

Geopolitical risk and M&A

Rao, Sandeep Keshava; Koirala, Santosh; Aldhawyan, Sulaiman; Corbet, Shaen

DOI:

[10.1016/j.econlet.2023.111062](https://doi.org/10.1016/j.econlet.2023.111062)

License:

Creative Commons: Attribution (CC BY)

Document Version

Publisher's PDF, also known as Version of record

Citation for published version (Harvard):

Rao, SK, Koirala, S, Aldhawyan, S & Corbet, S 2023, 'Geopolitical risk and M&A: The role of national governance institutions', *Economics Letters*, vol. 225, 111062. <https://doi.org/10.1016/j.econlet.2023.111062>

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.



Geopolitical risk and M&A: The role of national governance institutions

Sandeep Rao^{a,*}, Santosh Koirala^b, Sulaiman Aldhawyan^c, Shaen Corbet^{a,d}

^a DCU Business School, Dublin City University, Dublin, Ireland

^b Birmingham Business School, University of Birmingham, Birmingham, UK

^c Department of Finance, College of Administrative and Financial Sciences, Saudi Electronic University, Riyadh, Saudi Arabia

^d School of Accounting, Finance and Economics, University of Waikato, New Zealand

ARTICLE INFO

Article history:

Received 24 November 2022

Received in revised form 25 February 2023

Accepted 27 February 2023

Available online 28 February 2023

JEL classification:

G34

F51

F52

Keywords:

Geopolitical risk

Mergers and acquisitions

National institutions

Governance

ABSTRACT

Examining nineteen emerging economies from 1990 to 2018, we identify a positive effect of geopolitical risk on mergers and acquisition (M&A) deal frequency, driven mainly by an increase in domestic M&A. However, we find a negative effect of geopolitical risk on the M&A deal size, highlighting the deadweight cost created by the geopolitical risk. The quality of national governance moderates the deterring effect of geopolitical risk.

© 2023 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The ensuing tensions following the Ukraine-Russia crisis have highlighted the importance of geopolitical uncertainties upon global economic activities and security. The impact of similar events, such as the COVID-19 pandemic, political extremism, terrorism, or the Syrian refugee crisis, is apparent (Aldhawyan et al., 2020; Ahmed et al., 2022). The extant literature provides mixed evidence focusing on specific economies or sectors. While Shen et al. (2021) show a positive impact of GPR in Chinese energy sector mergers and acquisitions (M&As), Hao et al. (2020) show a negative consequence of GPR in US merger activities, and other studies focus on macroeconomic consequences of regional turmoil (Bouoiyour et al., 2019). Motivated by this, in this study, we look into the material impact of geopolitical risk (hereafter GPR) on M&As in emerging economies. Using data from nineteen emerging economies, we examine whether GPR explains variations in M&As and how differing quality of national institutions may moderate these effects.

GPR can destroy human and physical capital, as they are associated with extreme events, such as terrorist acts or fighting between a government entity and rebel groups (Caldara and Iacoviello, 2022). GPR being cumulative episodes of conflict, are

characterised by bursts of activities that are difficult to predict compared to other types of political risk. In situations of GPR, managers cannot predict the economic fluctuations associated with the event, which suggests that managing the business during GPR events has much greater levels of uncertainty (Kelly et al., 2016). In essence, GPR is a type of discontinuous political risk, which confers less information on the possibility of recurrence and future predictions. GPR is a key determinant of a firm's investment decisions (Caldara and Iacoviello, 2022). Further, Busse and Hefeker (2007) argue that government stability, internal and external conflicts, different natures of corruption, ethnic or racial tensions, determinants of order, political accountability, and bureaucracy all significantly affect FDI flows. We contribute to the literature by exploring business environmental risk derivations, specifically levels of risk directly resulting from geopolitical concerns.

Further, GPR can impact the firm's price volatility and its market valuation, as it is an important component of systematic risk. First, under an uncertain environment, the acquiring firms have a choice under the real options theory to either undertake an acquisition to unlock timely returns or defer the deals to an appropriate time if they feel that the deals under the current environment cannot generate value (McDonald and Siegel, 1986). Acquirers' cost of external financing increases in uncertain, risky environments, thus encouraging them to delay expansion strategies (Greenwald and Stiglitz, 1990). As the GPR causes uncertainty and a risky environment, deferment of acquisition deals

* Corresponding author.

E-mail address: sandeep.keshavarao@dcu.ie (S. Rao).

increases the value of delayed investments, especially as these are costly to reverse (Bernanke, 1983). To this end, evidence suggests that firms often defer their investments in uncertain environments (Bloom et al., 2007). These arguments support the deterrence hypothesis that under a higher GPR regime, the M&A activities slow down. Secondly, the prospect synergy effect theory suggests that under fierce industry competition, firms engage in higher (lower) risk under uncertain (deterministic) environments (Kahneman and Tversky, 2013). The growth option allows acquiring firms to engage in M&A deals to enhance their competitiveness and generate abnormal returns. Additionally, the expansion of M&A activities in light of uncertainty may be driven by the managerial empire-building motive (Duchin and Schmidt, 2013). Both differing mechanisms of the prospect synergy view and managerial empire-building arguments suggest higher M&As in uncertain environments. Thus, the alternative hypothesis is that a higher GPR regime increases M&A activities. Finally, we also hypothesize that the quality of national institutions moderates the impact of GPR on M&A. Marshall et al. (2022) provide empirical evidence that robust national governance mechanisms in the forms of quality of enabling institutions to moderate the effect of the market for corporate control on value-enhancing corporate risk-taking. The quality of National institutions is important as they enable to government to promulgate and enforce appropriate policies and regulations.

