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Can Social Capital and Reputation Mitigate Political and Industry-wide Risk?

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Abstract

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Keywords: CSR, social capital, risk, gubernatorial elections, tariff shocks, operational hedge

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1. Introduction

The focus on social capital as a significant link to ultimate success or failure has been on the rise over the past few years. A 2019 survey by Deloitte shows that 95% of surveyed business leaders plan to invest more on social-impact issues, with 93% agreeing with the notion that businesses are "stewards of society". Meanwhile, 88% of millennials judge a firm on the basis of its social impact in addition to financial performance (Deloitte, 2017). But social capital also has significant tangible effects. During periods of unexpectedly low trust, investors perceive firms with high social capital to be more trustworthy and place higher valuation premiums and lower credit spreads on these firms (Amiraslani et al., 2017; Lins et al., 2017). However, enhancing social capital comes with the trade-off of reduced financial flexibility, especially at times of negative shocks when firms need to balance stakeholders' expectations and social capital against earnings targets (Becchetti et al., 2015). This paper addresses two questions. Can social capital reduce risk? Does CSR have a transient or longer-lasting hedging effect, if any?

From a firm's perspective, social capital defines the relationship quality that a firm and its executives build with their stakeholders (Servaes and Tamayo, 2017). Corporate social responsibility (CSR) is a core business strategy to build social capital (Degli Antoni and Sacconi, 2011). Therefore, CSR activities can be a proxy for firms' social capital.¹ For instance, existing evidence suggests that CSR affects firm value by reducing the cost of capital (Hasan et al., 2017) and improving cash flows (Gregory et al., 2014).

CSR investment reduces information asymmetries between firms and stakeholders by signaling firms' unobservable moral attitudes and builds a good reputation (Fombrun and Shanley, 1990; Rindova and Fombrun, 1999; Su et al., 2014). This reputational effect (*reputation effects in a repeated game*) leads to better stock valuation and operating

¹ Hereafter, we use the term "social capital" and "CSR" interchangeably.

performance during firm-specific negative events (Choi and Wang, 2009; Godfrey et al., 2009; Barnett and Salomon, 2012) and economy-wide shocks (Lins et al., 2017). To understand the insurance-like ability of CSR reputation the focus should be on the impact of CSR on firm risk, for which little is known. Based on the interaction between signaling theory and reputation effects in the repeated game, we argue that CSR reputation can be used as an operational hedge against political or industry-wide adverse shocks. Therefore, we examine times of political and industry-wide uncertainty to empirically assess the hedging ability of CSR on firm risk, stock return volatility and cash flow volatility.²

We analyze all publicly listed U.S. firms, excluding financial and utilities firms, during 2002-2016. Because firm risk can also affect CSR engagement (Albuquerque et al., 2019), we use for identification two exogenous shocks that affect firm risk. First, we use gubernatorial elections to capture regional political risk. State governors have significant influence over legislation, regulation, permitting and other State-level policies relevant to business investment, with gubernatorial elections reducing business investment due to policy uncertainty (Falk and Shelton, 2018). Moreover, political uncertainty augments the expected return volatility around an election since stock returns are exposed to systematic economic forces (Campbell, 1985; Fama and French, 1988, 1989; Chen, 1991; Bailey and Chung, 1995). As gubernatorial elections occur in different times across different States, they give us a powerful econometric test. We also use placebo tests to rule out the possibility that our findings regarding political uncertainty are spurious.

Second, we use significant reductions in industry-level import tariffs as exogenous industry-wide shocks. Import tariff cuts intensify competitive pressure from foreign competitors for all domestic firms in the industry (Frésard, 2010). Meanwhile, firms respond

² By decomposing the firm-level stock return variance, Campbell and Shiller (1988) and Vuolteenaho (2002) show that idiosyncratic volatility originates from cash flow shocks and expected return shocks.

to tariff shocks heterogeneously (Frésard and Valta, 2015) and the magnitude of the shock differs across firms within the same industry (Bernard et al., 2006). Therefore, a significant tariff cut creates an industry-wide adverse cash flow shock (Kini et al., 2017). Moreover, as an alternative measure of market competition, we use product market fluidity developed by Hoberg et al. (2014).

Our findings suggest that CSR reputation reduces firm risk during political uncertainty; this effect is stronger during closely contested elections. Therefore, shareholders value social capital reputation during periods of economic uncertainty driven by elections and this reliance increases when the uncertainty on the election outcome is higher. Our results are also economically significant. A one standard deviation increase in CSR score reduces stock return volatility by 6.52% during a gubernatorial election and 11.56% during closely contested elections for firms headquartered in States facing gubernatorial elections. However, we do not find strong evidence to support the notion that CSR reputation can mitigate cash flow volatility during political uncertainty. We argue that this is driven by the fact that firms increase cash holdings as a precautionary buffer during an election year (Julio and Yook, 2012). Also, due to the transient nature of reputational hedging, a CSR-led reputation cannot affect quasi-static cash flows. Regarding industry-wide uncertainty, our results on tariff cuts as exogenous industry-wide shocks show that social capital does not have any mitigating effect on firm risk. However, when looking into more granular product market competition and across all industries, not just industrial firms, in the form of product fluidity, we find that having CSR credentials reduces stock volatility more, compared to firms without a CSR score.

For robustness, we use an instrumental variable (IV) approach and use CSR ratings for each industry-year pair and State-year pair (excluding the focal firm) as instruments for CSR. The IV-based findings confirm our baseline results. In addition, we find that the effect of CSR reputation on firm risk is transient. However, whether firms have a high or low CSR score has no impact on firm risk during times of industry-wide economic shocks. Overall, CSR is an effective reputational hedge against regional political risk (elections), but not so for industrywide economic shocks (import tariff cuts) and peer competition. Even though the risk hedging ability of CSR is transient, CSR has lasting real effects, since stakeholders' perception of social capital reputation during an election year increases operating margin, profitability, and Tobin's Q surrounding the election cycle.

Our contribution is threefold. First, we identify the causal effect of CSR on total firm risk measured by stock return volatility and alternatively by cash flow volatility. Second, we use an IV approach and exogenous shocks on firm risk driven by political uncertainty (electoral cycles) and product market competition (tariff cuts and market fluidity), to provide causal evidence of CSR on firm risk. Third, we do not restrict our analysis only to firms that have a CSR score; we investigate a comprehensive sample of all U.S. firms, with and without a CSR score, to assess not just by how high a CSR score has an impact but also whether having CSR credentials in the first place makes a difference on firm risk. Finally, our paper is very timely, since, 33% of global CEOs believe policy uncertainty will be a business threat in 2020 and list it among their top five concerns (PwC, 2019).

Our paper is related to a growing literature on social capital. For instance, existing evidence suggest a negative relationship between CSR and firms' systematic risk for the S&P500 constituent firms (Oikonomou et al., 2012) and idiosyncratic risk but for a small sample of 541 firms during 2002-03 (Luo and Bhattacharya, 2009). Similarly, Jo and Na (2012) find a negative association between CSR and risk for a small sample of 513 firms that belong to socially and environmentally controversial industries (e.g. Tobacco, Gambling, etc.). In contrast, Benlemlih et al. (2018) find no correlation between idiosyncratic risk and environmental and social disclosures, but find a negative correlation for systematic and total risk. Still, the aforementioned papers find only an association and not a causal effect, for small

samples, and without accounting for potential endogeneity between firm risk, and CSR investment and reputation.

In a related paper Harjoto and Laksmana (2018) assess firm risk as a function of analyst coverage and CSR, but without disseminating the reciprocal relationship between analyst coverage and CSR, and exclude firms without a CSR score. Similarly, Jo and Harjoto (2018) find an inverse relationship between CSR and firms' risk taking, based on the residual from a baseline regression which can potentially lead to biased estimates,³ and not realized risk, as we do in this paper. Jiraporn et al. (2014) find that CSR improves credit ratings, but they use only firms that both have a CSR score and a credit rating. Hence, they exclude firms that have a CSR score but no credit ratings and firms that do not have a CSR rating but may have a credit rating, resulting in a small sample.⁴ Bouslah et al. (2013) use a vector autoregressive analysis (VAR) and find that most CSR components have a bidirectional relationship with risk, while some CSR components have a unidirectional relationship with risk. Therefore, it is unclear whether social capital overall has a causal negative effect on firm risk. In contrast, Harjoto et al. (2017) find no direct relationship between CSR and risk, but without using any exogenous shocks on risk and also exclude firms without a CSR score.

Albuquerque et al. (2019) use an IV approach to show that CSR decreases systematic risk. But they also exclude firms that do not have a CSR score reported by KLD. Hence, they are

³ They measure risk taking as the residual from regressing variables such as R&D, Capex, standard deviation of ROA and stock return volatility, on firm-specific and macroeconomic variables, based on the assumption there is an optimal level of risk taking. But this can potentially lead to biased estimates. For instance the reported R-squared from the base line regressions used to estimate the residual as their risk-taking proxy, varies from 8% to 53.45%.

⁴ Jiraporn et al. (2014) use a smaller sample of 2,516 firm-year observations during 1995-2007 which also includes the start of the 2007-09 financial crisis and can potentially affect the results on credit ratings.

not able to assess whether just having a CSR score, regardless of magnitude, can make a difference to firm risk, compared to firms without a CSR score. Moreover, the authors use systematic risk based on the CAPM, as a measure of firm risk. This can be problematic because systematic risk accounts only for 15% to 18.9% of total equity volatility (Campbell et al., 2001; Goyal and Santa-Clara, 2003; Gaspar and Massa, 2006). Instead, we use total realized risk, which accounts for the often-ignored effect that idiosyncratic risk can have on market efficiency and stock pricing (Pontiff, 2006). Moreover, Mishra and Modi (2013) find that greater scores in *positive* CSR aspects are related with *lower* idiosyncratic risk, while greater scores in negative CSR aspects are related with higher idiosyncratic risk. In contrast, Bouslah et al. (2018) find that both positive and negative CSR aspects increase firm risk. However, they use the 2007-09 financial crisis as an exogenous shock on firm risk which can lead to biased estimates since, the 2007-09 financial crisis had a direct effect on real economic activity and not just on firm risk (Berger et al., 2020). Therefore, weakening the validity of the 2007-09 financial crisis as an exogenous shock only on firm risk. Instead, we use gubernatorial elections and tariff cuts which are staggered exogenous shocks on firm risk and can provide robust causal evidence.

2. Theoretical background and hypotheses development

2.1. Social Capital, CSR, and operational hedging

CSR can generate social capital by building trust while it establishes cooperating networks between the company and its stakeholders. We consider CSR activities as a proxy for firms' social capital (Degli Antoni and Sacconi, 2011; Lins et al., 2017). The instrumental stakeholder theory posits that CSR creates firm value by generating competitive advantages (Branco and Rodrigues, 2006) in a number of ways; for instance, via socially responsible human resource activities (Turban and Greening, 1997) and superior environmental performance (Russo and Fouts, 1997; McWilliams and Siegel, 2001). An alternative channel of value creation is reputation signaling. CSR investment reduces information asymmetries between firms and stakeholders, and builds reputation by signaling unobservable firm attributes, such as quality, capability and honesty (Fombrun and Shanley, 1990; Rindova and Fombrun, 1999; Su et al., 2014). Moreover, CSR investment can signal the executives' competency and morality to stakeholders (Milbourn, 2003) and enhance managerial reputation (Borghesi et al., 2014).⁵ Meanwhile, CSR reputation accumulates social capital by fostering good relationships with external parties such as customers (Lev et al., 2010), employees (Edmans, 2011), investors and creditors (Cheng et al., 2014; Hasan et al., 2017), and suppliers (Maden et al., 2012).

But CSR reputation also adds to firm value by mitigating the risk of reputational losses emerging from adverse firm-specific events (Peloza, 2006; Minor and Morgan, 2011). This is due to multiple stakeholders trusting the companies' explanation and perceived sincerity of proposed remedial activities (Brown, 1998). For instance, positive CSR-related events for companies with known controversies of a CSR nature have a positive market valuation effect (Krüger, 2015). Moreover, CSR activities improve cash flows due to immediate higher profitability immediately or superior long-run growth prospects (e.g., Choi and Wang, 2009). Similarly, CSR protects against reputation losses following adverse events (Herremans et al., 1993; Shiu and Yang, 2017) and protects firms' equity value during adverse events (Godfrey et al., 2009; Lins et al., 2017).

