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**Employee Satisfaction as a Mediating Factor in the Relation between Corporate Social
Responsibility and Corporate Financial Performance**

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Employee Satisfaction as a Mediating Factor in the Relation between Corporate Social Responsibility and Corporate Financial Performance

ABSTRACT: This study analyzes employee satisfaction as a mediating factor in the relationship between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP), and it distinguishes between the effects of various dimensions (Environmental, Social, Governance, and Controversies) of CSR. Using fixed effects modeling, the analysis explores within-company differences over time to provide evidence of causal effects. I find that CSR improves CFP and increases employee satisfaction. I also find tentative evidence that employee satisfaction improves CFP and partially mediates the CSR-CFP relation. When analyzed separately, the individual dimensions of CSR rarely have significant effects on CFP or employee satisfaction. However, CSR Controversies have a positive effect on CFP, and Environmental and Social CSR have the strongest effects on employee satisfaction. These results provide insight into the effects of CSR and the mechanisms through which CSR influences business outcomes.

1. Introduction

Increasingly, stakeholders are holding businesses accountable for the social consequences of their actions and the externalities they impose on society. Rather than solely prioritizing financial output, stakeholders pressure businesses to consider both profit maximization and the broader societal impact of the company. Corporate Social Responsibility (CSR) refers to the policies, initiatives, and management structures that firms implement for the betterment of society. Aguinis (2011) defines CSR as “context-specific organizational actions and policies that take into account stakeholder’s expectations and the triple bottom line of economic, social and environmental performance.”

Firms typically engage in CSR for two broad reasons (Rahbek, Pedersen, and Neergaard, 2009). They may engage in CSR for normative reasons: based on the prevailing social values and norms, these activities are moral and the civic duty of the company. On the other hand, firms may choose to engage in CSR for instrumental reasons: CSR improves productivity or financial performance. Intuitively, firms are more likely to engage in CSR if managers are convinced of the instrumental value of these activities. As such, many academics have studied the relationship between CSR and corporate financial performance, and they have found a robust, positive correlation (Busch & Friede, 2018). Managers implement CSR policies aimed to satisfy stakeholder expectations of firm behavior, and these CSR initiatives are associated with improved corporate financial performance (CFP).

In their expansive review of CSR research, Aguinis & Glavas (2012) contend there is a “need to conduct research that can help us understand the processes and underlying mechanisms through which

CSR actions and policies lead to particular outcomes.” There is a gap in our understanding of mediating factors in the relationship between CSR and financial outcomes. Past research has explored the impact of firm reputation (Orlitzky, Schmidt, & Rynes, 2003), customer satisfaction (Lev, Petrovits, & Radhakrishnan, 2010), and investor sentiment (Ioannou & Serafeim, 2010) on the relationship between CSR and CFP. Surroca, Tribó, and Waddock, (2010) argue that CSR is related to financial performance through the creation of intangible resources like innovation, culture, reputation, and human capital. Employee satisfaction may be an intangible benefit of CSR and therefore may also influence the relationship between CSR and CFP. This paper explores the impact of CSR on firm outcomes and proposes employee satisfaction as a mediating factor which partially explains the relation between CSR and CFP.

CSR aims to satisfy the expectations of stakeholders such as employees, and therefore may improve employee well-being. Employee-centered CSR initiatives, like diversity programs or safety precautions, may directly benefit employees, while external CSR, like community outreach, may improve company culture and indirectly benefit employees. Past research has found CSR is related to increased employee satisfaction (Valentine, & Fleischman, 2008). CSR is associated with increased organizational commitment (Brammer, Millington & Rayton, 2007), organizational pride (Ellemers, Kingma, van de Burgt, & Barreto, 2011), organizational identification (Carmeli, Gilat, and Waldman, 2007), task performance and effort (Story & Neves, 2015), organizational citizenship behavior (Lin, Lyau, Tsai, Chen, & Chiu, 2010), perceived meaningfulness of work (Aguinis & Glavas, 2019), and employee engagement (Glavas, 2016). Additionally, CSR is related to firm attractiveness to prospective employees (Greening & Turban, 2000) and reduced employee turnover (Carnahan, Kruscynski, & Olson, 2017). In summary, CSR practices are associated with positive employee outcomes; however, all of these studies use cross-sectional data and thus provide correlational evidence, not causal evidence.

Furthermore, employee satisfaction is correlated with improved organizational outcomes. Boehm & Lyubomirsky (2008) argue that happiness is associated with task performance, social support from coworkers, cooperative behavior, and decreased absenteeism. Happiness in the workplace may increase motivation to succeed and persistence to attain goals (De Neve, Diener, Tay, & Xuereb, 2013). In experimental settings, positive emotions were found to increase productivity (Oswald, Proto, & Sgroi 2015) and improve decision making (Staw & Barsade, 1993). Happy employees are more interested, energetic, and creative (Leitzel, 2001; George and Zhou, 2007). Krekel, Ward, & de Neve (2019) find that employee satisfaction is positively related to firm performance outcomes. Employee satisfaction is associated with greater sales, revenue, customer loyalty, and profits, (Harter, Schmidt, Asplund, Killham,

& Agrawal, 2010). Employee satisfaction may improve recruitment and retention of top talent, employee morale, and individual productivity, thereby increasing overall company performance.

CSR is positively correlated with employee satisfaction, and in turn, employee satisfaction is associated with improved firm performance; however, there is little research demonstrating a causal effect and there has been no research to date testing the mediation effect of employee satisfaction on the CSR-CFP relationship.

The aim of this paper is to use time-series data to provide evidence for a causal relationship and to empirically test employee satisfaction as a mediating factor between corporate social responsibility (CSR) and corporate financial performance (CFP). Additionally, I will separately examine dimensions of CSR (Environmental, Social, Governance, and Controversies) to determine which types of CSR initiatives are most impactful for improving employee satisfaction and CFP. This study will use Thomson Reuters data on ESG scores, financial data on return on assets (ROA), and company-reported employee satisfaction measures for a wide variety of companies globally. The firms in this dataset are large, public companies listed in the S&P 500, FTSE 250, and other global market indices. Insight from this analysis will lead to a better understanding of how CSR relates to firm performance and may provide instrumental incentives for businesses to consider societal wellbeing when determining company strategy. Furthermore, this research may have implications for Human Resource Management by demonstrating a causal impact of employee satisfaction on firm performance and exemplifying CSR as an effective organizational intervention to improve employee satisfaction.

2. Theoretical Framework

2.1 Corporate Social Responsibility: a conceptual clarification

CSR is the ongoing commitment by business to behave ethically. Under a narrow interpretation of CSR, firms should pursue their own economic self-interest while complying with laws because this allows the firm to provide returns to investors, payment to employees, and products to consumers, and these economic exchanges are good for society (Friedman, 1962). According to a more expansive view of CSR, firms have an ethical obligation to compensate for the negative externalities they impose on society by using their power and resources for the broader social good rather than solely for profit-maximization (Frederick, 1960). This paper assumes an expansive interpretation of CSR, wherein organizations have the

responsibility to implement business practices based on ethical norms and respect for employees, consumers, society, and the environment.

Early researchers like Sethi (1975) and Carroll (1979; 1991) outline hierarchical models for understanding CSR. According to these models, socially responsible behavior for firms is accomplished first by generating profits and obeying laws, then by acting morally beyond the requirements of the law, and lastly by proactively giving back to society. These early models harken back to the ideology of Friedman (1962) which prioritizes profitability and remain applicable today even as CSR becomes increasingly prevalent in companies. Many firms today reluctantly and superficially implement CSR policies rather than viewing CSR as an integral aspect of their business strategy (Porter & Kramer, 2006).

