Erasmus University Rotterdam

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Financial Economics

Master Thesis

Shaping the Future: CFOs, CEOs, and the Politics of Corporate Responsibility

Name: Valéry de la Haije

Student Number: 615107

Supervisor: Dr. H. Zhu

Co-reader: Dr. J. Lemmen

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Abstract

This study investigates the influence of CFO and CEO political ideology on Corporate Social Responsibility (CSR) performance and firm value within S&P 500 firms from 2007 to 2020. We conduct robustness checks, including ESG rating metrics and comparison with existing literature. Our findings indicate that liberal-leaning CFOs do not significantly affect overall CSR performance but enhance environmental while diminishing governance performance. This points to the fact that the influence of the CFO is not yet large enough to implicate personal values within CSR policies.

Notably, CFOs on the board amplify their liberal effect on CSR, contrasting with CEOs. Liberal alignment between CFOs and CEOs negatively impacts CSR performance. However, it has limited impact on firm value, except when the CFO is not on the board, resulting in a modest negative effect. Additionally, during Democratic presidential administrations, liberal CFOs exhibit substantial CSR performance improvements. These findings hold practical implications for board appointments and investor considerations, underscoring the significance of CFOs' political ideology in shaping CSR outcomes.

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1. Introduction

"Progress is impossible without change, and those who cannot change their minds cannot change anything". The quote by George Bernard Shaw addresses the current landscape we're in, as we become more aware of the limited resources and protecting the earth (Shaw, 2007). The concept of 'sustainability' or 'sustainable development' found its origins following the report 'Our Common Future', published in 1987 by the World Commission on Environment and Development (WCED, 1987), which addresses the "global view" regarding the future of our planet (Mebratu, 1998). Sustainability has reached business agendas, as businesses, try to incorporate within their business model and strategies a balance along economic, ecological, social, and cultural value creation (Danciu, 2013; Porter & Derry, 2012).

The idea of executives that the benefits of implementing sustainability at the core of the business strategy are outweighed by the costs, has been under discussion. The implementation of sustainability fosters innovation and this allows for driving a competitive advantage through stakeholder engagement (Seebode et al., 2012; Whelan & Fink, 2016; Verbeke & Tung, 2013; Willness & Jones, 2013).

As firms increasingly prioritize sustainability, they have explored diverse interpretations and concepts for its implementation and measurement. The "Environmental, Social & Governance (ESG)" framework offers a comprehensive metric for measuring a company's sustainability performance, enabling quantification and actionable insights, often leveraged by investors (Gibson et al., 2020). The adaption within business models and strategies is addressed as 'Corporate Social Responsibility' (CSR), considered to be the business behavior that include public and stakeholders' considerations (Dahslrud, 2008; Kassel, 2012). This paper differentiates between ESG as a measuring methodology and CSR as a reflection of business behavior, even while ESG expressly covers corporate governance (Raghavendra Rau & Yu, 2023).

Building on these foundational concepts, this research delves into the role of key executive figures. The main goal within this research is to examine if CFOs personal values and beliefs have an impact on the CSR performance of firms and how this relates to the ideology of the CEO. This will be examined by using a sample of CFOs and CEOs working within S&P500 companies between the 1st of January 2007 upon 31st of December 2020. ESG scores from the MSCI ESG IVA data are used as measurement for the CSR performance of companies. Political donation data is obtained for the measurement of the political ideology, on which we construct a political liberalism score for the CFO and CEO, following the methodology of Chin et al. (2013) and Gupta et al. (2017). We control for firm and executive characteristics. We include fixed effects such that we can control for year, industry, and state political effects. Multiple hypotheses for this research are constructed and these are tested by doing OLS regressions. By analyzing the findings, we find that these have some practical implications. The following research question will be examined within this research:

"How do the political preferences of the CFO influence the CSR performance of companies, and how does this relate to the ideology of the CEO?"

Sustainable awareness has led to an increase interest in ESG activities by investors, consumers, and regulators. Pressure by investors and stakeholders can be a driver to undergo into sustainable activities and this has led nowadays to a standard reporting of reporting of ESG activities (Friedman et al., 2021). The overall literature has divided the drivers of CSR for the incorporation in the business strategy into the of firms into internal drivers and external drivers (Chin et al., 2013; Singh et al., 2019; Vashchenko, 2017). The literature has focused mainly on the external drivers, and to a smaller extent on the internal determinants (Chin et al., 2013). As the literature is even more limited concerning the role of executives, with their values and characteristics as determinant on the CSR implications on the firm, it is of relevance to understand this relationship.

To translate sustainability into business practice, it is essential to develop an effective strategy in which the reinforcement of the strategy depends on leadership that prioritizes cultural integration and organizational commitment (Epstein & Buhovac, 2010). Financial benefits in the short term are often used by managers for the justification of an effective translation, however, the value lies in the fact that sustainability practices offer resilience in the future. It allows companies to identify detrimental trends and manage unexpected events effectively such that they can avoid crises and get performance back to the old level after a crisis (Ortiz-de-mandojana & Bansal, 2016).

According to the Upper Echelons Theory by Hambrick and Mason (1984), the CEO's traits and values influence policies, structures, strategies, and performances (Boeker, 1997; Papadakis & Barwise, 2002; Chatterjee & Hambrick, 2007; Zacharias et al., 2015). While most of the research has concentrated on the characteristics of CEOs, findings from Harrison and Malhotra (2023) underline the joint influence of CEO and CFO personalities on a firm's strategy.

Today's leaders must balance a variety of demanding and competitive tasks, making discretion merely one of the elements impacting business choices. The cooperation dynamics between CEOs and CFOs have become common in modern organizational structures (Denis et al., 2012). CFOs emerge as the "corporate conscience," stressing risk management and strategic caution, while CEOs are perceived as the "visionary leaders" pushing growth and charting strategic courses (Tulimieri & Banai, 2010). Effective coordination between the CEO and CFO is key for successful plan implementation (Chen et al., 2018). The strategic CEO-CFO collaborations may help businesses improve their financial performance, and the CEO's interactions with senior management teams can further affect organizational results (Han et al., 2015; Qiao et al., 2020; Gerstner et al., 2013).

Economic, social, and environmental factors are closely linked to the CFO's role in determining a company's long-term objectives (Kuehn, 2010). CFOs play a determinative role in

evaluating the viability of CSR projects and handling stakeholder communication. The efficiency of ESG reporting by the CFO ultimately depends on how well the firm can define goals, develop efficient means of achieving them and evaluating these goals (Dann & Galer, 2022; Egon Zehnder International, 2008; Nolop, 2012). Despite being sometimes overlooked, transparent reporting on ESG performance may considerably advance ESG activities by generating confidence (O'Riordan et al., 2015; Zorn, 2004). Moreover, the CFOs have significant control over the amount of funds that gets allocated to CSR programs (International Federation of Accountants, 2013).

This paper will build upon the Upper Echelons Theory which show that the value and beliefs of the CFO and CEO are represented within their political ideology. The Upper Echelons Theory with the individual characteristics and values of the CFO have not been researched widely within the literature, as stated by Velte (2020). Since only a few researchers investigated the impact of individual characteristics and values of the CFO on CSR, it could be relevant to investigate this topic (Wang et al., 2021; Sun and Rakhman, 2013; Bose et al., 2022).

The effect of individual characteristics and values of CEOs as internal driver on CSR performance have been researched widely as scholars have investigated CEO confidence (McCharty et al., 2017), CEO power and tenure (Velte, 2020), CEO narcissism (Petrenko et al., 2016) and CEO's ability (Yuan et al., 2017). The effect of political preferences of executives and CSR practices have been reviewed to a smaller extent, especially by Chin et al. (2013) and Gupta et al. (2019) regarding political preferences of the CEO and Gupta et al. (2017) on the firm level by using employee ideologies. The effect of political preferences of the CFO on CSR performance has not been researched earlier, which can give valuable insights for the literature. Moreover, analyzing the dynamics between these executives can be useful for companies' decisions.

This paper extends existing literature by examining the impact of the political ideology of the CFO on CSR performance. It also contributes to the understanding of how political ideology affects firm value and sheds new light on interactions between CEOs and CFOs who share the same ideology. Additionally, it provides evidence that the impact of a liberal-leaning CEO on CSR practices holds over a broader and more recent timeframe. The study uses the MSCI ESG IVA database, chosen for its comprehensive governance data, in contrast to the MSCI ESG KLD database used in prior research (Chin et al., 2013). Furthermore, the analysis delves into individual sustainability pillars to gain deeper insights into their effects.

The findings have some practical implications, as it can be useful for board appointments, recruitment decisions for a new CFO or CEO and for possible explanations regarding the firm value. In addition to this, the ideology of a newly appointed CFO or CEO can give an investor useful information for their investment strategy. Robustness checks with different ESG data are done and an additional DiD test is performed. Although we have taken steps to ensure external validity in this study, it is crucial to understand that there are inherent limits in any research.

Within the remainder of this paper, we first elaborate within the theoretical framework on the definitions and the background literature. Based on the literature, we formulate four hypotheses for this research. The construction of the sample and the methodology for this paper will be described. The findings will be discussed and compared to the existing literature. Finally, we draw conclusions on this paper and discuss limitations and recommendations for further research.

2. Theoretical Framework

In the first part of the theoretical framework, we need to determine how CSR can help to achieve the sustainability goals. Next, the foundations, the definitions and the determinants of CSR will be discussed. The second part will focus on how political ideology is defined, how values are connected to ideologies and the implications for the business strategy. The last part focuses on creating firm value and the interconnection between the previous parts. Subsequently, four hypotheses will be formulated that build upon the literature.

2.1 Sustainability

2.1.1 From Sustainability to CSR

In 2015, the United Nations established a new sustainability model for businesses that aligns with the Agenda for Sustainable Development. The 17 main Sustainable Development Goals (SDGs) assist businesses in choosing and ranking topics to corporate sustainability. Furthermore, taking into account the particular aims aids in the alignment of methods (Opoku, 2016).

CSR is considered to be effective to reach the SGs because the social and environmental concerns can be adapted in the business operations (Agudelo et al., 2019). The natural-resource-based view for companies is an explanation for the rise of sustainable development agendas driven by CSR (Moon, 2007). Resources and capabilities development is mainly driven by the natural environment. Following this, environmentally sustainable economic activities are facilitated by capabilities in which strategy and competitive advantages are rooted. This specially holds for strategies regarding sustainable development that can enhance efficiency and cut costs (Hart, 1995).

In addition to this, Sánchez-Teba et al. (2021) acknowledge that CSR is further developing towards sustainability. We consider that CSR is a crucial element to reach the objectives regarding sustainability.

2.2 Corporate Social Responsibility

2.2.1 Foundation & definitions

The history of CSRs definitions and foundations goes back to the beginning of the 1930s. The first distinction between companies their economic, ethical, legal, and discretionary responsibilities was made by Carroll (1979). Throughout the years it became important on how to operationalize CSR and how the processes of decision-making should be visualized which resulted in a more comprehensive framework called the "Pyramid of Corporate Social Responsibility" in 1991. This was a helpful tool for executives who now had to balance their commitments to a broader range of involved parties (Caroll, 1991; Agudelo et al., 2019; Nalband & Kelabi, 2014; Ehie, 2016).

The pyramid consists of four main responsibilities in which layer 1 serves as the foundation of the pyramid and stands for the responsibilities on the economic side. Layers 2 and 3 serve as the firm's responsibilities legally and responsibilities ethically, which determines beyond law-restricted actions. The last layer is the contribution to the life quality of the society.

Van Marrewijk (2003) viewed CSR from the angle of the society, as he believes that changing societal roles and responsibilities are the driver for corporate challenges, with CSR being the strategic response. Right strategic decisions allow for full sustainable integration of CSR, according to the holistic interpretation by Van Marrewijk (2003). Other concepts such as engagement with stakeholders, corporate citizenship, business ethic, Creating Shared Value (CSV) and corporate sustainability are pointed out as interrelated by Carroll (2015) (Porter and Kramer, 2011). He states that within the socially responsible business movement, CSR can be seen as the central piece and a solid benchmark (Carroll, 2015).

Due to the large quantity of definitions for CSR, there is not one specific definition, given the biased character of definitions in the direction of interests of scholars (Van Marrewijk, 2003). We are not able to analyze from a single disciplinary point of view (McWilliams et al., 2006). To create an unbiased definition might be difficult, given the lack in methodology for verification (Dahlsrud, 2008).

Sarkar and Searcy (2016) state that the CSR definitions over time are supported by six recurring and durable dimensions, namely, sustainability, stakeholders, social, ethical, economic, and voluntary. This paper uses the definition of Sarkar and Searcy (2016) that is formulated upon these dimensions: "CSR implies that firms must foremost assume their core economic responsibility and voluntarily go beyond legal minimums so that they are ethical in all of their activities and that they take into account the impact of their actions on stakeholders in society, while simultaneously contributing to global sustainability". The definition is an extension of the definition used by Chin et al. (2013) and Gupta et al. (2017), as it is important to capture all dimensions within CSR and a more recent definition is required.

2.2.2 Determinants

As stated earlier, the overall literature has divided the determinants of CSR-related behavior of firms into internal determinants and external determinants (Chin et al., 2013; Singh et al., 2019; Vashchenko, 2017). The external determinants that are determined within the literature are government interventions, activism and institutional pressure, social influence, and consumer influence. Moreover, globalization puts even more pressure on the accountability of firms regarding the environment and society (Lenssen et al., 2010; Graafland, 2018; Briscoe & Safford, 2008; Kim & Lee, 2012; Muthuri & Gilbert, 2011).

We focus in this paper on the internal determinants of CSR performance. CSR is for the most part determined by the degree of pressure a firm experience from stakeholders. The amount of pressure is on his turn dependent on the size, reputation, and internal strategy (Gupta et al., 2017). Next to this, important internal determinants of CSR are the behavior of managers, the ethical corporate culture, organizational competencies, and top management commitment (Shafer et al., 2007; Yin & Zhang, 2012; Ikemba-Efughi & Raj, 2020; Al-Reyaysa et al., 2019).

Next to the behavior of managers as significant determinant (Ikemba-Efughi & Raj, 2020), the objective characteristics of managers, being more cost driven, and the subjective characteristics, the perception of CSR, are also determinable for the CSR activities. Overall, Fabrizi et al. (2014) shows that the CSR activities are driven by the characteristics of the CEO.

Hemmingway and Maclagan (2004) find that personal values of individual managers can foster the implementation and adoption of CSR activities, if the values of an individual are represented within these CSR activities. Considering that Hemmingway and Maclagan (2004) found a relation between the managers their personal values and CSR activities, it is interesting to focus more on the personal values, represented by the political ideology, of the two most important managers, the CEO and CFO, and this effect on CSR performance.

2.2.3 Business implications

As stated earlier, CSR is a solid approach within the business operations to achieve the sustainable goals (Moon, 2007). For the economic relevancy for this paper, it is important to investigate what the implications for the firm value are as result of CSR. Initially, firm value is shown to be dependent on various factors such as the degree of corporate governance, capital structure company age, company size, financial performance, and profitability (Brown & Caylor, 2006; Masulis, 1983; Siahaan et al., 2014; Sucuahi & Cambarihan, 2016). The literature on factors influencing firm value has been extended in recent years with CSR as a possible new (in)direct driver.

We see some mixed results but the literature points towards a positive effect on firm value. The evidence towards the negative side point out that managers find a "ideal" CSR level via a cost-benefit analysis, that the present value of the cash flows in the future is not maximized in case CSR

activities are chosen to be funded by managers within publicly traded firms and that the costs related to CSR activities are at cost of firm value (Mackey et al., 2007; McWilliams and Siegel, 2001; Friedman, 1970)

On the other side, the main objectives are achieved more effectively as the core business activities are supported through the strategic approach of CSR (Burke & Logsdon, 1996). Engagement in CSR has a positive influence on the firm value as shown by the internal and external corporate governance, this holds especially for the internal social enhancing CSR activities (Jo & Harjoto, 2011). Firm value is indirectly positively influenced by CSR through reduction of excessive risk taking as multiple stakeholders' interests need to be satisfied by allocating resources in a way that they deviate from the optimal risk-taking level (Harjoto & Laksmana, 2018). By executing a diversified CSR structure, which represents the number of actions related to CSR that managers show commitment to, firm value will be enhanced (Bouslah et al., 2023). By implementing CSR practices, employees are more motivated, the relation between customer and supplier strengthens, long-term growth is boosted, dividends are increasing, and financing costs are reduced (Chang et al., 2022).

2.3 Political Ideology

2.3.1 Foundation & definitions

The question arises, what is a sufficient definition for political ideology, such that we can test the effect on CSR performance? The concept 'political ideology' is essential for a democracy to function well. The concept shows that within a coherent system, the political opinions and attitudes are linked together (Carmines & D'Amico, 2015).

Campbell et al. (1960) show that the general political worldview of an individual is described by a set of stable and interconnected beliefs, and this forms the political ideology of an individual. Converse (1964) came up with an alternative concept in which the conformation of the interdependence of ideas or attitudes form a belief system, which is ideology. Erikson and Tedin (2003) build on this definition and define political ideology as a "set of beliefs about the proper order of society and how it can be achieved". This definition is considered as general and somewhat uncontroversial for defining political ideology and is therefore a useful definition within this paper (Jost et al., 2009).

Scholars consider that political ideology also has a shared nature in which a community or group has a certain vision of the world and of the way it must be structured (Denzau & North, 1994). The focus within political science literature has been on the latter group nature of ideology and less on idiosyncratic belief (Carmines & D'Amico, 2015). For a particular group or society, political ideology allows for identification, as these shared values, opinions and beliefs are made concrete and well-defined within a specific ideology (Freeden, 2001; Knight, 2006). It enables interpretation as people can make assumptions or assertions such that they can specify a tolerable way to achieve ideals

regarding society, economy, or politics. Following this, it results in different perceptions on the way society must be structured (Jost, 2006).

2.3.2 Values to ideology

Schwartz (1992) states that "values are general beliefs that indicate desirable behaviors but can be applied to many different situations in guiding specific actions or beliefs". As we use values in viewing the world and within our daily interactions with others, these are intuitively understood. Feldman (1988) addresses examples of values in the form of opinions about the free enterprise system, the equality of opportunity and economic individualism. The more modest social welfare policies are supported by humanitarianism that have the feeling to address the problems of the people in need. Egalitarianism on the other hand believe in the more extensive role for the government regarding the economy (Feldman & Steenbergen, 2001). People have different political values, and these political opinions are a result of these values (Feldman, 1988).

Rokeach (1973) showed how political ideology can be attached to these political values by examining to what extent freedom and attitudes towards equality are fundamentals for the most well-known ideologies: capitalism, socialism, communism, and fascism. Haidt et al. (2012) and Graham et al. (2012) extended this framework by checking the level of morality through different dimensions and showing to what extent it serves as fundamentals. Liberal ideologies are recognizable as they rely on the two moral dimensions of care and fairness to a greater extent than conservatives. On the other hand, conservatives rely on three more moral dimensions, loyalty, authority and traditions, and sanctity.

The distinction between liberal-conservative, initiated as the left-right distinction, is seen as the classical standard to evaluate political thinking in the United States (Hutton et al., 2015; Briscoe & Joshi, 2017). Both sides differ in their perception about social change, in which liberal are supportive and conservatives are opposing, and the degree of acceptance of inequality, in which liberal are rejective and conservatives are acceptive (Jost et al., 2008). Within the political spectrum in the United States, political liberals are democrats, while political conservatives are considered as republicans, explained by the level of risk acceptance of liberals and democrats and vice-versa (Kam & Simas, 2010).

Political egalitarianism is more supported by the political left as they believe in a more extensive role for the government regarding the economy (Feldman & Steenbergen, 2001; Maynard & Mildenberger, 2018). Moreover, political left is pro fairly income redistribution and liberals tend to make plans towards social change (Jost et al., 2008; Ha, 2012). Lastly, the two dimensions of care and fairness are translated to a supportive attitude towards the welfare state by liberals, considering the shared responsibility (Graham et al., 2012; Armingeon, 2006).

In contrast, the political right supports less government intervention within the economy, only favor the income redistribution to a small extent, consider the welfare state less crucial and are in favor

of the maintenance of privileges and distinctions that are class-based (Huber, 1989; Marks et al., 2006). Moreover, individualism is valued by conservatives, and authority is respected (McClosky & Zaller, 1984).

Although, we cannot state that there is a clear separation between political left and right as the social dimension and economic dimension can be seen individually (Carmines & D'Amico, 2015). To have a clear measure of political ideology in this paper, we do assume political left and right.

2.3.3 Business implications

The Upper Echelons Theory of Hambrick and Mason (1984) shows that executives within the top management their personality, values, and experiences are reflected within the decision-making process. Strategic choices have been shown to be affected fundamentally recently by the political ideologies of executives (Chin et al., 2021; Elnahas & Kim, 2017; Gupta & Wowak, 2017; Semadeni et al., 2022).

Studies on the CEO implied that the ideology of the CEO has influence on the investment decisions, in which republicans undertake fewer M&A activities (Elnahas & Kim, 2017), and that differences between the CEO's political ideology and the national political climate leads to less R&D spending and increasing retained earnings (Semadeni et al., 2022). Moreover, political ideologies of directors have influence on the decisions made by the board and board structures (Gupta & Wowak, 2017). Considering that personal values and beliefs of executives influence strategic choices, it is interesting to see the effect on the firm's value.

Firms with republican leaning-managers tend to have lower firm values, measured in Tobin's Q. The explanation for this is the overinvestment in lobbying groups and the higher agency costs of free cash flow (Unsal et al., 2016). More diversity of the political preferences of board members also has a role in explaining the improvement in firm performance (Kim et al., 2013; Hudson & Morgan, 2023). Moreover, liberal CEOs tend to have a positive effect on the degree of innovation. This is associated with a higher firm value, although stock return volatility increases (Kashmiri & Mahajan, 2017). Regarding the shareholders, Bayat and Goergen (2020) finds that shareholders are favored by a conservative CEO, as he applies strategies that are favorable for them, in the form of higher dividend payout.

With previous literature as foundation, it is scientifically relevant to investigate this relation between political ideology and firm value further in a more recent time span.

2.4 Hypotheses

Within the definition of CSR by Sarkar and Searcy (2016), the emphasis lies on the society, the environment, and the required change in actions. All these three factors are considered in the values of liberals compared to conservatives, as shown in Section 2.3.2. By rational reasoning, we would expect

that liberal-leaning executives support more CSR activities. This reasoning is strengthened by Di Giuli and Kostovetsky (2014) who show if directors and CEOs are democratic, a firms obtain a higher CSR score. Within a sample of S&P 500 companies, they show that Republican-leaning companies spend \$80 million less on CSR than Democratic-leaning firms, especially on the social part. Regarding the acknowledgement of the scientific consensus of global warming, liberals are more acceptive than conservatives, who are less likely to express a belief. Liberals are more likely to take on action regarding global warming (Bolsen et al., 2015).

There are no earlier studies on the impact of political ideology of CFOs on CSR performance, although, scholars do have found an effect of liberal-leaning CEOs on CSR performance. It showed that the role of the CFO regarding CSR has become crucial (Denis et al., 2012; Tulimieri & Banai, 2010; Dann & Galer, 2022; EgonZehnder, 2008; Nolop, 2012). CSR activities seem to be influenced by the individual characteristics and values of CFOs, in line with the Upper Echelons theory (Wang et al., 2021; Sun & Rakhman, 2013; Bose et al., 2022). Moreover, personal values of individual managers can encourage the implementation and adoption of CSR activities (Hemmingway and Maclagan, 2004).

By considering all the previous mentioned, we would expect that liberal-leaning CFOs have a positive impact on the CSR performance. The following hypotheses can be formulated, in line with Chin et al. (2013), Gupta et al. (2019) and Markoczy et al. (2023):

Hypothesis 1a: The CSR performance of a company is positively influenced by a more liberal-leaning CFO

Hypothesis 1b: The CSR performance of a company is positively influenced by a more liberal-leaning CEO

It is interesting to examine the separate effect of both executives, such that the relative importance can be addressed. Although Harrison & Malhotra (2023) underline the joint influence of CEO and CFO personalities on a firm's strategy, the literature points towards the fact that the CEO is determinative for the course of the company (Boeker, 1997; Papadakis & Barwise, 2002; Chatterjee & Hambrick, 2007; Zacharias et al., 2015). Considering the decisive role of the CEO, we would expect that a liberal-leaning CEO will have a stronger effect than a liberal-leaning CFO. This allows us to formulate the following second hypothesis:

Hypothesis 1c: The effect of a liberal-leaning CEO will be stronger than the effect of a liberal-leaning CFO on the CSR performance of a company

Yang and Zhao (2014) show that dual leadership, being on the board and being CEO, allow coordination of actions by the board and faster implementation. The long-term vision and goals are overseen by the board, in which the strategy regarding CSR is shaped. If the CEO is on the board, there is more board vigilance, in which the board better monitor the actions of other executives (Finkelstein and D'Aveni, 1994). Greve and Mitsuhahsi (2007) demonstrate, building on the Upper Echelons Theory, that concentrated power within the top management team causes greater rates of strategy changes. A CEO's and CFO's decision-making authority ultimately rests on their position in relation to other executives and the board of directors

According to Li and Lee (2022), CFOs that are on the board greatly improve the organization's information disclosure, this shows the relative power of the CFO regarding information. Mobbs (2018) state that CFOs that are on the board of directors often have more influence over financial choices, which results in smaller cash holdings and less financial restrictions inside businesses. By giving CFOs additional resources and strategic leeway to deploy cash and support CSR projects inside the firm, this increased financial flexibility might be of influence on CSR initiatives.

This shows the increase in power of a CFO or CEO that is on the board and that this allows for advancements towards CSR activities. Therefore, we can formulate the following two hypotheses:

Hypothesis 2a: Being on the board of directors as CFO will amplify the effect of a liberal-leaning CFO on CSR performance

Hypothesis 2b: Being on the board of directors as CEO will amplify the effect of a liberal-leaning CEO on CSR performance

Cooperation dynamics between CEOs and CFOs have become common in modern organizational structures and on personality level, the firm's strategy is better reflected by both the CEO and CFOs combined values and preferences (Denis et al., 2012; Harrison & Malhotra, 2023). Considering that within the executive structure and decision-making, financial considerations have become of higher importance, the responsibility of the CFO to support the CEO has become more relevant (Zoni & Merchant, 2007; Skaerbaek & Tyrggestad, 2010). CEO-CFO interactions within senior management teams can further affect organizational results (Qiao et al., 2020; Gerstner et al., 2013).

It is interesting to test if alignment in the political preferences of both executives will influence CSR performance compared to opposing views. Under the condition that the political ideology between the CFO and CEO can differ, we can formulate hypothesis:

Hypothesis 3: In case of aligned political views of the CEO & CFO, the effect of liberalism on CSR performance is stronger than under opposing views

In succession of the previous hypotheses, we would expect that liberal-leaning executives positively influence the CSR performance of a company. For the economic relevance of this paper, it is interesting to investigate the implications on firm value that flows out the political ideology of these executives.

Liberal-leaning executives tend to have a positive influence on firm value (Unsal et al., 2016; Bayat & Goergen, 2020; Kashmiri, 207). The long-run firm valuation is enhanced and shareholders benefit since M&A activities are more likely to be undertaken by a liberal-leaning CEO (Elnahas & Kim, 2017). Aydogmus et al. (2022) show that the ESG positively impact firm value and firm profitability, with the governance and social score having the strongest effect.

As the previous hypotheses indicate that liberal-leaning executives positively influence the CSR performance, by reasoning we might expect that liberal-leaning executives have a positive effect on firm value and that this allows us to form the third hypothesis:

Hypothesis 4: Firm value is positively influenced by more liberal-leaning CFOs & CEOs

3. Data & Methodology

Within this chapter we will discuss which data is obtained for our research, how the variables are constructed, what methodology we use, and which regressions will do to test our hypotheses.

3.1 Data & Sample

3.1.1 Construction

Within this research, we have used panel data from the Standard & Poor 500 (S&P 500) from the 1st of January 2007 upon the 31st of December 2020. We have selected only CFO or CEOs that have been active within the respective role in a given year. For the collection of the donation data, we used the Federal Election Commission (FEC) website. Moreover, we used the Center for Responsive Politics website to gather additional data. With this donation data, we can build a political index which displays the political ideology of a CFO or CEO.

We used the MSCI ESG Intangible Value Assessment as proxy for the CSR performance. The ASSET ESG and CSR Strategy Score are retrieved from the Thomson Reuter's ASSET4 database which we will use for robustness checks. The data for the CSR performance on the MSCI ESG IVA database is available from 2007 which limits the use of data for earlier periods. Specific data regarding both the CFO and CEO is retrieved from the Wharton Research Data Services (WRDS) ExecuComp database and Thomson Reuters Eikon is used to collect the financial data for the companies.

We follow Gupta et al. (2017) and Chin et al. (2013) for the construction of the sample size. We only look at CEOs and CFOs from the beginning of their role, such that we can concentrate the monitoring of CSR performance. If the CFO or CEO have worked for less than two years within the firm, they are excluded from the sample. Only firms where all the required data regarding the CFO or CEO, the financial data and the ESG score is available for the regressions, will be used. We drop firms that are active in sectors that contains less than five firms within the sample to make sure that we have strong industry-level CSR standards. By doing the previous mentioned, we can give a representable setting for real-life cases. In total we end up with 8294 firm-year observations, with in total 389 firms in the sample. CFOs or CEOs can switch in function, or a new CFO or CEO can be introduced throughout the year. This will result in more than one CFO or CEO in a specific year within a company. Although this will be limited, this will show somewhat less observations for the regression for the fourth hypothesis.

3.1.2 Dependent variables

ESG Score & robustness

As stated earlier, this paper refers to ESG as the framework that is used to measure the output and CSR as the concept for specific firm behavior (Raghavendra Rau & Yu, 2023).

We measure the CSR performance through the ESG Score as earlier research have shown that this is a representable measurement for CSR performance (Buchanan et al., 2018; Chin et al., 2013; Gupta et al., 2020; Gupta et al., 2021; Gillan et al., 2021; Kim et al., 2013)

The data for the CSR performance is collected from the MSCI ESG Intangible Value Assessment (IVA). MSCI uses mainly governance tools, global equity indices and performance analytics. The companies are compared to peers within their sector to make sure that ESG driven opportunities or risks are detected which are not seen within the standard analyses. The bases for the rating will be the risk management of these companies and their long-term value creation that is not captured by traditional reporting, The information is therefore gathered from websites of firms, environmental and social reports, securities filings, and annual reports (MSCI, 2023).

THE MSCI ESG IVA database analyzes more than 5,500 firms which have a broad cover worldwide. 34 key ESG issues are determined by looking at the intersection between the key industry ESG issues and companies their core business. A three-phased analytical approach is used by starting to identify four to six key ESG trends and issues for the specific industry where externalities are generated regarding society or environment. Secondly, the individual size of exposure is determined while resilience, through risk management and the development of a robust strategy, is considered for the individual companies. Lastly, a weighting model for the sector-specific key issues is used to rate and rank companies by comparing them to peers within the sector. These ranks and rates are annually updated (MSCI IVA ESG, 2023).

We can dive deeper within this paper into the effect on the individual pillars separately as the MSCI ESG IVA database provides the separate scores. The KLD database has been integrated in the MSCI database in 2010. This database is used by Gupta et al. (2019), Gupta et al. (2021) and Chin et al. (2013) such that we can consider the MSCI ESG IVA database as an appropriate choice to measure the impact of political ideology on CSR performance. It is of importance to do robustness checks such that we know that the casual inference is valid. ESG ratings can namely show substantial differences with different ESG rating providers as rating agencies use different methods to provide company-specific ratings. The same firm can receive a high ranking from one source and a poor ranking from another due to differences in how ESG scores are calculated by ratings provider (Li & Polychronopoulos, 2020).

From Thomson Reuters' ASSET 4 database we obtain two other measures for CSR performance, the ASSET4 ESG Score and the CSR Strategy Score which will be the dependent variables in the robustness check. Based on the public information by firms, 10 key areas (emissions, environmental product innovation, human rights, shareholders, etc.) are determined in which a ESG Score is created by combining with proportionate weighting depending on the number of metrics within each category, demonstrating a company's commitment, performance, and effectiveness to ESG (Thomson Reuters Eikon, 2023). The Thomson Reuters' ASSET 4 database also provides a CSR Strategy Score, which evaluates how well a business communicates its commitment to integrating social, financial, and environmental considerations into all its daily decision-making processes.

Firm value

For the measurement of firm value, Tobin's Q is used as persistent measure. The use of Tobin's Q as measurement of firm value and the formula used for the measurement of Tobin's Q is supported by (Unsal et al., 2016; Hudson & Morgan, 2023; Kim et al., 2021; Kashmiri & Mahajan, 2017), who have shown the relation between political ideology and firm value

The methodology of Lewellen and Badrinath (1997) is used in this paper for the estimation of the ratio:

Tobins $Q = Market \ value \ of \ the \ firm \ / \ Replacement \ value \ of \ the \ firm$

Tobin's Q as measurement of firm value and the formula used for the measurement is supported by (Unsal et al., 2016; Hudson & Morgan, 2023; Kim et al., 2021; Kashmiri & Mahajan, 2017), who have shown the relation between political ideology and firm value. Moreover, Kashimire & Mahajan (2017) state that for a key long-term, forward-looking proxy of firm value and firm risk, Tobin's Q is an effective instrument.

3.1.3 Independent variables

Political Ideology

The independent variable, the CEO political liberalism of the CEO and CFO, is retrieved from the Federal Election Commission (FEC) website and the research institute, the Center for Responsive Politics, is also used to retrieve data for additional donation data. The donations in the United States are publicly available, such that we can obtain the donations made by both executives. Individual political contributions made to the democratic or republican party are used to measure the degree of political liberalism (Chin et al., 2013). Francia et al. (2003 & 2005) show that personal ideology is the main motivation to make individual donations. The political ideology can we consider as stable over time, such that we can address an executive as liberal or conservative over the whole period (Jost, 2006; Burris, 2001). Following this, we determine the political ideology of the executive prior to joining the company based on the donations made in the 5 years prior to the beginning of their role. We do this because a CFO or CEO might make political donations that are aligned with the interest of the firm they have started working. We consider that their political ideology holds for the whole sample period.

All the finance information regarding campaigns is monitored and disclosed by the independent regulatory agency, the Federal Election Commission (FEC). Contributions to individual candidates, political action committees (PACs), local, national, and state parties and to campaign committees for federal office above 200 dollars are recorded. Useful information regarding the contributor such as name, date, amount, and employer is given. All the names within the contribution data have been matched to the data from the Wharton Research Data Services (WRDS) ExecuComp database.

The matching process with the ExecuComp names was an extensive process which was partly done manually as there was a large amount of alternative spelling for the names of the CFOs and CEOs on the FEC website and the Center for Responsive Politics website. We also checked for cases in which names of executives were very much alike the names in the donation data, but the identities did not match. We checked for their identity through the website of companies, Hoover's Online, MergentOnline, Linkedin and other online platforms.

Following Chin et al. (2013) and Gupta et al. (2017), we construct a liberalism index based on four indicators, in which all the facets of the information are captured. The following indicators are constructed to avoid assignment of ideology score by incidental behavior:

1. The behavioral commitment

of donations to democrats
of donations to democrats and republicans

2. Financial commitment

Total \$ amount of donations to democrats

Total \$ amount of donations to democrats and republicans

3. Persistence of commitment

of years in 5 – year time frame with donations to democrats # of years in 5 – year time frame with donations to democrats and republicans

4. Scope of commitment

of distinct democratic recipients donations

of distinct democratic and republican recipients donations

To avoid scores of zero, we add 0.1 to the numerators and 0.2 to the denominators. Only contributions made to PACs that are obviously Democratic or Republicans, party committees and individual candidates are included, such that you prevent that it only visualizes personal connections between the executive and the candidates. Following Chin et al. (2013) all indicators have the same weight for the overall score. A score above 0.50 indicates liberalism, and below 0.50 indicates conservatism. An executive with four contributions to Democrats and three to Republicans of respectively \$2500 and \$600, contributed to Democratic party in two separate years and contributed to Republican party in two separate years. Moreover, the executive contributed to three different Democratic recipients and two different Republican recipients. The scores are as follow:

Behavioral commitment =
$$\frac{4+0.1}{7+0.2}$$
 = 0.57

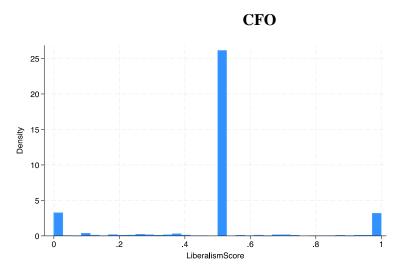
Financial commitment =
$$\frac{2500+0.1}{3100+0.2}$$
 = 0.81

Persistence of commitment =
$$\frac{3+0.1}{5+0.02}$$
 = 0.60

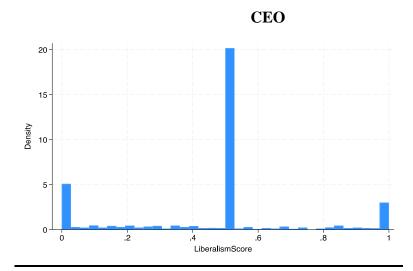
Scope of commitment =
$$\frac{3=2+0.1}{4+0.2}$$
 = 0.50

The average score is in this case 0.62, which show that the executive is relatively liberal. Within our sample, the average score for the CEO is 0.46 and for the CFO it is 0.49. The executives are overall more conservative leaning. Graph 1 and Graph 2 show that the distribution peaks at a score of 0.5, indicating CFOs or CEOs that are indifferent or have not donated to a particular party.

Graph 1



Graph 2



Board member

To establish if a CFO or CEO is one the board of directors within a specific year, we analyzed the given job title(s) of the executive in that specific year. These checks have been done partly manual to ensure that we did not miss any board position of CFO or CEOs. The literature has showed that the CEO or CFO has relatively more power when they are on the board of directors (Yang and Zhao, 2014; Li and Lee, 2022; Mobbs, 2018). *ExecutiveBoard* is a dummy variable, being 1 if the CEO or CFO is on the board, and 0 if not.

Alignment

We test if alignment in the political preferences of both the CEO and CFO can strengthen the impact of the ideology on CSR performance. The liberalism scores of both executives are determined based on the previous method. To test if alignment of a liberal CFO and CEO has effect on the CSR performance, we look at the interaction of a liberal CFO and a liberal CEO, which will be elaborated on within the regression analyses.

3.1.4 Control variables

To account for any factors that are related, we use various control variables in addition to the primary variables. We separate these control variables related to company's financials and to executive characteristics. Moreover, we control for fixed effects regarding industry, state, and year.

The following control variables are used related to a company's financials:

• *Firm size*, by taking of the total assets, the natural logarithm (Gupta et al., 2017), this measures the company's size because Initiatives within smaller companies are less effective as of the limited resources, reputation and experience (Amato & Falivena, 2020)

- *Firm leverage*, as the Debt-to-equity-ratio (Gupta et al., 2017; Chin et al., 2013), in which CSR strengths are negatively related to financial leverage of a firm (Harjato, 2017)
- Recent performance, as Return on Assets (ROA), in line with (Gupta et al., 2017; Chin et al., 2013), as it shows that recent financial performance has a positive effect on CSR performance (Cho et al., 2019)

The following control variables are used related to executive characteristics:

- *Age*, it shows that older executives tend to have a higher risk-aversion. By maintaining better CSR performance, takes away the CSR-related risk (David et al., 1998).
- *Gender*, a dummy variable is created for gender, being 1 if a CFO or CEO is a female, and for male a value 0. Females tend to focus more on CSR, as shown by Williams (2003).
- *Tenure*, by taking of the total amount of days the CFO or CEO works in the company, the natural logarithm, following Gupta et al. (2017). Personal agendas can be pursued by executives as they have worked for a long time within company within the same position, which has given them more power. Moreover, if a CFO or CEO is for a longer period within the company, he becomes more familiar with the ideology and belief systems of the company. The longer tenure can also indicate that the CFO or CEO wants to remain within an organization with such a belief system (Gupta et al., 2017). Therefore, it is important to control for this tenure.

We include fixed effects into our model such that we can reduce the impact of time-invariant, unobserved traits that are unique to each entity. These unobserved traits could be linked with the explanatory factors. Moreover, there might be factors that have an impact on the dependent variable. We account for these unobserved variables by introducing fixed effects, which lowers the possibility of omitted variable bias.

We controlled for industry by categorizing observations based on the two-digit SIC code into 12 unique industry categories, according to Fama-French, as shown in table 13. We control for state by creating categories for states the HQ of a company is located in, in which the states with fewer than 250 observations are grouped together. These results in total 12 categories of states, 11 separate states and 1 grouped. These states are also displayed in table 13. The regressions are run on dummy variables for each category that have been created.

Moreover, we controlled for unobservable year effects that could affect the dependent variable. These are time-specific shocks that are constant for all entities but vary over the sample period. Altogether, this improves the robustness of the regression such that connections are accurate displayed.

3.2 Regression analyses

The empirical approaches used to investigate the impact of executive political ideology on CSR performance and firm value are described in this chapter. Using panel data, we concentrate on CEOs and CFOs, looking at their political ideologies. To account for any confounding variables, our study uses Ordinary Least Squares (OLS) regressions in which the executives are the panels. We have corrected for heteroscedasticity within our regressions. We have computed robust standard errors for the coefficients to account for the heteroscedasticity. The OLS regressions offer the most accurate, unbiased linear estimates of the coefficients describing how the independent variables and the dependent variable interact.

To test if the political ideology of both the CFO and CEO have influence on the CSR performance of a company, we generate the following regression analysis:

Regression 1)

 $\gamma = \beta 0 + \beta 1 LiberalismScore + \beta 2 ExecutiveBoard + \beta 4 FirmCharacteristics + \beta 5 ExecutiveCharacteristics + FEi, s, y + \varepsilon$

 γ is denoted as the *ESGScore* from the MSCI ESG IVA, which represents the CSR performance of the company. The independent variable, denoted as $\beta 1LiberalismScore$ is shown as the centered *LiberalismScore*. $\beta 2ExecutiveBoard$ is denoted as the dummy variable for being on the board of directors, or not. This is already included in the regression to control for cofounding variables or alternative explanations for the relation between *LiberalismsScore* and *ESGScore*. The firm characteristics are specified as the *ROA*, the *Debt-to-equity-ratio* and the *LogAssets*. The executive characteristics are specified as *Gender*, *ExecutiveAge* and *Tenure*. We control for fixed effects in the regression by the *FEi*, *s*, *y* for *Industry*, *State*, and *Year*. The error term is represented by ε .

To test the first hypotheses, the effect of a liberal-leaning CFO and CEO on the CSR performance is tested. The $\beta 1LiberalismScore$ in regression 1 is in this case denoted as $\beta 1IdeologyCFO$, which is the centered LiberalismScore for the CFO, and the $\beta 1IdeologyCEO$, denoted as centered LiberalismScore for the CEO. The $\beta 2ExecutiveBoard$ is in this case denoted as ExecutiveBoardCfo for the CFO and ExecutiveBoardCeo for the CEO, which are both the dummy variables for being on the board as CFO or CEO. The outcomes of this regressions are shown in column 1 for the CFO and column 3 for the CEO within the regression tables 4 through 10, inclusive.

To test the second hypotheses, in which we test if being on the board amplify the impact of liberalism on the CSR performance, an interaction term is added to the previous two mentioned regressions, which is denoted as *LiberalismScore* x *ExecutiveBoard*. The outcomes of this regressions are shown in column 2 for the CFO and column 4 for the CEO within the regression tables 4 through 10, inclusive.

As shown earlier, looking at the combined and alignment of the political ideology can give valuable insights for this research. We look if the effects hold on a company level, represented by the CFO and CEO, in which the mean is taken for the all the non-dummy variables and the sum is taken for the dummy variables. Within regression 1, the $\beta 1LiberalismScore$ is the LiberalismScore on company level, and $\beta 2ExecutiveBoard$ displays the number of executives on the company level on the board. The outcomes of this regressions are shown in column 5 within the regression tables 4 through 10, inclusive.

To further test hypothesis 3, if alignment in the political preferences of both executives will strengthen the effect of the political ideology on CSR performance compared to opposing views, an interaction term is added for alignment in political ideology, for a liberal CFO and liberal CEO. This interaction term is denoted *LiberalCfo x LiberalCeo*. The $\beta 1LiberalismScore$ is split into a coefficient for *LiberalCfo* and *LiberalCeo* and $\beta 2ExecutiveBoard$ is excluded from the regression. The outcome of these regressions is shown in column 6 within the regression tables 4 through 10, inclusive.

We dive deeper into the three pillars by doing all the previous mentioned regressions again, but this time with three different dependent variables, denoted as γ : *EnvironmentalScore*, *SocialScore* and *GovernanceScore*. The outcomes of this regressions are shown in table 5, 6 and 7.

Lastly, we test hypothesis 4, in which we look if the political ideology has an impact on the firm value of a company. Therefore, we run all the previous mentioned regressions, from in which γ is denoted as *Tobin's Q*. ROA is not included as control variable within these regressions. The outcome of these regressions is shown in table 8.

For robustness checks, all the previous mentioned regressions are executed again in which γ is denoted as the *ASSET4 ESG* and *CSR Strategy Score*, the outcome of the regressions are shown in table 9 and 10.

Moreover, we perform a difference-in-differences (DiD) test to compare the differences between liberal and conservative CFOs and if alignment between a liberal president and liberal CFO have an effect on the CSR performance. We have created two groups, CFOs with a liberalism score > 0.6666 which are labeled as liberal-leaning, and CFOs with a liberalism score < 0.3334, labeled as conservative-leaning. The periods and their presidents are as followed: 2007-2008 with the republican Bush, 2009-2016 with Obama as democratic president, and 2017-2020 with Trump as republican president. The liberal-leaning CFOs are here the control group, denoted as *high* and the conservative-leaning CFOs, denoted as *low*, are the treatment group. Figure 3 is a graphical display of the results for the DiD, for both groups, where the *ESGScore* predictions are showed for the case where there is a democratic president and not. Regression 2 will be executed to test if alignment between a liberal president and liberal CFO have an effect, in which the outcome of the regression is shown in table 11:

Regression 2)

 $\gamma = \beta 0 + \beta 1 LiberalCFO + \beta 2 LiberalPresident + \beta 1 LiberalCFO * LiberalPresident + \beta 3 FirmCharacteristics + \beta 4 C foCharacteristics + FEi, s, y + \varepsilon$

3.3 Descriptive Statistics

We start with a summary of the descriptive statistics, giving a general understanding of the distribution, central trends, and dispersions of the data.

Table 1 and 2 show the summary statistics for all the variables used within the regressions. There are 4180 CEO year observations and 4114 CFO year observations. This is for the period between 2007-2020, in which the sample consist of 389 firms. In total, there are 695 CEO's and 790 CFO's, of which there are respectively 660 and 40 on the board of directors within the company. The average age for CEOs is 57 years old and for the CFOs is 53 years old. The natural logarithm of *Tenure* gives a mean value of 8.37 and 8.33. If we take the formulas:

$$e^{8.365932} = 4291.8 \ days$$

 $e^{8.3.332} = 4159.7 \ days$

We find the geometric mean of 11.7 years for the CEO and 11.4 years for the CFO. The mean for gender by 1.97 and 1.89 respectively shows that the sample is predominately male executives. The *LiberalismScore* has a mean of 0.46 for CEO's and 0.49 for CFOs, which indicates that the executives tend to be slightly more conservative leaning. The most *LiberalismScore* are situated near the value of 0.5, as distribution of values is narrow.

The *Tobin's Q* has been winsorized by the 1^{st} and 99^{th} percentile with a mean of 1.03 with a low standard deviation. This shows that the companies are slightly higher valued compared to the replacement costs of the assets.

The *ESG score* have a mean of 4.7 and 4.9 respectively, with relatively small standard deviations. Firms tend to score better on the *GovernanceScore*, with a mean of 5.5, than on the other two pillars, although the difference between the *GovernanceScore* and *EnvironmentalScore* is relatively small. Companies seem to have a higher average score for *ASSET4 ESG* and *CSR Strategy Score*, although the standard deviation is quite high which shows high variability which show that the data is more dispersed.

The control variables *ROA* and *Debt-to-equity-ratio* are, to correct for outliers, winsorized by the 1st and 99th percentile. We have taken the natural logarithm of total assets for the firm size, denoted as *LogAssets*, such that it can reduce the relative differences by stabilizing the variances and accounting for skewness.

4. Results

We dive into the main conclusions in this section of this paper. We use correlation analysis to look at the correlations between the variable. The primary regression findings give us the main insights and we do robustness tests on the results to make sure they are reliable. This all examine the reliability of our findings considering the given hypotheses. Finally, we expand our analysis by using a difference-in-difference technique in further tests with the intention of investigating causal implications and temporal effects in the dataset.

4.1 Correlation

Table 3 show the pairwise correlations between the variables used within the regressions. The first hypothesis, which expects that liberal-leaning executives have a positive effect on the CSR performance, might partially be explained by the significant correlation between *LiberalismScore* and *ESGScore* of 0.04. The *LiberalismScore* is positively correlated of 0.07 with the *EnvironmentalScore*, which could be an explanation for the correlation we found before for the main dependent variable. *ExecutiveAge* and *Gender* are significant negatively correlated with the *LiberalismScore*, indicating that older people and males are more conservative leaning.

Tobin's Q is significant positively correlated with *ASSET4 ESG*, which indicates that firms with higher firm value better perform on ESG or the other way around. Moreover, it is a small positive marginal significant correlation with *LiberalismScore*, so we would not expect any major effects there regarding the fourth hypothesis.

Gender is significant negatively correlated with the ASSET4 ESG and the CSR Strategy Score, which indicates that as the gender value increases, from female to male, there score will decrease. ExecutiveAge is positively related to these scores, indicating that if executives get older, they focus more on ESG performance.

The negative correlation of *ROA* with all the ESG performance measures indicate that ESG performance is at costs of higher recent firm performance, which is supported by Mackey et al. (2007).

4.2 Regression results

We have executed the grouped OLS-regressions in which we control for fixed effects. The R-squared within the regressions on the *ESGScore* is between 9.8% and 10.8%. This can be interpreted that 9.8% to 10.8% of the variability in the dependent variable is explained by the *ESGScore* within the regressions.

4.2.1 Hypothesis 1

First of all, to test the first hypotheses, we look at the two separate regressions for the CFO and CEO and compare the results to each other. By looking in Column 1 and 3 of table 4, we find in column 1 that for the CFO, the coefficient *LiberalismScore* is -0.00589, which is negative and almost zero, but insignificant. The coefficient indicates that if Liberalism Score increases from 0.45 to 0.55, the *ESGScore* decreases by 0.00589 points. However, we find lack of statistical evidence to support hypothesis 1a, considering the insignificant coefficient, as the effect could come from random chance.

Regarding the CEO, we find in column 3 a positive significant coefficient of 0.209 at a p-value < 0.1 of *LiberalismScore* on the *ESGScore*. This shows that when the *LiberalismScore* increases by 0.1, *ESGScore* with 0.209 points We found at a weaker level, evidence that liberal-leaning CEOs have a positive effect on the CSR performance, which is in line with hypothesis 1b.

The regressions are also executed on the individual pillars of the *ESGScore*, the Environmental, Social and Governance Pillars, within table 5, 6 and 7. With the *EnvironmentalScore* as dependent variable in table 5, we find a significant coefficient of 0.486 with a p-value < 0.0 for the CFO in column 1. If the *LiberalismScore* of a CFO increases with 0.1, the *EnvironmentalScore* increases with 0.486 points. This provides evidence that liberal-leaning CFOs have a positive effect on the environmental performance of companies.

With the *SocialScore* as dependent variable in table 6, we find that the coefficient for the CEO in column 3 is positive significant (0.232) with a p-value < 0.05. A more liberal-leaning CEO has a positive effect on the social performance of a company.

For the *GovernanceScore* in table 7, we find that a more liberal-leaning CFO has an negative effect on the governance performance of a company, as shown by the significant and negative coefficient of -0.375 in column 3. The *GovernanceScore* decreases by 0.375 points if the *LiberalismScore* increase by 0.1.

We found lack of evidence to support hypothesis 1a, but if we look at the individual pillars, it indicates that liberal-leaning CFOs have a positive effect on the environmental performance of companies but a negative effect on the governance performance of a company. We find evidence for hypothesis 1b and that this effect is driven by the social performance. The effect of the CEOs is stronger than for CFOs, as we did not find any effect by the CFO in our regression. This is in line with our hypothesis 1c.

4.2.2 Hypothesis 2

To answer the second hypotheses, we look at the second and fourth column in table 4 for the CFO and CEO that includes an interaction term for *LiberalismScore* x *ExecutiveBoard*. We find in column 2 for the CFO for *LiberalismScore* a negative but insignificant coefficient (0.156), which is the effect of a liberal-leaning CFO on CSR performance if the CFOs is not on the board. But for CFOs that are on the board, we find a positive and significant coefficient of 1.251 with p-value < 0.01 for *LiberalismScore* x *ExecutiveBoard*, which show that liberal-leaning CFOs have a positive effect on the CSR performance if they are on the board. This finding is in line with the hypothesis 2a that being on a board of directors as a CFO amplify the effect of liberalism on ESG performance.

In column 4, we find a positive and insignificant coefficient for *LiberalismScore*, which show that liberal-leaning CEOs does not have an effect on the CSR performance if they are not on the board, although we did find evidence for our first hypothesis 1b. The coefficient for *LiberalismScore* x *ExecutiveBoard* is positive and insignificant (0.0817), which does not support hypothesis 2b that the effect is amplified if a CEO is on the board.

For the *EnvironmentalScore* in table 5 and column 2, both the coefficients for the board (1.443) and non-board (0.419) are positive and significant at p-value <0.05. The effect for on the board is stronger, which show that being on the board as a CFO strengthen the effect on environmental performance.

In table 6 with the *SocialScore*, we find in column 2 that *LiberalismScore* does have an effect on the social performance for CFOs that are on the board, as it has a weak positive and significant coeffecient (1.053) with p-value < 0.1.

In table 7 wee see in column 2 that LiberalismScore has a negative significant effect (-0.427) with p-value < 0.01 on the GovernanceScore for CFOs that are not on the board. In contrary, being on the board do show a positive and significant effect (1.108) with p-value < 0.05 on the GovernanceScore.

We find evidence for the hypothesis 2a that being on a board of directors as an CFO amplify the effect of liberalism on CSR performance. It shows that there is now an effect for liberal CFOs on CSR performance, under the condition that they are on the board. In addition to this, we found that being on the board as a CFO strengthen the effect of liberalism on environmental and governance performance, and weakly strengthen the social performance. However, we do not find any evidence to support hypothesis 2b, as we find no effect for CEOs that are not on the board, nor on the board. This holds also for the individual pillars.

4.2.3 Hypothesis 3

First, we look at the effect of the two executives combined which show the liberalism on a company level, as represented by the CFO and CEO. In column 5 in table 4 we find a positive significant coefficient of 0.228 at 5% significance level, which indicates that a liberal-leaning company represented by these executives, have a positive effect on the *ESGScore*. In case of combined executives, liberalism does influence the CSR performance.

When looking at the separate pillars, table 5 and 6 show that LiberalismScore has a positive and significant effect of 0.827 with p-value < 0.01 on the EnvironmentalScore and a positive and significant effect of 0.235 with p-value < 0.1 on the SocialScore, which shows that the effect is mainly driven by the environmental performance.

Regarding the role at the board of both executives, table 4 show insignificant but positive coefficients for *ExecutiveBoard*, so we do not see a relation there. In table 5 we see that if one of the two executives is on the board, this has a positive effect on the *EnvironmentalScore* (0.152). In contrary, if both executives are on the board, we see that this has a negative effect on the *Environmentalscore* (-0.688), both findings are on a 5% significance level. On the *GovernanceScore* in table 6, we only see that if the CFO or CEO is on the board, it has a negative effect of -0.186 at 1% significance level on the *GovernanceScore*.

To answer the third hypotheses, column 6 is used in which we find an interaction term between the two executives that shows the effect of alignment on the CSR performance. In table 4, it shows a negative significant coefficient of -1.010 on a 1% significance level. This effect is mainly driven by the individual pillars of *EnvironmentalScore* in table 5, in which we find an even stronger effect (-1.193), and on the *GovernanceScore* (-1.938 at 1% level) in table 6.

Overall, we find no evidence for hypothesis 3, as alignment between the CFO and CEO who are liberal leaning have a negative effect on the CSR performance of a company, which is driven by the effect on environmental and governance performance.

4.2.4 Hypothesis 4

For hypothesis 4, we look in table 8 if liberal-leaning CFOs and CEOs have an influence on the firm value of a company. Columns 1 and 3 show small but insignificant coefficients of -0.0599 and 0.0481 for the CFO and CEO. *LiberalismScore* does not seem to have an effect on the firm value and is not in line with our fourth hypothesis.

In column 2 and 4 we see that the *LiberalismScore* does has a weak effect on the firm value if the CFO is not on the board with a coefficient of -0.0683 at a 10% significance level. However, the results suggest that there is not an effect for CFOs that are on the board and for CEOs overall. The findings in column 5 are in line with the findings for the CFO and CEO separately, which show that *LiberalismScore* does not influence the firm value. Moreover, the composition of executives that are

on the board or not does not make a difference for the effect of liberalism on firm value, considering the insignificant coefficients of 0.0027 and 0.0310. The last column 6 show that in case of alignment of a liberal CFO and CEO, the firm value is weakly positively influenced, with the coefficient of 0.200 for the interaction term and a significance level of 10%.

We do not find evidence for the fourth hypothesis, liberalism does not to influence the firm value. Liberalism do have a weak negative effect on the firm value if the CFO is not on the board. In case of alignment of a liberal CFO and CEO, the effect on the firm value is positive but this shows a weak relationship.

4.3 Comparison against literature

Considering that there is limited research on the effect of CFO political ideology on CSR performance, we do not have sufficient comparable research for our results. A possible explanation for that we did not find an effect for liberal-leaning CFOs on CSR performance can be that the influence of the CFO is not yet large enough, although it has increased fast in the previous years, to implement personal values and beliefs within the CSR policies. The finding in this paper that liberal-leaning CFOs do have an effect when they are on the board in which their relative power increase, support this explanation. The findings for the CEOs can be compared to the findings of Chin et al. (2013) and Gupta et al. (2019), as we have executed similar research by following most of their methodology. Chin et al. (2013) found for the hypothesis 1b a positive and significant coefficient of 1.16 at a 5% significance level. This coefficient is larger than coefficient of 0.209 at p < 0.01 on the *ESGScore*. Moreover, Gupta et al. (2019) find a positive significant coefficient of 1.597 at a 5% significance level.

Chin et al. (2013) found an insignificant effect as well for hypothesis 2. This is in line with our findings which show that being on the board does not amplify the effect of liberalism on CSR performance.

Our findings for the third hypothesis are to a small extent comparable, although it both display dynamics between to executives, to the results by Gupta et al. (2018), who showed that resource allocation improves if the ideology of the CEO is aligned with these of other organizational members. We find a contradicting relation regarding CSR and the alignment of the ideology.

The findings for the fourth hypothesis can be explained with the findings of Kim et al. (2013) and Hudson and Morgan (2023) that more diversity of the political ideology of board members also is determinable in explaining the improvement in firm performance.

Within this paper, we have used fixed effects to control for annual changes regarding the economy, the political context or awareness of ESG. A possible explanation for the fact that Chin et al. (2013) and Gupta et al. (2019) find a stronger effect for the first hypothesis might be that businesses may improve their ESG performance naturally as ESG relevance increases, independent of a CEO's

personal views. CEOs may modify their leadership style, regardless of their personal liberalism, to better conform to the growing ESG emphasis.

In other words, if ESG factors have developed greater relevance in recent years, the distinctive effect of a CEO's personal liberalism could become less obvious in a context when all enterprises are stepping up their ESG efforts. This explains why the observed impact was less in the sample from 2007 to 2020 within this paper than it was in the sample from 2005 to 2007 for Chin et al. (2013) and for Gupta et al. (2019) in the sample from 2001 to 2008.

4.4 Robustness check

The regressions are executed with ASSET4 ESG and the CSR Strategy Score as dependent variables in table 9 and 10 to check the validity of this research. The same control variables are used and we controll for the same fixed effects.

The results in table 9 in column 1 show a negative but insignificant coefficient of -0.763 for *LiberalismScore* and a positive but insignificant coefficient of 0.527 in column 3. In table 10 we see that there is a small positive insignificant effect (0.0430) in column 1 and a positive and significant coefficient of 5.871 in column 3.

The findings for the three first hypotheses are roughly in line with the findings in the main regression.

For hypothesis 2a in table 9, we find consistent but stronger results that being on a board of directors as CFO amplify the effect of liberalism on CSR performance, with the coefficient being large positive and significant (27.74). For hypothesis 2b in table 9, we find a significant positive coefficient (5.104) at a 5% significance level for the effect of liberalism on the CSR performance for CEOs that are on the board. In table 10 we find again a positive coefficient for CFOs that are on the board, although the effect is not different from zero. Again, we find in column 4 in table 10 that being on the board amplify the effect of liberalism on CSR performance, as shown by the significant coefficient of 14.27.

The findings for the CFO are roughly in line with the findings in the main regression and for the CEO we do find an amplifying effect in the robustness check, although the effect was positive in the main regression result.

For the third hypothesis, the results in table 9 show a positive but insignificant coefficient of 2.810 for the interaction term that denotes the alignment of the CEO and CFO in column 6. In table 10 we find a negative coefficient for the interaction term; however, this coefficient is insignificant (-1.390). These findings here do not show an effect, while the findings in the main regression find a negative effect.

Within the robustness check, we find that the results in the main regression hold for the first two hypotheses. However, the results regarding the alignment of two liberal executive differ. As stated

earlier, ESG ratings can show differences because of different ESG ratings agencies. Company-specific ratings are determined with different methods which can result in slightly different outcomes of the regression (Li & Polychronopoulos, 2020).

4.5 CFO & Presidents

Dunlap and McCright (2008) show that the presidential cycle is decisive for the acknowledgement of the importance of sustainability. The political ideology has major impact on the policies made regarding sustainability. Since large companies rely on regulations made within the United States, a change from a republican president to a democratic president can have a large impact on the ESG performance for companies.

As we observed different time frames with different president within the sample period, it is interesting to see to what extent the ideology of the president is determinative for the effect of liberal-leaning CFOs on the CSR performance of companies.

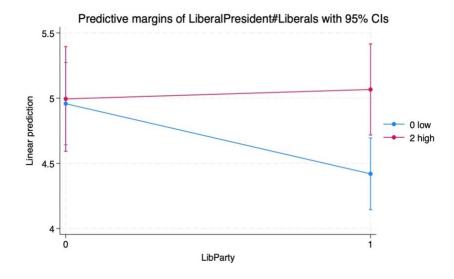
Therefore, it is useful to do a difference-in-differences (DiD) test to compare the differences between liberal and conservative CFOs and if alignment between a liberal president and liberal CFO have an effect on the CSR performance. The aim here is to test if there is a difference in CSR performance when the president's political is aligned with the CFO's political ideology.

The coefficient for Liberal CFO in table 11 shows that being liberal-leaning as a CFO, compared to being conservative-leaning, have a positive and significant effect (0.833) on the *EnvironmentalScore* with a significance level of 1% in column 2. Moreover, it shows a positive effect on the *ASSET4 ESG* (4.211) and *CSR Strategy Score* (9.688) at 10% and 5% significance level in column 5 and 6.

The negative and significant coefficients on *LiberalPresident* show that a liberal president have a negative effect on the *ESGScore* and *SocialScore*, but a positive effect on the *GovernanceScore*.

The interaction term shows the effect of liberals during a period with a liberal president. This shows a positive and significant coefficient of 0.611 at a p-value < 0.1, indicating that this combination does have a positive effect on the CSR performance. This impact is seen in the graph, as it shows that having a democratic president for liberals lead to a higher CSR performance, considering that the effect is different for conservatives as shown by the spread.

Graph 3



5. Endogeneity

The error term can be correlated with the independent variable because of omitted variables. For this reason, we need to check for possible endogeneity within this paper.

The first possible endogeneity concern is that a board attracts a new liberal-leaning CFO or CEO to repair their image if this has been affected by a misdeed or scandal. Hiring a CFO or CEO with an image to be empathetic and that has the skills for managing stakeholders, can be of importance if a firm has been in a recent scandal regarding fraud, sexual misconduct, human rights, discrimination or especially regarding the environment. Chin et al. (2013) state that, although they may be not selected based on that fact, these CEOs are probably liberal. It could be that it is more a firm-initiated action-plan to undergo in CSR activities and not purely from their own decision.

Controlling for this possible effect could through media-analyses, however, is almost new research on itself and goes beyond the scope of this paper. Moreover, this possible concern by Chin et al. (2013) might be more applicable to the CEO than the CFO, on which the latter lies the focus in this paper. The CEO is often seen as the representation of the firm as they are the public face and spokesperson for the firm. It would make more sense to attract such a CEO as this is notable for the public than the less "seen" CFO, although this could change in the future considering the growing importance of CFOs, as shown within this paper.

The second possible endogeneity concern can be that liberal CFOs and CEOs might be appointed within heavily democratic states and within democratic industries, as addressed by Chin et al. (2013). Within the regressions in this paper, we have created dummy variables for the *Industry* and *State* categories, such that we have controlled for this possible endogeneity. *Year* fixed effects have also

been included in the model to account for time-specific shocks that are constant for all entities but vary over the sample period.

6. Limitations and further research

This paper contains limitations which make space for further research on this topic to acknowledge the findings.

First, for measuring the political ideology, we have followed the methodology of Chin et al. (2013) and Gupta et al. (2017). A complex psychological concept is measured in a somewhat simplistic way by analyzing the donation data, although it does give a relevant display of the values of an executive. Research that will build upon this paper could make improvements on the constructed index. To gather more information, media sources, surveys and speeches or interviews by the executives could be used.

Secondly, of the 790 CFOs examined, only 40 served on their company's board of directors, resulting in 124 observations out of a total of 4114. This represents a small proportion of the dataset. Despite the limited size of this subgroup, our findings remained consistent during robustness checks. It is important to note, however, that this limitation may affect how generalizable our findings are, since the dynamics within this relatively small segment may not accurately reflect those of the general CFO population. For further research, looking at a dataset with more CFOs on the board could offer a more comprehensive understanding and enhanced reliability of the observed effects.

Thirdly, this study acknowledges potential endogeneity concerns. Following a scandal, businesses may look for liberal CFOs or CEOs for their empathy and stakeholder management abilities to fix their reputations. Such recruits could emphasize CSR activities as a firm-driven strategy rather than a personal decision. Future studies might examine the strategic hiring of CFOs and CEOs after the scandal, by looking if the company has been in a scandal the year before the CFO or CEO start in their position and assess the effects it had on CSR performances.

Fourth, this research largely uses data for large, listed firms within the United States. The conclusions may not be relevant to businesses that operate in other demographic or regulatory areas, this holds also for firms that are of smaller size. Future studies might examine the impact in other demographic or regulatory areas or for smaller size companies to determine if the found impact hold under different circumstances.

Fifth, this paper zooms in on the two main executives within the TMT. Hambrick and Mason (1984) state that it is a collective process to make decisions within corporations, in which other executives or board members might also be involved. A further study on this research could be on the whole top management team or the whole board of directors, as this can give valuable insight. Moreover, the dynamics that have been tested between the CFO and CEO in this research, can be expanded within these two groups.

7. Conclusions

Businesses are recognizing that sustainable development is not an idealistic ambition, but a practical and necessary approach for the future. Scholars have started to explore the point of view concerning the internal driver of CSR activities, giving additional insights on top of the researched external drivers of CSR. These internal drivers have been narrowed down to the characteristics and personal values of CFOs and CEOs within companies. Within this paper, we set light on the personal values and beliefs of executives in the form of political ideology and their effect on CSR performance. This paper builds on the existing literature on political ideology of CEOs and the effect on CSR performance by Chin et al. (2013) and Gupta et al. (2019), and on the organizational level by Gupta et al. (2017). This research has extended previous research by examining the effect of the political ideology of the CFO and how this relates to the CEO, considering the fast-growing role of the CFO regarding strategic management and the shifted roles to "visionary leader" and "corporate conscience". The following research question was formulated:

"How do the political preferences of the CFO influence the CSR performance of companies, and how does this relate to the ideology of the CEO?"

We have examined this research question on a sample of CFOs and CEOs within S&P 500 firms within the sample period from the 1st of January 2007 upon 31st of December 2020. First, this paper find that liberal-leaning CFOs do not have an impact on a firm's overall CSR performance; however, they do enhance environmental but diminish governance performance. Liberal-leaning CEOs positively influence overall CSR performance, with a particularly strong effect on social performance.

Secondly, although we did not find evidence that liberal-leaning CFOs influence the CSR performance, we found evidence supporting that there is an effect if CFOs are on the board of directors. We consider that being on the board amplifies a CFO's liberal effect on the CSR performance, which is driven by the environmental and governance performances. Nevertheless, we did not find prove that being on the board amplifies the effect for the CEO.

Thirdly, the results show that liberal alignment between CFOs and CEOs has a negative impact on CSR performance. Having liberal CFOs and CEOs have not a significant impact on firm value, with the exception that when a CFO is not on the board, liberalism weakly affects firm value negatively. Furthermore, a combined alignment of a liberal CFO and CEO slightly boosts firm value.

Lastly, we did a DiD-analysis to test if alignment in the political preferences of CFOs and US presidents during the sample period have an impact on CSR performance. In contrast to conservative CFOs, liberal CFOs have a positive effect on the CSR performance during periods of a liberal president.

To validate the consistency of our results, robustness checks with two new measures ESG rating metrics, ASSET4 ESG and CSR Strategy Score, are performed. The data shows that the impact of liberal-leaning CFOs and CEO on CSR performance is mostly consistent with the main results of the MSCI ESG IVA. The results for the alignment of two liberal executives somewhat differ, which can be explained due to the various methods used by rating agencies to provide company-specific ratings.

There are no earlier studies on the impact of political ideology of CFOs on CSR performance which makes comparison of the results difficult. Our findings indicate that the influence of the CFO is not yet large enough to implicate personal values and beliefs within CSR policies. This is supported by the findings for the second hypothesis in which the CFO does have more relative power for being on the board.

The findings for the CEO have been compared to Chin et al. (2013) and Gupta et al. (2019), on which we found consistent outcomes. Although greater impacts of CEO liberalism on ESG performance were seen by Chin et al. (2013) and Gupta et al. (2019) for time periods earlier than those included by our analysis from 2007 to 2020. The diminished impact that has been found in recent years may be because to the rising importance of ESG considerations in all organizations, which has diminished the impact of a CEO's personal liberalism.

In conclusion, political ideology of a CFO only has impact on the CSR performance in case the CFO is on the board of directors. Alignment of liberal CFOs and CEOs has a negative impact on CSR performance. Regarding firm value it show that liberal CFOs that are not on the board have a weak negative effect. Furthermore, a combined alignment of a liberal CFO and CEO slightly boosts firm value.