Based on the signaling theory and the reputation effects in a repeated game, we argue that when a politically-driven regional or industry-wide adverse event occurs, social capital serves

⁵ We assume that CEOs align, at least partially, their personal reputation with their firms' reputation.

as an operational hedging tool that protects firms during adverse events⁶. During these uncertain periods, stock volatility should be lower for firms with higher social capital. The hedging ability of CSR can affect value in two ways. First, the cost of equity is lower for high CSR firms (El Ghoul et al., 2011) because investors prefer to invest in companies with a high CSR reputation (Brown, 1998; Maden et al., 2012). Also, creditors lower the cost of debt for these firms due to the lower default risk (Goss and Roberts, 2011). For instance, high CSR reputation led to lower debt spreads during the 2007 financial crisis (Amiraslani et al., 2017). Meanwhile, Jiraporn et al. (2014) find that CSR score is positively related to credit ratings. Therefore, high CSR firms have better access to finance at a relatively lower cost of capital stemming from a lower risk premium (Cao et al., 2015; Hasan et al., 2017). Since the value of a firm is the present value of future expected cash flows, by reducing the cost of capital, high CSR investment can increase shareholder value (Gregory et al., 2014).

Second, Stulz (2002) argues that in the presence of market frictions risk reduction can increase firm value. Moreover, because of market frictions such as information asymmetry, tax convexity, and financial distress, cash flow volatility is costly (Tufano, 1996; Ağca and Mozumdar, 2008; Hankins, 2011). Therefore, hedging can increase firm value by reducing cash flow volatility (Stulz, 1990; Froot et al., 1993). In turn, by reducing cash flow volatility, CSR reputation can create value as an operational hedging instrument.

2.2. Operational hedging ability of CSR during political uncertainty

⁶ We refer to CSR as an operational hedging instrument as it is a non-financial instrument and increases firm value by reducing the deadweight costs of financial distress through operational activities. By following the same reasoning, repurchases, as a flexible pay-out structure (Bonaimé et al., 2014), and geographic diversification for multinational corporations (Allayannis et al., 2001; Kim et al., 2006), and acquisitions (Hankins, 2011), are considered as operational hedging mechanisms.

Political cycles arise in macroeconomic policies in response to the myopic behavior of voters. Such political business cycles reflect the incumbents' tendency to manipulate macroeconomic policy in order to increase their chances of winning an election by following an inflationary boom and lower unemployment rate prior to the election followed by deflationary policies after the election (Nordhaus, 1975). Meanwhile, the political budget cycle creates a distortion of fiscal policies by lowering taxes and increasing government consumption spending sub-optimally prior to the election (Rogoff, 1987). Hence, while the election is a fundamental mechanism of accountability, the potential policy differences surrounding these cycles and electoral competitiveness can change the firm's business environment and create uncertainty (Pástor and Veronesi, 2012; Gulen and Ion, 2016; Jens, 2017). As stock returns have exposure to systematic economic forces (Campbell, 1985; Fama and French, 1988, 1989; Chen, 1991; Bailey and Chung, 1995), political uncertainty augments the expected return volatility around an election. Empirical evidence shows that return volatility is higher in the election year and electoral competitiveness also contributes to the magnitude of this volatility (Pantzalis et al., 2000; Li and Born, 2006; Białkowski et al., 2008; Boutchkova et al., 2012; Pasquariello and Zafeiridou, 2014). We argue that, similarly to firm-specific negative events, investors trust firms with high social capital more during political uncertainty. For instance, shareholders assess the reliability of the firm in addition to the risk-return trade-off (Guiso et al., 2008). Therefore, we expect a negative relationship between CSR reputation and stock return volatility during political uncertainty driven by the staggered U.S. gubernatorial elections.

State governors shape State policies (e.g., State budget, tax code, subsidy policies) (Falk and Shelton, 2018), policy changes at the State level have a substantial influence in the economic environment in which firms operate (Chhaochharia et al., 2017) and, therefore, in their investment and financing policies. For instance, investors require a higher risk premium (Gao and Qi, 2013) and return volatility is higher (Jens, 2017) during U.S. gubernatorial elections. Therefore, we use gubernatorial elections as exogenous changes on firm risk. By considering election years and electoral competitiveness (narrow margin of victory) as sources of regional political uncertainty, we formulate our first hypothesis as follows:

H1a: Firm-specific social capital reduces stock return volatility during political uncertainty.

Electoral uncertainty generated by political factors also leads firms to temporarily reduce investment expenditures before the election outcome (Julio and Yook, 2012). Meanwhile, lower investment is associated with high cash flow volatility (Minton and Schrand, 1999). This is similar to firm holding an option on whether to invest or not. Since the option value of delaying an investment increases with higher uncertainty (Bloom, 2009), firms delay investing until this political uncertainty is resolved at the election (Rodrik, 1991). Since high CSR firms are more profitable and typically have high growth expectations compared to low CSR firms (Russo and Fouts, 1997; Barnett and Salomon, 2012; Gregory et al., 2014), cash flow volatility for high CSR firms should be lower during political uncertainty. Our next hypothesis is the following:

H1b: Firm-specific social capital reduces cash flow volatility during political uncertainty.

2.3. Operational hedging ability of CSR reputation during greater market competition

A reduction in import tariffs reduces the entry costs and relaxes the trade barriers for foreign companies to enter the U.S. product market. Therefore, a significant tariff reduction in an industry exogenously increases foreign competition for all domestic firms of that industry (Frésard, 2010). Consequently, the domestic profit margins for domestic firms reduce due to this increased competition (Bernard et al., 2006). To assess the operational hedging ability of CSR reputation, we exploit this exogenous shift in industry-level import tariffs as a quasinatural experiment, as this economic shock is exogenous to firm risk and CSR investment. Tariff cuts create an adverse cash flow shock to all domestic firms in the industry (Kini et al., 2017). In this regard, we argue that this cash flow shock will be felt disproportionately by firms with a high CSR reputation. As an alternative measure of product market competition we use product market fluidity developed by Hoberg et al. (2014). During shocks in product market competition, high CSR firms will enjoy a reputational hedging benefit and face lower cash flow volatility than low CSR firms. Thus, we expect a negative relationship between CSR reputation and risk (i.e., stock return volatility and cash flow volatility) during years of significant increases in product market competition. Our final hypotheses are the following:

H2a: Social capital reduces stock return volatility during greater product market competition.H2b: Social capital reduces cash flow volatility during greater product market competition.

3. Sample and data

Our study covers all publicly traded U.S. firms, excluding financial firms (SIC codes 6000-6999) and utilities (SIC codes 4900-4949), in the Center for Research in the Security Prices (CRSP)/Compustat merged database between 2002 and 2016. We collect firms' overall Environmental, Social, and Governance (ESG) score from the Asset4⁷ database provided by Refinitiv (formerly Thomson Reuters). Financial data are from CRSP/Compustat. Data on Gubernatorial elections are collected from online sources such as David Leip's Atlas of U.S. Presidential Elections (www.ourcampaigns.com) and individual State agency websites. To identify significant tariff cuts we obtain U.S. import data from Schott's International Economics Resource Page.⁸ State-level unemployment rate and annual GDP growth rate are collected from

⁷ Asset4 provides ESG information for more than 4,300 companies globally (of which 2,693 are U.S. firms) since 2002. Asset4 collects 900 evaluation points and measures 250 key performance indicators. On the basis of these indicators, scores are measured for four pillars: Economic, Social, Environmental, and Corporate Governance. An overall ESG score is measured as the equally weighted score of each pillar. In addition to company-reported data, Asset4 collects information from NGOs, stock exchange filings, and other independent news sources.

⁸ See <u>http://faculty.som.yale.edu/peterschott/sub_international.htm</u>

the Bureau of Labor Statistics (www.bls.gov) and the Bureau of Economic Analysis (www.bea.gov), respectively. After dropping observations with missing values from our control variables, the final sample consists of 43,631 firm-year observations for 5,814 unique U.S. firms.

We report the descriptive statistics for the main variables in Table 1. Table 1 shows the summary statistics for all sample firms in Panel A, firms with a high CSR score in Panel B, firms with a low CSR score in Panel C and firms without a CSR score in Panel D. Panel A shows that the mean overall CSR score is 52.56, consistent with Halbritter and Dorfleitner (2015) and Ferrell et al. (2016). For all sample firms, average stock return volatility is 0.542, and average cash flow volatility is 0.068. Panels B, C and D illustrate that firms with a high CSR score have relatively lower average stock return volatility (0.312) and cash flow volatility (0.025) than low CSR score firms and firms without a CSR score. In Table 2, we report the average values and differences in means of firm-specific characteristics for firms with and without a CSR score in Panel A, and firms with low and high CSR scores in Panel B.

4. Empirical Results

4.1. Baseline regressions

We test the hedging ability of CSR reputation for stock return volatility and cash flow volatility separately. We use the following OLS model to test the impact of social capital on risk:

$$Risk_{i,t} = \alpha + \beta_1 \times CSR_{i,t} + \beta_2 \times Political \ uncertainty_t + \beta_3 \times CSR_{i,t} \times Political \ uncertainty_t + X_{i,t-1} + \theta + \gamma + \varepsilon_{i,t}$$
(1)

where *Risk* is measured as stock return volatility and alternatively cash flow volatility. We follow Hoberg and Moon (2017) and measure return volatility as the standard deviation of the firms' daily logarithmic returns, multiplied by the square root of 252 trading days over a year. Cash flow volatility at time t is defined as the standard deviation of cash flow to assets for the

previous three years, *t-3* to *t-1*. As in Hoberg and Moon (2017), cash flow is measured as operating income before depreciation. *CSR*_{*i,t*} is the overall CSR score of firm *i* at time *t*. For firms with no CSR score we set CSR to zero. For political uncertainty, we use two binary variables: (i) *Election*, which is a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State at time *t*, and zero otherwise; (ii) *Close Election* which is a binary variable that takes the value of one if the victory margin of the headquarters State's gubernatorial election is in the lowest quartile, and zero otherwise. X is a vector of control variables that have been shown in the literature⁹ to affect return and cash flow volatility.¹⁰ As in Jens (2017), we also include State GDP growth rate and State unemployment rate to control for State-level economic conditions. We also add gubernatorial *Term Limit* as a State-level control variable, which is equal to one if the incumbent governor has a term limit on the gubernatorial election and zero otherwise. θ and γ denote year and industry fixed effects respectively. Firm-level financial controls, State-level GDP growth rate, and unemployment rate are lagged by one year for all specifications.

Table 3, Panel A presents the OLS estimates for the impact of CSR reputation on stock return volatility during political uncertainty. In line with our arguments, we expect the coefficient on the interaction term $CSR \times Political Uncertainty$ to be negative. Columns (1), (3) and (5) show the impact of CSR on return volatility during election years, close elections and post-election years, respectively. To mitigate the concern of omitted variable bias, we add firm-specific financial and State-level macroeconomic control variables in columns (2), (4) and (6). In all specifications, it is clear that return volatility is higher in election years and the degree of uncertainty increases during close elections. Column (1) shows that the higher CSR rating

⁹ See Vuolteenaho (2002), Bae et al. (2004), Chen et al. (2013), Hoberg and Moon (2017), Michaely et al. (2018), among others.

¹⁰ All control variables are defined in the Appendix.

reduces the return volatility during election year. The estimated coefficients indicate that firms having their headquarters in States which have an upcoming gubernatorial election, have 0.80% higher return volatility than firms having their headquarters in States without an upcoming election. However, for high CSR firms, this return volatility difference reduces to 0.01%, suggesting that high CSR reputation has a mitigating effect on stock volatility.

After adding firm- and State-level control variables, column (2) also confirms that a higher CSR rating reduces the return volatility during election year. In column (3), we estimate the CSR-risk relationship during closely contested elections. The result shows that the hedging ability of CSR reputation remains effective when the degree of uncertainty of election is higher. A one-standard-deviation increase in CSR (29.63) is associated with a 0.89% decrease in return volatility during closely contested election years, with the average vote margin being 3.18%. Column (4) confirms that high CSR rating reduces return volatility during close elections. We also regress CSR on return volatility during the post-election year to assess whether the hedging ability is transient or has a longer-term effect. In columns (5) and (6), the results show that the degree of uncertainty decreases during post-election year and the higher CSR rating increases the return volatility during this period. This suggests that CSR has a transient hedging effect on stock volatility during political uncertainty. During the post-election years, the uncertainty is reduced (Durney, 2011; Jens, 2017), which creates an opportunity to increase risk-taking. Our results suggest that high CSR firms use this opportunity through their market reputation and better access to finance. Overall, our results suggest that CSR reputation reduces stock return volatility during election years and especially during close elections when the degree of uncertainty regarding the gubernatorial race is high.

Panel B of Table 3 presents the OLS estimates for the impact of CSR reputation on cash flow volatility during political uncertainty. Columns (1), (3) and (5) show that cash flow volatility is positively affected by the election year and closely contested elections. Column (3)

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indicates that CSR reputation reduces cash flow volatility during close elections, although, these effects become statistically insignificant after we include control variables in column (4). Overall, we do not find strong evidence that would suggest that CSR reputation reduces cash flow volatility during political uncertainty.

4.2 Instrumental variable approach

The relationship between CSR and risk can be endogenous. For instance, financially constrained firms lower their investment in CSR (Hong et al., 2012). Moreover, Albuquerque et al. (2019) argue that higher valuation resulting from lower risk allows the firm to invest more in CSR (see also Orlitzky and Benjamin, 2001). To tackle this endogeneity between risk and CSR, we employ two alternative strategies. First, we use an IV approach to measure the relationship between CSR and risk by instrumenting CSR with a set of instruments. Second, we use industry-level import tariff reductions as a quasi-natural experiment to isolate the causal effect of risk on CSR. In addition to these two steps, we test the effect of CSR reputation across different groups that are categorized based on the CSR score in order to limit the possibility of spurious correlation.

Regarding the IV approach, we follow first the approach of Ferrell et al. (2016) and use the industry peers' average of the endogenous variable as an instrument. In this case our first instrument is the average CSR rating of all firms in the same industry, excluding the focal firm. The rationale behind this instrument is that the CSR performance of other firms in the same industry also systematically influence CSR practices of the focal firm (Cheng et al., 2014; Ioannou and Serafeim, 2014). Our second instrument is the average CSR score of all firms in the State (excluding the focal firm) where the focal firm's headquarters is located. Differences in the regional attitude towards CSR practice influence the social performance of the firm (Goss and Roberts, 2011). Rubin (2008) empirically shows that companies with a high CSR score tend to be situated in the Democratic (blue) States that vote Democratic in presidential elections, whereas low CSR companies tend to be situated in Republican (red) States. El Ghoul et al. (2011) and Dunbar et al. (2017) also use these IVs to instrument CSR. Similarly, we assume that both instruments, which vary across firms since the focal firm's CSR score is omitted, are exogenous to the contemporaneous CSR score.

Table 4 reports the 2-Stage Least Squares (2SLS) estimates of the impact of CSR reputation on risk by using both industry and State average CSR as instruments.¹¹ Panel A reports the regression estimates for stock return volatility. Column (1) reports the first stage regression on the CSR score. The results show that CSR has a positive and statistically significant relationship with the instrument. Columns (2) to (7) report the estimates from the second stage regressions. Column (2) confirms that the return volatility for the firms headquartered in States facing a gubernatorial election is higher than other U.S. firms and CSR reputation reduces this volatility. Moreover, our results show that CSR's hedging ability persists during closely contested elections. For instance, column (3) shows that a one-standard-deviation increase in CSR score (29.63) is associated with a 6.52% decrease in return volatility during the election period for firms headquartered in States facing a gubernatorial election.

According to the estimates of column (5), a one-standard-deviation increase in CSR score is associated with an 11.56% decrease in return volatility during close elections, which indicates that the CSR reputation effect is stronger when the degree of uncertainty is higher. However, both columns (6) and (7) support our earlier findings that CSR's hedging ability is transient. This finding also supports Lins et al. (2017), who find that the impact of CSR on firm

¹¹ We repeat the 2SLS estimations with each instrument (industry average CSR and State average CSR) separately. The results, presented in the Appendix (Tables A1 and A2), show that the instruments are also significant individually and, most importantly, the results remain qualitatively similar and significant (both statistically and economically).

performance becomes insignificant after the 2007-09 financial crisis. To confirm the strength of the instruments, we report the Cragg-Donald Wald F-statistics, which support the validity of the employed instruments. Overall, our IV estimates confirm that CSR reputation can reduce stock return volatility during political uncertainty. However, it is a transient effect since it lasts only during the year of the election.

In Panel B of Table 4, we report the 2SLS estimates of the impact of CSR reputation on cash flow volatility during political uncertainty by using both industry and State average CSR as instruments. In column (1), the first stage regression shows that both the instruments have a significantly positive association with CSR. The results of column (2) show that the cash flow volatility of firms having their headquarters in upcoming gubernatorial election States is 1.02% higher than other sample firms. A one standard deviation increase in the CSR score hedges this volatility during election year by 1.78%. Similarly to our earlier OLS results, the impact of CSR during or after elections (or closely contested elections) is not statistically significant when including other control variables to mitigate the concern of omitted variable bias. Boutchkova et al. (2012) argue that the uncertainty regarding future party orientation increases the uncertainty regarding future cash flows and this effect is industry-specific. Also, Julio and Yook (2012) show that firms increase cash holding more than usual during the election year on a precautionary basis. In addition to these reasons, we argue that due to the transient nature of CSR-led reputational hedge, it has no impact on quasi-static cash flows during political uncertainty (gubernatorial elections).

4.3 Tariff cuts as exogenous shocks on product market competition

We exploit the exogenous shock triggered by tariff cuts as a quasi-natural experiment and employ a difference-in-difference (DiD) approach to test the causal link between CSR reputation and economy-wide volatility. To identify significant import tariff cuts, we follow Kini et al. (2017). We collect U.S. import data from Schott's International Economics Resource Page spanning 2002-2016. First, the tariff rate for each industry-year observation is calculated as Calculated Duties, divided by Imports by Custom Value. Next, we consider that a significant tariff cut in an industry-year occurs when the tariff rate is reduced by more than 2.5 times the median level industry-wide tariff rate reduction over our sample period.¹² To ensure that large tariff cuts are not temporary changes in tariff rates, we exclude tariff cuts that are followed by large increases in tariffs over the three subsequent years. Next, we merge the tariff cut data with the CSR score from Asset4 and firm-level accounting data from Compustat. Because data on tariffs are available only for manufacturing industries, we restrict our focus to these industries. Finally, we create a binary variable for tariff cuts which is equal to one if any industry experiences a significant tariff cut, and zero otherwise. Finally, we estimate the following model:

$$Risk_{i,t} = \alpha + \beta ICSR_{i,t} + \beta 2Tariff Cut_{i,t} + \beta 3CSR_{i,t} \times Tariff Cut_{i,t} + Y_{i,t-1} + \theta + \gamma + u_{i,t}$$
(2)

Here, $Risk_{i,t}$ is measured as the stock return volatility and alternatively as the cash flow volatility of firm *i* during time *t*. *Tariff Cut*_{i,t} is a binary variable, which is one if any firm experiences a significant tariff cut in period *t*, and zero otherwise. We test CSR's hedging effectiveness within the reduced sample of firms that have a CSR score. Here, $CSR_{i,t}$ is a binary variable equal to one for firms with a high CSR score and zero for firms with a low CSR score. We identify firms as having high or low CSR based on the annual mean, median and tercile classifications. For *Median classification*, we split the set of observations into equal groups on the basis of the median value of CSR by year. Then, the group of firms having a higher CSR score than the median at year *t* is categorized as a high CSR firm and other firms are defined as low CSR firms. For the *Mean classification*, we follow the same procedure on the basis of mean CSR values by year. For *Tercile classification*, the set of observations are divided into

¹² Alternatively, we use a threshold of a tariff reduction of more than 3 times the median level industry-wide tariff rate reduction and the results remain qualitatively similar.

equal terciles every year based on the CSR score. Firms in the first tercile are classified as high CSR firms, and those in the third tercile are classified as low CSR firms. *Y* is a vector of firm-specific control variables that have been shown in the literature to affect return and cash flow volatility and θ and γ are time and industry fixed effects, respectively. If CSR can mitigate firm risk during industry-wide economic shocks, we expect the coefficient on the interaction term $CSR \times Tariff Cut$ to be negative.

The results from the impact of tariff cuts on the hedging ability of social capital are reported in Table 5. Panel A presents the results for stock return volatility as a risk measure. Columns (1) to (4) report the estimates for the nominal CSR score, mean, median and tercile classifications of CSR score, respectively. Overall, the results suggest that as far as stock volatility is concerned, the magnitude of CSR has no mitigating impact on firm risk.

Next, we repeat our estimations with cash flow volatility as a risk measure. The results reported in Table 5, Panel B show that in all specifications, the marginal effect related to the interaction term between Tariff Cut and CSR is not statistically significant. From this DiD estimation, we find that although CSR reputation is an effective hedge against risk during political uncertainty, it is not an effective hedge against firm risk during industry-wide economic shocks. While the tariff cut is an industry-wide shock, firms respond to tariff shocks heterogeneously (Frésard and Valta, 2015). Also, the magnitude of the shock differs across firms within the same industry (Bernard et al., 2006). We argue that it is due to this peer effect, that the theory of *reputation effects in a repeated game* is not reflected in the relationship between risk and CSR during tariff shock.

4.4 Product Market Fluidity as exogenous variation in competition

Because import tariff cuts are an industry-wide product market threat with the data being available only for industrial firms, we repeat the DiD analysis by using an alternative measure of product market competition. In particular, we use product market fluidity, developed by Hoberg et al. (2014).¹³ Fluidity is a text-based measure of how firms' product market space changes relative to competitors changing their products. Rivals create competitive pressure by changing their products as well as entering into a similar product mix. Therefore, greater product market fluidity creates a negative shock to profitability, in turn increasing firm volatility. We argue that firms can use their social capital as a reputational hedge against greater product market competition. Therefore, firms with more social capital should experience lower volatility.

The results from our estimated regression models are presented in Table 6. Panel A, reports the results for stock return volatility. In columns (1) and (2) we interact the continuous CSR score with a binary measure of fluidity. Because fluidity is a continuous variable, we first identify those firms that face greater market competition. Therefore, the variable *greater fluidity* takes the value of one for those firms having a fluidity measure greater than the annual average fluidity across all the firms in our sample. Alternatively, we use the adjusted greater fluidity, which is equal to one if a firm's fluidity is greater than the average fluidity across all the firms in our sample, excluding the firm in question from the average estimation. The results in column (1) indicate that in a competitive environment, as captured by greater fluidity, greater social capital leads to lower market volatility. This finding suggests that CSR is an effective reputational hedge when firms have a high CSR reputation. However, our results show that it is not enough for firms to have any CSR score in order to use social capital as an operational hedge when facing greater market competition. As shown in column (6), it is only for those firms that are in the top tercile of the CSR score that the reputational hedge leads to lower market volatility when facing greater market competition.

¹³ We use the product market fluidity data from Hoberg and Phillips Data Library available at http://hobergphillips.tuck.dartmouth.edu/.

In Panel B, we repeat our estimations with cash flow volatility as the risk measure. The results show that the marginal effect related to the interaction term between fluidity and CSR is not statistically significant. This is consistent with our earlier findings on the relationship between CSR and cash flow volatility. Overall, our findings suggest that CSR is an effective reputational hedge against risk emerging from a firm-specific product market threat. But it is not an effective hedge against firm risk during industry-wide product market economic shocks in the form of tariff cuts.

4.5 Placebo tests

We conduct placebo tests to ensure that the relationship between CSR and stock return volatility during political uncertainty is not spurious. In Panel A of Table 7, we conduct random placebo tests by choosing election years for each State randomly. Then, we replace the original election year with the falsified election year and run the regressions for the main results. The results of OLS are reported in columns (1) and (2), whereas the results based on our earlier IV approach are reported in columns (3) and (4). All specifications show that the coefficients of the interaction terms are not statistically significant. This suggests our results are not spurious. In Panel B, we repeat the placebo tests by choosing the close election years randomly and we do not find any significant effect of CSR on stock return volatility during these falsified close election years. Hence, we can conclude that the reputational hedging effect of CSR is specific to election years.

5. CSR Investment, Performance and Growth Surrounding Election Cycles

To explore the real effects of CSR investment during election year in more detail, we also focus on firms' performance and growth surrounding election cycles. In Table 8, we analyze the future operating margin, profitability, valuation (captured by Tobin's Q) and sales growth for firms with CSR, No CSR, High CSR and Low CSR scores over a three-year period for the overall sample period, election years and post-election years. The overall results show significantly higher future operating margin and profitability for firms with a high CSR reputation. However, low or no CSR firms have higher sales growth, since they tend to be younger and high growth firms. Regarding the market valuation, although there is a statistically significant difference between high and low CSR scores only for one year following the gubernatorial elections, there is a persistent difference in valuation between firms that have a CSR score and those firms without a CSR score. This suggests that the market places a premium on those firms committed to enhancing their social capital.

In Table 9, we regress firms' performance and growth measures on CSR investment during election year. Here, CSR_{Election-Year} is the firms' CSR score during an election year. Panels A and B show the results of election year and post-election years, respectively. Overall, the results suggest that CSR reputation during election year has a positive impact on operating margin, profitability, and market valuation (Tobin's Q) during and after an election. During post-election years, firms' operating margin increases, profitability remains same and Tobin's Q decreases compared to an election year. The impact on sales growth is insignificant in election year, but negative in post-election years. In sum, the results indicate that by hedging the political risk, CSR reputation increases firms' performance and growth in both election year and post-election years.

6. Conclusion

We assess the hedging ability of firms' social capital during regional political risk via gubernatorial elections and product market competition via industry-wide tariff cuts or alternatively via the product fluidity of Hoberg et al. (2014). We contribute to the literature by investigating the CSR-risk relationship during times of political uncertainty and industry-wide economic shocks while considering the potential reverse causality between CSR and firm risk. Our findings show that firm-specific social capital, captured by CSR reputation, has a statistically and economically significant mitigating effect on stock return volatility during

political uncertainty, but not on cash flow volatility. Although CSR can be an effective hedge against political uncertainty, it is not an effective hedge against risk during industry-wide economic shocks. However, high CSR firms do enjoy lower market volatility when facing higher competition in the product market. Moreover, we find that CSR's mitigating effect on stock volatility during political uncertainty is transient and dissipates following gubernatorial elections. Finally, this reputational hedge has a positive effect on firms' future performance and growth.

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Table 1. Summary Statistics

This table consists of summary statistics for our sample of all publicly traded U.S. firms in CRSP/Compustat between 2002 and 2016. We exclude financial firms (SIC codes 6000-6999) and utilities (SIC codes 4900-4949). Summary statistics for all sample firms, firms with a high CSR score, firms with a low CSR score and firms without a CSR score are reported in Panels A, B, C, and D respectively. Firms are classified as high and low CSR based on *Tercile classification*. All variables are defined in the Appendix. All continuous variables are winsorized at the 1% and 99% tails.

	N	Mean	SD	10th Percentile	90th Percentile
CSR	9766	52.5579	29.6292	14.8200	93.6400
Return Volatility	43631	0.5415	0.3027	0.2476	0.9392
Cash Flow Volatility	41903	0.0678	0.1086	0.0078	0.1549
Market-to-Book	43631	1.5555	1.5545	0.3201	3.3516
Leverage	43631	0.1745	0.2004	0.0000	0.4512
Operating Margin	43631	-0.5637	3.8638	-0.3473	0.2935
Investment	43631	0.0920	0.2246	-0.0696	0.3092
Sales Growth	43631	0.0813	0.3375	-0.2097	0.3797
Profitability	43631	-0.0459	0.2541	-0.3061	0.1208
Cash	41903	0.1547	0.1720	0.0101	0.3842
Negative Equity	43631	0.0336	0.1803	0.0000	0.0000

Panel A: All Firms

Panel B: High CSR Firms (Based on Tercile Classification)

	N	Mean	SD	10th Percentile	90th Percentile
CSR	3248	87.4654	8.9516	75.6000	95.8900
Return Volatility	3248	0.3124	0.1509	0.1715	0.4927
Cash Flow Volatility	3139	0.0247	0.0381	0.0050	0.0509
Market-to-Book	3248	1.5375	1.2002	0.4759	3.0367
Leverage	3248	0.2174	0.1393	0.0435	0.3981
Operating Margin	3248	0.1882	0.1641	0.0677	0.3473
Investment	3248	0.0535	0.1356	-0.0407	0.1608
Sales Growth	3248	0.0422	0.1689	-0.1085	0.1968
Profitability	3248	0.0653	0.0841	0.0045	0.1422
Cash	3139	0.0962	0.0814	0.0158	0.2069
Negative Equity	3248	0.0157	0.1243	0.0000	0.0000

Panel C: Low CSR Firms (Based on Tercile Classification)

	N	Mean	SD	10th Percentile	90th Percentile
CSR	3262	20.8853	8.9451	10.0500	34.1300
Return Volatility	3262	0.4121	0.2077	0.2133	0.6589
Cash Flow Volatility	3151	0.0447	0.0743	0.0058	0.1003
Market-to-Book	3262	1.8532	1.7597	0.4044	4.1757
Leverage	3262	0.2302	0.2117	0.0000	0.5130
Operating Margin	3262	-0.1577	2.7561	-0.0119	0.3798
Investment	3262	0.1329	0.2195	-0.0295	0.3708
Sales Growth	3262	0.1117	0.2997	-0.1270	0.3811
Profitability	3262	0.0186	0.1623	-0.1062	0.1379
Cash	3151	0.1298	0.1369	0.0103	0.2943
Negative Equity	3262	0.0392	0.1942	0.0000	0.0000

Panel D: No CSR Firms

	N	Mean	SD	10th Percentile	90th Percentile
Return Volatility	33865	0.5926	0.3108	0.2888	1.0060
Cash Flow Volatility	32465	0.0779	0.1178	0.0092	0.1823
Market-to-Book	33865	1.5238	1.5713	0.2952	3.3244
Leverage	33865	0.1612	0.2040	0.0000	0.4514
Operating Margin	33865	-0.7437	4.2752	-0.5897	0.2600
Investment	33865	0.0925	0.2360	-0.0838	0.3250
Sales Growth	33865	0.0829	0.3621	-0.2374	0.4087
Profitability	33865	-0.0719	0.2751	-0.3822	0.1128
Cash	32465	0.1669	0.1841	0.0094	0.4249
Negative Equity	33865	0.0351	0.1841	0.0000	0.0000

Table 2. CSR, No CSR, Low CSR and High CSR Firms

This table presents the average values and the differences in means of firm-specific characteristics for firms with and without a CSR score (Panel A), and firms with low and high CSR scores (based on Tercile classification) (Panel B) for our sample of all publicly traded U.S. firms in CRSP/Compustat between 2002 and 2016. We exclude financial firms (SIC codes 6000-6999) and utilities (SIC codes 4900-4949). All variables are defined in the Appendix. All continuous variables are winsorized at the 1% and 99% tails. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

	No CSR Firms		CSR I	Firms	
	N	Mean	N	Mean	Difference
CSR	-	-	9,766	52.558	
Return Volatility	33,865	0.593	9,766	0.365	0.228***
Cash Flow Volatility	32,465	0.078	9,438	0.033	0.045***
Market-to-Book	33,865	1.524	9,766	1.665	-0.142***
Leverage	33,865	0.161	9,766	0.221	-0.059***
Operating Margin	33,865	-0.744	9,766	0.061	-0.804***
Investment	33,865	0.093	9,766	0.090	0.002
Sales Growth	33,865	0.083	9,766	0.076	0.007*
Profitability	33,865	-0.072	9,766	0.044	-0.116***
Cash	32,465	0.167	9,438	0.113	0.054 ***

Panel A: CSR and No CSR Firms

Panel B: Low and High CSR Firms (Tercile Classification)

	Low CSR Firms(Q1)		High CSR I	High CSR Firms(Q3)		
	N	Mean	N	Mean	Difference	
CSR	3,262	20.885	3,248	87.465	-66.580***	
Return Volatility	3,262	0.412	3,248	0.312	0.101***	
Cash Flow Volatility	3,151	0.045	3,139	0.025	0.020***	
Market-to-Book	3,262	1.853	3,248	1.537	0.316***	
Leverage	3,262	0.230	3,248	0.217	0.013***	
Operating Margin	3,262	-0.158	3,248	0.188	-0.346***	
Investment	3,262	0.133	3,248	0.053	0.079***	
Sales Growth	3,262	0.112	3,248	0.042	0.069***	
Profitability	3,262	0.019	3,248	0.065	-0.047***	
Cash	3,151	0.130	3,139	0.010	0.034***	

Table 3. The Relationship between CSR Reputation and Risk during Political Uncertainty

This table reports OLS estimates of CSR reputation and risk. As a risk measure, we use return volatility and cash flow volatility as dependent variables in Panels A and B respectively. Stock return volatility is the standard deviation of the firms' daily logarithmic returns, multiplied by the square root of 252 trading days. Cash flow volatility is the standard deviation of cash flow to assets for the previous three years. To measure political uncertainty, we use two binary variables: (i) *Election*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State at time *t*, and zero otherwise; (ii) *Close*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State lagged by a year (*t-1*). Values of risk and CSR measures are contemporaneous. All firm-level financial controls, State-level GDP growth rate and unemployment rate are lagged by one year. All variables are defined in the Appendix. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

	(1)	(2)	(3)	(4)	(5)	(6)
CSR	-0.0033***	-0.0030***	-0.0032***	-0.0030***	-0.0033***	-0.0031***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Election	0.0080**	0.0118***				
	(0.0040)	(0.0042)				
CSR* Election	0.0001*	0.0001**				
	(0.0000)	(0.0000)				
Close Election			0.0255***	0.0263***		
			(0.0062)	(0.0061)		
CSR* Close Election			-0.0003***	-0.0003**		
			(0.0001)	(0.0001)		
Post-election				× ,	-0.0071**	-0.0059*
					(0.0031)	(0.0031)
CSR* Post-election					0.0003***	0.0003***

Panel A: Stock Return Volatility

					(0.0000)	(0.0000)
Market-to-Book		-0.0107***		-0.0107***		-0.0107***
		(0.0014)		(0.0014)		(0.0014)
Leverage		-0.0593***		-0.0590***		-0.0594***
		(0.0134)		(0.0134)		(0.0134)
Operating Margin		-0.0135***		-0.0135***		-0.0135***
		(0.0006)		(0.0006)		(0.0006)
Investment		-0.0556***		-0.0558***		-0.0555***
		(0.0078)		(0.0078)		(0.0078)
Sales Growth		0.0043		0.0041		0.0041
		(0.0053)		(0.0053)		(0.0053)
Negative Equity		0.1678***		0.1675***		0.1678***
		(0.0138)		(0.0139)		(0.0138)
Term Limit		-0.0279***		-0.0268***		-0.0230***
		(0.0063)		(0.0059)		(0.0059)
Δ GDP		0.0726		0.1099		0.0731
		(0.0747)		(0.0747)		(0.0748)
Unemployment		0.6884***		0.6969***		0.6844***
		(0.1938)		(0.1939)		(0.1938)
Constant	0.6322***	0.6220***	0.6290***	0.6200***	0.6398***	0.6324***
	(0.0411)	(0.0398)	(0.0412)	(0.0399)	(0.0411)	(0.0397)
Observations	43,631	43,631	43,631	43,631	43,631	43,631
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.306	0.345	0.307	0.345	0.306	0.345

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	(1)	(2)	(3)	(4)	(5)	(6)
CSR	-0.0007***	-0.0002***	-0.0006***	-0.0002***	-0.0007***	-0.0002***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Election	0.0045***	0.0015				
	(0.0014)	(0.0014)				
CSR* Election	-0.0000	-0.0000				
	(0.0000)	(0.0000)				
Close Election			0.0096***	0.0028		
			(0.0024)	(0.0019)		
CSR* Close Election			-0.0001**	-0.0000		
			(0.0000)	(0.0000)		
Post-election			· · · ·	· · · ·	-0.0019*	-0.0005
					(0.0011)	(0.0011)
CSR* Post-election					0.0000	-0.0000
					(0.0000)	(0.0000)
Market-to-Book		0.0110***		0.0110***	(,	0.0110***
		(0.0007)		(0.0007)		(0.0007)
Leverage		-0.0183***		-0.0183***		-0.0183***
8		(0.0043)		(0.0043)		(0.0043)
Profitability		-0 1867***		-0.1867***		-0 1867***
Trontaonity		(0.0048)		(0.0048)		(0.0048)
Cash		0.1066***		0.1066***		0.1066***
Cush		(0.0064)		(0.0064)		(0.0064)
Investment		0.0062*		(0.000+)		(0.000+)
		$(0.0002)^{*}$		(0.0002^{+})		(0.0002)
Nagativa Equity		(0.0034)		(0.0034)		(0.0034)
negative Equily		0.0296***		0.0293***		0.0296***

Panel B: Cash Flow Volatility

		(0.0050)		(0.0050)		(0.0050)
Term Limit		-0.0023		-0.0021		-0.0017
		(0.0020)		(0.0019)		(0.0019)
$\Delta \text{ GDP}$		-0.0393		-0.0355		-0.0391
		(0.0247)		(0.0247)		(0.0247)
Unemployment		-0.0259		-0.0249		-0.0264
		(0.0591)		(0.0591)		(0.0591)
Constant	0.0426***	0.0214***	0.0426***	0.0213***	0.0465***	0.0226***
	(0.0081)	(0.0067)	(0.0081)	(0.0066)	(0.0080)	(0.0066)
Observations	41,903	41,903	41,903	41,903	41,903	41,903
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.142	0.450	0.143	0.450	0.142	0.450

Table 4. The Relationship between CSR Reputation and Risk during Political Uncertainty

