

# Are Firms' Disclosed Diversity Targets Credible?\*

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## Abstract

Amid growing pressures to comply with ESG standards, firms increasingly disclose their ESG targets. However, given the difficulty in verifiability, it is unclear whether this public commitment to ESG goals is credible or only cheap talk. In this paper, we answer the question of how stakeholders should interpret firms' disclosure of ESG goals and what they could expect in terms of firms' future ESG performance. Specifically, we examine whether firms that publicly disclose diversity targets truly increase their diversity levels after the target disclosure. Exploiting a novel dataset of detailed firm employee records, we find that firms that disclosed a diversity target have indeed improved their diversity, but the diversity level already increased substantially *prior to* the target disclosure. To further explore how certain target characteristics are associated with disclosure credibility, we hand collected and coded firms' diversity goals from their sustainability reports. We show that numerical, forward-looking, and all-employee targeted goals are more credible than others. We also find that firms that are historically more compliant, with greater institutional pressure, and with greater innovation demand tend to disclose more credible goals, suggesting the importance of examining firms' incentives rather than the act of disclosure itself. Overall, our results generate practical implications for two groups: investors adjusting their decisions based on ESG disclosure and regulators assessing the necessity and content of ESG disclosure regulations.

**Keywords:** diversity targets, credible, ESG disclosure

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## I. INTRODUCTION

As investors and stakeholders become increasingly concerned with firms' practices in environmental, social, and governance (ESG) areas, a substantial number of companies are disclosing and publicly committing to ESG goals. For instance, more than 60 multinational corporations have pledged to follow a list of ESG goals curated by the World Economic Forum (WEF) at the annual Davos gathering in September, 2021.<sup>1</sup> However, the ESG targets are usually forward-looking and rely on metrics that are hard to verify. It is therefore difficult to know whether firms are making sincere efforts to deliver on their commitments. Notably, recent literature suggests that much of the nonfinancial voluntary disclosure and public commitments might simply be cheap talk (Raghunandan and Rajgopal, 2021; Bingler et al., 2022). How should investors and other stakeholders interpret and make sense of firms' disclosure of ESG goals? And what can they expect in terms of firms' future ESG performance?

In this paper, we answer these questions within the setting of firms' disclosure of employee diversity goals by exploiting a novel dataset of detailed records of employee demographics and examining whether firms' disclosures of employee diversity goals are credible or simply cheap talk. Specifically, using a third-party employee inflow and outflow statistics, we are able to examine firms that have publicly disclosed a goal of employee diversity. We therefore set out to look into firms' ESG disclosure through the lens of firms' diversity target disclosure and identify factors that make firms' disclosure more credible.

Different from disclosures of ESG outcomes, firms' disclosures of ESG goals can be more susceptible to cheap talk. As firms are only expected to deliver goal completion in the future, stakeholders may fail to follow up and hold the firms accountable. Moreover, many of the ESG

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<sup>1</sup> <https://www.weforum.org/press/2021/01/global-business-leaders-support-esg-convergence-bycommitting-to-stakeholder-capitalism-metrics-73b5e9f13d>.

goal metrics (including metrics concerning firms' employee diversity) are not subject to mandatory disclosure and are thus difficult for outside stakeholders to verify. Therefore, firms have greater incentive to ride the social movement tide, disclose a goal, and make no effort to subsequently improve their performance. Another common challenge in studying ESG disclosures is that ESG performance prior to disclosure is unknown (Christensen et al., 2019). In this study, our dataset enables us to overcome this challenge by observing detailed employee information such as total headcount, seniority, ethnicity, and gender composition over time. We are therefore able to construct various diversity measures for firms *before* and *after* their disclosure of goals. Our analyses uncover how firms' diversity performances have evolved after the disclosures. In particular, we examine whether the firms' diversity target disclosures satisfy a necessary condition of credibility: whether firms' employee diversity has improved after they disclosed the diversity target.<sup>2</sup>

Our study focuses on diversity goals for two important reasons. Firstly, employee diversity is a crucial part of the social factor in ESG. In light of the recent global pandemic and social movements (e.g., Black Lives Matter), there is increasing awareness of the importance of gender equality and the inclusion of racial and ethnic minorities in the workplace.<sup>3</sup> Previous studies suggest that diversity can possibly contribute to better firm performance (Carter et al., 2003). However, at the same time, there is significant underrepresentation and inequality of minority

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<sup>2</sup> One crucial criterium for us to consider a diversity target as "credible" is sincerity, in other words, whether disclosing firms strive to improve diversity level. For example, if 50% of a firm's employees are female and the firm set 50% of female employee as its gender target, the firm already meets the target upon setting it. Such a target is credible in a literal sense. However, this goal will not be classified as credible in our study if the firm does not make effort to improve the diversity level after disclosure.

<sup>3</sup> As one senior director of the WEF, Maha Eltobgy, points out "... (T)he social part has always been kind of lagging in ESG...but the pandemic has perhaps showed businesses the renewed importance of the people section... and I think that's good." See:

<https://www.fastcompany.com/90597676/50-global-businessesincluding-mastercard-nestle-and-unilever-announce-commitment-to-transparency>.

groups and female workers (e.g., Guest, 2017; Bertrand et al., 2010; Goldin et al., 2017). Corporations' commitment and actions in this area are potentially a crucial means in promoting social justice.

Secondly, employee diversity as a setting to study firms' disclosure of ESG goals has several advantages in terms of measurement compared to other factors in ESG. Firstly, employee diversity measure is subject to little measurement error. Firms' carbon footprint, greenhouse gas emissions, and water pollution are all difficult to measure accurately. Previous research has primarily relied on measures constructed by commercial data providers.<sup>4</sup> Recent studies reveal the inconsistency of these measures and caution researchers to use them mindfully (Busch et al., 2022; Kalesnik et al., 2020). In contrast, measuring firms' employee demographic diversity, such as percentage of female employees and ethnic minority, is relatively straightforward. Furthermore, firms' employee diversity performance is arguably more in management's control than other ESG factor performances. For example, to drastically reduce its carbon footprint, a firm may have to alter its business model, make substantial investments, or put pressure on suppliers and manufacturers along its value chain, while diversity is mainly achieved through firms' hiring and promoting practices. Therefore, employee diversity measures are more directly informative concerning managerial effort towards ESG (Holmström, 1979).

We use a novel dataset from Revelio Lab to construct a panel of firm diversity levels, and we use data of firms' diversity target disclosure from Refinitiv Workspace to identify firms that have disclosed diversity targets. The merged dataset covers a time period from 2008 to 2020. We investigate whether firms that disclosed diversity targets are actually improving their diversity levels. We first use a difference-in-differences design to determine whether the diversity level of

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<sup>4</sup> E.g., Refinitiv ESG database, Thomas Reuters ASSETS4, and MSCI KLD, etc.

the disclosing firms has increased after diversity target disclosure. The results show that the disclosing firms have a significantly higher level of diversity than non-disclosing firms after controlling for firm and year fixed effects. This result suggests that firms' diversity targets satisfy a necessary condition of being credible. That is, the disclosing firms indeed increase their diversity level after they disclose a diversity goal. Moreover, we also find in the dynamics analysis that the disclosing firms' diversity performance has already increased substantially *prior to* the target disclosure. This is consistent with voluntary disclosure theory, which postulates that firms with superior performance are more likely to disclose to differentiate themselves from their peers (Dye, 1985; Verrecchia, 1983). To this end, note that we do not make a causal argument about whether diversity target disclosure itself has a significant impact on firms' diversity performance. Our results suggest that these firms already started to improve their diversity *ex ante*, and these firms continue to improve their diversity levels after disclosure.

Next, we investigate whether certain disclosed target characteristics render the disclosure more credible. Specifically, we look at whether firms with numerical targets, forward-looking targets, and targets set for the entire employee group achieve higher diversity levels than firms that make a verbal, generic target disclosure. The selection of these target characteristics is motivated by the major concerns of firms' ESG disclosure identified by previous literature. In particular, the three characteristics correspond to the verifiability, salience, and timeliness of firms' voluntary disclosure. Consistent with theoretical predictions, we find that targets that are numerical, forward-looking, and aiming at the entire employee group are associated with higher diversity levels after target disclosure, suggesting that these characteristics can help stakeholders differentiate more credible targets from others.

Furthermore, we examine whether firms with certain characteristics have a greater incentive to improve their diversity performance. We particularly look at firms' reputational incentives, underlying demand for diversity and corporate governance, as they are important factors that shape firms' voluntary disclosure incentives (Mercer, 2004; Miras-Rodriguez and Di Pietra, 2018). In the context of diversity disclosure, we proxy firms' incentive to maintain their reputation using their compliance history. We proxy firms' actual demand for more diverse labor using R&D intensity, as prior literature suggests that employee diversity drives innovation (Østergaard, Timmermans and Kristinsson, 2011). Finally, we use share of institutional investors as proxy for firms' governance level and pressure to improve ESG performance (Chen et al., 2020). Consistent with prior literature, we find that firms that are historically more compliant, firms with greater R&D intensity, and firms with higher institutional ownership tend to disclose more credible diversity targets than firms without these characteristics. The results indicate that firms' incentives in improving diversity level play an important role when assessing the credibility of disclosed targets.

Lastly, in our additional analyses, we break down the singular diversity score into the percentages of ethnic minority and female employees to study whether our findings differ for the two aspects. We find that while the main findings hold for both metrics, the firm-level characteristics associated with firm incentives is only statistically significant for ethnic minority (though the coefficients on measures of female have the expected directions). The results suggest that firms may prioritize improving ethnic minority percentage to female percentage when incentivized to enhance diversity performance.

This paper contributes to advancing the understanding of firms' disclosure related to ESG, by answering calls from regulators and recent literature to look into the generic language firms use

in their ESG disclosure (Christensen et al., 2018; SASB, 2017). Previous studies have primarily focused on firms' disclosures of ESG outcomes rather than on disclosures of ESG goals (Clarkson et al., 2008; Christensen, 2016). We are among the first ones to study the disclosure of ESG targets. Given the prevalence of ESG target disclosure practice, our study helps to inform stakeholders regarding how to interpret firms' voluntary ESG goal disclosure. Moreover, we are also among the first to identify certain disclosure characteristics that are associated with better credibility. In doing so, we provide guidance on how to extract useful and decision-relevant information in firms' ESG target disclosure.

We also contribute to management accounting literature on corporate targets. Targets are important management tools for corporations to achieve better performance. Most of the prior research focuses on firms' internal target-setting practice such as goal determination, target revisions, and relative performance evaluations (Bol et al., 2010; Casas-Arce et al., 2018; Holzhaecker et al., 2019). These goals are published internally and are not visible to the public. Our setting is unique in that we study internal management targets publicly announced to all outside stakeholders. A study similar to ours is Ioannou et al. (2016), who examine the relationship between target difficulty and target completion in the setting of carbon emissions goals. However, Ioannou et al. (2016) focus on the practice of goal setting itself rather than the disclosure of the targets. Specifically, they examine how target difficulty affects the completion of the target, while we study whether the disclosed target is credible.

Our paper proceeds as follows. Section 2 motivates our main hypotheses and discusses related literature. Section 3 presents the sample and summary statistics. Section 4 discusses the main results of the analyses. Section 5 presents additional analyses, and Section 6 concludes.

## II. THEORETICAL DEVELOPMENT AND RELATED LITERATURE

### 2.1 ESG disclosure and credibility issues

ESG disclosure has recently received increased attention from investors, stakeholders, and regulators. Bloomberg Intelligence estimates that investment in ESG-related assets is set to reach \$50 trillion by 2025, compared with \$35 trillion in 2021. Facing the strong demand for information, ESG-related disclosure has become more prevalent (Amel-Zadeh and Serafeim, 2018). However, much of the disclosed information is hard to measure and verify. Unverifiable information coupled with potentially misaligned interests between a company's management and investors/other stakeholders renders the ESG disclosure particularly susceptible to cheap talk (Crawford and Sobel, 1982). As a result, the investors are concerned that they cannot rely on companies' disclosure to inform their investment decisions (Bernow et al. 2019).<sup>5</sup> This credibility issue similarly concerns regulators. The SEC cautioned investors of potential misstatements in firms' ESG disclosures (SEC, 2021).<sup>6</sup>

A couple of recent studies find that firms may engage in "greenwashing" to portray a positive image without improving their actual ESG performance. For instance, Hail et al. (2021) find evidence that managers overstate firms' environmental performance in conference calls and that this overstatement is associated with better external ESG ratings. Crowley et al. (2019) examine firms' Twitter posts and find that firms with poor CSR performance post more about their CSR activities. Binger et al. (2022) apply a state-of-the-art natural language processing method to analyze firms' annual reports and find that firms primarily disclose the least materially relevant information. Finally, Raghunandan and Rajgopal (2021) show that, despite firms' public

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<sup>5</sup> <https://www.mckinsey.com/business-functions/sustainability/our-insights/more-than-values-the-value-based-sustainability-reporting-that-investors-want>

<sup>6</sup> <https://www.sec.gov/news/press-release/2021-42>



commitment to the 2019 Business Round Table proposal, they do not follow up with the pledge and in fact have worse environment and labor-related compliance performance.

Recent conversations concerning the social importance of diversity have similarly provided firms with an incentive to create the appearance of diversity. Similar to ESG related disclosure, in the context of diversity disclosure, many firms do not voluntarily disclose their employee composition information. As a result, diversity disclosure is subject to the same credibility issue. Firms' disclosed diversity targets may therefore be simply cheap talk, and firms may not take subsequent actions to increase their diversity performance.

On the other hand, firms have reputation concerns. Firms often disclose ESG-related information (including diversity targets) in their sustainability report, which are often read and researched by sophisticated institutional investors. Rational investors anticipate firms' incentive to overstate their ESG performances and promises. This skepticism functions as a discipline mechanism to hold the firms responsible and "walk the talk." Moreover, given the documented "washing" activities, regulators are also taking steps to enforce a more informative disclosure environment. In 2021, SEC announced an enforcement task force to identify potential misstatements in firms' voluntary ESG-related information disclosure (SEC, 2021).<sup>7</sup>

Given the above discussion, it is *a priori* unclear whether firms that disclosed a goal for diversity would perform better in their employee diversity level. Therefore, we hypothesize the following in the null form:

***Hypothesis 1:*** *Companies with a diversity target disclosure do not increase their diversity level compared to companies that did not disclose a diversity target.*

## **2.2 Target Characteristics**

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<sup>7</sup> <https://www.sec.gov/news/press-release/2021-42>

### *2.2.1 Target disclosure verifiability and credibility*

One major concern of firms' ESG disclosure is its verifiability. As established in the accounting and economic theory literature, verifiability is a central mechanism in ensuring credible disclosure (Verrecchia, 1983; Dye, 1985; Grossman and Hart, 1980; Grossman, 1981; Milgrom, 1981). However, as the 2017 Sustainability Accounting Standards Board (SASB) report points out, companies often use vague, non-specific language when disclosing ESG related topics. In fact, more than 50% of the SEC registered firms' ESG disclosures are generic or boilerplate language (SASB, 2017). Vague language makes it difficult to interpret and verify firms' disclosures. One effective way to increase the verifiability is to use specific metrics or numerical disclosures (Christensen et al., 2018). Explicitly stating concrete goals allows investors and stakeholders to make comparisons both between firms and between a firms' past and current performance. We therefore hypothesize:

***Hypothesis 2a:*** *Companies with a numerical diversity target disclosure show greater improvement of diversity level than companies without such numerical targets.*

### *2.2.2 Target disclosure timeliness and credibility*

In traditional corporate practice, targets are an important and effective internal tool for firms to achieve desired outcomes. In disclosing the targets, firms publicly announce the goals to external investors and stakeholders. If the targets are forward-looking, they serve as a motivating mechanism (Chenhall, 2003). In contrast, past targets are unlikely to have a persistent effect on firms' behavior. In our sample of firm diversity target disclosures, a significant portion of firms have disclosed goals from the past, which they may or may not have achieved by now. Such disclosure about past target provides less actionable information to the investors. In contrast, a "forward-looking" diversity target, i.e., targets that firms promise to achieve in the future can

prompt firms to continue expending resources and effort in enhancing their diversity levels. As a result, we expect these firms to achieve better performance than firms that only disclose past targets.

***Hypothesis 2b:** Companies with a forward-looking diversity target disclosure show greater improvement of diversity level than companies with past targets.*

### 2.2.3 Target disclosure salience and credibility

Firms may be tempted to engage in “washing” to gain access to financing with better terms (Cheng et al., 2014) and to promote a positive image with their consumers (Schmeltz, 2012). To achieve these goals while minimizing cost, firms can selectively create disclosures related to salient ESG items. In the context of diversity disclosure, disclosing a target for Board or C-suite diversity is more salient than a target for the rank-and-file level employees. In fact, Board and C-suite diversity is among the most visible governance issues. Board and C-suite member profiles are often featured in companies’ website, annual reports, and other public relation materials. They are therefore more noticeable by company outsiders. Moreover, potential disclosure and composition requirement regulations are likely to be levied on company boards and C-suites. Notably, California already requires that all publicly held companies which have their executive offices located in California comply with the minimum requirements for female directors (as required respectively by Women on Boards, SB 826) and directors from underrepresented communities on their boards (as required by Communities on Boards, AB 979).<sup>8</sup> In contrast, diversity targets on rank-and-file level employees are not only harder to achieve, as these targets involve the whole corporate organization, but they are also less salient to outside stakeholders. Firms that disclose employee-level diversity targets are hence less likely to engage in “washing,” and the disclosed targets are more likely to be credible. We therefore hypothesize:

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<sup>8</sup> <https://www.sos.ca.gov/business-programs/diversity-boards>

***Hypothesis 2c:** Companies with an employee-level diversity target disclosure show greater improvement of diversity level than companies without employee-level targets.*

## **2.3 Firm characteristics and disclosure credibility**

### *2.3.1 Prior regulatory penalties and credibility*

Prior research has identified that firms' reputation concern plays a crucial role in their voluntary disclosure decisions of both financial and nonfinancial information (Michelon, 2011; Beyer and Dye, 2012). In our setting, we expect firms that have recently experienced a regulatory penalty (e.g., labor protection violations) to have more incentive to rebuild a positive reputation and are thus more prone to engage in "washing" behavior. Because firms do not usually disclose employee compositions, we expect firms that recently experienced a large penalty and disclosed a diversity target to have less incentive to actually improve their diversity level. Therefore, diversity targets disclosed by firms with a large amount of prior regulatory penalties are less credible.

### *2.3.2 R&D intensity and credibility*

Additionally, firms with R&D intensity demonstrate a sincere demand for diverse labor and generally have a less inefficient discriminatory hiring process (Martinez et al., 2017). Therefore, we expect diversity targets disclosed by firms with high R&D intensity to be more credible.

### *2.3.3 Agency issues and credibility*

Another important factor that affects firms' disclosure credibility is the severity of agency issues. Prior literature shows that firms with better corporate governance mechanisms are considered to have high-quality voluntary disclosures, especially ESG-related disclosures (Miras-Rodríguez and Di Pietra, 2018). Institutional investors play a monitoring role and may put pressure on firms to improve their ESG performance. Chen et al., 2020 find causal evidence that

an increase in the share of institutional investors positively affects firms' CSR performance. We therefore expect diversity targets disclosed by firms with a larger share of institutional investors to be more credible.

### **III. SAMPLE AND DESCRIPTIVE STATISTICS**

#### **3.1 Sample and Data**

We construct our sample primarily using two data vendors: human capital data from Revelio Lab and diversity disclosure data from Refinitiv Workspace. The Revelio Lab workforce dataset is collected from unstructured online public profiles, resumes, and job postings. Through the use of proprietary algorithms, it provides employee counts, inflows, and outflows by gender and ethnicity over time. The dataset is presented starting from 2008. We then merge Revelio Lab's employee data with Refinitiv, which provides information about a firm's disclosure of diversity-related targets. The resulting sample consists of 15,639 firm-years for 1,203 distinct firms from 2008 to 2020. To control for firms' fundamentals, we require our sample firms to have non-missing control variables retrieved from Compustat.

In our cross-sectional analyses, we split sample firms into high and low groups with respect to their institutional ownership percentage, dollar value of penalty received scaled by total assets, and R&D intensity. Institutional ownership data are provided by Thomson Reuters Stock Ownership Data, and penalty amount is retrieved from Violation Tracker, produced by the Corporate Research Project of Good Jobs First. We calculate firms' R&D Intensity based on data retrieved from Compustat.

While prior literature often examines the effect of firm-level characteristics on ESG disclosure, our study investigates the more nuanced implication of target-level characteristics on

the credibility of diversity targets. As discussed above, we expect target characteristics to provide additional information that is valuable to those who use diversity disclosure in investing and regulatory decisions. We manually screen 824 sustainability reports and identify firms' diversity targets with different characteristics.<sup>9</sup>

Using the merged data set of Revelio Lab and Refinitiv Workspace, we identify a list of firm-years with diversity target disclosure for which we have diversity performance data. The majority of listed companies provide their most recent report on their own website, making it simple to acquire the 2020 and 2021 reports. For historical reports, there are three main resources. We first check on corporate official websites to determine whether the website archived old reports. In the case that the report is not available on firms' official websites, a few websites, such as responsibilityreports.com, gather historical corporate responsibility reports. If neither the corporate website nor the responsibility report website has a firm's historical reports, we search company name, responsibility report (sustainability, ESG, corporate responsibility, etc.), and specific year (e.g., 2012) on Google for respective reports.

After downloading the report, we determine whether the report's diversity goal is disclosed by reading the summary, DE&I (diversity, equity, and inclusion), employment, and appendix sections. In order to find diversity goal disclosure, we additionally search the report file for key phrases including "diverse," "diversity," "female," "women," "minority," "goal," "commitment," and "aspiration."

After having identified disclosed diversity targets, we describe the objectives as *numerical* goals if they provide numerical values, such as "achieving 50% women and 50% men in our

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<sup>9</sup> Although our sample period ends in 2020, we also include 2021 sustainability reports in our manual search range to ensure that retrospective target disclosure is considered in our results.

workforce.”<sup>10</sup> The goals are categorized as non-numerical goals for those reports that solely textually describe diversity goals, such as “increase underrepresented minorities’ representation in our U.S. workforce.”<sup>11</sup>

Moreover, we categorize diversity objectives as *employee* versus *leadership*. If the company sets diversity goals for the entire employee group, we describe its diversity goal as an employee goal. Chemours, for example, has pledged that fifty percent of all global positions will be filled by women by 2030.<sup>12</sup> If the disclosed goals do not involve for the entire employee group but rather a subset of employees (e.g., leadership only), we classify these goals as *leadership*. For instance, Global Payments’ diversity objectives for 2025 include growing female leadership to 49%.<sup>13</sup> We consider such diversity goal as not relating to the entire employee population.

