

CORPORATE STRATEGY, POLITICAL CONTRIBUTIONS AND CORPORATE RISK-TAKING

Abstract

Purpose: Despite the importance and prevalence of corporate political activities in modern organizations, there remains limited insights on the potential relationship between political contributions and companies risk-taking activities. This study examines the relationship between monetary political contributions of firms and corporate risk-taking activities in the context of unstable political and economic environments.

Design/methodology/approach: We employ a two-step system GMM estimation to investigate the subject using a cross-country sample of 307 firms from 22 countries covered over 2002–2017. In line with the previous studies, we control for various corporate governance mechanisms, firm-level factors and country-level characteristics.

Findings: The findings demonstrate that firms that make monetary political contributions exhibit lower levels of risk as measured by different proxies for risks, namely, systematic, idiosyncratic and total risk.

Practical implications: The results suggest that political contributions can be a useful mechanism to mitigate risk exposure. Also, the use of different risk measures and other factors for robustness fosters a better understanding of political connectedness in a more contextualized and dynamic manner.

Originality: The current study seeks to contribute to the debate surrounding corporate strategy, political connectedness and corporate risk taking by using actual monetary political contributions as an explicit measure of political connection. The present study furthers scholarly understanding on the dynamics of corporate political activities using political contributions in monetary terms as a measure of political connectedness and its impact on risk-taking. Furthermore, we explore this topic using insights from nonmarket strategy literature and studies on political contributions.

Keywords: Corporate governance; political connections; political contributions; risk-taking

JEL Classification: G32, G34

1. Introduction

Over the past three decades, scholars have sought to understand the nature and effects of political activities of businesses (Baron, 1995a, 1995b; Boso et al., 2023; Mellahi et al., 2016). With accumulating body of research in this area, scholars have suggested that by engaging in political activities such as lobbying for preferential regulations and policies, firm can shape the environment to their benefit and curtail risk exposure (Baron et al., 2016; Doh et al., 2012). For instance, Faccio (2010) documents that politically connected firms (PCFs) enjoy important financial privileges such as low tax rates, excessive market share and can raise more leverage compared to their non-connected counterparts. Accordingly, there are financial motives for firms to initiate and maintain political connections (PCs)¹.

According to Faccio (2006), around 8% of the world's stock market capitalization is represented by PCFs. This representation is only bound to increase given the growing uncertainty firms are facing and the recent political upheavals. It therefore seems apt to probe the impact of political connectedness on corporate risk-taking.

Although some past studies have explored the effect of political connection (PC) on share prices (Brown and Hang, 2020; Child et al., 2021), innovation (Kim, 2018; Krammer and Jimenez, 2020); firm performance and valuation (Fisman, 2001; Shahzad et al., 2021; Prasetyo et al., 2021), accounting performance (Boubakri et al., 2008), quality of earnings (Chaney et al., 2011), government investment decisions (Duchin and Sosyura, 2012; Schoenherr, 2019),

¹ It is not uncommon for former politicians to appear on boards of large multinational companies. From a resource dependence theory perspective, it can be argued that firms explicitly seek such individuals to provide them political legitimacy and to better articulate the political environment and various processes to meet their interests (see, for example, Wu et al., 2018). One recent example is that of Sir Nick Clegg hired by Facebook in 2018, former deputy prime minister of the UK and former leader of the Liberal Democrats party. See, Hillman (2005) and Agrawal and Knoeber (2001), for some insights on political ties and the board of directors.

and tax liability (Faccio, 2010; Khlif and Amara, 2019), there remains limited insights on potential effects of the political contributions on corporate risk-taking.

Although PCFs may have privileged access to bank loans (Khwaja and Mian, 2005), and government contracts (Agrawal and Knoeber, 2001), such firms also concurrently employ PCs to insulate themselves against economic downturns (Faccio et al., 2006). However, some studies also report evidence to the contrary (Boubakri et al., 2013a, 2013b; Bliss and Gul, 2012a). Such studies contend that PCFs are perceived to be at high risk as political connections may cause firms to be inefficient and managers may be more inclined to undertake risky projects in the knowledge that they are “protected” by political connections in case of financial distress. Therefore, exploring the potential linkages of political contributions and corporate risk-taking may be of interest given that firms are able to shield themselves from legal actions via political activities, they may also be more inclined to take additional risk (Boubakri et al., 2013a; Bliss and Gul, 2012a).

Against this backdrop, the principal goal of this article is to examine the relationship between political connectedness of firms and corporate risk-taking. We contend that firm riskiness decreases as the level of monetary political contribution increases. More specifically, we aim to investigate whether firms’ political contribution is negatively related to three measures of risks (total risk, systematic risk and idiosyncratic risk). Our rationale is in line with prior literature that consider PCFs less risky compared to their non-connected counterparts. Intuitively, firms that make significant political contributions are perceived to be less risky by the market as they are likely to be assisted in an event of financial distress situation. However, it is important to note that there is evidence on the contrary where studies postulate a positive relationship between PCs and risk-taking.

In this paper, we define PC as monetary political contributions (or political donations)². We capitalize on Thomson Eikon (formerly Datastream) has recently started reporting data on the actual amount of corporate political donations to provide new insight on the subject. Monetary political donation in a cross-country institutional setting is a novel contribution of this research.

The contributions of this study to the literature are twofold. First, we integrate insights from nonmarket strategy literature (Baron, 1995a, 1995b) and studies on PCs (Faccio et al., 2006; Chen et al., 2017) to offer new insights on how monetary contributions made by firms to political parties³ shape their risk-taking activities. We specifically explore this in the context of relatively unstable political and economic environments such as the 2008 global financial crises and Eurozone debt crisis. Another vital source of theoretical contribution stems from the approaches we adopt in this study. Previous studies generally use dummy variables to represent a presence (or absence) of a political connection with firms (Faccio, 2006). This method inherently puts equal emphasis on highly connected firms' vs less connected firms thereby failing to capture variations in the strength of the connections. The current study, however, overcomes this problem by considering the actual contribution in cash terms rather than using a simple proxy for political connection (a dummy variable)⁴. Accordingly, this approach overcomes the shortcomings associated with the commonly used methodologies in the existing literature. Our study therefore enhances the understanding of association between risk-taking and monetary political contributions.

² Datastream provides data on political contributions and defines it as “*total spending for political lobbying, support of political candidates or contributions to parties*”. This variable is our main independent variable to explore its relation to firm risk-taking.

³ Previous literature generally uses dummy variables to proxy for political connections (Faccio, 2006).

⁴ While we emphasize on the amount of political contributions around the world, these measures are subject to some limitations since it may not capture the importance of contributions. A large firm making \$1 million contribution may not be as significant as a small firm making the same contribution. Therefore, the amount reported fail to capture the strength of the political donations.

2. Literature review and hypothesis development

2.1 Nonmarket strategy and political connections

Defined as organizations/firms concerted pattern of actions via engaging with political actors such as government officials and politicians to gain access to resources and expertise to improve firm performance and manage the competition environment, nonmarket strategy has now become a pillar in firms' competitive weapons (Mellahi et al., 2016; Baron et al., 2016; Doh et al., 2012; Wrona & Sinzig, 2018). Broadly speaking, nonmarket strategies entail social and political strategies and have become a crucial tool for firms to improve their performance and manage the competitive environment by engaging with political actors. Studies posit that shareholders and bondholders of connected firms require a lower cost of capital implying that these firms are perceived less risky (Boubakri et al., 2012a; Chaney et al., 2011; Chkir et al., 2020). Interestingly, however, studies such as Bliss and Gul (2012a) reported an opposite result documenting that PCFs are perceived higher risk by the market and are charged higher interest rates by lenders as a result of higher perceived inherent risks. For instance, Bliss and Gul (2012a) documented that PCFs receive benefits such as profitable contracts and subsidies, which lead to a culture of inefficiency within the firm. This results in such firms perceived as being riskier than their non-connected counterparts.

Several researchers further argue that PCs could be a source of agency problems (e.g., Faccio, 2006) where managers may adopt a self-serving behavior at the cost of corporate resources. This was echoed in Boubakri et al. (2013a) who suggest that managers try to divert corporate resources from shareholders. In an emerging economic setting, Khan et al. (2016) document that PCFs in Bangladesh exhibit higher agency cost than their non-connected counterparts. Furthermore, Batta et al. (2014), in the context of Venezuelan industrial firms, demonstrated that PCFs facing expropriation risk exhibit higher accounting quality than non-

connected firms. The authors argued that being politically connected reduces connected firms' desire to obfuscate their profitability due to it being "immune" from expropriation.

There are many aspects of corporate PCs. A firm is politically connected when a politician is on the board is also a large investor in the firm; has close ties with top managers or large shareholders. Other connections may include firms financing political campaigns (or parties), financially supporting certain political candidates, lobbying policies through a third party or even appointing politically connected financial advisor(s). Wu (2011) defined PCs as when a government partially or fully owns a firm. Faccio (2006, p. 369) identified PCFs if "*at least one of its large shareholders (anyone controlling at least 10 percent of voting shares) or one of its top officers (CEO, president, vice-president, chairman, or secretary) is a member of parliament, a minister, or is closely related to a top politician or party*". Most prior studies use Faccio's (2006) definition in the absence of a generally accepted definition of corporate PCs (Chen et al., 2011)⁵. However, Habib et al. (2018) argue that Faccio's (2006) definition fails to reflect the diversity of the nature of PCs.

2.2 Pre-eminence of political connections

Effects of political ties between corporations and politics have been widely documented in academic literature. Prior literature has linked various channels through which benefits via PCs are exerted⁶. It is widely recognized that corporate PCs play a role in a firm's economic value, growth and success (Fisman 2001; Yang, 2013; Chen et al., 2018). Research in this area has recently gained prominence given the economic implications of such connections and the

⁵ Studies such as Boubakri et al. (2012b), Chen et al. (2010), Chaney et al. (2011) and Faccio (2010) use the same (or modified) firm-level dataset developed by Faccio (2006) on political connections. However, there are studies that use this definition, a number of studies in literature do not use this definition (e.g., Brown and Huang, 2020; Child et al., 2021).

⁶ Studies have also documented the costs involved in being politically connected (see Banerji et al. 2016). For example, Wu (2011) documents that although political ties play a crucial role in product innovation, the benefits diminish after a certain threshold as the costs of political costs outweigh the benefits and report an inverted U-shaped relationship between political ties and product innovation.

surge in the availability of cross-country political donations data and information to enable such investigations.

Studies have documented various beneficial motives and several privileged treatments for acquiring PCs ranging from better corporate performance, stronger market power, easier access to external finance to preferential tax treatment (Johnson and Mitton, 2003; Faccio, 2010; Chen et al., 2017). Majority of earlier literature on this subject has conducted event studies to identify benefits of a politically connected firm. For example, Fisman (2001) provided evidence that PCFs in Indonesia enjoy improved performance and higher market valuation. Johnson and Mitton (2003) provided similar evidence in the Malaysian context for PCFs. A cross-country analysis using data from 47 countries by Faccio (2006) provided comprehensive evidence highlighting the value of PCs in an international context using a time frame from 1997 to 2001. The study concluded that PCs are prevalent, and the level of firm connections vary across countries.

Some past studies (e.g., Agrawal and Knoeber, 2001) have highlighted the benefits of direct PCs through board members in influencing government regulations, firm value and gaining lucrative government contracts. More recently, Houston et al. (2014) documented evidence that the cost of bank loans is lower for firms that have politically connected board members.

Another growing body of research has focused on benefits and privileges enjoyed by connected firms attributable to their PCs. Khwaja and Mian (2005) provided evidence of preferential treatment by banks to PCFs in a Pakistani context using loan-level data of more than 90,000 firms from 1996 to 2002. More specifically, the authors suggested that PCFs are granted preferential interest rates and larger loans⁷, and concluded that PCs lead to a reduction in firms financing cost. There is no doubt that loan restructuring, rescheduling and write-offs

⁷ The authors report that connected firms received 45 percent larger loans and documented a 50 percent higher default rate on these loans.

for PCFs is a very common issue in developing countries. Faccio et al. (2006) documented yet another intriguing finding; using data of 450 PCFs from 35 countries, the authors reported that connected firms are more likely to be bailed out by the government encountering financial distress than non-connected firms. A more recent study by Faccio (2010) added to the earlier research by suggesting that connected firms report higher leverage, implying preferential access to credit, lower tax and greater market share. Boubakri et al. (2012b) added credence to Faccio's (2010) findings documenting that firm performance and leverage increases when a politician is on the corporation's board of directors or after an executive pursues a career in politics.

Furthermore, studies suggest that a firm's political connection is an important determinant of its R&D spending, patent creation and capital expenditures. For instance, Kim (2018) found a negative association between capital expenditure, R&D spendings and patent creation. The foregoing discussion reveals that PCs of one type or another could have implications for various organizational outcomes. Furthermore, the factors investigated in the prior literature all seem to be very relevant for corporate risk-taking. This study focuses on the relationship between PCs and firm risk-taking. The next sections review existing literature on this subject and develop the hypothesis.

2.2 PCs and corporate risk-taking

Prior literature focuses on the benefits of PCs (Boubakri et al., 2012a; Wu et al., 2012). However, there is seldom research that investigates the effect of political connection on corporate risk-taking. Boubakri et al. (2013a) shed some light on the subject in an international context without considering the monetary political contribution in their definition of political connection. We argue that the intensity of monetary contribution is a more robust measure as the amount and magnitude of donations in different years is more appropriate than applying a

simple dummy variable. Past studies have demonstrated that political connection reduces the cost of equity and cost of debt, leading to a lower required rate of return by the shareholders. For instance, Boubakri et al. (2012a) reported evidence that politically connected firms experience a lower cost of equity capital, suggesting that they are considered less risky as compared to their non-connected counterparts while Chaney et al. (2011) provided similar evidence for cost of debt, implying that bondholders also perceive these firms less risky.

This could be due to the preferential credit terms (Khwaja and Mian, 2005) and the “cushion” of bailout in events of financial distress. The preceding arguments lead us to postulate that investors perceive firms less risky due to their PCs. This resonates with the soft-budget constraint hypothesis put forward by Kornai (1979, 1980) which suggests an external organization (such as the state) covers all or part of the debts of the financially struggling organization. This implies that the management considers political connection as an insurance mechanism against adverse times in line with the soft-budget constraint hypothesis (Duchin and Sosyura, 2012). Moreover, studying US Congressional elections, Akey and Lewellen (2017) observe that firms that are highly sensitive to government policy are more inclined to make a contribution to political candidates and these firms’ risk-taking (implied volatility and CDS spreads) and performance is more responsive to a gain or loss of a political connection relative to less sensitive firms. The authors suggest that if those candidates won the elections, firms experience reductions in risk and improves performance.

As Khwaja and Mian (2005) explained in their study that despite high levels of default rate, lower level of cost of capital allows government banks to remain solvent. Therefore, the political connection literature explicitly reports that PCFs are more likely to be bailed out during times of financial distress, suggesting that these firms are less likely to become insolvent (Faccio, et al. 2006; Duchin and Sosyura 2012). Studies have also provided evidence that PCFs may be subject to greater scrutiny by media and financial analysts (Chaney et al., 2011;

Boubakri et al., 2012b; Preuss and Konigsgruber, 2021). This scrutiny may result in alleviating the agency problem in the sense that managers would become more alert to their actions and possibly take on less risky projects effectively aligning shareholders' interests with that of the managers (Jensen and Meckling, 1976).

However, as paradoxical as this might seem, evidence has been advanced to suggest a positive relationship between PCs and risk-taking (Boubakri et al., 2013a). Such studies documented that political connections lead managers to undertake risky investments. These studies argued that since PCFs are perceived as lower risk due to the preferential treatments and benefits it is likely to receive, managers in those firms are more inclined to undertake risky investments. For instance, Boubakri (2013a) postulated that managers will be inclined to engage in more risky projects given that they are likely to be rescued by the government in case of financial distress. Preferential treatments such as government bailouts can be viewed as an insurance policy by managers to offset any extra risk associated with more aggressive investment choices; this encourages managers to undertake riskier projects. Some studies have also suggested that managers need to carefully understand both the benefits and costs of political ties and describe political ties as a “double-edge resource” (Wu, 2011).

Studies such as Boubakri et al. (2012b) and Faccio (2010) posited that connected firms can hold more cash as they are able to raise finance at better terms and pay fewer taxes. This could mean the managers may be more inclined to take on riskier projects as they feel more “cushioned” in case that their investment does not pay off. Boubakri et al. (2012b) implied that connected firms, in the knowledge that government bailouts are likely, are inclined to increase their corporate risk-taking as access to credit becomes easier after they have established a political connection.

In an emerging economic context, Bliss and Gul (2012a) reported that PCFs in Malaysia exhibit higher cost of debt and are more likely to be charged higher interest rates by lenders

due to higher perceived riskiness. The authors further report that PCFs in Malaysia exhibit a higher likelihood of reporting a loss and a higher likelihood of having negative equity. In the same vein, more recently, Nguyen et al. (2021) reported that PCFs in Malaysia are associated with higher distress risk via increased risk-taking behaviors at the firm level.

More recently, using an international sample of non-financial firms from 1988 to 2008, Boubakri et al. (2013a) investigated political connectedness on corporate risk-taking. Their paper focuses on PCs as defined by Faccio (2006) rather than political contributions. Their results suggested that PCFs' exhibit high earnings volatility and are more likely to engage in risk-taking activities implying that close ties to the government lead to more aggressive investment choices. This is in line with Faccio et al. (2006) suggesting that connected firms can afford to take more risky investments. However, their risk measures are primarily related to volatility in ROA, while our study however examines all key measures of risks including systematic, unsystematic and total risk measures. Additionally, Boubakri et al. (2013a) use dummy variables to indicate political connections while this study focuses on political contribution in monetary terms obtained from Thomson Eikon.

However, it can be argued that studies that use Faccio's (2006) definition of political connection rely on a direct link between the firm and political institutions. A politically connected major shareholder or a CEO, as in Faccio's (2006) definition, has a direct stake in the firm. Therefore, the agency relationship and risk-taking dynamics in such firms may be different from those firms that make monetary political contributions but do not exhibit a direct link. In line with this and building on earlier work, a negative relationship between political connection and risk-taking could be observed. Thus, we focus on monetary contributions which may not be necessarily for the benefit of one party (such as a CEO or chairman) but for the firm as a whole. Therefore, such firms are expected to be perceived less risky. Grounded on the theoretical and empirical evidence discussed above, we postulate the following hypothesis:

H1: Firms' political contribution is negatively related to the following levels of risk: (i) systematic risk, (ii) unsystematic risk and (iii) total risk

3. Data and descriptive statistics

To answer the research question, the study gathered data on the political contributions made by firms and their corresponding levels of total risk, systematic risk and idiosyncratic risk. Data on corporate political contributions, firm-level corporate governance mechanisms and firm-specific characteristics was collected from Asset 4 database⁸ (Thomson Eikon, formerly Datastream) whilst country-level data was collected from World Bank country-level indicators. Using these databases, we constructed a panel of 1261 firm-year observations for 307 firms in 22 countries⁹. Our panel was unbalanced because we did not have data for all years for all variables in our analyses.

Our sample was restricted to the firms that: (i) made political contributions, and (ii) had monetary political contributions data available on the databases used in this study. In other words, our sample was restricted to firms with data on political contributions in monetary terms¹⁰. Furthermore, as with most data, we faced the issue of missing data for other variables in our study. After cleaning our data, we ended up with a sample of 1261 firm-year observations. Our sample period starts from 2002 as this is the first-year data on political contributions was made available on Datastream. Table 1 reports the political contribution data for the sample and summary statistics for political contribution scaled by cash and political contribution scaled by sales.

⁸ Asset 4 has recently started reporting governance data, going back to 2002, for a global set of companies. Following Thomson Eikon code was used to obtain the data on political contributions: SOCODP035.

⁹ Table 2 shows fewer observations as some observations of explanatory variables were missing for certain firms.

¹⁰ It is important to note that while we define political connections by considering the actual contribution in cash terms, it may be possible that not all politically connected firms donated money and as such remain unidentified in our sample. However, other types of political connections are outside the scope of this study.

Issues arising from endogeneity is a major concern in the field of empirical finance. In the context of this study, risk can be affected by time-invariant variables such as organizational culture, business operations and ethos, managers' capability and so on. However, such variables were not included in the model since it is not possible to measure such time-invariant variables. Although ignoring them could lead to the omitted variable bias. Similarly, the current period's risk might have been affected by the previous period's risk, which required controlling for the effect of the previous period's risk. System GMM allows the inclusion of a lagged dependent variable (DV) as a control variable to capture the effect of previous period's risk (Ullah et al, 2018; Ullah et al., 2021).

System GMM is a widely used estimator for firm-level variables and risk-taking studies (Sila et al., 2016; Ahmad et al., 2021). To account for the effects of potential causality problems, Ammann et al. (2011) suggested the use of lagged variables as instruments for the present values of those variables. For the endogenous effect of the lagged DV, the system GMM estimator utilized the lagged differences of the DV as instruments for the equation in levels and lagged levels of the DV as instruments for the equation in first differences (Arellano and Bover, 1995).

GMM estimation method is particularly suited for this study for a number of reasons. Firstly, the specified model of this study encompasses endogenous variables. In order to test for the presence of endogeneity, we applied the standard Durbin-Wu-Hausman (DWH) test which showed that duality, risk management committee, audit committee independence, board size and gender diversity are endogenous variables in our model. Secondly, it can be argued that risk taking of the sample firms will show persistence over the sample period. Thus, the present value of the DV might be influenced by its past values. Such persistence in the DV requires utilization of an autoregressive regression model, and GMM is particularly designed for an autoregressive model (Arellano and Bover, 1995; Blundell and Bond, 1998). Thirdly,

unlike other instrumental variable approaches such as two-stage least square (2SLS), system GMM does not require finding instruments from other sources. In this research, the second lag of the endogenous variables were included in the estimation as instruments. Finally, system GMM is robust to panel-specific heteroscedasticity and serial correlation (Sila et al., 2016). Therefore, we used a dynamic system GMM estimator, proposed by Arellano and Bover (1995), and Blundell and Bond (1998).

The following Two-step System GMM model is employed for the current investigation which controls for unobserved heterogeneity, simultaneity and dynamic endogeneity.

$$Risk_{it} = \partial Political_{i,t-1} + Control_{it} + \mu_{it} + \varepsilon_{it} \quad (1)$$

Key variables of interests for this study are political contributions and risk taking. Following Sila et al. (2016), we included a number of proxies for risk taking, namely: total risk, systematic risk and idiosyncratic risk¹¹. Total risk was measured as logarithm of square root of 250 (we assumed 250 trading days per year) times daily return standard deviation (to get an annualized standard deviation). Systematic risk was measured as the coefficients of the stock market portfolio return from a market model of regression while idiosyncratic risk is measured as logarithm of the square root of 250 times the residuals from the market model regression. In line with Liang and Renneboog (2017) and Masulis and Reza (2015), we scaled our political expenditures data by cash ($\log(1 + \text{political contributions} / \text{cash}) \times 10^3$) and by sales ($\log(1 + \text{political contributions} / \text{sales}) \times 10^3$).

In line with the previous studies, we controlled for country-level characteristics in our analysis. Faccio (2006) and Boubakri et al. (2012a) argued that PCs are more prevalent in the

¹¹ It is important to note that our study does not directly relate to risk behavior undertaken by management at individual level and therefore does not fully reflect all risk-taking activities at the firm-level. Instead, we measure firm's perceived riskiness by market-driven proxies (namely, systematic, idiosyncratic and total risk) for risk-taking. Furthermore, as a robustness exercise, we also use an alternative measure of risk (ROA volatility).

presence of weak legal institutions, weak regulatory and institutional environments, and widespread corruption. The corporate governance (CG) mechanisms may also affect a firms' political "connectedness". To this end, we also take account of various CG mechanisms, and firm level factors. Firm-level CG control variables include duality (dual), audit committee independence (ACI), board size, total senior executive compensation, number of board meetings, percentage of non-executive directors, gender diversity, presence of risk management committees. These firm-level governance mechanisms are used to control for firm specific CG characteristics.

The country level control variables included rule of law, regulation quality, government effectiveness and investor protection. We take account of country and firm level factors in line with evidence that suggests that PCs are more pronounced in countries with weak legal systems and high levels of corruption and the benefits of PCs are dependent on specific country level characteristics (Faccio, 2006; Faccio, 2010, Chen et al., 2011). More specifically, Banerji et al. (2016) argued PCs depend on the political environment, economic and legal settings of each country, affirming the earlier finding of Boubakri et al. (2008) where the authors suggested that PCs are more prevalent in lower judicial independent countries. Figure 1 presents a conceptual model of the study.

Finally, additional firm-specific control variables include firm size, ROA, Tobin's Q, R&D and leverage similar to studies such as Wu (2011) and Boubakri et al. (2013a). In Table 2, we report aggregate descriptive statistics for: (i) dependent variables (risk measures), (ii) political contributions, (iii) CG variables, (iv) firm-specific financial characteristics, and (v) country-level control variables. Appendix 1 reports a list of variables and their definitions.