This table presents the results of the IV approach, which estimates the relationship between CSR reputation and risk during political uncertainty over the sample period of 2002-2016. As a risk measure, we use return volatility and cash flow volatility as dependent variables in Panels A and B respectively. Stock return volatility is the standard deviation of the firms' daily logarithmic returns, multiplied by the square root of 252 trading days. Cash flow volatility is the standard deviation of cash flow to assets for the previous three years. *CSR* is the overall ESG score instrumented with two instruments jointly: the average CSR rating for each State-year pair and industry-year pair. The results of the 1st stage are presented in column 1. Columns 2, 4 and 6 contain the results of 2nd stage regression without control variables. In columns 3, 5 and 7, we report the 2nd stage regression outcomes with control variables. To measure political uncertainty, we use two binary variables: (i) *Election*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State at time *t*, and zero otherwise. *Post-election* is a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State lagged by a year (*t-1*). Values of risk and CSR measures are contemporaneous. All firm-level financial controls, State-level GDP growth rate, and unemployment rate are lagged by one year. All variables are defined in the Appendix. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Industry Average CSR	0.1978***						
	(0.0373)						
State Average CSR	0.2939***						
	(0.0924)						
CSR		-0.0069***	-0.0065***	-0.0072***	-0.0067***	-0.0077***	-0.0072***
		(0.0010)	(0.0010)	(0.0010)	(0.0011)	(0.0011)	(0.0011)
Election		0.0331***	0.0355***				
		(0.0067)	(0.0067)				
CSR* Election		-0.0024***	-0.0022***				
		(0.0004)	(0.0004)				
Close Election				0.0613***	0.0682***		

	Panel A: Stock return	volatility - Inc	dustry and State	Average CSR	as Instruments
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CSR* Close Election				(0.0114) -0.0035*** (0.0008)	(0.0116) -0.0039*** (0.0009)		
Post-election						-0.0134***	-0.0115**
						(0.0047)	(0.0047)
CSR* Post-election						0.0009***	0.0008***
						(0.0003)	(0.0003)
Market-to-Book	1.3665***		-0.0053**		-0.0055**		-0.0054**
	(0.1838)		(0.0022)		(0.0021)		(0.0021)
Leverage	15.0456***		0.0035		0.0046		0.0028
	(1.5850)		(0.0221)		(0.0221)		(0.0221)
Operating Margin	0.6387***		-0.0108***		-0.0108***		-0.0108***
	(0.0522)		(0.0009)		(0.0009)		(0.0009)
Investment	-4.1628***		-0.0730***		-0.0732***		-0.0728***
	(0.5763)		(0.0091)		(0.0091)		(0.0091)
Sales Growth	-2.7035***		-0.0068		-0.0063		-0.0069
	(0.2832)		(0.0060)		(0.0060)		(0.0060)
Negative Equity	-11.3964***		0.1203***		0.1202***		0.1212***
	(1.2920)		(0.0191)		(0.0191)		(0.0190)
Term Limit	-0.6306		-0.0295***		-0.0346***		-0.0263***
	(0.5530)		(0.0072)		(0.0067)		(0.0063)
Δ GDP	-9.0755		0.0192		0.0985		0.0228
	(8.0010)		(0.0811)		(0.0813)		(0.0814)
Unemployment	43.4519		0.9277***		0.9753***		0.9276***
	(30.2223)		(0.2379)		(0.2360)		(0.2365)
Constant	-3.0938	0.6340***	0.5971***	0.6341***	0.5927***	0.6584***	0.6235***
	(10.6802)	(0.0763)	(0.0732)	(0.0747)	(0.0719)	(0.0754)	(0.0722)

Observations	43,631	43,631	43,631	43,631	43,631	43,631	43,631
Industry FE	YES						
Year FE	YES						
Cragg-Donald Wald		143.2	122.1	143.4	122.4	143.5	122.3

Panel B: Cash Flow Volatility- Industry and State Average CSR as Instruments

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Industry Average CSR	0.1795***						
	(0.0356)						
State Average CSR	0.2194**						
	(0.0906)						
CSR		-0.0030***	-0.0010***	-0.0030***	-0.0010***	-0.0031***	-0.0010***
		(0.0005)	(0.0003)	(0.0005)	(0.0003)	(0.0005)	(0.0003)
Election		0.0102***	0.0028				
		(0.0025)	(0.0021)				
CSR* Election		-0.0006***	-0.0001				
		(0.0002)	(0.0001)				
Close Election				0.0170***	0.0035		
				(0.0042)	(0.0032)		
CSR* Close Election				-0.0006**	-0.0000		
				(0.0003)	(0.0002)		
Post-election						-0.0043**	-0.0017
						(0.0017)	(0.0016)
CSR* Post-election						0.0002**	0.0001
						(0.0001)	(0.0001)
Market-to-Book	1.8407***		0.0124***		0.0124***		0.0124***
	(0.1830)		(0.0009)		(0.0008)		(0.0009)

Leverage	12.9760***		-0.0082		-0.0082		-0.0082
	(1.6326)		(0.0057)		(0.0057)		(0.0057)
Profitability	15.5799***		-0.1742***		-0.1742***		-0.1743***
	(0.8915)		(0.0066)		(0.0065)		(0.0066)
Cash	-15.0412***		0.0943***		0.0943***		0.0944***
	(1.4534)		(0.0079)		(0.0079)		(0.0079)
Investment	-7.3993***		0.0004		0.0003		0.0004
	(0.6663)		(0.0040)		(0.0040)		(0.0040)
Negative Equity	-7.5539***		0.0238***		0.0237***		0.0238***
	(1.2743)		(0.0055)		(0.0055)		(0.0055)
Term Limit	-0.9996*		-0.0033		-0.0032		-0.0027
	(0.5503)		(0.0021)		(0.0020)		(0.0019)
Δ GDP	-9.1272		-0.0482*		-0.0433*		-0.0479*
	(7.9997)		(0.0256)		(0.0258)		(0.0256)
Unemployment	72.7158**		0.0419		0.0436		0.0411
	(30.1796)		(0.0681)		(0.0684)		(0.0681)
Constant	-2.9354	0.0498	0.0187	0.0508	0.0192*	0.0576*	0.0210*
	(10.7814)	(0.0325)	(0.0114)	(0.0321)	(0.0113)	(0.0322)	(0.0113)
Observations	41,903	41,903	41,903	41,903	41,903	41,903	41,903
Industry FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Cragg-Donald Wald		146.4	94.48	147.1	95.36	147.1	95.17

Table 5. How CSR affects Firm Risk during Tariff Cuts

This table presents the relationship between CSR reputation and risk during import tariff cuts over the sample period of 2002-2016. Treatment firms are firms that belong to the industry which experienced a tariff cut shock during 2002-2016. As a risk measure, we use return volatility and cash flow volatility as dependent variables in Panels A and B respectively. Stock return volatility is the standard deviation of the firms' daily logarithmic returns multiplied by the square root of 252 trading days. Cash flow volatility is the standard deviation of cash flow to assets for the previous three years. CSR score is the continuous score for the sub-sample of firms that have a CSR score. High CSR Score (Mean) is a binary variable that takes the value of one for those firms with a CSR score that is higher than the annual mean CSR score in year t, excluding firms that have no CSR score, and zero otherwise. High CSR Score (Median) is a binary variable that takes the value of one for those firms with a CSR score that is higher than the annual median CSR score in year t, excluding firms that have no CSR score, and zero otherwise. High CSR Score (Tercile) is a binary variable that takes the value of one for those firms with a CSR score that is in the top tercile of the annual CSR score in year t, excluding firms that have no CSR score, and zero otherwise. *Tariff cut* is a binary variable, which is equal to one if the annual percentage drop of the import tariff rate is 2.5 times the industry median level, and zero otherwise. Values of risk and CSR measures are contemporaneous. All firmlevel financial controls are lagged by one year. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

	v			
	(1)	(2)	(3)	(4)
	i	High CSR	High CSR	High CSR
	CSR Score	Score	Score	Score
		(Mean)	(Median)	(Tercile)
CSR	-0.0015***	-0.0670***	-0.0677***	-0.1005***
	(0.0001)	(0.0079)	(0.0077)	(0.0101)
Tariff Cut	0.1162	0.1071	0.1053	0.1171
	(0.1017)	(0.0726)	(0.0725)	(0.0917)
CSR* Tariff Cut	-0.0009	-0.0694	-0.0679	-0.0530
	(0.0013)	(0.0765)	(0.0765)	(0.0957)
Market-to-Book	0.0036	0.0040	0.0042	0.0048
	(0.0029)	(0.0030)	(0.0030)	(0.0032)
Leverage	0.0946**	0.0992***	0.0995***	0.0746*
	(0.0366)	(0.0376)	(0.0376)	(0.0413)
Operating Margin	-0.0179***	-0.0188***	-0.0186***	-0.0179***
	(0.0027)	(0.0028)	(0.0028)	(0.0028)
Investment	0.0436*	0.0584**	0.0576**	0.0606**
	(0.0226)	(0.0226)	(0.0226)	(0.0277)
Sales Growth	0.0226	0.0273*	0.0261	0.0273
	(0.0155)	(0.0160)	(0.0160)	(0.0192)
Negative Equity	0.1039**	0.1076**	0.1077**	0.1204**

Panel A: Stock Return Volatility

	(0.0485)	(0.0489)	(0.0490)	(0.0547)
Constant	0.8310***	0.8020***	0.8051***	0.7952***
	(0.0216)	(0.0213)	(0.0213)	(0.0260)
Observations	3,800	3,800	3,800	2,616
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adj R-squared	0.465	0.446	0.447	0.469

Panel B:	Cash	Flow	Volatility	

	(1)	(2)	(3)	(4)
		High CSR	High CSR	High CSR
	CSR Score	Score	Score	Score
		(Mean)	(Median)	(Tercile)
CSR	-0.0001**	-0.0034	-0.0048*	-0.0057
	(0.0000)	(0.0025)	(0.0026)	(0.0036)
Tariff Cut	0.0028	0.0065	0.0011	-0.0068
	(0.0142)	(0.0111)	(0.0114)	(0.0091)
CSR* Tariff Cut	-0.0000	-0.0087	-0.0010	0.0044
	(0.0002)	(0.0122)	(0.0125)	(0.0112)
Market-to-Book	0.0081***	0.0081***	0.0081***	0.0091***
	(0.0014)	(0.0014)	(0.0014)	(0.0016)
Leverage	0.0162	0.0164	0.0165	0.0239
	(0.0142)	(0.0142)	(0.0142)	(0.0156)
Profitability	-0.1829***	-0.1848***	-0.1841***	-0.1930***
	(0.0220)	(0.0218)	(0.0218)	(0.0267)
Cash	0.1336***	0.1351***	0.1345***	0.1469***
	(0.0317)	(0.0318)	(0.0318)	(0.0396)
Investment	-0.0074	-0.0059	-0.0065	-0.0070
	(0.0122)	(0.0120)	(0.0120)	(0.0149)
Negative Equity	0.0538*	0.0538*	0.0537*	0.0546
	(0.0283)	(0.0283)	(0.0283)	(0.0361)
Constant	0.1184***	0.1161***	0.1166***	0.0901***
	(0.0060)	(0.0058)	(0.0058)	(0.0055)
	,			
Observations	3,699	3,699	3,697	2,549
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adj R-squared	0.405	0.404	0.404	0.432

Table 6. How CSR affects Firm Risk during a Firm-specific Product Market Threat

This table presents the relationship between CSR reputation and risk when firms face a firm-specific product market threat, measured by product market fluidity. Treatment firms are firms that have high product market fluidity during 2002-2016. As a risk measure, we use return volatility and cash flow volatility as dependent variables in Panels A and B, respectively. Stock return volatility is the standard deviation of the firms' daily logarithmic returns multiplied by the square root of 252 trading days. Cash flow volatility is the standard deviation of cash flow to assets for the previous three years. CSR score is the continuous score for the sub-sample of firms that have a CSR score. High CSR Score (Mean) is a binary variable that takes the value of one for those firms with a CSR score that is higher than the annual mean CSR score in year t, excluding firms that have no CSR score, and zero otherwise. High CSR Score (Median) is a binary variable that takes the value of one for those firms with a CSR score that is higher than the annual median CSR score in year t, excluding firms that have no CSR score, and zero otherwise. High CSR Score (Tercile) is a binary variable that takes the value of one for those firms with a CSR score that is in the top tercile of the annual CSR score in year t, excluding firms that have no CSR score, and zero otherwise. Greater Fluidity is a binary variable equal to one for those firms having a fluidity measure greater than the annual average fluidity across all firms in our sample, otherwise it equals zero. Adjusted Greater Fluidity is a binary variable equal to one for those firms having a fluidity measure greater than the annual average fluidity across all firms in our sample, excluding the firm in question from the average fluidity estimation, otherwise it equals zero. Fluidity is the continuous measure of fluidity from Hoberg et al. (2014). Values of risk and CSR measures are contemporaneous. All firm-level financial controls are lagged by one year. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