Finally, we document whether companies reveal their past and *forward-looking* diversity goals. For each year, if the company provides diversity goals and the progress of these goals for the reported year, we consider the goal to be a past goal. If the company sets goals for upcoming years, we consider these to be forward-looking goals. Lumentum Holdings, for example, claims in their 2021 Sustainability Report that one of its 2021 targets is to increase the percentage of women in senior leadership positions to 21%, and its 2021 outcome of this goal is 20.7%.<sup>14</sup> We consequently consider it as a disclosure of past goals. In contrast, Pfizer’s 2020 ESG performance

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<sup>10</sup> Accenture 2021 Global Impact Report: [https://www.accenture.com/\\_acnmedia/PDF-168/Accenture-United-Nations-Global-Compact-Communication-on-Progress-2021.pdf#zoom=40](https://www.accenture.com/_acnmedia/PDF-168/Accenture-United-Nations-Global-Compact-Communication-on-Progress-2021.pdf#zoom=40)

<sup>11</sup> Applied Materials 2018 Corporate Social Responsibility Report: [https://www.appliedmaterials.com/files/2018\\_csr\\_rev2.pdf](https://www.appliedmaterials.com/files/2018_csr_rev2.pdf)

<sup>12</sup> Chemours’ CSR website: <https://www.chemours.com/en/corporate-responsibility/2030-goals>

<sup>13</sup> Global Payments’ 2021 Global Responsibility Report: [https://s21.q4cdn.com/254933054/files/doc\\_downloads/global\\_responsibility/Global-Payments\\_2021\\_Global\\_Responsibility\\_Report.pdf](https://s21.q4cdn.com/254933054/files/doc_downloads/global_responsibility/Global-Payments_2021_Global_Responsibility_Report.pdf)

<sup>14</sup> <https://resource.lumentum.com/s3fs-public/literature-items/lumentum-csr-2021-report.pdf>

report presents its 2025 opportunity parity goals, and the goal is therefore classified as a forward-looking goal.<sup>15</sup>

We then use the three classifications to test whether certain goal characteristics represent high-credibility diversity goals and therefore contribute to improve diversity performance to a greater extent.

### **3.2 Descriptive Statistics**

Among the 1,203 distinct firms in our sample, 180 firms have disclosed diversity-related targets during the sample period, while 1,023 firms remain silent in this regard. Figure 1 plots the time trend of diversity target disclosure. The number of disclosing firms increases with an accelerated speed starting in 2014, suggesting that diversity target disclosure is becoming increasingly prevalent.

Table 1, Panel A presents descriptive statistics for our entire sample, divided into disclosing and non-disclosing firms. All continuous variables are winsorized at the 1% and 99% levels to eliminate the impact of outliers. While disclosing firms on average have a larger share of ethnic minority employees, they do not differ much in terms of female employee percentage. Diversity Score is the equally weighted average of Minority percentage and Female percentage, and firms with target disclosure therefore have greater diversity score than non-disclosing firms.

Compared to firms without a diversity target, disclosing firms are larger in total assets, more profitable as measured by ROA, more leveraged, and have a higher market-to-book ratio. While disclosing firms on average receive more penalties than non-disclosing firms, their total penalties scaled by total asset do not differ significantly from that of non-disclosing firms.

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<sup>15</sup> [https://s28.q4cdn.com/781576035/files/doc\\_downloads/Pfizer-ESG-Report-2020\\_2021-03-10.pdf](https://s28.q4cdn.com/781576035/files/doc_downloads/Pfizer-ESG-Report-2020_2021-03-10.pdf)



Moreover, disclosing firms show slightly lower institutional ownership percentage and lower R&D intensity.

Table 1, Panel B displays the results of our manual search for detailed content of firms' goals. We first search for 824 sustainability reports of firm-years that are identified as "with diversity target" in Refinitiv Workspace and we are able to find 596 available sustainability reports, from which 446 reports are published within 2008-2020.<sup>16</sup> In total, within our sample period, we find 131 firm-years with employee-level targets relating to ethnic minority and 211 targets for gender diversity. There are 128 firm-years in our sample with targets for both ethnic and gender diversity.

We classify identifiable targets according to three criteria: whether the target contains a numerical goal or a merely descriptive goal, whether the disclosure refers to a forward-looking goal or merely the achievement status of a previously set goal, and whether the target is aiming at the entire employee population. Furthermore, we also count targets fulfilling each criterion for ethnic minority percentage, female percentage, and for both percentages separately. In Appendix 2, we present sample screenshots of sustainability report that contain diversity targets of respective characteristics.

Among diversity targets we identified from sample firms' sustainability report, there is a greater proportion of gender targets that are numerical and aim at the entire employee population compared to ethnic minority goals. All ethnic minority goals we found are forward-looking, while only 91.94% of gender goals are new goals. We find that only one quarter of gender goals target the entire employee population, and this fraction is even smaller for ethnic minority goals (18.32%),

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<sup>16</sup> For some firm-years defined as "with diversity target disclosure" in Refinitiv Workspace, we did not find related disclosure in the corresponding Sustainability Report. It could be due to the reason that Refinitiv Workspace has a more comprehensive data source: Annual report, NGO report and website, news sources etc. See [https://www.refinitiv.com/content/dam/marketing/en\\_us/documents/faqs/diversity-inclusion-index-faq.pdf](https://www.refinitiv.com/content/dam/marketing/en_us/documents/faqs/diversity-inclusion-index-faq.pdf).

indicating that firms often set goals for subgroups such as management. As discussed in section 2.2, we predict that numerical goals, forward-looking goals, and goals aiming at the entire employee group are indicative of a firm's incentives to improve diversity.

Table 2 shows the Pearson and Spearman correlations among our variables. We find that ethnic minority and female level are negatively correlated, which calls for separate analyses of the two components that we present in Section 5. While firm size is positively correlated with both ethnic minority and female percentage (resulting in a greater diversity score), ROA, leverage, and market-to-book ratio demonstrate opposite association with the two levels respectively. On average, the four factors are all positively correlated with diversity score, indicating the importance of controlling for these fundamentals. Moreover, Pearson and Spearman correlations between diversity percentages and our cross-sectional variables (*Penalty scaled*, *Inst. ownership*, and *R&D intensity*) are of different directions, which highlight the necessity of more rigorous analyses to investigate whether these firm-level characteristics are associated with greater credibility of diversity targets.

## IV. EMPIRICAL DESIGN AND RESULTS

### 4.1 Difference-in-Differences: Credibility of Target Disclosure

To examine whether firms' disclosure of diversity targets associates with the improvement of firms' diversity performance and how users of diversity disclosure should interpret these targets, we use firms' voluntary disclosure of diversity targets as a treatment to test *Hypothesis 1* from Section 2. We use the most straightforward measure for a firm's diversity performance – *diversity level* (i.e., the equally weighted average of female and ethnic minority employee percentage) - to assess firms' diversity performance. We first use the weighted average of ethnic minority and

female employee percentage to capture both aspects of diversity, namely gender and racial equality. In section 5, we test for ethnic minority and female percentage separately for more insights.

We use the following Diff-in-Diff specification to test our main research question:

$$Diversity_{it} = \beta_0 + \beta_1 \cdot Treatment_{it} + \beta_2 \cdot Controls + FE + u_{it} \quad (1),$$

where  $Treatment_{it}$  takes value of 1 if firm  $i$  discloses a diversity related target for or before year  $t$ .<sup>17</sup> We use  $Diversity_{it}$  to measure sample firms' diversity level, which is defined as the equally weighted average of ethnicity and gender minority percentage. We control for the firm's logged total assets, market-to-book ratio, ROA, and leverage. Firm fixed effects and year fixed effects are included to rule out unobservable firm characteristics and time trend. Standard errors are clustered at the industry level, defined by 2-digits NAICS code to allow for intra-industry correlation of employee composition.

Results of our main analysis are tabulated in Table 3 and visualized in Figure 2. As displayed in column (1), the diversity score increased 0.398 percentage points after target disclosure without adding any control variables. After controlling for control variables, as shown in column (2), disclosing firms' diversity score still increased 0.278 percentage points after disclosure comparing to non-disclosing firms. Considering the average employee headcount of disclosing firms being 88,252, the increase translates to an additional hiring of 245 minority employees per firm each year and 44,161 minority employees for all disclosing firms per year. This finding suggests that disclosing firms indeed invest effort and resources to increase their diversity level after the target disclosure, and the disclosure behavior is thus likely not entirely for

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<sup>17</sup> We use the second year indicated as “with diversity target disclosure” in Refinitiv as the first treatment year, with the assumption that targets are set for the following years. For example, if firm  $i$  is indicated as “with diversity target” for the first time in 2015,  $Treatment_{it}$  for firm  $i$  takes value of 1 starting from 2016 to 2020, and 0 from 2008 to 2015. In untabulated analyses, we use the first disclosure year as treatment (e.g., 2015 for firm  $i$ ) for robustness tests, and our results are valid.

“diversity washing” purpose. These findings imply that a necessary condition for the disclosed targets to be credible is generally satisfied.

To gain further insight into whether the action of setting the diversity target *per se* results in improvement of diversity performance, we further conduct dynamic analysis to assess whether the significant impact occurs at or after the disclosure. In the dynamic analysis,  $t_0$  refers to our treatment year (i.e., the first year for which firm  $i$  has disclosed diversity targets), and the year before the first year with diversity targets ( $t-1$ ) is omitted. As tabulated in Table 3, column (3), diversity performance starts increasing four years before the target setting, and no sharp increase of diversity score could be observed right after the disclosure. Therefore, we do not argue that disclosure itself leads to the improvement of diversity performance. Instead, firms are self-selected into target disclosure – firms disclose diversity targets when they are *ex ante* good performers, consistent with prior literature arguing for voluntary disclosure behavior of advanced performers (Dye, 1985; Verrecchia, 1983).<sup>18</sup>

Overall, the findings of the main specification indicate that, on average, firms’ diversity target disclosure is credible in increasing post-disclosure diversity performance. However, we do not argue that the disclosure *per se* results in the improvement, since the improvement of diversity is already observed prior to the target disclosure. Therefore, the disclosure could be self-selection of *ex ante* above-average diversity performer. Upon observing diversity target disclosure, regulators and stakeholders could interpret the mere act of disclosure as a signal for firms with better diversity performance compared to their non-disclosing peers.

#### **4.2 Credibility of Diversity Goals: Target Characteristics**

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<sup>18</sup> In untabulated tests, we replace the outcome variable with diversity change rate (net change of minority headcount divided by total headcount of each year) to investigate whether firms increase their diversity level at a greater speed after disclosure. Our findings suggest that firms do not increase or decrease the speed at which they improve their diversity level.

In the previous section, we find that although firms' diversity performance is enhanced after the target disclosure, the trend is already observable prior to the target disclosure. While this conclusion holds on average for all disclosing firms, it is essential for users of diversity disclosure to know whether certain characteristics of diversity goals are associated with greater credibility.

To gain a greater understanding of the detailed content of firms' diversity goals and to investigate whether goals with certain characteristics are more credible than others, we hand collect all sustainability reports of our sample firms and identify exact contents of sample firms' diversity targets. We classify firms' diversity targets using three criteria: whether the target contains a numerical goal, whether the target is forward-looking, and whether the target is set for the entire employee group.

As discussed in section 2.2, we conjecture that numerical goals are more credible due to their greater verifiability. We also hypothesize that forward-looking goals would result in more persistent improvement of diversity performance in the coming years and are therefore more credible. Lastly, we make the assumption that targets set for the entire employee group are more credible than those targeted at certain subgroups, since the more comprehensive targets are less likely to be associated with "diversity washing" intention.

We use the following model to study the role of different goal characteristics:

$$Diversity\ Score_{it} = \beta_0 + \beta_1 \cdot Treatment_{it} \cdot GoalCharacteristic_{it} + \beta_2 \cdot Treatment_{it} + \beta_3 \cdot Controls_{it} + FE + u_{it}, \quad (2)$$

where  $Treatment_{it}$  takes a value of 1 if firm  $i$  discloses a diversity related target for or before year  $t$  and  $Diversity\ Score_{it}$  is the weighted average of firm  $i$ 's ethnic minority and female employee percentage in year  $t$ .  $GoalCharacteristic_{it}$  takes a value of 1 if firm  $i$ 's both ethnic minority and female employee percentage in year  $t$  fulfill one of the three characteristics above

respectively, and zero otherwise. Similar to model (1), we control for the firm's logged total assets, market-to-book ratio, ROA, and leverage. All continuous variables are winsorized at 1% and 99% level to rule out outlier impacts. We include firm fixed effects and year fixed effects and cluster standard errors at industry level, defined by 2-digits NAICS code.

Results to regression (2) are shown in Table 4. As predicted, setting numerical targets increases diversity percentage by 0.326 percentage points, and forward-looking goals contribute to an increase of 0.264 percentage points. In other words, for each disclosing firm, disclosing numerical goals help to additionally hire 287 minority employees, while having forward-looking goals is associated with an additional recruitment of 232 minority employees per year. Moreover, diversity targets set for the entire employee group contribute to an additional increase of diversity of 0.232 percentage points, translating to 204 minority employee recruitment per firm per year. While these results are consistent with our prediction that verifiability, timeliness, and salience are positively associated with credibility of diversity goals, goal verifiability contributes most to the improvement of diversity performance, suggesting that firms which set numerical goals provide a stronger signal of ESG commitment than others.

After analyzing hand-collected content of diversity targets through sustainability reports, our findings suggest that goals that are numerical, forward-looking, targeted at the entire employee group are more credible, confirming hypotheses 2a, 2b, and 2c. Among them, numerical goals contribute most to the target credibility. These findings indicate that stakeholders should focus not only on the mere existence of firms' diversity targets, but they should also examine the detailed content of the targets to identify firms that are serious in improving their diversity performance. These findings have practical implications for both investors and regulators. Our results inform investors and regulators about how to extract important information from firms' disclosures.

### 4.3 Credibility of Diversity Goals: Firm Characteristics

In this section, we further conduct analyses to investigate which firm-level characteristics are associated with the credibility of diversity targets. For investors to identify more credible goals, a more in-depth examination of firms' incentives in managing diversity performance is essential.

We first examine whether firms receiving more regulatory penalties scaled by total assets prior to target disclosure disclose less credible diversity targets, as they are more prone to “diversity washing” behavior. Second, we examine how firms' R&D intensity affects the credibility of diversity targets. As concluded by prior literature, team diversity may positively influence innovation through multiple channels (Martinez et al., 2017; Diaz-Garcia et al., 2013). However, diversity may cause issues such as opposing preferences and communication difficulties (Lazear, 1999). We argue that firms with greater R&D intensity have greater need for more diversified human capital and therefore would provide more credible diversity targets.

The third factor that may influence a firm's incentive to manage its diversity level more intensively is institutional ownership. Prior literature finds causal evidence for institutional investors' role in improving CSR performance, motivated by both financial and social incentives (Chen et al., 2020; Dimson et al. 2015; Dyck et al., 2019). Therefore, we hypothesize that disclosing firms with greater institutional ownership could face greater pressure from institutional shareholders to manage their diversity level, which would result in an accelerated growth rate of diversity level after disclosure.

We use the following model to conduct firm-level characteristics analysis:

$$\begin{aligned} Diversity\ Score_{it} = & \beta_0 + \beta_1 \cdot Treatment_{it} \cdot High_i + \beta_2 \cdot Treatment_{it} \cdot Low_i + \beta_3 \cdot \\ & Controls_{it} + FE + u_{it} \end{aligned} \tag{3},$$

where  $Treatment_{it}$  and  $DiversityScore_{it}$  are defined the same as in the models above. For analysis of the effects of violation penalties, we assign value 1 to  $High_i$  to firm  $i$  if the average scaled penalty received by disclosing firm  $i$  from 2008 to its first-time disclosing year is above the median of the scaled penalty received by all disclosing firms in the same period, and 0 otherwise. For example, if a firm started disclosing its diversity targets in 2012, we calculate the sum of scaled penalties for each disclosing firm from 2008 to 2012, and we then identify whether the firm's total scaled penalties from 2008 to 2012 is above the median. Similarly,  $Low_i$  takes value of 1 if the scaled penalty received by the disclosing firm  $i$  from 2008 to its first-time disclosing year is below the median of that of all treated firms, and 0 otherwise.<sup>19</sup>

In a similar vein, we split disclosing firms into firms with high and low institutional ownership percentage (R&D intensity) by calculating their averaged institutional ownership percentage (R&D intensity) from a firm's first-time disclosure year to 2020 and assess whether the institutional ownership exceeds the median of the whole sample. Like the models above, we control for total assets, leverage, ROA and market-to-book ratio. Moreover, industry and year fixed effects are controlled to rule out industry specific impacts and time trend.

Results are tabulated in Table 5. Column (1) displays the result of splitting disclosing firms into high and low penalty receiving firms. Consistent with our prediction, we do find that firms receiving lower scaled penalty prior to the disclosure experience a greater increase in Diversity Score: While firms receiving smaller penalties experience an increase in Diversity Score of 2.157 percentage points, high-penalty firms do not experience a statistically significant change in diversity percentage after disclosing a diversity target. Since low-penalty firms on average have

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<sup>19</sup> In untabulated analyses, we use top and bottom tercile as cut-offs to classify firms into high and low groups regarding the three firm-level characteristics, respectively. The findings are consistent with that using median as cut-off for classification.



53,049 employees, the result indicate that the 90 low-penalty firms altogether hire 102,984 more ethnic minority employees per year than non-disclosing firms. These findings suggest that, while heavily penalized firms are more likely to use diversity target disclosure to “wash” their ESG reputation, firms receiving low-scaled penalties more successfully manage their diversity level and accelerate their diversity improvement after the disclosure.

Results of the R&D intensity test are shown in Table 5, Column (2). As predicted, firms with high R&D intensity exhibit a statistically significant increase in diversity score of 1.652 percentage points, while low R&D firms do not show improvement of their diversity score after disclosing a diversity target. The magnitude is significant, since firms with greater-than-median R&D intensity have an average employee headcount of 94,315 globally and hence would hire 140,227 more minority employees worldwide per year. The result could be translated to a recruitment of 1,558 minority employees for *each* disclosing firms with high R&D demand per year comparing to non-disclosing firms. This finding is consistent with the conjecture that firms with high R&D intensity have a greater demand of diversified talent and therefore are better incentivized to achieve the diversity target. For this reason, diversity targets of high R&D firms are more credible.

Table 5, column (3) tabulates the impact of institutional ownership proportion on a firm’s incentive to manage diversity performance after disclosing a target. While having below-median institutional ownership does not have the negative impact of disclosure on diversity level improvement, firms with above-median institutional ownership show a statistically significant improvement in diversity score of 1.641 percentage points. Although the F statistics is not significant at conventional levels, the reason is likely low power and our conservative standard errors, which is a common issue in disclosure literature when splitting disclosing entities

(Christensen et al., 2016). These findings are consistent with the notion that institutional ownership plays a governance role in improving firms' CSR performance (Dyck et al., 2019).

In summary, firms that are historically more compliant, firms with greater R&D intensity, and firms with higher institutional ownership disclose diversity goals that are more likely to be credible. The results indicate that firms' incentives in managing diversity, rather than the disclosing behavior *per se*, play a crucial role in firm's diversity performance. These findings suggest that stakeholders could identify firms that disclose more credible targets by examining their incentives, including but not limited to received penalty, institutional ownership, and R&D intensity.

## **V. ADDITIONAL ANALYSIS: ETHNIC MINORITY AND FEMALE PERCENTAGE**

In our main analysis, we use the diversity score as the outcome variable, which is defined as the equally weighted average of firms' ethnic minority and female employee percentage. As shown in Table 2, the percentage of ethnic minority employees and the percentage of female employees are negatively correlated, and separate analyses of the two levels is therefore necessary. To shed more light on the differential impact of diversity target disclosure on firms' diversity performance, we further break down the diversity score into ethnic minority and female percentage respectively and repeat analyses above.

Table 6 tabulates results using ethnic minority employee percentage as the outcome variable. We first repeat model (1) and replace the outcome variable as ethnic minority percentage. Panel A shows that the ethnic minority percentage increased by 0.548 percentage points after disclosing diversity target without control variables, and it increased by 0.388 percentage points with control variables, which is greater than the increase of diversity score shown in Table 3, Panel

A. In other words, disclosing firms in total hire 61,635 more ethnic minority employees than non-disclosing firms each year. The dynamic analysis displayed in column (3) illustrates a similar pattern as that of the diversity score. The trend of higher ethnic minority employee percentage begins four years prior to the target disclosure.

As the next step, we examine which characteristics credible ethnic minority goals possess. We rerun model (2) with replaced outcome variables, and the dummy variable  $GoalCharacteristic_{it}$  is defined as 1 if firm  $i$ 's ethnic minority goal for year  $t$  fulfills respective criterion, and 0 otherwise. Results are presented in Table 6, Panel B. While numerical and forward-looking characteristics add credibility to ethnic minority goals, setting goals targeted at the entire employee group does not contribute to additional enhancement of it.

Lastly, we repeat model (3) for ethnic minority targets and tabulate results in Table 6, Panel C. Consistent with our findings above, firms receiving below-median penalty scaled by total assets show a significant increase of minority percentage of 3.604 percentage points, while firms with greater scaled penalty do not improve their minority employee percentage. The other two characteristics that are found to be associated with more credibility to diversity goals, namely high institutional ownership and high R&D intensity, also add credibility to ethnic minority goals. Moreover, the extent to which the three firm-level characteristics contribute to an increased diversity level is also greater for ethnic minority targets.

In a similar vein, we repeat the above-mentioned analyses for female percentage, and the results are presented in Table 7. As is shown in Panel A, the average increase of female employee percentage after the target disclosure is lower than that of ethnic minority percentage (0.177 percentage points vs. 0.388 percentage points). The dynamic analysis tabulated in column (3) shows that although female percentage does not vary in the near term around the target disclosure,

the difference can instead be observed in the long-term average. The result reinforces the earlier finding that target disclosure, on average, improves a firm's diversity level, but the improvement is not caused by the disclosure *per se*.

In Table 7, Panel B, it is observed that while disclosing a forward-looking goal for female employee percentage plays a less significant role than for the percentage of employees who are ethnic minorities (0.217 percentage points vs. 0.428 percentage points), announcing goals that are numerical and targeted towards all employees are more crucial in improving the representation of female employees. In fact, the significance of the impact of all-employee-targeted goals found in Table 4 is driven by female-related diversity goals.

