

Does Corporate Diversification Retrench the Effects of Firm-Level Political Risk?

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Firm-level Political Risk

- Political decisions on regulation and govt. expenditure have a major impact on business environment.
- Outcomes of these decisions often hard to predict (Trump agenda, health care, immigration reforms).
- Effects of risk on behavior of firms might outweigh potential upside of well-meaning reforms.
- How do firms react to political risk is difficult to measure in the absence of a measurement of firm-level political risk.
- Important literature: Julio and Yook (2012), Waisman et al. (2015), Bradley et al. (2016), Kelly et al. (2016), Pan et al. (2019), Gad et al. (2019).

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Evidence of Firm-level political Risk

- President Trump's Twitter attacks on Amazon indicting the firm for exploiting U.S. Post Office, avoiding taxes, and using the Washington Post as a covert lobbying tactic.
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Firm-level political Risk Measure

- Hassan et al. (2019) develop a novel, firm-level, measure of political risk based on textual analysis of conference call transcripts.
- Their measure quantifies role of aggregate vs. firm-level political risk.
- An overwhelming portion (i.e., 90%) of the variation in their measure of political risk occurs at the firm level rather than at the aggregate or sector level.
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Objective of the Study

- The purpose of our paper is to examine the role that the organizational form might play in combating the firm-level risk endangered by PU.
- Specifically, we ask the following questions not addressed in the literature before;
 - Whether a diversified firm is better able to control the firm-level impact of PU than a focused firm?
 - If so, what are potential mechanisms through which diversified firms achieved this feat?
 - Does internal capital market help combatting PU?
 - Does policy uncertainty exacerbate the impact of PU?

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Review of Results

We begin our analysis with the following baseline regression model;

Baseline Model: $y_{i,t} = \beta_0 + \beta_1 Prisk_{i,t} + \beta_2 Diversified_{i,t} + \beta_3 Prisk_{i,t} \times Diversified_{i,t} + \gamma X_{it} + \delta_t + \delta_i + \delta_t \times \delta_i + \epsilon_{it}$

- We identify a firm is industrially diversified when it has one or more business segments operate in more than one industry segment identified by 4-digit SIC codes.
- To determine the levels of industrial diversification, we group the diversified firms into moderate and high diversification categories (Shin and Stulz, 1998).

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Table: Panel A – Diversification and Political Risk

Variable	CAPX	Mark-Up	ROA
PRISK	-0.011***	-0.021***	-0.013***
DIVERSIFIED	-0.039***	-0.023***	-0.019***
DIVERSIFIED * PRISK	0.010**	0.018***	0.007**
Controls	Yes	Yes	Yes

Table: Panel B – Moderate Diversification and Political Risk

Variable	CAPX	Mark-Up	ROA
PRISK	-0.011***	-0.020***	-0.013***
DIVERSIFIED	-0.037***	-0.021***	-0.018***
DIVERSIFIED * PRISK	0.006	0.019***	0.008**
Controls	Yes	Yes	Yes

Table: Panel C – High Diversification and Political Risk

Variable	CAPX	Mark-Up	ROA
PRISK	-0.011***	-0.018***	-0.012***
DIVERSIFIED	-0.054***	-0.081***	-0.062***
DIVERSIFIED * PRISK	0.036**	0.009	-0.003
Controls	Yes	Yes	Yes

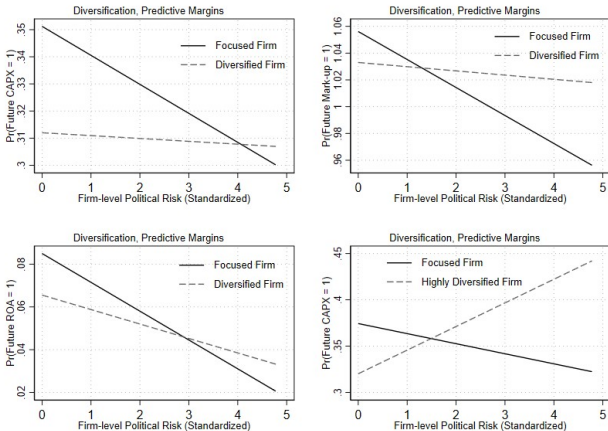


Figure: Marginal Effects of interaction between diversification and political risk

Falsification Tests

We conduct two falsification tests by controlling for;

- firm-level non-political risk and overall risk.
- the effects of economic policy uncertainty (EPU).

If the adverse impacts of PU on investments and profitability are mainly driven by the overall risks or economic policy uncertainty, then controlling for these measures should significantly weaken the estimated coefficient of PU.

Our results indicate neither the overall risk nor EPU is as significantly associated with the outcome variables as PU does.

