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The Effects Of Diversity And Inclusion Policies On Business Performance

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by
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Abstract

In the United States, social justice and equality have become a centralized concern over the past couple of years resulting from widespread incidents of racialized violence, and the passing of multiple anti-LGBTQ+ bills. Consequently, people have started demanding greater accountability and initiatives to protect minority communities. Many businesses, to stay competitive and support the needs of their employees and customers, have strengthened their commitments to foster a culture of diversity and inclusion at work. With increasing attention being given to such policies, it is important to ask how diversity and inclusion efforts can impact organizations through employee wellbeing and firm success. My research uses a mixed methods approach to analyze the relationship between diversity and inclusion policies and business performance. The study hypothesizes that greater implementation of diversity and inclusion policies will increase profitability through increased worker productivity, lower wage costs, and higher sales revenue. Microeconomic theory of the firm, wage differential theory, and the demand and supply of monopolistic competition are used as theoretical models for my hypothesis. Qualitative results were compiled by interviewing managers and employees who work for for-profit businesses in Wayne County. The responses provide evidence for my hypothesis as interviewees noted diversity and inclusion policies have a positive effect on employee engagement, customer satisfaction, and sales. Additionally, data on mutual funds' performance and their Gender Equality Scores (GES) was also used as a second method to test my hypothesis. Two out of the four components of the lagged GES, 'gender balance in leadership and workforce', and 'policies aimed at promoting gender equality' had positive effects on the one-year returns of mutual funds by 0.160 and 0.909 percentage points respectively. 'Equal compensation and work-life balance', and 'commitment, transparency, and accountability' had negative impacts on a mutual funds' returns, suggesting a net effect of diversity and inclusion efforts.

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1. Introduction

As globalization grows rapidly and concerns increase about the unjust, discriminatory behavior of individuals towards BIPOC, LGBTQ+, disabled, and lower socioeconomic communities, it is imperative for us to collectively take a stand against this to foster relations of peace. Specifically, within workplaces, minority workers face multiple obstacles because of their identities. Research highlights that women and racial minorities are subject to internal barriers at work e.g., stereotype threats, fear of missingout, and imposter syndrome (Ali, 2020). Moreover, the Society for Human Resource Management (2021) found that 42% of African American, 26% of Asian and 21% of Hispanic or Latino employees reported facing unfair treatment at work because of theirrace or ethnicity over the past 5 years. On the contrary, only 12% of white employees reported discrimination over the same period on the basis of their race or ethnicity. These findings clearly portray the widespread existence of discrimination at work and the needto address barriers to all employees feeling valued and comfortable in the workplace.

One significant method to overcome such challenges is the implementation of diversity and inclusion policies within workplaces. Research finds that such initiatives generate feelings of safety and respect among employees, creating a greater sense of belonging and community at work (Forbes, 2021). Diversity and inclusion policies can also increase trust levels among the workforce and benefit employee engagement (Wong, 2020). Moreover, employees are less likely to experience burnout in an inclusive workspace where they feel in control and recognized (Sharma and Sharma, 2015). Thus,diversity and inclusion policies are essential to promote the safety and wellbeing of all employees, regardless of their backgrounds.

Although diversity and inclusion efforts should be prioritized on ethical and moral grounds to ensure equality and fairness for all employees, their impact on business performance can influence employers' decisions to implement them. Therefore, it is important to address the topic of diversity and inclusion policies within the workplacein terms of organizational outcomes. Diversity at work is a contested topic. Some strongly favor promoting diverse workforce structures because it expands employee perspectives and increases inputs for problem solving. Others who argue against increasing diversity state that differing perceptions can disrupt team dynamics, makingcommunication among employees more difficult.

By addressing the topic of diversity and inclusion policies at work, I will try to determine the potential benefits of diversity and inclusion policies that – under ideal circumstances – can potentially overcome the costs related to enforcing these, thus encouraging firms to implement diversity and inclusion policies.

There has been a multitude of research in the past on topics of diversity and inclusion within the workforce. As discussed above, some find evidence in favor of it,some prove it is harmful, and others conclude it generates both benefits and harms. However, there is limited research that directly focuses on the impacts of diversity andinclusion policies on a business's performance. Those who have studied this topic do not discuss the demand-side factors of how implementing diversity practices can leadto a change in consumer preferences for that organization's product. Thus, through myresearch, I aim to expand the field of study by tackling both the supply-side factors (worker productivity, wage differentials, taste-based hiring) and demand-side changes as a result of enforcing diversity and inclusion policies in a firm. Moreover, much of the prior research has focused on the gender binary (male/female) and/or racial aspects. For example, Bayer and Rouse (2016) report the underrepresentation of women and racial minorities within the field of economics. What is interesting is studies like this, even in the present day, eliminate other significant minority groups(such as queer and/or disabled individuals). Therefore, my research aims to have an inclusive approach that talks about diversity in a generalized way that applies to all people who come from different identities, backgrounds, and/or lived experiences. The paper also uses a mixed methods approach to incorporate more feminist methodology and include the voices of employees from minority groups along with quantitative data.

The primary research question I will evaluate is: how do diversity and inclusion policies affect business performance. To consider this in-depth, I will break down thetopic into two parts: the supply-side effects, and demand-side effects of implementingthese practices within a firm. I hypothesize that promoting diversity and inclusion practices at work will increase a business's profit through 1) a rise in worker productivity resulting from an increase in motivation and knowledge spill-over effects, which will lower total costs, 2) wage differentials (workers may choose lowerwages in exchange for an inclusive workplace), which will reduce total wage costs, and 3) a growth in the business' product demand, which will push up its price and total revenue.

The paper will examine the research topic at hand by first providing a theoretical foundation, in Chapter 2, to build on the idea of how diversity and inclusion practices can impact profits. The theory section is further divided into parts to provide relevant background on the definition of diversity and inclusion policies, consider the supply- side effects by discussing the effect of productivity on profits through the profit maximization model, the hedonic wage model to show worker preferences and trade- offs, and Becker's taste-based model to highlight the effect of employer discriminationon profit. Chapter 2 also considers the demand-side effects through the law of supply and demand, and the use of the prisoners' dilemma in a business's decision to implement diversity and inclusion policies. Finally, the chapter will discuss the optimal level of diversity practices a firm would implement by using the profit-maximizing ruleto find the point where the marginal benefit from diversity and inclusion policies equals the marginal cost of implementing them.

In Chapter 3, I will review prior relevant literature sources to add to my research question. Most of these predict positive results from a diverse workforce in terms of business performance while some focus on the drawbacks of diversity at work. The research papers included were selected on their ability to further my theoretical model,as well as to highlight some of its major counterarguments.

Chapter 4 will discuss the methods and results from conducting interviews with employees and managers in for-profits businesses. This qualitative data will be analyzed to test my hypothesis and to understand the workforce's perceptions of diversity and inclusion policies at work. Chapter 5 will discuss the methods and resultsof a quantitative empirical model constructed using data on mutual funds' performanceand their Gender Equality Scores. Results from several regression models will be analyzed. The findings support my hypothesis as the lagged GES component, "policies aimed at gender equality" has a positive impact on a mutual funds one-year returns by0.909 percentage points. However, other factors of the overall GES had an equal balance of positive and negative relationships to returns, suggesting diversity and inclusion efforts generate net effects. Chapter 6 will conclude my study by consideringthe limitations and implications of my research.

2. Theoretical Framework

2.1 Background

There are numerous viewpoints regarding the impacts of implementing diversity and inclusion policies on business performance. Those who believe diversity improves organizational outcomes argue that people from different backgrounds bring multiple perspectives that improve decision-making. They also highlight another important aspect: higher diversity within a business can influence external factors, for example, it can satisfy consumer demands, build brand loyalty, and increase sales. On the other hand, people who are against promoting diverse workforces believe hiring individuals from various backgrounds can lower cohesion and teamwork, increasing turnover rates (Herring, 2009).

Although there has been expansive past research on how diversity can influence business performance, limited literature is available on the specific effects of diversity and inclusion initiatives on outcomes. Many world-renowned companies have been and continue to focus on creating diverse and inclusive workplace environments. Marriott International consciously works with women-owned enterprises, accounting for 10% of its supply chain in 2013 (3BL CSRwire, 2013). Coca-Cola actively conducts diversity trainings, speaker sessions and implemented a 6-week gender-neutral paid leave policy in 2017 (Dishman, 2016). Moreover, after the anti-black violence in mid-2020, there has been a surge in businesses taking on diversity and inclusion initiatives as a supportive stance towards social justice and equality or simply to avoid public backlash (Stevens, 2020).

Similar to the debate around a heterogenous workforce, diversity and inclusion policies within an organization have both positive and negative impacts. They cannot solely benefit or harm the business. Instead, the total impact should be calculated after considering the net of the benefits and harms as shown in equation 2.1.

$$\textit{Net Effect of Diversity}\ \text{and Inclusion Policies (DIP)}\ \textit{on a Business} =$$
$$\textit{Total Benefit Generated from}\ \text{DIP} - \textit{Total Cost of}\ \text{DIP} \qquad \text{(Eq. 2.1)}$$

Several factors could fall under the harms and benefits created by implementing diversity and inclusion policies. These can impact the business from both supply and demand-side perspectives. Inclusion policies can influence worker motivation and productivity by creating a safer workspace, generate spill-over effects as workers from different backgrounds interact together, and lower total wage costs because some employees may favor working in an inclusive environment enough to trade off their wages for it.

Implementing diversity and inclusion initiatives also poses multiple challenges. It is difficult to ensure that these policies are enacted in the day-to-day workings of a business to create a sustainable equitable and inclusive workspace. It is also possible that businesses may simply be using diversity policies within the organization as a marketing scheme or as a means to avoid legal liabilities, with no or little relative benefit to the internal working environment. Promoting diversity in the current day, amid xenophobia and queerphobia, is an easy method to improve the brand's image for consumers who see themselves as socially progressive and earn greater profits.

As mentioned above, diversity and inclusion efforts impact both internal and external factors of a business. To understand the full impact of diversity and inclusion practices, we need to consider the supply and demand consequences separately. Therefore, my theory will first consider the effects of diversity and inclusion policies through:

1. supply-side factors that primarily influence employees' skill sets, motivation, and productivity, and a business's total costs, and
2. demand-side factors that primarily influence consumer demand, product pricing, and a firm's total revenue.

I will then model the impact of improved productivity on a business's profit, as well as explain how a firm would choose the optimal level of diversity and inclusion policies.

2.2 Supply-Side Factors

By implementing diversity and inclusion policies within an organization, employees from minority groups will feel more included and recognized within the business (Downey et al., 2015). A higher trust climate will be promoted as a result. Workers will believe the manager has their greater interest in mind and has provided them with an environment to work safely. They will, in turn, be motivated to work harder and give back to the organization. This will directly be reflected in the productivity of the employees. More motivated workers have higher efficiency. Not only will they have a better, more inclusive workplace, but their personal drive will be strengthened as the business aligns with their moral and ethical rules.

Moreover, a business that focuses on diversity practices and hires workers from various backgrounds can enjoy knowledge spill-over effects. Diverse employees may bring more skills, experiences, and viewpoints than a homogenous group. Workers with disjointed skills – defined as "individuals having different information" (Lazaer, 1999) – that are relevant to each other can improve the productivity and efficiency of the workforce because each person can learn from the rest. We can understand this better through an example. If a fully operating restaurant employs an excess of waiters and shoemakers, but no one with cooking skills, it will fail because it has many individuals with overlapping, irrelevant qualities instead of a mix of complementary skills. Similarly, if a business hires all workers with overlapping backgrounds and qualities, the workers do not learn anything new from each other. This can act as a barrier to higher productivity and performance. It is also important to note that where there are diverse workforces, there is a need for a common language to conduct daily operations. As Lazear (1999) explains, information sets and skills are of no use if they cannot be understood by other employees. Maintaining this common communication is a cost to the business that shows up as a wage premium to those who are bilingual or multilingual. Moreover, a firm will only undertake this cost if the value created from diversity exceeds it.

As discussed above, diversity and inclusion policies at work can increase worker productivity through many approaches, and in turn can impact business profits positively. However, there can also be costs associated with enforcing these policies based on preferences of employers and employees at the workplace.

2.2.1 How Does Productivity Impact Profit?

Consider the profit maximizing formula shown in equation 2.2. We can use this to determine the effect labor productivity will have on business profits.

$$Max\,profit = p\,F(\bar{K},\bar{L}) - \bar{w}\bar{L} - \bar{r}\bar{K} \qquad \text{(Eq. 2.2)}$$

Assume that the wage rate (w), rent of capital (r), number of employees (L), and units of capital (K) are held constant. p represents the price of each product.

Assume there is a Firm A that pays its workers the same wage rate as other similar businesses (for the simplicity of the model). It is in a monopolistic competition and Firm A focuses on strongly implementing diversity and inclusion policies which also differentiates its products from other firms in the market. It hires a large percentage of workers from different backgrounds and cultures. Because of its diverse workforce and emphasis on diversity practices, the employees are more productive than their previous performance and other similar workers employed in less diverse environments. As described in the supply-side factors, this higher productivity will result from spill-over effects, and the creation of a safe workplace that recognizes and motivates employees etc.

Building from equation 2.2, we can model the greater productivity of workers by:

$$Max\ profit \;=\; p\,F(\bar{K},\alpha L \quad - \; w\,\bar{L} \; - \; r\,\bar{K} \qquad \text{(Eq. 2.3)}$$

Therefore, as shown in 2.3, all else remains the same for Firm A except that all its employees are more productive by a multiplicative factor α resulting from the diversity efforts within the business. Each hour of labor hired is as productive as α with diversity and inclusion practices in place. The value of α >1 (or α% >100%) because employees become more productive than they previously were without the implementation of these policies.

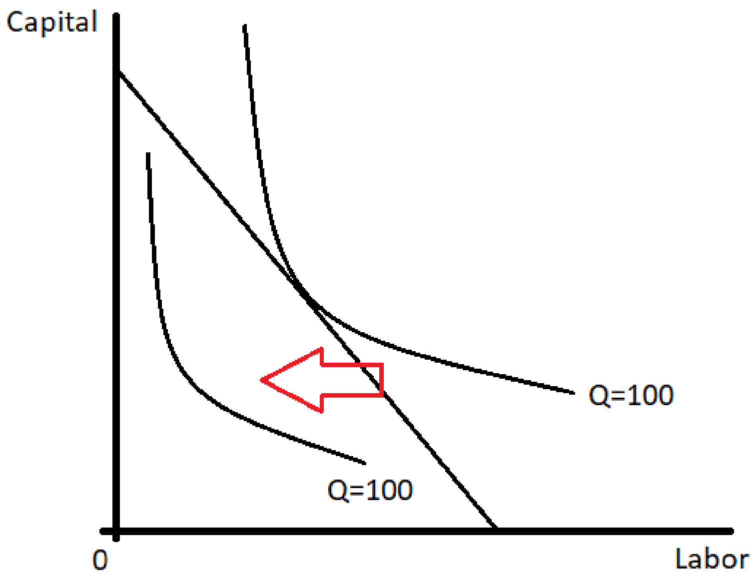

Figure 1: Change in production curve from implementing diversity and inclusion policies

This can also be graphically explained using isocosts and isoquants, as shown in Fig. 1. Firm A, before implementing inclusion policies was producing the 100 units of total output represented by Q=100. Assume the business was already producing at the optimal level with a fixed amount of labor and capital. However, after Firm A starts enforcing the diversity and inclusion policies, the workers will become more productive – depicted by the multiplicative element α in equation 2.3. This rise in productivity is a result of a more recognized, motivated workforce that derives utility from being employed in a diverse environment and enjoys positive spill-over effects from the skills and knowledge of other employees.

Therefore, when productivity rises, the same amount of total output (Q=100) may be produced by a lower level of labor and capital, shown by the leftward shift of the isoquant for Firm A. This relationship can also be determined from equation 2.3, where $\bar{w}L$ indicates the total wage costs and $\bar{r}K$ shows the total cost of renting capital. A focus on diversity and inclusion policies will increase worker productivity allowing a smaller level of labor and capital to produce the same level of output. As a result, the total wage costs and the rent of capital will be reduced overtime which will lower the total costs of Firm A. Consequently, the business will make a higher profit.

2.2.2 Compensating Wage Differentials

Moreover, it is also possible that wage differentials on the basis of employee preferences to work in a diverse and inclusive climate may impact a business's profit. As explained in Fig. 2 below, workers who derive greater utility from working in a diverse environment may trade-off higher wages for more nonwage amenities, that can be provided through the enforcement of diversity policies. Curve *Ic1* is the hedonic indifference curve that shows the various combinations of wage rate and a nonwage amenity, yielding a specific level of total utility. Assume the amenity referred to here is diversity and inclusion policies. Instead of operating at point '*a*' where the wage rate is *W1* and the working conditions provided are *A1*, employees who value working in an inclusive organization may be willing to work at point '*b*' with a lower wage *W2*, but a greater level of the nonwage amenity – diversity practices at *A2*. This means they will be indifferent between the points *a* and *b* because both points yield the same level of total utility for them. Firms may be able to hire such employees for a lower wage if they offer them a diverse and inclusive environment, allowing the business to lower its wage costs. Thus, this may boost up profits for diverse workplaces (ceteris paribus).

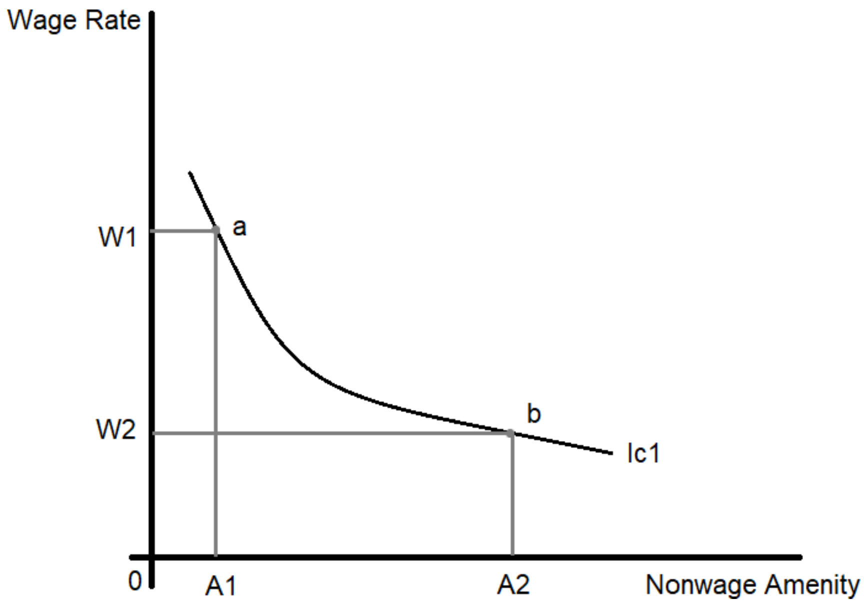

Figure 2: Wage differential for employees resulting from the nonwage amenity – diversity and inclusion policies

Employees who gain satisfaction from working in diverse environments, especially those from minority groups, will reciprocate the inclusive decisions of human resources by higher engagement in their work, shirking less, and lowering the wastage of resources by accidents or inefficiency. Therefore, total costs to the business may be reduced as workers give up higher wages to be a part of a more inclusive organization and increase their productivity. As a result, the firm's profit may increase (assuming ceteris paribus).

However, taking up a loss-in-diversity sentiment, there may be employees who gain a disutility from working in a diverse environment. Such an individual may simply be unwilling to work with people from diverse backgrounds or find it difficult to adapt to a changed workplace environment or be unhappy about using their resources (such as time) to focus on diversity efforts. As shown in Fig. 3. this person's reservation wage is *W1* at *0* implementation of the nonwage amenity – diversity and inclusion policies at work. If the firm does apply diversity practices, an employee who gets disutility from it will want a higher wage to compensate for their dissatisfaction and stay indifferent at curve *u*. For instance, if *A1* of diversity and inclusion policies are enforced, this employee will want a wage of *W2* to gain the same level of utility. If they do not receive wage *W2* from the business they are currently employed at, they can find a new job that has no diversity policies as long as it offers them at least a wage *W1*. The worker will not be willing to participate in the labor market for a wage less than this. This can reduce a firm's profit because it has to bear the initial cost of applying diversity and inclusion practices, while also paying higher wages to such employees. If the business does not increase the wage rate of employees who get a disutility from working in a diverse environment, it may face higher costs of hiring and training new workers.