These findings have practical implications, for board appointments for example. If companies want to increase the CSR performance, they might take a CFO's political views into account when appointing them to boards of directors. Moreover, given the negative implications of liberal alignment, a diversity of political beliefs in top leadership might result in a balanced CSR strategy.

The findings show that it is important to take into account the CFOs' ideology as it can have potential effect on the firm's value. For succession and recruitment, aligning liberal CFOs and CEOs may slightly increase firm value, which firm must take into consideration. Moreover, it can be useful information for investors to know what political ideology a newly appointed CFO or CEO has. It can be perceived as positive information by investors in case there is a new liberal CEO appointed with a liberal CFO already in place.

8. References

Aguilera, R., Duran, P., Heugens, P. P. M. A. R., Sauerwald, S., Turturea, R., & VanEssen, M. (2021). State ownership, political ideology, and firm performance around the world. Journal of World Business, 56(1), 101113.

Al-Reyaysa, M., Pinnington, A.H., Karatas-Ozkan, M. and Nicolopoulou, K. (2019), "The management of corporate social responsibility through projects: a more economically developed country perspective", Business Strategy and Development, Vol. 2 No. 4, pp. 358-371.

Alshehhi, A., Nobanee, H., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. Sustainability, 10(2), 494.

Armingeon, K. (2006). Reconciling competing claims of the welfare state clientele. In The politics of post-industrial welfare states: Adapting post-war social policies to new social risks (pp. 100-122). London: Routledge.

Aydoğmuş, M., GÜLAY, G., & ERGUN, K. (2022). Impact of ESG performance on firm value and profitability. Borsa Istanbul Review.

Bayat, A., & Goergen, M. (2020). Ceo political ideology, shareholder primacy and dividend policy. European Corporate Governance Institute–Finance Working Paper, 650.

Bergh, D. D. (2001). Executive retention and acquisition outcomes: A test of opposing views on the influence of organizational tenure. Journal of management, 27(5), 603-622.

Boeker, W. (1997). Strategic change: The influence of managerial characteristics and organizational growth. Academy of Management Journal, 40(1), 152–170.

Bolsen, T., Druckman, J. N., & Cook, F. L. (2015). Citizens', scientists', and policy advisors' beliefs about global warming. The ANNALS of the American Academy of Political and Social Science, 658(1), 271-295.

Bose, S., Hossain, S., Sobhan, A., & Handley, K. (2022). Does female participation in strategic decision-making roles matter for corporate social responsibility performance?. Accounting & Finance, 62(3), 4109-4156.

Bouslah, K., Hmaittane, A., Kryzanowski, L., & M'Zali, B. (2023). CSR structures: Evidence, drivers, and firm value implications. Journal of Business Ethics, 185(1), 115-145.

Briscoe, F., & Joshi, A. (2017). Bringing the boss's politics in: Supervisor political ideology and the gender gap in earnings. Academy of Management Journal, 60(4), 1415-1441.

Briscoe, F., & Safford, S. (2008). The Nixon-in-China effect: Activism, imitation, and the institutionalization of contentious practices. Administrative science quarterly, 53(3), 460-491.

Briscoe, F., & Safford, S. (2008). The Nixon-in-China effect: Activism, imitation, and the institutionalization of contentious practices. Administrative science quarterly, 53(3), 460-491.

- Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. Journal of accounting and public policy, 25(4), 409-434.
- Buchanan, B., Cao, C. X., & Chen, C. (2018). Corporate social responsibility, firm value, and influential institutional ownership. Journal of Corporate Finance, 52, 73-95.
- Burke, L., & Logsdon, J. M. (1996). How corporate social responsibility pays off. Long range planning, 29(4), 495-502.
- Burris V. (2001). The two faces of capital: corporations and individual capitalists as political actors. American Sociological Review 66: 361–381.
- Campbell A, Converse PE, Miller WE, Stokes DE. (1960). The American Voter. Chicago: Univ. Chicago Press
- Carmines, E. G., & D'Amico, N. J. (2015). The new look in political ideology research. Annual Review of Political Science, 18, 205-2
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. Academy of management review, 4(4), 497-505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. Business horizons, 34(4), 39-48.
- Carroll, A. B. (2015). Corporate social responsibility (CSR) is on a sustainable trajectory. Journal of Defense Management, 5(2), 1-2.
- Chang, X., Fu, K., Jin, Y., & Liem, P. F. (2022). Sustainable finance: ESG/CSR, firm value, and investment returns. Asia-Pacific Journal of Financial Studies, 51(3), 325-371.
- Chatterjee, A., & Hambrick, D.C. (2007). It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. Administrative Science Quarterly, 52(3), 351–386.
- Chin, M. K., Hambrick, D. C., & Treviño, L. K. (2013). Political ideologies of CEOs: The influence of executives' values on corporate social responsibility. Administrative science quarterly, 58(2), 197-232.
- Chin, M. K., Zhang, S. X., Jahanshahi, A. A., & Nadkarni, S. (2021). Unpacking political ideology: CEO social and economic ideologies, strategic decision-making processes, and corporate entrepreneurship. Academy of Management Journal, 64(4), 1213-1235.
- Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the Relationship between CSR and Financial Performance. Sustainability, 11(2), 343.
- Converse PE. (1964). The nature of belief systems in mass publics. In Ideology and Discontent, ed. DE Apter, pp. 206–61. New York: Free Press
- Cronqvist, H., Makhija, A. K., & Yonker, S. E. (2012). Behavioral consistency in corporate finance: CEO personal and corporate leverage. Journal of financial economics, 103(1), 20-40.

D'Amato, A., & Falivena, C. (2020). Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. Corporate Social Responsibility and Environmental Management, 27(2), 909-924.

Dahlsrud, A. (2008), "How corporate social responsibility is defined: an analysis of 37 definitions", Corporate Social Responsibility and Environmental Management, Vol. 15 No. 1, pp. 1-13.

Danciu, V. (2013). The sustainable company: new challenges and strategies for more sustainability. Theoretical and Applied Economics, 20(9), 7-26.

Dann, T., & Galer, D. (2022). What CFOs Should Consider Concerning ESG Reporting. The CPA Journal, 92(7/8), 10-11.

David, P., R. Kochhar, and E. Levitas, 1998, The effect of institutional investors on the level and mix of CEO compensation, Academy of Management Journal 41, 200–208.

Denis, J. L., Langley, A., & Sergi, V. (2012). Leadership in the plural. Academy of Management Annals, 6(1), 211-283.

Denzau, A. T., & North, D. C. (1994). Shared mental models: ideologies and institutions. KYKLOS-BERNE-, 47, 3-3.

Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. Journal of financial economics, 111(1), 158-180.

Dunlap, R. E., & McCright, A. M. (2008). A widening gap: Republican and Democratic views on climate change. Environment: Science and Policy for Sustainable Development, 50(5), 26-35.

Egon Zehnder International. (2008). Managing the evolving relationship between the CEO and the CFO. Retrieved from http://www.egonzehnder.com/files/ceocfo.pdf

Ehie, I. C. (2016). Examining the corporate social responsibility orientation in developing countries: an empirical investigation of the Carroll's CSR pyramid. International Journal of Business Governance and Ethics, 11(1), 1-20.

Elnahas, A. M., & Kim, D. (2017). CEO political ideology and mergers and acquisitions decisions. Journal of Corporate Finance, 45, 162-175.

Epstein, M. J., & Buhovac, A. R. (2010). Solving the sustainability implementation challenge. Organizational dynamics, 39(4), 306.

Erikson RS, Tedin KL. 2003. American Public Opinion. New York: Longman. 6th ed.

Ernst & Young, 2016, How sustainability has expanded the CFO's role. Retrieved from http://www.ey.com/US/en/Services/Specialty-Services/Climate-Change-and-Sustainability-Services/How-sustainability-has-expanded-the-CFOs-role

Fabrizi, M., Mallin, C. and Michelon, G. (2014), "The role of CEO's personal incentives in driving corporate social responsibility", Journal of Business Ethics, Vol. 124 No. 2, pp. 311-326.

- Feldman S. (1988). Structure and consistency in public opinion: the role of core beliefs and values. Am. J. Polit. Sci. 32:416–40
- Feldman, S., & Steenbergen, M. R. (2001). The humanitarian foundation of public support for social welfare. American Journal of Political Science, 658-677.
- Finkelstein, S., & D'aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. Academy of Management journal, 37(5), 1079-1108.
- Francia P. L., Green J. C., Herrnson P. S., Powell L. W., Wilcox C. 2005 "Limousine liberals and corporate conservatives: The financial constituencies of the Democratic and Republican parties." Social Science Quarterly, 86: 761–778.
 - Freeden M, ed. (2001). Reassessing Political Ideologies. London: Routledge
- Freeman, R. E. (2001). A stakeholder theory of the modern corporation. Perspectives in Business Ethics Sie, 3(144), 38-48.
- Freeman, R.E., Harrison, J.S., Wicks, A.C., Parmar, B.L. & deColle, S. (2010). Stakeholder theory: The state of the art. New York: Cambridge University Press.
- Friedman, H. L., Heinle, M. S., & Luneva, I. M. (2021). A theoretical framework for ESG reporting to investors. Available at SSRN 3932689.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. In Corporate ethics and corporate governance (pp. 173-178). Berlin, Heidelberg: springer berlin heidelberg.
- Gerstner, W. C., König, A., Enders, A., & Hambrick, D. C. (2013). CEO narcissism, audience engagement, and organizational adoption of technological discontinuities. Administrative science quarterly, 58(2), 257-291.
- Gibson, R., Glossner, S., Krueger, P., Matos, P. and Steffen, T. (2020), "Responsible institutional investing around the world", ECGI Working Papers.
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. Journal of Corporate Finance, 66, 101889.
- Graafland, J. (2018), "Does corporate social responsibility put reputation at risk by inviting activist targeting? An empirical test among European SMEs", Corporate Social Responsibility and Environmental Management, Vol. 25 No. 1, pp. 1-13.
- Graham, J., Nosek, B. A., & Haidt, J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. PloS one, 7(12), e50092.
- Greve, H. R., & Mitsuhashi, H. (2007). Power and glory: Concentrated power in top management teams. Organization Studies, 28(8), 1197-1221.
- Gupta, A., & Wowak, A. J. (2017). The elephant (or donkey) in the boardroom: How board political ideology affects CEO pay. Administrative Science Quarterly, 62(1), 1-30.

- Gupta, A., Briscoe, F., & Hambrick, D. C. (2017). Red, blue, and purple firms: Organizational political ideology and corporate social responsibility. Strategic management journal, 38(5), 1018-1040.
- Gupta, A., Briscoe, F., & Hambrick, D. C. (2018). Evenhandedness in resource allocation: Its relationship with CEO ideology, organizational discretion, and firm performance. Academy of Management Journal, 61(5), 1848-1868.
- Gupta, A., Fung, A., & Murphy, C. (2021). Out of character: CEO political ideology, peer influence, and adoption of CSR executive position by Fortune 500 firms. Strategic management journal, 42(3), 529-557.
- Gupta, A., Nadkarni, S., & Mariam, M. (2019). Dispositional sources of managerial discretion: CEO ideology, CEO personality, and firm strategies. Administrative Science Quarterly, 64(4), 855-893.
- Ha, E. (2012). Globalization, government ideology, and income inequality in developing countries. The journal of Politics, 74(2), 541-557.
- Haidt J. (2012). The Righteous Mind: Why Good People Are Divided by Politics and Religion. New York: Pantheon Books
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. Academy of management review, 9(2), 193-206.
- Han, J., Zhang, J., & Han, J. (2015). CFO as a Strategic Partner of the CEO: Relational Demography and Firm Financial Performance. Journal of Business & Management, 21(1).
- Harjoto, M. A. (2017). Corporate social responsibility and degrees of operating and financial leverage. Review of Quantitative Finance and Accounting, 49(2), 487-513.
- Harjoto, M., & Laksmana, I. (2018). The impact of corporate social responsibility on risk taking and firm value. Journal of business ethics, 151, 353-373.
- Harrison, J. S., & Malhotra, S. (2023). Complementarity in the CEO-CFO interface: The joint influence of CEO and CFO personality and structural power on firm financial leverage. The Leadership Quarterly, 101711.
- Hart S. 1995. A natural-resource-based view of the firm. Academy of Management Review 20(4): 986–1014
- Hemingway, C. A., & Maclagan, P. W. (2004). Managers' personal values as drivers of corporate social responsibility. Journal of business ethics, 50, 33-44.
- Huber, J. D. (1989). Values and partisanship in left-right orientations: Measuring ideology. European Journal of Political Research, 17(5), 599-621.
- Hudson, K., & Morgan, R. E. (2023). Board political ideological diversity and information exposure as antecedents to value creation and value appropriation. Journal of Product Innovation Management.

Hutton, I., Jiang, D., & Kumar, A. (2015). Political values, culture, and corporate litigation. Management Science, 61(12), 2905-2925.

Ikemba-Efughi, I. and Raj, R. (2020), "Managerial behaviour and corporate social responsibilities of private education providers in Nigeria: a case of private primary education", Journal of Global Responsibility, Vol. 11 No. 4, pp. 387 -405.

International Federation of Accountants (IFAC). (2013). The role and expectations of a CFO: a global debate on preparing accountants for finance leadership. New York: IFAC.

- Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. Journal of business ethics, 103, 351-383.
- Jones, D. A., & Willness, C. R. (2013). 17 Corporate Social Performance, Organizational Reputation, and Recruitment. The Oxford handbook of recruitment, 298.
 - Jost JT. (2006). The end of the end of ideology. Am. Psychol. 61:651–70
- Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. Annual review of psychology, 60, 307-337.
- Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. Perspectives on Psychological Science, 3(2), 126-136.
- Kam, C. D., & Simas, E. N. (2010). Risk orientations and policy frames. The Journal of Politics, 72(2), 381-396.
- Kashmiri, S., & Mahajan, V. (2017). Values that shape marketing decisions: Influence of chief executive officers' political ideologies on innovation propensity, shareholder value, and risk. Journal of Marketing Research, 54(2), 260-278.
- Kassel, K. (2012). The circle of inclusion: Sustainability, CSR and the values that drive them. Journal of Human Values, 18(2), 133-146.
- Kim, D., Kim, I., Krueger, T. M., & Unsal, O. (2021). The influence of CEO political ideology on labor relations and firm value. Managerial Finance, 47(9), 1300-1319.
- Kim, I., Pantzalis, C., & Park, J. C. (2013). Corporate boards' political ideology diversity and firm performance. Journal of Empirical Finance, 21, 223-240.
- Kim, J., Chung, S., & Park, C. (2013). Corporate social responsibility and financial performance: the impact of the MSCI ESG ratings on Korean firms. Journal of the Korea Academia-Industrial Cooperation Society, 14(11), 5586-5593.
- Kim, S. and Lee, Y.-J. (2012), "The complex attribution process of CSR motives", Public Relations Review, Vol. 38 No. 1, pp. 168-170.
- Kitzmueller, M. and Shimshack, J. (2012), "Economic perspectives on corporate social responsibility", Journal of Economic Literature, Vol. 50 No. 1, pp. 51-84.
- Knight K. (2006). Transformations of the concept of ideology in the twentieth century. Am. Polit. Sci. Rev. 100:619–26

Kramer, M. R., & Porter, M. (2011). Creating shared value (Vol. 17). Boston, MA, USA: FSG.

Krüger, P. (2015), "Corporate good"

Kuehn, K. (2010). Five ways to convince your CFO that sustainability pays. GreenBiz. com.

Latapí Agudelo, M. A., Jóhannsdóttir, L., & Davídsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. International Journal of Corporate Social Responsibility, 4(1), 1-23.

Lee, M.D.P. (2008), "A review of the theories of corporate social responsibility: its evolutionary path and the road ahead", International journal of management reviews, Vol. 10 No. 1, pp. 53-73.

Lenssen, G., Bevan, D., Fontrodona, J., Sobczak, A. and Martins, L.C. (2010), "The impact and interplay of national and global CSR discourses: insights from France and Brazil", Corporate Governance, The International Journal of Business in Society.

Li, F., & Polychronopoulos, A. (2020). What a difference an ESG ratings provider makes. Research affiliates, 24.

Li, Y. Y., & Lee, C. C. (2022). Does CFO serving as board secretary matter for information disclosure? Evidence from China's listed companies. Applied Economics, 54(24), 2737-2758.

Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. Academy of management review, 32(3), 817-835.

Markoczy, L., Kolev, K. D., & Qian, C. (2023). Trade-off among stakeholders: CEO political orientation and corporate social irresponsibility. Long Range Planning, 56(2), 102273.

Marks, G., Hooghe, L., Nelson, M., & Edwards, E. (2006). Party competition and European integration in the East and West: Different structure, same causality. Comparative Political Studies, 39(2), 155-175.

Masulis, R. W. (1983). The impact of capital structure change on firm value: Some estimates. The journal of finance, 38(1), 107-126.

Maynard, J. L., & Mildenberger, M. (2018). Convergence and divergence in the study of ideology: A critical review. British Journal of Political Science, 48(2), 563-589.

McCarthy, S., Oliver, B., & Song, S. (2017). Corporate social responsibility and CEO confidence. Journal of Banking & Finance, 75, 280-291.

McClosky, H., & Zaller, J. (1984). The American ethos: Public attitudes toward capitalism and democracy. Harvard University Press.

McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. Academy of management review, 26(1), 117-127.

McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. Journal of management studies, 43(1), 1-18.

Mebratu, D. (1998). Sustainability and sustainable development: historical and conceptual review. Environmental impact assessment review, 18(6), 493-520.

Mobbs, S. (2018). Firm CFO board membership and departures. Journal of Corporate Finance, 51, 316-331.

Moon, J. (2007). The contribution of corporate social responsibility to sustainable development. Sustainable development, 15(5), 296-306.

MSCI. (2014). MSCI ESG Intangible Value Assessment, retrieved from https://www.msci.com/documents/10199/25a39052-0b0e-4a10-bef8-e78dbc854168

Muthuri, J.N. and Gilbert, V. (2011), "An institutional analysis of corporate social responsibility in Kenya", Journal of Business Ethics, Vol. 98 No. 3, pp. 467-483.

Nalband, N. A., & Kelabi, S. A. (2014). Redesigning Carroll's CSR pyramid model. Journal of Advanced Management Science, 2(3).

Nolop, B. P. (2012). The essential CFO: A corporate finance playbook. John Wiley & Sons.

O'Riordan, L., Zmuda, P., & Heinemann, S. (Eds.). (2015). New perspectives on corporate social responsibility: Locating the missing link. Springer.

Opoku, A. (2016). SDG2030: A sustainable built environment's role in achieving the post-2015 United Nations Sustainable Development Goals. In Proceedings of the 32nd Annual ARCOM Conference (Vol. 2, pp. 1149-1158). Manchester, UK: Association of Researchers in Construction Management.

Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. Strategic Management Journal, 37(8), 1615-1631.

P. Tulimieri, M. Banai, A. (2010). A new corporate paradigm: The CEO and CFO – A partnership of equals. Organizational Dynamics, 39 (3) pp. 240-247

Papadakis, V.M., & Barwise, P. (2002). How much do CEOs and top managers matter in strategic decision-making? British Journal of Management, 13(1), 83

Paula-Carmen, R. O. Ş. C. A., & Dorin-Paul, B. (2019). Sustainability Reporting Process: Benefits, Limits And Achievments. The Annals of the University of Oradea, Economic Sciences (2), 60-70.

Petrenko, O. V., Aime, F., Ridge, J., & Hill, A. (2016). Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. Strategic management journal, 37(2), 262-279.

Porter, T., & Derry, R. (2012). Sustainability and business in a complex world. Business and Society Review, 117(1), 33-53.

- Qiao, K., Yang, C. L., & Yin, X. (2021). The effects of CEO-TMT interaction on organizational performance. International Journal of Organizational Analysis, 29(3), 585-602.
- Rau, P. R., & Yu, T. (2023). A survey on ESG: investors, institutions and firms. China Finance Review International.
 - Rokeach M. (1973). The Nature of Human Values. New York: Free Press
- Sánchez-Teba, E. M., Benítez-Márquez, M. D., Bermúdez-González, G., & Luna-Pereira, M.
- D. M. (2021). Mapping the Knowledge of CSR and Sustainability. Sustainability, 13(18), 10106.
- Sarkar, S., & Searcy, C. (2016). Zeitgeist or chameleon? A quantitative analysis of CSR definitions. Journal of cleaner production, 135, 1423-1435.
- Schwartz SH. (1992). Universals in the content and structure of values. In Advances in Experimental Social Psychology, ed. MP Zanna, pp. 1–65. New York: Academic
- Seebode, D., Jeanrenaud, S., & Bessant, J. (2012). Managing innovation for sustainability. R&d Management, 42(3), 195-206.
- Semadeni, M., Chin, M. K., & Krause, R. (2022). Pumping the brakes: Examining the impact of CEO political ideology divergence on firm responses. Academy of Management Journal, 65(2), 516-544.
- Shafer W. E., Fukukawa K., Lee G. M. (2007). Values and the perceived importance of ethics and social responsibility: The U.S. versus China. Journal of Business Ethics, 70, 265-284.
- Shaw, G. B. (2007). Progress is impossible without change, and those who cannot change their minds cannot change anything.
- Siahaan, F. O. (2014). The effect of good corporate governance mechanism, leverage, and firm size on firm value. GSTF Journal on Business Review (GBR), 2(4).
- Singh, K. S. D., Islam, M. A., Ahmed, E. R., & Amran, A. (2019). An empirical investigation into the major drivers of corporate social responsibility. Opción: Revista de Ciencias Humanas y Sociales, (21), 1076-1090.
- Sucuahi, W., & Cambarihan, J. M. (2016). Influence of profitability to the firm value of diversified companies in the Philippines. Accounting and Finance Research, 5(2), 149-153.
- Sun, L. and Rakhman, F. (2013), "CFO financial expertise and corporate social responsibility: evidence from S&P 500 companies", International Journal of Law and Management, Vol. 55 No. 3, pp. 161-172.
- Talent, A. (2013). Corporate environmental sustainability and employee recruitment: Leveraging "green" business practices to attract talent. Green Organizations: Driving Change with IO Psychology; Routledge Academic: New York, NY, USA, 231-250.
- Thomson Reuters Eikon (2023). Thomson Reuters ESG Scores. Retrieved from https://www.esade.edu/itemsweb/biblioteca/bbdd/inbbdd/archivos/Thomson_Reuters_ESG_Scores.pdf

Ting, I. W. K., Azizan, N. A. B., & Kweh, Q. L. (2015). Upper echelon theory revisited: The relationship between CEO personal characteristics and financial leverage decision. Procedia-Social and Behavioral Sciences, 195, 686-694

United Nations, (2015). Transforming Our World: the 2030 Agenda for Sustainable Development A/RES/70/1. Resolution Adopted by the General Assembly

Unsal, O., Hassan, M. K., & Zirek, D. (2016). Corporate lobbying, CEO political ideology and firm performance. Journal of Corporate Finance, 38, 126-149.

Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. Journal of business ethics, 44, 95-105.

Vashchenko, M. (2017). An external perspective on CSR: What matters and what does not?. Business Ethics: A European Review, 26(4), 396-412.

Velte, P. (2020). Do CEO incentives and characteristics influence corporate social responsibility (CSR) and vice versa? A literature review. Social Responsibility Journal, 16(8), 1293-1323.

Verbeke, A., & Tung, V. (2013). The future of stakeholder management theory: A temporal perspective. Journal of business ethics, 112, 529-543.

W.G. Lewellen and S.G. Badrinath (1997). On the measurement of Tobin's q. Journal of Financial Eco-nomics, 40,77-122.

Wang, B., Wang, Z., Wen, J., & Zhang, X. T. (2021). Executive gender and firm environmental management: Evidence from CFO transitions. Sustainability, 13(7), 3653.

WCED, S. W. S. (1987). World commission on environment and development. Our common future, 17(1), 1-91.

Whelan, T., & Fink, C. (2016). The comprehensive business case for sustainability. Harvard Business Review, 21(2016).

Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. Journal of Business Ethics, 41(1), 1–10.

Yang, T., & Zhao, S. (2014). CEO duality and firm performance: Evidence from an exogenous shock to the competitive environment. Journal of banking & finance, 49, 534-552.

Yin J., Zhang Y. (2012). Institutional dynamics and corporate social responsibility (CSR) in an emerging country context: Evidence from China. Journal of Business Ethics, 111, 301-316.

Yin, J. (2017), "Institutional drivers for corporate social responsibility in an emerging economy: a mixed-method study of Chinese business executives", Business and Society, Vol. 56 No. 5, pp. 672-704.

Yuan, Y., Tian, G., Lu, L. Y., & Yu, Y. (2019). CEO ability and corporate social responsibility. Journal of Business Ethics, 157, 391-411.

Zacharias, N. A., Six, B., Schiereck, D., & Stock, R. M. (2015). CEO influences on firms' strategic actions: A comparison of CEO-, firm-, and industry-level effects. Journal of Business Research, 68(11), 2338-2346.

Zhong, W., Lin, Y., Tu, H., & Gao, H. (2023). CEO Ideology and Firm Performance. In Academy of Management Proceedings (Vol. 2023, No. 1, p. 12077). Briarcliff Manor, NY 10510: Academy of Management.

Zorn, D. M. (2004). Here a chief, there a chief: The rise of the CFO in the American firm. American sociological review, 69(3), 345-364.

Zuraik, A., & Kelly, L. (2018). The role of CEO transformational leadership and innovation climate in exploration and exploitation. European journal of innovation management, 22(1), 84-104.

9. Appendix

Table 1

		CEO				
	N	Mean	SD	Median	min	max
		Dependent vari	ables			
ESGScore	4180	4.852	1.103	4.816	.354	9.452
EnvironmentalScore	4180	5.345	2.047	5.25	0	10
SocialScore	4180	4.586	1.61	4.6	0	10
GovernanceScore	4180	5.491	1.736	5.383	0	10
ASSET4 ESG	3914	55.834	18.417	57.34	2.68	95.15
CSR Strategy Score	3110	61.532	26.977	68.61	2.13	99.67
Tobin's Q	2872	1.015	.621	.841	.04	3.211
	I	ndependent var	iables			
LiberalismScore	4180	.457	.268	.5	0	1
ExecutiveBoard	4180	.558	.497	1	0	1
		Control varial	bles			
ROA	4044	5.565	6.26	5.62	-19.67	19.52
Debt-to-equity-ratio	3419	1.275	3.515	.621	-11.896	18.96
LogAssets	2904	17.253	.859	17.315	13.861	19.508
ExecutiveAge	4180	57.297	6.333	57	28	86
Gender	4180	1.962	.191	2	1	2
Tenure	4180	8.399	.697	8.347	5.106	10.631

Note: The above table show the Descriptive Statistics for the dependent, independent and control variables for the firm and the CEO within the sample period of 2007-2020

Table 2

		CFO						
	N	Mean	SD	Median	min	max		
Dependent variables								
ESGScore	4114	4.841	1.107	4.814	.354	9.452		
EnvironmentalScore	4114	5.342	2.042	5.25	0	10		
SocialScore	4114	4.569	1.618	4.568	0	10		
GovernanceScore	4114	5.488	1.733	5.377	0	10		
ASSET4 ESG	3855	55.592	18.549	57.1	2.68	95.15		
CSR Strategy Score	3040	61.166	27.042	68.61	.25	99.8		
Tobin's Q	2838	1.01	.62	.841	.04	3.211		
	1	Independent var	iables					
LiberalismScore	4114	.491	.228	.5	0	1		
ExecutiveBoard	4114	.03	.171	0	0	1		
		Control variab	oles					
ROA	3990	5.639	6.231	5.62	-19.67	19.52		
Debt-to-equity-ratio	3386	1.241	3.571	.612	-11.896	18.96		
LogAssets	2872	17.251	.856	17.315	13.861	19.508		
ExecutiveAge	4112	52.36	6.052	52	30	80		
Gender	4114	1.889	.314	2	1	2		
Tenure	4114	8.332	.635	8.366	2.944	10.597		

Note: The above table show the Descriptive Statistics for the dependent, independent and control variables for the firm and the CFO within the sample period of 2007-2020

Table 3

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) ESGScore	1.00														
(2) EnvironmentalScore	0.49***	1.00													
(3) SocialScore	0.69***	0.08***	1.00												
(4) GovernanceScore	0.33***	-0.02**	0.09***	1.00											
(5) ASSET4 ESG	0.27***	0.26***	0.12***	0.13***	1.00										
(6) CSR STRATEGY	0.19***	0.13***	0.14***	0.02*	0.65***	1.00									
SCORE															
(7) Tobin's Q	0.03**	0.04***	-0.01	0.01	0.05***	-0.02	1.00								
(8) LiberalismScore	0.04***	0.07***	0.00	0.01	0.02**	0.02	0.02*	1.00							
(9) ExecutiveBoard	0.02*	-0.01	0.00	-0.01	0.02**	0.00	-0.03**	-0.11***	1.00						
(10) ROA	-0.02	-0.06***	-0.02**	0.08***	-0.03***	-0.08***	0.42***	-0.01	-0.01	1.00					
(11) Debt-to-equity-ratio	-0.02*	-0.02	0.02	-0.03**	-0.03**	-0.04***	-0.12***	-0.01	0.00	-0.16***	1.00				
(12) LogAssets	0.05***	0.10***	0.04***	0.00	0.00	-0.01	-0.27***	0.06***	-0.06***	-0.05***	0.01	1.00			
(13) ExecutiveAge	-0.03**	0.00	-0.03**	0.00	0.08***	0.05***	-0.01	-0.09***	0.38***	-0.06***	0.00	0.00	1.00		
(14) Gender	0.00	0.03**	-0.01	0.02	-0.09***	-0.07***	-0.02	-0.10***	0.09***	0.02*	0.02*	-0.03**	0.07***	1.00	
(15) Tenure	0.06***	0.01	0.08***	0.00	-0.08***	-0.09***	-0.01	-0.02*	0.18***	0.00	0.00	-0.01	0.16***	0.02**	1.00

Note: The above table show the Pearson correlations between the variables with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1

Table 4

	(1)	(2)	(3)	(4)	(5)	(6)
			ESG S	Score		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	-0.00589	-0.0639	0.209***	0.158	0.228**	
	(0.0961)	(0.0984)	(0.0750)	(0.118)	(0.104)	
Liberal CEO						0.264***
						(0.0763)
Liberal CFO						-0.171*
						(0.0980)
Liberal CEO x Liberal CFO						-1.010***
						(0.263)
ExecutiveBoard $(0 = no, 1 = yes)$	-0.0658	0.0274	0.0148	0.0173		
	(0.140)	(0.135)	(0.0435)	(0.0439)		
ExecutiveBoard x Liberalism		1.251***		0.0817		
		(0.452)		(0.148)		
ExecutiveBoard (CFO or CEO in					0.0473	
Board)					(0.0433)	
ExecutiveBoard (both CFO and					0.0829	
CEO in Board)					(0.156)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.420***	3.624***	3.720***	3.836***	2.767***	2.639***
	(0.690)	(0.697)	(0.668)	(0.664)	(0.712)	(0.730)
Observations	2,869	2,869	2,903	2,903	2,991	2,775
R-squared	0.148	0.151	0.158	0.158	0.155	0.167

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the ESGScore. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 5

	(1)	(2)	(3)	(4)	(5)	(6)
			Environn	nentalScore		
VARIABLES	CFO	CFO	CEO	CEO	CEO & CFO	CEO & CFO
LiberalismScore	0.486***	0.419***	0.114	0.351	0.439**	
	(0.151)	(0.156)	(0.139)	(0.234)	(0.177)	
Liberal_CEO						0.0766
						(0.143)
Liberal_CFO						0.404**
						(0.157)
Liberal CEO x Liberal CFO						-1.793***
						(0.457)
ExecutiveBoard $(0 = no, 1 = yes)$	-0.695***	-0.588**	0.0780	0.0662		
	(0.237)	(0.237)	(0.0760)	(0.0765)		
ExecutiveBoard x LiberalismScore		1.443**		-0.381		
		(0.576)		(0.279)		
ExecutiveBoard (CFO or CEO in					0.152**	
Board)					(0.0743)	
ExecutiveBoard (both CFO & CEO in					-0.688**	
Board)					(0.288)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.181***	3.663***	3.216***	3.217***	2.635**	2.683**
	(1.200)	(1.207)	(1.218)	(1.211)	(1.315)	(1.323)
Observations	2,869	2,869	2,903	2,903	2,991	2,775
R-squared	0.180	0.181	0.171	0.171	0.177	0.185

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the EnvironmentalScore. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 6

	(1)	(2)	(3)	(4)	(5)	(6)
			Soci	ialScore		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	-0.00783	-0.0567	0.232**	0.125	0.235*	
	(0.130)	(0.133)	(0.106)	(0.169)	(0.139)	
Liberal_CEO						0.197*
						(0.113)
Liberal_CFO						-0.0910
						(0.138)
Liberal CEO x Liberal CEO						-0.395
						(0.364)
ExecutiveBoard $(0 = no, 1 = yes)$	0.00148	0.0798	-0.0395	-0.0341		
	(0.163)	(0.153)	(0.0626)	(0.0629)		
ExecutiveBoard x LiberalismScore		1.053*		0.173		
		(0.630)		(0.212)		
ExecutiveBoard (CFO or CEO in					-0.0261	
Board)					(0.0616)	
ExecutiveBoard (both CFO & CEO in					0.114	
Board)					(0.172)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.282***	3.452***	2.093**	2.235**	2.147**	1.916*
	(1.003)	(1.009)	(0.997)	(0.991)	(1.019)	(1.061)
Observations	2,869	2,869	2,903	2,903	2,991	2,775
R-squared	0.160	0.161	0.163	0.163	0.163	0.164

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the SocialScore. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 7

	(1)	(2)	(3)	(4)	(5)	(6)
			Govern	nanceScore		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	-0.375***	-0.427***	0.129	-0.0337	-0.0292	
	(0.140)	(0.144)	(0.114)	(0.195)	(0.152)	
Liberal CEO						0.416***
						(0.118)
Liberal CFO						-0.671***
						(0.145)
Liberal CEO x Liberal CEO						-1.938***
						(0.425)
ExecutiveBoard $(0 = no, 1 = yes)$	0.0370	0.119	-0.147**	-0.139**		
	(0.172)	(0.177)	(0.0678)	(0.0683)		
ExecutiveBoard x LiberalismScore		1.108**		0.261		
		(0.523)		(0.236)		
ExecutiveBoard (CFO or CEO in					-0.186***	
Board)					(0.0680)	
ExecutiveBoard (both CFO & CEO in					0.146	
Board)					(0.201)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.864***	3.860***	5.459***	5.562***	4.106***	4.866***
	(1.112)	(1.111)	(1.125)	(1.122)	(1.155)	(1.182)
Observations	2,869	2,869	2,903	2,903	2,991	2,775
R-squared	0.176	0.177	0.170	0.170	0.168	0.185

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the GovernanceScore. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 8

	(1)	(2)	(3)	(4)	(5)	(6)
			Tob	in's Q		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	-0.0599	0.0692*	0.0481	0.0292	0.00489	
Liberansinscore		-0.0683*				
L'I LGDO	(0.0386)	(0.0398)	(0.0307)	(0.0457)	(0.0420)	0.06154
Liberal CEO						0.0615*
						(0.0317)
Liberal CFO						-0.0710*
						(0.0402)
Liberal CEO x Liberal CFO						0.200*
						(0.117)
ExecutiveBoard $(0 = no, 1 = yes)$	0.0174	0.0304	0.0105	0.0115		
	(0.0377)	(0.0348)	(0.0165)	(0.0168)		
ExecutiveBoard x LiberalismScore		0.185		0.0306		
		(0.137)		(0.0582)		
ExecutiveBoard (CFO or CEO in					0.00227	
Board)					(0.0161)	
ExecutiveBoard (both CFO & CEO in					0.0310	
Board)					(0.0434)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	8.375***	8.373***	8.445***	8.472***	8.243***	8.243***
	(0.357)	(0.357)	(0.364)	(0.361)	(0.368)	(0.384)
Observations	2,836	2,836	2,872	2,872	2,955	2,747
R-squared	0.613	0.613	0.609	0.609	0.611	0.613
I	0.010	0.010	0.007	0.507	0.011	0.010

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the Tobin's Q. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 9

	(1)	(2)	(3)	(4)	(5)	(6)
			ASSE	T4 ESG		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	-0.763	-2.104	0.527	-2.635	0.490	
	(1.671)	(1.714)	(1.243)	(2.079)	(1.791)	
LiberalCEO						-0.0143
						(1.235)
Liberal_CFO						-0.141
						(1.692)
Liberal CEO x Liberal CEO						2.810
						(5.008)
ExecutiveBoard $(0 = no, 1 = yes)$	-3.662	-1.206	3.445***	3.580***		
	(2.430)	(2.229)	(0.727)	(0.731)		
ExecutiveBoard x LiberalismScore		27.74***		5.104**		
		(5.456)		(2.512)		
ExecutiveBoard (CFO or CEO in					3.341***	
Board)					(0.711)	
ExecutiveBoard (both CFO & CEO in					0.671	
Board)					(2.823)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	61.16***	65.56***	83.58***	84.83***	66.07***	57.63***
	(11.25)	(11.31)	(11.50)	(11.52)	(12.08)	(12.63)
Observations	2,673	2,673	2,707	2,707	2,789	2,585
R-squared	0.183	0.188	0.178	0.179	0.196	0.178

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the ASSET4 ESG. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 10

	(1)	(2)	(3)	(4)	(5)	(6)
			CSR Stra	tegy Score		
VARIABLES	CFO	CFO	CEO	CEO	CFO & CEO	CFO & CEO
LiberalismScore	0.0430	-0.402	5.871***	-3.214	3.949	
	(2.769)	(2.810)	(2.070)	(3.493)	(3.005)	
Libera CEO						3.492
						(2.208)
Liberal CFO						1.707
						(2.854)
Liberal CEO x Liberal CFO						-1.390
						(7.921)
ExecutiveBoard $(0 = no, 1 = yes)$	-9.945**	-9.556**	2.218*	2.697**		
	(4.172)	(4.139)	(1.232)	(1.252)		
ExecutiveBoard x LiberalismScore		9.099		14.27***		
		(14.13)		(4.105)		
ExecutiveBoard (CFO or CEO in					4.082***	
Board)					(1.208)	
ExecutiveBoard (both CFO & CEO					-9.256**	
in Board)					(4.575)	
Executive Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Firm Characteristics	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry, State & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	110.2***	112.1***	100.7***	105.2***	103.1***	117.2***
	(20.10)	(20.25)	(20.03)	(19.89)	(21.16)	(21.51)
Observations	2,139	2,139	2,187	2,187	2,235	2,085
R-squared	0.167	0.168	0.188	0.192	0.188	0.171

Note: The results of the OLS regressions are shown in the above table which test the effect of the political ideology of the CEO & CFO on the CSR Strategy Score. The independent variables in these regressions are denoted as LiberalismScore, Liberal CEO, Liberal CFO & ExecutiveBoard. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 11

VARIABLES	ESGScore	EnvironmentalSc	SocialScore	Governance	ASSET4	CSR Strategy Score
		ore		Score	ESG	
Liberal CFO	-0.112	0.833***	-0.174	-0.231	4.211*	9.688**
	(0.133)	(0.225)	(0.173)	(0.167)	(2.183)	(3.786)
Liberal President	-0.204*	-0.0987	-0.297**	0.465***	-2.152	-0.968
	(0.106)	(0.184)	(0.146)	(0.161)	(1.858)	(2.826)
Liberal CFO x Liberal	0.201	-0.348	0.0225	-0.338	-2.951	-4.218
President						
Executive	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Characteristics						
Executive	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Characteristics						
Industry, State & Year	Yes	Yes	Yes	Yes	Yes	Yes
FE						
Constant	6.959***	3.264	12.49***	-0.272	54.99**	6.890
	(1.266)	(2.241)	(1.837)	(2.332)	(21.66)	(43.33)
Observations	707	707	707	707	683	562
R-squared	0.210	0.201	0.191	0.163	0.234	0.251

Note: The above table show the results of the Difference-in-difference test which tests the effect of alignment between a liberal president and liberal CFO on the ESGScore, EnvironmentalScore, SocialScore, GovernanceScore, ASSET4 ESG & CSR Strategy Score. The independent variables in these regressions are denoted as Liberal CFO & Liberal President. Section 3.1.2, 3.1.3 offer a description of the independent and dependent variables. Section 3.2 describes the regression analyses. Within the regressions is controlled for firm (ROA, Debt-to-equity-ratio, LogAssets) and executive (ExecutiveAge, Tenure, Gender) characteristics as described in section 3.1.4. Within the regression is controlled for industry, state, and year fixed effects, as described in 3.1.4. Robust standard errors are displayed in parentheses with the significance levels denoted as *** p<0.01, ** p<0.05, * p<0.1, following McCarthy et al. (2017).

Table 12
MSCI ESG IVA – Key Iusses (MSCI, 2023)

Environmental

- Carbon Emissions
- Product Carbon Footprint
- Energy Efficiency
- Insuring Climate Change Risk
- Water Stress
- Biodiversity and Land Use
- Raw Material Sourcing
- Financing Environmental Impact
- Toxic Emissions and Waste
- Packaging Material and Waste
- Electronic Waste
- Opportunities in Clean Tech
- Opportunities in Green Building
- Opportunities in Renewable Energy

Social

- Labor Management
- Human Capital Development
- · Health and Safety
- Supply Chain Labor Standards
- Controversial Sourcing
- Product Safety and Quality
- Chemical Safety
- Financial Product Safety
- Privacy and Data Security
- Responsible Investing
- Insuring Health and Demographic Risk
- Opportunities in Health and Nutrition
- Access to Communications
- Access to Finance
- Access to Healthcare

Governance

- Corruption & Instability
- Financial System Instability
- Business Ethics & Fraud
- Anti-competitive Practices
- Corporate Governance

Table 13 Fama-French Industries & States for fixed effects (STATA)

Fama-French Industries	States
Consumer NonDurables Food, Tobacco, Textiles, Apparel, Leather, Toys	California
Consumer Durables Cars, TV's, Furniture, Household Appliances	Georgia
Manufacturing Machinery, Trucks, Planes, Off Furn, Paper, Com Printing	Idaho
Oil, Gas, and Coal Extraction and Products	Kentucky
Chemicals and Allied Products	Michigan
Business Equipment Computers, Software, and Electronic Equipment	Nebraska
Telephone and Television Transmission	Ohio
Utilities	Oregon
Wholesale, Retail, and Some Services (Laundries, Repair Shops)	Pennsylvania
Healthcare, Medical Equipment, and Drugs	Tennessee
Finance	Washington
Other Mines, Constr, BldMt, Trans, Hotels, Bus Serv, Entertainment	Other