Panel A: Stock Return Volatility	y					
	(1)	(2)	(3)	(4)	(5)	(6)
		CSR Score		High CSR Score (Mean)	High CSR Score (Median)	High CSR Score (Tercile)
CSR	-0.0010***	-0.0010***	-0.0006***	-0.0428***	-0.0393***	-0.0516***
	(0.0001)	(0.0001)	(0.0002)	(0.0096)	(0.0094)	(0.0119)
Greater Fluidity	0.0773***					
	(0.0097)					
CSR* Greater Fluidity	-0.0007***					
	(0.0001)					
Adjusted greater Fluidity		0.0810***				
		(0.0099)				
CSR* Adjusted greater Fluidity		-0.0007***				
		(0.0002)				

Fluidity			0.0137***	0.0102***	0.0106***	0.0111***
			(0.0016)	(0.0012)	(0.0012)	(0.0014)
CSR* Fluidity			-0.0001***	-0.0016	-0.0024	-0.0045**
·			(0.0000)	(0.0015)	(0.0015)	(0.0019)
Market-to-Book	-0.0030	-0.0031*	-0.0037**	-0.0032*	-0.0033*	-0.0011
	(0.0018)	(0.0018)	(0.0018)	(0.0018)	(0.0018)	(0.0020)
Leverage	0.0704***	0.0696***	0.0650***	0.0706***	0.0707***	0.0538**
-	(0.0199)	(0.0198)	(0.0197)	(0.0198)	(0.0198)	(0.0224)
Operating Margin	-0.0172***	-0.0173***	-0.0165***	-0.0180***	-0.0177***	-0.0162***
	(0.0026)	(0.0026)	(0.0027)	(0.0028)	(0.0027)	(0.0027)
Investment	0.0405***	0.0394***	0.0337**	0.0454***	0.0433***	0.0470***
	(0.0134)	(0.0135)	(0.0134)	(0.0135)	(0.0135)	(0.0161)
Sales Growth	0.0062	0.0062	0.0028	0.0074	0.0063	0.0128
	(0.0107)	(0.0107)	(0.0105)	(0.0109)	(0.0108)	(0.0130)
Negative Equity	0.0477**	0.0479**	0.0465**	0.0501**	0.0504**	0.0523**
	(0.0228)	(0.0229)	(0.0227)	(0.0225)	(0.0225)	(0.0263)
Constant	0.4943***	0.4969***	0.4450***	0.4639***	0.4362***	0.4779***
	(0.0234)	(0.0238)	(0.0274)	(0.0255)	(0.0257)	(0.0211)
Observations	9,766	9,766	9,559	9,559	9,559	6,360
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.457	0.458	0.464	0.447	0.45	0.478

Panel B : Cash Flow Volatility						
· · · · · · · · · · · · · · · · · · ·	(1)	(2)	(3)	(4)	(5)	(6)
		CSD Soore		High CSR	High CSR	High CSR
		CSK Scole		Score	Score	Score
				(Mean)	(Median)	(Tercile)
CSR	-0.0002***	-0.0002***	-0.0000	-0.0045	-0.0043	-0.0095**
	(0.0000)	(0.0000)	(0.0001)	(0.0030)	(0.0030)	(0.0042)
Greater Fluidity	0.0174***					
	(0.0031)					
CSR* Greater Fluidity	-0.0001***					
	(0.0000)					
Adjusted greater Fluidity		0.0169***				
		(0.0033)				
CSR* Adjusted greater Fluidity		-0.0001***				
		(0.0000)				
Fluidity			0.0034***	0.0025***	0.0026***	0.0027***
			(0.0006)	(0.0004)	(0.0004)	(0.0005)
CSR* Fluidity			-0.0000***	-0.0007	-0.0009*	-0.0009
			(0.0000)	(0.0005)	(0.0005)	(0.0007)
Market-to-Book	0.0066***	0.0066***	0.0062***	0.0063***	0.0063***	0.0076***
	(0.0010)	(0.0010)	(0.0010)	(0.0010)	(0.0010)	(0.0012)
Leverage	0.0146*	0.0146*	0.0130*	0.0142*	0.0144*	0.0199**
	(0.0076)	(0.0076)	(0.0075)	(0.0076)	(0.0076)	(0.0089)
Operating Margin	-0.0048***	-0.0048***	-0.0047***	-0.0050***	-0.0049***	-0.0036***
	(0.0011)	(0.0011)	(0.0012)	(0.0012)	(0.0012)	(0.0008)
Investment	-0.0088	-0.0089	-0.0106	-0.0087	-0.0091	-0.0130
	(0.0076)	(0.0076)	(0.0078)	(0.0077)	(0.0077)	(0.0097)
Sales Growth	-0.0075	-0.0075	-0.0070	-0.0064	-0.0065	-0.0076
	(0.0060)	(0.0060)	(0.0059)	(0.0060)	(0.0060)	(0.0070)
Negative Equity	0.0335***	0.0336***	0.0309***	0.0315***	0.0316***	0.0381**
	(0.0099)	(0.0099)	(0.0098)	(0.0098)	(0.0098)	(0.0150)
Constant	0.0171***	0.0181***	0.0061	0.0060	0.0064	0.0070

	(0.0043)	(0.0044)	(0.0061)	(0.0053)	(0.0054)	(0.0066)
Observations	9,401	9,401	9,200	9,200	9,197	6,120
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.224	0.223	0.226	0.219	0.220	0.234

Table 7. Placebo Test

This table reports the results of placebo tests. We conduct random placebo tests by choosing election years (Panel A) and close election years (Panel B) randomly. Here, the dependent variable is stock return volatility measured as the standard deviation of the firms' daily logarithmic returns, multiplied by the square root of 252 trading days. We report the results of OLS in columns (1) and (2), and IV in columns (3) and (4). Values of risk and CSR measures are contemporaneous. All firm-level financial controls, State-level GDP growth rate and unemployment rate are lagged by one year. All variables are defined in the Appendix. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

Panel A: Stock Return Volatility								
	(1)	(2)	(3)	(4)				
	OLS	OLS	IV	IV				
CSR	-0.0032***	-0.0030***	-0.0075***	-0.0070***				
	(0.0001)	(0.0001)	(0.0010)	(0.0011)				
Election	-0.0020	-0.0028	-0.0038	-0.0047				
	(0.0024)	(0.0024)	(0.0044)	(0.0043)				
CSR* Election	-0.0001	-0.0001	-0.0000	0.0000				
	(0.0001)	(0.0001)	(0.0003)	(0.0003)				
Market-to-Book		-0.0107***		-0.0054**				
		(0.0014)		(0.0021)				
Leverage		-0.0595***		0.0026				
		(0.0134)		(0.0221)				
Operating Margin		-0.0135***		-0.0108***				
		(0.0006)		(0.0009)				
Investment		-0.0555***		-0.0729***				
		(0.0078)		(0.0091)				
Sales Growth		0.0041		-0.0069				
		(0.0053)		(0.0060)				
Negative Equity		0.1678***		0.1211***				
		(0.0139)		(0.0190)				
Term Limit		-0.0232***		-0.0265***				
		(0.0059)		(0.0063)				
Δ GDP		0.0751		0.0268				
		(0.0746)		(0.0812)				
Unemployment		0.6835***		0.9286***				
		(0.1939)		(0.2366)				
Constant	0.6399***	0.6331***	0.6584***	0.6239***				
	(0.0410)	(0.0396)	(0.0750)	(0.0718)				
Observations	43,631	43,631	43,631	43,631				
Industry FE	YES	YES	YES	YES				

Year FE	YES	YES	YES	YES
Adj R-squared	0.306	0.345	0.184	0.240
Cragg-Donald Wald			143.5	122.4
Panel B : Cash Flow V	olatility			
	(1)	(2)	(3)	(4)
	OLS	OLS	IV	IV
CSR	-0.0032***	-0.0030***	-0.0074***	-0.0069***
	(0.0001)	(0.0001)	(0.0010)	(0.0011)
Close Election	0.0029	0.0063	0.0069	0.0111
	(0.0045)	(0.0048)	(0.0076)	(0.0076)
CSR* Close Election	0.0001	0.0001	-0.0005	-0.0005
	(0.0001)	(0.0001)	(0.0006)	(0.0006)
Market-to-Book		-0.0107***		-0.0055**
		(0.0014)		(0.0021)
Leverage		-0.0594***		0.0023
		(0.0134)		(0.0220)
Operating Margin		-0.0135***		-0.0108***
		(0.0006)		(0.0009)
Investment		-0.0555***		-0.0725***
		(0.0078)		(0.0091)
Sales Growth		0.0041		-0.0067
		(0.0053)		(0.0060)
Negative Equity		0.1677***		0.1214***
		(0.0139)		(0.0190)
Term Limit		-0.0267***		-0.0292***
		(0.0065)		(0.0070)
Δ GDP		0.0685		0.0197
		(0.0751)		(0.0816)
Unemployment		0.6813***		0.9310***
		(0.1938)		(0.2363)
Constant	0.6383***	0.6309***	0.6554***	0.6199***
	(0.0410)	(0.0396)	(0.0750)	(0.0717)
	10 - 50 -			10 - 22 -
Observations	43,631	43,631	43,631	43,631
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adj R-squared	0.306	0.345	0.186	0.241
Cragg-Donald Wald			143.8	122.7

Table 8. Future Growth and Performance

In this table, we test the consequences of CSR investment on the firms' future performance and growth over a three-year period for the overall sample period (Panels A and B), election years (Panels C and D) and post-election years (Panels E and F). As a performance and growth measure, we use: operating margin, profitability, Tobin's Q, and sales growth. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

		(1)		(2)				(3	3)		(4)				
		C	SR		No CSR					Low	CSR		High CSR			
	t+1	t+2	t+3	t+1 to	t+1	t+2	t+3	t+1 to	t+1	t+2	t+3	t+1 to	t+1	t+2	t+3	t+1 to
				t+3				t+3				t+3				t+3
Operating	0.149	0.176	0.177	0.538	-0.562	-0.478	-0.423	-1.241	0.077	0.147	0.15	0.470	0.194	0.196	0.192	0.582
Margin	0.051	0.054	0.054	0.1.60	0.0.00	0.050	0.044	0.110	0.000		5	0.100	0.0.00	0.070	0.0.00	0.011
Profitability	0.051	0.054	0.054	0.168	-0.060	-0.050	-0.044	-0.113	0.032	0.037	0.03 7	0.120	0.069	0.070	0.069	0.211
Tobin's Q	2.165	2.106	2.074	6.292	1.993	1.963	1.925	5.902	2.283	2.141	2.10	6.451	2.124	2.107	2.092	6.265
											5					
Sales Growth	0.055	0.047	0.037	0.155	0.064	0.062	0.054	0.198	0.082	0.065	0.05	0.211	0.030	0.028	0.020	0.093
Sules Olowin											4					

Panel A: Overall Sample Period

Panel B: Overall Sample Period

		Difference in Mea	ns: No CSR vs.	CSR	Difference in Means: Low CSR vs. High CSR					
	Operating	Profitability	Tobin's Q	Sales Growth	Operating	Profitability	Tobin's Q	Sales Growth		
	Margin	-			Margin	-				
t+1	-0.711***	-0.112***	-0.172***	0.009**	-0.117***	-0.037***	0.159***	0.052***		
t+2	-0.654***	-0.104***	-0.143***	0.015***	-0.049***	-0.034***	0.033	0.037***		
t+3	-0.600***	-0.098***	-0.149***	0.017***	-0.037***	-0.032***	0.013	0.034***		
t+1 to t+3	-1.779***	-0.281***	-0.391***	0.043***	-0.112***	-0.091***	0.185*	0.118***		

Panel C: Election Years

	(1)					(2	2)			(.	3)		(4)			
		CS	SR			No	CSR			Low	CSR		High CSR			
	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3
Operating	0.168	0.175	0.174	0.171	-	-	-	-	0.140	0.143	0.140	0.474	0.190	0.195	0.194	0.583
Margin					0.594	0.508	0.423	0.128								
Profitability	0.053	0.050	0.053	0.171	-	0.065	-	-	0.034	0.035	0.034	0.128	0.071	0.068	0.071	0.216
					0.063		0.049	0.128								
Tobin's Q	2.176	2.073	2.154	6.360	2.046	1.923	2.004	5.967	2.229	2.081	2.220	6.542	2.160	2.086	2.163	6.336
Sales Growth	0.058	0.048	0.014	0.157	0.069	0.072	0.032	0.220	0.075	0.064	0.031	0.205	0.038	0.034	0.000	0.109

Panel D: Election Years

	D	ifference in Means	Differe	nce in Means: L	ow CSR vs. H	igh CSR		
	Operating	Drofitability	Tabin'a O	Salas Crowth	Operating	Ductitability	Tabin'a O	Sales
	Margin	Promability	Tobin's Q	Sales Growin	Margin	Promability	Tobin's Q	Growth
t+1	-0.762***	-0.116***	-0.130***	0.011	-0.050**	-0.037***	0.069	0.037***
t+2	-0.683***	-0.114***	-0.150***	0.024***	-0.052**	-0.032***	-0.005	0.030***
t+3	-0.597***	-0.101***	-0.150***	0.018**	-0.053	-0.037***	0.057	0.031**
t+1 to t+3	-0.299***	-0.299***	-0.393***	0.063***	-0.110	-0.088***	0.206	0.096***

Panel E: Post-election Years

	(1)				(2)			(3)				(4)				
	CSR				No CSR				Low	CSR		High CSR				
	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3	t+1	t+2	t+3	t+1 to t+3
Operating					-	-	-	-								
Margin	0.142	0.176	0.178	0.535	0.547	0.463	0.422	1.228	0.055	0.148	0.159	0.469	0.196	0.196	0.191	0.582
Profitability					-	-	-	-								
	0.051	0.056	0.054	0.167	0.060	0.043	0.042	0.108	0.031	0.037	0.038	0.117	0.068	0.071	0.068	0.209
Tobin's Q	2.162	2.120	2.048	6.271	1.970	1.981	1.893	5.876	2.302	2.166	2.068	6.421	2.111	2.117	2.069	6.242
Sales Growth	0.054	0.047	0.045	0.154	0.061	0.058	0.064	0.188	0.084	0.065	0.061	0.214	0.027	0.025	0.025	0.087

rallel F: Fost-el	ection rears							
	D	ifference in Mean	s: No CSR vs. C	CSR	Difference	e in Means: Lo	w CSR vs. Hig	gh CSR
	Operating	Profitability	Tobin's O	Sales Growth	Operating	Drofitability	Tobin's O	Sales
	Margin	Floinability	Toom s Q	Sales Olowill	Margin	FIOInability	Toom's Q	Growth
t+1	-0.690***	-0.110***	-0.191***	0.008*	-0.141***	-0.037***	0.191***	0.057***
t+2	-0.639***	-0.099***	-0.138***	0.011**	-0.048***	-0.031***	0.049	0.040***
t+3	-0.600***	-0.096***	-0.155***	0.019***	-0.032**	-0.030***	-0.001	0.036***
t+1 to t+3	-1.763***	-0.275***	-0.395***	0.034***	-0.112***	-0.092***	0.179	0.127***

Panel F: Post-election Years

Table 9. CSR Investment during Election Year and Performance Surrounding Gubernatorial Election Cycle

In this table, we analyze the impact of firms' CSR investment during election year on the performance and growth of the election year (Panel A) and post-election years (Panel B). The dependent variables are operating margin, profitability, Tobin's Q, and sales growth. Here, CSR_{Election-Year} is firms' CSR score during the election year. All firm-level financial controls, State-level GDP growth rate, and unemployment rate are lagged by one year. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

Panel A: Election	Year							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Operating Margin	Operating Margin	Profitability	Profitability	Tobin's Q	Tobin's Q	Sales Growth	Sales Growth
CSR _{Election-Year}	0.0117***	0.0122***	0.0017***	0.0017***	0.0031***	0.0053***	-0.0000	-0.0001
	(0.0011)	(0.0011)	(0.0001)	(0.0001)	(0.0007)	(0.0006)	(0.0001)	(0.0001)
Market-to-Book		-0.3225***		-0.0053*				0.0404***
		(0.0427)		(0.0031)				(0.0026)
Leverage		0.7589***		0.0577***		-0.9198***		0.1262***
		(0.1991)		(0.0193)		(0.0905)		(0.0185)
Sales Growth		1.1448***		0.0186		0.4941***		
		(0.2101)		(0.0130)		(0.0528)		
Profitability						-0.7963***		
						(0.0959)		
Operating								
Margin								-0.0088***
N. (' E' '((0.0020)
Negative Equity		-0.6770***		-0.1096***		1.2591***		-0.0861***
— — — —		(0.2462)		(0.0222)		(0.1137)		(0.0198)
Term Limit		0.0997		0.0309***		0.0443		0.0134*

		(0.0845)		(0.0063)		(0.0354)		(0.0078)
Δ GDP		-0.7203		0.0977		0.2491		0.3124**
		(1.3583)		(0.1179)		(0.5827)		(0.1484)
Unemployment		-5.9241*		-1.1020***		2.4922*		-0.1602
		(3.4154)		(0.2438)		(1.4595)		(0.2771)
Constant	-0.3079	0.2194	-0.0963***	-0.0551	1.3834***	1.3684***	-0.0708**	-0.1509***
	(0.3577)	(0.4513)	(0.0335)	(0.0365)	(0.3833)	(0.3917)	(0.0352)	(0.0359)
Observations	12,470	12,470	12,527	12,527	12,364	12,364	12,483	12,483
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Adj R-squared	0.106	0.137	0.125	0.133	0.132	0.190	0.0355	0.0839
Panel B: Post-elec	tion Years							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(1) Operating	(2) Operating	(3)	(4)	(5)	(6)	(7) Sales	(8) Sales
	(1) Operating Margin	(2) Operating Margin	(3) Profitability	(4) Profitability	(5) Tobin's Q	(6) Tobin's Q	(7) Sales Growth	(8) Sales Growth
CSR _{Election-Year}	(1) Operating Margin 0.0122***	(2) Operating Margin 0.0128***	(3) Profitability 0.0018***	(4) Profitability 0.0017***	(5) Tobin's Q 0.0020***	(6) Tobin's Q 0.0044***	(7) Sales Growth -0.0003***	(8) Sales Growth -0.0003***
CSR _{Election-Year}	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011)	(3) Profitability 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001)	(5) Tobin's Q 0.0020*** (0.0006)	(6) Tobin's Q 0.0044*** (0.0006)	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001)
CSR _{Election-Year} Market-to-Book	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505***	(3) <u>Profitability</u> 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001) -0.0059**	(5) Tobin's Q 0.0020*** (0.0006)	(6) Tobin's Q 0.0044*** (0.0006)	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402***
CSR _{Election-Year} Market-to-Book	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415)	(3) Profitability 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029)	(5) Tobin's Q 0.0020*** (0.0006)	(6) Tobin's Q 0.0044*** (0.0006)	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018)
CSR _{Election-Year} Market-to-Book Leverage	 (1) Operating Margin 0.0122*** (0.0011) 	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415) 0.6604***	(3) <u>Profitability</u> 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029) 0.0540***	(5) Tobin's Q 0.0020*** (0.0006)	(6) Tobin's Q 0.0044*** (0.0006) -1.0674***	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018) 0.1207***
CSR _{Election-Year} Market-to-Book Leverage	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415) 0.6604*** (0.1854)	(3) Profitability 0.0018*** (0.0001)	 (4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029) 0.0540*** (0.0145) 	(5) Tobin's Q 0.0020*** (0.0006)	 (6) Tobin's Q 0.0044*** (0.0006) -1.0674*** (0.0783) 	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018) 0.1207*** (0.0126)
CSR _{Election-Year} Market-to-Book Leverage Profitability	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415) 0.6604*** (0.1854)	(3) Profitability 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029) 0.0540*** (0.0145)	(5) Tobin's Q 0.0020*** (0.0006)	 (6) Tobin's Q 0.0044*** (0.0006) -1.0674*** (0.0783) -0.8509*** 	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018) 0.1207*** (0.0126)
CSR _{Election-Year} Market-to-Book Leverage Profitability	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415) 0.6604*** (0.1854)	(3) <u>Profitability</u> 0.0018*** (0.0001)	(4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029) 0.0540*** (0.0145)	(5) Tobin's Q 0.0020*** (0.0006)	 (6) Tobin's Q 0.0044*** (0.0006) -1.0674*** (0.0783) -0.8509*** (0.0925) 	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018) 0.1207*** (0.0126)
CSR _{Election-Year} Market-to-Book Leverage Profitability Sales Growth	(1) Operating Margin 0.0122*** (0.0011)	(2) Operating Margin 0.0128*** (0.0011) -0.3505*** (0.0415) 0.6604*** (0.1854) 1.4122***	(3) Profitability 0.0018*** (0.0001)	 (4) Profitability 0.0017*** (0.0001) -0.0059** (0.0029) 0.0540*** (0.0145) 0.0608*** 	(5) Tobin's Q 0.0020*** (0.0006)	 (6) Tobin's Q 0.0044*** (0.0006) -1.0674*** (0.0783) -0.8509*** (0.0925) 0.4703*** 	(7) Sales Growth -0.0003*** (0.0001)	(8) Sales Growth -0.0003*** (0.0001) 0.0402*** (0.0018) 0.1207*** (0.0126)

Operating								
Margin								-0.0096***
								(0.0014)
Negative Equity		-0.4730***		-0.1108***		1.3056***		-0.0694***
		(0.1834)		(0.0170)		(0.0949)		(0.0144)
Δ GDP		-0.9458		-0.0909		1.6435***		0.5009***
		(1.1727)		(0.0897)		(0.4904)		(0.0982)
Unemployment		-1.8894		-0.9478***		3.6752***		0.9435***
		(3.0358)		(0.2197)		(1.3388)		(0.1733)
Constant	0.0057	0.3701	-0.0924**	-0.0467	1.3500***	1.2171***	0.0366	-0.1021**
	(0.2485)	(0.3115)	(0.0372)	(0.0385)	(0.2384)	(0.2301)	(0.0411)	(0.0424)
Observations	30,994	30,994	31,095	31.095	30,762	30,762	31,002	31,002
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Adj R-squared	0.111	0.147	0.120	0.133	0.126	0.185	0.0458	0.0966

Variables	Definitions
CSR	Equally-weighted Overall ESG score from Asset4.
Return	The standard deviation of the firms' daily logarithmic returns (source: CRSP),
Volatility	multiplied by the square root of the 252 total trading days over a year.
Cash flow	Operating income before depreciation (Compustat item OIBDP).
Cash Flow	The standard deviation of cash flow (Compustat item OIBDP) scaled by total
Volatility	assets (Compustat item AT) for the previous three years, <i>t</i> -3 to <i>t</i> -1.
Election	Binary variable, which is equal to one if a gubernatorial election occurred in
	the firm's headquarters State at time t, otherwise it equals zero.
Close Election	Binary variable, which is equal to one if the victory margin of the headquarters
	State's gubernatorial election in year t is at the lowest quartile, otherwise it
	equals zero.
Tariff cut	Binary variable, which is equal to one if the annual percentage drop of the
	import tariff rate is twice the industry average, and zero otherwise.
Fluidity	The degree of competitive threat and product market change surrounding a
	firm, based on Hoberg et al. (2014).
Greater	A binary variable equal to one for those firms having a fluidity measure greater
Fluidity	than the annual average fluidity across all firms in our sample.
Adjusted	A binary variable equal to one for those firms having a fluidity measure greater
Greater	than the annual average fluidity across all firms in our sample, excluding the
Fluidity	firm in question from the average fluidity estimation, otherwise it equals zero.
Market-to-	Market value of equity (Compustat item PRCC times item CSHO) over total
Book	assets (Compustat item AT).
Leverage	Long-term debt (Compustat item DLTT) over total assets (Compustat item
	AT).
Operating	Operating income before depreciation (Compustat item OIBDP) scaled by
margin	sales (Compustat item SALE).
Investment	Percentage change in gross plant, property, and equipment (Compustat item
	PPEGT) from year t-1 to year t.
Sales growth	Growth in sales from year t-1 to year t (Compustat item SALE).
Profitability	The ratio of net income before extraordinary items (Compustat item NI) to
	total assets (Compustat item AT).
Cash	Cash (Compustat item CH) scaled by total assets (Compustat item AT).
Tobin's Q	Market value of equity (Compustat item PRCC times item CSHO) plus book
	value of debt (Compustat item AT minus CEQ) over total assets (Compustat
	item AT).
Negative Equity	Equal to one if the total liabilities (Compustat item LT) are greater than the
	book value of total assets (Compustat item AT), otherwise zero.
Term Limit	Equal to one if the incumbent governor has a term limit on the gubernatorial
	election, otherwise zero.
$\varDelta GDP$	Annual percentage change in State GDP.
Unemployment	Annual State-level unemployment rate.