Although early researchers and many modern firms view the primary social obligation of business as maintaining the economic viability of the company, most definitions of CSR involve more wide-ranging commitments. Based on a content analysis of CSR literature, Dahlsrud (2008) identifies five common dimensions of CSR definitions: economic, environmental, social, stakeholders, and voluntariness. Most definitions of CSR contain several or all of these dimensions. Thus, CSR encompasses the relationship with employees, shareholders, customers, the local community, the environment, and the broader social fabric. CSR is the enduring commitment to consider the triple bottom line of economic, social and environmental outcomes. No universal definition of CSR exists in the literature, but this ambiguity allows for context-dependent understandings of CSR and the flexibility for firms to implement strategic CSR policies to suit their organizational strengths and needs.

As such, CSR can constitute a wide variety of activities and policies. Common CSR initiatives are charitable giving, volunteer programs within the local community, reducing the environmental impact of company operations, and improving labor conditions. For example, Wells Fargo aims to donate 1.5% of its annual revenue to charity and gives employees 2 paid days off per year to volunteer. Starbucks is committed to hiring military veterans. Netflix gives employees unlimited vacation time and generous paid family leave. General Electric donates millions of dollars to educational programs in STEM fields. The Walt Disney Company builds Disney-themed playrooms in children's hospitals. IKEA is committed to reducing its environmental impact by using more recycled materials and eliminating waste in operations. Google has invested more than \$1 billion in renewable energy and demonstrates its commitment to transparency by publishing data on its CSR activities. These CSR programs consider the triple bottom line rather than solely prioritizing profits, and they aim to improve relationships with stakeholders like employees, the local community, and the general public.

CSR can be further divided into the elements of corporate behavior found in Environmental, Social, Governance (ESG) scores. Environmental CSR involves resource use, emissions, and innovation. Social CSR encompasses the treatment of the workforce, human rights, community, and product responsibility. Governance CSR refers to management, shareholders, and CSR strategy—this dimension is not always measured in CSR research; however corporate structures may impact workplace culture and financial performance, so I include CSR Governance in the analysis. Additionally, corporate social *irresponsibility* such as ethics breaches or environmental scandals may have huge negative impacts on firm reputation and employee attitudes, so it is important to also consider CSR Controversies.

In sum, CSR is a broad concept referring to the moral duty of businesses to compensate for their negative externalities and to contribute to a better society. CSR encompasses contributions to economic growth, sustainable environmental practices, social considerations, relationships with stakeholders, and voluntary actions above and beyond legal requirements.

2.2 Corporate Social Responsibility and Corporate Financial Performance

CSR can be viewed as a moral obligation of profitable businesses, but normative reasoning often does not drive firm behavior, so why would company managers choose to engage in CSR? Researchers have long theorized on this topic and have developed an array of frameworks to examine CSR and its instrumental impact.

A subset of these CSR theories focuses on profitability and the firm's perspective. Agency theory suggests that CSR results from a conflict of interest: managers use CSR to advance their own career and social agendas at the expense of shareholders (Friedman, 1970; Wright and Ferris, 1997). Under this view, the firm should redirect resources from CSR back to the company to increase firm efficiency and generate social benefits through economic value. McWilliams and Siegel (2001) outline a framework in which managers engage in a cost-benefit analysis and undertake CSR efforts only if it is in the financial interest of the firm. The firm should invest in CSR to the point that the additional revenue generated from increased demand equals the higher costs of using resources for CSR. Porter and Kramer (2006) argue for a synergistic perspective, integrating business and societal needs to create shared value. Businesses need a healthy society—education and healthcare are necessary for a productive labor force, efficient use of environmental resources can ensure long term productivity, and a prosperous society increases consumer demand. Similarly, society needs successful businesses to create jobs, wealth, and innovation to improve the standard of living. Porter and Kramer (2006) advise firms to engage in strategic CSR which benefits

society while directly helping the firm itself.* Along those lines, Resource-Based theory posits that firms gain competitive advantage through the accumulation of non-transferable resources (Grant, 1991). CSR can generate internal resources, like technological knowledge, company culture, and employee happiness, and external resources, like customer loyalty and company reputation. These theories emphasize the firm's perspective and evaluate the impact of CSR for generating firm value.

Other strands of CSR theories consider more altruistic perspectives. Stakeholder theory emphasizes that firms have relationships with various constituent groups which affect and are affected by the actions of the firm (Roberts, 1992). Firms make implicit claims to non-investor stakeholders, and CSR can improve the relationship with these stakeholders and the credibility of these claims (Cornell & Shapiro, 1987). Firms must balance the needs of their shareholders, employees, suppliers, customers, local community, activists, and government. CSR initiatives can emerge as a result of balancing stakeholder needs.

Organizational Justice frameworks assert that moral perceptions of firm behavior impact relationships with the firm (Rupp, Ganapathi, Aguilera, & Williams, 2006). How stakeholders are treated by the firm signals to employees the fairness of organizational policies and how the employees themselves can expect to be treated. Aguilera, Rupp, Williams, & Ganapathi (2007) argue that CSR is used as a heuristic for fairness and that firms can use CSR initiatives to signal a high level of organizational justice to stakeholders.

According to these theories, the decision to implement CSR initiatives can be thought of as a strategic firm decision in its own self-interest, an act of balancing stakeholder interests, and a means of demonstrating ethical company values. Despite differing reasons for decisions regarding CSR, most firms care about the same outcome of their CSR activity: financial performance (CFP)

There are four main theories for the relationship between CSR and CFP. The first is that there is no relationship, or even a slightly negative effect, between CSR and CFP—early empirical work found an ambiguous relationship (e.g., Alexander and Buchholz, 1982; Aupperle, Carroll and Hatfield, 1985; Ullman, 1985; Shane and Spicer, 1983). This is consistent with Friedman (1962; 1970) who argues it is inefficient and ineffective for firms to allocate resources away from business operations in order to serve a social purpose. The second framework is Slack Resources Theory which posits that CFP causes CSR because only

* For example, Microsoft donated technology, expertise, and millions of dollars to community colleges when it was faced with a shortage of IT professionals.

financially successful firms with excess cash can afford to spend on CSR initiatives (Bansal, 2003; Waddock & Graves, 1997). Third, Good Management Theory argues that better performance in CSR causes improved financial outcomes (Waddock & Graves, 1997). Along those lines, many researchers have documented the positive effects of CSR such as improving firm reputation (Brammer & Pavelin, 2006), increasing customer satisfaction (Lev, Petrovits, Radharkishnan, 2010), and attracting talented employees (Greening & Turban, 2000) which could mediate a causal pathway between CSR and CFP. Lastly, the virtuous cycle argument combines Slack Resources Theory and Good Management Theory; excess resources allow firms to invest in CSR and these CSR policies further improve financial performance (Orlitzky, Schmidt, & Rynes, 2003; Busch & Friede, 2018). Although early studies found ambiguous evidence, Busch & Friede (2018) conduct a highly powered, second order meta-analysis of the CSR-CFP relationship and find support for a robust, bidirectional relationship.

In this paper, I will focus on the effect of CSR on CFP, not the bidirectional effects. I expect to replicate previous research (e.g., Cheng, Ioannou, & Serafeim, 2014; Tang, Hull, & Rothenberg, 2012) which operationalizes CSR as ESG scores (see Methodology chapter) and finds a positive causal relationship between CSR and CFP.

Hypothesis 1: CSR increases CFP

2.3 Corporate Social Responsibility and Employee Satisfaction

Employees are highly important stakeholders in businesses and are affected by the corporate behavior of their employers. As such, CSR may affect employee outcomes like job satisfaction (Valentine & Fleischman, 2008; Asrar-ul-Haq, Kuchinke, & Iqbal, 2017). Job satisfaction is a feeling of fulfillment or enjoyment a person derives from their job and is related to the nature of work, relationships with supervisors, workplace culture, career opportunities, and compensation. Internal CSR initiatives, like employee benefit programs, directly impact employees and improve their working conditions. However, CSR programs which do not directly affect employees may still influence job satisfaction.

For instance, according to social identity theory, individuals form their self-image based on the groups they belong to, so the characteristics of one's employer affect how he think of himself (Peterson, 2004). CSR may affect job satisfaction by influencing perceived organizational morality and increasing organizational pride (Rupp, Ganapathi, Aguilera, & Williams, 2006). If employees shape their self-image partly based on the reputation of their employer, perceived organizational morality is associated with employee satisfaction because employees can identify themselves with good and ethical values. Ellemers,

Kingma, van de Burgt, & Barreto (2011) find that CSR affects employee perceptions of organizational morality which in turn is associated with increased organizational pride, employee commitment, and job satisfaction. Barakat, Isabella, Boaventura, & Mazzon (2016) demonstrate that company image mediates the relationship between CSR and employee satisfaction.

CSR may also influence job satisfaction by creating a positive workplace climate. Internal CSR initiatives, like diversity programs or safer working conditions, could directly impact employees by creating a more people-friendly working environment. External CSR initiatives, like volunteer programs or environmental protection, may indirectly affect employees by influencing their feelings toward the firm. Glavas & Kelley (2014) find that CSR is positively related to workplace meaningfulness and perceived organizational support. Employees find meaning in their jobs when their work aligns with their values and when they believe their company is contributing to the greater good (Beadle & Knight, 2012; Rosso, Dekas, & Wrzesniewski, 2010). CSR may increase employee perception that their organization is making a social impact and thereby improve employees' sense of meaningfulness at work. Additionally, firms perceived to take care of external shareholders through CSR signal to employees that they will also be treated fairly. CSR, therefore, is associated with perceived organizational support. Glavas & Kelley (2014) demonstrate that CSR is associated with job satisfaction, and that this relationship is partially mediated by work meaningfulness and perceived organizational support.

Furthermore, employee psychological needs may also mediate the relationship between CSR and job satisfaction. Bauman & Skitka (2012) outline a theoretical framework in which CSR increases employee satisfaction by meeting employees' psychological need for safety and security, positive distinctiveness and social identity, a sense of shared values and belonging within the company, and a greater sense of purpose and meaning in their job. CSR satisfies a need for security because employees may judge companies with a strong record of CSR as more likely to treat them fairly. CSR satisfies a need for positive distinctiveness because CSR promotes a virtuous and successful firm reputation which generates pride for employees. CSR satisfies a need for belonging by communicating the company values, and employees may feel increased identification with a firm which shares their values. Finally, CSR satisfies a need for meaning in the workplace by providing an indirect outlet for the employees to positively affect society. Lee, & Chen (2018) find an association between employee perceptions of CSR, the fulfillment of employee needs, and employee outcomes like job satisfaction and retention.

These theoretical frameworks are highly interrelated. Under social identity theory, employees like to identify themselves with reputable companies, and CSR improves the reputation of the firm. CSR

improves workplace climate by increasing the perception of work meaningfulness and organizational support. Lastly, CSR satisfies employee psychological needs. These concepts are interconnected; for instance, CSR may contribute to the workplace climate by generating organizational pride and perceived organizational morality, and this improved company culture may fulfill psychological needs for safety, meaningfulness, and belonging. Additionally, the psychological need for positive distinctiveness is highly related to social identity theory and the satisfaction derived from identifying with a well-known, respected firm.

This paper will empirically examine the relationship between CSR and Employee satisfaction. Using time-series data, I will be able to provide evidence for a causal effect. Based on the above theoretical reasoning and correlational evidence, I propose there will be a significant, positive effect of CSR on employee satisfaction.

Hypothesis 2: CSR increases employee satisfaction.

2.4 Employee Satisfaction and Corporate Financial Performance

Employee satisfaction is positively associated with firm performance. On the individual level, positive affect is linked to improved individual performance (Oswald et al., 2015), better decision making (Staw & Barsade, 1993), and increased creativity (Amabile, Barsade, Meuller, & Staw 2005). Lyubomirsky, King, & Diener (2005) demonstrate a positive correlation between happiness, desirable attributes and behaviors like sociability or problem solving, and workplace success. At the firm-level, Harter, Schmidt, & Hayes (2002) use a meta-analysis of Gallup survey data to demonstrate a robust, positive relationship between employee attitudes (job satisfaction and employee engagement) and business-level outcomes like customer satisfaction, employee retention, safety, productivity, and profit. Krekel, Ward, & de Neve (2019) replicate these results on a larger, more recent sample. Employee attitudes are linked with individual performance and overall firm performance.

Field experiments which employ organizational interventions designed to improve employee well-being provide evidence for a causal relationship between satisfaction and firm performance (Bloom et al., 2014; Moen et al., 2011; Moen et al., 2016). For example, Bloom et al. (2015) found that allowing employees to work from home increased satisfaction, improved productivity, and reduced employee turnover. Edmans (2012) analyzed stock market returns on companies ranked as one of the 100 Best Companies to Work For; these firms with highly satisfied employees earned higher stock returns in the following period and had more positive earnings surprises.

In summary, past research has demonstrated a positive relation between employee satisfaction and firm-level outcomes. Employee satisfaction influences individual performance, which can directly impact firm performance (ie Oswald et al., 2015). Additionally, employee satisfaction may result in improved employee recruitment, reduced turnover and absenteeism, and increased customer satisfaction, and these effects mediate the relationship between satisfaction and firm performance. (ie Krekel, Ward, & de Neve, 2019). There are several theoretical frameworks which explain this relationship.

First, the cynical view of employee satisfaction espoused in the finance and economics literature claims that increasing job satisfaction is costly and represents a zero-sum game where managers must choose between providing additional satisfaction to employees or higher returns to shareholders. In alignment with this view, past research has found a neutral or negative relationship between employee benefits and company stock value (Abowd, 1989; Diltz, 1995; Gorton & Schmid, 2004). Under this view, investments to improve employee satisfaction may be better spent on initiatives which directly increase productivity or shareholder value.

Human Resource Theory, in contrast, argues that employee well-being strengthens firm performance by increasing human capital at the firm through improved employee recruitment, reduced turnover and absenteeism, and higher employee motivation (Becker & Gerhart, 1996). Under this view, human resource management is paramount to achieving competitive advantage (Lockwood, 2007). Firm investments to improve employee satisfaction increase the ability of the firm to attract, retain, and motivate talented employees, and this increases the overall productivity of the firm.

Lastly, Emotion Theory suggests that one's emotional state impacts his performance; thus, positive affect resulting from job satisfaction leads to increased motivation, organizational citizenship behavior, creativity, and performance (Staw, Sutton, & Pelled, 1994; Baumeister, Vohs, DeWall, & Zhang, 2007). The Broaden and Build Theory proposed by Fredrickson (2001) argues that positive emotions like pride or joy expand momentary thought-action repertoires, spurring creativity, increased interest, and the ability to take in new information. In contrast to negative emotions like fear which narrow thought-action repertoires and cause us to react quickly in the face of perceived threats, positive emotions lead us to play, explore, and learn. Therefore, satisfied employees may broaden their habitual modes of thinking and acting, generate creative ideas, interact positively and cooperatively with new people, and maintain more mental resources to devote to productive work.

Based on the empirical findings and the theoretical background, I expect to find a positive causal relationship between employee satisfaction and corporate financial performance (CFP).

Hypothesis 3: Employee Satisfaction increases CFP

Employee satisfaction is associated with increased firm performance through the recruitment and retention of a high-quality workforce (ie Human Resource Theory) and through increased morale and individual performance (ie Emotion Theory). As such, investing in employee well-being is a potential strategy for firms to gain competitive advantage (Lockwood, 2007). CSR could serve as an organizational intervention to improve employee satisfaction and consequently improve firm performance. Therefore, I expect employee satisfaction to mediate this relationship between CSR and CFP.

Hypothesis 4: Employee Satisfaction mediates the CSR-CFP Relation

Because CSR encompasses many types of firm behavior, it is important to distinguish which aspects of CSR are related to company outcomes. Due to conflicting results or the use different measurements of CSR dimensions, it is difficult to form conclusions based on past empirical studies (e.g. Lee & Chen 2018; Glavas & Kelley, 2014). However, it is possible to use theory to make predictions. Using the framework from Bauman & Skitka (2012) on employee psychological needs, employee-centered CSR which improves work-conditions or provides employee benefits would satisfy the psychological need for safety. Employee-centered CSR may also increase firm attractiveness to talented, new employees (Greening & Turban, 2000) which would increase human capital and improve firm productivity. So, Social CSR, which involves workforce treatment, may be highly related to employee satisfaction and CFP. Additionally, Onkila (2015) highlights employees' desire to avoid embarrassment from the firm, and Saeidi et.al (2015) demonstrate how CSR influences CFP through its effect on firm reputation. So, CSR Controversies may be strongly negatively related to employee satisfaction and CFP. This paper will contribute to this literature by examining the effects of individual CSR dimensions on company outcomes.

Hypothesis 5: Social CSR and CSR Controversies have stronger effects on company outcomes than Environmental CSR and Governance CSR

Figure 1: Data Frequencies

SIC Industry Code	Frequency Count
1	217
2	406
3	399
4	611
5	162
6	779
7	259
8	70
Country	Frequency Count
AU	144
BD	106
BG	43
BR	111
CB	8
CH	25
CL	12
CN	135
DK	80
ES	64
FN	71
FR	71
HK	26
HN	4
ID	26
IN	29
IR	2
IS	2
IT	44
JP	121
KN	3
KO	113
MX	23
MY	48
NL	126
NW	45
NZ	15
OE	5
PH	20
PO	12
PT	23
RS	7
SA	55
SD	107
SG	18
SI	2
SW	47
TA	29
TH	37
TK	29
UK	560
US	455

Figure 1 displays the number of companies in the dataset per industry and per country

3. Methodology

3.1 Data

For the empirical analysis, I use a panel dataset with Environmental, Social, and Governance (ESG) scores obtained from the Thomson Reuters ESG Scores data. ESG scores are often used in the finance domain to aid in portfolio analysis, screening, and equity research, and past researchers have used ESG scores to operationalize CSR in their studies (Cheng, Ioannou, & Serafeim, 2014; Attig, El Ghouli, Guedhami, Suh, 2013; Tang, Hull, Rothenberg, 2012). Thomson Reuters analysts use company reported data, NGO websites, and news sources to construct an objective, robust, and data-driven measure of relative ESG performance. Over 400 ESG metrics are standardized and used to calculate scores. The company reported data are not always independently verified; however, scandals involving misreported data and the use of an independent auditor to compile company reports are included as metrics which contribute to the overall CSR score. Although the data rely on potentially biased company reports, metrics with higher transparency and categories composed of more metrics are given greater weight. Further, the ESG scores are calculated based on relative performance within industry clusters to minimize the effects of outliers and to contextualize ESG performance. Thomson Reuters ESG Scores data includes scores across 10 themes (emissions, shareholders, human rights, etc.), separate scores for the Environmental, Social, and Governance domains, and an overall ESG score.

Additionally, I use financial data on return on assets (ROA) obtained from DataStream and matched with the companies found in the Thomson Reuters ESG Scores dataset. The dataset includes more than 7000 public companies globally with time series data going back to 2002. The dataset focuses on the large, publicly traded corporations found in stock indices like the S&P 500 and MSCI World; see Figure 1 for information on

the number of companies in the dataset per industry and per country.

Data points were dropped from the analysis if the company did not have at least two years of employee satisfaction data to facilitate comparisons over time.

3.2 Variables

CSR score: The first variable of interest is the firm's level of CSR, which is operationalized as the overall ESG score. This is a weighted average of the subcomponents of ESG metrics. Subcomponents are weighted by the number of metrics which make up each component relative to total number of metrics used; in this way, more weight is given to components which contain more information and therefore are calculated with a higher degree of confidence. This CSR score measures firm commitment and performance across CSR categories and quantifies the ethical impact of the company.

Dimensions of CSR: Additionally, CSR scores are broken down into the subcomponents (Environmental, Social, and Governance) of ESG scores and analyzed as distinct dimensions of CSR activities.

Environmental CSR refers to the Environmental component of ESG scores and encompasses resource use, emissions, and innovation. Metrics used to construct this score include environmental R&D expenditure, noise reduction, recycling initiatives, environment management training, total energy usage, etc.

Social CSR captures workforce treatment, human rights, community, and product responsibility. Metrics used for this dimension are, for example, employee strikes, percentage of female employees, total employee injury rate, usage of child labor in the supply chain, employee volunteer programs, product recalls, whether the company earns money from harmful products like tobacco or armaments, etc.

Governance CSR covers management, shareholders, and CSR strategy. Example metrics in this dimension are executive board functioning, compensation policy, whether the company has an external auditor for their CSR report, shareholder voting rights, etc.

CSR Controversies refers to significant, material company scandals occurring within the previous fiscal year. Examples include public health controversies, tax fraud, disproportionate executive pay, customer dissatisfaction, privacy scandals, or workforce diversity controversies. Because this variable enumerates negative outcomes, a higher score on this measure indicates worse CSR performance.

Employee Satisfaction: This variable is operationalized as the company-reported overall percentage of employees at the firm who are satisfied about their jobs. Survey methodology, like sampling procedures or the wording of questions, may differ across companies. Survey questions must explicitly mention satisfaction about employment at the company; statements about organizational pride or meaningfulness do not qualify. A striking weakness of this employee satisfaction measure is that it relies on company reported data about their own employees and thus may overestimate the true level of employee satisfaction. However, the degree of data distortion in company-reported measures should not vary over time because social desirability pressures and the risk associated with lying should not significantly change from year to year. Assuming there is no systematic variation in the degree of overestimation of the employee satisfaction measure across companies or over time, this overestimation should not bias the results.

CFP: CFP is operationalized as return on assets (ROA). ROA is an indicator of how profitable a company is relative to its amount of assets, and it is calculated by dividing net income over total assets. ROA captures how efficient a company is by measuring how effectively the company converts invested capital into profits. In many studies within this field, ROA is a common measure of firm financial performance (Orlitzky et al., 2003; Tang, Hull, Rothenberg, 2012).

Control Variables: Lastly, I include several controls. Organizational size may be related to discretionary income for CSR initiatives, employee satisfaction, and organizational management structures. I control for organization size by including a variable which captures the natural logarithm of the number of employees at the firm during a given year; the organization size variable is log-transformed to minimize the effect of outliers with extremely large workforces. I include year dummies to control for time shocks like financial crises or macroeconomic trends in CSR investments, firm profitability, or employee satisfaction. I include industry*year dummies to control for industry-specific time trends like increased demand in certain sectors or public outcry after an industry-wide scandal. I use country*year dummies to control for location-specific time trends such as governmental regulations, political unrest, or changing cultural norms. However, because of data constraints, these location-specific time trends only capture the country of the company headquarters, not where the employees themselves are located if the company is multi-national.

In Appendix A, I control for demographic variables of company employees; however, due to the large proportion of missing data, these variables were excluded from the main analysis.

3.3 Estimation Strategy

To analyze the hypothesized causal relations, I use fixed effects models. This strategy exploits within-company variation over time, controlling for unobservable firm-level factors and macro-level time shocks. Data-collection methodology differs between companies, which would lead to a high degree of measurement bias if I examined between-company differences. The use of fixed-effects models allows me to control for any bias which may arise from company reported measures (i.e. Employee Satisfaction) because I analyze within-company differences and the change in variables rather than the overall level. The identifying assumption needed for these tests is that unobservable factors which affect both predictor and outcome variables are time-invariant or explicitly controlled for. Although this assumption cannot be tested, it is reasonable to assume that year dummies control for macro-level changes in attitudes or market characteristics and that there is no systematic pattern in firm-level changes over time, so averaging the observed effect over several years and across many firms yields an accurate measurement of the true causal effect.

Throughout the analysis, I run three model specifications. First, I run a fixed effects model with no controls to demonstrate a baseline effect. Secondly, I add in controls for organization size, global time trends, and industry-specific time trends. This model is more complete and provides a better estimation of the true effect. Lastly, I run a third model specification in which I include all controls used in Model 2 and add in location-specific time trends. This model provides additional control for location-specific time shocks but also introduces a potential bias because the dataset includes multi-national companies with employees located in different countries than the company headquarters.

To test for a mediation effect, I conduct a Sobel-Goodman mediation analysis. This method runs a series of regressions; first it regresses CFP on CSR (regression 1), next it tests the mediation pathway by regressing Employee Satisfaction on CSR (regression 2), and lastly regresses CFP on both CSR and Employee Satisfaction (regression 3). The test determines the total effect of CSR on CFP (the coefficient on CSR from regression 1), the direct effect of CSR on CFP (the coefficient on CSR from regression 3), and the indirect effect of CSR on CFP which is mediated through Employee Satisfaction (the product of the coefficient on CSR from regression 2 and the coefficient on Employee Satisfaction from regression 3). In this way, I can test for the significance of the indirect effect and calculate the proportion of the total effect which is mediated.

To examine differences in the effects of the various CSR dimensions, I repeat the analyses separately for each CSR dimension and I compute pairwise comparisons of the coefficients. Due to a high degree of

multicollinearity between dimensions (see Appendix B), I run separate fixed effects models for each dimension.

4. Analysis

Descriptive statistics for CSR scores, Employee Satisfaction, ROA, and the Organization Size control are summarized in Table 1. Pairwise correlations between the key variables are reported in Panel A of Table 2, and pairwise correlations between dimensions of CSR are reported in Panel B. In line with my expectations, CSR score is positively related to Employee Satisfaction, and Employee Satisfaction is positively correlated with ROA. However, counter to my predictions, CSR score is negatively correlated with ROA. Organization Size is significantly related to all three key variables and thus is included in the analysis as a control. All CSR dimensions are significantly correlated, demonstrating a high degree of overlap in CSR performance across dimensions.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CSR score	2,903	67.56	13.06	10.08	95.38
Environmental CSR	2,903	79.38	19.77	9.05	96.40
Social CSR	2,903	81.14	18.65	5.36	99.13
Governance CSR	2,903	66.75	26.12	1.95	98.13
CSR Controversies	2,903	41.84	24.64	0.17	81.82
Employee Satisfaction	2,903	75.48	10.11	14	100*
ROA	2,903	5.89	6.66	-53.22	75.21
Organization Size	2,903	49,638.35	83,864.27	32	642,292

Table 1 reports the descriptive statistics for all key variables used in the analysis.

* Because it is unlikely that 100% of employees at a company are satisfied, this number seems unreasonably high. Therefore, I repeat the analysis after winsorizing the highest 5% of Employee Satisfaction scores, and the results still hold.

Table 2: Pairwise Correlations

PANEL A	CSR score	Employee Satisfaction	ROA	Organization Size	
CSR score	1.000				
Employee Satisfaction	0.0566 (0.0023)	1.000			
ROA	-0.0683 (0.0002)	0.0758 (0.0000)	1.000		
Organization Size	0.1771 (0.0000)	-0.0891 (0.0000)	-0.0798 (0.0000)	1.000	
PANEL B	CSR score	Environmental CSR	Social CSR	Governance CSR	CSR Controversies
CSR Score	1.000				
Environmental CSR	0.6342 (0.0000)	1.000			
Social CSR	0.6141 (0.0000)	0.6999 (0.0000)	1.000		
Governance CSR	0.3587 (0.0000)	0.1447 (0.0000)	0.1976 (0.0000)	1.000	
CSR Controversies	-0.3295 (0.0000)	-0.2637 (0.0000)	-0.1617 (0.0000)	-0.2349 (0.0000)	1.000

Table 2 displays pairwise correlations between variables, p-values are reported in parenthesis. Panel A contains the correlations between the key variables and Panel B contains the correlations between dimensions of CSR.

4.1 Corporate Social Responsibility and Corporate Financial Performance

First, I empirically analyze the effect of CSR on CFP. I use fixed-effects models which allow me to control for company-specific fixed effects and time shocks; in this way, I isolate the effect of within-company variations in CSR scores over time on ROA. I control for organization size, global time trends, industry-specific time trends, and country-specific time trends. I run three specifications of the regression: first with only company-specific fixed effects, second including organization size, global time trends, and

industry-specific time trends, and lastly adding country-specific time trends. The results of this analysis are reported in Table 3. In line with previous evidence (Cheng, Ioannou, & Serafeim, 2014; Tang, Hull, & Rothenberg, 2012), I find the estimated coefficient on CSR is positive and significant. These results suggest that CSR increases ROA. Thus, the negative correlational relationship reported above (see Table 2) becomes positive when controlling for unobservable company characteristics, organization size, and time trends. A 10-point increase in CSR scores leads to a 0.36 to 0.58 percentage point increase in ROA, an economically significant increase in the profitability of the firm. These results support Hypothesis 1 (CSR increases CFP) and provide evidence for a causal relation between CSR scores and ROA.

Table 3: Fixed Effects Models of the CSR-CFP Relation

Dependent variable: ROA	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
CSR score	0.036* (0.016)	0.015	0.056*** (0.001)	0.016	.058** (0.002)	0.019
ln(orgsize)			-1.209*** (0.001)	0.372	-1.232** (0.003)	0.418
Time Trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific time trends	No		No		Yes	

Table 3 displays the results from three model specifications of CSR score on ROA. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.2 Corporate Social Responsibility and Employee Satisfaction

Secondly, I analyze the effect of CSR on Employee Satisfaction. Again, I run a series of fixed effects models controlling for company-specific fixed effects, time shocks, organization size, industry-specific time trends, and country-specific time trends. Therefore, I examine the effects within-company variations in CSR scores over time on Employee Satisfaction. These results are reported in Table 4. In line with previous correlational evidence (Valentine, & Fleischman, 2008; Asrar-ul-Haq, Kuchinke, & Iqbal, 2017) and my predictions, I find a positive estimated coefficient on CSR which is significant at the 0.1% level, suggesting that CSR increases employee satisfaction. A 10-point increase in CSR scores leads to a 1.37 to 1.72 percentage point increase in the proportion of satisfied employees at the firm. These results support Hypothesis 2 (CSR increases Employee Satisfaction) and provide evidence for a causal relation.

Table 4: Fixed Effects Models of the CSR-Employee Satisfaction Relation

Dependent variable: Employee Satisfaction	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
CSR score	0.172*** (0.000)	0.020	0.138*** (0.000)	0.022	0.137** (0.000)	0.023
ln(orgsize)			-0.426 (0.393)	0.499	-0.645 (0.223)	0.529
Time Trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific time trends	No		No		Yes	

Table 4 displays the results from three model specifications of CSR score on Employee Satisfaction. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.3 Employee Satisfaction and Corporate Financial Performance

Third, I analyze the causal effect of Employee Satisfaction on CFP. I run a series of fixed effects models which analyze the effect of Employee Satisfaction on ROA, adding in controls for company-specific fixed effects, times shocks, organization size, industry-specific time trends, and country-specific time trends. Therefore, I examine the effects within-company variations in Employee Satisfaction over time on CFP. Results from this analysis are reported in Table 5. In line with expectations, the coefficient on Employee Satisfaction is positive. The coefficient is not significant (p-value = 0.179) in the model without controls, marginally significant (p-value = 0.068) when controlling for organization size and certain time trends, and significant (p-value = 0.010) in the model with all controls. If an additional 10% of employees at the firm are satisfied, ROA will increase by 0.21 to 0.47 percentage points. These results provide tentative evidence that Employee Satisfaction increases CFP; therefore, Hypothesis 3 is marginally supported.

Table 5: Fixed Effects Model of the Employee Satisfaction-CFP Relation

Dependent variable: ROA	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
Employee Satisfaction	0.021 (0.179)	0.015	0.029 (0.068)	0.016	.047** (0.010)	0.018
ln(orgsize)			-1.154** (0.002)	0.373	-1.180** (0.005)	0.418

Time Trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific time trends	No		No		Yes	

Table 5 displays the results from three model specifications of Employee Satisfaction score on ROA. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.4 Mediation Analysis

I conduct a Sobel-Goodman mediation analysis to explore whether Employee Satisfaction mediates the relationship between CSR and CFP. I include company dummies to mimic the fixed effects models used above. I run additional specifications which control for time shocks and organization size. Results are reported in Table 6. Employee Satisfaction mediates between 5.74% and 9.42% of the relationship between CSR score and ROA. This mediation effect is significant when controlling for organization size, time shocks, industry-specific time trends, and country-specific time trends, but not significant in both other specifications. These results provide tentative support for Hypothesis 4 that Employee Satisfaction mediates the CSR-CFP relation.

Table 6: Mediation Analysis

	Model 1	Model 2	Model 3
Indirect effect	0.00257 (0.3578)	0.00325 (0.1599)	0.0055* (0.0420)
Direct effect	0.0356* (0.0216)	0.0533** (0.0012)	0.0529** (0.0044)
Total effect	0.0382* (0.0123)	0.0566*** (0.0005)	0.0584** (0.0015)
Proportion of total effect that is mediated	0.0673	0.0574	0.0942
Organization size controls	No	Yes	Yes
Time trends	No	Yes	Yes
Industry-specific time trends	No	Yes	Yes

Country-specific Time trends	No	No	Yes
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Table 6 presents the results from a Sobel-Goodman mediation analysis. CSR score is the independent variable, Employee Satisfaction is the mediator, and ROA is the dependent variable. P-values are reported in parenthesis.

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.5 Dimensions of CSR

Finally, I explore the effects of various CSR dimensions by repeating the analysis for each dimension. Due to a high degree of multicollinearity between CSR dimensions (see Appendix B), I run separate fixed effects models for each dimension and compare the regression coefficients.

I begin by analyzing the effects of each CSR dimension on CFP. I run three specifications of fixed-effects models for each CSR dimension, adding in additional control for time trends, organization size, industry-specific time trends, and country-specific time trends. Results are reported in Table 7. CSR Controversies, which signify unethical firm behavior, have a significant and positive estimated coefficient; a 10-point increase in the CSR Controversies score leads to an increase in ROA by 0.129 to 0.166 percentage points. None of the CSR dimensions which denote positive, ethical behavior (Environmental, Social, or Governance CSR) have significant effects. Next, I analyze the differences between coefficients in Seemingly Unrelated Regressions (SUR); these results are reported in Table 8. I run Chi-squared tests for each pairwise comparison of coefficients. The coefficients on all CSR dimensions are significantly different from each other, except for Social CSR and CSR Controversies. This suggests that there are business benefits of forgoing ethical behavior (CSR Controversies), and that these benefits are greater than the effect of Environmental CSR or Governance CSR on CFP. However, the benefits of unethical behavior are not greater than the benefits of Social CSR on CFP. Although the direction of the effect is in the opposite direction, these results provide support for Hypothesis 5 that Social CSR and CSR Controversies have greater effects on company outcomes than Environmental CSR and Governance CSR.

Table 7: The Effects of CSR Dimensions on CFP

Dependent Variable= ROA	Model 1	Model 2	Model 3
Overall CSR score	0.036* (0.016)	0.056*** (0.001)	0.0584** (0.002)
Environmental CSR	-0.0132 (0.215)	0.0047 (0.704)	0.0203 (0.172)
Social CSR	-0.0032 (0.761)	0.0152 (0.211)	0.0178 (0.215)
Governance CSR	0.0128 (0.186)	0.0161 (0.113)	0.0168 (0.165)
CSR Controversies	0.0129* (0.013)	0.0139** (0.008)	0.0166** (0.005)
Organization size controls	No	Yes	Yes
Time trends	No	Yes	Yes
Industry-specific time trends	No	Yes	Yes
Country-specific time trends	No	No	Yes

Table 7 displays the regression coefficients from fixed effects model of ROA on dimensions of CSR. Each dimension was analyzed separately, thus each cell of the table displays results from a regression which includes only one CSR dimension (plus controls). P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: Comparison of the effects of CSR dimensions on CFP

Dependent Variable= ROA	Environmental CSR	Social CSR	Governance CSR	CSR Controversies
Environmental CSR	$\beta = -0.007$ (0.000)			
Social CSR	$\chi^2 = 12.39$ (0.001)	$\beta = 0.001$ (0.529)		
Governance CSR	$\chi^2 = 189.94$ (0.000)	$\chi^2 = 35.31$ (0.0000)	$\beta = -0.013$ (0.000)	
CSR Controversies	$\chi^2 = 402.82$ (0.000)	$\chi^2 = 0.53$ (0.4671)	$\chi^2 = 687.64$ (0.000)	$\beta = 0.003$ (0.000)

Table 8 displays the results from an analysis of CSR dimensions. Dimensions were analyzed using the *xtsur* command for seemingly unrelated regressions using panel data. Organization size was controlled for, but time trends were not included due to calculation constraints. Regression coefficients are reported along the diagonal, and results from chi-squared tests between coefficients are reported in all other cells. P-values are reported in parenthesis.

Next, I analyze the effects of each CSR dimension on Employee Satisfaction. Again, I run three specifications of fixed-effects models for each CSR dimension, including additional controls for time trends, organization size, industry-specific time trends, and country-specific time trends. Results are reported in Table 9. In most specifications of the model, the coefficients are not significant. However, in the specifications which do not include controls for time trends or organization size, Environmental CSR and Social CSR are both significant. Subsequently, I analyze the differences between coefficients in Seemingly Unrelated Regressions (SUR), these results are reported in Table 10. I run Chi-squared tests for each pairwise comparison of coefficients. There are significant differences between all dimensions of CSR. This suggests that Environmental CSR is the most impactful, followed by Social CSR, then CSR Controversies, with Governance CSR having the least impact on Employee Satisfaction.

Table 9: The Effects of CSR Dimensions on Employee Satisfaction

Dependent Variable=Employee Satisfaction	Model 1	Model 2	Model 3
Overall CSR score	0.172*** (0.000)	0.138*** (0.000)	0.137** (0.000)
Environmental CSR	0.0337*** (0.001)	0.0095 (0.461)	0.0243 (0.082)
Social CSR	0.0229* (0.035)	-0.0090 (0.480)	-0.0070 (0.612)
Governance CSR	0.0062 (0.493)	0.0053 (0.586)	-0.0172 (0.185)
CSR Controversies	-0.0086 (0.175)	-.0035 (0.608)	-0.0025 (0.723)
Organization size controls	No	Yes	Yes
Time trends	No	Yes	Yes
Industry-specific time trends	No	Yes	Yes
Country-specific time trends	No	No	Yes

Table 9 displays the regression coefficients from fixed effects model of Employee Satisfaction on dimensions of CSR. Each dimension was analyzed separately, thus each cell of the table displays results from a regression which includes only one CSR dimension (plus controls). P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 10: Comparison of the effects of CSR Dimensions on Employee Satisfaction

Dependent Variable=Employee Satisfaction	Environmental CSR	Social CSR	Governance CSR	CSR Controversies
Environmental CSR	$\beta = -0.0437$ (0.000)			
Social CSR	$X^2 = 622.23$ (0.000)	$\beta = -0.0225$ (0.00)		
Governance CSR	$X^2 = 1594.11$ (0.000)	$X^2 = 404.79$ (0.0000)	$\beta = -0.0010$ (0.322)	
CSR Controversies	$X^2 = 5523.66$ (0.000)	$X^2 = 948.03$ (0.000)	$X^2 = 25.62$ (0.000)	$\beta = 0.0048$ (0.000)

Table 10 displays the results from an analysis of CSR dimensions. Dimensions were analyzed using the *xtsur* command for seemingly unrelated regressions using panel data. Organization size was controlled for, but time trends were not included due to calculation constraints. Regression coefficients are reported along the diagonal, and results from chi-squared tests between coefficients are reported in all other cells. P-values are reported in parenthesis.

I conduct a Sobel-Goodman mediation analysis to explore whether Employee Satisfaction mediates the relationship between CSR dimensions and CFP. For simplicity, I run only one model specification which includes company fixed effects, organization size, global time trends, industry-specific time trends, and country-specific time trends (as in Model 3 in other parts of the analysis). Results are reported in Table 11. None of the effects of the CSR dimensions are significantly mediated by employee satisfaction, although the mediation effects on Environmental CSR and Social CSR approach significance.

Table 11: Mediation Analysis

	Environmental CSR	Social CSR	Governance CSR	CSR Controversies
Indirect effect	0.0024 (0.0634)	0.0017 (0.1131)	-0.0001 (0.9149)	0.0001 (0.8093)
Direct effect	0.0179 (0.2283)	0.0161 (0.2629)	0.0168 (0.1651)	0.0165** (0.0048)
Total effect	0.0203 (0.1715)	0.0178 (0.2152)	0.01672 (0.1667)	0.0166** (0.0047)
Proportion of total effect that is mediated	0.1186	0.0971	-0.0047	0.0052

Table 11 presents the results from a Sobel-Goodman mediation analysis, ran separately with each CSR dimension score as the independent variable. Employee Satisfaction is the mediator, and ROA is the dependent variable. All

*models included organization size controls, global time trends, industry-specific time trends, and country-specific time trends (as in Model 3 in other parts of the analysis). P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$*

5. Conclusion

This study used data from large, public companies to empirically explore the relationship between CSR and CFP and proposed employee satisfaction as a mediating factor. The data, which is comprised of information from the same companies over several years, allows for fixed effects modeling to isolate within-company differences over time and provide evidence for causal, rather than correlational, effects. This analysis also distinguished between dimensions of CSR to analyze which types of CSR initiatives are most effective for improving company outcomes. This study aims to provide evidence for instrumental reasons for firms to engage in ethical behavior and fills gaps in our understanding of the mechanisms through which CSR affects company outcomes (e.g. Aguinis & Glavas, 2012).

The results from this analysis provide strong evidence that CSR has a positive causal effect on company outcomes. First, I find that CSR increases CFP, in line with my predictions and with past findings (Busch & Friede, 2018; Cheng, Ioannou, & Serafeim, 2014). Ethical firm behavior and philanthropic initiatives increase the profitability of firms given their level of assets (ROA). Second, I find the CSR increases employee satisfaction, supporting my hypothesis and substantiating previous correlational studies (Valentine, & Fleischman, 2008; Asrar-ul-Haq, Kuchinke, & Iqbal, 2017). CSR policies, regardless of whether they directly benefit the employees, improve the percentage of employees at the firm who report themselves as satisfied. Therefore, CSR strategies have instrumental benefits for companies by improving profitability and employee satisfaction.

Additionally, this analysis provides tentative evidence that employee satisfaction mediates the relationship between CSR and CFP, although these results are less conclusive. Depending on the model specifications and the control variables included, employee satisfaction increased CFP and mediated approximately 5-10% of the CSR-CFP relationship. These results support my hypotheses but are insignificant or only moderately significant in models with fewer control variables. The lack of conclusive results could be explained by relatively small effect sizes which are difficult to detect. Furthermore, there is very little within-company variability in employee satisfaction scores over time, which decreases the statistical power of the analysis. In addition, I use an accounting-based metric of CFP (i.e. ROA) rather than an operations-based metric (such as productivity or turnover). Accounting-based measures may be influenced by discretionary accounting practices or noisy market movements, and therefore individual

employee performance may have a smaller impact on them (Busch & Friede, 2018). So, although I find evidence supporting employee satisfaction as a mediating factor in the CSR-CFP relationship, future research needs to be done to replicate and confirm this finding.

This research also provides insight into which types of CSR initiatives have the greatest impact on company outcomes. Counter to my predictions, CSR Controversies were associated with increased CFP and did not significantly impact employee satisfaction. This suggests that forgoing ethical behavior may actually be good for business, perhaps because the effects of negative publicity for the firm and embarrassment for employees are outweighed by the profits derived from unethical behavior. Of the positive dimensions of CSR, Environmental and Social CSR appear to have greater effects on employee satisfaction than Governance CSR. None of the dimensions have significant impact on CFP. Although the effects of CSR dimensions when analyzed separately often fail to reach significance, overall CSR scores have a significant effect on company outcomes, suggesting that firms may need to behave ethically in a variety of domains in order to achieve benefits from their CSR policies.

This research has implications for both practical business strategy and academic theory. First, I find evidence that CSR has instrumental value for firms, so managers can justify expenditure on CSR because it strengthens financial performance. Firms could invest in CSR initiatives to satisfy normative expectations of stakeholders and for their own self-benefit. Second, CSR can be used as an intervention to improve employee morale. It is important that companies invest in employee satisfaction both because it increases individual performance (Krekel et. al., 2019) and because it generates human capital by attracting and retaining talented employees. With the current low levels of unemployment, employees have greater bargaining power in the labor market and firms may need to cater to employee needs. CSR programs are opportunities for companies to generate organizational pride, improve the workplace climate, and create a sense of meaning in work for their employees (Ellemers, et.al, 2011; Glavas & Kelley, 2014). Firms looking to improve employee satisfaction could invest in CSR, and in particular, firms could focus on Environmental CSR like reducing company emissions or on Social CSR programs like generous family leave policies because these CSR dimensions appear to have greater impact on employee satisfaction. Third, these findings contribute to our theoretical understanding of the effects of CSR and the factors which mediate these outcomes. These results support Good Management Theory (Waddock & Graves, 1997) and Resource-Based Theory (Grant, 1991) because CSR engagement generates internal company resources (i.e. employee satisfaction) which drive financial success.

However, there are several limitations to this study. First, the employee satisfaction measure is potentially problematic because there is little variability and it represents the proportion of satisfied employees rather than the level of satisfaction of individual employees. Statistical power is limited because effect sizes are small and there is little within-company variation over time. Furthermore, the data captures changes in the proportion of satisfied workers but does not measure changes in how satisfied individual employees are—therefore, I cannot examine the effects of satisfied employees becoming extremely satisfied or unhappy employees feeling less negatively. These changes in affect could impact motivation and performance, but they are not captured by the current measure.

Second, company reported data (used in ESG scores and the employee satisfaction measure) may be biased towards socially desirable results and relies on heterogeneous surveying methods. Assuming that self-reported data distortion does not vary systematically over time, fixed effects modeling should eliminate this bias. The company-specific fixed effects used in this analysis should also eliminate the biases of between-company differences in survey methods, but they do not control for within-company changes.

Another limitation of this study is that the data set is mostly comprised of large companies—the average number of employees at companies in this sample was nearly 50,000. Smaller companies may engage in different types of CSR than larger companies, like community volunteering rather than making large charitable donations, and these CSR initiatives may have different effects on employee satisfaction and CFP.

Moreover, it was difficult to accurately control for location because many of the companies in this dataset are multi-national; I was able to control for the location of company headquarters but not where the employees themselves work if they are located abroad. For this reason, I only include country-specific time trends in one specification of the models throughout the analysis. However, cultural values, political climate, and social norms inherent to one's home country are likely to impact these results, particularly results involving employee satisfaction.