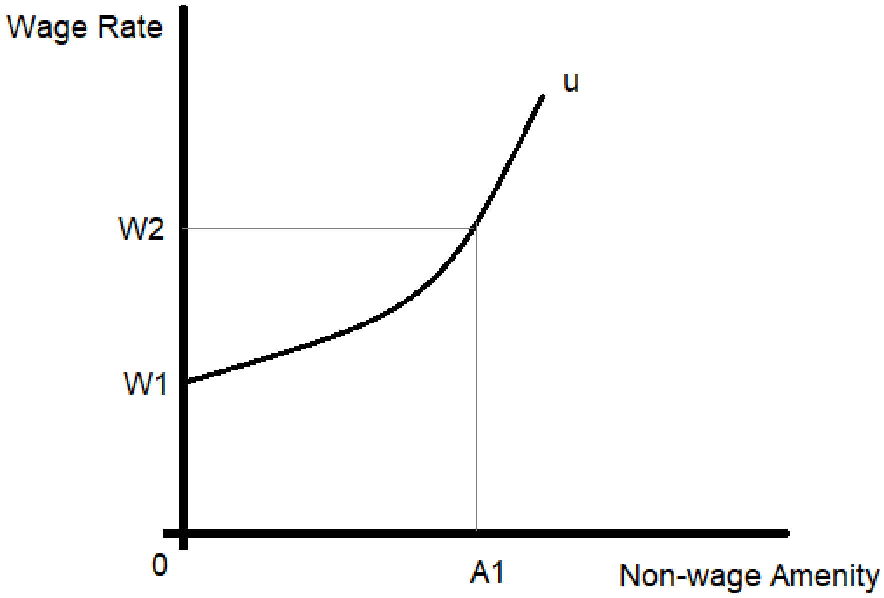

Figure 3: Reservation wage curve for employees who face disutility from the nonwage amenity – diversity and inclusion policies

The wage rate the firm will need to pay will thus be determined as a net effect of the lower wage accepted by employees who gain greater satisfaction from working in a diverse organization, and the higher wage preferred by employees as compensation for the disutility they face from increased diversity initiatives at work.

2.2.3 Becker's Taste-Based Model

Employers can also determine who they hire on the basis of discrimination. For example, there may be an employer who discriminates against black workers and may get a greater disutility from working with them. Thus, as Becker's Taste-Based Model emphasizes, this individual will associate an additional cost for hiring a black employee. We will use d to denote the discrimination coefficient. Assume, both white and black workers are willing to work for $5000/month and are equally qualified. Such an employer will associate a psychological cost with employing a black individual of $\$5000(1+d)$. If d = 0.3, then the employer will act as if they are paying a wage of $6500.

Considering the profit maximizing equation:

$$\max_{L_{wh}, L_b, K} pf(L, K) - w_{wh}L_{wh} - w_b L_b - rK \qquad \text{(Eq. 2.4)}$$

where price (p), labor (L), capital (K), wage (w), rent (r), white employees (wh), and black employees (b). Employers would like to maximize their profits by increasing total revenue and lowering total cost. In the case of a discriminatory employer, the profit maximization or more aptly, the utility maximization equation (since there is a psychological, non-monetary cost resulting from discrimination coefficient d) will be:

$$\max_{L_{wh}, L_b, K} pf(L, K) - w_{wh}L_{wh} - w_b L_b - rK - dL_b \qquad \text{(Eq. 2.5)}$$

where d is the discrimination coefficient. dL_b represents the non-pecuniary cost to the employer of hiring black workers because of their discrimination. Thus, such an employer will recruit more white workers because they see them as less costly for the business. By hiring more black employees, this employer may feel that they are incurring a higher cost. As a result of this taste-based discrimination, it is also possible that such employers may not promote and implement diversity and inclusion practices at work to discourage people of minority races, genders, and/or sexualities, etc. from applying to the organization.

However, in a competitive market such a firm will fail in the long run. Assume a white employee has a wage rate of \$8000/month while a black worker's is \$7200/month. The discrimination coefficient (d) is 0.2. An employer that discriminates while hiring will attach a psychological cost to the wage of black employees, equaling to $\$7200(1 + 0.2) = \$8640$. Thus, they will see black workers as more expensive and be willing to hire more white employees. This employer will incur higher wage costs as compared to an employer who would have been indifferent and chose workers simply to maximize profits. In the long run, this firm will lose its competitive advantage as non-discriminating businesses will have lower wage costs and earn greater profits.

Discrimination can also persist in the market as a result of other discriminatory actors. For example, it may be that the customers of a business are strongly conservative and do not support notions of diversity and inclusion. Under such circumstances, hiring a diverse workforce will lower customer satisfaction and cause revenues to decrease. Therefore, to maximize its profits and stay competitive, the employer of such a firm may benefit from not implementing diversity and inclusion policies.

2.3 Demand-Side Factors

On the other hand, diversity and inclusion policies can influence sales revenue and a firm's profit by increasing consumer demand. People match their interests with brands. Customers buy from companies that support the same ethics and principles as them. For instance, a person that is against animal cruelty will purchase from businesses that advertise they do not test products on animals. Kitterman (2020) reports that 83% of Millennials want brands to align with their morals and values, while 65% boycotted a firm that held an opposite stance from their beliefs. Similarly, consumers who support diversity and equal treatment of all people regardless of their gender, race, sexuality, and/or dis/ability, etc. will buy more from corporations that implement diversity and inclusion policies. Recent research finds that 64% of individuals are more likely to make an instant purchase from a business after seeing an advertisement focused on diversity (Cision PR Newswire, 2020).

Going back to the assumption of Firm A, as shown in Fig. 4, the initial demand for Firm A's product when it did not enforce diversity and inclusion policies was D, along with marginal cost MC and average total cost ATC. This creates an equilibrium at price P

and quantity *Q* for the business's product. The firm makes a profit of rectangle *PUVW* since its average total costs are lower than the price. However, when Firm A starts implementing diversity and inclusion practices, its consumer base will eventually grow as people who support similar ethical ideologies will begin purchasing more of its commodity. This will drive up the demand from *D* to *D** and the marginal revenue from *MR* to *MR** for Firm A's product, reaching a new equilibrium at a higher price *P**, and at a higher quantity *Q**. Now the business earns a higher profit of rectangle *P*XYZ* as shown in Fig. 4 because its demand increases, thus pushing up price and marginal revenue which grow more than the rise in average total cost (not shown in Fig. 4 for clarity).

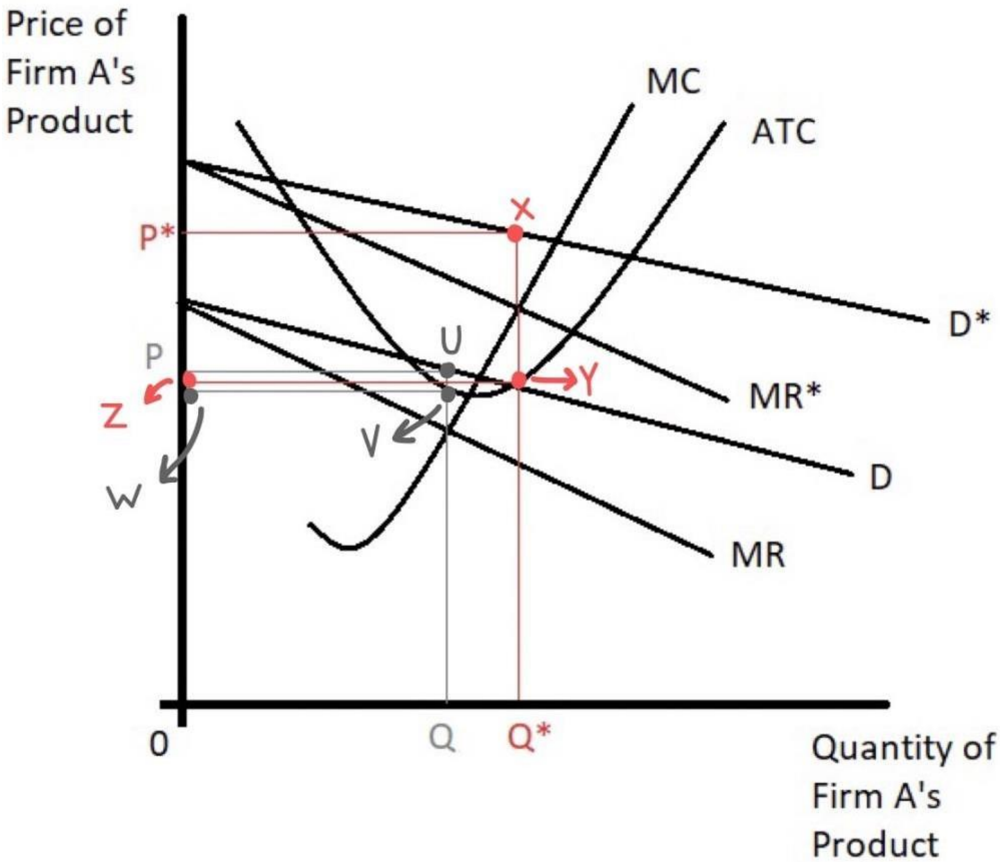

Figure 4: Increase in demand resulting from Firm A implementing diversity and inclusion policies

The same process as Fig. 4 can be explained mathematically. Going back to equation 2.3, the profit maximization problem can be used to show the effect of inclusion practices on profits. When Firm A implements diversity and inclusion policies, the demand for its product increases, pushing up price p – as represented in equation 2.3. Overtime, a higher price will boost up total sales revenue and the business's profit.

However, the collective effects of these policies on business profits are more complex. We will now consider both the demand-side and supply-side impacts on a business that is newly practicing diversity and inclusion at work, assuming a value-in-diversity stance. Consider again the example of Firm A which is operating in a monopolistic competition. Firm A makes the decision to focus on diversity and inclusion practices to differentiate its product. Fig. 5A shows its marginal revenue and demand before it enforces these policies. Here, Firm A has a marginal cost of *MC1* and an average total cost of *ATC1*. Thus, it sells a quantity of *Q1* for a price of *P1*. The profit it makes at this equilibrium is shown by the area marked P_1CDE. However, initially when a firm implements diversity policies it may face an increase in its total cost from organizing trainings, hiring diversity and inclusion managers, updating organizational policies, and promoting a more inclusive brand image to its consumer base, etc. For simplicity of the model, assume all else as ceteris paribus. Thus, Firm A will see a short-run increase in its marginal cost from *MC1* to *MC2*, and from *ATC1* to *ATC2*. This will increase the price to *P2* and decrease the quantity to *Q2*, relatively lowering its profit to the area marked P_2FGH.

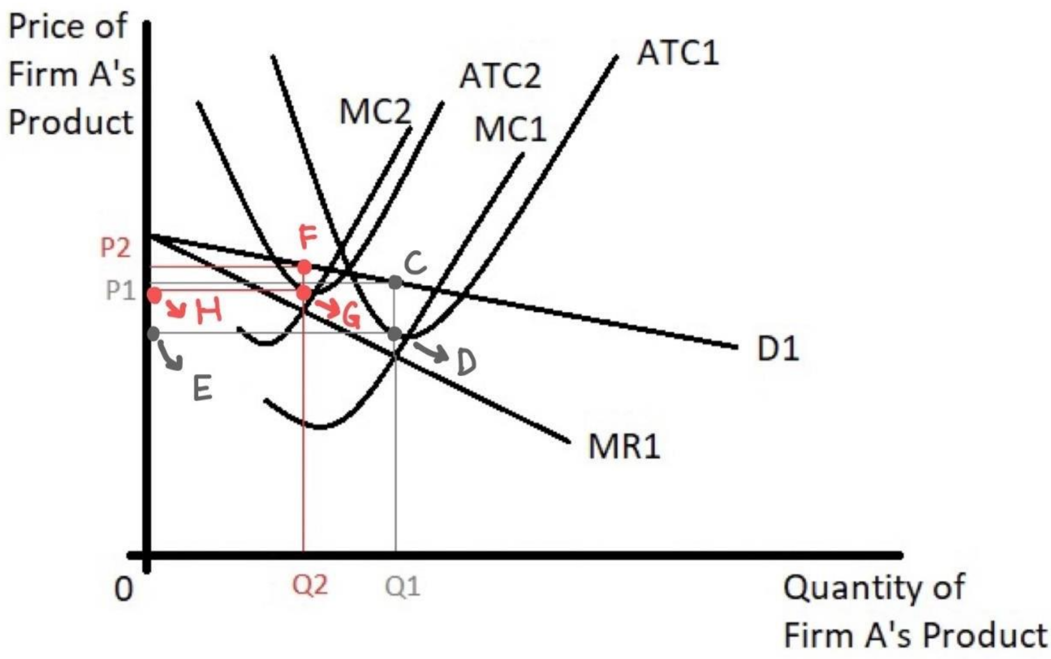

Figure 5 A: Short-run increase in costs when Firm A implements diversity and inclusion policies

Also, in the short run, as discussed before, businesses may enjoy an increase in the demand for their products once they focus their operations on diversity and inclusion. As shown in Fig. 5B, Firm A's demand curve and marginal revenue will shift upward to *D2* and *MR2* while marginal cost is still at *MC2*, and average total cost is at *ATC2*. The price of its product will increase to *P3* and the quantity to *Q3*. Therefore, this will boost up Firm A's profit to the area P_3IJK, offsetting to some extent the relative decrease in profit resulting from the costs of implementing diversity and inclusion policies.

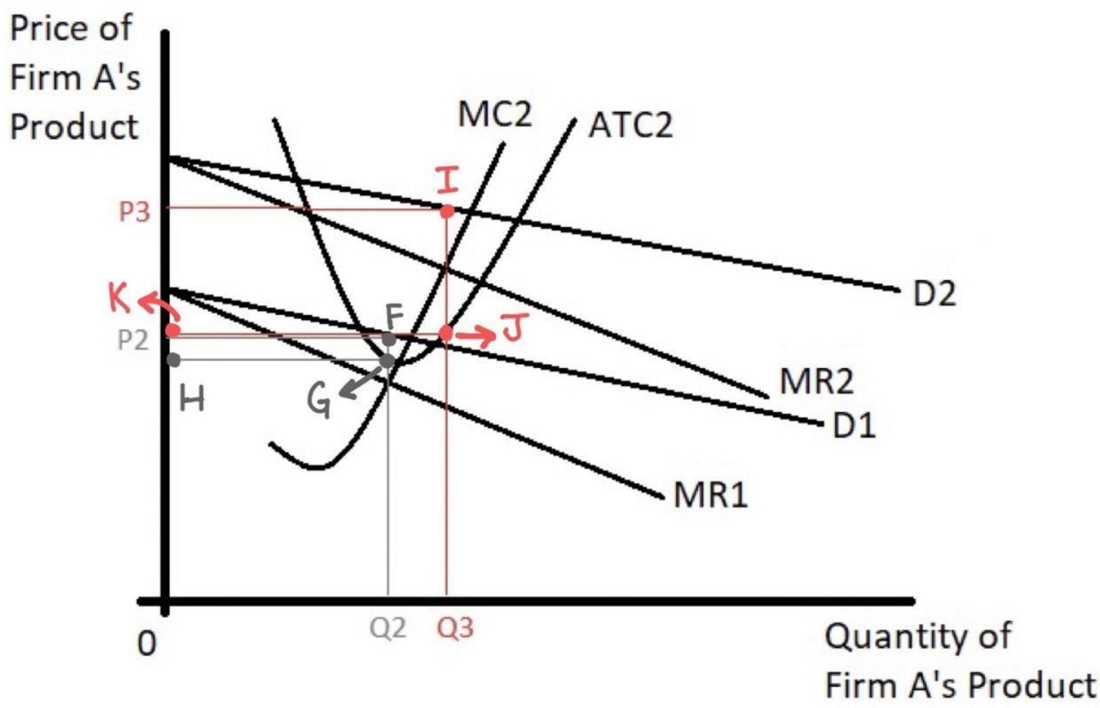

Figure 5 B: Increase in demand resulting from Firm A implementing diversity and inclusion policies

As discussed above, diversity and inclusion policies will gradually increase worker motivation and productivity through the creation of safer workspaces, and employees generate spill-over effects by learning from each other's different perspectives and skills. This process will follow after the increase in demand for Firm A's product since realizing benefits on worker performance will typically take longer than promoting the business's inclusive outlook to customers. Thus, in the longer run as employee productivity improves because of diversity practices, the marginal cost may decrease from *MC2* to *MC3* (holding all else constant), and the average total cost may fall from *ATC2* to *ATC3* – as shown in Fig. 5C. This will increase the quantity to *Q4* and decrease the price to *P4*. At the demand curve *D2* and marginal revenue curve of *MR2*, Firm A enjoys a profit of area P_4LMN. Therefore, a firm can – under ideal conditions and implementation processes – make a much greater profit than it did before it enforced diversity and inclusion policies.

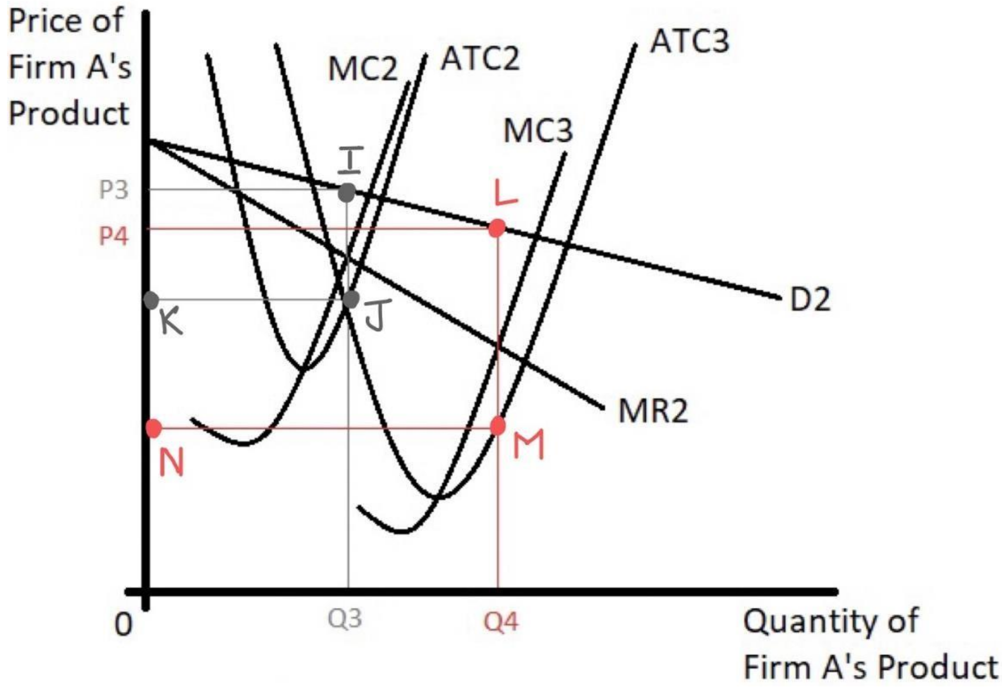

Figure 5 C: Long-run decrease in costs resulting from Firm A implementing diversity and inclusion policies

However, the decision to focus on diversity and inclusion practices can also be influenced by strategies and collaboration among businesses, instead of simply costs and demand. Firms in an oligopoly market can cooperate and strategize in such a way that neither firm implements diversity and inclusion practices. For example, assume there are only two businesses: A, B. Each firm must make the decision to implement diversity practices or not. Using the prisoners' dilemma model, we can assume their payoffs for the first month in each situation. In the table below, we hold the payoffs constant for simplicity but in practice the payoffs from implementing diversity and inclusion policies will change overtime from a potential fall initially as the business takes up the costs of enforcing these policies – e.g., diversity training costs, hiring a diversity consultant, etc., to a gradual rise in payoffs – a possible rise in profits through greater worker motivation, more workforce cohesion, better decision-making, etc.