Lastly, we repeat regression (3) for female employee percentage to investigate which firm characteristics are associated with more credible female percentage targets, and we display results in Table 7, Panel C. Although the sign largely follows the same pattern as observed in the main effect, the coefficients on the three firm-level characteristics are not significant, indicating that the cross-sectional effect of the three firm level characteristics is mostly driven by ethnic minority percentage. The findings suggest that firms may prioritize increasing ethnic minority employee percentage to female percentage when incentivized to improve diversity level.

In this section, we present results of breaking down the outcome variable into female and ethnic minority percentage respectively. While the average level of both female and ethnic minority percentage increased after the target disclosure, the magnitude is greater for the ethnic minority level. Furthermore, different goal characteristics influence the credibility of ethnic minority and female percentage goals differently. While a numerical and forward-looking nature adds credibility to both ethnic minority and female goals, employee-targeted goals increase the credibility of only female percentage goals. The most significant difference is that firm-level

factors that are found to be associated with credible diversity targets do not appear to incentivize firms to increase female percentage, suggesting potential different prioritization of female employee percentage to ethnic minority employee percentage by firms. Overall, our analyses indicate that there are subtle differences between female and ethnic minority targets, and users of diversity disclosure should pay attention to these differences if they are interested in specific aspects.

## VI. CONCLUSION

While ESG disclosure is gaining more and more attention from investors and stakeholders, evidence for firms' motivation of and credibility of ESG disclosure remains mixed. Moreover, compared to literature examining disclosure of environmental issues, studies investigating diversity disclosure are scarce. With a surging number of firms disclosing their diversity targets, it becomes increasingly important to inform investors and stakeholders about how to interpret these disclosures and how to extract useful information from the disclosure.

In this study, we exploit a novel dataset that allows us to observe firms' diversity level before and after diversity target disclosure and examine whether firms' disclosed diversity targets are credible in improving diversity level. First, we find that disclosure of diversity target is credible in improving diversity level, but the improvement is not driven by the disclosure *per se*. Rather, the disclosure is a self-selection behavior – disclosing firms are *ex ante* advanced performers in employee diversity. To help investors and stakeholders identify firms with more credible diversity targets, we further examine whether certain target- and firm-level characteristics are associated with greater post-disclosure diversity level. Results suggest that numerical targets, forward-looking targets, and targets set for the entire employee group are more credible than others.

Moreover, we also find that firms receiving less penalty prior to target disclosure, firms with greater R&D intensity, and firms with greater institutional ownership disclose more credible targets, suggesting that users of diversity reports should examine firms' incentives to improve diversity targets rather than taking firms' commitment at face value. Lastly, we break down diversity level into ethnic minority percentage and female employee percentage and conclude that firms may subordinate gender diversity to ethnic diversity when motivated to improve diversity level.

Our contributions are twofold. First, our study contributes to the literature on ESG disclosure by providing evidence for how to interpret and extract useful information from target disclosure, which is understudied by prior studies. Importantly, by investigating hand-collected information from target disclosures, our study is able to generate insights into what information helps stakeholders differentiate credible disclosure from non-credible disclosure. Second, our study also contributes to research on corporate targets, as our data sets allow us to explore the implication of internal management targets announced publicly, ultimately filling this research gap.

Our study is subject to the caveat that we could not observe whether the disclosed targets are achieved for two reasons. First, we find great heterogeneity in target disclosure, and a large proportion of disclosed targets consist only of verbal description. Second, even for numerical targets, they are often set for a specific subgroup, for which we do not have diversity level data without firms specifically disclosing corresponding performance. The voluntary nature of disclosure makes it practically impossible to assess the achievement status of these targets.

Moreover, while our study gives guidance of how to interpret firms' diversity target disclosure, we do not attempt to answer the question of whether disclosing targets or improving diversity level is financially beneficial to the firm. Due to the limited scope of the study, we focus

on investigating credibility and implication of diversity disclosure rather than its financial benefits. Future research could examine financial value of diversity disclosure to shed more light into the net value of diversity investment.

However, given the increasing number of firms disclosing diversity targets and the growing need of stakeholders to correctly interpret these disclosures, our paper makes the first and an important attempt to clarify the implications of diversity target disclosure and to inform stakeholders about how to extract useful information from related disclosure. The practical implication should be valuable for investors and regulators alike.

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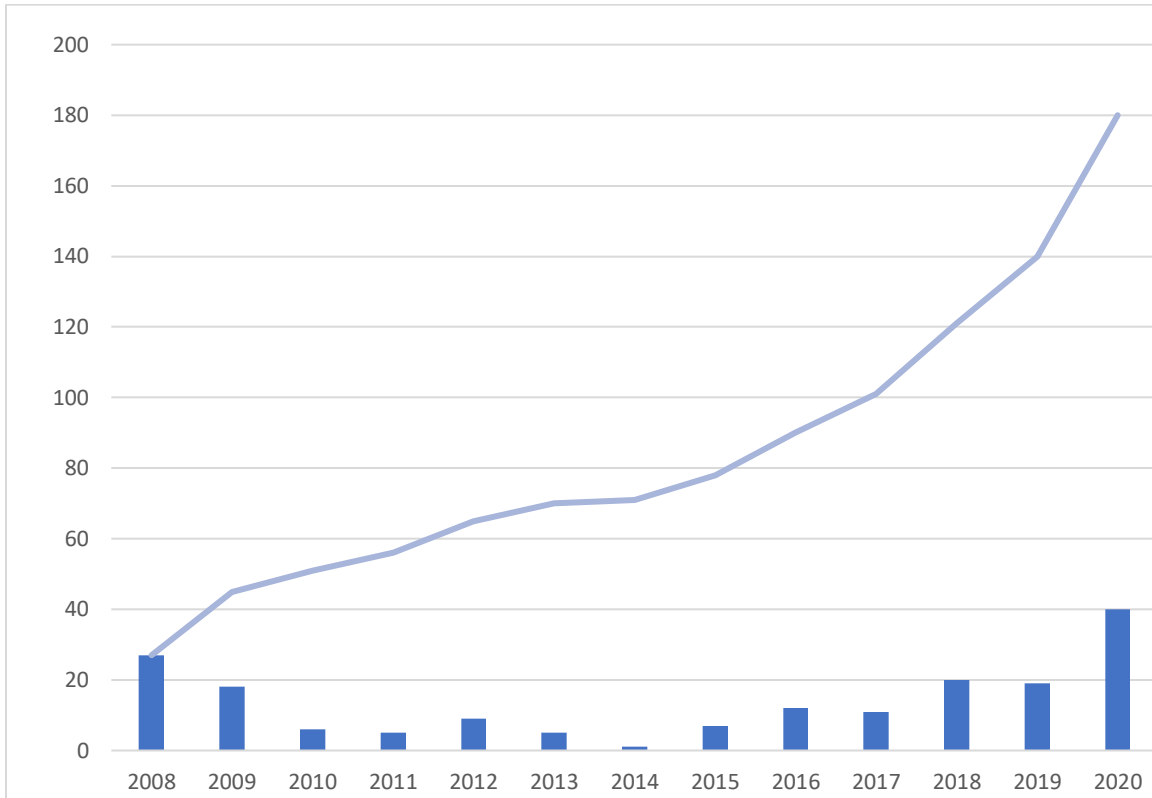
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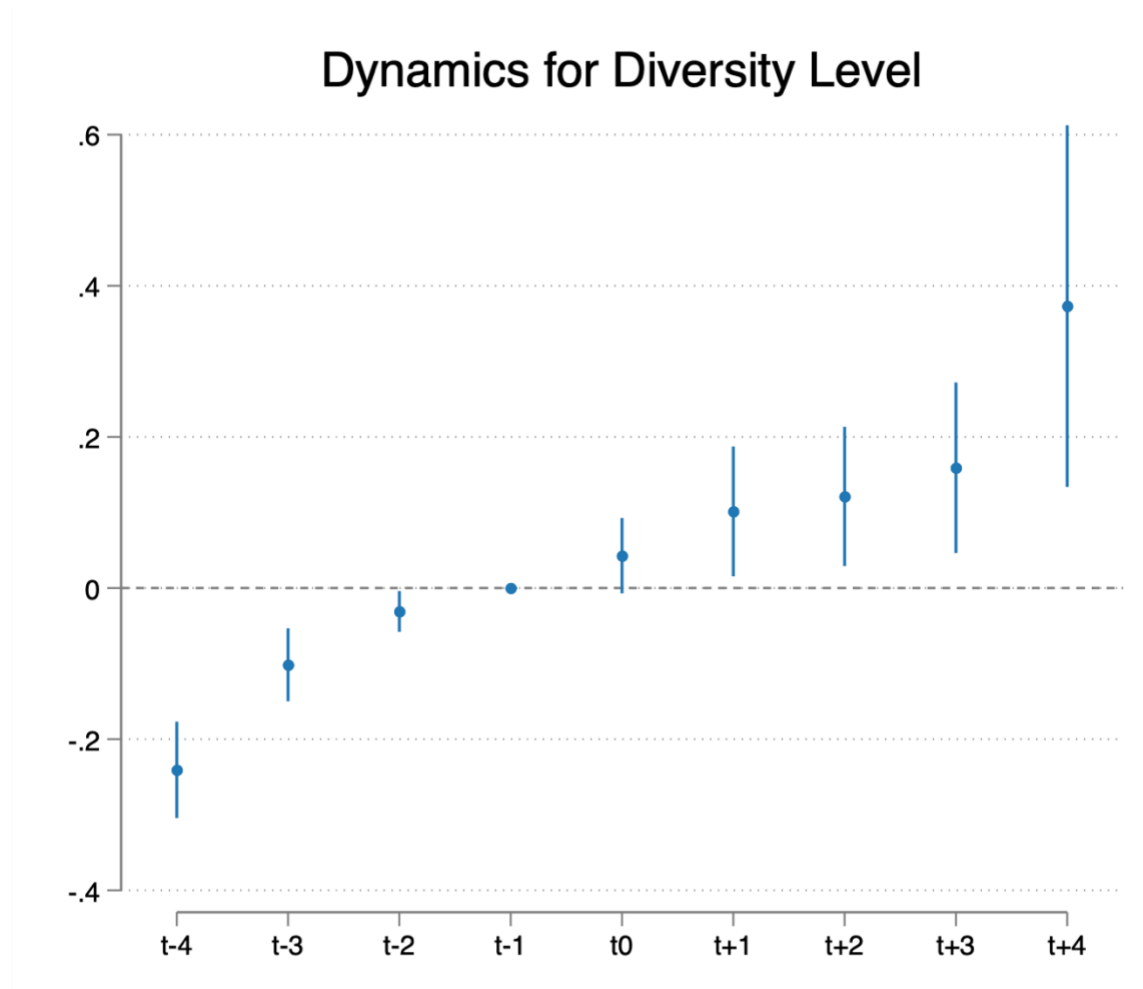
**Figure 1: Diversity Target Disclosure Trend**

The figure presents the trend of diversity target disclosure of our sample firms. While the line plots cumulative number of our sample firms with diversity target disclosure from 2008 to 2020, the bars plot the number of sample firms disclosing diversity targets in each year.



**Figure 2: Dynamic Analysis**

The figure visualizes the dynamic analysis tabulated in Table 3, showing target disclosure coefficients relative to period  $t-1$ , i.e., one year before the treatment year. Year  $t-1$  is omitted in the regression and is set as baseline level. The displayed confidence interval is at 90% level.



**Table 1: Descriptive Statistics**

This table provides descriptive statistics for our sample. The sample for our main analyses consists of 15,639 firm-years for 1,203 distinct firms from 2008 to 2020, from which 180 firms have disclosed diversity targets and are labeled as treatment firms. All continuous variables are winsorized at 1% and 99% level to avoid outlier impacts. Panel B provides descriptive statistics for the detailed contents of diversity targets we identified from sample firms' sustainability reports. The first column and the second column show percentage of ethnic minority and female targets fulfilling each criterion respectively. The third column shows percentage of firm-years where both targets fulfill the respective criterion. The last row shows number of firm-years with ethnic minority, gender, and both targets. See Appendix A for variable definitions.

**Panel A: Firm Characteristics**

	With Target #Firms:180					No Target #Firms:1023				
	Mean	Min	Median	Max	Std	Mean	Min	Median	Max	Std
Minority percentage	37.400	18.863	37.422	64.785	8.255	34.407	17.307	33.229	64.785	9.268
Female percentage	40.650	19.029	39.453	74.169	11.155	41.406	19.029	38.695	74.169	12.804
Diversity score	39.054	22.323	39.545	57.039	7.041	37.925	22.323	37.887	57.212	7.371
Size	9.964	4.797	9.971	13.004	1.472	8.219	4.797	8.121	13.004	1.573
ROA	0.056	-0.322	0.053	0.271	0.070	0.045	-0.322	0.041	0.271	0.080
Leverage	0.662	0.096	0.655	1.316	0.202	0.586	0.096	0.581	1.316	0.240
MTB	3.719	-12.902	2.445	33.158	5.838	3.198	-12.902	2.153	33.158	4.730
Total penalty	28.044	0.000	0.022	802.698	123.143	3.158	0.000	0.000	802.698	31.694
Penalty scaled	0.000	0.000	0.000	0.024	0.002	0.000	0.000	0.000	0.024	0.002
Inst. ownership	0.641	0.000	0.742	1.170	0.313	0.652	0.000	0.788	1.170	0.358
R&D intensity	0.024	0.000	0.000	0.531	0.053	0.035	0.000	0.000	0.965	0.101

**Panel B: Target Types**

	Minority	Gender	Both
Numerical Goal	48.06%	60.66%	46.09%
Forward-looking Goal	100.00%	91.94%	100.00%
Entire employee Goal	18.32%	25.12%	16.41%
Number of Targets	131	211	128

**Table 2: Correlations**

Table 2 reports the correlation matrix for our main variables. Pearson and Spearman correlation coefficients are provided below and above the diagonal, respectively. Star \* indicates significance at the 10 percent level or less. The sample consists of 15,639 firm-years (1,203 firms) from 2008 to 2020. See Appendix A for variable definitions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) <b>Minority percentage</b>		-0.1054*	0.4829*	0.0161*	0.1620*	-0.1365*	0.2068*	-0.0545*	-0.0675*	0.0702*	0.4147*
(2) <b>Female percentage</b>	-0.1290*		0.7778*	0.1343*	-0.1090*	0.2340*	-0.0759*	-0.0745*	-0.0868*	-0.0375*	-0.3471*
(3) <b>Diversity score</b>	0.5172*	0.7799*		0.1091*	0.0142*	0.1083*	0.0644*	-0.1048*	-0.1212*	0.0054	-0.0484*
(4) <b>Size</b>	0.0182*	0.0901*	0.0864*		-0.1840*	0.4830*	-0.1610*	0.3792*	0.3011*	-0.1016*	-0.2195*
(5) <b>ROA</b>	0.1103*	-0.0209*	0.0539*	-0.0702*		-0.3554*	0.5014*	0.0154*	0.0324*	0.0542*	0.1933*
(6) <b>Leverage</b>	-0.1154*	0.2025*	0.1024*	0.4325*	-0.2322*		-0.1621*	0.1581*	0.1248*	-0.1017*	-0.3080*
(7) <b>MTB</b>	0.1257*	-0.0212*	0.0623*	-0.0568*	0.2259*	-0.0167*		-0.0472*	-0.0352*	0.0437*	0.3201*
(8) <b>Total penalty</b>	0.0365*	0.0343*	0.0515*	0.2151*	-0.0158*	0.0789*	-0.0247*		0.9882*	-0.0503*	-0.1265*
(9) <b>Penalty scaled</b>	0.0069	0.0421*	0.0401*	0.0326*	0.0134	0.0115	0.0018	0.5267*		-0.0335*	-0.1233*
(10) <b>Inst. ownership</b>	0.0184*	-0.0519*	-0.0345*	0.0234*	0.0625*	-0.0545*	0.0150*	-0.0118	0.0061		0.0366*
(11) <b>R&amp;D intensity</b>	0.2582*	-0.1154*	0.0621*	-0.2103*	-0.1978*	-0.1887*	0.1225*	-0.0073	-0.0098	0.0123	

**Table 3: Credibility of Diversity Targets**

Table 3 reports the results of regression (1) examining the change of diversity level after diversity target disclosure. The dependent variable is the equally weighted average of firms' ethnic minority and female employee percentage (*Diversity score*). *Treatment* is a dummy variable taking a value of 1 if firm *i* has disclosed diversity targets for or before year *t*, and zero otherwise. Control variables include *ROA*, *Size*, *Leverage*, and *MTB*. Column (1) presents results of model (1) without control variables, and column (2) presents results with control variables. Column (3) shows the results of dynamics test of model (1). See Appendix A for other variable definitions. All continuous variables are winsorized at 1% and 99% level. Firm fixed effects and year fixed effects are included. All standard errors are clustered at the industry level, as defined by 2-digit NAICS code. Standard error in parentheses. \*\*\*, \*\*, and \* indicate significance levels at 1%, 5%, and 10%, respectively.

	(1) Diversity Score	(2) Diversity Score	(3) Diversity Score
Treatment	0.398*** (0.0793)	0.278*** (0.0726)	
ROA		0.389 (0.287)	0.391 (0.285)
Size		-0.126*** (0.0406)	-0.114** (0.0409)
Leverage		0.577** (0.252)	0.564** (0.251)
MTB		0.00155 (0.00335)	0.00154 (0.00343)
t-4 <sup>-</sup>			-0.241*** (0.0371)
t-3			-0.102*** (0.0281)
t-2			-0.0309* (0.0157)
t_0			0.0428 (0.0291)
t+1			0.101* (0.0501)
t+2			0.121** (0.0537)
t+3			0.159** (0.0657)
t+4 <sup>+</sup>			0.373** (0.139)
Constant	38.07*** (0.00464)	38.72*** (0.441)	38.65*** (0.446)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	15639	14473	14473
Adj.R <sup>2</sup>	0.982	0.990	0.990



**Table 4: Target Characteristics and Credibility**

Table 4 reports the results of regression (2) examining the impact of target characteristics on target credibility. The dependent variable is the equally weighted average of firms' ethnic minority and female employee percentage (*Diversity score*). *Treatment* is a dummy variable taking a value of 1 if firm *i* has disclosed diversity targets for or before year *t*, and zero otherwise. *Numerical (Forward-looking)* is a dummy variable taking a value of 1 if firm *i*'s both ethnic minority percentage and female percentage targets for year *t* contain numerical goals (Forward-looking goals), and zero otherwise. *Employee* is a dummy variable taking a value of 1 if firm *i*'s both ethnic minority percentage and female percentage targets for year *t* are set for the entire employee group, and zero otherwise. Control variables include *ROA*, *Size*, *Leverage*, and *MTB*. All regressions contain firm industry and year fixed effects. Standard errors are clustered by industry (two-digit NAICS code) and are provided in the parentheses. See Appendix A for variable definitions. Standard error in parentheses. \* \* \* , \*\* , and \* indicate significance levels at 1%, 5%, and 10%, respectively.

	(1)	(2)	(3)
	Diversity Score	Diversity Score	Diversity Score
Treatment × Numerical	0.326** (0.134)		
Treatment × Forward-looking		0.264** (0.106)	
Treatment × Entire employee			0.232* (0.128)
Treatment	0.255*** (0.0716)	0.234*** (0.0703)	0.272*** (0.0733)
ROA	0.390 (0.286)	0.393 (0.288)	0.389 (0.286)
Size	-0.126*** (0.0407)	-0.126*** (0.0405)	-0.126*** (0.0406)
Leverage	0.577** (0.252)	0.578** (0.251)	0.576** (0.252)
MTB	0.00158 (0.00332)	0.00165 (0.00333)	0.00159 (0.00336)
Constant	38.72*** (0.442)	38.73*** (0.439)	38.73*** (0.441)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	14473	14473	14473
Adj.R <sup>2</sup>	0.990	0.990	0.990

**Table 5: Firm Characteristics and Target Credibility**

Table 5 reports the results of regression (3) examining the impact of firm characteristics on target credibility. The dependent variable is the equally weighted average of firms' ethnic minority and female employee percentages (*Diversity score*). *Treatment* is a dummy variable taking a value of 1 if firm *i* has disclosed diversity targets for or before year *t*. *High penalty* (*Low penalty*) is dummy variable that takes a value of 1 if firm *i*'s average penalty scaled by total asset prior to its first-time disclosure is above (below) the median of all disclosing firms, and 0 otherwise. *High inst. ownership* (*Low inst. ownership*) is dummy variable that takes a value of 1 if firm *i*'s average institutional ownership percentage after its first-time disclosure is above (below) the median of all disclosing firms, and 0 otherwise. *High R&D* (*Low R&D*) is dummy variable that takes a value of 1 if firm *i*'s average R&D intensity after its first-time disclosure is above (below) the median of all disclosing firms, and 0 otherwise. The p-value of F test shows p-value of testing the null hypothesis that coefficients of two interaction terms are equal. Control variables include *ROA*, *Size*, *Leverage*, and *MTB*. All regressions contain firm industry and year fixed effects. Standard errors are clustered by industry (two-digit NAICS code) and are provided in the parentheses. See Appendix A for variable definitions. Standard error in parentheses. \* \* \*, \*\*, and \* indicate significance levels at 1%, 5%, and 10%, respectively.

	(1)	(2)	(3)
	Diversity Score	Diversity Score	Diversity Score
Treatment × High penalty	-0.0725 (-0.18)		
Treatment × Low penalty	2.157* (1.82)		
Treatment × High R&D		1.652*** (1.96)	
Treatment × Low R&D		0.220 (0.31)	
Treatment × High inst. Ownership			1.641* (2.69)
Treatment × Low inst. Ownership			0.257 (0.29)
<i>F test (p-value):</i>	<u>0.0787</u>	<u>0.2732</u>	<u>0.2222</u>
ROA	2.304 (1.08)	2.197 (1.03)	2.311 (1.09)
Size	-0.798 (-0.61)	-0.838 (-0.64)	-0.808 (-0.61)
Leverage	0.287** (2.48)	0.283** (2.46)	0.286** (2.42)
MTB	0.0635 (1.61)	0.0637 (1.58)	0.0636 (1.56)
Constant	35.70*** (43.58)	35.76*** (44.14)	35.71*** (43.07)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry

Observations	14480	14480	14480
Adj.R <sup>2</sup>	0.320	0.320	0.320

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**Table 6: Minority Percentage and Target Disclosure**

Table 6, Panel A, Panel B, and Panel C repeat model (1), (2), and (3) respectively with the dependent variable *Minority Percentage* defined as firm *i*'s ethnic minority employee percentage in year *t*. Treatment is a dummy variable taking a value of 1 if firm *i* has disclosed diversity targets for or before year *t*, and zero otherwise. Control variables include *ROA*, *Size*, *Leverage*, and *MTB*. See Appendix A for other variable definitions. All continuous variables are winsorized at 1% and 99% level. Standard error in parentheses. \* \* \*, \*\* , and \* indicate significance levels at 1%, 5%, and 10%, respectively.

