

Firm-Level Political Risk and Dividend Payout

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Abstract:

We use a novel measure of firm-level political risk based on a textual search technique on firms' quarterly earnings conference transcripts to explain dividend payout in publicly listed US firms. We find a positive and significant effect of firm-level political risk on dividend payout particularly in uncertainties related to economics, institutions, technology, trade, and security. The effect is more pronounced in firms with better corporate governance, lower analyst follow-up, and higher growth opportunities. These results support the signaling role of dividends rather than the role of agency theory in explaining dividend payout when firms are associated with higher levels of political risk. We also find the effect to be prominent after controlling for an aggregate measure of economic policy uncertainty, and in poor and recessionary economic conditions. We address endogeneity concerns and selection bias using two-stage least squares instrumental variable analysis, placebo tests, and propensity score matching approach.

JEL classification: G18, G34, G35, P16

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1. Introduction

Ongoing prevailing debates have been centered around exploring the impact of political uncertainty on firms' dividend payout policies. The importance of those debates stems from the significance of policy-related uncertainty effects on various economic outcomes such as firm-level investment and employment growth (Bernanke, 1983; Pindyck, 1988; Dixit and Pindyck, 1994; Bloom et al., 2007; An et al., 2016; Baker et al., 2016; among others), firms' financing decisions (Dai and Ngo, 2021; Çolak et al., 2017), cash holdings (Gao and Zhang, 2015; Gulen and Ion, 2016; Xu et al., 2016), accounting quality (El Ghoul et al., 2021), corporate innovations (Bhattacharya et al., 2017; Xu, 2020), M&A activity (Nguyen and Phan, 2017; Bonaime et al., 2018; Cao et al., 2019), firms' cost of financing (Herrala and Turk-Ariss, 2016; Bradley et al., 2016; Drobetz et al., 2018) and market valuation (Pastor and Veronesi, 2013; Brogaard and Detzel, 2015; Brogaard et al., 2019).

In the handful of papers that investigate the relationship between political uncertainty and firms' dividend payout policy, mixed evidence is proclaimed, where a positive relationship is noted in some studies citing agency theory behind this relationship whereby dividends help mitigate agency problems during high political uncertainty periods (Baker et al., 2016; Attig et al., 2021), while a negative relationship is reported in others (Huang et al., 2015) suggesting precautionary managerial responses through more conservative dividend distributions during such periods. However, in all those studies, authors use conventional and/or aggregate measures of political uncertainty aiming to identify variation in aggregate and sector-level political risk using either country-level economic policy uncertainty (EPU) indices or event studies (such as global political crisis events or presidential election periods) which do not capture the cross-sectional and time-

series variation in firms' exposure to aggregate political risk (Hassan et al., 2019; Pan et al., 2019). However, it is noted that most of the variation measured in political risk is derived from idiosyncratic firm political risk, and the prevalence of political risk across firms is much more volatile and heterogeneous than previously assessed (Hassan et al., 2019). Hence, our study aims to fill the gap in this literature by accounting for this political risk heterogeneity across firms and being the first study to use a novel and direct firm-level political risk measure to explore the effect of firm-level political risk on firm-level dividend distribution.

Studying a sample of US-publicly listed firms spanning from 2002 to 2018, we define firm-level political risk using Hassan et al. (2019) measure based on transcripts of quarterly earnings conference calls. This direct firm-specific measure is based on a textual-search technique to quantify the proportion of the earning conference call that focuses on general political risk. Furthermore, this measure is decomposed to reflect the particular type of political risk faced by the company over time. We retrieve dividend payout and other firm financial data from CRSP/Compustat Merged database. Following the literature, we exclude financial and utility firms from our analysis as those firms face certain regulations restricting their dividend payouts. After applying those filters we end up with a final sample of 4,322 unique firms with 133,919 firm-quarter observations in our main analysis.

To examine the impact of firm-level political risk on firm dividend payout, we employ an OLS regression as our baseline model using the ratio of cash dividends to net income (La porta et al., 2000; Chay and Suh, 2009; among others) as the dependent variable and controlling for firms' financial variables shown previously in the literature to impact firms' dividend payout. Our baseline results indicate a statistically significant and positive relationship between firm-level political risk and dividend payout. Our results also illustrate significant economic impact; a one

standard deviation increase in firm-level measure of political risk above its mean, holding other variables at their sample mean, corresponds to an increase of 4.52 percentage points in firm's dividend payout ratio which translates into an increase of 23%. Furthermore, our statistically and economically significant positive relationship holds even when we utilize three alternative definitions for dividend payout as the dependent variable (dividend yield, $\log(1+\text{dividend})$, dividend dummy).

Next, to identify the source of political uncertainty associated with those significant results, we re-run our baseline model using each of the eight sub-components of political risk (economics, institutions, technology, trade, tax, environment, health, and security) as defined by Hassan et al. (2019). We find that most of the explanatory power of our measure of political risk is attributed to topics related to economics, institutions, technology, trade, and security, while political uncertainty topics related to taxes, environmental, and health issues do not have a significant impact on firms' dividend payout.

Following our baseline results, we alleviate endogeneity concerns arising from the possibility of having time-varying omitted variables that simultaneously affect both firm-level political risk and firm dividend payouts. We address these concerns using two approaches: an instrumental variable (IV) analysis and placebo tests. In the IV analysis we use a two-stage least squares (2SLS) regression analysis, where we regress in the first stage an instrument that we believe should impact firm-political risk but has no impact on firm-dividend policy, and in the second stage regress the instrumented-firm-level political risk on firm dividend payout. Following previous studies (Azzimonti, 2014, 2016, 2018; Gulen and Ion, 2016; Pan et al., 2019; Attig et al., 2021) we use the partisan conflict index (degree of political polarization or disagreement among politicians at the federal level in the US retrieved from Federal Reserve Bank of Philadelphia) as an instrument

for estimating firm-political risk. We perform the conventional tests of goodness of instruments and find the results in line with our expectations and the extant literature; a highly statistically significant positive association between partisan conflict index and firm-level political risk. After using the instrumented firm-level political risk, we report an even larger positive effect of firm-level political risk on dividend payout, supporting our baseline results. Next, to complement our IV results, we run placebo tests where we randomly draw from the sample distribution of firm-level political risk to construct 133,919 fake firm-level political risk measures and re-estimate the baseline regression model. We find an insignificant coefficient on firm-level political risk with all measures of dividend distribution employed in our analysis, suggesting that our baseline results survive the placebo tests and providing more support that our results hold even after considering potential endogeneity.

Next, to ensure that our results are not picking up the aggregate economic political uncertainty effects as measured and documented previously in the literature, we conduct horse race regressions controlling for economic policy uncertainty (EPU measure defined by Baker et al., 2016). The coefficient on firm-level political risk remains positive and statistically significant even after controlling for EPU providing more support for the robustness of our measure. Furthermore, to check that our measure of firm-level political risk reflects variation across firms in different economic environments, we test the impact of firm-level political risk on dividend payout in poor, good, and recessionary periods. The significant impact of firm-level political risk is prevalent in environments of poor economic conditions with largest effect witnessed in recessionary periods. In addition, to confirm that our results are not also driven by selection bias and by systematic differences between firms with respect to other firm financial factors possibly affecting dividend payouts, we use a propensity score matching (PSM) approach to match the sample firms based on

their firm size and leverage, and we still find the significant positive impact of firm-political risk on dividend payout after applying the baseline model on the matched sample.

Last, to explore the channel by which firm-level political risk impacts firm dividend policy, we first test whether agency theory can be used to explain the observed significant positive effect. Prior studies (see for example: Attig et al., 2021) suggest that dividends can be used as instruments to mitigate agency problems, and so firms with poorer governance should have a more pronounced effect of political risk on dividend payout since more cash will be available for managers during politically uncertain periods (Hanlon et al., 2017) due to fewer investment opportunities. To test this conjecture, we include additional controls for corporate governance in our baseline models and re-run the model on subsamples classifying firms into low vs. high governance based on their governance measures. We find that our significant positive coefficient of firm-level political risk remains positive and significant after controlling for governance, and contrary to predictions of agency theory, is dominant in the subsample of firms with higher corporate governance, indicating that agency theory cannot be used to explain our results. Hence, we move to test the second theory that can be explaining our results: the signaling theory. From the lens of famous cash flow signaling hypothesis advanced by Bhattacharya (1979), firms with high growth opportunities who wish to signal to the market their promising future outlook would still pay high dividends (Denis et al. 1994; Yoon and Starks, 1995) despite the high political risk, contrary to firms with conservative managers who would cut off the dividend payments due to worries about the future. To test for this conjecture, we run two analyses. In the first analysis we use the number of analysts following the firms to proxy for the need of using dividend payouts as a signaling mechanism to the market. Firms with a low number of analysts following them would need such signaling mechanism more than firms with high analyst follow-up to mitigate higher information asymmetry

effects (Andres et al. 2013). Hence, we break down our sample into two subsamples based on number of analysts follow up (low and high) and indeed we find that the significant positive firm-level political risk effect is only present in the subsample of firms with low analyst following hence suggesting higher need for using dividends as a signaling mechanism reassuring the market participants about future growth opportunities. Moreover, in our final analysis, to confirm the validity of using signaling theory to explain our results, we split our sample into two subsamples based on firms' growth opportunities using two proxies: market to book ratio and sales growth to classify firms as high vs. low growth companies. Consistent with our prior, we observe that a significantly positive effect of firm-level political risk is more pronounced in the case of high growth firms.

This study contributes to the literature in three distinct ways. First, this paper extends the recent and growing literature on firm-level political risk (Hassan et al., 2019; Pan et al., 2019) and its impact on various firm financial policies and gives empirical support to the notion that that large share of the variation in political risk appears occurring at the firm level, rather than the level of the sector or the economy as a whole. Second, this study contributes to the prolonging literature on factors affecting firms' dividend policies (Lie, 2005; DeAngelo et al., 2006; Brockman and Unlu, 2009; Leary and Michaely, 2011; Chen et al., 2017; Cooper and Lambertides, 2018; among others) adding to the literature an essential determinant of firms' dividend payout ratios; firm-level political risk. Finally, this paper contributes to the limited literature on the effect of economic policy uncertainty on dividends (Huang et al., 2015; Attig et al., 2021) but using a direct measure of firm-level political risk which overcomes drawbacks associated with the other aggregate political risk measures which do not allow to gauge uncertainty over time and across firms, and contributes to the existing mixed evidence on the effect of political risk on dividend payout giving

support to the dividend signaling theory in explaining this effect which represents a novel addition to the literature since such channel has not been explored yet in such context.

The paper proceeds as follows. Section 2 summarizes the literature on dividend payout policy and effects of political uncertainty on firms, and develops our hypotheses. Section 3 explains the firm-level measure of political risk and describes the data. Section 4 presents the empirical models and results. Section 5 concludes.

2. Literature review and hypothesis development

2.1 Dividend policy

A plethora of studies has been conducted to identify firm-specific characteristics which play an essential role in explaining firms' dividend policies, including profitability (Nissim and Ziv, 2001), leverage (Cooper and Lambertides, 2018), ownership (Short et al. 2002; Henry, 2011; Firth et al., 2016; He and Mi, 2022), board gender diversity (Chen et al., 2017) and firms' life cycle (DeAngelo et al., 2006; Brockman and Unlu, 2011).

Moreover, a large body of literature shows that financially unconstrained firms tend to pay dividends rather than repurchase shares (Lie, 2005), present a high level of dividend smoothing (Leary and Michaely, 2011) and are less likely to reduce their payout during a shock to the supply of credit (Bliss et al., 2015).

Research also finds evidence that firms adjust their payout policies in response to developments in the business environment in which they operate, such as changes in tax policy (Chetty and Saez, 2005; Buchanan et al., 2017), labor market (DeAngelo & DeAngelo, 1990) and degree of institutional investors' perception (Short et al., 2002; Amihud and Li, 2006; Firth et al. 2016; He and Mi, 2022).

Finally, a country's institutional environment, particularly the content and enforcement of the legal protections afforded to outside investors, can affect corporate dividend policy (La Porta et al., 2000; Brockman and Unlu, 2009; Cumming et al., 2011; Dang et al., 2021). Moortgat et al. (2017) document a contradictory evidence as they observe little impact of investor protection and tax legislation on dividend policy of Belgian firms.

2.2 Political risk

According to conventional models of investment under uncertainty, any increase in any form of risk, and hence an increase in the firm's political risk, leads to a decline in firm-level investment and employment growth (e.g., Bernanke 1983; Pindyck, 1988; Dixit and Pindyck, 1994; Bloom, et al., 2007; An et al., 2016). Studies conducted at the macroeconomic level confirm that these negative relationships also hold at an aggregate level (Baker et al., 2016).

More recent studies at the firm level, find evidence that high policy risk alters firms financing decisions (Chen et al., 2017; Çolak et al., 2017; Dai and Ngo, 2021), cash holdings (Gulen and Ion, 2016; Gao and Grinstein, 2014), corporate investments (Julio and Yook, 2012; Gulen and Ion, 2016; King et al., 2021), corporate innovations (Bhattacharya et al., 2017; Xu, 2020), M&A activity (Nguyen and Phan, 2017; Bonaime et al., 2018; Cao et al., 2019), accounting quality (El Ghoul et al., 2021), and IPOs (Colak et al., 2017).

Several studies have also provided evidence of a strong relationship between political risk and firms' cost of financing (Herrala and Turk-Ariss, 2016; Bradley et al., 2016) and market valuation (Pastor and Veronesi, 2013; Brogaard and Detzel, 2015; Brogaard et al., 2020).

Much of the abovementioned studies use election year dummies as a proxy for political risk. This approach has certain drawbacks as it does not allow to gauge uncertainty over time and

explore cross-section properties. Baker et al. (2016) overcome some of these problems introducing a time-varying index of economic policy uncertainty (EPU) based on text-search results obtained from electronic archives. However, EPU, is calculated for specific policy categories (fiscal, monetary, regulatory and trade activities) on the countries levels and does not permit to capture heterogeneity across firms.

2.3 Political risk and dividend payout

Agency theory is one of the predominant theories in explaining firms' dividend payout policies. Several studies explain the significance of dividends' role in mitigating agency problems (Alli et al., 1993; Short et al., 2002; Allen and Michaely, 2003; Leary and Michaely, 2011; among others). In particular, studies show how dividends can act as a substitute for governance (La Porta et al., 2000; Grinstein and Michaely, 2005; Officer, 2011; among others) as paying higher dividends suggests less excess cash flows to be expropriated by self-serving managers.

Moreover, several other studies propose the dividend signaling theory in explaining firms' dividend payouts, where managers use dividend payouts to signal their earnings expectations to the general public (Bhattacharya, 1979; Ghosh and Woolridge, 1989; Beer, 1993; Denis et al., 1994; Yoon and Starks, 1995; Lie, 2005; Leary and Michaely, 2011; Cao et al., 2017).

Drawing on the insights of those theories, recent studies emerged attempting to explain impact of political risk on firms' dividend payouts, where some studies give empirical support to the agency theory citing that firms are more likely to face high agency problems during political uncertainty periods, and hence this will be translated to higher dividend payouts, with this effect being more pronounced in firms with poorer governance (Attig et al., 2021). While other studies argue that firms in high political uncertainty periods need to be more conservative in their dividend

payouts due to the anticipated increase in the cost of financing (Huang et al., 2015) and hence this will be translated to lower dividend payouts. However, those studies ignored the dividend signaling theory and the possibility of high growth firms using the dividends to signal their future positive earning expectations despite the current high firm-level political risk. The inconclusive evidence drawn from those studies can potentially be due to the use of an aggregate measure of political uncertainty to explain firm-level decisions associated with dividend policy. Hence, in this study, we test our primary research question on the impact of firm-level political risk on dividend payouts using a more refined measure of direct firm-level political risk capturing the heterogenous effect across firms and time periods, with no a priori, so this formulates the basis for our main hypothesis as follows:

H1: Firms with higher firm-level political risk are associated with higher (lower) dividend payouts.

Next, to further explore whether agency theory is the channel causing the firm-level political risk to affect firms' dividend payout, we test for the second hypothesis:

H2: The effect of firm-level political risk on firms' dividend payouts is more (less) pronounced in firms with weaker (stronger) governance.

Finally, to investigate whether dividend signaling theory is the channel causing the firm-level political risk to affect firms' dividend payout, we test for the third hypothesis:

H3: The effect of firm-level political risk on firms' dividend payouts is more (less) pronounced in firms with higher (lower) growth opportunities.

3. Data

3.1 *Firm-level measure of political risk*

We adopt Hassan et al. (2019) firm-level political risk measure, representing the proportion of the firm's earnings conference call spent on discussions related to political risks. This measure enables us to identify the political risk at the firm rather than the aggregate level, and it allows the firm's political risk to vary across firms and time. Hassan et al. (2019) construct this measure using a text searching methodology on the quarterly earnings conference calls transcripts of US publicly listed firms to identify and classify words related to politics and risks. They then use an algorithm to calculate the frequency of those terms with respect to the duration of the conference call.[‡] The authors conduct several validation tests and compare their measure to other text-based measures such as the EPU index developed by Baker et al. (2016). Hassan et al. (2019) measure has been used recently to study the impact of firm-level political risk on capital investments (Choi et al., 2021), accounting quality (El Ghoul et al., 2021), and debt maturity and leverage (Pan et al., 2019).

In addition to the main firm-level political risk variable, we also decompose this measure into eight different sub-indices as in Hassan et al. (2019). Those eight sub-indices result from quantifying the duration of the quarterly earnings conference call spent on a specific political risk topic related to economics, institutions, technology, trade, taxes, environment, health, and security.

3.2 *Dividend payout and other variables*

We follow the norm in the literature by defining dividend payout as the ratio of cash dividends declared on common shares to net income before extraordinary items (La Porta et al., 2000; Chay

[‡] For full details related to this measure please refer to Hassan et al. (2019)

and Suh, 2009; among others). To ensure robustness of our results, we use 3 other alternative measures of dividend payout: dividend yield which is the ratio of dividend per share divided by the stock market price per share; $\ln(1+\text{dividend})$ which is the natural logarithm of 1 plus dividend amount; and dividend dummy which is an indicator that is set to 1 if the company declared a dividend by the end of the period, and 0 otherwise.

We also control for all firm financial variables which have been previously shown to affect the dividend distribution of the firms, including firm size, leverage, market to book, ratio of cash to total assets, amount of cash flow, sales growth, return on assets, R&D intensity, capital expenditure, tangibility, and Whited-Wu index of financial constraints. All of those variables are defined in the Appendix of this paper.

Since Hassan et al. (2019) measure of political risk is quarterly, we retrieve all dividend payout and financial variables from the CRSP/Compustat Merged database at the end of each quarter. We exclude the firms with negative values on assets, sales, cash and dividends. Following the convention in the literature, we also exclude utility firms (SIC 4900 -4949) and financial firms (SIC 6000 – 6999). This filtering process results in a US sample of 4,322 unique firms spanning from the first quarter of 2002 until the end of the last quarter of 2018 with 133,919 observations.

[Table 1 about here]

[Table 2 about here]

In table 1, we classify the sample by year, and in table 2, we present descriptive statistics of all main variables used in the study. We winsorize all variables at the 1% and 99% to minimize the effect of outliers. From table 1, we can notice that US firms had an almost steady increase in their dividend payouts during the 2002-2013 periods reaching a peak of 19.7% in 2013, then the

dividend payout ratio started to decrease. From table 2, we can see that the average dividend payout ratio for our sample firms is 15.2% while the median is 0.00. On average, 35.6% of the firms have ever paid a dividend during the sample period, and the standardized firm-level measure of political risk is -0.072.

4. Empirical results

4.1 Impact of firm-level political risk on dividend payout

To examine the effect of firm-level political risk on dividend payout, we run the following OLS specification. We include time, industry and firm fixed effects. Standard errors are adjusted for heteroskedasticity and are clustered at firm level.

$$Dividend\ Payout_{i,t} = \alpha_i + \beta_1 Political\ Risk_{i,t} + \gamma Controls_{i,t} + Time \times Industry\ FE + Firm\ FE + \varepsilon_{i,t} \quad (1)$$

[Table 3 about here]

We present results of estimating equation (1) by using the dividend payout ratio (amount of dividend declared on common stock at the end of the quarter divided by net income before extraordinary items at the end of the quarter), dividend yield (amount of dividend per share declared at the end of the quarter divided by stock market price at the end of the quarter), logarithm of (1+ dividend), and dividend dummy (a dummy set to 1 if the company declared a cash dividend on common stock at the end of the quarter, and 0 otherwise), respectively, in columns 1,2,3, and 4 of table 3. In all four specifications, the coefficient on firm-level political risk is positive and highly statistically significant (at the 1% level in our baseline model 1). Our results are also economically significant, a one standard deviation increase in the firm-level measure of political risk above its mean in baseline model 1, holding other variables at their sample mean, corresponds to an increase of 4.52 percentage points in firm's dividend payout ratio, which translates into an increase of 23%.