In this study, we look at a multi-country emerging market setup and document unsettling results of a positive effect of GPR on M&A deal frequency. Further dissection of the M&A activities reveals that domestic M&A deals largely drive the positive effect of GPR on total deal frequency, which offsets the deterrence effects of GPR in cross-border (CB) deals. However, these offsetting results are not seen in deal size as we find a negative effect of GPR on the M&A deal size, highlighting the deadweight cost created by GPR. In the enquiry of moderating effect of national institutions, the deterring effect of GPR is lessened by the quality of national governance. Our findings highlight the merit of national institutional quality in providing a partial hedge to the frictions caused by geopolitical risk.

2. Data and methodological structure

We employ a high-frequency media-based measure of the GPR index for 19 emerging economies (target countries) as computed by Caldara and Iacoviello (2022) for the sample period 1990–2018. We first use the country-industry and year-month fixed effects model to investigate the impact of GPR on the total M&A deal frequency and deal volume.

$$Y_{i,t} = \alpha + \beta_1 \cdot \text{GPR}_{c,t} + \phi_k C_{c,t} + \lambda_k X_{i,t-1} + \text{FE} + e_{i,t} \quad (1)$$

where $Y_{i,t}$ is the M&A outcome variable which is deal frequency or deal volume. $\text{GPR}_{c,t}$ is a continuous variable that captures country c 's geopolitical risk in a given month t . The dependent variables are deal frequency and deal volume aggregated at the target country-industry level each month based on 2-digit SIC. $C_{c,t}$ represents the vector of country-level control variables that include Country Size, Economic growth, FDI inflow, FDI-outflow, Trade, Unemployment and Inflation; $X_{i,t-1}$ is a vector of Industry controls that include industry median of Firm Size, Leverage, Cash-holding, Average sales growth and ROA. The standard errors are double clustered at country-industry and year-month level.¹

¹ The variables are obtained from SDC platinum, Compustat or World bank databases (please see Online Appendix Table 1 for source and definitions). We present the sample distribution of the 242,778 M&A target countries' deals in Online Appendix Table 2 and the descriptive statistics of the variables in Online Appendix Table 3.

Table 1
The impact of GPR on the total M&A deal frequency and volume.

	Deals frequency		Deals volume	
	Model 1	Model 2	Model 3	Model 4
GPR	0.0366*** (0.00)	0.0376*** (0.00)	-0.2096*** (0.00)	-0.1437** (0.01)
Country size		0.6721*** (0.00)		1.1469*** (0.00)
GDP growth		-0.0095*** (0.00)		0.0072 (0.19)
FDI-inflow		-0.0035*** (0.00)		1.0116*** (0.00)
FDI-outflow		-0.0079*** (0.00)		0.4046 (0.39)
Trade		0.0039*** (0.00)		0.4615*** (0.00)
Unemployment		0.0234*** (0.00)		0.0656*** (0.00)
Inflation		0.0031 (0.16)		-0.0643*** (0.00)
Firm-size		0.0020 (0.34)		0.2242*** (0.00)
Leverage		-0.0004** (0.02)		0.0010** (0.02)
Cash-holding		0.0023*** (0.00)		0.3555** (0.01)
Average sales growth		0.0005*** (0.00)		-0.0000 (0.45)
ROA		0.0011** (0.02)		0.2683** (0.01)
Adj. R2	0.4610	0.5044	0.1322	0.1637
No. of Observations	60,128	60,128	40,362	40,362
Year-month FE	Yes	Yes	Yes	Yes
Country-industry FE	Yes	Yes	Yes	Yes

Note: The above table reports the results of the impact of GPR on the total M&A deal frequency and volume: we report p-values in parenthesis. *, **, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 1990–2018.

3. Results

As reported in Table 1, our empirical examination reveals an unsettling result of a positive association between the effect of GPR on M&A deals. In terms of economic magnitude, a one percent increase in the GPR index is associated with an increase in M&A deal frequency in a range of 3.67% to 3.76% per month. This contradicts the theoretical prediction of the deadweight cost posed by GPR to deter M&A frequency. However, consistent with the theoretical prediction of deterrence, the GPR negatively affects the deal volume (dollar size of the deal). Regarding economic magnitude, a 1% increase in the GPR index is associated with a decrease in deal size in a range of 14.37% to 20.96%.

To further dissect this seemingly contradicting view of the positive effect of GPR on M&A deal frequency, we divide the deals into domestic and CB and examine the effect of GPR on this subset of M&A activities. The results are presented in Table 2. For brevity, we only report the beta coefficient of GPR on M&A deals.

As reported in Panel A, we find that a 1% increase in the GPR index is associated with an increase in domestic deal frequency in the magnitude of 4.95% to 5.35% and a reduction of CB deal frequency by 2.50% to 2.76% per month. The result reveals that the deterrence of overall M&A deals due to GPR (Table 1) is offset by an increase in domestic deals. This highlights the attempt by bidders to compensate for the reduction in CB-deal frequency by increasing deal initiation in the domestic market. In the face of higher GPR, the domestic market provides a better familiarity advantage than the cross-border M&A, where they deal in an alien environment. However, as reported in Panel B of Table 2, no such offsetting phenomenon is observed in deal volume. This aligns with the argument that M&A pose a higher degree of investment

Table 2
The impact of GPR on the Domestic and Cross border (CB) M&A deal frequency and volume.

Panel A	Domestic deal-frequency		CB deal-frequency		CB deal-ratio
	Model 1	Model 2	Model 3	Model 4	
GPR	0.0535*** (0.00)	0.0495*** (0.00)	-0.0250*** (0.00)	-0.0276*** (0.00)	-0.0158*** (0.00)
Country level controls	No	Yes	No	Yes	Yes
Industry median controls	No	Yes	No	Yes	Yes
Adj. R2	0.1607	0.1835	0.1020	0.1085	0.0565
No. of observations	59,892	59,892	59,984	59,984	59,748
Year-month FE	Yes	Yes	Yes	Yes	Yes
Country-industry FE	Yes	Yes	Yes	Yes	Yes
Panel B	Domestic deal-volume		CB deals-volume		CB volume-ratio
	Model 1	Model 2	Model 3	Model 4	
GPR	-0.0968* (0.09)	-0.1170** (0.05)	-0.5283*** (0.00)	-0.5001*** (0.00)	-0.0315*** (0.00)
Country level controls	No	Yes	No	Yes	Yes
Industry median controls	No	Yes	No	Yes	Yes
Adj. R2	0.1436	0.1566	0.1381	0.1444	0.0404
No. of observations	40,337	40,337	31,121	31,121	48,674
Year-month FE	Yes	Yes	Yes	Yes	Yes
Country-industry FE	Yes	Yes	Yes	Yes	Yes

Note: The above table reports the results of the impact of GPR on the Domestic and Cross border (CB) M&A deal frequency and volume. We report p-values in parentheses. *, **, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 1990–2018.

Table 3
Investigating the moderation of National Governance on the effect of GPR on M&A deal frequency.

	Model 1	Model 2	Model 3	Model 4
GPR x RQ	0.0319** (0.02)			
GPR × RL		0.0386*** (0.00)		
GPR × CC			0.0289** (0.03)	
GPR × PC				0.0140*** (0.01)
GPR	-0.0319*** (0.00)	-0.0283*** (0.00)	-0.0210** (0.03)	-0.0251*** (0.01)
Control Variables	Yes	Yes	Yes	Yes
Adj. R2	0.1074	0.1073	0.1077	0.1074
No. of observations	53,208	53,208	53,208	53,208
Year-month FE	Yes	Yes	Yes	Yes
Country-industry FE	Yes	Yes	Yes	Yes

Note: The above table reports the moderation of National Governance on the effect of GPR on M&A deal frequency. We report p-values in parentheses. *, **, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 1990–2018.

irreversibility, thereby creating deadweight transaction cost to deter M&A deal size.

Further, following Marshall et al. (2022), we test the impact of the quality of national governance institutions on the effect of GPR on M&A using the following regression specification:

$$Y_t = \alpha + \beta_1 \cdot \text{GPR}_{c,t} + \beta_2 [\text{GPR}_{c,t} \times \text{NG}_{c,t}] + \phi_k C_{c,t} + \lambda_k X_{i,t-1} + \text{FE} + e_{i,t} \quad (2)$$

where $\text{NG}_{c,t}$ is the national governance measures capturing regulatory quality [RQ], rule of law [RL], control of corruption [CC] and combined governance [PC] of country c in time t . All other variables are the same as in Eq. (1) As reported in Table 3, our examination of moderation by national governance reveals the deterrence effect of M&A deals is assuaged by the quality of institutions based on the RQ (model 1), RL (model 2), CC (model 3) and first principal component (PC) of RQ, RL and CC (model 4). In summary, our results indicate that better quality of institution lowers the deterrence effect of GPR on M&A.

4. Concluding comments

M&A is an important growth driver. In the face of geopolitical risk, there is uncertainty concerning the M&A strategies adopted by firms. Specifically, we contribute to the burgeoning literature on geopolitical uncertainty and corporate risk-taking M&A strategies. To this end, we provide evidence that while the M&A activities in terms of deal numbers increase significantly, the deal's overall value shrinks. We further provide new insights on the impact of GPR on domestic Vs CB M&A deals. Developing upon a number of avenues of research, we provide novel evidence on how the quality of national institutions in emerging economies can moderate the effects of GPR on M&A activities. Our findings suggest robust enabling institutions soften the negative effects of geopolitical tensions and help instil greater confidence among firms to undertake M&A strategies. