

How Do the CEO Political Leanings Affect REIT Business Decisions?

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ABSTRACT

Business decisions made by the real estate industry have a profound effect on the well-being of people who live, work, or shop in these buildings. While these decisions may be informed by evidence, the available evidence is often incomplete or imperfect. Therefore, the personal opinions or judgments of senior executives can have an effect. In this paper, we study these effects in two parts: risk-taking and environmental, social, and governance (ESG) activities. Since a person's political learning is a relatively stable measure, and is associated with preferences for risk and ESG activities, we examine how the political leanings of the CEOs are related to these effects. Using the data from 2003 to 2016, we find that real estate investment trusts with Democratic-leaning CEOs tend to take more risks, as evidenced by higher levels of leverage and more risk in stock prices. We further find that Democratic-leaning CEOs are more broadly engaged in environmentally oriented ESG activities.

KEYWORDS

Politics; environmental, social, and governance activities; corporate social responsibility; risk taking; decision making

JEL CODES

D21; G32; M14; Q56

Introduction

This paper studies how the preferences of leaders of real estate investment trusts (REITs) affect business decisions. Businesses seek to increase profits but the people who make those decisions may be motivated by other concerns, such as concern for risk or the environment, and the conflicts cannot always be resolved by the available information. The fact that a right answer is not obvious means that the personal judgments or opinions of a decision maker can play a larger role. For a “small” decision in the simple world of a principal-agent relationship, research suggests how a motivated sales manager or a CEO can control the flow of information while “shirking” (Shleifer & Vishny, 1997). While research has also shown how the effects of selfish motives can be controlled by modifying the terms of a job contract or with appropriate supervision, these recommendations are less useful when the base of knowledge is evolving or the consequences will not be evident for many years. Examples of such big decisions include decisions regarding sustainable business practices and risky investments. Such business-defining decisions are rarely judged by a wise, impartial principal who knows the issues being debated. When

shareholders or the board of directors are unaware of some relevant facts, the personal beliefs of a CEO matter.

Careful analysis of the link between opinions and actions is complicated by the fact that opinions come in many forms. Recent research has identified a particular class of opinions that is easy to identify and that affects important business decisions: political preferences or leanings (e.g., Hong & Kostovetsky, 2012; Hutton et al., 2014). Political preferences represent the personal preferences of a voter who is also a consumer, an investor or, maybe, a CEO.

This study is especially valuable because the real estate industry is very active in politics. The idea that success in a real estate business is all about “location, location, location” helps to explain why many businesses are very active in city politics, as either a rent-seeking activity or to inform local politicians. Our paper focuses on a different level of politics. The real estate industry is one of the top donors to federal politicians in the U.S., although the finance industry ranks even higher during recent election cycles.¹ During the 2015–2016 cycle which included a presidential vote, the industry donated US\$158m to political action committees, to political parties and to individual candidates. About half of this total went to Democrats.

Political preferences, especially in the United States, offer a measure which is both easy to identify and correlated with the essential beliefs of a decision maker. People who support the Republican Party in the U.S. tend to favor less government intervention in markets, well-defined property rights, and to prefer individual responsibility organized by market forces and community social values as policy solutions: in other words, they support traditional “conservative” beliefs. People who support the Democratic Party tend to favor government initiatives as a way to solve social problems (since the responsibility for a “problem” does not necessarily lie with the individual), are more willing to explore new ideas, and are more “progressive” socially. Hibbing et al. (2014) state that conservatives are “supporters of traditional and stability” while liberals innovate and reform. It is easy to find high profile and vocal examples of both stereotypes in the private sector. These traditional ideological tendencies are stable over time, even if the positions on specific policies evolve from decade to decade.

Investigating this dimension of a personality is consistent with the work of other researchers who have considered the effects of other dimensions of a CEO’s personality, such as narcissism (Aktas et al., 2016; Chatterjee & Hambrick, 2007), military service (Benmelech & Frydman, 2012), religiosity (Hilary & Hui, 2009), whether the CEO has a daughter (Cronqvist & Yu, 2017), childhood experiences (Bernile et al., 2017) and the results of psychometric tests which measure traits such as optimism, time preference and risk aversion (Graham et al., 2013). Our research considers whether preferences expressed at macro or political levels reappear at a micro or personal level.

Specifically, we study how the political preferences of CEOs affect business decisions in REITs. A question that interests all investors is the extent of risk-taking. Given the recent trends in sustainable development, REITs are investing more in green buildings and strengthening their environmental, social, and governance (ESG) credentials.² Because the social value of such activities is debated in political arenas, we also study how the political preferences affect decisions related to ESG. We posit that Democratic-leaning CEOs are more likely to take risks because of their general attitude or approach

to problem-solving, especially when compared to traditional Republican-leaning or “conservative” CEOs. Similarly, we argue that the same attitudes about underlying causes and approaches to solutions mean that Democratic-leaning CEOs tend to be more active in ESG activities.

Previous research has confirmed that personality differences exist and these differences appear frequently in debates about how businesses should contribute to society. Both of the leading political parties in the U.S. think that businesses should be profitable but financial performance is not the only metric of success. In the real estate industry, both of these issues are prominent. For example, and in spite of the popular media’s focus on the transportation sector for excessive use of oil and creating greenhouse gases (GHG), the “nearly six million commercial and industrial buildings in the U.S. ... produce 45% of ... emissions” and, for the 30% of commercial buildings which operate inefficiently, “a 10% improvement in energy efficiency would result in \$40 billion in collective savings ... equal to 19% of all ... vehicles” (Devine, 2017, p. 9). Especially in the recent past, trends in climate, in energy scarcity and in urbanization create opportunities for a CEO to invest in “green” real estate if that CEO wishes to lead their company in that direction. Similarly, large real estate companies make large, long term, risky investments which affect the lives of many people in many ways even if capital markets are incomplete.

To conduct our study, we use data on REITs between 2003 and 2016. To measure the political preferences of CEOs, we use data on personal political contributions of CEOs provided by the Federal Election Commission (FEC). The strategy used to identify CEOs’ political leanings follows Hong and Kostovetsky (2012) and Hutton et al. (2014).

A study which uses data on REITs in the United States has two noteworthy advantages. The fact that two parties dominate the political environment simplifies the problem of choosing an explanatory variable substantially. Equally important is how the choice of data simplifies the analysis and any implications. Typically, discussions of corporate social responsibility (CSR) focus on the “ESG” dimensions: environmental, social, and governance. People recognize that some dimensions are more important in some industries and for some countries than others, which complicates any analysis which includes a range of industries or countries: for the country where our data is taken from and for REITs, worries about child labor are less severe and working conditions are rarely life-threatening. Regulations about the level of pay and labor unions plus job mobility make worries about governance in the U.S. real estate industry more of a bargaining issue than one of human rights. As a result, using data on U.S. REITs enables us to focus on the environmental dimension of the impact of CEO’s political preference on a company’s ESG activities.

Our study contributes ideas and evidence to a variety of literatures. We study additional influences on how decisions are actually made in real estate companies. Our paper is among the first to systematically consider the effects of political opinion on the decisions of a REIT. We find that REITs whose CEO leans towards the Democratic Party are willing to take more risks, with higher levels of leverage, but less investment. We also find that Democratic-leaning REITs are more likely to undertake green activities than their competitors who are led by CEOs with a different political leaning. These results help to understand the fundamental choices of a REIT, including risky and ESG activities.

The remainder of the paper is organized as follows. The second section reviews the related literature. The third and fourth sections develop our hypotheses and empirical design. The fifth section describes the data sample and presents our empirical findings. The final section summarizes and provides concluding remarks.

Literature Review

Our research combines several strands of literature. We begin by reviewing research on political preferences and how they might affect business or financial decisions in general. We then review the existing research on the decisions in two dimensions: CSR and risk-taking. Each strand of literature is broad and, therefore, the research noted below is necessarily selective. Since some of the cited papers analyze the topic in general terms while others focus on a real estate specific context, we end this section by emphasizing the papers which focus on decisions by REITs or in the real estate industry.

Preferences and Politics

Much recent research has considered the politics of an individual company or of an individual within the company. This literature differs from the literature on lobbying by individuals or companies, which is intended to influence specific aspects of a particular public policy. The recent research considers whether the political preferences of key individuals, such as a CEO, affect the actions of a company. We start our review by noting that a person's political preference can be identified, before showing how earlier researchers have used this identity to explain business activities.

The Introductory section notes that, when using American data, the differences in opinion between Democrats and Republicans are relatively well-defined and stable over time, for the time period we consider. The opinions of members of different parties can overlap but there are prominent differences. Based on a Gallup poll, Saad (2016) finds that 37% of Americans consider themselves "conservative", 35% consider themselves "moderate" and 24% consider themselves "liberal". Amongst Democrats, 45% consider themselves "liberal" (and that fraction has been increasing) and 17% consider themselves "conservative". Amongst Republicans, 68% consider themselves "conservative" and 6% consider themselves "liberal".

The psychological basis of different political opinions is confirmed by researchers in psychology: e.g., Hirsh et al. (2010) or Hibbing et al. (2014). Hibbing et al. (2014) suggest that the ways of thinking used by people with different political leanings may differ so much that they complicate interactions between people with different political opinions, and frustrate people on both sides of the political aisle. Verhulst et al. (2012) use data on twins to conclude that, rather than being the result of their experience and maturity, a person's political opinion has a genetic basis. Such deep psychological forces are correlated with simple forms of consumer behavior: Jung et al. (2017) find that people from conservative counties in the United States complain significantly less when dealing with companies and are less likely to dispute a resolution.

We are aware that the correlation between party identification and the preferences of an individual is imperfect. While the severity of this concern depends on the data, we remind readers that political preferences for parties are easy to identify, and change little year to year, even as the policies advocated by the parties change. Measures of political

leaning based on donations to a political party also indicate that this preference is fairly stable: few individuals split their donations between parties. Some of the differences in political identification vary by location, which implies that a person's opinions may be easy to identify relative to a local population even if their relative position would change if they were to move to a different state. Harrison (2017, Table 5.2) comments on the stability of location variation over time by showing that there are few "swing states": for the four U.S. presidential elections between 2000 and 2012, the same party (i.e., the Democratic or the Republican candidate) won all four of these elections in almost all states. He also notes that government policies which might encourage CSR activities vary with the party that is in charge locally and that the use of renewable energy products is higher in states where Democrats lead. Dippold et al. (2014) note that areas with "well-educated people and a political preference for the Democratic Party significantly and positively influence the decision to certify buildings [as being green]." Our analysis uses location fixed effects and, to the extent that our measure of preferences is imperfect, the errors in variables should bias any observed effect toward zero.

Most of the research on this topic uses financial donations to measure political preferences. For example, Hong and Kostovetsky (2012) find that the investments of mutual fund managers in socially sensitive industries are correlated with their political donations. Hong and Kostovetsky make the important point that this tendency holds even if the mutual funds are not designated as "socially responsible." Thus, the effects of socially responsible investing are broader than the official numbers would suggest. The goal of "following the money," combined with the previous comments about the political preferences not being perfectly aligned with party affiliation, is another reason why our research uses financial donations as the variable of interest.

Hutton et al. (2014) study the relationship between political preferences and risk aversion using a pair of natural experiments. They find that Republican companies become more conservative following a major event which appears to increase the riskiness of the business environment. Hutton et al. (2015) use a similar methodology to study the relationship between political preferences and the kinds of risks which a company is willing to accept. In their study, risk is measured by the types of lawsuits which a company experiences. They find that the stereotypes are confirmed: that Republicans are relatively less concerned about cases involving civil rights or environmental concerns, while Democrats are relatively less concerned about cases involving security fraud or intellectual property.

Chin et al. (2013) offer an interesting variation on this argument, when studying industries other than real estate. Using information collected by a survey, they find a similar relationship between a CEO's political ideology and the level of CSR activities, and that the effect is amplified by a CEO's relative power within the company. They also note that a Republican CEO is not opposed to CSR activities under all conditions but that, due to a lesser commitment, those activities are more sensitive to the current state of the market or to the financial status of the company.

Corporate social responsibility (CSR)

CSR refers to how a corporation interacts with its environment as an employer, as a buyer and as a member of a broader community. Many papers focus on the "ESG"

dimensions of CSR activities: environmental, social, and governance. Like many other labels, there is more agreement on its intent than on how to measure it precisely. Therefore, this review considers broader aspects of the situation, while trying to keep the discussion as brief as possible. Interested readers are encouraged to read review papers such as van Beurden and Gosling (2008), Aguinis and Glavas (2012), Kitzmueller and Shimshack (2012), Crifo and Forget (2015), Schmitz and Schrader (2015), Huang and Watson (2015), or Westermann et al. (2018).

A common question is: are CSR activities related to a company's financial performance? The answer is not as simple as one might hope. van Beurden and Gosling (2008) argue that there are competing definitions of CSR and competing definitions of financial performance. They conclude that, while there is a generally positive relationship between CSR and the financial performance of a company, the evidence is not overwhelming. Aguinis and Glavas (2012) study about 700 sources to offer a research agenda on how management should act in the context of CSR. They conclude that this literature has not found robust conclusions. Similarly, Crifo and Forget's review (2015) concludes that the mechanisms by which CSR activities have an effect are still unclear. This lack of clarity is one of the reasons why our research primarily focuses on the determinants of the CSR activities rather than on their effects or on the net benefits of the effects.

Kitzmueller and Shimshack (2012) reinforce the idea that the CSR literature is diverse and focus on organizing the literature into various perspectives. They advocate for considering three categories of CSR activities: "strategic," "not-for-profit," and "moral hazard". The first category describes activities where profit is generated by influencing the behavior of consumers, employees or politicians. The second category describes activities where shareholders give managers permission to engage in the activities in order to survive when competing with firms which do not. The third category describes a situation where the managers do not have permission to engage in these activities from shareholders but, since shareholders are unaware, managers are not prevented from doing so. Based on the literature available at the time of their writing, they argue that there is little evidence that the not-for-profit category explains much of the observed behavior. They follow with "the observational evidence for strategic CSR is somewhat more favorable. Nevertheless, data on systematic large gains from CSR are limited" (p. 72). Di Giuli and Kostovetsky (2014) reinforce the importance of moral hazard by noting that it is hard for a researcher or investor to collect the data needed to study the CSR activities of a company.

Riskiness, Capital Structure, and Politics

The literature on risk-taking is enormous and, still, incomplete (Westermann et al., 2018). Our empirical research focuses on differences between REITs according to leverage choice, capital expenditure, volatility of stock price and systemic risk. These variables have a natural interpretation in terms of riskiness, especially the volatility of stock price and systemic risk.

All firms consider a risk-return trade off when making a decision, and risk management strategies are a familiar part of standard operating procedures. Our analysis considers an association between risk aversion and political tastes. The familiar argument is

that all managers seek to increase risk adjusted returns but that managers who, for any reason, has a stronger dislike for risk would tend to avoid actions which increase risk. For example, increasing leverage may increase the expected rate of return on an investment but the associated increase in the variance of the rate of return is also well-known. Low (2009) notes many other actions which a manager can take, if they want, and which would affect the degree of risk, such as investment amount, type of project, diversification and hedging activities. As noted above, people who favor the Republican Party in the U.S. tend to be more “conservative” in more than one way and tend to be less likely to try new things.

Some evidence on these effects in different types of decisions already exists. DeVault and Sias (2017) find that hedge fund managers who are relatively liberal in a political sense tend to invest more in assets which are riskier. Their bibliography includes citations from both the political science and the psychology literatures over more than 60 years to link political preferences and, in its many forms, risk preferences. Campbell et al. (2019) note that managers with ideologies which are politically conservative tend to behave differently when reporting on corporate performance: they are less likely to restate earnings and to use discretionary accruals less. Both of these effects tend to reduce the risk inferred by investors.

Politics, CSR, Riskiness, and REITs

We think that our paper is the first to systematically consider the effects of political opinion on the decisions of a REIT. Given the large number of people who think that “location, location, location” is the secret to success in a real estate business, it is important to note our work is distinct from the literature on political donations as rent seeking since our measure of political donations focuses on the national level. The review above used ideas from many different fields and, for that reason, this subsection focuses on recent work which considers these issues in the context of REITs or the real estate industry.

There has been an active line of research in real estate that looks at CSR activities and market performance. Many papers show that the effects of CSR on the willingness to pay by tenants, owners or buyers of real estate and on financial or operational performance of a property are both economically and statistically significant, including Devine and Kok (2015), Kerscher and Schaefer (2015), Miller et al. (2013), Reichardt et al. (2012), and Pivo and Fisher (2010).

We noted that one advantage of focusing on U.S. REITs is that the concerns about CSR which complicate studying other industries, by raising questions about possible confounding variables, are less relevant. Following increasing environmental concerns and higher energy prices, sustainable buildings gained the attention among real estate investment during the last decade, but early work indicated that investors are uncertain about the benefits of green buildings (i.e., Eichholtz et al., 2010, 2012; Fuerst & McAllister 2011; Miller et al., 2013). Devine (2017) expresses the now dominant view: that green building is profitable and that companies make decisions based primarily on a financial cost-benefit calculation.³ Devine also notes that, because the costs and benefits are not always understood by tenants, some kind of independent certification (such as LEED)

matters. Eichholtz et al. (2012) evaluate the determinants of green property investments in U.S. REITs, and add the suggestion that political preference may help to explain why some REITs are enthusiastic about sustainable investments.

This view is not universally held. For example, Coën et al. (2018) argue that, after accounting for effects of systemic risk, errors in variables in asset pricing models and the problems associated with illiquidity (esp. for smaller REITs), the conclusion changes. They hypothesize that green REITs may invest in more efficient properties. Chiang et al. (2019) use evidence from disclosure statements to conclude that REITs are more involved in CSR activities when growth and investment opportunities are greater.

While the correlation between political preferences and firm behaviors can be investigated empirically, the challenge is to separate this effect from other variables which might be relevant. Previous studies in REITs have noted many variables which should be included as control variables, at least. For example, Feng et al. (2007) offer a general survey of the capital structure of REITs with a particular emphasis on financing options. They find a positive relationship between the market to book ratio and the leverage ratio. Harrison et al. (2011) find that asset tangibility is positively related to leverage, and that profitability and market-to-book ratios are negatively related. They argue that their results support the market timing and trade-off theories of capital structure but not the pecking order theory.

Another factor that affects firm performance and the capital structure is the potential agency problem. Several studies in REITs have found that managing real estate investments through external advisors generates a larger conflict of interest between shareholders and agents than does through internal advisors. Capozza and Seguin (2000) find that externally advised REITs performed worse than the REITs run by internal advisors. Ambrose and Linneman (2001) provide evidence that externally advised REITs in general also incur higher financial expenses. Chan et al. (2003) offer a comprehensive review on the agency problems associated with REIT's advisor choice. For a broader discussion on the positive relation between corporate governance and REIT's performance, please see Bauer et al. (2010).

There is also a large body of work on the determinants of the expected returns to investing in REITs: see especially the recent review by Letdin et al. (2019). Letdin et al. (2019) conclude that the unlevered returns of REITs are between those of stocks and bonds, that highly leveraged REITs are likely to underperform less leveraged REITs (but outperform on a risk-adjusted basis) and that an increase in leverage increases the sensitivity of REIT returns to general stock market returns. Letdin et al. (2019, p. 9, see also p. 15) also conclude that "idiosyncratic risk dominates the volatility of [equity] REIT returns", that there is conflicting evidence on whether leverage increases volatility and that the current volatility is predictive of future volatility.

Some recent work offers a more complicated view of decision making that informs our work even if we cannot resolve the disputes. For example, Giaccotto et al. (2021) note that, while a single period CAPM is popular, it fails to account for three reasons why long-term discount rates tend to be lower than short term discount rates. Therefore, the same single period CAPM model used to decide whether to buy or sell a unit would tend to under-estimate the value of a long-term investment in technology intended to make the REIT more sustainable. And, while REITs are popular investments

because they are a relatively-transparent device to convey money from tenants to investors, the work by Beracha et al. (2019a, 2019b), Xu and Ooi (2018), and Highfield et al. (2021) note that economies of scale and variation in operational efficiency have effects which are both statistically significant and economically significant.

This result is surprising given the general presumption that market forces should eliminate obvious sources of excess profit. Downs et al. (2019) present evidence showing that, despite the widespread presumption that the rules governing REITs protects managers, REITs are as likely to be the target of activist shareholders as regular companies. On the other hand, Hardin et al. (2017) argue that, even if all investors are concerned about rates of return, the difference between active and passive institutional investors affects the performance of a REIT significantly. Further, Chen et al. (2020) use hand-collected data to argue that investors have a limited attention span.

Hypotheses

A person who believes in something has their reasons. At home, people act on those beliefs when investing and consuming. When that person goes to work, their brain does not change nor do their beliefs. And, if that person is a CEO then their decision would affect many people.

Previous literature identifies two hypotheses based on the link between the preferences of a REIT's leader and its actions.⁴ The idea that the word "conservative" can be used to describe both an attitude toward risk and an attitude toward politics is not merely a matter of language: for example, Kam and Simas (2010) verifies the link and studies it more precisely. The literature cited above notes that people who are liberal or favor the Democratic Party tend to look for changes while people who are conservatives or favor the Republican Party tend to prefer stability. Hutton et al. (2014) add to this with a number of conjectures concerning how the CEO's political leaning might affect corporate investment. They argue that Republican leaning CEOs would invest less in tangible investments and prefer safer projects. At the same time, the conservative perspective of a Republican leaning CEO may constrain the overconfidence which leads to excess investment (Malmendier & Tate, 2005).⁵ By implication, Democratic leaning CEOs would go in the opposite direction. Therefore, we offer the following hypothesis.

H1: A REIT whose CEO favors the Democratic Party tends to use a riskier business strategy.

We investigate REITs' risk-taking activities from three perspectives; (i) capital structure in terms of leverage, (ii) riskiness of a stock price as seen by investors and (iii) capital investment.

Our second hypothesis also builds on previous literature and uses the idea that Democrats tend to be socially progressive. Although discussions about specific ESG activities are relatively new, members of the Democratic Party in the U.S. have expressed concerns for the environment for decades. Therefore, the second hypothesis should not be surprising.

H2: A REIT whose CEO favors the Democratic Party is more likely to undertake ESG activities.

Many papers investigate CSR activities by focusing on the "ESG" dimensions (environmental, social, and governance) where, as we note, the environmental dimension is most

important to the US real estate industry. We expect that Democrats are more open to new types of environmental investments.

Empirical Design

To test these hypotheses, we use information on the personal political contributions of CEOs provided by the Federal Elections Commission (FEC),⁶ where all federal contributions since 1979 are publicly available. The FEC database records information about donor's address, employer, occupation, contribution date, contribution amount, recipient and the recipient's party which we manually search for each REIT CEO's contributions recorded in SNL database and ExecutiveComp database. We locate 218 CEOs of 181 REITs among which 89 CEOs (i.e., 41%) made political donations in the database, as presented in [Appendix 1](#).⁷ The rest are classified as non-donors.

We adopt the strategy used by Hong and Kostovetsky (2012) and Hutton et al. (2014) to identify CEOs' political leanings. We construct two measures of the political preference in the cross section. The first measure (*DEM*) captures whether a REIT is Democratic leaning. Similar to Hong and Kostovetsky (2012) and Hutton et al. (2014), we define *DEM* as the dollar value to the Democratic Party divided by the CEO's total contributions to date. (*DEM* = 0 for REIT CEOs who never make a political contribution.) To illustrate, consider a CEO who has made ten donations amounting \$10,000 up to 2010. If he donates exclusively to the Democratic Party in all ten donations, then *DEM* = 1 (= \$10,000/\$10,000) in 2010. If a different CEO donates to the Democratic Party in six donations amounting \$8,000 and four mixed donations amounting \$2,000 to other parties up to 2010, then *DEM* = 0.8 (= \$8,000/\$10,000) in 2010. If this second CEO donates \$6,000 to Republicans during 2011 then *DEM* = 0.5 (= \$8,000/\$16,000) in 2011. Therefore, *DEM* is time-varying for every CEO and indicates whether a CEO has a weak or strong Democratic leaning. To construct *DEM*, we use the donation data starting in 1999, even though our empirical analysis uses data from 2003 to 2016: the extra information on donations from 1999 to 2002 helps make our constructed measure more stable during the earliest years. In a robustness check, we define *DEM* as 1 if over 50% of CEO contribution amount goes to Democrats, otherwise *DEM* equals 0.⁸ The second measure (*DEM Amount*) emphasizes the dollar amount in the political contribution. *DEM Amount* is the contribution of CEO (in logarithm) to Democrats for the given year *t*, according to Federal Elections Commission.

Our regressions with firm leverage as the dependent variable use

$$Leverage_{it} = a_i + b * PC_{it} + c * controls_{it-1} + \eta_h^1 + \eta_t^2 + w_{it} \quad (1)$$

We use both the *book leverage* and the *market leverage*. *Book leverage* is measured as the short-term and the long-term liabilities over the total assets, and *market leverage* is measured as the short-term and the long-term liabilities over the market value, for each firm in each year. For this regression and the ones with other dependent variables, *PC* takes the political preference measures described above, a_i is the firm fixed effect and, finally, we include a measure of the total amount of CEO contribution (*CEO Contribution*) to check consistency with the prior literature on the political contribution. $\{\eta_h^1, \eta_t^2\}$ respectively represent state fixed-effects for the state in which the REIT headquarter is located and a dummy variable for financial crisis. We considered fixed-effects for each of

the property types in an unreported robustness check and found qualitatively similar results.

To study the effect of a CEO being Democrat on a REIT's investments, we estimate the following equation:

$$Investment_{it} = a_i + b * PC_{it} + c * controls_{it-1} + \eta_h^1 + \eta_t^2 + w_{it} \quad (2)$$

where *Investment* is measured by capital expenditure in logarithm.

To test whether being Democrat makes a REIT act less risk averse, we estimate the following equation:

$$Investment\ Riskiness_{it} = a_i + b * PC_{it} + c * controls_{it-1} + w_{it} \quad (3)$$

using two dependent variables. First, we use *Systematic Risk*, measured as the yearly market beta⁹ for a certain REIT from CAPM. Second, we use *Volatility*, measured as the yearly standard deviation of the stock return (excluding dividend payment) for a certain REIT. By focusing on more than one variable which is associated with risk, we seek to highlight the effects of a difference in risk preferences.

Finally, to investigate whether Democratic leaning REITs are active in ESG, we estimate the following equation:

$$ESG_{it} = a_i + b * PC_{it} + c * controls_{it-1} + \eta_h^1 + \eta_t^2 + w_{it} \quad (4)$$

where *ESG* uses "Environmental" measures of CSR from the KLD dataset, including the measures of Environmental Opportunities, Environmental Strengths (aggregating KLD's total number of strengths and other strengths), Environmental Concerns (aggregating KLD's four other environmental concerns including Agricultural chemicals, Ozone-depleting chemicals, Other concern, and Climate change), and the Composite Index which aggregates Environmental Opportunities and Environmental Strengths, by deducting Environmental Concerns.

We include a set of control variables. Following the existing finance literature (Hutton et al., 2014) and literatures on REITs capital structure (Boudry et al., 2010; Feng et al., 2007; Harrison et al., 2011), we use total assets (in logarithm of millions of dollars; *Firm_Size*) and the firm's market value divided by its book value of the total assets (*MB*) to measure the growth opportunity, *Profitability* (operating income scaled by the total assets),¹⁰ *Retained_Earnings* (retained earnings over total assets), *Tangibility* (tangible assets over the total assets), *Modern_REIT* (equals 1, if the IPO year is 1993 or later), *Advisor* (equals 1, if externally advised) and *CEO_Duality* (equals 1, if CEO also serves as the president or/and the chairman of the board) to measure the effectiveness of corporate governance and institutional investors. [Appendix 2](#) lists all the variables we use and their sources.

Data and Empirical Results

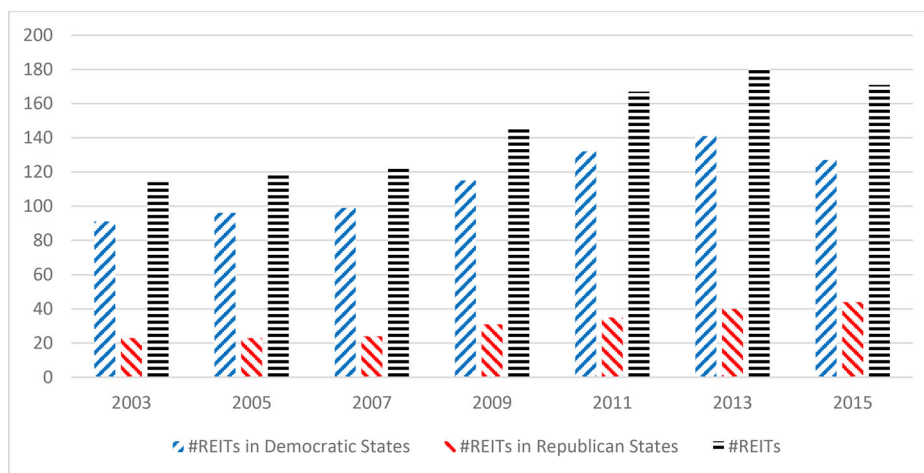
This study uses a panel of U.S. equity REITs from 2003 to 2016.¹¹ We restrict the sample to those (1) listed on NYSE, Nasdaq, or Amex, with (2) non-missing values on Compustat and CRSP. We also collect data on political contributions to the candidates and to the political action committees (PACs) during federal elections from the U.S. Federal

Table 1. Political preference measures: summary statistics.

Panel A: Political Preference for REIT CEOs

Election cycle	DEM amount Mean	REP amount Mean	CEO contribution Mean
2003–2004	5,668	1,842	7,293
2005–2006	8,756	4,044	10,429
2007–2008	5,590	6,674	10,714
2009–2010	4,390	6,824	8,475
2011–2012	2,932	4,855	12,186
2013–2014	2,365	7,195	10,281
2015–2016	3,375	1,850	9,543

Panel B: Political preference of state and location of a REIT's headquarters



This table describes the summary statistics of REIT CEOs political contributions from 2003 to 2016 for full sample. Panel A describes the REIT CEOs political contributions to different parties in USD. Panel B describes the political preference for REIT headquarter distribution, where a state is defined as Democratic if the Democratic candidate wins at the state level for the presidential election in the given election cycle.

Elections Commission (FEC) website. We manually match the names of each REIT CEO with the FEC records. This gives us 1019 REITs CEO-year observations.

Panel A of [Table 1](#) reports summary statistics for the CEO contribution to Democrats across all election cycles from 2003 to 2016. The mean amount of CEO's contribution to Democrats (*DEM Amount*) shows a noticeable shift in about 2008 or 2010 when the presidency changed from a Republican to a Democrat and followed the Citizen's United decision by the U.S. Supreme Court. [Appendix 1](#) dives into the data deeper and shows that donors tend to focus their donations on only one party. This is partial evidence that the donations are not motivated by rent-seeking or a desire to influence politicians on a particular policy. Panel B shows where REITs locate their headquarters over the time and according to the political leaning of the location.

[Table 2](#) presents descriptive statistics for our key variables. The mean of *Book Leverage* and *Market Leverage* are 54.7% and 39.9%, indicating that REITs tend to be highly levered when compared with other industries (Feng et al., 2007; Harrison et al., 2011; Letdin et al., 2019). The mean of *Investment (in logarithm)* is 0.314. The mean value of *Systematic Risk* is 0.685, suggesting REITs have less systematic risk than common stocks. The mean of *Volatility* is 0.048. Yet, there is a wide variation in the measure of *Systemic*

Table 2. Descriptive statistics.

Variable name	N	Mean	SD	p50	p1	p25	p75	p99
<i>Book Leverage</i>	1,019	0.547	0.197	0.558	0.186	0.455	0.669	0.955
<i>Market Leverage</i>	1,019	0.399	0.179	0.385	0.112	0.291	0.503	0.868
<i>Investment</i> (in logarithm)	1,019	0.314	1.355	0.000	-2.453	0.000	0.000	6.111
<i>Systematic Risk</i>	1,019	0.685	1.133	0.400	-0.329	0.000	1.190	3.342
<i>Volatility</i>	1,019	0.048	0.067	0.043	0.000	0.000	0.069	0.317
<i>ESG Measures</i>								
Environmental Strengths	1,019	0.007	0.084	0.000	0.000	0.000	0.000	1.000
Environmental Opportunities	1,019	0.001	0.031	0.000	0.000	0.000	0.000	2.000
Environmental Concerns	1,019	0.004	0.061	0.000	0.000	0.000	0.000	1.000
Composite Index	1,019	0.008	0.125	0.000	0.000	0.000	0.000	2.000
<i>DEM</i>	1,019	0.105	0.170	0.006	0.000	0.000	0.144	0.771
<i>DEM Amount</i> (in logarithm)	1,019	0.232	1.960	0.000	0.000	0.000	0.000	5.600
<i>CEO Contribution</i> (in logarithm)	1,019	2.767	4.072	0.000	0.000	0.000	7.824	10.820
<i>MB</i>	1,019	1.350	0.466	1.271	0.555	1.057	1.544	2.741
<i>Profitability</i>	1,019	0.018	0.075	0.018	-0.149	0.000	0.038	0.159
<i>Retained_Earnings</i>	1,019	-0.021	0.102	-0.013	-0.402	-0.028	0.000	0.108
<i>Tangibility</i>	1,019	0.084	0.284	0.000	0.000	0.000	0.000	1.310
<i>Firm_Size</i>	1,019	3.203	4.326	1.920	0.005	0.599	3.796	22.675
<i>Modern_REIT</i>	1,019	0.829	0.377	1.000	0.000	1.000	1.000	1.000
<i>Advisor</i>	1,019	0.133	0.340	0.000	0.000	0.000	1.000	1.000
<i>CEO_Duality</i>	1,019	0.250	0.433	0.000	0.000	0.000	1.000	1.000

This table presents descriptive statistics for the variables used in the empirical analyses of U.S. equity REITs from 2003 to 2016. We restrict the sample to those (1) listed on NYSE, Nasdaq, or Amex, with (2) non-missing values on Compustat and CRSP.

Risk across REITs. As for the ESG measures, the mean value of Environmental Strengths (Environmental Opportunities) is 0.007 (0.001), while the mean value for Environmental Concerns is 0.004. REITs are priced with a mean *MB* of 1.350. On average 13.3% of REITs are externally advised and 25% of CEOs also serve as the president or/and the chairman of the board. In an unreported analysis, we also document that a REIT whose CEO leans Democratic tends to have higher market-to-book ratio and hold relatively more cash and tangible assets. All variables are winsorized at 99% to remove outliers.

The next few subsections report the empirical evidence of the political preference on capital structure, capital expenditure, investment riskiness and ESG activities. The results overall support the hypotheses that political preferences of CEOs affect the business decisions of REITs.

Political Preference and Use of Debt

Table 3 reports on the relationship between the political preference and capital structure. Column (1) shows that *DEM* is positively related with book leverage, with a high degree of statistical significance. We also find a positive relation between *DEM Amount* and book leverage. Column (3) and column (4) show that both *DEM* and *DEM Amount* are positively related with market leverage. Keeping in mind that REITs use more leverage than general firms, these results indicate that a REIT with a CEO who leans Democratic more strongly uses even more leverage. Using information from Tables 2 and 3, we find that an increase in *DEM* by one standard deviation increases book leverage by 1.94 percentage points ($= 0.114^* 0.170$) and market leverage by 1.45 percentage points ($= 0.085^* 0.170$).

Table 3 also presents the relationship between the capital structure and other variables. The coefficient for *MB* is negative. This finding is consistent with Ling et al.'s (2019)

Table 3. Political preference and capital structure.