Moreover, results of other determinants of firms' payout ratio are consistent both in terms of sign and significance with the literature.

Next, to analyze the nature of firm-level political risk associated with the higher dividend payout ratios, we rerun equation (1) but using each subcomponent of the political risk as an explanatory model in a separate regression. Results are displayed in table 4.

[Table 4 about here]

We decompose the firm-level political risk into its eight components as in Hassan et al. (2019) based on the topic of political risk discussed in the quarterly earnings conference call. This includes economics, institutions, technology, trade, security, tax, environment, and health-related topics as shown in columns 1 to 8 of table 3. After such decomposition, we find that political risk arising from economics, institutions, technology, trade, and security uncertainty corresponds to significantly higher dividend payout ratios, while uncertainty related to taxes, environment and health do not.

4.2 Endogeneity concerns

After finding empirical support for our main hypothesis regarding significant positive impact of firm-level political risk on dividend payout, we proceed to ensure the robustness of our results to alleviate concerns regarding possibility of having time-varying omitted variables which simultaneously affect both firm-level political risk and firm dividend payouts. To address those concerns, we start off by running a two-stage least squares (2SLS) instrumental variable analysis. Following Azzimonti (2014, 2016, 2018), Gulen and Ion (2016), Pan et al. (2019) and Attig et al. (2021), we use the partisan conflict index (degree of political polarization or disagreement among politicians in the US retrieved from Federal Reserve Bank of Philadelphia) as our instrument

because it should impact firm-political risk but it is not expected to have an impact on firm-dividend policy.

[Table 5 about here]

The first stage results whereby we estimate firm-political risk using partisan conflict index are presented in the first column of table 5. The highly statistically significant (at the 1% level) and positive coefficient on partisan conflict index shows that higher political disagreements result in higher levels of political risk. Moreover, conventional tests of under-identification and the F-test for weak instrument rejects that partisan conflict index is a weak instrument. We then estimate dividend payout ratio as in (equation 1) but using instrumented firm-level political risk as the explanatory variable in column 2 and we find an even larger and more significant positive effect of firm-level political risk on dividend payout ratio.

Next, we run placebo tests to further address any endogeneity concerns and to ensure the robustness of our baseline results. To do this, we randomly draw from the sample distribution of firm-level political risk to construct 133,919 fake firm-level political risk measures and re-estimate the baseline regression (equation 1). We conduct the placebo tests using the 4 definitions of dividend payout as in table 3 and present results of placebo analysis in table 6.

[Table 6 about here]

In all 4 models of table 6, we find an insignificant coefficient on firm-level political risk indicating that our baseline results survive the placebo tests and hence providing more support that our results hold even after considering potential endogeneity.

4.3 Firm-level or aggregate political risk?

To ensure that our reported results are not picking up the aggregate political risk effect documented previously in the literature, we conduct the following two analyses. We start off by conducting Horse Race regressions replicating our baseline model (equation 1) but while controlling for the aggregate economic policy uncertainty measure (EPU) defined by Baker et al. (2016). This measure is also a result of text search but on electronic news archives to quantify fiscal, monetary, regulatory and trade policy categories on the countries level.

[Table 7 about here]

Column 1 of table 7 shows the results of applying the model using only the EPU index as the explanatory variable. The coefficient on EPU index is positive and statistically significant at the 5% level giving support to Attig et al. (2021) results. After including our measure of firm-level political risk in column 2, the coefficient on firm-level political risk remains to be positive and statistically significant at the 1% level even after controlling for the EPU measure, solidifying our results that firm-level political risk is not picking up the aggregate effect. Furthermore, we proceed with our analysis of how firm-level political risk is distinct from EPU by conducting the analysis on subsamples of low and high economic policy uncertainty periods in columns 3 and 4 , respectively. We define periods of low and high economic policy uncertainty based on median values of EPU index. The coefficient on firm-level political risk remains to be positive and statistically significant in the high period of economic uncertainty, suggesting that firms increase their dividend payouts specifically in periods of high economic uncertainty, reflecting a firm associated factor which we will delve into explaining in upcoming sections. On the other hand, the coefficient on EPU is positive and statistically significant in the low economic uncertainty period while is negative and statistically significant in the high economic uncertainty period reflecting a

more aggregate reaction to economic policy uncertainty where firms overall cut their dividend payouts in response to fears associated with high economic uncertainty (Huang et al., 2015) without being able to reflect the variation across the cross-section of firms.

To further investigate whether effect of firm-level political risk is uniform or varies across different economic environments, we examine our baseline regression in different economic conditions: poor, good, and recession. Results of the analysis are presented in table 8.

[Table 8 about here]

We classify our sample into the different economic conditions poor, good, and recession using Chicago Fed National Activity Index (CFNAI) and we define recession as the 2008 financial crisis period (as defined in appendix). In columns 1 and 2 of table 8 we report the results on the subsamples corresponding to poor and good economic conditions, respectively. Furthermore, in columns 3 and 4 we divide the sample on whether the economic period is considered a recession (column 3) or not recession (column 4). From this analysis, we note that the significant and positive effect of firm-level political risk is prevalent in poor economic environments and exacerbates in recessionary periods, hence arguing against theories of firms' tendency to uniformly cut-off dividends in high economic uncertainty times and suggesting that a cross-variation across the firms is what is deriving those results.

4.4 Selection bias

In this section, we continue to check whether the firm-level political risk effect is not a result of selection bias and that it does not pick up any other effect such as variations in financial characteristics among sample firms driving the change in dividend payout policy. Hence, we run

a propensity score matching technique using firm size and leverage and then we re-run our baseline models on the new matched sample.

[Table 9 about here]

Panel A of table 9 displays the comparisons among the two sub-groups with respect to firm size and leverage before and after the matching. The difference in mean firm size and leverage between the treated and control groups is now not statistically significant after the matching is done. Panel B further shows that even after conducting a propensity score matching approach, the coefficient on firm-level political risk is positive and statistically significant when using all 4 definitions of dividend payout as in columns 1 to 4 on the matched sample.

4.5 Role of dividends in mitigating agency conflicts

If the firm-level political risk effect on dividend payout can be explained by agency theory by which dividends act as a substitute for stakeholders' monitoring (La Porta et al., 2000) we expect to find our reported positive significant effect of firm-level political risk to be even more pronounced in firms with poorer governance. Such firms would want to signal to the stakeholders and the market that because less investment opportunities are available to them due to high political risk uncertainty; they will distribute the excess cash to the shareholders to avoid expropriation by self-serving managers. To empirically test this second hypothesis of our study we first collect corporate governance variables on our sample firms from Boardex. We collect data on board size, CEO duality, independent board members, outside directors, foreignness of the board, board gender diversity, average tenure of board members, and CEO gender. All corporate governance variables are defined in the appendix. Because our analysis is on quarter year observations, we use the value of the corporate governance measures at the beginning of the year for the 4 quarters in

the year. We re-run our baseline model but after controlling for corporate governance measures. For this analysis, data is only available for 108,498 firm quarter year observations.

[Table 10 about here]

Results of baseline model after controlling for corporate governance measures in column 1 of table 10 show that the coefficient on firm-level political risk is still positive and highly statistically significant. Next, we classify the firms into low vs. high corporate governance subsamples in columns 2 and 3 whereby if values of board independence and outside directors variables are below sample median for a firm in a given year, then the firm is classified to be in the low corporate governance subsample, and vice versa. The significance of the coefficient on firm-level political risk in both subsamples with a larger magnitude in high governance subsample (mean is statistically higher than low governance subsample at the 1% level) indicates results contrary to what agency theory proponents would stipulate. Hence, we fail to find evidence supporting the agency theory explanation associated with firm-level political risk and supporting hypothesis 2 and so we move to the alternative explanation of signaling theory as explained in hypothesis 3.

4.6 Role of dividends in signaling future prospects

Another role which dividends can play, which can be an alternative channel which helps explain the observed positive firm-level political risk dividend payout relationship is that managers can use dividends to signal expectations to the general public (Beer, 1993; Cao et al., 2017; among others). Hence firms would want to signal that despite their high political risk uncertainty, they are expected to grow in the future and have promising future prospect and so they are still paying higher dividends. To explore this notion, we use the number of analysts following a firm as a proxy for necessity of using the dividends as a signaling mechanism. Firms with low number of analysts

followers might be exposed to higher degree of information asymmetry (Andres et al., 2013) and need to signal the market through another channel – dividends, their future prospects while firms with high number of analysts followers might not need to do so. To empirically test this conjecture we obtain data on number of analysts following a company from IBES Data on analyst follow up is available for 122,397 firm quarter year observations. Similar to what we did in previous analyses, we split the sample into two subsamples (low vs. high analyst follow up) using the median value of the variable.

[Table 11 about here]

Results of this analysis are included in table 11. In support to signaling theory, we find the significant positive coefficient on firm-level political risk to be dominant in the subsample of firms followed by less analysts (column 1) while the coefficient fails to be significant when only analyzing the firms followed by a number of analysts higher than sample median (column 2). These findings are in line with previous studies such as Andres et al. (2013). To complement our results supporting the signaling theory, in our final analysis, we classify the firms into two subsamples of high vs. low growth using two measures: market to book ratio and sales growth rate. In lines with signaling theory, firms with high market to book ratios and sales growth rates should pay more dividends to signal their future positive growth opportunities despite the current high firm-level political risk compared to firms with less growth opportunities.

[Table 12 about here]

The results of this analysis are included in table 12. We classify firms into low vs. high growth subsamples using the median of market to book ratio in columns 1 and 2, and sales growth rate in columns 3 and 4, respectively. We find that indeed, in support to dividend signaling theory, the

significant positive relationship between firm-level risk and dividend payout is significantly higher and larger in magnitude in the high growth subsamples (columns 2 and 4) and the difference in mean between the two subsamples using the two measures is also significant at the 1% level. These findings are in line with the findings of Yoon and Stark (1995) and further substantiate the cash flow signaling hypothesis.

5 Conclusion

The escalation in political uncertainties surrounding firms pressurizes researchers to study the impact of resulting political risk on various financial decisions, policies, and outcomes. However, the challenge in quantifying the firm-level exposure to political risk led many studies to focus on aggregate measures of political risk which ignore the cross-sectional and time-series variation across firms.

In this study, we overcome this barrier and use a novel measure recently introduced by Hassan et al.(2019) to measure firm-level political risk using a textual search approach. With this measure, we quantify the firm-level political risk based on the share of the quarterly earning conference calls spent on discussing political uncertainties in general and according to 8 different topics. Such direct measure enables us to capture the idiosyncratic variation across firms highlighting the differential effect of political uncertainty exposure. We examine the impact of this direct measure of firm-level political risk on one of the crucial financial policies where mixed evidence remains to be proclaimed - the dividend payout policy.

We conduct our analysis on a sample of US publicly listed firms spanning from first quarter of 2002 until the end of last quarter of 2018 for which quarterly data on firm-level political risk is available. Following the norm in the literature, we define dividend payout using three alternative

definitions and we control for firm financial variables previously shown to determine dividend payout. Our baseline results show a significant positive effect of firm-level political risk on dividend payout. After closely looking at which political risk topics in particular are associated with such significant positive effects, we find the effect to be dominant in topics related to economics, institutions, technology, trade, and security. We then conduct a battery of robustness tests including 2SLS instrumental variable analysis, placebo tests and propensity score matching approach to alleviate concerns for endogeneity and to address self selection bias. We also control for an aggregate measure of economic policy uncertainty (Baker et al., 2016) to ensure that our measure is not picking up the aggregate effect, and we test our model in different economic conditions, and in all those analyses, we continue to present empirical evidence supporting our baseline results of significant positive effect of firm-level political risk on dividend payout.

Finally, we conduct empirical tests to identify the channel associated with such positive effect of firm-level political risk on dividend payout and find that our results cannot be explained by agency theory, as a matter of fact, our results show contrary to agency theory explanation, that firms with better corporate governance are associated with larger dividend payouts while being exposed to higher firm-level political risk, while firms with poor corporate governance are not. However, our results can be explained by the dividend signaling theory where firms with high growth opportunities measured by high market to book ratio or high sales growth, and firms which are in more need for a signaling mechanism such as firms with low analyst follow up are the ones witnessing a dominant positive effect of firm-level political risk on dividend policy.

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Table 1: Sample distribution

This table classifies our sample of U.S. publicly listed firms with available firm-level political risk and dividend payout data by sample years. The quarter-year observations reflect total of 4 quarters of data per year for each firm in the sample.

Year	Quarter-year observations	Unique firms	Dividend payout
2002	3,511	1,530	0.099
2003	6,121	1,864	0.102
2004	7,133	1,970	0.114
2005	7,550	2,144	0.119
2006	7,851	2,229	0.129
2007	8,188	2,326	0.127
2008	8,641	2,392	0.127
2009	8,393	2,330	0.132
2010	8,206	2,275	0.142
2011	8,898	2,444	0.151
2012	8,685	2,440	0.191
2013	8,149	2,298	0.197
2014	8,685	2,484	0.190
2015	8,697	2,496	0.184
2016	8,077	2,333	0.192
2017	8,869	2,501	0.166
2018	8,265	2,215	0.157
Total	133,919	4,322	0.148

Table 2: Descriptive statistics

This table presents the summary statistics of the main variables used in the study. We present the mean, standard deviation, 25th percentile, median, 75th percentile, and number of observations, respectively. All variables are defined in the appendix.

Variable	Mean	STD	25th %	Median	75th %	N
<i>Dividend variables</i>						
Dividend Payout	0.152	0.528	0.000	0.000	0.161	133,919
Dividend Yield	0.003	0.519	0.000	0.000	0.004	109,450
ln (1 + Dividend)	1.045	1.696	0.000	0.000	1.896	133,753
Dividend Dummy	0.356	0.479	0.000	0.000	1.000	133,919
<i>Political risk variables (Standardized)</i>						
Political Risk	-0.072	0.904	-0.476	-0.312	-0.006	133,919
Political Risk - Economics	-0.092	0.842	-0.430	-0.304	-0.056	133,919
Political Risk - Environment	-0.031	1.039	-0.303	-0.225	-0.050	133,919
Political Risk - Trade	-0.043	0.878	-0.255	-0.197	-0.061	133,919
Political Risk - Institutions	-0.055	0.921	-0.361	-0.263	-0.059	133,919
Political Risk - Health	-0.033	0.963	-0.251	-0.189	-0.058	133,919
Political Risk - Security	-0.057	0.976	-0.383	-0.271	-0.048	133,919
Political Risk - Tax	-0.065	0.909	-0.348	-0.257	-0.066	133,919
Political Risk - Technology	-0.045	1.011	-0.385	-0.275	-0.042	133,919
<i>Firm financial variables</i>						
Firm Size	6.892	1.866	5.584	6.840	8.141	133,919
Leverage	0.429	0.228	0.263	0.409	0.555	133,919
MTB	2.047	1.377	1.200	1.589	2.356	133,919
Cash/Total Assets	0.195	0.218	0.033	0.107	0.285	133,919
Cash Flow	0.917	5.225	0.630	1.966	3.217	133,919
Sales Growth	0.047	0.259	-0.048	0.023	0.101	133,919
ROA	0.051	0.120	0.022	0.059	0.108	133,919
R&D Intensity	0.013	0.026	0.000	0.000	0.017	133,919
Capital Expenditure	0.032	0.041	0.008	0.018	0.039	133,919
Tangibility	0.274	0.253	0.074	0.177	0.419	133,919
Whited-Wu Index	0.408	0.491	0.000	0.000	1.000	133,919
<i>Macroeconomic variables</i>						
Economic Conditions	-0.269	0.987	-0.500	-0.030	0.350	133919
Partisan Conflict	1.275	46.349	0.865	1.314	1.600	133919
<i>Corporate governance variables</i>						
Board Size	8.593	2.179	7.000	8.000	10.000	108499
CEO Duality	0.028	0.166	0.000	0.000	0.000	108499
Board Independence	0.673	0.136	0.600	0.700	0.778	108499
Outside Directors	0.831	0.090	0.800	0.857	0.889	108499
Board Foreignness	0.088	0.165	0.000	0.000	0.200	108499
Board Gender Diversity	0.894	0.104	0.833	0.889	1.000	108499
Board Tenure	5.724	3.113	3.513	5.414	7.563	108499
Female CEO	0.021	0.143	0.000	0.000	0.000	108499

Table 3: Firm-level political risk and dividend payout

This table displays the estimates from OLS models explaining the dividend payout. The dependent variable is the dividend payout measured by dividend payout ratio, dividend yield, $\ln(1+\text{dividend})$, and dividend dummy in models 1 to 4, respectively. The variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Model:	(1)	(2)	(3)	(4)
Dependent variable	Dividend payout	Dividend Yield	$\ln(1 + \text{Dividend})$	Dividend Dummy
<i>Variable of interest</i>				
<i>Political Risk</i>	0.005*** (2.83)	0.004*** (2.62)	0.007*** (2.62)	0.002** (2.00)
<i>Control Variables</i>				
<i>Firm Size</i>	0.008 (1.25)	0.013* (1.65)	0.221*** (8.96)	0.039*** (5.80)
<i>Leverage</i>	-0.024 (1.51)	-0.017 (0.67)	-0.052 (0.89)	-0.063*** (3.28)
<i>MTB</i>	0.004* (1.94)	-0.010*** (4.25)	0.039*** (4.57)	0.008*** (3.15)
<i>Cash/Total Assets</i>	-0.023 (1.26)	-0.031 (1.26)	0.162** (1.98)	-0.015 (0.68)
<i>Cash Flow</i>	0.004*** (12.18)	-0.001** (2.42)	0.000 (0.48)	0.000 (0.93)
<i>Sales Growth</i>	-0.024** (2.37)	-0.005 (1.50)	-0.026*** (3.38)	-0.007*** (2.67)
<i>ROA</i>	-0.045** (2.23)	0.140*** (5.68)	0.255*** (4.80)	0.109*** (6.84)
<i>R&D Intensity</i>	0.150 (1.57)	0.113 (1.03)	1.106*** (3.31)	0.367*** (3.72)
<i>Capital Expenditure</i>	0.226*** (2.72)	0.14 (1.55)	0.917*** (4.56)	0.257*** (4.46)
<i>Tangibility</i>	-0.083* (1.69)	-0.052 (0.72)	-0.218 (1.62)	-0.038 (0.87)
<i>Whited-Wu Index</i>	-0.002 (0.39)	0.009 (1.26)	-0.079*** (4.01)	-0.020*** (3.23)
Time × Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.23	0.66	0.84	0.78
Observations	133,919	109,450	133,753	133,919

Table 5: Firm- level political risk and dividend payout – 2SLS IV analysis

This table presents estimates of regressing firm-level political risk on dividend payout using the 2SLS Instrumental Variable approach. Column 1 shows the first-stage results, where Partisan Conflict is used as an instrument to predict firm-level political risk. Partisan conflict is the degree of polarization between US politicians retrieved from from Federal Reserve Bank Philadelphia (as defined in the appendix). Column 2 shows the second stage results where dividend payout ratio is regressed on instrumented firm-level political risk. All control variables are included in both stages but coefficients are not reported for brevity. We include quarter-year, industry, and firm fixed effects in both stages. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. *** denote statistical significance at the 1% level.