[Insert Figure 1, Table 1 and 2 about here]

4. Results

4.1 Political contribution, total risk and systematic risks

Table 3 Model 1 shows that political contribution is negatively associated with total risk ($\beta = -0.0049, \rho < 0.01$). After controlling for additional country level factors, rule of Law in Model 2 ($\beta = -0.00375, \rho < 0.01$) and government effectiveness in Model 3 ($\beta = -0.0051, \rho < 0.01$), the relationship is still statistically significant. Table 4 also highlights that using a different measure of risk i.e. systematic risk, the relationship is still negative. The main explanatory variable, political contribution, is significantly negatively associated with systematic risk in Model 4 ($\beta = -0.970, \rho < 0.01$), Model 5 ($\beta = -0.958, \rho < 0.01$) and Model 6 ($\beta = -0.951, \rho < 0.01$). These findings support H1 which states that firms that make a political contribution exhibit lower levels of risk. This negative relationship between political contribution and risk could be explained by a number of factors. For instance, firms that make political contributions would have lower cost of debt and equity (Boubakri et al., 2012a, Chaney et al., 2011). Similarly, Khwaja and Mian (2005) argued that PCFs are able to obtain credit on preferential terms. Therefore, in our sample those firms that make political contributions may be able to acquire loans at lower interest rates and easy repayment terms. Therefore, such firms will appear more stable and less likely to suffer financial distress (Faccio et al., 2006). Moreover, Akey and Lewellen (2017) argued that firms that are highly sensitive to government policy are more inclined to make a contribution and when those candidates win the elections, their firms experience reductions in risk.

[Insert Table 3 about here]

Existing literature also shows that lower risk exposure could well be the result of reduced agency problems in firms that make political contributions (Chaney et al., 2011; Boubakri et al., 2012b). The reduction in agency problems at such firms would lead to increased efficiency and better management of resources by managers. Therefore, managers in such firms will be less likely to invest in risky projects and this would lead to a decrease in the overall risk of such firms¹².

Our model also controls for a number of CG variables. A visual inspection of Tables 4 and 5 reveals that CEO duality is significantly positively associated with both measures of risk for all models. This result is consistent with Chen and Ebrahim (2018), who reported a positive association between CEO duality and stock return volatility for a sample of US banks. In line with this, Farag and Mallin (2016) also reported that CEO duality is positively associated with total and systematic risk for a sample of Chinese firms.

Tables 3 and 4 document that total risk as well as systematic risk are positively associated with risk management mechanisms for all models. This result could be explained in two ways. First, companies operating in an environment where systematic risk is high might have put in place risk management mechanisms, in order for them to be able to better assess and mitigate risk that might arise. Second in relation to total risk, companies that have put in place risk management mechanisms might be doing so to compensate for their riskier strategies. This is in line with the existing literature, which reports that the establishment of a risk committee is positively associated with risk taking (Akbar et al., 2017).

¹² It is important to note that the relationship between agency theory and political connections in relation to risk-taking is complex and context-dependent. While political connections may exacerbate agency problems by providing managers with opportunities to adopt a self-serving behavior at the cost of corporate resources, they can also serve as a mechanism to mitigate them. For instance, politically connected firms may be subject to greater scrutiny by media and financial analysts, which may result in alleviating the agency problem. Therefore, it is important to carefully consider the potential benefits and costs of political connections in managing firm risk-taking and agency problems.

[Insert Table 4 about here]

Table 3 also indicates that audit committee independence is negatively associated with total risk for all three models. This result provides support to the existing literature which reports that audit committee independence is associated with better performance. In this regard, Yeh, Chung, and Liu (2011) argued that this better performance is achieved through better management of risk in excessive risk-taking environments. However, interestingly, audit committee independence is positively associated with systematic risk.

Gender diversity is shown to be negatively associated with total risk according to Table 3. This result is consistent with the existing literature that investigates the impact of gender diversity on various types of risks faced by organizations. The general consensus is that female directors are associated with conservative risk taking (De Cabo, et al., 2012; Faccio et al., 2016). However, gender diversity is positively associated with systematic risk. This could indicate that organizations operating in a high systematic risk environment diversify their boards to be able to mitigate the risk faced by the organization. As this risk indicates the systematic risk, which is beyond organizations' control, increasing gender diversity on corporate boards may not be effective. The difference in the results for these two risk measures indicate that female directors could affect the total risk exposures of firms by reducing the idiosyncratic risk (which is also part of the total risk) but they are deemed ineffective for reducing the systematic risk.

4.2 Political contribution and idiosyncratic risk

In Table 5, we report the results for political contribution and firm-specific (idiosyncratic) risk. Following Sila et al. (2016), we calculated idiosyncratic risk by taking logarithm of the square root of 250 times the residuals from the market model regression.

Consistent with our previous risk measures (total risk and systematic risk), we found a negative relationship between political contribution and firm-specific (idiosyncratic) risk. In line with Vallascas et al. (2017) and Sila et al. (2016), we also reported a negative relationship between the majority of firm-level governance mechanisms (CEO duality, non-executive board members, number of board meetings, and audit committee independence) and firm-specific risk. The negative relationship between country-level governance indicators (rule of law, regulation quality and government effectiveness) supports the conventional governance view that firms operating in strong legal and regulatory regimes are less likely to be exposed to greater firm-specific risks. Therefore, based on our results, the negative relationship between political contribution and risk taking is confirmed for three measures of risks (total risk, systematic risk and idiosyncratic risk). In the next section, we introduce some robustness tests to confirm our results hold when we introduce alternative measures of risk and scale our political contribution measure by sales.

[Insert Table 5 about here]

4.3 Robustness check

We used a series of robustness checks. First, we applied a different measure of risk to see whether our political contribution variable produces the same estimates for alternative measures of risk. In the robustness tests, we also used political contribution scaled by sales rather than cash to test the sensitivity of our key explanatory variable. Following Boubakri et al. (2013a), we used ROA volatility as one alternative measure of risk as the difference between the maximum and minimum ROA reported over the 5-year interval to capture volatility in a firm ROA. Following Boubakri et al. (2013a), we also used volatility of earnings (measured by the country-adjusted volatility of earnings for each firm over the entire sample period

(2002–2017) as an alternative measure of risk. The results reported in Table 5,7 and 8 show that our key explanatory variable (political contributions) is significantly negatively related with alternative measures of risk and political contribution scaled by sales, suggesting that our primary results remain relatively unaffected by these changes supporting the validity of our findings presented in the previous section.

[Insert Table 6 about here]

[Insert Table 7 about here]

[Insert Table 8 about here]

5. Conclusion

This study investigated the impact of political contributions on firm risk taking. Capitalizing on a sample of 307 firms from 22 countries from 2002 to 2017, we found that the number of political contributions made is indeed negatively associated with, idiosyncratic, systematic and total risk of firms making these contributions. This negative association between the number of political contributions and risk could be driven by a number of factors.

First, firms making political donations have lower cost of capital (Boubakri et al. 2012a, Chaney et al., 2011, Khwaja and Mian 2005). This lower cost of capital would make financing easier and cheaper for such firms, therefore, making these firms less risky from investors and lenders' perspectives. Second, the political contributions made by firms might indicate to investors that such companies are more likely to be bailed out by governments if they encounter financial distress (Faccio et al., 2006). Finally, existing evidence shows that politically sensitive firms are more likely to make contributions and when the candidates they support win the elections, such firms experience a lower level of risk.

In line with this argument, results of this study show that political contribution is negatively associated with all three measures of risk used. This implies that firms making political contributions may have fewer agency problems, which in turn would lead to a reduced risk for such firms.

Contribution to theory

From theoretical perspective, the present study furthers scholarly understanding on the dynamics of corporate political activities (Amankwah-Amoah et al., 2022; Boso et al., 2023; de los Reyes & Scholz, 2022; Mellahi et al., 2016) by offering a new understanding of political connectedness and risk-taking using political contributions in monetary terms¹³. In addition, our insights on the PCs and risk-taking illuminates as well as advances our understanding of risk-taking and PCs. We extend the literature on two fronts by: (i) identifying political connectedness in monetary terms rather than using the definition provided by Faccio (2006), and (ii) investigating a more recent time period in the wake of global financial crises and market uncertainty. In light of growing interest in corporate political connections (Mellahi et al., 2016; Wei, Jia, & Bonardi, 2022), this study deepens researchers' understanding by using different risk measures and other factors for robustness which fosters a better understanding of political connectedness in a more contextualized and dynamic manner.

Policy Implications

These findings have implications for policy makers. Political donation is a “grey area” in corporate governance research and political donations and political spending disclosure needs more transparency in every institutional context. From corporate reporting perspectives,

¹³ Political connections that are forged by monetary contributions may hold a higher influential power to derive benefits as the government may feel they owe a debt as compared to other forms of political connections.

very few regulatory bodies around the world have emphasized on specific disclosure requirements with regards to firm level political donations in the annual reports. We suggest that national corporate governance codes should include specific provisions (requirements) related to firm-level political transparency and political spending disclosures. We also argue that similar to other types of firm level reporting (e.g., CSR, Sustainability, governance, tax strategy reporting, modern slavery reporting etc.), detailed disclosure requirements on corporate political activities would help market participants in understanding the political orientation of their investee companies. From an external assurance perspective, we posit that auditors reports of listed companies should also feature a brief narrative commentary on corporate political spendings. The amount reported for political donations have financial implications on corporate cash flows and hence there is a ‘value relevance dimension’, and thus, the reported amount needs more scrutiny and assurance from a firm’s auditors/legal advisors.

For practitioners, we also indirectly demonstrate that the amount of political contribution made to political parties could be considered as a tool in managing the risk exposure and agency problems within firms, however it is important to acknowledge the consequences of such actions as studies have highlighted the potential downsides of such political ties and described it as a “double-edged resource” (Wu, 2011). It is important to encourage firms to account for all such political contributions, as it seems that such disclosure could affect the decision making of shareholders, lenders and other stakeholders.

Limitations and Future Directions

Our analysis and approaches are subjected to some limitations linked to directions for future research. First our study focused on a cross-country sample of 307 firms from 22 countries. Given that there are over 200 countries around the globe, our study provides a limited

scope for generalization and thereby emphasizes the need to broaden the scope of our analysis to include more than 22 countries. Second, the study period covered 2002–2017. Accordingly, future research could look for a more extended period for the data to help enhance the robustness of the analysis (especially in the aftermath of COVID-19). As political contribution data is now increasingly available in financial databases for a global sample of companies, we suggest a number of avenues for utilizing such a unique and insightful dataset. From an accounting perspective, it will be interesting to explore financial reporting quality (earnings quality) in politically connected versus non-PCFs. We also suggest content and textual analysis of annual reports to explore how these cash contributions are accounted for (and reported) in corporate disclosure documents. Although our research only focuses on the risk dimension of corporate political contributions, future studies may look into the market valuation of PCFs to see whether the markets really appreciate such contributions by the managers as the latest data becomes more readily available.

Another possible avenue would be to investigate the channels through which political contributions may lead to lower risk taking such as cash holding, leverage and R&D investments. Additionally, it would be of interest to explore whether firms linked to various controversies and scandals (e.g., accounting, environmental, tax avoidance, human rights violations) are politically connected or more importantly whether these connected firms use their political privileges to conceal their morally and legally (corrupt) actions/inactions or mask their scandalous behavior?

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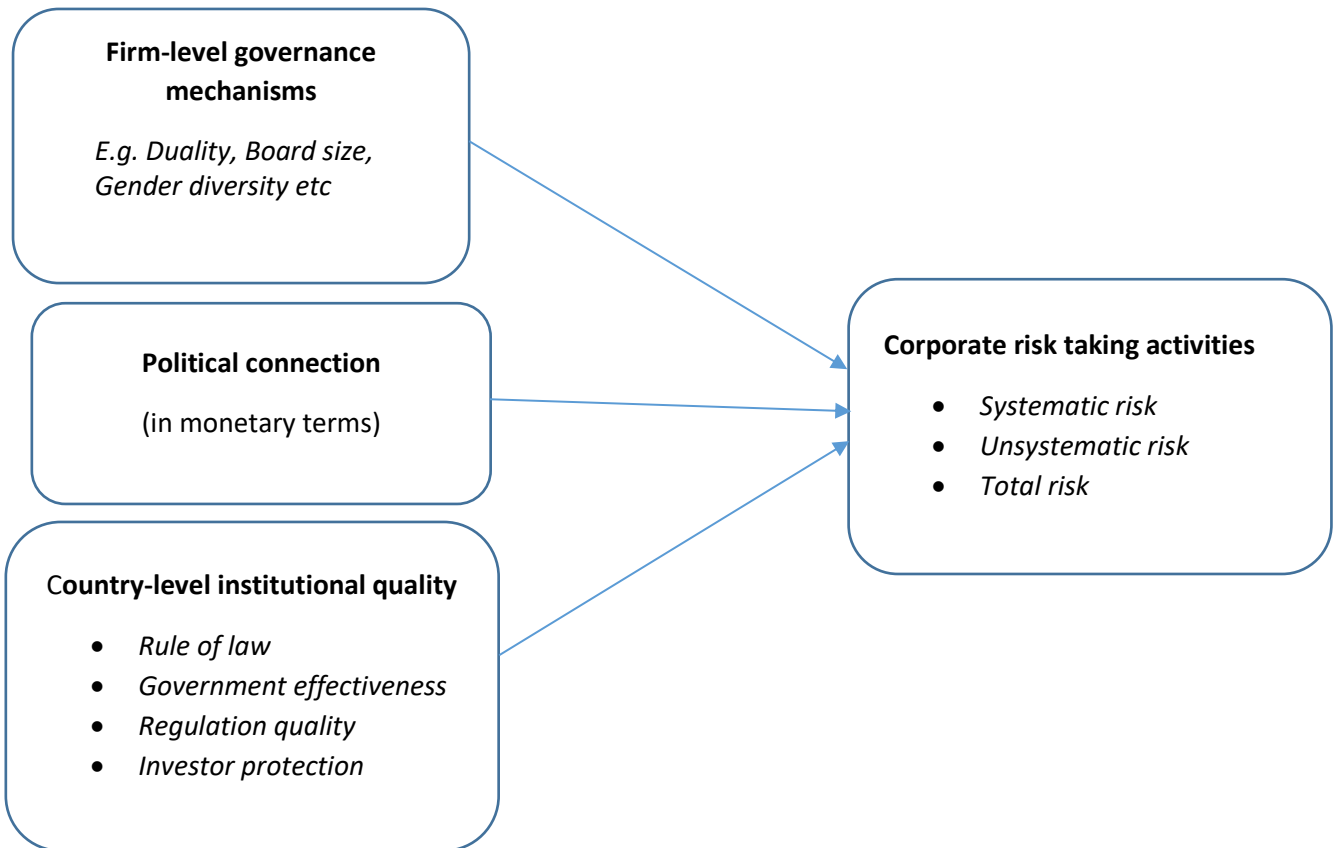
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Figure 1: Conceptual framework



Source: Developed by the authors

Table 1 Country-level data on corporate political contributions

Name	Political Contributions Scaled by Cash					Political Contributions Scaled by Sales				
	Total contributions	Mean	Median	Minimum	Maximum	Number	Mean	Median	Minimum	Maximum
Australia	7,234,833	4.2602	4.4983	1.4267	6.8816	16	1.3271	1.1060	-2.05768	4.6223
Brazil	63,400,000	6.3302	6.8816	1.4267	6.8816	6	4.4067	5.2760	-1.18638	5.2777
Canada	13,900,000	4.0043	4.2530	1.4267	6.8816	16	0.8484	0.8338	-2.05768	3.7649
Chile	1,345,000	1.4267	1.4267	1.4267	1.4267	1	-1.44908	-1.44908	-1.44908	-1.44908
China	5,000	1.4267	1.4267	1.4267	1.4267	1	-1.70455	-1.70455	-1.70455	-1.70455
Colombia	1,170,000,000	4.9931	5.6400	2.8551	6.4841	3	2.3085	2.2922	1.6698	2.9634
Denmark	6,839,371	3.5865	3.7999	3.0675	3.9459	1	1.7394	2.0235	1.1506	2.2007
Finland	588,861	4.2968	4.6026	2.8071	5.3196	2	-0.21189	-0.01026	-1.71862	2.3751
France	184,725	2.3780	2.5727	1.6895	2.8820	1	-0.13383	0.0998	-0.90344	0.2650
Germany	70,600,000	3.6623	3.4017	1.4267	6.8029	9	1.2774	0.9326	-1.7713	4.9353
India	2,570,000,000	5.8145	6.4836	1.8402	6.8816	15	3.4920	3.9068	-1.1197	5.2777
Israel	455,200	2.2421	2.2236	1.9813	2.5212	1	-0.1623	-0.13772	-0.47614	0.1270
Italy	1,250,000	6.8816	6.8816	6.8816	6.8816	1	4.9818	4.9818	4.9818	4.9818
Japan	104,000,000	2.8885	3.3428	1.4267	3.9772	4	0.2081	0.1958	-0.41158	1.1617
Korea, Republic	12,200,000,000	6.2232	6.2150	6.0098	6.4531	1	4.0413	4.0271	3.9092	4.2016
Netherlands	584,223	3.7378	3.5643	1.8242	5.1742	2	0.7204	1.1160	-1.57497	1.5168
New Zealand	240,000	5.7134	5.7134	5.6835	5.7433	2	2.9864	2.9864	2.5636	3.4092
South Africa	24,400,000	4.5140	4.2424	1.4267	6.6616	3	2.4963	2.2058	-2.05768	5.2494
Spain	1,036,250	4.5771	4.5398	1.7172	6.8816	5	0.8774	0.6109	-0.55717	2.6568
Switzerland	68,300,000	3.5942	3.6514	1.4267	6.3635	5	0.9333	0.8911	-2.05768	4.9989
United Kingdom	152,000,000	4.1456	4.1567	1.4267	6.8816	37	1.5870	1.5374	-2.05768	5.2777
United States	1,070,000,000	4.4451	4.4505	1.4267	6.8816	175	1.9819	2.0046	-2.05768	5.2777

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Note: This table reports the total political contribution extracted from Datastream for all 22 countries in this study. Total contributions are in local currency for each country. The table also reports mean, median, minimum and maximum of the political contributions scaled by cash and by sales.