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Falsification Tests

Variable: Risks	CAPX	Mark-Up	ROA	CAPX	Mark-Up	ROA
PRISK	-0.008***	-0.023***	-0.014***	-0.011***	-0.018***	-0.011***
NRISK	-0.009***	0.007***	0.001			
RISK				-0.001	-0.004*	-0.003*
DIVERSIFIED	-0.040***	-0.023***	-0.019***	-0.039***	-0.023***	-0.019***
DIVERSIFIED * PRISK	0.010***	0.017***	0.007***	0.001***	0.018***	0.007***
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Variable: EPU	CAPX	Mark-Up	ROA	CAPX	Mark-Up	ROA
PRISK	-0.009***	-0.013***	-0.011***	-0.012***	-0.019***	-0.013***
LN(1+EPU)	0.006	0.023***	0.007**	-0.005	0.032***	0.010**
DIVERSIFIED	-0.035***	-0.008*	-0.013***	-0.176***	-0.097**	-0.018
DIVERSIFIED * PRISK				0.008***	0.018***	0.006***
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Role of internal capital in managing political risk

$$\begin{aligned}
 \frac{y_{i,j}(t)}{TA_j(t-1)} &= a + b \frac{\text{Sales}_{i,j}(t) - \text{Sales}_{i,j}(t-1)}{\text{Sales}_{i,j}(t-1)} + c \frac{\text{Cashflow}_{i,j}(t)}{TA_j(t-1)} \\
 + d \frac{\text{Cashflow}_j(t) - \text{Cashflow}_{i,j}(t)}{TA_j(t-1)} &+ e q_{i,j}(t-1) + f \text{Prisk}_{i,j}(t-1) \\
 + g \frac{\text{Cashflow}_{i,j}(t)}{TA_j(t-1)} \times \text{Prisk}_{i,j}(t-1) &+ h \frac{\text{Cashflow}_j(t) - \text{Cashflow}_{i,j}(t)}{TA_j(t-1)} \\
 &\times \text{Prisk}_{i,j}(t-1) + \eta_{i,j} + \theta_j + \epsilon_{i,j}(t)
 \end{aligned}$$

where,

- $Y_{i,j}$ = Gross capital expenditure (capxs) or Mark-up of the i th segment of firm j during the year t .
- $\text{Prisk}_{i,j}(t-1)$ = Political risk of i^{th} segment of firm j during the year $t-1$.

Role of internal capital in managing political risk

Variable	Div	ModDiv	HighDiv
SC	0.016**	0.012*	0.001
OSC	0.0080	0.005	0.027***
SPR	-0.008***	-0.009***	-0.0003
SPR*SC	0.048***	0.057***	0.039*
SPR*OSC	0.038***	0.047***	-0.003

- Where the dependant variable is capx.
- The estimated coefficients of Segment PRISK(SPR) \times Segment Cashflow(SC) and SPR \times Other Segments Cashflow (OSC) suggest that when faced with an increased level of political risk, segments become more sensitive not only to their own-cashflow (SPR \times SC) but also to the cash-flow of other segments (SPR \times OSC).

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Managing political risk politically?

We test if the superior ability of a diversified firm to reduce the firm-level PU is possibly due to its ability to spend more on lobbying and PAC.

$$z_{i,t+1} = \beta_0 + \beta_1 Prisk_{i,t} + \beta_2 Diversified_{i,t} + \beta_3 Prisk_{i,t} \times Diversified_{i,t} + \gamma \Theta_{it} + \delta_t + \delta_i + \delta_t * \delta_i + \epsilon_{it}$$

- Our dependent variable $Z_{i,t+1}$ represents PAC and lobbying variables.
- The primary variable of interest, the interaction term between diversification and political risk.
- Results indicate that diversified firms do not spend more money on lobbying and political donation than focused firms to reduce political risk.

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Political connection, lobbying, firm-level political risk, and diversification

Div	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$
PRISK	0.175***	0.214***	0.128***	0.156***
DIVERSIFIED	0.290***	0.296***	0.188***	0.171
PRISK*DIVERSIFIED			0.14	0.172
Controls	YES	YES	YES	YES

Mod Div	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$
PRISK	0.161***	0.194***	0.130***	0.156***
DIVERSIFIED	0.242*	0.204	0.169	0.116
PRISK*DIVERSIFIED			0.101	0.122
Controls	YES	YES	YES	YES

High Div	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$	$\log(1+\$PAC),t+1$	$\log(1+\$Lobby),t+1$
PRISK	0.162***	0.209***	0.139***	0.178***
DIVERSIFIED	1.166***	1.574***	0.856***	1.164***
PRISK*DIVERSIFIED			0.408	0.538
Controls	YES	YES	YES	YES

Contributions

- We show that the diversification strategy plays a vital role in mitigating adverse effects stemming from the firm-level political risk
- We show that it is the internal capital market that is instrumental in combating investment inefficiency stemming from PU
- We show that diversified and focused firms do not behave any differently in lobbying expenses and political donations in subsequent periods: this bolsters our argument that it is the internal capital market and not the political strategy that is the primary driver in political risk management.

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Conclusions

- We find that diversified firms are better able than focused firms in mitigating idiosyncratic political risk.
- Diversified firms accomplish this feat via efficient use of the internal capital market that allows segments to alleviate the adversity of political uncertainty.
- Our main findings are robust to a battery of endogeneity tests.

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