Model:	(1)	(2)
	First-stage	Second-stage
Dependent variable:	Political Risk	Dividend Payout
<i>Variables of Interest</i>		
Partisan Conflict	3.080*** (4.79)	
Instrumented Political Risk		1.023*** (4.12)
Control Variables	Yes	Yes
Time × Industry FE	Yes	Yes
Firm FE	Yes	Yes
Joint test of excluded Instruments	F(12,4322)=16.83 Prob >F = (0.00)	
Test of under-identification	22.88*** <i>P-val</i> (0.00)	
Test of weak instruments	22.049	
Number of Observations	133,919	133,919

Table 6: Firm-level political risk and dividend payout- Placebo tests

This table displays the estimates from OLS models explaining the dividend payout but after randomly assigning firm-level political risk to sample firms through Placebo tests as explained in section 4.2. The dependent variable is the dividend payout measured by dividend payout ratio, dividend yield, $\ln(1+\text{dividend})$, and dividend dummy in models 1 to 4, respectively. The variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include all control variables in all models but do not report the coefficients for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses.

Model:	(1)	(2)	(3)	(4)
Dependent variable:	Dividend Payout	Dividend Yield	ln (1 + Dividend)	Dividend Dummy
<i>Variable of Interest</i>				
Political Risk	0.001 (0.69)	-0.001 (0.23)	0.000 (0.23)	-0.001 (0.18)
Control Variables	Yes	Yes	Yes	Yes
Time \times Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.232	0.659	0.838	0.775
Observations	133,919	109,432	133,919	133,919

Table 7: Firm-level political risk and dividend payout- controlling for EPU

This table displays the estimates from OLS models explaining the dividend payout using Horse Race regressions and after controlling for economic policy uncertainty (EPU). The dependent variable is the dividend payout and the variables of interest are *Political Risk* and *Economic Policy Uncertainty*. Political risk is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. Economic Policy Uncertainty is as defined by Baker et al. (2016) and as explained in section 4.3. All control variables are included in all models but we do not report coefficients for brevity. We include quarter-year, industry, and firm fixed effects in all models. The models are run on the full sample in models 1 and 2 and on subsample of Low EPU and subsample of High EPU in models 3 and 4 respectively. Low EPU and High EPU are classified based on EPU sample median. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. *** and ** denote statistical significance at the 1% and 5% levels, respectively.

Model:	(1)	(2)	(3)	(4)
Sample:	Full	Full	Low EPU	High EPU
<i>Variables of Interest</i>				
Political Risk		0.005*** (3.07)	0.003 (0.74)	0.008** (2.35)
Economic Policy Uncertainty	0.013** (2.35)	0.012** (2.21)	0.424*** (10.39)	-0.064*** (3.56)
Difference (High) - (Low)			***0.005	
Control Variables	Yes	Yes	Yes	Yes
Time × Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.228	0.228	0.829	0.842
Observations	133,919	133,919	66,710	66,559

Table 8: Firm-level political risk and dividend payout – by economic conditions

This table presents the estimates from OLS baseline models explaining dividend payout but applied on different subsamples representing different economic conditions. The sample is divided into poor vs. better economic conditions based on Chicago Fed National Activity Index (CFNAI) from Federal Reserve Bank of Chicago in columns 1 and 2, respectively and recessionary vs. non-recessionary based on 2008 financial crisis period starting from 1st Q2008 and lasting till the end of 2nd Q2009 in columns 3 and 4, respectively (details on definition of economic condition variable and recession dummy are in the appendix). The dependent variable is the dividend payout measured by dividend payout ratio and the variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include all control variables in all models but do not report the coefficients for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. *** and * denote statistical significance at the 1% and 10% levels, respectively.

Model:	Economic Conditions		Recession	
	(1)	(2)	(3)	(4)
Subsample based on:	Poor	Better	Yes	No
<i>Variables of Interest</i>				
Political Risk	0.007*** (2.93)	0.002 (0.85)	0.016*** (2.65)	0.004* (1.85)
Difference (High) - (Low)	***-0.005			
Difference (No) - (Yes)			***-0.012	
Control Variables	Yes	Yes	Yes	Yes
Time × Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.234	0.23	0.302	0.235
Observations	66,735	66,583	12,724	120,895

Table 9: Firm-level political risk and dividend payout - PSM technique

Panel A of this table shows the mean of firm size and leverage for the treated and control subsamples before and after using the propensity score matching (PSM) technique, the difference among the means of the two subsamples, and the T- test statistic resulting from significance of difference in means test. Panel B of this table displays the estimates from OLS baseline models explaining the dividend payout but after matching the sample firms using PSM. The dependent variable is the dividend payout measured by dividend payout ratio, dividend yield, $\ln(1+\text{dividend})$, and dividend dummy in models 1 to 4, respectively. The variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include all control variables but coefficients are not reported for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. *** and ** denote statistical significance at the 1% and 5% levels, respectively.

Panel A:

Comparison of Means Across Matched Sample								
	Before matching				after matching			
	Treated	Control	diff	t-stat	Treated	Control	diff	t-stat
Firm Size	6.861	6.902	-0.041	3.39	6.861	6.856	0.005	0.33
Leverage	0.421	0.431	-0.010	6.61	0.421	0.421	0.000	0.10

Panel B:

Dependent variable:	Dividend Payout	Dividend Yield	$\ln(1 + \text{Dividend})$	Dividend Dummy
Model:	(1)	(2)	(3)	(4)
<i>Variable of Interest</i>				
Political Risk	0.007*** (3.92)	0.003** (2.39)	0.006** (2.24)	0.002** (2.31)
Control Variables	Yes	Yes	Yes	Yes
Time \times Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.229	0.669	0.847	0.786
Observations	58,216	47,518	58,137	58,216

Table 10: Firm-level political risk and dividend payout – controlling for governance

This table displays estimates of OLS baseline regression explaining dividend payout but after adding additional controls for corporate governance as in model 1. We retrieve data on firms' governance from Boardex. All governance variables are as defined in the appendix. We use the year beginning value of the corporate governance measure for all quarters in a year, and resulting data available for this analysis on our full sample is 108,498 quarter year firm observations. In models 2 and 3 we split the sample into low vs high corporate governance based on median value of two corporate governance measures: board independence and outside directors. A firm which has both measures as below sample median in a given year will be classified as low in corporate governance and vice-versa. We include all control variables in all 3 models but coefficients are not reported for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Model:	(1)	(2)	(3)
Sample is:	Full	Corporate Governance	
<i>Variable of Interest</i>		Low	High
Political Risk	0.005** (2.33)	0.004* (1.72)	0.007* (1.73)
<i>Corporate Governance Controls</i>			
Board Size	-0.001 (0.47)	-0.005 (0.94)	0.004 (1.07)
CEO Duality	0.017 (1.44)	0.001 (0.03)	0.023 (1.42)
Board Independence	0.072** (2.16)	0.036 (0.62)	0.08 (0.78)
Outside Directors	-0.033 (0.71)	-0.035 (0.42)	-0.075 (0.42)
Board Foreignness	0.031 (1.33)	0.035 (0.94)	0.055 (1.25)
Board Gender Diversity	-0.090** (2.25)	-0.110* (1.66)	-0.141* (1.87)
Board Tenure	0.003** (2.15)	0.006*** (2.97)	0.002 (0.57)
Female CEO	0.095** (2.50)	0.083 (1.51)	0.131** (2.06)
Difference (High) - (Low)		***0.003	
Control Variables	Yes	Yes	Yes
Time × Industry FE	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Adjusted R ²	0.235	0.255	0.221
Observations	108,498	43,461	34,101

Table 11: Firm-level political risk and dividend payout – the role of analyst following

Table 11 presents estimates from OLS baseline regression models explaining dividend payout but applying them on subsamples classified according to number of analysts following the firms. We obtain data on analyst following from IBES. Data on firm analyst following is available for 122,397 firm quarter year observations. We classify firms into two subsamples low and high in models 1 and 2, respectively based on median value of number of analysts following the firm. The dependent variable is the dividend payout measured by dividend payout ratio and the variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include all control variables in all models but do not report the coefficients for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. *** Denotes statistically significant at the 1% level.