	<i>Book leverage</i>		<i>Market leverage</i>	
	Column 1	Column 2	Column 3	Column 4
<i>DEM</i>	0.114*** (0.032)		0.085*** (0.029)	
<i>DEM Amount</i>		0.004* (0.002)		0.004* (0.002)
CEO Contribution	0.000 (0.002)		0.001 (0.001)	
<i>MB</i>	-0.044** (0.017)	-0.044** (0.017)	-0.202*** (0.016)	-0.201*** (0.016)
<i>Profitability</i>	-0.518*** (0.102)	-0.516*** (0.101)	-0.497*** (0.091)	-0.495*** (0.090)
<i>Retained_Earnings</i>	-0.455*** (0.113)	-0.453*** (0.111)	-0.231*** (0.081)	-0.229*** (0.081)
<i>Tangibility</i>	0.040* (0.021)	0.038* (0.021)	0.004 (0.019)	0.002 (0.018)
<i>Firm_Size</i>	0.004*** (0.001)	0.004*** (0.001)	0.001 (0.001)	0.002* (0.001)
<i>Modern_REIT</i>	-0.095*** (0.016)	-0.095*** (0.016)	-0.044*** (0.011)	-0.045*** (0.011)
<i>Advisor</i>	-0.028 (0.023)	-0.029 (0.023)	0.006 (0.021)	0.005 (0.021)
<i>CEO_Duality</i>	0.015 (0.014)	0.017 (0.013)	-0.025** (0.010)	-0.022** (0.010)
<i>Crisis</i>	0.047* (0.026)	0.044* (0.026)	0.102*** (0.023)	0.101*** (0.023)
<i>Location FE</i>	Yes	Yes	Yes	Yes
<i>Constant</i>	Yes	Yes	Yes	Yes
<i>Num of Obs.</i>	1,019	1,019	1,019	1,019
<i>Adjusted R²</i>	0.266	0.265	0.474	0.473

This table presents the relation between the political preference and capital structure of U.S. equity REITs from 2003 to 2016. The dependent variable is *Leverage*, measured as short-term and long-term liabilities over the book value of total assets (*Book Leverage*) or the market value (*Market Leverage*). The variables of interest are *DEM*, and *DEM Amount*. All variables are as defined in Appendix 2. Coefficient estimates are presented, and robust standard errors are included in parentheses. *, **, and *** represent the 10%, 5%, and 1% significance levels, respectively.

analysis showing that “fast-growing firms tend to issue equity in the next period”. *Profitability* and, especially, *Modern REITs* and *CEO Duality* tend to affect leverage negatively which is consistent with the findings of prior literature on corporate governance.

Overall, the results in Table 3 support the hypothesis that the capital structure (in terms of leverage) of a REIT is positively associated with leaning Democratic (H1).

Political Preference and Riskiness of Stock Prices

Table 4 reports on the relationship between the CEO’s political preference and the riskiness of stock returns. Column (2) reports a positive relation between *DEM Amount* and the stock *Volatility*. Column (3) and column (4) show that both *DEM* and *DEM Amount* are also positively related with *Systematic Risk*.¹² The economic significance of political leaning is greater for *Systemic Risk* than for the *Volatility* of stock return, especially as measured by *DEM*. A REIT’s CEO can affect the systematic risk through selecting which assets to buy or sell, according to location and the type of tenant (Delcoure & Dickens, 2004; Gyourko & Nelling, 1996).

Table 4. Political preference and investment riskiness.

	Volatility		Systematic Risk	
	Column 1	Column 2	Column 3	Column 4
<i>DEM</i>	0.016 (0.019)		0.628** (0.303)	
<i>DEM Amount</i>		0.002* (0.001)		0.033** (0.016)
<i>CEO Contribution</i>	0.003*** (0.001)		0.047*** (0.009)	
<i>MB</i>	-0.013** (0.005)	-0.012** (0.005)	-0.198 (0.127)	-0.171 (0.126)
<i>Profitability</i>	0.044* (0.025)	0.046* (0.024)	-1.030* (0.623)	-0.985 (0.620)
<i>Retained_Earnings</i>	-0.002 (0.017)	-0.001 (0.017)	0.976* (0.529)	1.005* (0.523)
<i>Tangibility</i>	-0.015*** (0.005)	-0.016*** (0.006)	-0.126 (0.077)	-0.168** (0.076)
<i>Firm_Size</i>	0.000 (0.000)	0.000 (0.000)	0.002 (0.008)	0.008 (0.007)
<i>Modern_REIT</i>	-0.007 (0.005)	-0.008 (0.005)	-0.032 (0.072)	-0.052 (0.074)
<i>Advisor</i>	-0.004 (0.008)	-0.004 (0.008)	-0.375*** (0.096)	-0.378*** (0.095)
<i>CEO_Duality</i>	-0.017*** (0.005)	-0.011*** (0.004)	-0.081 (0.059)	0.035 (0.059)
<i>Crisis</i>	0.099*** (0.017)	0.101*** (0.017)	0.541*** (0.178)	0.573*** (0.178)
<i>Location FE</i>	Yes	Yes	Yes	Yes
<i>Constant</i>	Yes	Yes	Yes	Yes
<i>No. of Obs.</i>	1,019	1,019	1,019	1,019
<i>Adjusted R²</i>	0.236	0.225	0.081	0.071

This table presents the relation between the political preference and investment riskiness of U.S. equity REITs from 2003 to 2016. The dependent variables are *Volatility*, measured as yearly standard deviation of the stock return (excluding dividend payment) for a certain REIT, and *Systematic Risk*, measured as yearly market beta for a certain REIT from CAPM. The variables of interest are *DEM*, and *DEM Amount*. All variables are as defined in [Appendix 2](#). Coefficient estimates are presented, and robust standard errors are included in parentheses. *, **, and *** represent the 10%, 5%, and 1% significance levels, respectively.

Overall, the results in [Table 4](#) support the hypothesis that a REIT's riskiness is positively associated with the CEO leaning Democratic (H1).

Political Preference and Capital Expenditure

Our third test follows the ideas expressed in Hutton et al. (2014) and considers whether a CEO leaning Democratic affects corporate investment. [Table 5](#) reports the relationship between political preference and capital expenditure. The results document a significant and negative relation between political preference and capital expenditure. For an increase in *DEM* equal to one standard deviation, capital expenditure decreases by 19.2% ($=\exp(-1.255 * 0.170) - 1$, using information from [Tables 2](#) and [5](#)). The coefficient on *CEO Contribution* is also negative and significant, indicating that the amount of the CEO's contribution is also associated with corporate investment strategies.

This result differs from what Hutton et al. (2014) found, although they focused on Republicans. In other ways, our findings are consistent with what Hutton et al. found: [Table 3](#) finds that Democratic leaning REITs use more leverage and [Table 4](#) shows that

Table 5. Political preference and capital expenditure.

	<i>Investment</i>	
	Column 1	Column 2
<i>DEM</i>	-1.255*** (0.337)	
<i>DEM Amount</i>		-0.045** (0.019)
<i>CEO Contribution</i>	-0.050*** (0.013)	
<i>MB</i>	0.148 (0.174)	0.117 (0.172)
<i>Profitability</i>	0.261 (0.744)	0.204 (0.750)
<i>Retained_Earnings</i>	1.655* (0.868)	1.620* (0.877)
<i>Tangibility</i>	2.660*** (0.328)	2.716*** (0.333)
<i>Firm_Size</i>	0.069*** (0.011)	0.060*** (0.011)
<i>Modern_REIT</i>	0.243** (0.096)	0.264*** (0.096)
<i>Advisor</i>	-0.567*** (0.113)	-0.562*** (0.114)
<i>CEO_Duality</i>	0.637*** (0.108)	0.507*** (0.099)
<i>Crisis</i>	0.263 (0.180)	0.242 (0.184)
<i>Location FE</i>	Yes	Yes
<i>Constant</i>	Yes	Yes
<i>No. of Obs.</i>	1,019	1,019
<i>Adjusted R²</i>	0.549	0.537

This table presents the relation between the political preference and corporate investment of U.S. equity REITs from 2003 to 2016. The dependent variable is Investment, measured as capital expenditure in the observation year in logarithm. The variables of interest are *DEM*, and *DEM Amount*. All variables are as defined in Appendix 2. Coefficient estimates are presented, and robust standard errors are included in parentheses. *, **, and *** represent the 10%, 5%, and 1% significance levels, respectively.

investors owning such REITs are exposed to more risk. We conjecture that the difference in investment strategies may be related to differences in the rules governing REITs, especially the idea that REITs rely more on capital markets to fund investments.

The empirical effects of control variables are consistent with prior studies. More specifically, we document a positive relationship between *Retained_Earnings*, *Tangibility*, *Firm_Size*, *Modern_REIT*, *CEO_Duality* and investment. The coefficients showing the effect of *Advisor* on the corporate investment are negative and highly significant.

Overall, the results in Table 5 disconfirm the hypothesis that corporate investment is positively associated with a CEO leaning toward the Democratic Party (H1). Future research should investigate whether the difference is related to specific features of investing by REITs.

Political Preference and ESG Activities

Table 6 reports on the relationship between the political preference and ESG activities. As expected, both *DEM* and *DEM Amount* are positively related to the environmental strengths within a REIT (Columns 1 and 2) and are positively related to the Composite Index (Columns 7 and 8). Columns (3) to (6) report the findings for the Number of Environmental Concerns and Environmental Opportunities within a REIT, but not at the

Table 6. Political preference and environmental, social, and governance activities.

	Environmental strengths		Environmental opportunities		Environmental concerns		Composite index	
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
<i>DEM</i>	0.097*** (0.032)		-0.012 (0.013)		-0.007 (0.020)		0.093** (0.042)	
<i>DEM Amount</i>		0.014*** (0.002)		-0.001 (0.001)		0.002* (0.001)		0.011*** (0.002)
<i>CEO Contribution</i>	0.004*** (0.001)		0.001 (0.000)		0.000 (0.001)		0.004*** (0.001)	
<i>Profitability</i>	-0.028 (0.037)	-0.022 (0.037)	-0.007 (0.015)	-0.006 (0.015)	0.006 (0.023)	0.006 (0.023)	-0.040 (0.049)	-0.034 (0.049)
<i>Retained_Earnings</i>	-0.011 (0.034)	-0.009 (0.033)	0.001 (0.014)	0.001 (0.014)	0.003 (0.021)	0.003 (0.021)	-0.013 (0.045)	-0.011 (0.045)
<i>Tangibility</i>	-0.013 (0.011)	-0.017 (0.010)	-0.001 (0.004)	-0.002 (0.004)	0.003 (0.007)	0.003 (0.007)	-0.017 (0.014)	-0.021 (0.014)
<i>Firm_Size</i>	0.003*** (0.001)	0.003*** (0.001)	0.000 (0.000)	0.001* (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002 (0.001)	0.002* (0.001)
<i>Modern_REIT</i>	0.002 (0.010)	0.001 (0.010)	0.007* (0.004)	0.006 (0.004)	0.005 (0.006)	0.005 (0.006)	0.004 (0.013)	0.002 (0.013)
<i>Advisor</i>	-0.005 (0.012)	-0.005 (0.011)	0.000 (0.005)	0.000 (0.005)	0.000 (0.007)	0.000 (0.007)	-0.005 (0.015)	-0.005 (0.015)
<i>CEO_Duality</i>	-0.020** (0.008)	-0.016** (0.007)	-0.001 (0.003)	0.001 (0.003)	-0.009* (0.005)	-0.010** (0.005)	-0.011 (0.010)	-0.006 (0.010)
<i>Crisis</i>	-0.017 (0.014)	-0.020 (0.014)	-0.002 (0.006)	-0.001 (0.006)	0.014 (0.009)	0.013 (0.009)	-0.033* (0.019)	-0.034* (0.019)
<i>Location FE</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Constant</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>No. of Obs.</i>	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019
<i>Adjusted R²</i>	0.031	0.051	0.019	0.019	0.002	0.005	0.006	0.008

This table presents the relation between the political preference and various measures of ESG activities by U.S. equity REITs from 2003 to 2016. The dependent variables include Environmental Opportunities, Environmental Strengths, Environmental Concerns and the Composite Index. The variables of interest are *DEM*, *DEM Amount*, and *CEO Contribution*. All variables are as defined in Appendix 2. Coefficient estimates are presented, and robust standard errors are included in parentheses. *, **, and *** represent the 10%, 5%, and 1% significance levels, respectively.

standard level of statistical significance (except Column 6). Perhaps surprisingly, this table also indicates that REITs with a CEO contributing more to any party tend to perform better on Environmental Strengths.

Mostly, the results in Table 6 support the hypothesis that Democratic leaning CEOs are more active in ESG activities associated with the environment (H2). It adds to the dominant view that investment in green building depends on financial returns. The fact that REITs with politically inclined CEOs are generally more active is more surprising, and it is in sharp contrast to the results noted in prior analyses where the effects of a CEO's contribution were nearly always insignificant and small. Given how the debate on environmentally conscious business practices is evolving, it would be interesting to revisit this issue in the future when the accumulation of research would reduce the novelty or innovativeness factor of environmentally oriented decisions.

Additional Analysis: Political Preference and Property Portfolio

The previous subsections note that REITs with a CEO contributing more to either party tend to be more active in ESG while a REIT leaning Democratic tends to take on less investment. Prior studies also suggest that Democrats are more open to environmental investments. Given the geographic feature of real estate properties, the impact of

Table 7. Political preference and REITs property portfolio.

	Properties acquired (%)				Properties disposed (%)			
	in Democratic States		in Republican States		in Democratic States		in Republican States	
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
<i>DEM</i>	0.010 (0.097)		-0.010 (0.050)		0.188* (0.099)		-0.095** (0.039)	
<i>DEM Amount</i>		0.010*** (0.004)		-0.001 (0.001)		0.004 (0.003)		0.005 (0.003)
<i>CEO Contribution</i>	0.006* (0.003)		0.001 (0.002)		0.005* (0.003)		0.008*** (0.002)	
<i>MB</i>	-0.037* (0.020)	-0.034* (0.020)	0.033** (0.013)	0.030** (0.014)	-0.070*** (0.014)	-0.066*** (0.013)	-0.031*** (0.010)	-0.027*** (0.010)
<i>Profitability</i>	0.221** (0.101)	0.221** (0.100)	-0.002 (0.065)	-0.005 (0.075)	-0.045 (0.055)	-0.038 (0.055)	-0.008 (0.049)	-0.004 (0.050)
<i>Retained_Earnings</i>	0.200** (0.089)	0.201** (0.089)	-0.031 (0.078)	-0.033 (0.084)	0.032 (0.067)	0.040 (0.069)	-0.010 (0.034)	-0.010 (0.034)
<i>Tangibility</i>	-0.136*** (0.022)	-0.139*** (0.022)	-0.061** (0.027)	-0.049 (0.031)	-0.044*** (0.017)	-0.052*** (0.017)	-0.064*** (0.015)	-0.067*** (0.015)
<i>Modern_REIT</i>	-0.013 (0.026)	-0.015 (0.026)	-0.006 (0.017)	-0.008 (0.021)	-0.034* (0.020)	-0.038* (0.020)	-0.022 (0.022)	-0.025 (0.021)
<i>Advisor</i>	-0.100*** (0.031)	-0.100*** (0.031)	-0.013 (0.024)	-0.013 (0.026)	-0.048* (0.027)	-0.053* (0.028)	-0.036* (0.020)	-0.034* (0.019)
<i>Crisis</i>	-0.132*** (0.031)	-0.129*** (0.031)	-0.011 (0.030)	-0.011 (0.031)	0.072* (0.038)	0.075* (0.039)	0.059* (0.034)	0.065* (0.034)
<i>CEO_Duality</i>	-0.044* (0.024)	-0.032 (0.022)	-0.035** (0.015)	-0.033** (0.015)	-0.021 (0.016)	-0.003 (0.016)	0.010 (0.014)	0.022 (0.014)
Location FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>No. of Obs.</i>	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019
<i>Adjusted R²</i>	0.134	0.134	0.078	0.068	0.087	0.075	0.126	0.113

This table presents the relation between the political preference and REITs property portfolio of U.S. equity REITs from 2003 to 2016. The dependent variables are the measures of the property acquisition and the property disposition. Property acquisition is measured as properties acquired over the total properties in Democratic States and Republican States, and property disposition is measured as properties disposed over the total properties in Democratic States and Republican States, for each firm in each year. The variables of interest are *DEM*, and *DEM Amount*. All other variables are as defined in [Appendix 2](#). Coefficient estimates are presented, and robust standard errors are included in parentheses. *, **, and *** represent the 10%, 5%, and 1% significance levels, respectively.

political preference on REITs portfolio diversification becomes an empirical question. Our regression with property portfolio as the dependent variable uses

$$Property\ Portfolio_{it} = a_i + b * PC_{it} + c * controls_{it-1} + \eta_t^1 + w_{it} \quad (5)$$

We consider both property acquisition and property disposition. Property acquisition is measured as properties acquired over the total properties in Democratic states and Republican states, and property disposition is measured as properties disposed over the total properties in Democratic states and Republican states, for each firm in each year. a_i and η_t^1 account for the firm fixed effects.

We report the results in [Table 7](#). Columns (1) to (4) document the limited impact of political preference on acquisitions in either Democratic states or Republican states. In contrast, Columns (5) to (8) find that leaning Democratic is significantly and positively associated with properties disposed in a Democratic state, but significantly and negatively associated with properties disposed in a Republican state. The effect of a REIT's ratio of market to book value on dispositions has a high level of statistical significance, but not for acquisitions. By shifting the property portfolio to Republican leaning states, the geographic diversification of a REIT with a property portfolio which concentrates on Democratic states could be improved.

Conclusion

This paper discusses how to construct several variables to measure the political preference of a REIT's CEO and uses them to find effects on a REIT's business decisions. We find that REITs with CEOs who lean toward the Democratic Party tend to involve more risk, and to invest less. We also find that REITs whose CEO lean Democratic are more active in ESG activities, and that REITs whose CEOs contribute to either political party are generally more active in ESG when compared to REITs whose CEOs donate nothing.

Given the previous work on the effects of political leanings on business decisions, one finding is particularly surprising. We find that REITs with Democratic leaning CEOs invest less even if we hypothesized that they should be less risk averse and even if they use more leverage and even if financial markets regard such REITs as being more volatile. This contrasts with Hutton et al. (2014) who find that companies with Republican leaning CEOs tend to invest less at the same time as they display less risk. Future work can investigate whether this difference is due to the rules governing REITs. In particular, the idea that REITs rely heavily on capital markets to fund new investments means that a CEO of a REIT who wants to act on their preferences faces an extra constraint. If investors tend to be Republican leaning then, building on the work of Hong and Kostovetsky (2012) who show that investors are swayed by their political leanings, those investors may avoid investing in a company which is riskier and which spends more on ESG activities. Similarly, our measures of riskiness are relatively high level; Allen and Letdin (2020), for example, explore the difference between recourse and non-recourse mortgage debt to show how the cost of risk varies with the type of debt and the sources of risk. Studying these conjectures more carefully would require more data and a research method which can test for the multiple effects jointly. Unfortunately, that is beyond the scope of this paper.

These results are interesting because they demonstrate how political beliefs affect business decisions. While initiatives by high profile companies can accomplish a goal, Hong and Kostovetsky (2012) note that the focused efforts of a few can be overwhelmed by the small actions of many. This perspective is critical when looking forward since, as Sah and Miller (2018, p. 175) note "the future of REITs is to go green ... More REITs are adapting to such changing real estate needs; those that are not will be forced to change or will be left to lose ground relative to their peers.": in other words, a CEO who wanted to be seen as adventurous by advocating sustainable practices at a time when there was much less evidence will need to advocate something else now. Given the debate about government policy in the presence of a market failure, their work and ours raise new questions about the supposed dichotomy between the private sector being preferred to finding effective solutions (if the market's incentives can be "corrected" by appropriate taxes or subsidies) and the public sector being preferred to finding effective solutions.

The question of whether a business should make decisions with a narrowly selfish focus or with a concern for broader social concerns, as if it were a government agency providing public services, has been debated for centuries. Nearly 60 years ago, Milton Friedman argued that a business should focus on attempting to earn a profit for its owners. Miller and Pogue (2018, p. 20) argue "Much has occurred since that time, and most commercial real estate players now believe that their responsibilities are significantly broader and more complex in a rapidly changing and more transparent world economy."

The ESG activities of a company seem to fit into the category of being a privately provided public good, even if managers rarely have the skills or resources needed to resolve a social problem. For the kinds of business decisions we consider, the first or second welfare theorems do not clearly link an equilibrium with a first best outcome. That being said, Letdin et al. (2019) and Westermann et al. (2018) offer evidence showing that financial markets for REITs are not informationally efficient. If true then, contrary to Freidman's assertion, there are actions which a wise CEO could take which both add social value and increases the share price. This paper does not resolve the debate on whether a CEO is sufficiently wise. We study the more practical question of whether his or her political preferences influence the decisions that are made, and leave the broader question for the future.

It is interesting to note that we find the effects of politics are independent of the type of Advisor, suggesting that the level of governance has little effect in the dimensions we study. We use Advisor as a control variable, rather than offering a testable hypothesis. A more careful analysis of this issue might build on the work by Edmans and Gabaix (2016) which explicitly studies how executive compensation might vary with the risk environment facing a company. Their paper also offers more guidance on how the team which surrounds a CEO affects decisions also. This issue has added significance when the recent literature on variation in operating efficiencies is combined with Schoen's (2019) provocative suggestion that sustainability initiatives are part of a broader initiative to enhance operational effectiveness overall. Her argument is based on her personal experience. We are not able to study this suggestion since, as demonstrated by the recent work of Beracha et al. (2019a, 2019b), Xu and Ooi (2018), and Highfield et al. (2021), a careful study of variation in operational effectiveness uses a different set of techniques.

Our analysis focuses on the political donations made by a CEO. Even if a CEO is the most important or influential individual in a company, that focus means that we cannot separate the effects of the CEO political leanings from those of the employees who implement the CEO's instructions or those of the board of directors which oversee the CEO. These effects can be economically significant. For example, Eichholtz and Yönder (2020) create a measure of optimism by a REIT's CEO and its CFO and show that "optimistic executive teams [tend to pay more] for their private asset acquisitions" but their properties do not sell at premium. Thus, they conclude that diverse opinions improve stock performance. The obvious solution to this limitation is to collect more data, perhaps by following the method outlined in Gupta et al. (2017), and to use a different methodology which could identify and resolve any possible endogeneity. That exercise is beyond the scope of this paper. Our analysis is also limited by the fact that we consider only the financial donations and overlook other measures of political activity such as the time donated to a party.

We also remind readers that this kind of research is easiest to implement using data from the United States where two parties dominate the political discussion. Research using data from other countries could add to this research by going beyond a simplistic left-right spectrum to clarify which aspects of a political ideology affect business decisions.¹³ Such research could reveal more about the behavior of "independent" CEOs in the U.S. who do not appear to lean toward either the Democratic or Republican Parties. These issues would affect policy advice since our paper should not be used to argue that leaders should be given incentives to make a particular type of decision; there is a well-known tension between intrinsic and extrinsic motivation (e.g., Bowles & Polania-Reyes, 2012).

Our work shows that the political opinions of a REIT's CEO are related to its decisions. Decisions involving risk and ESG activities (including investments in green buildings) have profound consequences for the success of a company, for its tenants and for its place within a broader society.

Notes

1. <https://www.opensecrets.org/overview/industries.php>. This information excludes donations at the state or city level and does not include expenses associated with lobbyists.
2. We thank an anonymous referee for noting that these concerns are becoming so well recognized that the notion of responsibility or good intentions associated with the term CSR is being replaced by corporate reports emphasizing specific ESG metrics and activities.
3. In the same book, Sah and Miller (2018) offer a complementary review of US REITs while Parker (2018) reviews the experience of REITs globally.
4. Some readers may think that a natural experiment to test both of these hypotheses would be to consider a subset of REITs for which the CEO changed from one who leaned toward the Democratic Party to one who leaned toward the Republican Party. While this thought is reasonable, it is complicated by endogeneity in the process which selects the new leader.
5. Eichholtz and Yönder (2020) add to this idea by studying the prices paid by REITs when buying property. Using a measure derived from the exercise of stock options, they find that CEO optimism affects the price paid when buying properties and that the magnitude of this effect varies with the optimism of the CFO.
6. www.fec.gov
7. Some readers may wonder whether the large contributions to "Other Parties" revealed by Appendix 1 indicate that firms are trying to purchase political capital. Our data on donations comes from the Federal Election Commission, which does not collect data on donations to local politicians such as mayors or city councilors. The fact that nearly 60 percent of the REIT's CEOs donate nothing to any political party, and that those who do donate tend to focus on one party only, also suggest that the relevance of this issue to our study is likely limited.
8. In a further robustness check, we also define *DEM* as 1 if over 80% of CEO contribution amount goes to Democrats, otherwise, *DEM* equals 0, which we look at the extreme. For both measures, the results are qualitatively similar, and are available upon request.
9. In a robustness check, we also adopt yearly and quarterly standard deviation of the market premium to measure the systematic risk.
10. The Flow of Funds from Operations (FFO) is often the preferred measure when analyzing returns. We choose not to use data on FFO because doing so would reduce our sample size substantially.
11. We use the sample from 2003 for regressions given that few REITs CEOs had made political contribution prior to 2003.
12. In the unreported analysis, we examine subsamples to measure the effect of a turnover in the State Governor and "purple" states (whose political leadership combines Democratic and Republican elements), which document a silent effect on REITs stock liquidity and risk taking, indicating that our results are purely driven by the political value not the effect of lobbying or rent seeking.
13. While the left wing vs. right wing distinction is not isolated to the U.S., identifying those beliefs in other countries is harder. In countries with more than two parties that may form a government, the intuition of the popular median voter model is not obviously relevant and, thus, a more intrusive research methodology may be necessary. Since competition for voters takes place on more dimensions, and government policies may be based on a coalition made up after the voting has finished, the beliefs associated with a party are not as stable. The United States political system also permits greater financial contributions from private individuals, unions or corporations, compared to most other countries and that observed behavior is less likely to be bound by administrative criteria. Government policies concerning financial support of political parties vary in other countries.

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Appendix 1. REITs CEO Political Contributions

This table presents REITs CEO political contributions to different parties from 1999 to 2016.

REITs name	REITs CEO	Aggregate amount to Democratic Party (DEM) (USD, as of Dec 31, 2016)	Aggregate amount to Republican Party (REP) (USD, as of Dec 31, 2016)	Aggregate amount to Other Party (USD, as of Dec 31, 2016)	Aggregate amount (USD, as of Dec 31, 2016)
ACADIA REALTY TRUST	Bernstein, Kenneth	0	0	18,000	18,000
ALEXANDRIA R E EQUITIES INC	Marcus, Joel CPA	0	129,600	7,700	137,300
AMERICAN ASSETS TRUST INC	Chamberlain, John	0	0	1,000	1,000
AMERICAN ASSETS TRUST INC	Rady, Ernest	0	0	1,500	1,500
AMERICAN CAMPUS COMMUNITIES	Bayless, William Jr.	0	3,500	20,000	23,500
APARTMENT INVST & MGMT CO	Considine, Terry J.D.	0	5,000	10,000	15,000
ARMADA HOFFLER PROPERTIES	Haddad, Louis	0	1,000	0	1,000
ASSOCIATED ESTATES RLTY CORP	Friedman, Jeffrey	1,000	5,250	34,900	41,150
AVALONBAY COMMUNITIES INC	Naughton, Timothy	0	0	5,000	5,000
BOSTON PROPERTIES INC	Linde, Edward	7,100	0	3,300	10,400
BRIXMOR PROPERTY GROUP INC	Carroll, Michael	0	0	5,000	5,000
BRIXMOR PROPERTY GROUP INC	Taylor, James Jr.	0	0	10,000	10,000
CAMDEN PROPERTY TRUST	Campo, Richard	8,800	12,000	96,125	116,925
CBL & ASSOCIATES PPTYS INC	Lebovitz, Charles	0	4,900	17,500	22,400
CBL & ASSOCIATES PPTYS INC	Lebovitz, Stephen	0	6,100	22,500	28,600
CEDAR REALTY TRUST INC	Ullman, Leo	500	0	4,750	5,250
CEDAR REALTY TRUST INC	Schanzer, Bruce	1,600	0	1,000	2,600
CORPORATE OFFICE PROPERT	Griffin, Randall	15,000	3,500	9,500	28,000
CORPORATE OFFICE PROPERT	Waesche, Roger Jr.	0	0	1,000	1,000
COUSINS PROPERTIES INC	Bell, Thomas Jr.	500	47,700	19,500	67,700
COUSINS PROPERTIES INC	Gellerstedt, Lawrence III	0	8,200	15,750	23,950
CYRUSONE INC	Wojtaszek, Gary	0	5,400	0	5,400
DCT INDUSTRIAL TRUST INC	Hawkins, Philip	1,000	0	3,000	4,000
DIAMONDROCK HOSPITALITY CO	Brugger, Mark	0	0	3,000	3,000
DOUGLAS EMMETT INC	Kaplan, Jordan	16,500	0	67,400	83,900
DUKE REALTY CORP	Hefner, Thomas	0	3,000	10,000	13,000
DUKE REALTY CORP	Oklak, Dennis	15,550	35,650	94,200	145,400
DUKE REALTY CORP	Connor, James	0	0	7,500	7,500
EPR PROPERTIES	Brain, David	0	0	2,850	2,850
EPR PROPERTIES	Silvers, Gregory	0	0	2,469	2,469
EQUITY RESIDENTIAL	Neithercut, David	18,350	19,700	119,350	157,400
ESSEX PROPERTY TRUST	Schall, Michael CPA	0	1,000	2,400	3,400
EXTRA SPACE STORAGE INC	Woolley, Kenneth	0	10,000	5,000	15,000
EXTRA SPACE STORAGE INC	Kirk, Spencer	0	3,500	70,000	73,500
EXTRA SPACE STORAGE INC	Margolis, Joseph J.D.	0	0	5,000	5,000
FEDERAL REALTY INVESTMENT TR	Wood, Donald CPA	0	1,000	23,500	24,500
FIRST INDL REALTY TRUST INC	Duncan, Bruce	3,900	75,600	39,700	119,200
GEO GROUP INC	Zoley, George, Ph.D.	11,800	27,920	35,512	75,232
GETTY REALTY CORP	Liebowitz, Leo	0	0	10,000	10,000
HCP INC	Martin, Lauralee	0	0	5,000	5,000
HCP INC	Herzog, Thomas	0	0	2,000	2,000
HEALTHCARE REALTY TRUST INC	Emery, David	0	10,600	500	11,100
HIGHWOODS PROPERTIES INC	Fritsch, Edward	0	4,500	17,691	22,191
HOME PROPERTIES INC	Pettinella, Edward	0	4,000	47,000	51,000
HOST HOTELS & RESORTS INC	Nassetta, Christopher	0	0	10,000	10,000
HOST HOTELS & RESORTS INC	Risoleo, James	0	0	10,000	10,000
INLAND REAL ESTATE CORP	Parks, Robert	0	0	1,000	1,000
INLAND REAL ESTATE CORP	Zalatoris, Mark CPA	0	1,000	7,500	8,500
IRON MOUNTAIN INC	Meaney, William	0	0	11,000	11,000
KILROY REALTY CORP	Kilroy, John Jr.	1,275	50,963	145,800	198,038
KIMCO REALTY CORP	Cooper, Milton	22,400	2,000	30,250	54,650
KIMCO REALTY CORP	Henry, David	0	0	42,000	42,000

(continued)

Continued.

REITs name	REITs CEO	Aggregate amount to Democratic Party (DEM) (USD, as of Dec 31, 2016)	Aggregate amount to Republican Party (REP) (USD, as of Dec 31, 2016)	Aggregate amount to Other Party (USD, as of Dec 31, 2016)	Aggregate amount (USD, as of Dec 31, 2016)
KIMCO REALTY CORP	Flynn, Conor	0	0	7,500	7,500
KITE REALTY GROUP TRUST	Kite, John	4,200	6,050	4,351	14,601
LAMAR ADVERTISING CO-CL A	Reilly, Kevin Jr.	11,200	10,900	22,500	44,600
LAMAR ADVERTISING CO-CL A	Reilly, Sean	13,050	4,700	27,600	45,350
LASALLE HOTEL PROPERTIES	Barnello, Michael	1,000	0	45,000	46,000
LTC PROPERTIES INC	Simpson, Wendy	500	1,000	7,000	8,500
MACERICH CO	Coppola, Arthur CPA	47,650	36,650	102,450	186,750
MACK-CALI REALTY CORP	DeMarco, Michael	2,700	0	0	2,700
NATIONAL RETAIL PROPERTIES	Macnab, Craig	0	0	3,000	3,000
PARKWAY PROPERTIES INC	Heistand, James	0	10,000	0	10,000
PEBBLEBROOK HOTEL TRUST	Bortz, Jon CPA	0	0	15,250	15,250
PENNSYLVANIA RE INVS TRUST	Rubin, Ronald	16,850	0	5,000	21,850
POST PROPERTIES INC	Stockert, David	4,800	7,800	75,800	88,400
PROLOGIS INC	Moghadam, Hamid	1,000	2,500	89,600	93,100
PS BUSINESS PARKS	Russell, Joseph Jr.	0	0	22,000	22,000
PUBLIC STORAGE	Havner, Ronald Jr.	5,000	1,000	43,300	49,300
REALTY INCOME CORP	Case, John	0	0	2,500	2,500
REGENCY CENTERS CORP	Stein, Martin Jr.	16,300	67,500	159,350	243,150
SABRA HEALTH CARE REIT INC	Matros, Richard	2,500	1,200	5,000	8,700
SAUL CENTERS INC	Saul, Bernard II	0	1,000	0	1,000
SENIOR HOUSING PPTYS TRUST	Hegarty, David	0	0	35,500	35,500
SIMON PROPERTY GROUP INC	Simon, David	12,900	12,033	35,500	60,433
SL GREEN REALTY CORP	Holliday, Marc	4,600	0	5,000	9,600
SUMMIT HOTEL PROPERTIES INC	Hansen, Daniel	0	0	5,500	5,500
TANGER FACTORY OUTLET CTRS	Tanger, Stanley	9,700	5,000	0	14,700
TANGER FACTORY OUTLET CTRS	Tanger, Steven	0	0	17,500	17,500
TAUBMAN CENTERS INC	Taubman, Robert	43,800	180,000	171,500	395,300
UDR INC	Toomey, Thomas	2,000	1,750	86,500	90,250
UNIVERSAL HEALTH RLTY INCOME	Miller, Alan	10,000	6,500	12,000	28,500
URBAN EDGE PROPERTIES	Olson, Jeffrey	2,500	2,000	25,000	29,500
URSTADT BIDDLE PROPERTIES	Urstadt, Charles	0	64,750	8,500	73,250
VENTAS INC	Cafaro, Debra	15,700	0	93,500	109,200
VORNADO REALTY TRUST	Roth, Steven	153,600	84,700	224,100	462,400
VORNADO REALTY TRUST	Fascitelli, Michael	54,900	2,500	87,900	145,300
WASHINGTON REIT	McDermott, Paul	0	0	5,000	5,000
WEINGARTEN REALTY INVST	Alexander, Andrew	500	5,000	115,000	120,500
WELLTOWER INC	DeRosa, Thomas	0	1,000	0	1,000

Appendix 2. Variable Definitions

Variable name	Definition	Data sources
Panel A: Dependent variables		
<i>Book Leverage</i>	Short-term and long-term liabilities over total assets	Compustat
<i>Market Leverage</i>	Short-term and long-term liabilities over market value	Compustat
<i>Investment</i>	Capital expenditure (in logarithm)	Compustat
<i>Systematic Risk</i>	Yearly market beta for a certain REIT from CAPM	CRSP
<i>Volatility</i>	Yearly standard deviation of the stock return (excluding dividend payment) for a certain REIT	CRSP
<i>ESG Measures</i>	Using KLD's Corporate Social Responsibility measures, we focus on the Environmental dimension. Environment Strengths aggregates KLD's total number of strengths and other strengths. Environmental Concerns aggregates KLD's four other environmental concerns (Agricultural chemicals, Ozone-depleting chemicals, Other concern, and Climate change). The Composite Index aggregates Environmental Opportunities and Environmental Strengths and deducts Environmental Concerns.	KLD
Panel B: Political preference		
<i>DEM</i>	DEM is a time-varying measure of the strength of a CEO's Democratic leaning. For example, if a CEO donates \$8,000 to the Democratic Party and \$2,000 to other parties, before 2010, then $DEM = 0.8$ ($=\$8,000/\$10,000$) in 2010. If they donate \$6,000 to other parties during 2011, then $DEM = 0.5$ ($=\$8,000/\$16,000$) in 2011.	Federal Elections Commission Website
<i>DEM Amount</i>	CEO contribution amount to the Democratic Party (in logarithm)	Federal Elections Commission Website
Panel C: Control variables		
<i>CEO Contribution</i>	Total CEO contribution amount made in the given year (in logarithm)	Federal Elections Commission Website
<i>Advisor</i>	Equals 1, if externally advised. Otherwise, the value is 0	SNL
<i>MB</i>	Market capitalization and total liability over total assets	Compustat
<i>Firm_Size</i>	Total Assets (in logarithm of millions of dollars)	Compustat
<i>Profitability</i>	Operating income over total assets	Compustat
<i>Retained_Earnings</i>	Retained earnings over total assets	Compustat
<i>Tangibility</i>	Tangible assets over total assets	Compustat
<i>Modern_REIT</i>	Equals 1, if the IPO year is 1993 or later. Otherwise, the value is 0	Compustat
<i>CEO_Duality</i>	Equals 1, if CEO also serves as the president or/and the chairman of the board. Otherwise, the value is 0	SNL
<i>Crisis</i>	Equals 1 in 2008. Otherwise, the value is 0	