Table 1: Prisoners' Dilemma model of two monopolistic firms deciding whether they should implement diversity and inclusion policies

	Firm B		
Firm A		Do not implement Diversity & Inclusion Policies	Implement Diversity & Inclusion Policies
	Do not implement Diversity & Inclusion Policies	11, 11	9, 12
	Implement Diversity & Inclusion Policies	12, 9	10, 10

Using Table 1, if one firm – say Firm A chooses to focus on diversity and inclusion practices it will have a higher payoff of $12,000 the first month – despite the cost of implementing these practices – because of the improvement in its marketing which can build up consumer demand if its customers are mainly supportive of diversity. At the same time, Firm B will have a lower payoff of $9,000 for that month because it may be that some of its customers shift to A as a result of brand image.

Another strategy for the firms is that they both enforce diversity and inclusion policies. Here both Firm A and B will have payoffs of by $10,000 for the first month. This is the nash equilibrium of the prisoners' dilemma. They will not gain any competitive advantage and will be considered similar in terms of optics. As a result, there will not be much change in how customers perceive the two firms while they still bear the initial costs of implementing diversity and inclusion policies. However, it is important to note that Table. 1 only accounts for the first month's returns. In the long run, both firms may see a greater increase in their payoffs as a result of the benefits to business performance by investing in diversity and inclusion.

It can also be the case that both firms may be discouraged from investing in diversity and inclusion if they anticipate that neither will be much better off financially than the other by doing so. Thus, the final strategy for the businesses is that they both collaborate and neither implements diversity and inclusion practices. Both earn a payoff of $11,000 for the month because neither has to take up the cost of enforcing the policies while also not losing their relative brand image. In terms of marketing, both firms not focusing on diversity and inclusion is the same as if both were to implement said practices. Thus, we see that this pair of strategies is pareto superior than the nash equilibrium because both businesses could have enjoyed higher payoffs by not enforcing diversity and inclusion practices. Neither Firm A or B will have a strong incentive to cheat as well because if – say Firm A – were to deceive B and move towards strengthening it diversity and inclusion plan, Firm B would also do the same to stay competitive and ensure that in the longer run, Firm A is not the only one to reap the benefits (higher employee productivity, lower costs, improved brand image, etc.) of focusing on diversity and inclusion. Consequently, both firms will be seen as similar in terms of inclusive stances by customers.

2.4 Finding the Optimal Level of Implementing Diversity & Inclusion Policies

Building from the previous theoretical models analyzed, a firm will not implement an unlimited number of diversity and inclusion policies. Rather, it will enforce them till the profit maximizing point where the marginal benefit to the business of practicing each additional policy will be greater or equal to the marginal cost of enforcing that policy.

Costs can arise from diversity trainings, creating safer workspaces, increased communication between human resources and employees, etc. These costs might rise as more policies are enforced. For example, the more workers get trained and learn about diversity, the more complex or higher level the next training session would have to be, which may cost more than previous relatively simpler trainings. Additionally, considering the example of Google's 'Sojourn' diversity program, the company faced opposition from conservatives for enforcing greater diversity and inclusion practices (Glaser, 2020). This can be seen as a cost to Google of implementing these policies that grows as it encourages greater diversity.

After a certain level, practicing diversity policies and hiring diverse workers may start to show diminishing returns. This is because the firm may have already reaped all the benefits of promoting diversity within the workplace. For example, an employee from a racial or gender minority may initially gain higher utility by their employer holding diversity trainings, etc. However, after being exposed to such practices for a long time, their utility will be maximized and may even start to diminish. Moreover, employees' skillsets and knowledge will become redundant or overlapping – as explained in supply-side factors. Beyond such a point, adding an additional policy will contribute less to the marginal product than the previous policy. Therefore, a business will not implement diversity and inclusion policies or hire workers from different backgrounds after the profit maximizing point.

3. Literature Review

3.1 Overview

In this section, I will discuss previous interdisciplinary literature on or related to my research question. First, I will provide a critical review of "Diversity in the Economics Profession: A New Attack on an Old Problem" (Bayer & Rouse, 2016) that has aided in establishing the foundations of my study by addressing how organizations discriminate and discourage potential diverse employees from joining. This paper was included because of its in-depth analysis on the white, patriarchal power structures within the field of Economics, and how both the supply of and demand for women and racial minorities is discouraged in this profession. It helped me understand the factors that limit diversity within certain settings like the lack of prior role models, institutional bias, etc. Furthermore, this study proved beneficial because it helped me understand how diversity and inclusion work in a field I am familiar with, and one which is similar to the corporate environment I am analyzing.

Next, I will discuss "The Role of Diversity Practices & Inclusion in Promoting Trust &Employee Engagement" (Downey et al., 2015), "Cultural Diversity and Work Group Effectiveness" (Thomas, 1999), and "Inclusive Workplace and Organizational Citizenship Behavior" (Panicker et al., 2018). All three articles examine the effects of workplace diversity on employees through psychological and behavioral factors, and how these impact a business. Downey et al. (2015) has added to my research by setting up a distinct, positive relationship between diversity practices and worker engagement, thus highlighting that productivity is a function of diversity and inclusion policies. Thomas (1999) explains how diverse backgrounds (e.g., collectivism, sociocultural norms, etc.) influence an individual's behavior within a heterogenous workgroup, which ultimately impacts team performance.

Panicker et al. (2018) discusses how employee perceptions of an inclusive workplace can determine their behavior towards acting in the benefit of the organization. Moreover, it examines if the certain groups (gender, religion, etc.) can impact worker outlooks of inclusion and how they respond accordingly.

I will also include “Racial Diversity, Business Strategy, and Firm Performance: A Resource-Based View” (Richard, 2000), and “Demographic Diversity in the Boardroom: Mediators of the Board Diversity-Firm Performance Relationship” (Miller and Triana, 2009). Both these sources consider the potential positive effects of diversity on business outcomes under specific contexts. Richard (2000) examines the impacts of diversity on productivity, market performance, and return on equity emphasizing that the results will vary on the business strategy pursued. There will be value-in-diversity when a firm aims for growth and vice versa. Miller and Triana (2009) analyze the influence of boardroom diversity on firm performance, highlighting that organizational innovation and reputation will motivate the results. A firm that focuses on these two factors will reap more benefits from implementing diversity at the board level.

Lastly, I incorporate an article review of “Does Diversity Pay? Race, Gender, and the Business Case for Diversity” (Herring, 2009) to show focused research on how gender and racial diversity can benefit firms. This paper evaluates the impact of workforce diversity on a business’s performance by comparing the sales, size of customer base, market share, and profit of diverse and homogenous corporations. Herring (2009) ties up my literature review section by finding empirical firm level results indicating a value-in-diversity sentiment, adding strength to the previous sources that suggest diversity at work can boost firm performance. Thus, this partially supports my hypothesis – as diversity practices rise, a business’s profit will increase.

3.2 Bayer and Rouse (2016)

The article, "Diversity in the Economics Profession: A New Attack on an Old Problem" is written by Amanda Bayer and Cecilia Elena Rouse and published in the *Journal of Economic Perspectives*. It studies the underrepresentation of women and racial and ethnic minorities in the field of economics. Although this does not completely align with my research topic, I chose it to understand the problem of diversity and inclusion from the root – what generates this gap? – before moving on to more complex questions like how it affects employees and businesses. The relationship developed between diversity in the field and the willingness of minority groups to study/work in economics solidifies my use of the theory of compensating differentials – some employees who strongly prefer a diverse workspace may be willing to give up a higher pay to not work in a homogenous environment (economics). Similarly, this article highlights the impacts of diversity on productivity which again falls in line with my theoretical framework of how a focus on diversity and inclusion practices can strengthen worker motivation and productivity, boosting up profits in the long run.

More importantly, I consider the mention of the field of economics in this paper as just a profession (rather than specifically examining diversity in economics) to align with my research. The results found related to the underrepresentation in the profession of economics can somewhat map out why there may be discrimination against or a relative lackof participation from women and minority groups in the corporate world. Upon gaining this foundational understanding, it would be easier to approach my research topic and build off of the dynamics I take away from this article. The following paragraphs will summarize Bayer and Rouse's (2016) paper – focusing especially on its findings, as well as my critique of it, takeaways, and how this has helped generate ideas for my research.

Bayer and Rouse (2016) highlight the underrepresentation of women and racial minority groups – including African Americans, Native Americans, and Hispanics/Latinos – in the profession of economics. This is in terms of the US population as a whole, and the academic disciplines. The primary hypothesis of the paper is that there is this underrepresentation in the field of economics resulting from implicit biases and institutional policies and that this as a consequence slows the growth of the discipline, limits the issues taken on, and fosters constricting perspectives. The article is presented in four major sections:data proving the gender and racial gap in economics, reasons that lead up to this, evidence of how productivity is spurred by diversity, and possible interventions to overcome the issueat hand.

The article provides detailed statistical results compiled from many relevant research papers. The majority of the findings show that the gender gaps in rates of tenure and promotion are higher in economics as compared to the social sciences. Economists from minority groups represent a very small percentage, despite having a relatively greater overall percentage in the total US population. Using data gathered by the National Center for Education Statistics, the paper presents graphical findings showing economics has the lowest rate of doctorate degrees awarded to women and minority groups from 1995 – 2014 comparing data from the social sciences, business, humanities, and STEM. It also shows similar results for the rate of bachelor's degrees awarded. This suggests that in about 20 years, the discipline of economics has barely progressed in terms of diversification. However,the data used does have its limitations. The findings of the American Economics Association's survey referred to does not collect data using self-identification and there may be mismeasurement of race and gender – instead, department chairs reported these characteristics for their members. This could mean the results may be biased and so, not suitable for confidently coming to a conclusion.

Moreover, Bayer and Rouse find underlying reasons that generate the gender and racial gap in economics. This is broken down into two parts: supply-side, and demand-side factors. The supply-side factors focus on what considerations do people have prior to choosing economics as a profession or as an education path. They find previous research papers attribute the decision of taking a class or major in economics to previous math exposure. However, the article argues this as an insignificant factor since women had a higher rate of bachelor's degrees in mathematics and statistics in contrast to economics. Another factor considered in declaring a major is an individual's perceived interest in it. Citing previous papers, Bayer and Rouse state that women compared to men are twice as likely to report not taking an economics course in their freshman year because they did not find it interesting. Most importantly, the instructor's identity impacts student performance. A lack of a similar role model in the department may deter women and minorities from joining economics. Findings confirm that top universities with more women participating in the economics faculty tend to have a larger number of female students going for a Ph.D. in economics.

Moving to aspects that influence the demand of women and minorities in academic institutions and professions related to economics (and generally), there are two prominent determinants. The first is implicit bias, meaning unconscious discrimination which goes against the person's actual beliefs. The paper stresses this impacts professional decisions like hiring, promotion, as well as routinely academic interactions like advising students, etc. Men and women were found to be equally capable of exhibiting implicit bias. Another key factor is institutional bias, meaning an institution's policies may benefit or harm members of a specific group because of their race or gender. Bayer and Rouse highlight how this is prevalent in the economics field for instance there is a higher tendency in economists to recruit from the best graduate schools as compared to other disciplines, creating a systematic drawback for others. Moreover, the article mentions economists do not focus on designing teaching techniques and undergraduate courses in a way that makes thediscipline more inclusive for underrepresented groups in the profession. Although this section of the paper does provide me with the basic understanding of why there may be an overall gender and racial gap, it would have been interesting to have had more in-depth empirical research specific to economics on the topic.

The article then signifies the importance of diversity for economists. It stresses that because of a lack of women and minorities, the views of economists may be skewed or biased. They present the findings of another paper stating a group of various genders generates better outcomes in a corporate setting. This is because diversity in a group can affect the collective dynamics and decisions made. Although highly significant to my research and in line with my hypothesis, this is only a small part of the article and does not provide a detailed understanding of the impacts of diversity on decisions and outcomes. The research could further highlight the limitations of diversity within economics by stating how this may prove to be a barrier towards innovation of thought, better understanding of core economic research such as inequality and inflation (since the field may tend to be classist), and potentially discouraging fresh talent – through younger generations – from joining the field.

Bayer and Rouse (2016) take on the problem of underrepresentation in economics from a very holistic framework. Not only do they explain the extent of the phenomenon, but they also consider what causes it, why is it harmful to the discipline, and how to overcome it. The authors present their argument well and cite multiple works to add weight to their argument. Moreover, the research covers many major points related to the economics field and other disciplines as well. This makes it easier to compare and understand the extent to which there is a greater underrepresentation in economics and where it stems from. I believe the demand-side and supply-side factors mentioned which restrict diverse representation can also be applied to other professions to help in understanding thegender, sexual orientation, and racial gaps in the corporate world. For example, considering the field of medicine, in the U.S. less than 1% of physicians and medical students identified as trans in 2020, despite the rapid growth of the trans community (Association of American Medical Colleges, 2020). This could be a result of strong institutional bias towards trans people proved through denial of healthcare and repeated instances of harassment and discrimination in a clinical setting. Thus, the trans community may be discouraged to join the medical profession because of prior underrepresentation and institutional bias.

The article also gives me a sense of how I could format and present my research. Although it did not have a lot of empirical research conducted out by the authors themselves,the paper effectively incorporates data and information from previous research. The many citations included also give me an idea of literature to use relevant to my research. It worksto provide clarity about the writing style and how to take on economic research papers.

3.3 Downey et al. (2015)

“The Role of Diversity Practices & Inclusion in Promoting Trust & Employee Engagement” by Stephanie N. Downey et al. (2015) and published in the *Journal of Applied Social Psychology* researches the impacts of diversity practices on employee engagement through considering how employee inclusion promotes a trusting climate. The article is specifically similar to my research question because it investigates the relationship between diversity and employee productivity. It examines diversity practices and inclusion as antecedents building up a safe environment at the workplace. This results in influencing worker participation. I chose this article because of the scope of the topic. It analyzes the relationship between diversity practices and worker engagement by examining other important variables in-depth as well. This paper will help me in framing my IS research in terms of what variables I should examine, what are the possible options for theory and empirical models etc.

Moreover, the data collected to distinguish the relationship between the variables specifically considers employee perceptions of inclusion and diversity at the organization, unlike other similar research that uses data based on workplace records which may be biased or overstated. I believe this adds to the accuracy of the data and is a relatively different approach to tackling the question. Another reason for selecting this article is to learn about the writing style. The article breaks down the process of increasing employee engagement at a workplace into subparts and then collectively considers the results.

Downey et al. (2015) researches the effects of diversity practices (independent variable) on employee engagement (dependent variable). It uses worker perceptions of inclusion as a moderator and trust climate as a mediator of the relationship between the independent and dependent variables. Mediators must always be caused by the independent variable and should come before the independent variable. They also demonstrate how the independent and dependent variables are related. On the other hand, moderators are not a causal result of the independent variable and can influence the direction and extent of the relationship between a dependent and independent variable. The article argues that strong implementation of diversity practices will make employees believe they are highly included in the organization, building trust and encouraging them to be more engaged in their work. Therefore, diversity policies can lead to positive outcomes for the workers and the workplace. Examples of benefits include improved job performance for minority employees, lower turnover rate, and a stronger commitment of workers to the organization. The paper does not, however, cover methods by which employers or management can promote diversity at a workplace which limits the research to some extent.

The authors form three primary hypotheses. The first states that workers' engagement will directly be related to their perception of diversity practices at the job. This is based on the Social Exchange Theory stating relationships are strengthened with time leading to reciprocity and loyalty. Employees who believe their job provides them with resources and assistance, especially from HR activities, will reciprocate by being more involved with their work. The second hypothesis is that a greater trust climate will mediate diversity policies and worker well-being by lowering vulnerability, thus causing higher engagement. The third hypothesis is that diversity practices and trust will be moderated by employees' views of inclusion. If a worker believes he is an insider at the organization and is included in important networks and decisions, he will trust the environment more and feel obliged to increase his engagement.

The data is collected from 4,597 employees at a healthcare organization through a Likert scale anonymously assessing the diversity environment. A Likert scale is a rating tool commonly used in psychological contexts to determine and measure the perceptions, attitudes and opinions of individuals – typically used in questionnaires and surveys where responses tend to range from 'strongly agree' to 'strongly disagree'. Questions included to understand employee perceptions of engagement focused on the personal importance of performing well at work and the willingness to go beyond one's duties to support the success of the organization. For perspectives on diversity practices, employees were asked if they believed their employers prioritized and supported diversity through recruitment, and their awareness about the company's procedure in case of discrimination. For inclusion, employees were asked if they felt included in the operations and decisions of the organization by their employers and co-workers. Lastly, to measure trust climate, employees were asked the extent to which they felt there was trust, reliability, and respect with their employers and co-workers.

Considering the Likert-scale for data collection, arguments have been made in the past that self-reported data may be biased, but there is also debate that this is the most appropriate method for collecting data for a variable that cannot be determined by others. Although considering worker perception is important and may result in more accurate data, it is also possible the workers are falsely reporting information. Therefore, it is hard to come to a precise conclusion about the accuracy of the data used.

The article uses a moderation mediation model to test the hypotheses. This method is used to determine the impact of an independent variable on a dependent variable through a mediator which changes as a result of the moderator. The findings suggest that worker engagement and diversity practices have a statistically significant relation – a one unit increase in the employee perceptions of diversity practices when mediated by trust climate and moderated by inclusion increased worker engagement by 0.32 unit. Thus, the extent of engagement is directly impacted by a worker's view of the business's diversity practices. Moreover, the environment of trust mediates the impact of diversity practices on employee engagement, significantly varying based on inclusion levels. The research establishes that trust climate and the feeling of being included have a significant direct relation. This means if a worker feels they are fully included in the workings of the organization, they will trust the job and colleagues and be more engaged than an employee who feels they are barely involved in the workplace.

Downey et al. (2015) distinguishes itself as the first paper to research in detail the impact of diversity practices on worker engagement. It does so by breaking down this relationship to consider other important factors like trust and inclusion that can influence the independent and dependent variables. The article is accessible and well-presented, first defining all key terms and then moving to the empirical model. It provides proof for the validity of the data and methods through conducting tests like confirmatory factor analysis, successfully strengthening the research. The use of a moderated mediation analysis rather than a simple regression equation also clarifies the individual importance of each variable in determining the effect of diversity practice on engagement. Through this empirical method and the ample use of citations from relevant previous literature, the article has also given me more direction about ways I could build on my research. Moreover, this paper has prompted me to think about reverse causality related to my research topic – does a diverse workforce come first, or do diversity policies draw in diverse workforces? A deep dive of relevant literature could help distinguish this. To solve the problem of endogeneity, it will be important to use control variables in my regression equation that also impact the performance dependent variable to strengthen the validity of the results.

3.4 Thomas (1999)

I have chosen the article "Cultural Diversity and Work Group Effectiveness" – published in the *Journal of Cross-Cultural Psychology* – to understand how cultural differences within a work group may affect the team's dynamics and so, collective performance. This research paper adds to my study of supply-side factors by focusing on a psychological perspective to explain how diversity at work can lead to varying levels of effective outcomes. The article helped me grasp the underlying cultural mechanisms (like sociocultural norms) that influence workers' roles within their organizations. Through this, I can build on my research to analyze what aspects of diversity lead to a change in business performance.

Thomas (1999) evaluates three factors of cultural influence: cultural diversity, sociocultural norms, and relative cultural difference – all analyzed with respect to collectivism because it strongly impacts social behavior. "Cultural diversity" is defined as the degree of cultural heterogeneity with a work group, "sociocultural norms" are the culturally defined orientations of people within a team that influence their interactions, and "relative cultural distance" relates to the extent of cultural difference within the group members. All three of these factors represent how culture influences and shapes a person's identity. Thus, these mechanisms are used to understand work group functioning, more specifically team processes and outcomes because they also dictate an individual's ability to work in a diverse team. Moreover, it is important to examine the three aspects in relation to collectivism because it determines the degree of cultural influence on a person. Collectivist culture is explained to have different characteristics than individualists because it prioritizes integration over individuality, for example, collectivists have more integrated familial structures, greater emotional dependence on a group, and their personal identities are closely drawn from their social group. Therefore, an individual from a collectivist cultural background will have stronger ties with and greatly value their societal characteristics.

Thomas, 1999 analyzes cultural diversity – one of the three factors – by suggesting culturally heterogeneous groups may suffer from greater initial process losses and lower team performance because of different perceptions and communication traits. However, as the diverse team learns how to effectively work together and overcome their differences, they will perform better than homogenous groups. Moreover, the article states cultures have varying sociocultural norms such as values and behavioral scripts that influence an individual's actions within a group, thus changing their assessment of group effectiveness and processes. Behavioral scripts are defined as responses engraved in our memory picked up from our culture that dictates what we deem as appropriate behaviors for specific situations. Thomas (1999) argues that sociocultural norms spill-over in work group settings. The third factor is relative cultural distance examined through "relational demography" – defined by previous research as comparative demographic traits of group members. The paper argues an individual's behavior in groups is impacted by their relative cultural distance, which in turn is related to their perception of group processes and performance. A person may become self-aware and compare their behavior to others in a team if they are culturally distant. The article synthesizes the effects of the three diversity influences on group effectiveness into three hypotheses:

1. initially, culturally diverse groups will exhibit lower performance than culturally homogenous teams. Over time, diverse groups will improve their performance in comparison to homogenous groups.

2. group members' collectivist values will have a positive relation to their evaluation of work team processes.

3. an individual's comparative cultural distance will directly affect their assessment of team outcomes and processes.

The paper uses a sample of 77 undergraduate students from a university in New Zealand, belonging to 14 different nationalities. They are split up into 24 multicultural groups, each with three to four members, that are assigned the task of analyzing five case studies related to business organizational behavior. From these, the teams had to find the overlying problem and provide a logically supported solution. Each participant's value towards collectivism and their formation of self-identity by culture and extent of cultural variation from group members was also measured. After completing all five case studies, each participant evaluated their perceptions of the team's functionality. Measures used for this included the extent of conflict, cooperation, cohesiveness, social impairment, trust, and satisfaction with the group. The team's group effectiveness was reviewed by two post-graduate teaching assistants based on the ability of each group to identify the problem and provide an appropriate solution.

The findings from this experiment prove collectivism and cultural self-identity have a significant positive correlation. Thus, people who have stronger collectivist orientations (belonging to cultural backgrounds that prioritize and value group action over personal autonomy) are more likely to establish their identity from their cultural interactions. To test the first hypothesis, the mean differences of group performance and individual evaluation of group tasks were calculated for homogenous and heterogeneous teams. Results show that homogenous groups outperformed heterogeneous groups which may be because of process losses (defined in Psychology as the inefficient or suboptimal performance of a team) resulting from communication issues, differing opinions, and perceptions within a diverse team. Moreover, the individual assessment of group processes showed high correlations, thus factor analysis was used to agglomerate the data. This statistical method identifies common factors that can explain several results from various tests. Thus, it compresses multiple variables into fewer ones based on their variability and correlations. Several variables related to outcomes of group functioning were placed into process outcomes, while the perception of conflict and social impairment were grouped in group receptiveness.

To test the second and third hypotheses, separate regression equations were used where collectivism and relative cultural distance were independent variables, and process outcomes and group receptiveness were dependent variables. For hypothesis 2, the r-squared of the regressions were analyzed because the X variables were correlated – which tends to influence the beta coefficients.

Collectivism significantly positively impacted process outcomes (r^2 = .060), but was not statistically significant for group receptiveness (r^2 = .003). This provides some support for the second hypothesis since the evaluation of some group processes was related to collectivism, however, conflict and social impairment did not suggest the same. The positive coefficient for collectivism on process outcomes proves people with collectivist value perceptions assessed positive results for group effectiveness. Similarly, hypothesis 3 is partly proved true as relative cultural distance has a significant relationship to group receptiveness (r^2 = .087), but not for process outcomes (r^2 = .000). This shows the relative cultural distance influences an individual's evaluation of social impairment and conflict because they may feel more self-conscious and compare themselves to the group's norms. Thomas (1999) also emphasizes that the type of tasks affects the performance of diverse groups. Heterogenous teams do well in idea generation because of their varying perspectives, while they may do relatively poorly in complex tasks that are assessed because of their differences which make it harder to agree. Moreover, production tasks provide a low opportunity for analyzing the impacts of diversity, while tasks that focus on integration and communication are ideal for assessing the effects of diversity because they encourage group dynamics.

Thomas (1999) provides a detailed examination of the influences cultural diversity has on work group effectiveness. By analyzing both group performances and individual perceptions of each member, the paper relays the collective impact of diversity on team performance, as well as how people may assess their group's functioning based on their cultural differences and behavior. Although smaller sample sizes can reduce the variation of the results by randomization, Thomas could have used a wider sample to further increase the accuracy and validity of the findings. Through this, he can avoid skewed data and gain more precise mean values used for measuring group performance and individual perceptions. Additionally, the experiment only focused on one kind of task: evaluating case studies. To understand the full effect of cultural diversity on work team effectiveness, the behavior of groups should have been examined while performing different types of missions such as idea-generating, and production tasks – the experiment in the article only asked participants to complete one type of task: analyze case studies. Similarly, the level of the impact of diversity and inclusion policies can vary across job types and industries. Interactive, decision-based occupations may benefit more from diversity practices in comparison to isolated, standardized jobs. For example, a writer can learn from working and communicating with other diverse authors, however, a factory worker that has a specialized task in an assembly line will not gain much advantage from diversity at work because of the secluded nature of the job.

The article expands my research by increasing my understanding of how culturally diverse people behave based on their sociocultural norms and cultural distance in relation to collectivist values. These will help me build on how employees' motivation and productivity are changed by diversity. Thomas (1999) denies my hypothesis that greater diversity through inclusion policies will improve business performance. Therefore, this article provides me with an alternative view and has encouraged me to add an argument section briefly explaining the loss-in-diversity perspective that states greater diversity may also negatively affect an organization. The different theoretical and empirical models used through this paper also give me more direction on how I could model my research. Although I do not fully comprehend the methods used such as the factor analysis, these are concepts that I plan to go over in terms of my next steps.

3.5 Panicker et al. (2018)

"Inclusive Workplace and Organizational Citizenship Behavior" written by Panicker et al. and published in *Equality, Diversity and Inclusion: An International Journal*, examines how an inclusive workspace can impact the performance levels of employees. I believe this research is beneficial to my I.S. topic because it aids in considering the effects of diversity and inclusion practices from a more global perspective. Panicker et al. (2018) conducts this analysis in India. Most of the literature examined so far has been related to the West, thus including this paper in my research can help understand if the impacts of diversity and inclusion policies are universal anywhere in the world or if they change according to regions and cultures. Since India focuses on collectivism, I feel it will be interesting to see if the effect of diversity practices at work may be less or more significant to some extent than in the

West. Another aspect of Panicker et al. (2018) that stood out from previous similar research was the consideration of other forms of diversity. The article focuses on classifications (caste systems), and religious orientation to analyze if people respond differently to an inclusive workplace on the basis of these. Therefore, Panicker et al. works to expand the research on the impacts of diversity and inclusion practices on business performance.

Panicker et al. (2018) examines the relationship between an employee's perception of an inclusive workplace and their performance. The research was conducted specifically in relation to a higher education institute in Uttar Pradesh – an Indian city. The term 'inclusive workplace' is divided up as inclusive practices, climate, and leadership. The authors chose these three independent variables to represent an inclusive workspace in more detail after carefully analyzing many previous literature sources. These three factors were most important for creating and maintaining a diverse and inclusive organization. The dependent variable was 'organizational citizenship behavior (OCB)' which can be defined as the voluntary, incentive-free behavior of an employee that may lead to an increase in the efficiency of the business. OCB can be organizational where employee behaviors directly impact the business, or OCB-individual where a worker's behavior affects specific individuals while indirectly impacting the organization. The paper accounts for both types of OCB.

Using Blau's social exchange theory, Panicker et al. highlights that people feel obligated to reciprocate the support they get as they interact over a long period of time. This encourages mutual trust and no motive to take harmful actions against the other, increasing worker OCB and performance. Thus, the researchers hypothesize that there will be a direct, positive relation between each independent variable and OCB. Moreover, Panicker et al. also includes the gender (male, female), social class an individual belongs to (general, scheduled castes and scheduled tribes, other backward class), and religion (Hindu, Muslim, Christian, Punjabi/Sikh, other) to examine how worker perceptions of workplace inclusion can alter as a result of their diverse backgrounds. The researchers also hypothesize that there will be significant variations in the perception of workplace inclusion (specifically inclusive practices, climate, and leadership) as a result of the difference among their gender, category, and religion.

Data was collected from questionnaires distributed to academics at a higher education institute in India. The education sector was selected for the research because of the diverse workforce participation. Non-probability sampling was conducted and out of the 500 questionnaires distributed, 492 responded. The questionnaire included questions on inclusive practices, inclusive leadership, inclusive climate, and OCB. These variables were measured through a seven-point Likert scale. Descriptive statistics were analyzed, and a multiple regression equation was calculated to determine how the impact of employee perceptions of inclusive practices, climate, and leadership on OCB differed as a result of their gender, category, and religion.

The descriptive statistics used a z-test (tests a distribution's mean and determines an alternative hypothesis against a null hypothesis) for comparing the means of gender, and ANOVA (used to analyze the statistical significance of the differences between groups) to compare the means of religious orientation, and category. Both these tests were conducted to determine if the difference between the means of various genders, religions, and categories were statistically significant. The results found that with respect to an employee's category and gender, there were significant differences in perceptions of inclusive climate (p-value of 0.296 and 0.64 respectively). Apart from these, there is no significant variation in the employee perceptions towards inclusive practices and leadership resulting from their gender, category, and religion (p-values < 0.05).

Coming to the regression equation, Panicker et al. (2018) finds that there is a significant positive relationship between inclusive practices (with a one unit increase in inclusive practices, the OCB for males increased by 0.24 units, while for females it increased by 1.19 units). The same relationship was true for OCB, and the independent variables inclusive climate and leadership in terms of gender. The research also finds a strong direct impact of inclusive practices, climate, and leadership on OCB for academicians belonging to the general category group (β = 0.68, 0.12, 0.52 respectively). However, this did not hold true for the scheduled castes and scheduled tribes, and other backward class where both had p-values > 0.05. Similarly for religion, there was a significant positive relationship between inclusive practices, climate, and leadership towards OCB in respect to Hinduism. However, for all other mentioned religions, there was a significant negative coefficient between the perception of inclusive practices and OCB (Muslim: β = -2.44, Christian: β = -1.34, Others: β = -2.0). Finally, there was an insignificant relationship between inclusive climate and OCB in terms of religion for all mentioned orientations except for Hinduism. Overall, the results do highlight the potential for increased worker perceptions of inclusive workspaces to positively influence employee OCB, especially when considering gender diversity.

Panicker et al. (2018) clearly distinguishes the relationship between workplace inclusion and organizational performance by considering multiple interconnected, but critical components which previous research had not broken down. This paper extensively splits up workplace inclusion into inclusive practices, climate, and leadership that all factor in together to create an organizational culture of inclusion. Without considering all of these, inclusion can only be broadly discussed and understood. Thus, this article explores a much more in-depth outlook of diversity and inclusion. Additionally, Panicker et al. (2018) considers employee perceptions through questionnaires instead of basing the research on pre-collected or management-reported data which can be overstated, biased, or inaccurate.

Another strength of the article is the detailed analysis of results. The hypotheses accepted or rejected are clearly explained by highlighting p-values and their significance. This type of simplification makes the paper accessible to a wider audience who may not be well-versed with the methodology. An important discovery was the negative value of some coefficients of inclusive practices and climate in relation to OCB when considering various religious groups. For example, a one unit increase in the inclusive climate led to a 0.89 unit decrease in the OCB of Punjabi/ Sikh employees. Apart from Hinduism – the majority religion in India, all other religious groups had some negative response to their OCB because of an increase in workplace inclusion. This could indicate that some workers of diverse backgrounds may also not prefer more inclusive workplaces for various reasons.

A limitation of Panicker et al. (2018) is that gender is considered in the binary which restricts the findings of the paper by excluding those who are gender non-binary. Moreover, some ideas brought up in the article were not described fully. The researchers conducted a simple regression equation with the three independent variables of workplace inclusion in relation to OCB, but the results from this were not shared in the paper. Additionally, their findings to the initial hypotheses that inclusive practices, climate, and leadership are directly and positively related to OCB were not clearly discussed. Similarly, the negative coefficients of the independent variables in relation to OCB when considering religious orientations were not discussed. Thus, there was scope for Panicker et al. (2018) to further examine why this may be the case and expand the field of research. However, because of these omissions, there were some loose ends in the article making it a little confusing to follow through.

3.6 Richard (2000)

"Racial Diversity, Business Strategy, and Firm Performance: A Resource-Based View" by Orlando C. Richard and published in the *Academy of Management Journal*, is incorporated in my literature review because of how his research complements my study. This paper helps build a relationship between racial diversity and firm performance which is deeper than just proving that a heterogenous workforce may lead to positive outcomes for the business. Instead, Richard interrogates the conditions needed within the business to analyze the impacts of diversity. He adds more components to his work, making a similar hypothesis to my I.S. topic that diversity will benefit a firm under specific strategies. He explicitly states that having proper management and practices can influence the outcomes of heterogenous workers. Thus, Richard (2000) helps add weight to my argument that diversity will perform better under ideal conditions and improve firm profits.

Richard (2000) examines the impacts of racial diversity on organizational performance using a resource-based view which suggests that otherwise similar firms will be different because their mix of resources will be different. Thus, Richard argues that a diverse workforce will create competitive advantage for a business by allowing it to connect with a wider customer base and market segments. He also states that since it is difficult for other firms to precisely imitate the resource mix of a business focused on diversity – resulting from social complexities such as organizational structures, workplace environment, etc. that cannot be easily recreated – that it can achieve a sustained competitive edge in the industry. Additionally, he suggests there are few businesses that view diversity as a value rather than a cost with a relatively small percentage of racial minority workers in the labor market furthering the potential to exploit it and earn a competitive advantage. This view, however, seems dated since the paper was released in 2000 and as globalization grew, so did the racioethnic integration of labor. Moreover, firms are actively recognizing diversity as a benefit and aiming to incorporate it into their operations. Using the resource-based view, Richard's first hypothesis is that worker diversity will positively impact performance by generating a competitive edge for the firm.

Additionally, the paper focuses on understanding the impacts of workforce diversity on organizational outcomes, holding business strategy as a moderator variable. A moderator variable influences the strength of the relation between an independent and dependent variable. He highlights that for a firm to employ its human resources as a competitive advantage, it needs to be "positioned to exploit and benefit from the resource" (Richard 166). He hypothesizes that a business aiming towards growth should benefit from hiring more diverse workers. This may strengthen the human capital's creativity and flexibility towards change because they will already have overcome the change involved with bringing diversity to the workplace. For a firm strategizing to downsize, Richard hypothesizes that it will suffer from hiring more diverse employees because this will increase its costs of control and coordination. Thus, his second hypothesis is that business strategy will moderate the relationship between racioethnic diversity and business outcomes, with higher racial diversity benefiting a firm aiming for growth and vice versa.

Richard (2000) examines the banking industry specifically because of how important human capital is in this service sector for creating a competitive edge. He had a sample of 574 banks in California – chosen because of its concentrated racial diversity, Kentucky – because it has low racial diversity, and North Carolina – because of the financial success and asset size of its banks. Out of these, 63 responded with the most representation from California. Richard selected two independent variables, the first of which was the racial diversity level collected from an EEO-1 Standard Form 100 – a government form – reporting sex and race of workers to determine the proportion of women and minority races employed. The second independent variable is growth strategy, collected from the fiscal asset growth reported on the Sheshunoff Bank Search database. The greater the percentage, the more focus of the bank on growth. A negative percentage represents downsizing. Moreover, his dependent variables were employee productivity measured by the net income per employee, return on equity collected again from the Sheshunoff database, and a perceptual measure of performance by asking employees how they would compare their bank's outcomes – sales, market share, etc. – with those of other banks. The perceptual measure was calculated by a Likert-scale. Some control variables used were firm size, being a holding company, gender diversity, geographic scope, HR's attitudinal measure on diversity – higher the value, the more likely to positively relate to diversity. All these factors have been controlled for because they can impact the ability of a firm to draw racial diversity.

Richard used hierarchal regression analyses to analyze how explained variation changed once the independent variables were introduced to the control variables. First, he ran all the control variables. Then he added the racial diversity variable. This did not have a significant impact on productivity (β = -0.16), return on equity (β = -0.09), and market performance (β = -0.21), thus support for the hypothesis that racial diversity will positively affect firm performance was not found. Richard then introduced the business growth strategy variable to the regression equation. Again, the results were not statistically significant. However, when an interaction term of racial diversity × growth strategy was added, significant positive β coefficient values were generated. For every 1 percentage point increase in the business's growth, a 1-unit improvement for its Blau's Index of Heterogeneity (an index used to measure the probability that two people randomly chosen from the sample will be from varying categories), it indicates the different races boosted productivity by 47%. Additionally, there was a positive significant relationship between the interaction term and return on equity, which increased by 35% with a unit rise in the Blau's Index and business growth of 1 unit as well. The result was similar for the relationship between the interaction term and market performance (β = 0.38). Although the results indicate a very high percentage rise in the dependent variables, it is also important to note that a full unit improvement in the Blau's Index of Heterogeneity is impossible to achieve since it will mostly be <1. Moreover, even bringing Blau's Index close to the value of 1 needs a lot of diversity (many racial categories present in the workspace) which requires dedicated effort and a heavy financial cost undertaken by management and HR for hiring, retaining, and coordinating the heterogenous workforce.

Richard (2000) progresses the prior research done on diversity and firm performance by highlighting that the positive impact of racial diversity on business outcomes occur under specific contexts. This addresses not only that value-in-diversity is dependent on the strategies of a business, but also emphasizes the need for diversity and inclusion policies at work in order to harness the benefits of a diverse human capital. Moreover, Richard interrogates the relationship on a firm-based level accounting for organizational hierarchies – he includes data from managers, technicians, sales workers, laborers, etc. Again, this is a step further in this field of research because previously diversity was considered at a group or team level, rather than recognizing a wider group of employees honing different qualifications and experiences.

However, some of the limitations of his work are that he only considers racial diversity within a specific industry (banking) which gives only a fraction of the overall picture. Had his research included other types of diversity like dis/ability, age, etc. and been inter-industry, it would have been more accurate and representative. Similarly, his analysis only discusses one context – growth strategy – that influences the effects of racial diversity. There can be multiple contexts that can lead to a value or loss in diversity impact within an organization such as how integrated it is, or the leadership style applied at work. These can determine the ability of sharing diverse knowledge and affect the costs associated with implementing diversity at work. Considering these could have also made Richard (2000) more applicable to multiple types of businesses.

Overall, my I.S. research has been furthered by this paper because it has made me more aware of the ways I can construct an empirical model to prove my hypothesis. Richard's use of hierarchal regression analysis was especially interesting to me because I plan to use multiple independent and dependent variables. Thus, this method can allow me to compare the change in coefficients of the variables under different conditions.