Finally, it is a study limitation that I was not able to account for individual characteristics. Due to the heterogeneity of employees and the personal nature of job satisfaction, individual factors are likely to moderate the CSR-employee satisfaction relation. Du, Bhattacharya, & Sen (2015) argue that heterogeneous employee segments have different job needs and therefore vary in their demand for and response to CSR initiatives. Wisse, van Eijbergen, Rietzchel, & Scheibe (2018) find that age moderates the CSR-employee satisfaction relationship. Lee & Chen (2018) demonstrate equifinality in how CSR satisfies

employee needs and improves employee attitudes. Onkila (2015) finds differences in emotional processing and reactions to CSR. Employees are a heterogeneous group, so the strength of the CSR-employee satisfaction relationship and its mediating factors may differ across individuals. In Appendix A, I control for certain demographic factors, but it is beyond the scope of this analysis to fully explore the effects of employee heterogeneity.

Future research must be done to address these limitations and replicate the results of this study. Future studies could implement a standardized procedure for measuring employee satisfaction and perhaps generate two distinct measurements: one for the proportion of satisfied employees at the company and another for the individual level of satisfaction. Future research should replicate this study using data from smaller businesses to ensure the generalizability of the findings. To gain better control, researchers could gather data on the location of individual employees or the percentage of employees who work abroad, in addition to the location of company headquarters. Lastly, because many firms 'green-wash' their company reports but do not truly implement socially responsible practices, future research could examine the differential impact of advertised CSR policies versus tangible CSR actions on employee satisfaction and CFP.

CSR can be an effective tool for societal advancement by synergizing the needs of business and society. This study provides insight into how CSR impacts financial success, explores the impact of employee satisfaction on the CSR-CFP relationship, and offers instrumental incentives for firms to balance profit maximization and their broader societal impact.

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Appendix A

Analysis Controlling for Demographic Variables of Employees

It is important to control for within-company changes over time which may simultaneously affect key variables and bias the results. The demographic characteristics of employees at companies is one such variable. The relationship between CSR and employee outcomes (e.g. satisfaction and commitment) is stronger for older employees (Wisse et.al., 2018) and female employees (Stawiski, Deal, & Gentry, 2010). For that reason, I repeat the analysis with controls for the average age of employees and the percentage of female employees at the company. In general, the results show effects in the expected direction which fail to reach significance because of the much smaller sample size when including demographic variables. For instance, Model 2, which is arguably the most relevant specification because it includes significant controls without introducing bias from the location-specific time trends (see Methodology section), consistently shows results in the expected direction when controlling for these demographic variables.

The number of observations in this analysis decreased significantly because there was less available data on these demographic characteristics (N=382). The mean of the average age of employees at each company was roughly 40 years old (M = 40.35, SD = 3.71) and the mean percentage of female employees at each company was about 37% (M = 37.01, SD = 15.37). Both average age and percentage of female employees are correlated with key variables in the analysis, suggesting it is important to include them as controls.

Corporate Social Responsibility and Corporate Financial Performance

I regress ROA on CSR score using a fixed effects model, and I add in controls for demographic variables, organization size, and time trends. These results, displayed in Table 12, are not significant.

Table 12: Fixed Effects Models of the CSR-CFP Relation

Dependent variable: ROA	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
CSR score	-0.009 (0.753)	0.029	0.010 (0.734)	0.0286	-0.009 (0.884)	0.063
ln(orgsize)			-1.87 (0.063)	0.372	-6.988** (0.009)	2.589
Average Age	-0.111 (0.608)	.216	-0.028 (0.900)	0.229	-0.666 (0.120)	0.424

Percentage Female	0.037 (0.432)	0.047	0.026 (0.567)	0.045	0.055 (0.401)	0.065
Time Trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific time trends	No		No		Yes	

Table 12 displays the results from three model specifications of CSR score on ROA. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Corporate Social Responsibility and Employee Satisfaction

I analyze the effects of CSR on Employee satisfaction, again by running a series of fixed effects models controlling for company fixed effects, time shocks, organization size, industry-specific time trends, and country-specific time trends. These results are displayed in Table 13. CSR has a significant, positive effect on Employee Satisfaction in Model 1 (without controls for organization size and time trends) but is not significant in both other model specifications.

Table 13: Fixed Effects Models of the CSR-Employee Satisfaction Relation

Dependent variable: Employee Satisfaction	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
CSR score	0.161** (0.007)	0.059	0.118 (0.075)	0.066	-0.175 (0.175)	0.127
ln(orgsize)			-6.599* (0.048)	3.320	-7.264 (0.172)	5.269
Average Age	0.759 (0.089)	.444	-0.473 (0.371)	0.528	-0.460 (0.595)	0.862
Percentage Female	-0.053 (0.581)	0.096	-0.091 (0.376)	0.103	-0.194 (0.146)	0.132
Time Trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific time trends	No		No		Yes	

Table 13 displays the results from three model specifications of CSR score on Employee Satisfaction. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Employee Satisfaction and Corporate Financial Performance

I analyze the effect of Employee Satisfaction on CFP with fixed effects models, adding in additional controls for demographic variables, organization size, and time trends. These results are reported in Table 14. The results indicate that Employee Satisfaction increases CFP; the effect is significant or marginally significant in all model specifications.

Table 14: Fixed Effects Model of the Employee Satisfaction-CFP Relation

Dependent variable: ROA	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
Employee Satisfaction	0.077** (0.009)	0.029	0.076* (0.011)	0.030	0.106 (0.057)	0.055
ln(orgsize)			-2.189 (0.123)	1.414	-6.124* (0.017)	2.505
Average Age	-0.179 (0.404)	.214	0.007 (0.974)	0.226	-0.613 (0.143)	0.413
Percentage Female	0.0387 (0.402)	0.046	0.0326 (0.461)	0.044	0.074 (0.246)	0.063
Organization size controls	No		Yes		Yes	
Time trends	No		Yes		Yes	
Industry-specific time trends	No		Yes		Yes	
Country-specific Time trends	No		No		Yes	

Table 14 displays the results from three model specifications of Employee Satisfaction score on ROA. Regression coefficients and standard errors are displayed. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Mediation Analysis

Finally, I conduct a Sobel-Goodman mediation analysis to explore whether Employee Satisfaction mediates the relationship between CSR and CFP. I include the demographic control variables and company dummies to mimic the fixed effects models used above. I run additional specifications which controls for time shocks and organization size. Results are reported in Table 15. According to the analysis, employee satisfaction mediates between -143% and 206% of the CSR-CFP relationship, and these results are not significant.

Table 15: Mediation Analysis

	Model 1	Model 2	Model 3
Indirect effect	0.0129 (0.0543)	0.0090 (0.1436)	-0.0188 (0.2651)
Direct effect	-0.0219 (0.4461)	0.0008 (0.9784)	0.0096 (0.8768)
Total effect	00.0090 (0.7531)	0.0097 (0.7337)	-0.0091 (0.8841)
Proportion of total effect that is mediated	-1.4262	0.9211	2.0578
Demographic Controls	Yes	Yes	Yes
Organization size controls	No	Yes	Yes
Time trends	No	Yes	Yes
Industry-specific time trends	No	Yes	Yes
Country-specific Time trends	No	No	Yes

Table 15 presents the results from a Sobel-Goodman mediation analysis. CSR score is the independent variable, Employee Satisfaction is the mediator, and ROA is the dependent variable. P-values are reported in parenthesis. Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix B

Testing multicollinearity between dimensions of CSR

I conduct an analysis to test for multicollinearity between dimensions of CSR because these dimensions are correlated (see Table 2) and theoretically related. The results are reported in Table 16. There is a high degree of multicollinearity between CSR dimensions when controlling for company fixed effects; therefore, these dimensions must be analyzed separately for fixed effects models.

Table 16: Variance Inflation Factors

CSR Dimension	VIF
Environmental CSR	14.05
Social CSR	12.74
Governance CSR	17.74
CSR Controversies	3.37

Table 16 displays the VIF of the various CSR dimensions. The model includes company fixed effects and controls for organization size, global time trends, industry-specific time trends, and country-specific time trends.