**Panel A: Minority Percentage – Credibility of Diversity Targets**

	(1)	(2)	(3)
	Minority Percentage	Minority Percentage	Minority Percentage
Treatment	0.548*** (0.108)	0.388*** (0.100)	
ROA		-0.0570 (0.402)	-0.0540 (0.400)
Size		-0.236*** (0.0793)	-0.221** (0.0802)
Leverage		0.544* (0.292)	0.527* (0.295)
MTB		-0.00112 (0.00639)	-0.00114 (0.00650)
t-4			-0.313*** (0.0558)
t-3			-0.125*** (0.0417)
t-2			-0.0500* (0.0256)
t_0			0.0808** (0.0319)
t+1			0.148** (0.0700)
t+2			0.173* (0.0866)
t+3			0.273*** (0.0917)
t+4 <sup>+</sup>			0.510** (0.218)
Constant	34.82*** (0.00630)	36.45*** (0.661)	36.35*** (0.675)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	15639	14473	14473
Adj.R <sup>2</sup>	0.981	0.986	0.986

**Panel B: Minority Percentage - Target Characteristics**

	(1)	(2)	(3)
	Minority Percentage	Minority Percentage	Minority Percentage
Treatment × Numerical Ethnic	0.340* (0.182)		
Treatment × Forward-looking Ethnic		0.428** (0.162)	
Treatment × Entire employee Ethnic			0.0724 (0.204)
Treatment	0.363*** (0.100)	0.317*** (0.103)	0.386*** (0.105)
ROA	-0.0543 (0.402)	-0.0504 (0.403)	-0.0569 (0.402)
Size	-0.236*** (0.0792)	-0.236*** (0.0790)	-0.236*** (0.0793)
Leverage	0.543* (0.292)	0.545* (0.293)	0.544* (0.292)
MTB	-0.00111 (0.00636)	-0.000975 (0.00634)	-0.00112 (0.00638)
Constant	-0.0543 (0.402)	-0.0504 (0.403)	-0.0569 (0.402)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	14473	14473	14473
Adj.R <sup>2</sup>	0.986	0.986	0.986

**Panel C: Minority Percentage – Firm Characteristics**

	(1)	(2)	(3)
	Minority Percentage	Minority Percentage	Minority Percentage
Treatment × High penalty	0.901 (1.07)		
Treatment × Low penalty	3.604** (2.63)		
Treatment × High R&D		2.615** (2.75)	
Treatment × Low R&D		1.593 (1.23)	
Treatment × High inst. Ownership			3.576*** (3.31)
Treatment × Low inst. Ownership			0.787 (0.84)
<i>F test (p-value):</i>	<u>0.1159</u>	<u>0.5652</u>	<u>0.0819</u>
ROA	3.535 (1.09)	3.472 (1.09)	3.525 (1.10)
Size	-3.333* (-1.95)	-3.364* (-1.96)	-3.347* (-1.95)
Leverage	0.865*** (7.79)	0.860*** (7.64)	0.866*** (7.78)
MTB	0.106** (2.50)	0.107** (2.49)	0.106** (2.45)
Constant	28.77*** (33.01)	28.83*** (33.64)	28.77*** (33.64)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	14480	14480	14480
Adj.R <sup>2</sup>	0.193	0.192	0.193

**Table 7: Female Percentage and Target Disclosure**

Table 7, Panel A, Panel B, and Panel C repeat model (1), (2), and (3) respectively with the dependent variable *Female Percentage* defined as firm *i*'s female employee percentage in year *t*. *Treatment* is a dummy variable taking a value of 1 if firm *i* has disclosed diversity targets for or before year *t*, and zero otherwise. Control variables include *ROA*, *Size*, *Leverage*, and *MTB*. See Appendix A for other variable definitions. All continuous variables are winsorized at 1% and 99% level. Standard error in parentheses. \* \* \* , \*\* , and \* indicate significance levels at 1%, 5%, and 10%, respectively.

**Panel A: Female Percentage – Credibility of Diversity Targets**

	(1) Female Percentage	(2) Female Percentage	(3) Female Percentage
Treatment	0.250*** (0.0846)	0.177** (0.0791)	
ROA		0.855*** (0.229)	0.857*** (0.228)
Size		0.0189 (0.0858)	0.0277 (0.0857)
Leverage		0.655* (0.369)	0.646* (0.367)
MTB		0.00470 (0.00326)	0.00470 (0.00324)
t-4 <sup>-</sup>			-0.157*** (0.0552)
t-3			-0.0731 (0.0455)
t-2			-0.00937 (0.0233)
t <sub>0</sub>			0.0103 (0.0521)
t+1			0.0619 (0.0692)
t+2			0.0789 (0.0733)
t+3			0.0718 (0.0713)
t+4 <sup>+</sup>			0.267*** (0.0849)
Constant	41.28*** (0.00495)	40.64*** (0.841)	40.58*** (0.839)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	15639	14473	14473
Adj.R <sup>2</sup>	0.989	0.993	0.993

**Panel B: Female Percentage - Target Characteristics**

	(1)	(2)	(3)
	Female Percentage	Female Percentage	Female Percentage
Treatment × Numerical	0.455*** (0.135)		
Treatment × Forward-looking		0.217* (0.105)	
Treatment × Entire employee			0.399* (0.197)
Treatment	0.106 (0.0729)	0.124* (0.0634)	0.153* (0.0748)
ROA	0.860*** (0.232)	0.857*** (0.231)	0.860*** (0.232)
Size	0.0198 (0.0858)	0.0189 (0.0859)	0.0187 (0.0857)
Leverage	0.657* (0.368)	0.657* (0.369)	0.656* (0.369)
MTB	0.00483 (0.00321)	0.00477 (0.00325)	0.00479 (0.00327)
Constant	40.64*** (0.839)	40.64*** (0.841)	40.64*** (0.840)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	14473	14473	14473
Adj.R <sup>2</sup>	0.993	0.993	0.993



**Panel C: Female Percentage - Firm Characteristics**

	(1)	(2)	(3)
	Female Percentage	Female Percentage	Female Percentage
Treatment × High penalty	-1.198 (-1.41)		
Treatment × Low penalty	0.655 (0.38)		
Treatment × High R&D		0.688 (0.63)	
Treatment × Low R&D		-1.360 (-1.03)	
Treatment × High inst. Owr			-0.354 (-0.27)
Treatment × Low inst. Ownership			-0.426 (-0.34)
<i>F test (p-value):</i>	<u>0.2664</u>	<u>0.2633</u>	<u>0.9648</u>
ROA	0.793 (0.29)	0.622 (0.22)	0.816 (0.29)
Size	1.617 (0.54)	1.564 (0.52)	1.613 (0.53)
Leverage	-0.264 (-1.30)	-0.268 (-1.34)	-0.267 (-1.31)
MTB	0.0194 (0.32)	0.0193 (0.31)	0.0199 (0.33)
Constant	42.47*** (26.88)	42.55*** (27.02)	42.49*** (26.71)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Std Error	Industry	Industry	Industry
Observations	14480	14480	14480
Adj.R <sup>2</sup>	0.463	0.463	0.462

## Appendix A: Variable Definition

Variable	Definition	Data Source
Size	Natural log of total asset (in millions) of firm $i$ in year $t$	Compustat
Leverage	Leverage ratio (total liability divided by total asset) of firm $i$ in respective year $t$	Compustat
MTB	Market capitalization divided by book value of equity of firm $i$ in year $t$	Compustat
ROA	Net income divided by total assets of firm $i$ in year $t$	Compustat
R&D Intensity	R&D expenses divided by sales of firm $i$ in year $t$	Compustat
Penalty	Dollar value of penalty (in millions) received by firm $i$ in year $t$	Violation Tracker
Scaled Penalty	Dollar value of penalty received by firm $i$ in year $t$ , divided by total asset	Compustat, Violation Tracker
Institutional Ownership	Percentage of institutional ownership of firm $i$ in year $t$	Thomson Reuters
Minority percentage	Firm $i$ 's ethnic minority employee headcount divided by total number of employees in year $t$ , multiplied by 100	Revelio Lab
Female percentage	Firm $i$ 's female employee headcount divided by total number of employees in year $t$ , multiplied by 100	Revelio Lab
Diversity score	Equally weighted <i>Ethnic Minority</i> and <i>Female Percentage</i> of firm $i$ in year $t$ , multiplied by 100	Revelio Lab
Treatment	Dummy variable that takes value of 1 if firm $i$ has disclosed diversity targets for or before year $t$ , and 0 otherwise	Refinitiv Workplace
t-4	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year in four or more than four years in the future, and zero otherwise	Refinitiv Workplace
t-3	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year three years after the current one, and zero otherwise	Refinitiv Workplace
t-2	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year two years after the current one, and zero otherwise	Refinitiv Workplace
t-1	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the next year, and zero otherwise	Refinitiv Workplace
t_0	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the current year, and zero otherwise	Refinitiv Workplace
t+1	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the last year, and zero otherwise	Refinitiv Workplace
t+2	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year two years prior to the current one, and zero otherwise	Refinitiv Workplace
t+3	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year three years prior to the current one, and zero otherwise	Refinitiv Workplace
t+4+	Dummy variable that is equal to 1 if firm $i$ will disclose its diversity target for the year four or more years prior to the current one, and zero otherwise	Refinitiv Workplace
High penalty	Dummy variable that takes value of 1 if firm $i$ 's average penalty scaled by total asset prior to its first-time disclosure is above the median of all disclosing firms, and 0 otherwise	Compustat, Violation Tracker, Refinitiv Workplace
Low penalty	Dummy variable that takes value of 1 if firm $i$ 's average penalty scaled by total asset prior to its first-time disclosure is below the median of all disclosing firms, and 0 otherwise	Compustat, Violation Tracker, Refinitiv Workplace
High Institutional Ownership	Dummy variable that takes value of 1 if firm $i$ 's average institutional ownership percentage after its first-time disclosure is above the median of all disclosing firms, and 0 otherwise	Thomson Reuters, Refinitiv Workplace

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Low Institutional Ownership	Dummy variable that takes value of 1 if firm <i>i</i> 's average institutional ownership percentage after its first-time disclosure is below the median of all disclosing firms, and 0 otherwise	Thomson Reuters, Refinitiv Workplace
High R&D	Dummy variable that takes value of 1 if firm <i>i</i> 's average R&D intensity after its first-time disclosure is above the median of all disclosing firms, and 0 otherwise	Compustat, Refinitiv Workplace
Low R&D	Dummy variable that takes value of 1 if firm <i>i</i> 's average R&D intensity after its first-time disclosure is below the median of all disclosing firms, and 0 otherwise	Compustat, Refinitiv Workplace
Numerical	Dummy variable that takes value of 1 if firm <i>i</i> has set numerical targets for both ethnic minority percentage and female percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Numerical Ethnic	Dummy variable that takes value of 1 if firm <i>i</i> has set numerical targets for ethnic minority percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Numerical Gender	Dummy variable that takes value of 1 if firm <i>i</i> has set numerical targets for female percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Forward-looking	Dummy variable that takes value of 1 if firm <i>i</i> has set new targets for both ethnic minority percentage and female percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Forward-looking Ethnic	Dummy variable that takes value of 1 if firm <i>i</i> has set new targets for ethnic minority percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Forward-looking Gender	Dummy variable that takes value of 1 if firm <i>i</i> has set new targets for female percentage for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Entire employee	Dummy variable that takes value of 1 if firm <i>i</i> has set targets for both ethnic minority percentage and female percentage of all employees for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Employee Ethnic	Dummy variable that takes value of 1 if firm <i>i</i> has set targets for ethnic minority percentage of all employees for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report
Employee Gender	Dummy variable that takes value of 1 if firm <i>i</i> has set targets for female percentage of all employees for year <i>t</i> , and 0 otherwise	Hand Collected Data from Sustainability Report

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## Appendix B: Target Characteristics

### (1) Numerical Goal vs Non-Numerical Goal

#### Numerical Example: Axcelis Technologies 2021 Diversity and Inclusion Report

##### WHAT WE ARE DOING

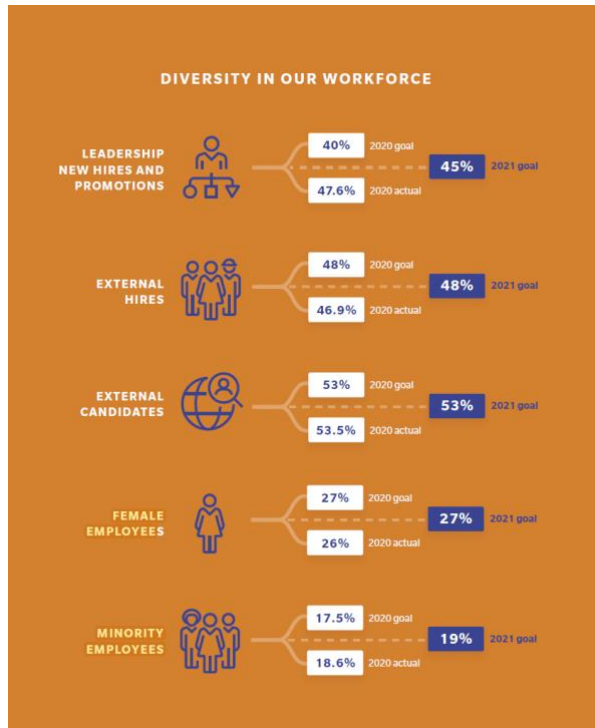
*Establishing Diversity Metrics and Goals.* In November 2020, the Compensation Committee of the Board of Directors modified their charter to formalize the committee's oversight of the Company's workforce diversity efforts. With the guidance of the Compensation Committee, management is now tracking specific demographic information related to the number of women and URMs in our workforce.

Management committed to a set of five year goals, set forth below:

Metric	2020 Status	2025 Goal
US female employee population	16%	20%
US URM employee population	8%	10%
Women in Engineering and Product Support	11%	15%
URMs in Engineering and Product Support	4%	8%
Women in Leadership (Bands L2-L4)	15%	20%
URMs in Leadership (Bands L2-L4)	2.1%	5%

Source: [https://2pnie125s5061t8w8f1rlqyj-wpengine.netdna-ssl.com/wp-content/uploads/2021/07/Axcelis\\_Diversity2021\\_FINAL.pdf](https://2pnie125s5061t8w8f1rlqyj-wpengine.netdna-ssl.com/wp-content/uploads/2021/07/Axcelis_Diversity2021_FINAL.pdf)

#### Numerical Example: Eversource Energy 2020 Sustainability Report



Source: <https://www.eversource.com/content/docs/default-source/community/2020-sustainability-report.pdf>

Non-numerical Example: Eastman Chemical 2020 Sustainability Report

## CARING FOR SOCIETY

- **Achieve gender parity** in alignment with our commitment to Paradigm for Parity®
- **Be a leader for racial equity** within our industry
- Drive new product **innovations that advance solutions for society's most pressing needs** while ensuring product safety and transparency

Source: <https://www.eastman.com/Company/Sustainability/Documents/Eastman-Sustainability-Report-2020.pdf>

Non-numerical Example: Edwards Lifesciences 2019 Sustainability Report

Current sustainability targets			
By 2022, all global employees to have completed unconscious bias training, and new hires within six months of employment	5 GENDER EQUALITY	10 REDUCED INEQUALITIES	
Year-over-year positive trending globally of women in leadership positions	5 GENDER EQUALITY	11 SUSTAINABLE CITIES AND COMMUNITIES	
Year-over-year positive trending in U.S. ethnically diverse talent in leadership positions	5 GENDER EQUALITY	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	

Source: [https://www.responsibilityreports.com/HostedData/ResponsibilityReports/PDF/NYSE\\_EW\\_2019.pdf](https://www.responsibilityreports.com/HostedData/ResponsibilityReports/PDF/NYSE_EW_2019.pdf)

## (2) New Goal vs Past Goal

New Goal Example: Global Payment 2021 Global Responsibility Report

### Workforce Diversity

- Increase **Female** representation from  
**44% to 47%**<sup>(1)</sup>  
by 2025

- Increase **People of Color** representation from  
**31% to 39%**<sup>(2)</sup>  
by 2025

Source: [https://s21.q4cdn.com/254933054/files/doc\\_downloads/global\\_responsibility/Global-Payments\\_2021\\_Global\\_Responsibility\\_Report.pdf](https://s21.q4cdn.com/254933054/files/doc_downloads/global_responsibility/Global-Payments_2021_Global_Responsibility_Report.pdf)

New Global Example: Hershey 2020 Sustainability Report



By 2025, we seek to increase representation of our employee base so that **47 to 50 of our employees are women and 30 to 40 percent are POC. Similarly, we aspire to have 15 to 22 percent of People Leader roles occupied by POC and 40 to 42 percent by women.** Through these goals, we aim to set the bar for representation in our industry.

Source: [https://www.thehersheycompany.com/content/dam/hershey-corporate/documents/pdf/hershey\\_2020\\_sustainability\\_report.pdf](https://www.thehersheycompany.com/content/dam/hershey-corporate/documents/pdf/hershey_2020_sustainability_report.pdf)

## Past Goal Example: Lumentum 2021 Corporate Social Responsibility Report

FY21 DIB Goal	FY21 Target	FY21 Outcome	Context
Increase the percentage of women in senior leadership positions	21%	20.7%	We increased the proportion of women in senior leadership roles to 20.7%, just below our 21% goal. We have increased the number of women globally to 50% of our population and females hold 28% of our people management roles.
Increase the percentage of early career new hires	33%	48.0%	We exceeded our early career hire goals with 48% of our new employees being within the first five years of their career.
Increase the percentage of Black/ African American new hires (U.S.A. only)	10%	10.2%	We achieved our goal for Black/African American representation of new hires and understand this is an important step in fostering a more diverse workforce.
Increase the percentage of Latinx/ Hispanics new hires (U.S.A. only)	10%	4.6%	In FY21, our Latinx/Hispanic representation of new hires was under our 10% goal. Looking ahead, we believe our university relations program, increased diverse partnerships, and further development of our ERGs will continue to strengthen our reach to a diverse candidate pool. These efforts support our desire to foster a culture of inclusiveness and a sense of belonging for all employees, improving our desirability as an employer.
Less than a 2% gender pay gap, globally	<2%	<2%	We are proud to have achieved our goal and understand it takes regular monitoring to ensure we remain equitable in our compensation.
Less than a 2% pay gap for underrepresented minorities (U.S.A. only)	<2%	<2%	

Source: <https://resource.lumentum.com/s3fs-public/literature-items/lumentum-csr-2021-report.pdf>

## Past Goal Example: Synopsys 2021 Corporate Social Responsibility Report

### Progress Against 2021 CSR Goals

2021 CSR GOALS	PROGRESS IN 2021
Increase representation of women globally	<ul style="list-style-type: none"> <li>In 2021, we attained an external hiring rate of 26% women and continued to increase representation of women company-wide year over year.</li> </ul>
Increase representation of Black, Latinx, and Indigenous (BLI) employees in the U.S.	<ul style="list-style-type: none"> <li>We significantly increased the hiring rate of BLI talent in the U.S.</li> </ul>

Source: <https://www.synopsys.com/content/dam/synopsys/company/company-pdfs/Synopsys-2021-CSR-Report.pdf>

### (3) Entire Employee vs Not at Entire Employee

Entire Employee Example: Chemours 2020 Corporate Responsibility Commitment Report

#### OUR COMMITMENTS

Our 2030 CRC Goals	Our 2020 Performance*	2030 Goal Progress
50% of all global positions filled with women	22.1% of all positions filled with women	
20% of all US positions filled with ethnically diverse employees	19.6% of all US positions filled with ethnically diverse employees	

Source: <https://www.chemours.com/en/-/media/files/corporate/crc/2020/corporate-responsibility-commitment-report-executive-summary.pdf?la=en&rev=70fb755d8ea5478eae655192d9e48998>

Entire Employee Example: Union Pacific 2021 Human Capital Report

## OUR GOALS – BETTER REFLECTING OUR COMMUNITIES

In 2020, Union Pacific set aggressive diversity goals to be reached over the next decade. **By 2030, we want to increase our people of color population from 29.4% to 40% and double our female population to 11%.** By achieving these goals, the railroad will better reflect the communities we serve.

Source: [https://www.up.com/cs/groups/public/@uprr/@corprel/documents/up\\_pdf\\_natedocuments/pdf\\_up\\_2021-human-capital-rep.pdf](https://www.up.com/cs/groups/public/@uprr/@corprel/documents/up_pdf_natedocuments/pdf_up_2021-human-capital-rep.pdf)

Not at Entire Employee Example: Clean Harbors 2021 Corporate Responsibility Commitment Report

Source: <https://www.cleanharbors.com/sites/g/files/bdczcs356/files/2021-03/CLH%20Sustainability%20Report%202-26-21.pdf>



[Report%202-26-21.pdf](https://www.cleanharbors.com/sites/g/files/bdczcs356/files/2021-03/CLH%20Sustainability%20Report%202-26-21.pdf)

Not at Entire Employee Example Two-DICK'S Sporting Goods 2020 Purpose Playbook

Source: [https://s27.q4cdn.com/812551136/files/doc\\_downloads/2020PurposePlaybook.pdf](https://s27.q4cdn.com/812551136/files/doc_downloads/2020PurposePlaybook.pdf)

#### UPDATED INCLUSION AND DIVERSITY (I&D) GOALS

DICK'S is committed to creating an inclusive and diverse workplace. This commitment is at the core of our philosophy and is also reflected in our I&D goals.

Maintain a median gender pay ratio of 100%.	<input checked="" type="radio"/> Achieved
Achieve 50% BIPOC and/or women for entry-level hires for technology by 2025.	<input type="radio"/> In Progress
Increase BIPOC representation in leadership roles by 30% by 2025.	<input type="radio"/> New Goal
Increase overall representation of women in store leadership to 40% by 2025.	<input type="radio"/> New Goal