3.7 Miller and Triana (2009)

"Demographic Diversity in the Boardroom: Mediators if the Board Diversity-Firm Performance Relationship" by Miller and Triana – published in the *Journal of Management Studies* – analyzes the effects of gender and racial diversity within a board on organizational performance using mediator variables: business innovation and reputation. I chose to include this paper in my I.S. because it acknowledges that the relationship between board diversity and firm outcomes is complex, thus emphasizing the need to study intervening factors in detail to understand the true nature of this relation. For this purpose, it uses innovation and reputation as mediators, adding to prior research because these two variables have not been widely examined when discussing the value-in-diversity sentiment. Additionally, this article is unique from the others used in my literature review because it analyzes diversity at the board-level rather than just at the employee-level or broadly the firm level. Therefore, this could further my research by allowing me to assess if the impacts of diversity on business performance change through the hierarchy of a firm.

Miller and Triana (2009) investigate the effects of gender and racial board diversity on firm performance. However, it highlights that much of the past research has had mixed results because of the lack of consideration of mediators – variables that explain the relationship between an independent and dependent variable. A mediator is an outcome of an independent variable and typically can be observed before the impact of the explanatory variable on the dependent variable. The paper introduces innovation and reputation as mediators that influence the impact of board diversity on the outcomes of an organization. Innovation is explained as the strategies a business uses to create new opportunities for improving its operations and products or services, therefore gaining competitive advantage and eventually strengthening firm performance. Reputation is an intangible asset for a business which influences its attraction to stakeholders and allows them to assess its quality in comparison to other firms, thus affecting its outcomes.

The article notes that some key tasks of the board are to allocate resources and resolve conflicts among all stakeholders. Hence, having a diverse board is important to achieve these goals. Racial and gender heterogeneity among the board pools in educational and functional diversity through the differentiated past experiences and interactions of the directors. This, in turn, leads to an increase in creativity, more ideas are generated in decision-making, and there is greater information present – all of which can improve innovation. Moreover, a homogenous board may be biased because of its similarity and cohesion which can cause conformity. Another benefit of a diverse board is that their demographic differences can increase the business's network allowing for non-redundant interactions. Past research states that females and racial minorities tend to have more diverse social groups in comparison to white males. Thus, board diversity can positively affect innovation by exposing executives to information that may be less biased. The first hypothesis of the article is that a diverse board has a positive relationship with business innovation.

Secondly, a firm sends out selective information through signals to its stakeholders which they then use to assess its capabilities and judge its reputation. Miller and Triana (2009) uses past research to describe how having women and racial minorities on the board can influence stakeholders' perceptions about the quality and effectiveness of the business.

Diversity within the directors signals that the firm is in a position to understand a diverse market and has the human capital to do so. Women and racial minorities on a board also follows social norms and can mean better/ more equal working conditions. Additionally, racial and gender diversity at the board-level also results in increased social responsibility, community-building, and charity work – all which work to build up a business' reputation among the public. Thus, the second hypothesis is that board diversity has a positive relationship with firm reputation. The paper also hypothesizes that innovation and reputation mediate the relation between board diversity and business outcomes.

Miller and Triana (2009) used demographic data relating to the Fortune 500 out of which 432 met the criteria of being publicly traded, and active from 2002 to 2005 (the data used was from this time range), etc. This data was analyzed to understand if innovation is a mediator between board diversity and business performance. These 432 companies were further matched with the Fortune Reputation Survey for 2003 to examine if reputation mediates the relationship between board diversity and firm performance.

The first independent variable was board diversity – divided further into two separate variables: once calculated by Blau's Index of Heterogeneity (it calculates the probability of two individuals being selected at random and belonging in separate categories), and the other represented the proportion of women or racial minorities to the firm's total executives. The second independent variable was innovation measured by the business's research and development intensity ($R\&D\ Cost/Sales$) relative to the industry. The final independent variable was firm reputation, collected from the Fortune Reputation Survey for 2003 – executives rank businesses in their industry from bad (0) to excellent (10) on the basis of several performance attributes e.g., financial soundness, product quality, etc. However, this also was biased by financial performance, thus the researchers regressed reputation over firm performance – the predicted value is the variance explained by monetary outcomes, the residual value is the firm reputation independent of any financial bias. The dependent variables are firm performance – measured by return on investment and return on sales, which were standardized to create a collective average performance variable. It used data from 2005 to allow for a two-year lag during which the effect of the mediators can take place. Control variables used were firm age, size, industry, liquidity, product diversification, etc. Multiple regression equations were calculated to analyze the effects of board diversity on business outcomes as a result of the mediators: innovation and reputation.

The results show a positive significant relationship between board racial diversity and reputation [$\beta = 0.86, 1.42$ (Blau's Index, Proportion respectively) significant at $p < 0.10$], therefore if the Blau's Index for race increases by 1 unit, there will an 86% improvement in the business's reputation. There was no significant relation between board gender diversity and reputation. Miller and Triana (2009) state this may be because women are less likely than racial minorities to occupy roles that are highly visible to the public such as chair of a committee. Additionally, there is a positive significant relationship between racial and gender diversity and innovation [$\beta = 0.035, 0.040$ (Blau's Index for race and gender diversity respectively) significant at $p < 0.10$]. Thus, if the Blau's Index for race increases by 1 unit, innovation at the firm would rise by 3.5%; if the Blau's Index for gender increases by 1 unit, innovation would grow by 4%.

The researchers use the method from Barron and Kenny (1986) to test for mediators. This includes four steps: there should be a significant relationship between the independent and dependent variables, the independent variable should impact the mediator, the mediator should influence the outcome variable while the independent variable is controlled, the significant relationship between the independent and dependent variables should decrease when a mediator is included. According to this test, reputation does not mediate between board gender diversity and firm performance since there is no significant relationship between gender diversity (independent variable) and reputation (mediator). Similarly, innovation does not mediate between board gender diversity since there was no significant relationship between gender diversity and firm performance (dependent variable). However, the data did show that reputation and innovation mediate the relationship between board racial diversity and firm performance.

A consistent strength of Miller and Triana (2009) is the clarity with which the research is presented. The paper explained the methodology and results in detail which made it much easier to follow through, as well as it allowed me to understand complex processes – e.g., a step-by-step breakdown of testing a mediator – which furthered my plans for creating my empirical model. Moreover, the research covered ideas which had not been discussed in the other literature sources I cite. An example of this can be the mention of diversity and networking, an important but less referenced benefit of having heterogeneity at work. Thus, the paper provided theoretical and in-depth ideas relating to board diversity and business outcome which have aided me in comprehending the complex and multi-layered bond between diversity and firm performance.

A limitation of the article is that it only considers race and gender – that too in binary terms. This restricts the scope of the paper and does not allow for a more encompassing understanding of the effects of board diversity and performance. Additionally, although it covers two key mediators of diversity at the board level, the research could include many more such as employee turnover rates, worker productivity, etc. This could help explain how a diverse board can have a top-down impact on the organizational hierarchy and so, affect business performance. Another limitation was that Miller and Triana (2009) did not discuss why innovation may not act as a mediator between board gender diversity and firm performance.

3.8 Herring (2009)

The article "Does Diversity Pay? Race, Gender, and the Business Case for Diversity", published in the *American Sociological Review*, is very similar to my research topic because it examines the impacts of a diverse workforce on a business's performance by comparing the sales, customers, market share, etc. of firms with homogenous or heterogeneous employees. The article covers the history of diversity in workplaces while also bringing up the value-in-diversity (those who believe diversity at work generates positive results) and loss-in-diversity (those who argue diversity harms an organization's performance) perspectives. My work primarily focuses on the value-in-diversity stance as I hypothesize and show through theory that workplaces devoted to implementing inclusive policies derive greater benefits and increase a business's profit. The scope of this paper was very relevant in furthering my research. Descriptive statistics and multivariate regression equations are considered that give more evidence to support my hypothesis. It walks us through the steps and theory behind constructing the regression equations to test the effects of diversity on a for-profit business which adds to my understanding of how I should model my research.

Herring (2009) considers the impacts of a diverse workplace on business performance. The article sheds light on the debate around diversity within a business. Those in favor of a diverse workforce believe diversity adds to the organization by expanding worker perspectives, providing multiple viewpoints for decision-making, and satisfying the customers. As explained in the theory chapter, people buy from businesses that align with their morals and ethics. Therefore, consumers that support inclusivity – a much greater percentage in the past years as concerns about racism, homophobia, and other forms of discrimination are brought to light – derive greater utility from purchasing from diverse organizations. However, those who believe diversity takes away from the business argue that employees from different backgrounds lower team cohesion and increase conflicts which translates to higher absenteeism and turnover rates.

Herring tests the impacts of diversity on an organization by limiting the research to only for-profit businesses because he states more direct decision-making takes place in such institutions. The paper tests eight hypotheses. Four are related to racial diversity – an increase in the racial diversity of employees increases the sales revenue, customers, market share, and profits of the business. The remaining four hypotheses are similar but consider the impacts of gender diversity. Data is used from the National Organizations Survey from 1996 to 1997. The survey includes data on the financial information and workforce composition of 506 for-profit organizations. The paper provides descriptive statistics and regression models, first without considering explanatory variables, and then after including them to determine if the hypotheses hold using various empirical models.

Herring defines diversity as an all-inclusive concept that refers to people from multiple various backgrounds and can also be defined as policies and strategies that work to create an accepting culture valuing the input of all people regardless of their identity. The paper splits the for-profit businesses into low (<10%), medium (10-24%), and high (25%+) degrees of racial diversity. A similar process is followed for gender diversity as well with low(<20%), medium (20-44%), and high (45%+) levels. The findings are generated from the survey data used. Results showed that 30% and 28% of businesses had low racial and gender diversity respectively, 27% and 28% had medium diversity of both types, and 43% and 44% had high racial and gender diversity. The percentage values are almost the same for both race and gender. Although the findings are fairly easy to understand, the process behind it is not fully explained, for example, there is no reference to how categories have been established based on percentages.

Moreover, the descriptive statistics calculated on the basis of these levels (low, medium, high) suggest a significant common pattern. Mean sales revenue, mean number of customers, market share, and profit were all greater for for-profit businesses that had a high level of racial and gender diversity. However, summary statistics can be limiting because they do not account for endogeneity and may predict higher values for revenue, customers, market share, etc. without these directly being a result of greater diversity at work. These alone can be misleading because of omitted variable bias. It is important to use regression analysis to derive more accurate results because through it we can determine which variables are most important and need to be included in our model to avoid endogeneity.

Herring (2009) then calculates individual regression equations for gender and racial diversity with dependent variables sales revenue, market share, number of customers, and profit. Additionally, the article also provides regression equations with control variables to fully understand the impacts of diversity on a workplace. Control variables include the size of the business, and the age of the business that can influence the ability of the organization to impact diversity through conducting trainings, etc. Other explanatory variables used were the industry, and region of the organization which can affect the workforce diversity based on demographic factors, for example, a certain region may have a concentration of one race.

Results find significant positive relationships between all Y variables and both the types of diversities. The multivariate regression equations support all hypotheses except there is an insignificant positive relationship between gender diversity and market share. All results presented in Herring (2009), including the descriptive statistics and regression equations, find that an increase in racial and gender diversity positively impacts sales revenue, customer base, and profitability of for-profit organizations. A one unit rise in racial diversity and gender diversity increases sales by 9.3 and 2.8 percent respectively, and drives-up the number of customers by 433 and 196 individuals. Market shares increase when a business increases its racial diversity (a one unit increase in racial diversity boosts market share by 0.7 percent), however, this does not hold for gender diversity – it has a statistically insignificant relationship with market share. A limitation of the paper is that it does not discuss why gender diversity does not drive-up market shares like racial diversity. Through developing this finding further, Herring could have greatly expanded the breadth of the article by predicting some underlying relationship. Overall, the research finds evidence in support of the value-in-diversity debate. A diverse workforce may generate both negative and positive impacts, but as Herring confirms, the net effects of diversity on a business are positive.

The article is well-presented and easy to follow through. The results stated are concise and clear. However, the processes of calculating the results were not fully explained. Herring measured business performance after collecting data from respondents. Although through intuition readers can understand who the respondents are, Herring could have made this clearer by reintroducing this methodological approach. The results may also be inaccurate because they are based on survey data and responses from individuals within an organization, both of which could be overreported or have measurement errors. It would benefit firms to report greater diversity within their organization to keep up their brand image. As a result, the estimated relationship between diversity and business performance may be overstated (more positive) as well.

Herring (2009), despite some shortcomings, adds to the research on diverse workplaces by considering sales, customers, market shares, profit together in one paper. Moreover, by separating gender and racial diversity, the results can be better understood in response to each element. I believe my research has been expanded by this article because it has given me direction in terms of the theory and factors to consider for creating an empirical model.

The dataset used by Herring in the article broadened my idea of the resources I can use for my paper because the National Organization Survey's data accounts for the levels of racial composition within a firm as well as provides business performance-related data. However, this paper specifically works with diversity related to employee structure, while my research examines the impact of diversity policies on a firm. Therefore, I will have to find additional data related to inclusion practices within a business to construct my empirical model. The control variables identified in the paper will prove to be beneficial for my research as I can use similar ones to reduce omitted variable bias and strengthen the relationship between diversity policies and a firm's profit. Herring (2009) does not explicitly evaluate diversity and inclusion practices, but it has provided me a base idea on how I can build my research.

3.9 Synthesis

Most of the articles reviewed for my research predict a positive relationship between diversity and inclusion in the workplace and business performance. Bayer and Rouse (2006) acts as the foundational framework for my study as it examines how field-specific discrimination leads to a pattern of underrepresentation of women and racial minorities. It determines the factors that influence the labor supply and demand within certain jobs based on discriminatory factors (lack of relatable role models, institutional bias, etc). It also briefly addresses the benefit of diversity at work through knowledge spill-over effects that improve decision-making. Similar to Thomas (1999), Bayer and Rouse stresses that diversity impacts group dynamics and produces different behavioral traits than those of an individual worker. Thus, in line with Richard (2000), and Miller and Triana (2009), it states diversity within a field is necessary to generate relevant, robust knowledge – formed from the various perspectives of a heterogeneous group. Richard (2000) and Miller and Triana (2009) go in further detail to discuss that diversity of the human capital can create a competitive advantage for a firm under specific contexts (growth strategy, improved reputation) by increasing innovation through the incorporation of different knowledge, experiences and skills.

Downey et al. (2015) and Panicker et al. (2018) exhibit similar findings. Both find that by promoting diversity at work, employee perceptions about being included will positively change allowing them to feel safe and recognized. Thus, they argue that inclusion practices will influence the behavior of diverse employees and motivate them to work harder. Thomas (1999) and Richard (2000) report somewhat conflicting views expanding the research by also considering the setbacks of a diverse workforce. Thomas (1999) finds that heterogenous teams may suffer from process losses resulting from differing perceptions, behaviors, and communication methods – which he argues can be corrected with time. As they learn to work together and overcome their cultural barriers, they will outperform homogenous work teams. Richard (2000) turns to business strategy to express that firms who are downsizing will suffer a loss from diversity because of the costs associated with it as a result of increased communication and coordination expenses. Finally, Herring (2009) ties all the articles together by considering the overarching question: how does diversity impact business performance? Thus, it provides evidence for the value-in-diversity perspective by predicting a rise in sales revenue, customer base, and profit as a business grows more diverse. It adds weight to most of the literature sources that focus on value-in-diversity, however, it does not account for the initial loss-in-diversity of hiring a heterogenous workforce as found by Thomas (1999) and the disadvantage of diversity to a downsizing firm as discussed by Richard (2000) – despite Herring (2009) using organizational age and size as control variables.

The literature sources evaluated so far emphasize there are multiple viewpoints and research related to the topic of diversity, employee well-being, firm optics, organizational strategies, and business performance. However, there is a need to further examine the specific relationship between policies that promote diversity and inclusion at work, and business profitability. Additionally, most of the articles mentioned do not discuss the impacts of workforce diversity on the consumers' demand. There is a need to research this further to understand the demand-side effects of implementing diversity and inclusion practices at work.

4. Qualitative Methodology

4.1 Data Collection

My study focuses on the impact of diversity and inclusion policies on business performance. I hypothesize that by a greater implementation of these policies, organizations can achieve better outcomes. To test this hypothesis, I conducted structured interviews with two for-profit organizations in Wayne County. The purpose of this qualitative research was to analyze what – if any – diversity and inclusion initiatives are implemented at work, as well as to understand how managers and employees view diversity within their workplaces, if they believe diversity policies are favorable and impactful, and how they believe these have affected business performance. Participants included representatives of both management and employee positions. A total of two managers, and two employees were interviewed for this purpose.

Prior to conducting these interviews, the Human Subjects Research Committee's (HSRC) approval was required to ensure that the interview process is ethical and appropriate for those participating. To receive HSRC approval, my interview questions were edited multiple times to structure them in a nonintrusive manner that accounts for the sensitive nature of my research topic. Talking about diversity and inclusion is complex because participants' race, gender, sexual orientation, dis/ability, age, etc. impact their answers and may be difficult to disclose or discuss with an interviewer because of a lack of familiarity and trust. Similarly, managers may feel hesitant about sharing challenges in promoting diversity and inclusion at work because this may negatively affect their brand image. To maintain the safety and privacy of the respondents and their companies, they were also given the choice to opt out of answering a question if they felt uncomfortable doing so. The HSRC review board required the submission of a certificate proving I had completed the human subjects protection training, sample interview questions, a consent form, and a research protocol. I also decided to keep all responses anonymous and strip them of any identifiers when using them in my paper to maintain the confidentiality of the organizations and ensure the safety of all interviewees. After turning in all these materials, I received HSRC approval to conduct my interviews.

All participants were selected using a convenience sampling method. These were individuals from organizations I had previously been in contact with. They were initially contacted through email for recruitment. Once they had shared their signed consent forms, I held a 30-minute interview over Teams for each participant. The interview was recorded to transcribe and analyze their responses later. The questions asked of managers were separate from those asked of employees to ensure that responses accounted for differing perspectives according to their corporate positions. There were seven interview questions each for managers and employees.

All questions were influenced from my theoretical framework and literature review to understand if organizational performance was impacted by the for-profit business's diversity and inclusion policies and if so, how. The supply-side theory section and some literature sources such as Downey et al. (2015) and Panicker et al. (2018) discuss the effect of diversity and inclusion initiatives on employee motivation and performance. Some questions asked from respondents were related to this theme e.g., "Do you believe diversity and inclusion policies have/ can benefit employees in your organization? If yes, how?". The demand-side theory section and Herring (2009) both analyze the impact of diversity and inclusion efforts on a business's sales and profit. Thus, some of my interview questions dug into the possible evidence respondents may have based on their organizational performance, e.g., "Have diversity and inclusion policies benefitted firm performance in terms of profits? In terms of sales and/or customer satisfaction? If yes, how?”. A full list of the interview questions can be found in Appendix A.

4.2 Qualitative Results and Analysis

As the opening question, managers and employees were asked to define diversity according to their own understanding of the term. This allowed me to better analyze their responses based on aspects they believed should be included in ‘diversity’. All respondents mentioned gender, race, ethnicity, sexuality, age, dis/ability, socioeconomic status, geographic location, and religion. Although many other aspects can fall under ‘diversity’, all interviewees covered many of the major categories typically associated with the term.

Another common question asked from both managers and employees was whether their organizations focused on implementing diversity and inclusion policies, and what these were. One business mentioned they had more micro-level practices such as creating a culture of inclusion through inclusive language, small-scale trainings on unconscious bias and microaggressions, offering flexible work hours, and prioritizing more equal hiring. The second organization implemented structural policies such as having an Equality Action Committee (centered on taking active steps towards promoting diversity and inclusion at work while limiting inequality and discrimination), departmental diversity and inclusion goals (e.g., purchasing department focused on buying inputs from minority-owned vendors, production department included more diverse representations of voice outputs in their devices, human resources took up more inclusive hiring practices by offering remote positions), calendars and emails highlighting diverse events, and gender-neutral restrooms. These add to my research because many of the literature sources used focused on the impact of diversity rather than considering workplace policies specifically. Herring (2009) briefly discusses affirmative action policies – aimed at recruiting and advancing minorities and veterans, which are more formal structural efforts to support diversity and inclusion. The policies stated by interviewees cover both macro (Equality Action Committee) and micro (inclusive language, etc.) level initiatives, providing a more encompassing understanding of how workplaces commit to diversity and inclusion. Moreover, the response highlights a business's diversity and inclusion policies are not limited to just employees, but also extend to suppliers and customers when properly implemented.

When employees from these workplaces were asked if they believed these initiatives impacted employee engagement, one interviewee stated, "Some people just don't care about it a whole lot – that doesn't mean they're not trying, but I don't know how effective everything is." This suggests it is harder to gauge the effect of such policies because they can create both positive and negative influences, leading to a final net effect. Additionally, the respondent's answer also relates to the loss-in-diversity perspective briefly analyzed in my theory section and some literature sources. As discussed using the wage differentials theory, employees who do not support diversity and inclusion policies or see it as extra work may suffer a disutility which can lead to a desire for higher wages to reach their previous higher levels of utility at work or shift to another job.

However, it is important to note both respondents felt that diversity and inclusion policies are important for the safety and wellbeing of workers ("less anxious and worried", "it feels great to live authentically and wholly as myself and still be valued as one of the team"). Additionally, they emphasized that "if an employee feels that their employer cares about their issues, they'll be more willing to work harder because they'll feel like they are being helped. It will be a mood boost and mood is important for employees – the happier they are, the more they'll get done." One of the respondents also mentioned if they worked in a discriminatory environment, they would only value their organization as much as it valued them and would be actively considering employment in a more inclusive workplace. These responses relate strongly to the findings of Downey et al. (2015) and Panicker et al. (2018) that employee engagement depends on their perceptions of feeling included at work. Moreover, both employee-level respondents spoke of the correlation between being valued and accepted at work and giving back to the organization. Downey et al. (2015) refers to this as the reciprocal nature of workers who, upon feeling recognized and safe by their employers, would want to engage more with their work to perform better and give back to the organization.

Employee respondents also expressed that they believe diversity and inclusion efforts improve business performance. Both interviewees mentioned that if workers are comfortable at work, they will find it easier to interact with other. The organization will be more likely to "work as a communicative, collaborative and efficient team." My research paper's theory section also suggested a similar relationship between diversity and inclusion policies and employee productivity, eventually reducing costs and increasing profit.

One of the respondents also discussed the impact of diversity and inclusion policies on market share, saying, "A business with diversity and inclusion practices may also be able to attract a more diverse client base while maintaining their current consumer base, thus overall increasing business." An organization that values workers of different backgrounds sends out a positive signal to potential buyers of these segments as well. They in turn will support such a business by aligning their morals and principles with their purchases, driving up profits. This answer supports my theory on diversity and inclusion policies affecting a company's demand. However, it is important to note that in the short run, strategic optics may also generate a similar increase in demand as compared to an organization that is truly devoted to practicing diversity and inclusion.

Managers were asked a different set of questions than employees. Upon asking if they believed diversity and inclusion policies impacted employee engagement, both managers stated there was a direct relationship between the two. One respondent emphasized that diverse inputs and opinions can improve organizational productivity. The other manager interviewed also highlighted that the workforce performed better when they acted as a team, putting away their differences and coming together as a singular unit. Thomas (1999), included in the literature review, similarly analyzed that heterogenous teams will perform better than homogenous groups over time if they are successfully able to navigate their differences. Diversity and inclusion efforts can thus be critical to overcoming this challenge and creating a culture of equality at work.

One of the interviewees emphasized the impact of offering flexible work hours on workplace inclusion. Organizational support, such as the permission to work outside of traditional hours and the office space or another worker covering some tasks, was extended to employees, especially women and/or those with disabilities who had to take time off to care for their children or for a health concern. As a result, the workforce held higher perceptions of autonomy. The respondent highlighted that "an attitude of flexibility does contribute to job satisfaction." This is in line with the compensating wage differentials theory. Employees who value flexible work hours – a nonwage workplace amenity – may trade-off a higher wage for such diversity and inclusion policies while enjoying the same level of utility. It is also important to note that the ability to promote inclusion by allowing flexible hours varies according to industries. For example, it may be harder to have such a policy in manufacturing as compared to a tech job because of the different work characteristics.

A manager also mentioned their organization's success in increasing racial diversity at the leadership level. They believed employees who felt underrepresented previously were more motivated after this change because of increased trust in the business's commitment towards diversity and inclusion. The interviewee also highlighted that not all employees will support diversity policies because they may see these as additional or unnecessary work. This supports my theory about the net outcome of such policies where both positive and negative effects are produced simultaneously.

When asking managers about the impact of diversity and inclusion policies on sales and profits, both stated that they had not yet developed metrics that could measure the isolated effect. Thus, there was not enough financial information available to test my hypothesis. However, they mentioned that such policies had improved client satisfaction which could be evidenced through word of mouth. For instance, a product distributor had conveyed to a manager the positive feedback they had received from clients after including more diverse voice options into their devices. Similarly, another manager emphasized the impact of diversity and inclusion policies at work on client perceptions, "your clients pick up on if there's not a good relationship (between the staff) or if people don't feel valued." Client-employee interactions will also be affected by the morale of workers. If they are happy or friendly at work, customers are more likely to feel welcomed and satisfied. Additionally, this manager shared that they are a strong LGBTQ+ ally which "helps with client satisfaction and comfort level" of customers from minority groups. Such a factor can differentiate the organization's product or service offering them a competitive edge and more of an ability to retain their clients which may translate to improved brand loyalty, higher sales and profits.

4.3 Summary

My research focuses on analyzing the relationship between diversity and inclusion policies and business performance. I hypothesize that as such policies are implemented, profits will increase consequentially. To collect qualitative data from corporate settings, I interviewed two employees and two managers from for-profit organizations who were selected through convenience sampling. Employees and managers expressed their businesses had prioritized diversity and inclusion policies. They believed these had a positive impact on employee engagement by making them feel more valued and safer at work, translating into a reciprocal desire to perform better and give back to their companies. They also noticed a significant relationship between diversity and inclusion initiatives and client satisfaction through increased representation, higher comfort levels and a sense of better morale in the workforce. Although respondents highlighted the role of such practices in increasing sales through attracting more diverse market segments, there was no specific metric in place to measure the impact of diversity and inclusion policies on sales and profit. Thus, the results suggest higher employee productivity, greater sales through attracting new customers and ensuring the satisfaction of existing ones. However, the relationship between diversity and inclusion policies and profit cannot be predicted because of the lack of advanced metrics to collect such financial information.

5. Quantitative Methodology

5.1 Data Collection

My study focuses on the impact of diversity and inclusion policies on business performance. I hypothesize that by a greater implementation of these policies, organizations can achieve better outcomes. My initial goal was to collect data on the diversity and inclusion practices, and profitability of multiple for-profit businesses. However, finding detailed secondary data on businesses' diversity and inclusion attempts was difficult because of the sensitive nature of the matter and a lack of transparency. The available data was either not available for independent research purposes or was too generalized (a dataset recorded gender equality scores for multiple individual companies but assigned most of them the highest value, 100, without a clear breakdown of the criteria) – which could cause concerns of validity. Instead, I utilized data on mutual funds to analyze the relationship between gender equality policies of holdings and returns.

I used data from two sources. First, I collected Fidelity Fund Performance Data from Fidelity Investments – this provided the mutual fund's overview, risk, and management data for the year end 31 December 2021. The second dataset, Invest Your Values, was from Gender Equality Funds (GEF). GEF offers a search platform aimed at promoting investing practices where investors' are able to easily align their values with their actions. Thus, it offers information on mutual funds such as their commitment to gender equality, sustainability, harmony, etc. This was included in my research because it not only provided an overview of multiple mutual funds' performance, but also recorded gender equality scores on the basis of the companies in each portfolio. Apart from returns taken from 14 December 2021, all other variables for the dataset were from 11 November 2020.

5.2 Data Cleaning

Because I used data from two different sources, I merged them together using the fund profile ticker as my key variable. Additionally, each fund had multiple shareclasses accounting for varying costs, minimum investment limits and privileges to best accommodate the investor's preferences. However, the fund portfolio and investment mandates were common for all shareclasses in a mutual fund. As a result, the Gender Equality Scores were the same for all shareclasses in a fund. To account for this repetition, I collapsed the merged dataset by shareclass tickers – the list of the tickers of all shareclasses offered for a fund. The mean values of all numeric variables with the same shareclass tickers were taken. All missing values were also dropped. The final dataset had 1,115 observations.

5.3 Empirical Model and Variable Description

The empirical model below was used to estimate the relationship between lagged gender equality scores and the returns of mutual funds. I hypothesize that mutual funds with a higher Gender Equality Score in the previous year will enjoy greater one year returns at the end of the next year.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GenderEqualityScore_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.1)}$$

My dependent variable, $OneYrReturns_{it}$, is the one-year change in trailing returns for a mutual fund *i* in year *t* and is expressed in a percentage value. Data is from 2021. Thiswas selected as my dependent variable because it measures a fund's performance over time based on the rate of return that can be received by holding it for a year. $OneYrReturns_{it}$ is used as a proxy for firm performance. If companies focusing on diversity and inclusion policies can see this translate into improved performance, then mutual funds who invest in these businesses should also enjoy higher returns. Thus, it can be hypothesized that a profile's trailing returns increase when it focuses on including companies in its portfolio that invest in diversity and inclusion practices.

The independent variable of interest, $GenderEqualityScore_{it-1}$ is the overall gender equality score (GES) based on Equileap's ratings according to gender equality policies, equal pay, work-life balance, transparency and commitment, etc. It is the average value of the gender equality scores of companies in a portfolio *i* for the lagged year *t-1* and is measured out of 100 points. GES was chosen as my independent variable because it highlights the efforts of fund profiles towards actively recognizing and accepting diversity and inclusion practices in their portfolios. This method adds to previous research on the relationship between diversity and inclusion at work, and organizational performance which mostly used data on employee demographics or analyzed employee surveys through the Likert scale. Considering only gender, the GES is more encompassing than employee demographics because it considers many additional factors e.g., the gender structure of the workforce, gender wage gap, and policies implemented for gender equality at work. However, it is limited because it only inspects gender ignoring all other diversity characteristics such as race, sexuality, age, dis/ability, etc. Moreover, unlike the Likert scale method, GES does not account for employee perspectives using data provided by businesses themselves – which may be biased or inaccurate.

GES Data was used from 2020 to account for a period of lag to allow diversity and inclusion efforts to translate towards a change in fund performance. Regression equation 5.1

estimates the lagged effect of a gender equality score from the period *t-1* on a fund *i*'s one-year returns.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GenderEqualityScore_{it-1} + \beta_2 ShareClassInception_i$$
$$+\beta_3 ManagerYrs_{it} + \beta_4 RiskScore_{it} + \beta_5 DeforestationFunds_{it-1} +$$
$$\beta_6 FossilFuelFunds_{it-1} + \beta_7 WeaponFunds_{it-1} + \beta_8 PrisonFunds_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.2)}$$

Equation 5.2 was used to estimate the isolated impact of the gender equality score on a fund's one-year returns by correcting for endogeneity with the addition of control variables. There are several control variables in my primary regression equation. $ShareClassInception_i$ is the inception date defined as the date when the fund profile was started. This is because it might be possible that the age of a profile affects its response towards prioritizing diversity and inclusion, e.g., a newly launched fund profile may be more conscious about including equitable companies in its portfolio because of the recent rise in activism, or an older profile may be more equipped (more knowledge and experience of portfolio managers, etc.) to select companies that invest in diversity and inclusion. Thus, by using the inception date as a control variable I will attempt to improve the validity of my findings.

Another control variable is $ManagerYrs_{it}$, the tenure in years of the present fund manager in year *t*. This was included as a control because longer manager tenure is equated with better performing funds. Thus, this may affect GES as such funds might be financially stronger to invest in diversity and inclusion. $RiskScore_{it}$ is the risk score assigned to each fund category *i* by Morningstar in year *t*. Higher risk funds tend to have greater returns, thus affecting the dependent variable. Additionally, if we consider the common argument that men are more risk-seeking than women, it is important to control for risk because high risk mutual funds may enjoy greater returns without necessarily investing in diversity and inclusion initiatives (Charness and Gneezy, 2012).

Investment mandates were also included as control variables. This is because some fund profiles have objectives of social responsibility, global equity, gender and inclusion, environmental, social, and governance which could signify they are also likely to prioritize other forms of social/ environmental justice to some extent. The correlation can be made because such a fund may focus on measures of success beyond profitability or believe social/ environmental responsibility adds to returns. Therefore, investment mandates may also affect gender equality scores and returns which can cause endogeneity if not controlled for. I have used four measures for this. First is $DeforestationFunds_{it-1}$, the count of holdings in a fund profile *i* for year *t-1* of companies contributing to deforestation. Similarly, $FossilFuelFunds_{it-1}$, $WeaponFunds_{it-1}$, and $PrisonFunds_{it-1}$ record the number of holdings in a fund profile of fossil fuel companies, weapon companies, and businesses involved with the prison industrial complex, respectively. All four of these control variables are lagged by a year (data from 2020) to analyze how these factors affect next year's returns.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GenderEqualityScore_{it-1} + \beta_2 ShareClassInception_i$$

$$+\beta_3 ManagerYrs_{it} + \beta_4 RiskScore_{it} + \beta_5 DeforestationFunds_{it-1} +$$

$$\beta_6 WeaponFunds_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.3)}$$

In regression equation 5.3, $FossilFuelFunds_{it-1}$ was excluded because it had a strong correlation with $DeforestationFunds_{it-1}$. Similarly, $PrisonFunds_{it-1}$ was removed from the equation because it exhibited a strong correlation with $WeaponFunds_{it-1}$. By dropping these redundant variables, I corrected the regression equation for multicollinearity. If this had not been done, the intercorrelated explanatory variables could have significantly affected the coefficient estimates and increased their standard errors.

Table 2: Description of Variables

Variable Name	Description
OneYrReturns	One-year annualized returns, calculated as a percentage
GenderEqualityScore	Gender Equality Score out of 100, calculated by Equileap as an average of the GES of all companies in the fund's portfolio (lagged)
ShareClassInception	Starting date of the shareclass, after merging the mean of all shareclass inception dates was used
ManagerYrs	Manager tenure in years for the mutual fund
RiskScore	Risk score assigned to each mutual fund category by Morningstar
DeforestationFunds	Number of holdings invested in companies contributing to deforestation (lagged)
FossilFuelFunds	Number of holdings invested in fossil fuel companies (lagged)
WeaponFunds	Number of holdings invested in weapon companies (lagged)
PrisonFunds	Number of holdings invested in companies involved with the prison industrial complex (lagged)
ShareClassTicker	Tickers of all shareclasses of this fund

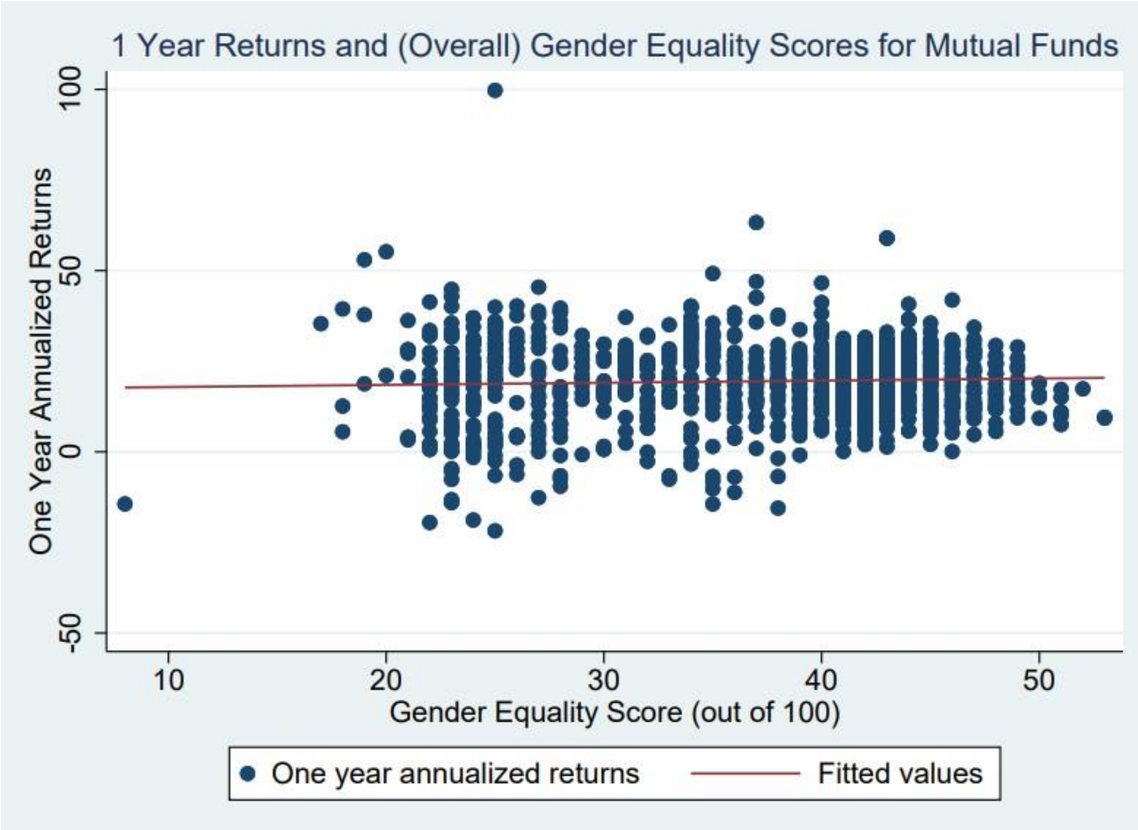

Figure 6: Scatterplot of One Year Returns and Gender Equality Score of Mutual Funds

The scatterplot in Fig. 6 depicts the relationship between one year returns of mutual funds and the lagged overall gender equality scores for each. The highest GES is 53 out of 100 and the lowest is 8. Using the line of best fit which is almost flat, we can observe that the dependent and independent variables do not have a strong relationship. Therefore, I used secondary regression equations (shown below) using individual factors of the total GES to analyze how each affects returns.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GESLeadershipWorkforce_{it-1} + \beta_2 ShareClassInception_i + \beta_3 ManagerYrs_{it} + \beta_4 RiskScore_{it} + \beta_5 DeforestationFunds_{it-1} + \beta_6 WeaponFunds_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.4)}$$

The regression equation 5.4 has the same dependent and control variables as eq. 5.3, however, I used $GESLeadershipWorkforce_{it-1}$ as the independent variable. This represents the average GES of companies in a mutual fund portfolio according to their focus on gender equality in leadership and workforce positions. Equileap's criteria for calculating this score included a percentage breakdown of gender among the board of directors, senior management, executives, and workforce. I used data from 2020 to lag the variable and observe how it influences returns in 2021.