Model:	(1)	(2)
Subsample based on:	Analyst following	
	Low	High
<i>Variables of Interest</i>		
Political Risk	0.009*** (3.78)	0.001 (0.33)
Difference (High) - (Low)	***-0.008	
Control Variables	Yes	Yes
Time × Industry FE	Yes	Yes
Firm FE	Yes	Yes
Adjusted R ²	0.20	0.28
Observations	62,470	59,927

Table 12: Firm-level political risk and dividend payout – by firms’ growth opportunities

Table 12 presents estimates from OLS baseline regression models explaining dividend payout but applying them on subsamples classified according to firms’ growth opportunities using market to book ratio in columns 1 and 2 and sales growth rate in columns 3 and 4. We classify firms into two subsamples low and high based on median value of measure used. The dependent variable is the dividend payout measured by dividend payout ratio and the variable of interest is *Political Risk* which is firm-level political risk as defined by Hassan et al. (2019) and as explained in section 3.1. All variables are as defined in the appendix. We include all control variables in all models but do not report the coefficients for brevity. We include quarter-year, industry, and firm fixed effects in all models. Standard errors are adjusted for heteroskedasticity and are clustered at firm level. T-statistics are included in parentheses. ***, ** Denotes statistically significant at the 1% and 5% levels, respectively.

Model:	(1)	(2)	(3)	(4)
Subsample based on:	Market to Book		Sales Growth	
	Low	High	Low	High
<i>Variables of Interest</i>				
Political Risk	0.004 (1.39)	0.005** (2.00)	0.005* (1.86)	0.006*** (2.71)
Difference (High) - (Low)	0.001***		0.001***	
Control Variables	Yes	Yes	Yes	Yes
Time × Industry FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Adjusted R ²	0.205	0.297	0.234	0.259
Observations	55,309	55,341	66,716	66,704

Appendix: Variables definitions [§]

Dependent variables

Dividend Payout: Total dividends divided by net income before extraordinary item.

Dividend Yield: Dividend per share divided by share price.

Ln (1 + Dividend): Natural logarithm value of total dividend paid.

Dividend Dummy: Binary variable that takes the value 1 if dividend is paid at the end of a given quarter, and 0 otherwise.

Independent variables of interest

Political Risk: The proportion of quarterly earnings conference calls of individual firms devoted to political risks (Hassan et al., 2019).

Political Risk - Economics: The economic policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to economic policy related political risk (Hassan et al., 2019).

Political Risk - Environment: The environment specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to environment related political risk (Hassan et al., 2019).

Political Risk - Trade: The trade policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to trade policy related political risk (Hassan et al., 2019).

Political Risk - Institutions: The institutions and political process specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to the institutions and political process related political risk (Hassan et al., 2019).

Political Risk - Health: The health policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to health care policy related political risk (Hassan et al., 2019).

Political Risk - Security: The security and defense policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to security and defense policy related political risk (Hassan et al., 2019).

Political Risk - Tax: The tax policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to tax policy related political risk (Hassan et al., 2019).

Political Risk - Technology: The technology policy specific component of political risk that equals the proportion of quarterly earnings conference calls of individual firms devoted to technology and infrastructure policy related political risk (Hassan et al., 2019).

[§] Unless explicitly mentioned otherwise, quarterly data is obtained from CRSP/Compustat Merged database for financial and accounting related variables and stock market related variables. Yearly data is retrieved from Boardex for corporate governance related variables.

Economic Policy Uncertainty: Natural logarithm of the average of the monthly policy uncertainty index over the quarter. Authors' calculation based on Baker et al., (2016).

Firm financial variables

Firm Size: Natural logarithm of firm's total assets.

Leverage: Total debt divided by total assets.

MTB: Market value of a firm divided by its book value.

Cash/Total Assets: Total cash divided by its total assets.

Cash Flow: Sum of total income before extraordinary items and depreciation expense scaled by total assets.

Sales Growth: Quarterly sales growth rate.

ROA: Operating income before depreciation scaled by total assets.

R&D Intensity: Research and development expenditure scaled by total assets.

Capital Expenditure: Capital expenditures scaled by total assets.

Tangibility: Tangible assets (property, plant, and equipment) scaled by total assets.

Whited-Wu Index: Financial constraint index calculated following Whited and Wu (2006). Whited-Wu Index = $0.65 - 0.091 \times CF - 0.062 \times \text{Dividend Dummy} + 0.021 \times \text{TLTD} - 0.044 \times \ln(\text{TA}) + 0.102 \times \text{ISG} - 0.035\text{SG}$. CF is the cash flow ratio; Dividend Dummy is a dummy variable that equals 1 if the firm pays dividends, and 0 otherwise; TLTD is the ratio of long-term debt to total assets; $\ln(\text{TA})$ is the natural log of total assets; ISG is the three-digit industry sales growth; and SG is firm's sales growth.

Macroeconomic variables

Recession Dummy: Binary variable that takes value 1 if the US economy is undergoing a recession, and 0 otherwise with the recession period considered as the period of 2008 financial crisis starting from Q1-2008 and ending at Q2-2009.

Economic Conditions: Chicago Fed National Activity Index (CFNAI) that equals the weighted average of 85 monthly indicators of national economic activity. A positive index value characterizes better economic conditions and corresponds to growth above trend while a negative index value characterizes poor economic condition and corresponds to growth below trend (Source: Federal Reserve Bank of Chicago).

Partisan Conflict: A news articles-based index that captures the degree of political disagreement among U.S. politicians, branches of government, or political actors at the federal level (Source: Federal Reserve Bank Philadelphia).

Corporate governance variables

Board Size: Total number of directors on the board.

CEO Duality: Binary variable that takes value 1 if CEO also chairs the board, and 0 otherwise.

Board Independence: The proportion of non-executive directors on the board.

Outside Directors: Total number of outside directors on the board.

Board Foreignness: The proportion of foreign directors on the board.

Board Gender Diversity: The proportion of female directors on the board.

Board Tenure: The average tenure length of the directors.

Female CEO: Binary variable that takes value 1 if firm's CEO is female, and 0 otherwise.