Appendix A. Variable Definitions

Table A1. The Relationship between CSR Reputation and Risk during Political Uncertainty

This table presents the results of the IV approach, which estimates the relationship between CSR reputation and risk during political uncertainty over the sample period of 2002-2016. As a risk measure, we use stock return volatility as the dependent variable. Stock return volatility is the standard deviation of the firms' daily logarithmic returns, multiplied by the square root of 252 trading days. *CSR* is the overall ESG score instrumented with two instruments separately: the average CSR rating for each industry-year pair (Panel A) and State-year pair (Panel B). The results of the 1st stage are presented in column 1. Columns 2, 4 and 6 contain the results of 2nd stage regression without control variables. In columns 3, 5 and 7, we report the 2nd stage regression outcomes with control variables. To measure political uncertainty, we use two binary variables: (i) *Election*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State at time *t*, and zero otherwise, *(ii) Close*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State lagged by a year (*t*-*I*). Values of risk and CSR measures are contemporaneous. All firm-level financial controls, State-level GDP growth rate, and unemployment rate are lagged by one year. All variables are defined in the Appendix. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

(2)

(A)

(5)

(6)

(7)

	(1)	(2)	(3)	(4)	()	(0)	(7)
Ind_CSR10	0.2013***						
	(0.0375)						
CSR		-0.0056***	-0.0047***	-0.0059***	-0.0049***	-0.0063***	-0.0053***
		(0.0010)	(0.0010)	(0.0010)	(0.0010)	(0.0011)	(0.0011)
Election		0.0285***	0.0305***	((,	(,	(,
		(0.0063)	(0.0063)				
CSR* Election		-0.0019***	-0.0017***				
		(0.0004)	(0.0004)				
Close Election		(0.0000)	(000000)	0.0561***	0.0593***		
				(0.0116)	(0.0115)		
CSR* Close Election				-0.0030***	-0.0032***		
				(0,0009)	(0.0002)		
Post-election				(0.000))	(0.0000)	-0.0119**	-0.0103**
						(0.0017)	(0.0105)
CSR* Post-election						0.00047)	0.007**
						0.0008	0.0007

Panel A: Stock return volatility - Industry Average CSR as Instruments

(1)

(2)

						(0.0003)	(0.0003)
Market-to-Book	1.3370***		-0.0078***		-0.0079***		-0.0079***
	(0.1842)		(0.0020)		(0.0020)		(0.0020)
Leverage	15.2795***		-0.0257		-0.0243		-0.0265
	(1.5905)		(0.0212)		(0.0212)		(0.0211)
Operating Margin	0.6448***		-0.0120***		-0.0120***		-0.0121***
	(0.0523)		(0.0009)		(0.0009)		(0.0009)
Investment	-4.3272***		-0.0649***		-0.0652***		-0.0646***
	(0.5832)		(0.0090)		(0.0090)		(0.0090)
Sales Growth	-2.6997***		-0.0016		-0.0014		-0.0018
	(0.2840)		(0.0060)		(0.0060)		(0.0060)
Negative Equity	-11.5398***		0.1423***		0.1418***		0.1431***
	(1.2998)		(0.0186)		(0.0186)		(0.0185)
Term Limit	-0.8498		-0.0284***		-0.0320***		-0.0248***
	(0.5615)		(0.0067)		(0.0063)		(0.0061)
Δ GDP	-13.1927		0.0432		0.1127		0.0462
	(8.2649)		(0.0775)		(0.0777)		(0.0776)
Unemployment	58.4227*		0.8141***		0.8554***		0.8126***
	(30.1630)		(0.2137)		(0.2137)		(0.2127)
Constant	-3.1884	0.6310***	0.6049***	0.6302***	0.6010***	0.6523***	0.6280***
	(10.8753)	(0.0634)	(0.0561)	(0.0625)	(0.0556)	(0.0627)	(0.0553)
Observations	43,631	43,631	43,631	43,631	43,631	43,631	43,631
Industry FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Cragg-Donald Wald		213	189.7	214.6	191	214.2	190.7

Panel B: Stock return volatility - State Average CSR as Instruments										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
State Average CSR	0.3116***									
	(0.0932)									
CSR		-0.0106***	-0.0124***	-0.0110***	-0.0127***	-0.0117***	-0.0135***			
		(0.0026)	(0.0034)	(0.0026)	(0.0035)	(0.0027)	(0.0036)			
Election		0.0395***	0.0420***							
		(0.0094)	(0.0098)							
CSR* Election		-0.0031***	-0.0030***							
		(0.0007)	(0.0008)	0.0624***	0 0754***					
Close Election				0.0634***	0.0754***					
				(0.0139)	(0.0156)					
CSR* Close Election				-0.0035^{***}	-0.0042^{***}					
Dest election				(0.0011)	(0.0013)	0.0169**	0.0150**			
Post-election						-0.0168**	-0.0150**			
						(0.0068)	(0.0072)			
CSR* Post-election						0.0012^{**}	0.0011^{*}			
Markat to Pool	1 2/10***		0.0027		0.0022	(0.0006)	(0.0000)			
Market-to-book	(0.1945)		(0.0027)		(0.0023)		(0.0027)			
Lavaraga	(0.1043) 15 2724***		(0.0032)		(0.0032)		(0.0032)			
Levelage	13.2724^{11}		(0.0983)		(0.0979)		(0.0998)			
Operating Margin	(1.3923) 0.6722***		0.0066***		(0.0374)		0.0065***			
Operating Wargin	(0.0753)		$(0.0000^{-0.000})$		$(0.0007)^{-0.000}$		$(0.0003)^{-0.0003}$			
Investment	-4 1523***		_0.0023		_0 000237		_0.0023)			
Investment	(0.5812)		(0.0))3		(0.07)2		(0.0174)			
Sales Growth	_2 7381***		-0.0235**		-0.0227**		(0.017+)			
Sales Glowin	(0.2850)		(0.0233)		(0.0109)		(0.0240)			
Negative Equity	-11 4988***		0.0491		0.0502		0.0484			
Tieguite Equity	(1.3164)		(0.0448)		(0.0302)		(0.0452)			
Term Limit	-0.6130		-0.0337***		-0.0406***		-0.0316***			

	(0.5556)		(0.0098)		(0.0090)		(0.0084)
Δ GDP	-8.0065		-0.0573		0.0327		-0.0548
	(8.0181)		(0.1100)		(0.1098)		(0.1118)
Unemployment	45.4783		1.2996***		1.3475***		1.3093***
	(30.2730)		(0.4083)		(0.4008)		(0.4111)
Constant	-2.4176	0.6460***	0.5779***	0.6489***	0.5746***	0.6753***	0.6085***
	(10.3158)	(0.1130)	(0.1350)	(0.1103)	(0.1318)	(0.1129)	(0.1348)
Observations	43,631	43,631	43,631	43,631	43,631	43,631	43,631
Industry FE	YES						
Year FE	YES						
Cragg-Donald Wald		80.38	59.58	79.22	58.86	80.41	59.53

Table A2. The Relationship between CSR Reputation and Risk during Political Uncertainty

This table presents the results of the IV approach, which estimates the relationship between CSR reputation and risk during political uncertainty over the sample period of 2002-2016. As a risk measure, we use cash flow volatility as the dependent variable. Cash flow volatility is the standard deviation of cash flow to assets for the previous three years. *CSR* is the overall ESG score instrumented with two instruments separately: the average CSR rating for each industry-year pair (Panel A) and State-year pair (Panel B). The results of the 1st stage are presented in column 1. Columns 2, 4 and 6 contain the results of the 2nd stage regression without control variables. In columns 3, 5 and 7, we report the 2nd stage regression outcomes with control variables. To measure political uncertainty, we use two binary variables: (i) *Election*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State at time *t*, and zero otherwise; (ii) *Close*, a binary variable equal to one if a gubernatorial election occurred in the firm's headquarters State lagged by a year (*t*-1). Values of risk and CSR measures are contemporaneous. All firm-level financial controls, State-level GDP growth rate, and unemployment rate are lagged by one year. All variables are defined in the Appendix. All regressions include industry and year fixed effects. We use heteroscedasticity robust standard errors clustered at the firm level, which are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. All continuous variables are winsorized at the 1% and 99% tails.

Panel A: Cash Flow Volatility - Industry Average CSR as Instrument										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
Industry Average CSR	0.1816*** (0.0358)									
CSR		-0.0028***	-0.0009***	-0.0029***	-0.0010***	-0.0030***	-0.0010***			
		(0.0005)	(0.0003)	(0.0005)	(0.0003)	(0.0005)	(0.0003)			
Election		0.0087***	0.0023							
		(0.0024)	(0.0020)							
CSR* Election		-0.0005***	-0.0001							
		(0.0002)	(0.0001)							
Close Election				0.0160***	0.0031					
				(0.0045)	(0.0031)					
CSR* Close Election				-0.0006	0.0000					
				(0.0003)	(0.0002)					

Post-election						-0.0038**	-0.0019
						(0.0017)	(0.0016)
CSR* Post-election						0.0002	0.0001
						(0.0001)	(0.0001)
Market-to-Book	1.8319***		0.0123***		0.0123***		0.0123***
	(0.1832)		(0.0009)		(0.0009)		(0.0009)
Leverage	13.0833***		-0.0087		-0.0087		-0.0087
	(1.6364)		(0.0058)		(0.0058)		(0.0058)
Profitability	15.7120***		-0.1748***		-0.1749***		-0.1748***
	(0.8920)		(0.0066)		(0.0066)		(0.0066)
Cash	-15.3756***		0.0949***		0.0949***		0.0949***
	(1.4526)		(0.0078)		(0.0078)		(0.0078)
Investment	-7.5431***		0.0006		0.0006		0.0006
	(0.6730)		(0.0040)		(0.0040)		(0.0040)
Negative Equity	-7.6046***		0.0240***		0.0240***		0.0241***
	(1.2797)		(0.0055)		(0.0055)		(0.0055)
Term Limit	-1.2285**		-0.0032		-0.0031		-0.0027
	(0.5586)		(0.0021)		(0.0020)		(0.0019)
Δ GDP	-12.1830		-0.0478*		-0.0432*		-0.0476*
	(8.2353)		(0.0256)		(0.0256)		(0.0256)
Unemployment	85.2410***		0.0389		0.0397		0.0380
	(30.1406)		(0.0673)		(0.0675)		(0.0672)
Constant	-2.9884	0.0500	0.0191*	0.0504*	0.0195*	0.0567*	0.0211*
	(10.9394)	(0.0307)	(0.0111)	(0.0304)	(0.0110)	(0.0305)	(0.0110)
Observations	41,903	41,903	41,903	41,903	41,903	41,903	41,903
Industry FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Cragg-Donald Wald		223.9	158.4	225.9	159.8	225.6	159.9

Panel B: Cash Flow Volatility - State Average CSR as Instrument										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
State Average CSR	0 2329**									
State Monage CBR	(0.0914)									
CSR	× ,	-0.0034***	-0.0011	-0.0036***	-0.0012	-0.0037***	-0.0012			
		(0.0010)	(0.0007)	(0.0010)	(0.0007)	(0.0010)	(0.0007)			
Election		0.0130***	0.0040							
		(0.0035)	(0.0029)							
CSR* Election		-0.0009***	-0.0002							
		(0.0003)	(0.0002)							
Close Election				0.0173***	0.0039					
				(0.0050)	(0.0038)					
CSR* Close Election				-0.0006	-0.0000					
				(0.0004)	(0.0003)					
Post-election						-0.0055**	-0.0015			
						(0.0025)	(0.0022)			
CSR* Post-election						0.0003	0.0001			
						(0.0002)	(0.0002)			
Market-to-Book	1.8291***		0.0127***		0.0127***		0.0127***			
	(0.1830)		(0.0014)		(0.0015)		(0.0014)			
Leverage	13.1042***		-0.0061		-0.0057		-0.0060			
	(1.6378)		(0.0103)		(0.0104)		(0.0103)			
Profitability	16.0829***		-0.1716***		-0.1712***		-0.1715***			
	(0.8951)		(0.0125)		(0.0127)		(0.0126)			
Cash	-15.7099***		0.0918***		0.0913***		0.0916***			
	(1.4685)		(0.0135)		(0.0136)		(0.0135)			
Investment	-7.5201***		-0.0009		-0.0011		-0.0009			
	(0.6724)		(0.0065)		(0.0066)		(0.0065)			

Negative Equity	-7.5199***		0.0225***		0.0223***		0.0225***
	(1.2923)		(0.0074)		(0.0075)		(0.0074)
Term Limit	-1.0240*		-0.0034		-0.0035		-0.0029
	(0.5516)		(0.0022)		(0.0021)		(0.0020)
Δ GDP	-8.2460		-0.0502*		-0.0449*		-0.0498*
	(8.0013)		(0.0268)		(0.0270)		(0.0269)
Unemployment	75.7166**		0.0558		0.0602		0.0563
	(30.1651)		(0.0929)		(0.0940)		(0.0931)
Constant	-2.2606	0.0502	0.0177	0.0529	0.0186	0.0600	0.0206
	(10.4267)	(0.0376)	(0.0132)	(0.0372)	(0.0132)	(0.0375)	(0.0129)
Observations	41,903	41,903	41,903	41,903	41,903	41,903	41,903
Industry FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Cragg-Donald Wald		76.04	33.84	74.32	33.17	76.17	33.78



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