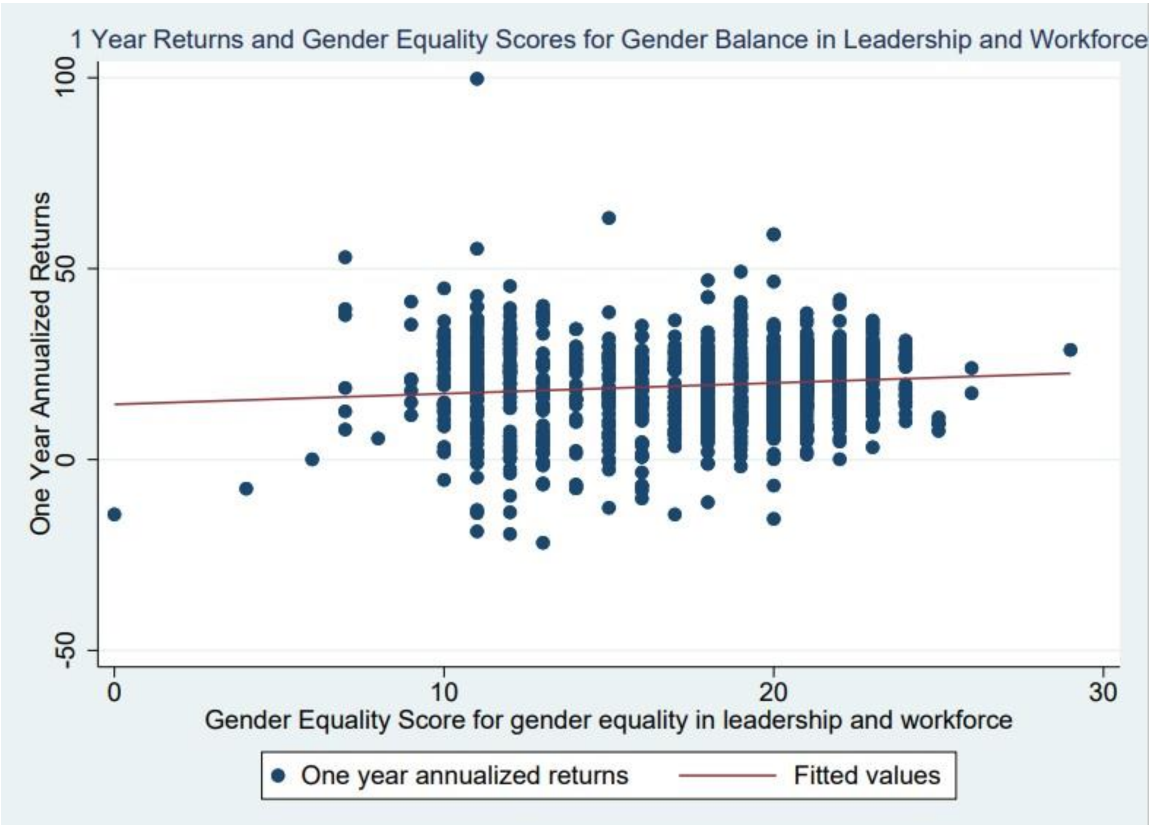

Figure 7: Scatterplot of one year returns and the gender equality scores for gender balance in leadership and workforce

Fig. 7 shows the one year returns of mutual funds in relation to their lagged gender equality scores for gender balance in leadership and workforce. The minimum score was 0 and the maximum was 29 out of a total of 30 points. The line of best fit signifies a slight positive relation between returns and GES for gender equality in leadership and workforce.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GESEqualcompWorklifebalance_{it-1} + \beta_2 ShareClassInception_i$$

$$+\beta_3 ManagerYrs_{it} + \beta_4 RiskScore_{it} + \beta_5 DeforestationFunds_{it-1} + \beta_6 WeaponFunds_{it-1} + \varepsilon_i$$

(Eq. 5.5)

The regression equation 5.5 has $GESEqualcompWorklifebalance_{it-1}$ as the independent variable. This is the average GES of holdings in a fund portfolio based on their commitment to equal pay and maintaining a healthy work-life balance. The score criteria included living wage, gender pay gap, parental leave, and flexible work times. Data from 2020 was used.

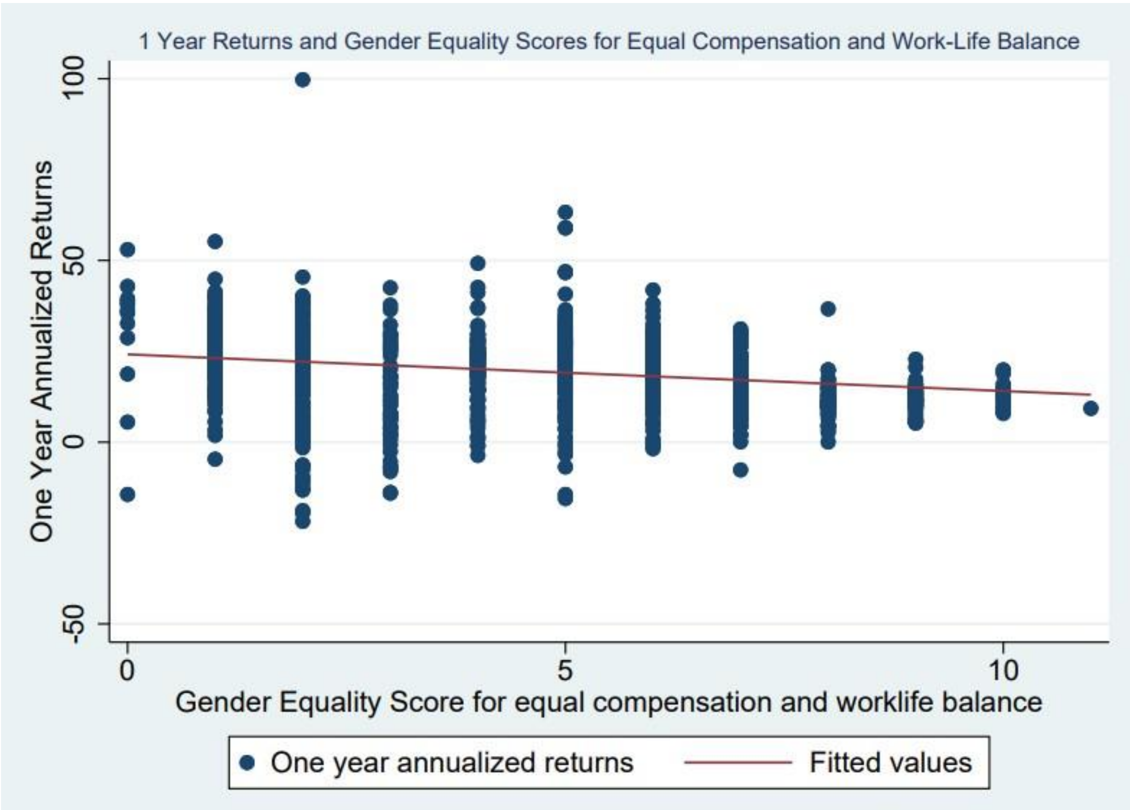

Figure 8: Scatterplot for one year returns and the gender equality scores for equal compensation and work-life balance

Fig. 8 depicts the relationship between one year returns and lagged gender equality scores for equal pay and work-life balance. The total score was out of 30 with 0 being the lowest, and 11 the highest. The line of best fit is downward sloping, which means there is a negative relationship between the two variables. Thus, as companies in a mutual fund's portfolio prioritize equal compensation and work-life balance, one-year returns for the fund fall in the next financial period.

$$OneYrReturns_{it} = \beta_0 + B_1 GESGenderequalitypol_{it-1} + B_2 ShareClassInception_i + B_3 ManagerYrs_{it} + B_4 RiskScore_{it} + B_5 DeforestationFunds_{it-1} + B_6 WeaponFunds_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.6)}$$

Regression equation 5.6 has $GESGenderequalitypol_{it-1}$ as the independent variable. This is the average GES of companies in a portfolio according to their implementation of policies promoting gender equality at work. Policies included equal training and career development opportunities, inclusive recruitment, employee safety and protection, supplier diversity, and prohibiting violence and harassment. Data from 2020 was used.

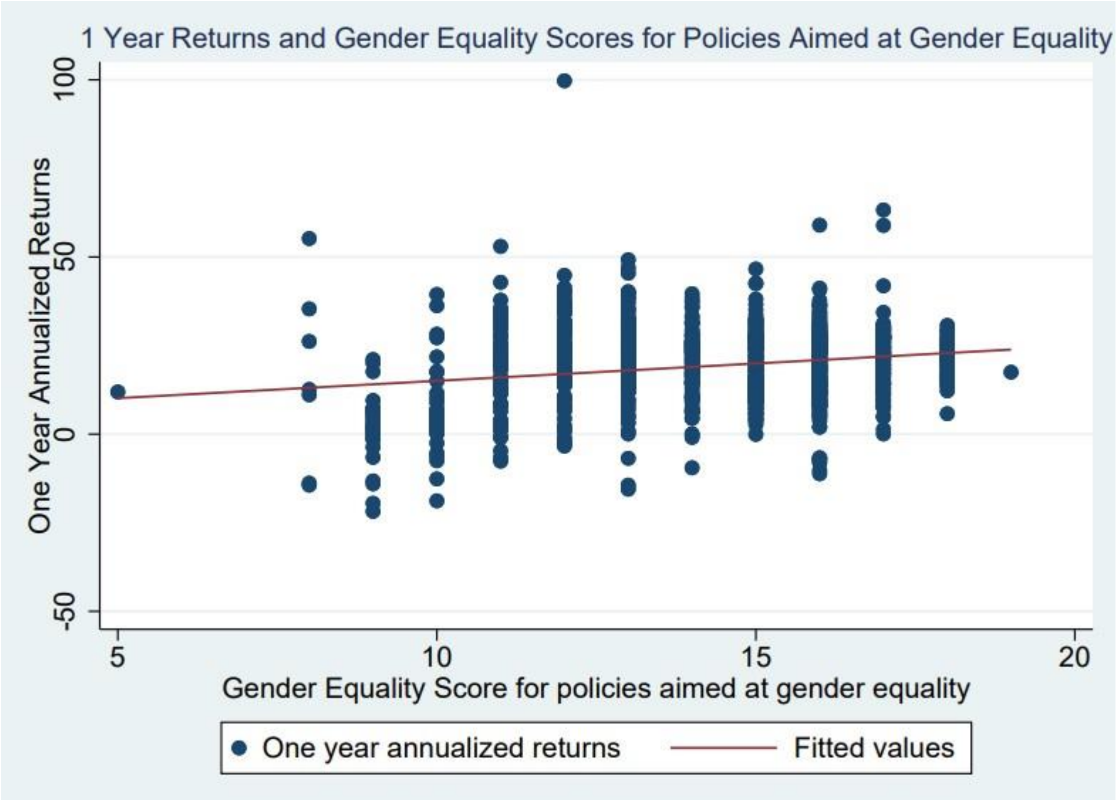

Figure 9: Scatterplot for one year returns and the gender equality scores for policies aimed at gender equality at work

Fig. 9 shows the relationship between one-year returns and lagged gender equality scores for policies focused on promoting gender equality at work. The maximum score was 19 and the minimum was 5, out of a total of 20. The line of best fit depicts a positive relationship between returns and policies aimed at gender equality.

$$OneYrReturns_{it} = \beta_0 + \beta_1 GESCommitTransparAcc_{it-1} + \beta_2 ShareClassInception_i$$
$$+\beta_3 ManagerYrs_{it} + \beta_4 RiskScore_{it} + \beta_5 DeforestationFunds_{it-1} +$$
$$\beta_6 WeaponFunds_{it-1} + \varepsilon_i \qquad \text{(Eq. 5.7)}$$

Lastly, regression equation 5.7 includes $GESCommitTransparAcc_{it-1}$ as the independent variable. It is the average GES of holdings in a fund portfolio based on their focus towards commitment, transparency and accountability. Score criteria was based on a business's dedication towards women empowerment and getting audited by Equileap. Data was used from 2020.

$GESCommitTransparAcc_{it-1}$ had a total score out of 10 points, however, the highest score assigned to a mutual fund was 1. Thus, a scatterplot of the relationship between one-year returns and the gender equality scores for commitment, transparency, and accountability did not effectively depict the variables and was not included. Considering the average one-year returns according to a fund's GES on commitment, transparency, and accountability, it can be observed that out of the 1,155 observations only 234 funds had a score of 1 out of the total 10. These profiles had average returns of 14.35% which was much lower than that of funds who scored 0 (20.80%) – signifying that as holdings in a fund's portfolio improve their commitment towards gender equality, transparency and accountability, one-year returns for the mutual fund falls.

Table 3: Descriptive Statistics of Dependent, Independent and Control Variables

Variable	**Obs**	**Mean**	**Std. Dev.**	**Min**	**Max**
OneYrReturns	1155	19.495	10.753	-21.788	99.731
GenderEqualityScore	1155	37.478	8.169	8	53
ShareClassInception	1155	15380.807	4178.531	-11141	22208
ManagerYrs	1155	10.717	7.1	2	86
RiskScore	1155	6.442	.779	4	8
DesforestationFunds	1155	1.764	5.839	0	79
FossilFuelFunds	1155	17.365	39.976	0	592
WeaponFunds	1155	3.328	5.675	0	66
PrisonFunds	1155	4.313	6.103	0	46
GESLeadershipWorkf~e	1155	17.984	4.168	0	29
GESEqualcompWorkli~e	1155	4.626	2.364	0	11
GESGenderequalitypol	1155	14.538	2.325	5	19
GESCommitTransparAcc	1155	.203	.402	0	1

5.4 Results and Analysis

My research paper examines the impact of diversity and inclusion policies on organizational performance. I hypothesize that as diversity and inclusion efforts increase, performance will improve. The study considered several regression models; however, these can be explained in two categories. The first group of regression equations – referred to later as aggregated GES regressions – estimates the lagged effect of Gender Equality Scores from the year *t-1* on a mutual fund *i*'s one-year returns by initially just using the independent and dependent variables, then adding all control variables, and lastly removing some control variables that caused multicollinearity. For the second group of regression models – referred to as GES Component Regressions, each equation relates to the four individual components of the total Gender Equality Scores (gender equality in leadership and workforce balance, equal compensation and work-life balance, etc.). This section will discuss the results of all regression equations, following the order of the two categories mentioned above.

5.4.1 Aggregated GES Regression Results

This section will analyze the results from the first three regression equations. All three of these included lagged Gender Equality Scores as the independent variable and one-year returns as the dependent. However, the second equation adds control variables, and the third excludes some to correct for multicollinearity. Finally, all regression equations have robust standard errors to also correct for heteroskedasticity.

The first column in Table. 4 below shows the regression estimates for lagged Gender Equality Scores and one-year returns. As a fund profile's Gender Equality Score increases by one unit, its one-year returns rise by 0.059 percentage points the following year. Although this depicts a positive relationship between the two variables, the coefficient is not statistically significant.

Column 2 highlights the results from regression equation 5.2 where all control variables were added highlighting that as the Gender Equality Score increases by one unit, a fund profile's one-year returns diminish by 0.065 percentage points. Because the coefficient is not significant, this effect cannot be confidently described as evidence of a positive relationship between these variables. Similarly, the age of a fund, and the risk score also have a negative relationship to the one-year returns for the same year, while the tenure of the manager has a positive relationship. However, these are also statistically insignificant values. On the other hand, if the number of companies in a fund profile contributing to deforestation increases by one unit, the mutual fund's one-year returns will fall by 0.610 percentage points in the upcoming year. This value is statistically significant at the 1% level. What is notable is that if the number of companies in a fund profile investing in fossil fuels or the prison industrial complex rises by one unit, one-year returns for the next year increase by 0.055 and 0.417 percentage points respectively. These coefficients are also significant at the 1% level. Research suggests that mutual funds like BlackRock and Vanguard still heavily invest in fossil fuel companies simply because they are some of the most profitable globally (The Guardian, 2019). The same might be true for prison funds.

Column 3 shows the results from equation 5.3 in which I corrected for multicollinearity by excluding $FossilFuelFunds_{it-1}$ and $PrisonFunds_{it-1}$. The model also predicts a negative relationship between a mutual fund's lagged Gender Equality Score and one-year returns for the next year. It estimates a 0.027 percentage point decline in the following year's returns if a fund's GES increases by a unit. Although this coefficient is also not significant, by correcting for multicollinearity we see a smaller fall in one-year returns resulting from a one-unit rise in the GES as compared to that of Model 2. Deforestation funds still have a statistically significant inverse relationship with one-year returns for the next year, but to a smaller extent as compared to Model 2 (0.105 percentage points less). Finally, if the number of weapon companies in a mutual fund's portfolio increases by one unit, its one-year returns for the upcoming year will rise by 0.429 percentage points. The coefficient is significant at the 1% level.

Through the multiple regression equations, we see a shift in the relationship between the independent and dependent variable from a positive coefficient value in Column 1 to a negative one in Columns 2 and 3. Additionally, the beta coefficients for the Gender Equality Score are statistically insignificant for all three models. Thus, it is difficult to predict a definitive outcome.

Table 4: Regression Results of gender equality scores on one-year returns

	(1)	(2)	(3)
VARIABLES	**OneYrReturns**	**OneYrReturns**	**OneYrReturns**
GenderEqualityScore	0.0590	-0.0646	-0.0265
	(0.0469)	(0.0554)	(0.0499)
ShareClassInception		-0.0294	-0.0340
		(0.0265)	(0.0266)
ManagerYrs		0.000124	0.000244
		(0.0447)	(0.0450)
RiskScore		-0.903	-1.032
		(0.658)	(0.662)
DesforestationFunds		-0.610***	-0.505***
		(0.104)	(0.0554)
FossilFuelFunds		0.0546***	
		(0.0180)	
WeaponFunds		-0.160	0.429***
		(0.107)	(0.0445)
PrisonFunds		0.417***	
		(0.0967)	
Constant	17.28***	85.53	94.71*
	(1.921)	(52.72)	(53.06)
Observations	1,155	1,155	1,155
Adjusted R-squared	0.002	0.091	0.068

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

5.4.2 GES Components Regression Results

This section will analyze the impact of a mutual fund's lagged Gender Equality Score on its one-year returns for the following year by specifically focusing on the four components that make up the overall GES. These are average scores assigned to a portfolio's companies according to the following factors: gender equality in leadership and workforce, equal compensation and work-life balance, policies targeting gender equality at work, and commitment, transparency and accountability. For this purpose, four regression models were run to estimate the effect of each component on the fund's returns. Again, all results show robust standard errors to correct for heteroskedasticity.

Column 1 in Table 5 shows the estimates for 5.4 where $GESLeadershipWorkforce_{it-1}$ was the independent variable and all else was similar to regression equation 5.3. The results suggest that as a fund's lagged gender equality score for gender equality in leadership and workforce increases by one unit, its one-year returns for the next year will also rise by 0.160 percentage points, showing a positive relationship between the two variables. The coefficient is statistically significant at the 10% level. Moreover, shareclass inception and risk score have a negative relationship to one-year returns for the same year, while an increase in the manager's tenure has a positive impact on the one-year returns by 0.008 percentage points. Deforestation funds and weapon funds still exhibit a similar relationship as the results from equation 5.3.3 with approximately the same coefficient values.

The results from regression equation 5.5 are presented in Column 2 where $GESEqualcompWorklifebalance_{it-1}$ was the independent variable. As a mutual fund's lagged gender equality score on the basis of equal compensation policies and accommodating work-life balance increases, its next year's one-year returns will drop by 1.254 percentage points. This is statistically significant at the 1% level. Additionally, now the manager's tenure inversely impacts one-year returns for the same year by 0.037 percentage points, but this value is not significant. What is also interesting is the statistically significant risk score coefficient where a one-point increase diminishes the one-year returns by 2.486 percentage points. This is interesting because most literature determines the opposite relationship: riskier mutual funds make greater returns.

Regression equation 5.6's results are shown in Column 3 below. Here $GESGenderequalitypol_{it-1}$ is the independent variable. The model finds that as a portfolio's gender equality score for policies aimed at promoting gender equity at work increases by one unit, its one-year returns for the next year also improve by 0.909 percentage points. This coefficient is statistically significant to the 1% level.

Lastly, Column 4 accounts for regression equation 5.7 where $GESCommitTransparAcc_{it-1}$ was the independent variable. The estimate highlights that a one unit increase in the portfolio's score for its companies' commitment, transparency and accountability decreases one-year returns for the upcoming year by 6.067 percentage points. This value is statistically significant at the 1% level.

Table 5: Regression results of gender equality scores on one-year returns

VARIABLES	(1) **OneYrReturns**	(2) **OneYrReturns**	(3) **OneYrReturns**	(4) **OneYrReturns**
GESLeadershipWorkforce	0.160*			
	(0.0972)			
ShareClassInception	-0.0278	-0.0371	-0.0113	-0.0227
	(0.0265)	(0.0266)	(0.0254)	(0.0265)
ManagerYrs	0.00756	-0.0367	0.0237	-0.0320
	(0.0447)	(0.0440)	(0.0444)	(0.0438)
RiskScore	-0.464	-2.486***	0.706	-1.554**
	(0.631)	(0.604)	(0.731)	(0.604)
DesforestationFunds	-0.508***	-0.385***	-0.484***	-0.396***
	(0.0561)	(0.0480)	(0.0556)	(0.0504)
WeaponFunds	0.432***	0.341***	0.405***	0.344***
	(0.0445)	(0.0429)	(0.0439)	(0.0427)
GESEqualcompWorklifebalance		-1.254***		
		(0.119)		
GESGenderequalitypol			0.909***	
			(0.215)	
GESCommitTransparAcc				-6.067***
				(0.675)
Constant	74.70	115.5**	23.64	76.12
	(53.02)	(52.58)	(50.63)	(52.31)
Observations	1,155	1,155	1,155	1,155
Adjusted R-squared	0.071	0.130	0.091	0.115

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

From the analysis of the results of the GES Components regression equations, it can be concluded that the individual components of the overall Gender Equality Score can significantly impact a mutual fund's one-year returns for the upcoming period. Scores for equal compensation and work-life balance, as well as for commitment, transparency, and accountability may have an inverse relationship with one-year returns for the next financial year because they may lower the confidence of potential investors. A reason for this may be that in the short-run companies focused on efforts such as reducing the gender pay gap, allowing flexible work hours and/or conducting audits may have to bear greater costs and hence, make smaller profits – as discussed in the theory section. Investors might be discouraged by such a possibility because this might suggest a smaller, irregular or no dividend payout and/or a lesser possibility of capital gains distribution – both which are impacted by the basis of company performance. This can also generate a network effect by increasing concerns for other potential investors who may choose to not invest as well. Consequently, the mutual fund will have a smaller cashflow and a lower likelihood of efficiently diversifying its investments.

On the other hand, a fund portfolio's gender equality scores for gender balance in leadership and workforce, and policies aimed at promoting gender equity at work have a positive impact on its one-year returns for the following period because potential investors may not see initiatives such as training and career advancement, non-discriminatory recruitment and promotional strategies, employee safety at work – which were recorded in these measures by Gender Equality Funds – as a large percentage of the overall company cost. Thus, such efforts may not be typically seen as discouraging for investors. It may also be that investors value such measures more in comparison to the other two because they most directly relate to diversity and inclusion at work. With a growing focus on social equity and more individuals supporting businesses with this vison, it may be expected that companies taking on diversity and inclusion initiatives may perform better in the market, enjoy higher stock prices, etc.

5.5 Summary

The study hypothesized that as a business focuses on diversity and inclusion policies, its performance will improve as a result. Because of a limitation of secondary data, I examined the lagged impact of a mutual fund's Gender Equality Score on its one-year returns for the following financial period. The results from the aggregated GES regression models

(Eq. 5.1, 2, 3) did not predict a statistically significant relationship between the lagged overall Gender Equality Score and one-year returns. However, when I analyzed the four components of the Gender Equality Score individually, the results estimated a statistically significant correlation between all four of the lagged measures and a fund's one-year returns.

It is important to highlight that the gender equality scores for gender balance in leadership and workforce, and for commitment, transparency and accountability have a negative relation to one-year returns, while the gender equality scores for gender balance in leadership and the workforce, and policies aimed at promoting gender equity have a positive relation. This can generate a net effect of zero because of the varying signs. It could be that the overall Gender Equality Score did not determine a significant relationship between the independent and dependent variable because its components cancelled each other out to some extent. It also likely that the empirical model may not capture the true relationship between diversity and inclusion policies and organizational performance because of the relatively complicated structure of mutual funds. Company initiatives of diversity and inclusion may translate more smoothly to improved business performance, but it may be harder to ascertain their effect on a mutual fund's return which is impacted by multiple forces external to the company e.g., size of the fund, expense ratio, etc.

6. Conclusion

This study focuses on the effect of diversity and inclusion policies on business performance. The research hypothesizes that as the implementation of these policies increases in an organization, its profit grows as a result of 1) improved worker productivity through higher motivation and knowledge spillover, 2) lower wage costs as employees who value diversity and inclusion may tradeoff a higher wage, and 3) a rise in demand which will increase the product/service's price and revenue.

Using economic models, the paper attempts to provide theoretical evidence for my hypothesis. Individuals who, as a result of diversity and inclusion policies, feel more recognized and accepted at work will have greater motivation to perform better. Hence, the profit maximizing equation was modified to add a multiplicative variable for employee productivity which in turns positively influences a business's profit. Additionally, greater productivity will also lower average total costs in the long run and boost profits. The theory of wage differentials was used to understand the net impact of diversity and inclusion policies on wage costs. Individuals who strongly prefer working in welcoming and equal environments may be willing to give up a higher wage in return for the utility derived from an inclusive nonwage amenity. However, people who do not value diversity and inclusion policies at work may demand a higher wage to compensate for the disutility they get from such efforts. Thus, organizational diversity and inclusion initiatives may generate a net effect on wage costs depending on the preferences of the workforce. Focusing on the demand-side impacts, businesses who align their practices with the values of their customer base by implementing diversity and inclusion policies may be able to attract more segments and better retain their existing ones. This can increase demand, eventually driving up prices and sales revenue.

The paper also looks at relevant past research articles on diversity and inclusion and its impact on business performance. Most suggest that there is a positive relationship between diversity and inclusion and organizational outcomes through greater worker engagement, better decision making, higher sales, market share and profits. A key factor some of these papers discuss is that the positive effect of diversity and inclusion on business performance depends on specific contexts such as the focus of a business on growth strategy, prioritizing firm innovation and reputation, and the ability of a heterogenous workforce to overcome their differences to perform efficiently.

To test my hypothesis, I used two mixed methods empirical models constructed using the theory and literature sources. The first interviewed managers and employees of for-profit businesses to learn about their perspectives and experiences related to the impact of diversity and inclusion policies on organizational performance. The responses provided strong evidence about the positive relationship between the two variables of interest. Employees and managers alike believed that workers who feel more accepted, valued and safe at work because of diversity and inclusion initiatives are more likely to perform better. Moreover, they stated that such policies also improve client satisfaction by creating a more friendly and comfortable atmosphere. Lastly, all respondents mentioned that diversity and inclusion policies can increase sales by drawing in more customers and strengthening the brand loyalty of existing ones. The results from the interviews provide compelling evidence in favor of my hypothesis. However, the responses do not provide much support for the effect of diversity and inclusion policies on profit specifically because of a lack of metrics to quantify the financial impact. Thus, this method partially backs my hypothesis.

To find a more conclusive relationship between diversity and inclusion policies and business outcomes, I used a second empirical model based on data on mutual funds' one-year returns and their lagged Gender Equality Scores (GES). Multiple regression equations were run, first using the overall GES, an average score out of 100 assigned according to the diversity and inclusion initiatives of a fund portfolio's companies, and then using the four individual components that were analyzed to create the overall GES. These components included gender balance in leadership and workforce, equal compensation and work-life balance, policies aimed at promoting gender equality, and a business's commitment, transparency and accountability. Results for the overall GES regression did not find a statistically significant relationship between the GES and one-year returns for the next financial year, thus this regression model did not support my hypothesis.

On the other hand, the results from the lagged individual components of the GES all suggest a statistically significant relationship to one-year returns. Gender balance in leadership and workforce, as well as policies aimed at promoting gender equality both had a positive impact on a mutual fund's one-year returns by 0.160 and 0.909 percentage points respectively. However, equal pay and work-life balance, and commitment, transparency, and accountability both had a negative effect on one-year returns of -1.254 and 6.067 percentage points. There is a net effect of these lagged components on one-year returns. Although the results of these regression equations are mixed, the measure "policies aimed at promoting gender equality" from the individual GES factors is most closely related to my research. The empirical model finds a positive relationship between this lagged variable and the mutual fund's returns. Thus, my hypothesis is supported that as the implementation of diversity and inclusion policies is improved, an organization will perform better.

A limitation of my study is that the data on mutual fund performance was used to approximate the true relationship between diversity and inclusion policies and profitability. The Gender Equality Score was a proxy for organizational diversity and inclusion initiatives and similarly, a mutual fund's one-year return was a proxy for profit. Because the GES represents the average score of a fund portfolio's companies, it is harder to predict an isolated impact of GES on a mutual fund's returns. Despite using several control variables, many others come into play such as market conditions, policy changes, cashflows, etc. which are harder to measure. Using a dataset that contains individual company scores on diversity and inclusion policies and its profitability might have led to a more significant estimate between the two.

Additionally, the GES data utilized only accounts for gender, excluding many other factors of diversity that are important to consider within a workplace e.g., race, sexuality, age, dis/ability, etc. Although the results are important in advancing the research on diversity and inclusion policies at work, they are limited because of their one dimensionality. Similarly, the sample size for my interviews was small and focused on managers and desk job employees. Gathering the responses of multiple staff members at various levels would have led to more enriching results and might have improved the validity of my findings.

While my paper analyzes the relationship between diversity and inclusion policies and firm performance, further research is needed to fully understand the effect of such policies specifically on profitability. Because my study primarily focuses on finding a relationship between the two variables, additional research through empirical models is needed to understand the mechanisms that guide this correlation – why and how are diversity and inclusion policies impacting organizational performance. Further analyzing the impact of diversity and inclusion policies on employee productivity, on wage costs via wage differentials, and on sales revenue via increased demand – as discussed in my theory section – could be a good starting point for this. Lastly, research that is consciously inclusive of different categories that fall within "diversity" and accounts for the impact of intersectionality could lead to more illuminating results on the effect of diversity and inclusion policies on business performance.

An implication of diversity and inclusion policies at work is that their impact on business performance relies on multiple factors. As Richard (2000) highlights, focusing on diversity initiatives if a company is downsizing will lead to loss-in-diversity. Similarly, if a significant percentage of an organization's employees or customers get disutility from such policies based on their beliefs and opinions, there may be a decrease in profitability. It is important to note diversity and inclusion policies will have a net effect on business performance which may vary from firm to firm. Although in some cases these initiatives may harm an organization's financial performance, from an ethical and humanitarian standpoint there is still great value in implementing diversity and inclusion. As my qualitative results suggest, such efforts increase employee perceptions of feeling safe, respected and valued at work which are essential for their mental wellbeing.

Similarly, diversity and inclusion policies promote equality at the workplace leading to fairer practices of hiring, promoting, retaining, etc. When translated on a larger scale, these initiatives can impact labor market trends. Widely implemented parental leave, flexible work hours, and employee safety policies can encourage more women, racial minorities, and disabled individuals to enter the labor market, increasing their labor force participation rates and gross domestic product. Moreover, policies aimed at equal compensation, and equal training and career development can minimize the gender pay gap and work towards deconstructing patriarchal biases deep-rooted within economies. Thus, despite the costs associated with diversity and inclusion policies, they can improve employee wellbeing and standards of living – especially for minority groups.

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Appendix

Appendix A: Interview Questions

Questions for Employees:

How do you define diversity?

In your opinion, does your organization focus on diversity and inclusion (D&I)? If yes, what are your organization's D&I policies?

How are they implemented?

Do you believe D&I policies are efficient in promoting/accepting diversity and inclusiveness? If yes, how?

Do you believe D&I policies have/ can benefit employees in your organization? If yes, how?

Do you believe D&I policies have/ can benefit the organizational performance? If yes, how?

Do you believe D&I policies have/ can impact(ed) you personally into engaging more with your work? If yes, can you explain why you might have felt/ may feel this way?

Questions for Managers:

How do you define diversity?

In your opinion, does your organization focus on diversity and inclusion? If yes, what are your organization's D&I policies?

How are they implemented?

Have D&I policies improved employee engagement? If yes, how?

Have D&I policies benefitted firm performance in terms of profits? If yes, how?

Have D&I policies benefitted firm performance in terms of sales and/or customer satisfaction? If yes, how?

Follow up: What metrics has the organization used to determine this? Or is there evidence that could support these findings? If yes, what (financial data, surveys, etc.)?

Appendix B: Stata Regression Results

Regression results for Eq. 5.1

```
. reg OneYrReturns GenderEqualityScore, robust

Linear regression                               Number of obs     =      1,155
                                                F(1, 1153)        =       1.58
                                                Prob > F          =     0.2086
                                                R-squared         =     0.0020
                                                Root MSE          =     10.746
```

OneYrReturns	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
GenderEqualityScore	.0589791	.0468801	1.26	0.209	-.0330008	.1509589
_cons	17.28476	1.921007	9.00	0.000	13.5157	21.05382

Regression results for Eq. 5.2

```
. reg OneYrReturns GenderEqualityScore ShareClassInception ManagerYrs RiskScore DesforestationFund
> s FossilFuelFunds WeaponFunds PrisonFunds, robust

Linear regression                               Number of obs     =      1,155
                                                F(8, 1146)        =      20.50
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0910
                                                Root MSE          =     10.288
```

OneYrReturns	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
GenderEqualityScore	-.0645734	.0554016	-1.17	0.244	-.1732733	.0441265
ShareClassInception	-.0294484	.0264607	-1.11	0.266	-.0813653	.0224685
ManagerYrs	.0001243	.0447052	0.00	0.998	-.087589	.0878376
RiskScore	-.9028826	.658417	-1.37	0.171	-2.194721	.3889554
DesforestationFunds	-.6100697	.1039762	-5.87	0.000	-.8140747	-.4060646
FossilFuelFunds	.0546348	.0180258	3.03	0.002	.0192675	.0900021
WeaponFunds	-.1599925	.1066765	-1.50	0.134	-.3692957	.0493106
PrisonFunds	.417339	.09669	4.32	0.000	.2276296	.6070483
_cons	85.53236	52.72449	1.62	0.105	-17.915	188.9797

Regression results for Eq. 5.3

```
. reg OneYrReturns GenderEqualityScore ShareClassInception ManagerYrs RiskScore DesforestationFund
> s WeaponFunds, robust

Linear regression                               Number of obs     =      1,155
                                                F(6, 1148)        =      25.19
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0679
                                                Root MSE          =     10.408

--------------------------------------------------------------------------------------
                    |               Robust
       OneYrReturns | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------------+-----------------------------------------------------------------
GenderEqualityScore |  -.0265227   .0498571    -0.53   0.595    -.1243441    .0712986
ShareClassInception |  -.0340332   .0266202    -1.28   0.201    -.0862629    .0181966
         ManagerYrs |   .0002442    .044956     0.01   0.996    -.0879609    .0884493
          RiskScore |   -1.03159   .6616405    -1.56   0.119     -2.32975    .2665706
  DesforestationFunds |  -.5049929   .0553912    -9.12   0.000    -.6136723   -.3963136
        WeaponFunds |   .4292194   .0444503     9.66   0.000     .3420065    .5164322
              _cons |   94.71296   53.05791     1.79   0.075    -9.388383    198.8143
--------------------------------------------------------------------------------------
```

Regression results for Eq. 5.4

```
. reg OneYrReturns GESLeadershipWorkforce ShareClassInception ManagerYrs RiskScore DesforestationF
> unds WeaponFunds, robust

Linear regression                               Number of obs     =      1,155
                                                F(6, 1148)        =      24.66
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0706
                                                Root MSE          =     10.393

-----------------------------------------------------------------------------------------
                       |               Robust
          OneYrReturns | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-----------------------+-----------------------------------------------------------------
GESLeadershipWorkforce |   .1601972   .0972263     1.65   0.100     -.030564    .3509585
   ShareClassInception |  -.0278404   .0265291    -1.05   0.294    -.0798914    .0242105
            ManagerYrs |   .0075632   .0447401     0.17   0.866    -.0802183    .0953447
             RiskScore |  -.4640394   .6314541    -0.73   0.463    -1.702973    .7748942
   DesforestationFunds |  -.5076794    .056098    -9.05   0.000    -.6177455   -.3976134
           WeaponFunds |   .4323014   .0445161     9.71   0.000     .3449592    .5196435
                 _cons |   74.70294    53.0201     1.41   0.159    -29.32421    178.7301
-----------------------------------------------------------------------------------------
```

Regression results for Eq. 5.5

```
. reg OneYrReturns GESEqualcompWorklifebalance ShareClassInception ManagerYrs RiskScore Desforesta
> tionFunds WeaponFunds, robust
```

Linear regression

Number of obs	=	1,155
F(6, 1148)	=	53.53
Prob > F	=	0.0000
R-squared	=	0.1293
Root MSE	=	10.059

OneYrReturns	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
GESEqualcompWorklifebalance	-1.254435	.1191195	-10.53	0.000	-1.488152	-1.020719
ShareClassInception	-.0370849	.0265725	-1.40	0.163	-.089221	.0150511
ManagerYrs	-.0367032	.0439664	-0.83	0.404	-.1229667	.0495602
RiskScore	-2.485728	.60431	-4.11	0.000	-3.671404	-1.300052
DesforestationFunds	-.3851801	.0479834	-8.03	0.000	-.479325	-.2910351
WeaponFunds	.3414814	.0428601	7.97	0.000	.2573886	.4255743
_cons	115.4738	52.58348	2.20	0.028	12.30334	218.6443

Regression results for Eq. 5.6

```
. reg OneYrReturns GESGenderequalitypol ShareClassInception ManagerYrs RiskScore DesforestationFun
> ds WeaponFunds, robust
```

Linear regression

Number of obs	=	1,155
F(6, 1148)	=	27.90
Prob > F	=	0.0000
R-squared	=	0.0911
Root MSE	=	10.278

OneYrReturns	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
GESGenderequalitypol	.9093941	.2145944	4.24	0.000	.4883529	1.330435
ShareClassInception	-.0113225	.0253612	-0.45	0.655	-.061082	.038437
ManagerYrs	.0236575	.0444222	0.53	0.594	-.0635002	.1108153
RiskScore	.7055625	.7313721	0.96	0.335	-.7294133	2.140538
DesforestationFunds	-.4836212	.0555906	-8.70	0.000	-.5926918	-.3745507
WeaponFunds	.4049837	.0439335	9.22	0.000	.3187847	.4911826
_cons	23.64392	50.62871	0.47	0.641	-75.69126	122.9791

Regression results for Eq. 5.7

```
. reg OneYrReturns GESCommitTransparAcc ShareClassInception ManagerYrs RiskScore DesforestationFun
> ds WeaponFunds, robust

Linear regression                               Number of obs     =      1,155
                                                F(6, 1148)        =      46.26
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1146
                                                Root MSE          =     10.144
```

OneYrReturns	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
GESCommitTransparAcc	-6.066614	.674845	-8.99	0.000	-7.390682	-4.742546
ShareClassInception	-.0227277	.0264912	-0.86	0.391	-.0747043	.0292488
ManagerYrs	-.0320219	.0437764	-0.73	0.465	-.1179128	.0538689
RiskScore	-1.55393	.6044935	-2.57	0.010	-2.739966	-.3678946
DesforestationFunds	-.3955473	.0504477	-7.84	0.000	-.4945274	-.2965673
WeaponFunds	.3435833	.0426596	8.05	0.000	.2598839	.4272828
_cons	76.12209	52.30853	1.46	0.146	-26.50895	178.7531

Appendix C: Multicollinearity Tests

Multicollinearity test for mutual funds' lagged overall Gender Equality Scores and One-Year Returns using all investment mandates (Eq. 5.2)

```
. vif
```

Variable	VIF	1/VIF
FossilFuel~s	6.31	0.158385
WeaponFunds	6.13	0.163031
PrisonFunds	4.65	0.215214
Desforesta~s	4.42	0.226325
GenderEqua~e	1.64	0.609850
RiskScore	1.60	0.626605
ShareClass~n	1.11	0.901554
ManagerYrs	1.08	0.926181
Mean VIF	3.37	

Multicollinearity test for mutual funds' lagged overall Gender Equality Scores and One-Year Returns removing fossil fuel funds and prison funds (Eq. 5.3)

```
. vif
```

Variable	VIF	1/VIF
WeaponFunds	1.74	0.573534
Desforesta~s	1.62	0.616269
RiskScore	1.57	0.637499
GenderEqua~e	1.43	0.697015
ShareClass~n	1.11	0.904660
ManagerYrs	1.08	0.927525
Mean VIF	1.43	