Table 2 Descriptive statistics

Variables	Observation	Mean	Std.Dev.	Min	Max
<i>Risk Measures</i>					
Total risk	1261	2.442	0.413	1.499	3.302
Systematic risk	1261	7.159	15.524	-4.209	72.365
Idiosyncratic Risk	1261	2.357	0.414	1.167	3.511
<i>Key Explanatory Variables</i>					
Political contribution scaled by cash	1189	4.671	1.372	1.427	6.882
Political contribution scaled by sale	1267	2.217	1.353	0.001	5.278
<i>Governance Related Controls</i>					
Dual	1267	0.571	0.495	0	1
RiskManagCom	1267	0.933	0.25	0	1
ACI	1247	0.952	0.178	0	1
NBM	1250	8.783	3.474	4	20
BSIZE	1266	11.427	2.638	3	20
NEDSA	1260	0.851	0.106	0.125	1
GD	1266	0.182	0.099	0	0.667
LOGTSEC	1236	7.36	0.448	4.486	8.999
<i>Firm-specific Characteristics</i>					
LEVERAGE	1267	0.305	0.166	0	0.919
TOBIN's Q	1261	1.814	1.036	0.661	7.074
ROA	1262	0.143	0.096	-0.437	0.56
RandD	702	12.853	2.476	5.561	19.486
SIZE	1267	7.374	0.593	5.358	10.017
<i>Country-level variables</i>					
RULEOFLAW	1236	0.906	0.081	0.413	1
GOVEFFEC	1236	0.901	0.082	0.452	1
INVESTOR PROTECION	595	6.633	0.526	4.2	7.8
REGQUALITY	1236	0.896	0.1	0.346	0.995

Note: This table shows the total number of observations for each variable. Std.Dev., Min and Max donate the standard deviation, the minimum and the maximum of all variables. Please refer to Appendix 1 for the definition of variables.

Table 3 Political contribution and total risk

Variables	(1) Total Risk	(2) Total Risk	(3) Total Risk
L. Total Risk	0.469*** (0.00731)	0.462*** (0.00704)	0.462*** (0.00769)
L2. Total Risk	0.382*** (0.00800)	0.365*** (0.00893)	0.379*** (0.00568)
DUAL	0.0231*** (0.00565)	0.0348*** (0.00627)	0.0235*** (0.00433)
RiskManagCom	0.0779*** (0.00545)	0.0773*** (0.00860)	0.0764*** (0.00715)
BSIZE	-0.00111 (0.000767)	-0.0001 (0.000570)	-0.000643 (0.000459)
NEDS	0.0436 (0.0389)	0.0304 (0.0333)	-0.00977 (0.0304)
LEVERAGE	-0.0262* (0.0137)	-0.0444*** (0.0159)	-0.0404*** (0.0134)
TOBIN's Q	0.0212*** (0.00207)	0.0206*** (0.00268)	0.0250*** (0.00241)
Political contribution	-0.00491*** (0.000802)	-0.00375*** (0.00101)	-0.00541*** (0.000736)
REGQUALITY	-0.278*** (0.0251)		
ACI	-0.0830*** (0.0167)	-0.0955*** (0.0122)	-0.0918*** (0.0119)
NBM	-0.00207*** (0.000518)	-0.000934** (0.000443)	-0.00189*** (0.000664)
GD	-0.0373*** (0.0124)	-0.0187 (0.0168)	-0.0560** (0.0260)
LOGTSEC	-0.0316*** (0.00413)	-0.0255*** (0.00299)	-0.0335*** (0.00476)
ROA	0.0779*** (0.0297)	0.106*** (0.0169)	0.0632*** (0.0222)
RandD	-0.00129 (0.00183)	0.000297 (0.00212)	0.000295 (0.00202)
SIZE	0.0395*** (0.00755)	0.0210*** (0.00793)	0.0353*** (0.00701)
RULEOFLAW		-0.374*** (0.0449)	
GOVEFEC			-0.267*** (0.0574)
Constant	0.553*** (0.0701)	0.762*** (0.0659)	0.650*** (0.0703)
AR1(p-value)	-6.126(0.00)	-2.847(0.00)	-6.060(0.00)
AR2 (p-value)	-0.135(0.89)	0.885(0.37)	1.245(0.21)
J-Test(p-value)	115.5(0.39)	120.4(0.28)	130.4 (0.11)
Observations	689	689	689
Number of firms	307	307	307

Note: Variable definitions are presented in Appendix 1. The dependent variable in all three models (1–3) is total risk with political contribution as our key explanatory variable. Model 1 includes country level factor regulation quality (REGQUALITY), model 2 includes rule of law (RULEOFLAW) measure and model 3 includes an additional country level measure: government effectiveness (GOVEFEC). “L. Total Risk” represents first lag of the dependent variable and “L2. Total Risk” represents second lag of the dependent variable. Corporate governance and firm-specific characteristics are included as control variables. AR1 and AR2 are the Arellano-Bond serial correlation tests for first order correlation (AR1) and second order correlation (AR2), reported with its p-value. J-test is the Sargan-Hansen’s test of the overidentifying restrictions to test the overall validity of the instruments, reported with its p-value. Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 4 Political contribution and systematic risk

Variables	(4) Systematic Risk	(5) Systematic Risk	(6) Systematic Risk
L. Systematic Risk	0.316*** (0.000599)	0.318*** (0.000990)	0.316*** (0.000764)
L2. Systematic Risk	0.193*** (0.000680)	0.196*** (0.000696)	0.194*** (0.000735)
DUAL	0.559*** (0.0621)	0.491*** (0.0901)	0.123 (0.0898)
RiskManagCom	5.516*** (0.229)	4.183*** (0.742)	4.911*** (0.355)
BSIZE	-0.710*** (0.0182)	-0.646*** (0.0247)	-0.671*** (0.0168)
NEDS	-9.931*** (0.312)	-10.97*** (0.302)	-11.15*** (0.273)
LEVERAGE	-1.381*** (0.231)	-1.233*** (0.244)	-1.273*** (0.235)
TOBIN's Q	0.579*** (0.0527)	0.606*** (0.0396)	0.462*** (0.0500)
Political contribution	-0.970*** (0.0214)	-0.958*** (0.0188)	-0.951*** (0.0180)
REGQUALITY	18.39*** (0.499)		
ACI	2.454*** (0.240)	2.681*** (0.323)	2.387*** (0.231)
NBM	-0.241*** (0.00906)	-0.243*** (0.00888)	-0.206*** (0.0110)
GD	5.393*** (0.397)	4.909*** (0.335)	5.565*** (0.406)
LOGTSEC	0.856*** (0.0524)	0.905*** (0.0672)	0.742*** (0.0785)
ROA	2.075*** (0.371)	2.734*** (0.446)	4.135*** (0.496)
RandD	0.537*** (0.0241)	0.453*** (0.0338)	0.527*** (0.0374)
SIZE	2.116*** (0.138)	2.104*** (0.189)	2.062*** (0.215)
RULEOFLAW		28.39*** (1.817)	
GOVEFEC			17.55*** (1.690)
Constant	-28.49*** (0.887)	-36.03*** (2.747)	-25.55*** (1.899)
AR1(p-value)	-6.030 (0.00)	-2.837(0.00)	-6.065(0.00)
AR2 (p-value)	-0.0431(0.97)	0.910(0.36)	0.958(0.33)
J-Test(p-value)	134.2(0.50)	145.1(0.276)	143.6(0.29)
Observations	689	689	689
Number of firms	307	307	307

