R-sq	0.109	0.101
Fixed Effects	Industry	Industry
Clustered Standard Errors	Industry	Industry

Notes: Table 4 presents our estimation of equation (3), which we use to validate our measure of *CommitDEI.* The dependent variable (*EmpDEIRating*) is employees' average Diversity and Inclusion ratings in 2020 on the Glassdoor website. The independent variable *CommitDEI* is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 5
Firms' Commitment to DEI and Employee Productivity

DV =	(1) Coef. (S.E.) *EmpProd*	(2) Coef. (S.E.) *EmpProd*	(3) Coef. (S.E.) *EmpProd* 2019	(4) Coef. (S.E.) *EmpProd* 2020	(5) Coef. (S.E.) *EmpProd*
Intercept	2.4506***	2.1201***	2.0764***	2.1012***	2.1197***
	(0.0767)	(0.1615)	(0.1579)	(0.1795)	(0.1560)
CommitDEI	**0.2063***	**0.1997***	**0.2146***	**0.1812***	**0.2242***
	(0.0293)	**(0.0605)**	**(0.0615)**	**(0.0574)**	**(0.0684)**
Post					-0.0556*
					(0.0275)
CommitDEI×Post					**-0.0538**
					(0.0231)
Size $_{t-1}$	0.4260***	0.5159***	0.5242***	0.5120***	0.5182***
	(0.0084)	(0.0466)	(0.0465)	(0.0468)	(0.0466)
Q $_{t-1}$	0.0742***	0.0601	0.0733	0.0532	0.0623
	(0.0068)	(0.0470)	(0.0573)	(0.0415)	(0.0470)
ROA $_{t-1}$	1.1685***	1.1324***	1.0565***	1.1493***	1.1172***
	(0.1021)	(0.2429)	(0.2322)	(0.2695)	(0.2398)
Margin $_{t-1}$	0.0436**	0.0764	0.0939	0.0666	0.0759
	(0.0202)	(0.1042)	(0.1528)	(0.0807)	(0.1041)
Leverage $_{t-1}$	0.4237***	0.4426**	0.4710***	0.4497**	0.4559**
	(0.0513)	(0.1579)	(0.1503)	(0.1576)	(0.1519)
Intangibles $_{t-1}$	0.2060***	-0.1816	-0.2202	-0.1353	-0.1765
	(0.0505)	(0.3298)	(0.3359)	(0.3391)	(0.3289)
PPE $_{t-1}$	0.4781***	-0.4162	-0.3462	-0.4313	-0.3928
	(0.0471)	(0.3485)	(0.3256)	(0.3936)	(0.3509)
LaborSize $_{t-1}$	-0.4673***	-0.5499***	-0.5511***	-0.5519***	-0.5517***
	(0.0091)	(0.0562)	(0.0547)	(0.0577)	(0.0562)
Age $_{t-1}$	0.0185	0.0086	0.0010	0.0179	0.0094
	(0.0134)	(0.0191)	(0.0181)	(0.0226)	(0.0191)
N	4,335	4,335	2,108	2,227	4,335
adj. R-sq	0.520	0.587	0.607	0.572	0.589
Fixed Effects	No	Industry	Industry	Industry	Industry
Clustered SE	Robust	Industry	Industry	Industry	Industry

Notes: Table 5 presents our estimation of equations (2) and (4) examining our H1, the relation between employee productivity (*EmpProd*) and firms' commitment to DEI (*CommitDEI*). The dependent variable is *EmpProd,* calculated as the log of sales scaled by average employees. The independent variable *CommitDEI* is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. *Post* is an indicator variable equal to 1 if the observation is for 2020, and 0 otherwise. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 6
Firms' Commitment to DEI and Employee Productivity:
Examination of Financing Constraints

	(1) Coef. (S.E.)	(2) Coef. (S.E.)
DV =	*EmpProd*	*EmpProd*
Intercept	2.0142***	2.0582***
	(0.1785)	(0.1637)
CommitDEI	**0.3269***	**0.2605***
	(0.0556)	**(0.0539)**
Leverage $_{t-1}$	0.8719***	
	(0.1832)	
CommitDEI×Leverage $_{t-1}$	**-0.5338***	
	(0.1006)	
KZ $_{t-1}$		0.0459
		(0.0459)
CommitDEI×KZ $_{t-1}$		**-0.0582***
		(0.0154)
Size $_{t-1}$	0.5174***	0.5272***
	(0.0466)	(0.0404)
Q $_{t-1}$	0.0592	0.0699
	(0.0476)	(0.0580)
ROA $_{t-1}$	1.1533***	1.0003***
	(0.2506)	(0.1544)
Margin $_{t-1}$	0.0764	0.0797
	(0.1038)	(0.0998)
Intangibles $_{t-1}$	-0.1749	-0.0324
	(0.3348)	(0.4280)
PPE $_{t-1}$	-0.4084	-0.2565
	(0.3435)	(0.4327)
LaborSize $_{t-1}$	-0.5511***	-0.5518***
	(0.0558)	(0.0553)
Age $_{t-1}$	0.0080	0.0008
	(0.0193)	(0.0245)
N	4,335	4,335
adj. R-sq	0.589	0.579
Fixed Effects	Industry	Industry
Clustered SE	Industry	Industry