Note: Variable definitions are presented in Appendix 1. The dependent variable in models 4–6 is systematic risk with political contribution as our key explanatory variable. Model 4 includes country level factor regulation quality (REGQUALITY), model 5 includes rule of law (RULEOFLAW) measure and model 6 includes an additional country level measure: government effectiveness (GOVEFEC). “L. Systematic Risk” represents first lag of the dependent variable and “L2. Systematic Risk” represents second lag of the dependent variable. Corporate governance and firm-specific characteristics are included as control variables. AR1 and AR2 are the Arellano-Bond serial correlation tests for first order correlation (AR1) and second order correlation (AR2), reported with its p-value. J-test is the Sargan-Hansen’s test of the overidentifying restrictions to test the overall validity of the instruments, reported with its p-value. Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 5 Political contribution and firm-specific (Idiosyncratic) risk

Variables	(7) Idiosyncratic risk	(8) Idiosyncratic risk	(9) Idiosyncratic risk
L. Idiosyncratic Risk	0.445*** (0.00625)	0.446*** (0.00707)	0.455*** (0.00879)
L2. Idiosyncratic Risk	0.396*** (0.00887)	0.399*** (0.0105)	0.379*** (0.00951)
DUAL	-0.0165** (0.00654)	-0.0167*** (0.00557)	-0.0155*** (0.00511)
RiskManagCom	0.0516*** (0.0140)	0.0568*** (0.0133)	0.0488*** (0.0140)
BSIZE	0.00120* (0.000676)	-0.000588 (0.000687)	-0.000292 (0.000718)
NEDS	-0.106*** (0.0308)	-0.102*** (0.0213)	-0.0923*** (0.0172)
LEVERAGE	-0.0250* (0.0147)	-0.0252* (0.0145)	-0.0174 (0.0140)
TOBIN's Q	0.0386*** (0.00186)	0.0408*** (0.00293)	0.0391*** (0.00162)
Political contribution	-0.00163* (0.000876)	-0.000716 (0.000749)	-0.00181** (0.000778)
REGQUALITY	-0.323*** (0.0270)		
ACI	-0.0554*** (0.0150)	-0.0764*** (0.0182)	-0.0701*** (0.0177)
NBM	-0.000509* (0.000269)	-0.000631** (0.000301)	-0.000716* (0.000383)
GD	-0.00999 (0.0281)	-0.0118 (0.0243)	-0.0303 (0.0230)
LOGTSEC	-0.0176*** (0.00470)	-0.00891* (0.00504)	-0.00811** (0.00397)
ROA	0.119*** (0.0163)	0.0833*** (0.0145)	0.0990*** (0.0143)
RandD	-0.00371** (0.00171)	-0.00225 (0.00150)	-0.00257 (0.00166)
SIZE	0.0525*** (0.00797)	0.0410*** (0.00886)	0.0467*** (0.00671)
RULEOFLAW		-0.352*** (0.0609)	
GOVEFEC			-0.331*** (0.0454)
Constant	0.494*** (0.0724)	0.544*** (0.0861)	0.503*** (0.0503)
AR1(p-value)	-6.281 (0.00)	-2.878 (0.00)	-5.769 (0.00)
AR2 (p-value)	-0.386 (0.69)	1.066 (0.28)	1.314 (0.18)
J-Test(p-value)	118.7 (0.31)	114.7 (0.41)	127.4 (0.15)
Observations	689	689	689
Number of firms	307	307	307

Note: Variable definitions are presented in Appendix 1. The dependent variable in models 7–9 is idiosyncratic risk, with political contribution as our key explanatory variable. Model 7 includes country level factor regulation quality (REGQUALITY), model 8 includes rule of law (RULEOFLAW) measure and model 9 includes an additional country level measure: government effectiveness (GOVEFEC). “L. Idiosyncratic Risk” represents first lag of the dependent variable and “L2. idiosyncratic Risk” represents second lag of the dependent variable. Corporate governance and firm-specific characteristics are included as control variables. AR1 and AR2 are the Arellano-Bond serial correlation tests for first order correlation (AR1) and second order correlation (AR2), reported with its p-value. J-test is the Sargan-Hansen’s test of the overidentifying restrictions to test the overall validity of the instruments, reported with its p-value. Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 6 Robustness check – ROA volatility (the difference between the maximum and minimum ROA reported over the 5–year interval)

Variables	(10) ROA volatility	(11) ROA volatility	(12) ROA volatility	(13) ROA volatility	(14) ROA volatility	(15) ROA volatility
L. ROA volatility	0.614*** (0.00467)	0.607*** (0.00516)	0.607*** (0.00567)	0.522*** (0.00735)	0.524*** (0.00840)	0.516*** (0.0109)
L2. ROA volatility	-0.0213*** (0.00605)	-0.0223*** (0.00548)	-0.0121** (0.00572)	-0.0642*** (0.00687)	-0.0651*** (0.00708)	-0.0590*** (0.00787)
ACI	-0.00478 (0.00475)	-0.00732* (0.00426)	-0.00853* (0.00448)	-0.0577*** (0.00425)	-0.0588*** (0.00471)	-0.0520*** (0.00599)
BFSIZE	-0.000551*** (0.0001)	-0.000884*** (0.0001)	-0.000717*** (0.000103)	-0.00285*** (0.000243)	-0.00295*** (0.000292)	-0.00258*** (0.000388)
GD	-0.0541*** (0.00344)	-0.0485*** (0.00695)	-0.0645*** (0.00488)	-0.0886*** (0.00692)	-0.0865*** (0.00803)	-0.0903*** (0.00533)
LEVERAGE	-0.0243*** (0.00209)	-0.0222*** (0.00219)	-0.0203*** (0.00280)	0.0303*** (0.00200)	0.0307*** (0.00213)	0.0355*** (0.00298)
TOBINS'Q	-0.00270*** (0.000484)	-0.00212*** (0.000552)	-0.00161*** (0.000563)	-0.00543*** (0.000759)	-0.00561*** (0.000818)	-0.00505*** (0.000970)
ROA	0.0386*** (0.00783)	0.0202*** (0.00524)	0.0382*** (0.00514)	0.116*** (0.00934)	0.117*** (0.00939)	0.0845*** (0.00861)
Political contribution	-0.00193*** (0.000125)	-0.00139*** (0.000143)	-0.00181*** (0.000180)	-0.00219*** (0.000310)	-0.00235*** (0.000424)	-0.00230*** (0.000536)
REGQUALITY	-0.0995*** (0.00550)					
DUAL	-0.0105*** (0.00180)	-0.00432*** (0.00115)	-0.00803*** (0.00121)	-0.0104*** (0.00101)	-0.0102*** (0.00103)	-0.00787*** (0.00178)
RiskManagCom	0.00843** (0.00357)	0.00410* (0.00216)	0.00824*** (0.00313)	-0.110*** (0.0297)	-0.109*** (0.0299)	-0.140*** (0.0303)
NBM	0.00204*** (0.0001)	0.00191*** (0.0001)	0.00200*** (0.0001)	0.00185*** (0.0001)	0.00185*** (0.0001)	0.00182*** (0.0001)
NEDs	0.0150** (0.00720)	0.0180*** (0.00620)	0.0361*** (0.00623)	-0.0204*** (0.00553)	-0.0202*** (0.00549)	-0.00313 (0.00419)
LOGTSEC	0.00320*** (0.00110)	0.00788*** (0.000893)	0.00534*** (0.00124)	-0.00635*** (0.000842)	-0.00656*** (0.000937)	-0.00737*** (0.000977)
RandD	0.00565*** (0.000533)	0.00559*** (0.000645)	0.00506*** (0.000518)	0.0121*** (0.000398)	0.0124*** (0.000622)	0.0123*** (0.000878)
SIZE	-0.0360***	-0.0395***	-0.0339***	-0.0392***	-0.0393***	-0.0377***

RULEOFLAW	(0.00279)	(0.00233) 0.0110 (0.0175)	(0.00261)	(0.00219)	(0.00220)	(0.00324)
GOVEFEC			-0.113*** (0.0135)			
INVESTOR PROTECTION				0.0590*** (0.00190)	0.0598*** (0.00229)	0.0649*** (0.00425)
Riskmanagcom*REGQUALITY					-0.00461 (0.0103)	
Political contribution*election2						0.00184*** (0.000173)
Constant	0.300*** (0.0232)	0.198*** (0.0233)	0.273*** (0.0269)	0.0558 (0.0343)	0.0545 (0.0343)	0.0180 (0.0516)
Observations	739	739	739	347	347	347
Number of firms	156	156	156	119	119	119

Note: Variable definitions are presented in Appendix 1. The dependent variable in models 10–15 is ROA volatility. “L. ROA volatility” represents the first lag of the dependent variable and “L2. ROA volatility” represents a second lag of the dependent variable (ROA volatility). The key explanatory variable is political contribution. Model 10 includes country level measure regulation quality (REGQUALITY), model 11 includes another country level measure rule of law (RULE OF LAW), model 12 includes a measure for government effectiveness (GOVEFFECT), model 13 includes a proxy for country-level investor protection (INVESTOR PRTECTION), model 14 includes an interaction term between the presence of firm-level risk management committee and regulation quality (Riskmanagcom*REGQUALITY). Model 15 included the interaction between political contribution and election year (Political contribution*election2).

Table 7 Robustness Check – Volatility of earnings (the country-adjusted volatility of earnings for each firm over the entire sample period)

VARIABLES	(16) Volatility of earnings	(17) Volatility of earnings	(18) Volatility of earnings
L. Volatility of earnings	1.246*** (0.00459)	1.271*** (0.00544)	1.250*** (0.00532)
L2. Volatility of earnings	-0.572*** (0.00586)	-0.643*** (0.0125)	-0.556*** (0.00708)
DUAL	0.317*** (0.0267)	0.292*** (0.0284)	0.327*** (0.0421)
Riskmanagcom	-0.414* (0.212)	2.603*** (0.351)	-0.366*** (0.138)
ACI	0.851*** (0.0577)	0.751*** (0.0677)	0.939*** (0.0642)
BSIZE	-0.0225*** (0.00189)	-0.0154*** (0.00293)	-0.0255*** (0.00194)
LOGTSEC	-0.0620*** (0.00981)	-0.0156 (0.0122)	-0.0781*** (0.00825)
LEVERAGE	-0.189*** (0.0270)	-0.331*** (0.0549)	-0.274*** (0.0592)
TOBIN's Q	-0.0706*** (0.00696)	-0.107*** (0.00783)	-0.0631*** (0.00976)
ROA	-0.282*** (0.0792)	0.290** (0.119)	-0.362*** (0.0448)
Political contributions scaled by sales	-0.00988** (0.00423)	-0.00852** (0.00411)	-0.0435*** (0.00595)
NBM	-0.0303*** (0.00232)	-0.0227*** (0.00226)	-0.0356*** (0.00353)
NEDs	-0.455*** (0.131)	-0.500*** (0.111)	-0.313 (0.202)
GD	-1.278***	-0.886***	-1.061***

	(0.125)	(0.0697)	(0.104)
RandD	0.105***	0.105***	0.103***
	(0.0117)	(0.0129)	(0.0151)
SIZE	0.0651*	-0.128***	0.0430
	(0.0351)	(0.0468)	(0.0624)
INVESTOR PROTECTION	-0.110***	-0.229***	-0.0616
	(0.0321)	(0.0393)	(0.0402)
RISKMANGCOMP*REGQUALITY		-2.984***	
		(0.128)	
Political contribution*election2			0.0637***
			(0.00184)
Constant	1.125***	2.735***	0.885**
	(0.360)	(0.518)	(0.443)
Observations	349	349	349
Number of firms	119	119	119

Note: Variable definitions are presented in Appendix 1. The dependent variable in models 16–18 is Volatility of earnings. “L. Volatility of earnings” represents the first lag of the dependent variable and “L2. Volatility of earnings” represents a second lag of the dependent variable (Volatility of earnings). The key explanatory variable is political contribution. The political contribution data is scaled by sales in models 16–18. Model 16 includes country-level variable for investor protection (INVESTOR PROTECTION), model 17 includes interaction term for risk management committee in the presence of regulation quality (RISKMANGCOMP*REGQUALITY) and model 18 included the interaction between political contribution and election year (Political contribution*election2) Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table 8 Robustness Check – Political Contribution Scaled by Sales

VARIABLES	(19) Total Risk	(20) Systematic Risk	(21) Idiosyncratic Risk
L1	0.475*** (0.00311)	0.314*** (0.000434)	0.450*** (0.00675)
L2	0.374*** (0.00573)	0.197*** (0.000284)	0.377*** (0.0126)
RiskManagCom	0.0907*** (0.00520)	0.571*** (0.0588)	0.0515*** (0.00847)
BSIZE	0.000860* (0.000468)	4.797*** (0.182)	0.000969 (0.000610)
LEVERAGE	0.00292 (0.0136)	2.557*** (0.365)	-0.0289*** (0.0102)
Political Contribution (scaled by sales)	-0.00431*** (0.000552)	-0.626*** (0.0155)	-0.00709*** (0.000760)
REGQUALITY	-0.290*** (0.0180)	-9.815*** (0.259)	-0.332*** (0.0271)
DUA	0.0276*** (0.00518)	3.688*** (0.283)	-0.0126*** (0.00460)
ACI	-0.0785*** (0.0111)	0.692*** (0.0518)	-0.0473*** (0.0148)
NBM	-0.000133 (0.000270)	-0.505* (0.276)	0.000652*** (0.000216)
NEDS	-0.0403* (0.0224)	-0.933*** (0.0110)	-0.0905*** (0.0213)
GD	-0.0745*** (0.0184)	17.30*** (0.346)	-0.00577 (0.0292)
LOGTSEC	-0.0415*** (0.00335)	-0.202*** (0.00431)	-0.0272*** (0.00378)
TOBIN'S Q	0.0211*** (0.00158)	0.634*** (0.0256)	0.0403*** (0.00161)
ROA	0.0890*** (0.0172)	2.025*** (0.535)	0.120*** (0.0143)
RandD	0.00488*** (0.00166)	0.753*** (0.0496)	-0.00548*** (0.00202)
SIZE	0.0216*** (0.00656)	1.585*** (0.266)	0.0548*** (0.00889)
Constant	0.700*** (0.0292)	-28.38*** (1.959)	0.585*** (0.0811)
Observations	736	736	736
Number of firms	155	155	155

Note: Variable definitions are presented in Appendix 1. The dependent variable in models 19, 20 and 21 is Total Risk, Systematic Risk and Idiosyncratic Risk, respectively. L1 and L2 represent lag 1 and lag 2 of each measure of risk. The key explanatory variable is political contribution scaled by sales and a Regulation Quality is used as country-level control variable (REGQUALITY). All other firm specific and firm level governance variables are the same as in previous models. Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Appendix 1 Variable definitions

Variable	Definition	Source
<i>Risk Measures</i>		
Total risk	Logarithm of square root of 250 times daily return standard deviation.	Thomson Eikon
Systematic risk	Coefficients of the stock market portfolio return from a market model of regression.	Thomson Eikon
Idiosyncratic Risk	Logarithm of the square root of 250 times the residuals from the market model regression.	Thomson Eikon
<i>Key Explanatory Variables</i>		
Political contribution	Expenditures on political lobbying: support of political candidates and contributions to parties, scaled by cash: $\log(1 + \text{political contributions} / \text{cash}) \times 10^3$	Thomson Eikon
Political contribution	Expenditures on political lobbying: support of political candidates and contributions to parties, scaled by sales: $\log(1 + \text{political contributions} / \text{sales}) \times 10^3$	Thomson Eikon
<i>Governance Mechanisms</i>		
Dual	1 if chairman and CEO are the same person, 0 otherwise.	Thomson Eikon
RiskManagCom	1 if a company has a risk management committee, 0 otherwise.	Thomson Eikon
ACI	Percentage of non-executive board member on the audit committee.	Thomson Eikon
NBM	The number of board meetings during the year.	Thomson Eikon
BSIZE	The total number of board members at the end of the fiscal year.	Thomson Eikon
NEDS	Percentage of non-executive board members.	Thomson Eikon
GD	Percentage of women on the board of directors.	Thomson Eikon
LOGTSEC	Logarithm of the total compensation paid to all senior executives (if total aggregate is reported by the company).	Thomson Eikon
<i>Firm-specific Characteristics</i>		
LEVERAGE	A firm's total debt divided by its total assets	Thomson Eikon
TOBIN's Q	Total assets + Market value of equity – Total common equity – Deferred taxes/Total assets.	
ROA	Operating income divided by total assets at the end of the year	

RandD	Research and development expenditures divided by sales.	Thomson Eikon
SIZE	Natural logarithm of a firm's total assets at the end of a financial year	Thomson Eikon
<i>Country-level variables</i>		
RULEOFLAW	The index measures the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Values vary from 0 (non-existent) to 100 (excellent).	World Bank indicator
GOVEFFEC	The index which ranges from 0 to 100 measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures.	World Bank indicator
INVESTOR PROTECION	This index is an average of three indices: the extent of disclosure index, the extent of director liability index, and the ease of shareholder suit index. The index ranges from 0 (little to no investor protection) to 10 (greater investor protection).	World Bank indicator
REGQUALITY	The index measures how governments formulate and implement sound policies and regulations that permit and promote private sector development.	World Bank indicator