Notes: Table 6 presents our estimation of equations (5) and (6), examining the relation between employee productivity (*EmpProd*) and firms' commitment to DEI (*CommitDEI*) with interaction with financing constraints (*Leverage* in column (1); *KZ* in column (2)). The dependent variable is *EmpProd,* calculated as the log of sales scaled by average employees. The independent variables are *CommitDEI,* which is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 7
Panel A: Firms' Commitment to DEI and Employee Satisfaction

	(1) Coef. (S.E.)	(2) Coef. (S.E.)
DV =	*EmpRating*	*EmpRating* 2020
Intercept	2.7351***	2.7720***
	(0.1211)	(0.0994)
CommitDEI	0.0747**	0.0700*
	(0.0301)	(0.0337)
Size $_{t-1}$	0.0949***	0.0936***
	(0.0205)	(0.0203)
Q $_{t-1}$	0.0825***	0.0758***
	(0.0094)	(0.0098)
ROA $_{t-1}$	0.0756	0.2063
	(0.1450)	(0.1656)
Margin $_{t-1}$	-0.0008	-0.0129
	(0.0266)	(0.0245)
Leverage $_{t-1}$	-0.1337	-0.1389
	(0.0948)	(0.0965)
Intangibles $_{t-1}$	-0.1486	-0.1414
	(0.1166)	(0.1212)
PPE $_{t-1}$	-0.0360	-0.0189
	(0.0883)	(0.0964)
LaborSize $_{t-1}$	-0.0167	-0.0154
	(0.0166)	(0.0172)
Age $_{t-1}$	-0.0136	-0.0210
	(0.0148)	(0.0160)
N	2,561	1,300
adj. R-sq	0.145	0.142
Fixed Effects	Industry	Industry
Clustered Standard Errors	Industry	Industry

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Panel B: Firms' Commitment to DEI and R&D Expenditure

DV =	(1) Coef. (S.E.) *R&D*	(2) Coef. (S.E.) *R&D* Non-missing R&D
Intercept	0.0143	0.0483
	(0.0213)	(0.0490)
CommitDEI $_{t-1}$	**0.0128***	**0.0170***
	(0.0061)	**(0.0043)**
Size $_{t-1}$	0.0036	0.0046
	(0.0037)	(0.0083)
Q $_{t-1}$	0.0094***	0.0079***
	(0.0010)	(0.0015)
ROA $_{t-1}$	-0.1653***	-0.1852***
	(0.0311)	(0.0276)
Margin $_{t-1}$	-0.0190***	-0.0176***
	(0.0016)	(0.0015)
Leverage $_{t-1}$	-0.0224**	-0.0306**
	(0.0084)	(0.0133)
Intangibles $_{t-1}$	-0.0465*	-0.0714**
	(0.0238)	(0.0311)
PPE $_{t-1}$	-0.0393	-0.0751**
	(0.0247)	(0.0306)
LaborSize $_{t-1}$	-0.0054	-0.0078
	(0.0037)	(0.0072)
Age $_{t-1}$	-0.0001	0.0005
	(0.0012)	(0.0018)
N	4,335	2,050
adj. R-sq	0.602	0.573
Fixed Effects	Industry	Industry
Clustered Standard Errors	Industry	Industry

Notes: Table 7 presents our estimation of equations (7) and (8), examining the mechanism through which committing to DEI influences employee productivity. Panel A tests for employee satisfaction based on *EmpRating,* average employee overall rating of their firms; Panel B tests for firms' commitment to innovative activities based on *R&D*, R&D expenditures scaled by average assets. The independent variable *CommitDEI* is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 8
Profitability and Firms' Commitment to DEI

	(1) Coef. (S.E.)	(2) Coef. (S.E.)
DV =	*AdjROA*	*AdjROA*
Intercept	-0.1666*	-0.2701**
	(0.0769)	(0.1164)
CommitDEI	**0.0255****	**0.0138**
	(0.0112)	**(0.0112)**
EmpProd		**0.0553****
		(0.0227)
Size $_{t-1}$	0.0126	-0.0168**
	(0.0095)	(0.0066)
Q $_{t-1}$	0.0283***	0.0239***
	(0.0029)	(0.0033)
Margin $_{t-1}$	0.0159**	0.0085
	(0.0061)	(0.0129)
Leverage $_{t-1}$	-0.0785**	-0.0964**
	(0.0312)	(0.0339)
Intangibles $_{t-1}$	-0.0432	-0.0371
	(0.0402)	(0.0331)
PPE $_{t-1}$	-0.0354	-0.0149
	(0.0327)	(0.0377)
LaborSize $_{t-1}$	0.0041	0.0341**
	(0.0047)	(0.0120)
Age $_{t-1}$	0.0180**	0.0162**
	(0.0067)	(0.0056)
N	4,335	4,335
adj. R-sq	0.214	0.269
Fixed Effects	Industry	Industry
Clustered Standard Errors	Industry	Industry

Notes: Table 8 presents our estimation of modified versions of equation (2), where we replace the dependent variable with firm profitability (*AdjROA*), calculated as earnings plus R&D expenditures scaled by average assets. The independent variable *CommitDEI* is an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. Columns (1) and (2) present our analysis without and with controlling for *EmpProd,* respectively. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 9
Firms' Commitment to DEI and Employee Productivity:
2SLS Analysis

DV =	(1) Coef. (S.E.) *CommitDEI* Probit	(2) Coef. (S.E.) *EmpProd* 2nd Stage of 2SLS
Intercept	-2.5047***	2.5836***
	(0.2555)	(0.1388)
CommitDEI		**0.2523****
		(0.1083)
DIndex5	**0.0806****	
	(0.0352)	
Size $_{t-1}$	0.3734***	0.5053***
	(0.0383)	(0.0452)
Q $_{t-1}$	0.1792***	0.0620
	(0.0312)	(0.0468)
ROA $_{t-1}$	0.1611	1.0556***
	(0.3163)	(0.2415)
Margin $_{t-1}$	-0.0765*	0.0688
	(0.0395)	(0.1079)
Leverage $_{t-1}$	0.1269	0.4222**
	(0.1972)	(0.1727)
Intangibles $_{t-1}$	0.6276**	-0.2176
	(0.3073)	(0.3226)
PPE $_{t-1}$	0.0060	-0.4251
	(0.3011)	(0.3375)
LaborSize $_{t-1}$	0.1090**	-0.5426***
	(0.0455)	(0.0561)
Age $_{t-1}$	-0.0674	0.0093
	(0.0418)	(0.0192)
N	4,141	4,141
Pseudo/adj. R-sq	0.2514	0.585
Fixed Effects	Industry	Industry
Clustered SE	Industry	Industry

Notes: Table 9 presents our 2SLS estimation of the relation between firms' commitment to DEI (*CommitDEI*) and employee productivity (*EmpProd*). Column (1) presents our first-stage probit model of equation (1) with our exclusionary term of *DIndex5,* which we calculate as a quintile ranking for our sample firms' Diversity Index based on the state of the firms' headquarter. Column (2) presents our second-stage model of 2SLS estimation using the predicted probability from the probit model in Column (1) as an instrumental variable for equation (2). Our dependent variable in column (1) is *CommitDEI,* an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. Our dependent variable in column (2) is *EmpProd,* calculated as the log of sales scaled by average employees. We present our coefficient estimates with their corresponding standard errors in the parentheses below. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.

TABLE 10
Panel A: Board Diversity and Commitment to DEI

DV =	(1) Coef. (S.E.) *CommitDEI*	(2) Coef. (S.E.) *CommitDEI*	(3) Coef. (S.E.) *CommitDEI*	(4) Coef. (S.E.) *CommitDEI*
Intercept	-0.2552	-0.3839	-0.3791	-1.4559***
	(0.4864)	(0.5117)	(0.5164)	(0.5065)
BoardDiversity_E	**0.4870**		**0.3924**	**0.3414**
	(0.3661)		**(0.3663)**	**(0.3585)**
BoardDiversity_G		**1.1632***	**1.1211**	**0.6464**
		(0.4316)	**(0.4551)**	**(0.4561)**
BoardInd				**1.4477***
				(0.4535)
BoardSize				**0.0852**
				(0.0398)
Size $_{t-1}$	0.1865***	0.1823**	0.1786**	0.1032*
	(0.0684)	(0.0730)	(0.0718)	(0.0573)
Q $_{t-1}$	0.0608	0.0525	0.0488	0.0567
	(0.0758)	(0.0790)	(0.0783)	(0.0742)
ROA $_{t-1}$	0.3772	0.2685	0.3653	0.6899
	(1.1869)	(1.2269)	(1.1927)	(1.1677)
Margin $_{t-1}$	0.0748	0.0753	0.0649	0.0237
	(0.0742)	(0.0795)	(0.0806)	(0.0789)
Leverage $_{t-1}$	-0.0013	-0.0508	-0.0461	-0.0712
	(0.3593)	(0.3548)	(0.3614)	(0.3812)
Intangibles $_{t-1}$	1.0322***	0.9517***	0.9692***	0.9936***
	(0.3404)	(0.3592)	(0.3662)	(0.3393)
PPE $_{t-1}$	-0.5058	-0.4732	-0.4824	-0.3596
	(0.4350)	(0.4241)	(0.4255)	(0.4095)
LaborSize $_{t-1}$	0.0092	0.0072	0.0022	0.0001
	(0.0480)	(0.0487)	(0.0497)	(0.0495)
Age $_{t-1}$	-0.1236	-0.1350	-0.1332	-0.1616*
	(0.0779)	(0.0837)	(0.0846)	(0.0919)
N	1,835	1,835	1,835	1,835
Pseudo R-sq	0.090	0.096	0.097	0.118
Fixed Effects	Industry	Industry	Industry	Industry
Clustered SE	Industry	Industry	Industry	Industry

Panel B: Employee Productivity, Board Diversity, and Commitment to DEI

DV =	(1) Coef. (S.E.) EmpProd	(2) Coef. (S.E.) EmpProd	(3) Coef. (S.E.) EmpProd	(4) Coef. (S.E.) EmpProd	(5) Coef. (S.E.) EmpProd
Intercept	2.3679***	2.3488***	2.3522***	2.2410***	2.1501***
	(0.2569)	(0.2599)	(0.2604)	(0.3106)	(0.3208)
CommitDEI					**0.1685***
					(0.0464)
BoardDiversity_E	**-0.1131**		**-0.1218**	**-0.1193**	**-0.1251**
	(0.1026)		**(0.1038)**	**(0.1020)**	**(0.1047)**
BoardDiversity_G		**0.2152**	**0.2231**	**0.1762**	**0.1528**
		(0.1765)	**(0.1754)**	**(0.1748)**	**(0.1734)**
BoardInd				**0.2399**	**0.2035**
				(0.1647)	**(0.1644)**
BoardSize				**-0.0136**	**-0.0157**
				(0.0176)	**(0.0169)**
Size $_{t-1}$	0.5895***	0.5860***	0.5872***	0.5917***	0.5899***
	(0.0480)	(0.0495)	(0.0492)	(0.0401)	(0.0397)
Q $_{t-1}$	0.0380	0.0353	0.0361	0.0382	0.0375
	(0.0362)	(0.0352)	(0.0356)	(0.0363)	(0.0365)
ROA $_{t-1}$	2.3716***	2.3804***	2.3608***	2.3544***	2.3285***
	(0.6973)	(0.6937)	(0.6881)	(0.6771)	(0.6911)
Margin $_{t-1}$	-0.6841	-0.6865	-0.6844	-0.6779	-0.6797
	(0.5613)	(0.5590)	(0.5576)	(0.5489)	(0.5501)
Leverage $_{t-1}$	0.1258	0.1203	0.1177	0.1075	0.1065
	(0.0866)	(0.0868)	(0.0837)	(0.0786)	(0.0769)
Intangibles $_{t-1}$	-0.0265	-0.0232	-0.0264	-0.0314	-0.0517
	(0.3642)	(0.3652)	(0.3638)	(0.3615)	(0.3620)
PPE $_{t-1}$	-0.3584	-0.3518	-0.3518	-0.3525	-0.3428
	(0.3722)	(0.3741)	(0.3745)	(0.3651)	(0.3607)
LaborSize $_{t-1}$	-0.6517***	-0.6546***	-0.6529***	-0.6494***	-0.6491***
	(0.0531)	(0.0520)	(0.0530)	(0.0553)	(0.0548)
Age $_{t-1}$	-0.0097	-0.0114	-0.0117	-0.0084	-0.0047
	(0.0156)	(0.0153)	(0.0154)	(0.0126)	(0.0126)
N	1,835	1,835	1,835	1,835	1,835
R-sq	0.724	0.724	0.724	0.725	0.727
adj. R-sq	0.721	0.721	0.721	0.722	0.724
Fixed Effects	Industry	Industry	Industry	Industry	Industry
Clustered SE	Industry	Industry	Industry	Industry	Industry

Notes: Table 10 presents our examination of the relation between employee productivity, commitment to DEI, and board of director characteristics. Panel A examines the probit model of equation (1) with board characteristics as additional independent variables. Panel B presents our estimation of variations of equation (2). Our dependent variable in Panel A is *CommitDEI,* an indicator variable equal to 1 if the firm has an explicit commitment to DEI per their human capital disclosures in 2020, and 0 otherwise. Our dependent variable in Panel B is *EmpProd,* calculated as the log of sales scaled by average employees. All columns include industry (Fama-French 12) fixed effects and industry (Fama-French 12) clustered standard errors. See Appendix B for variable definitions. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed p-values.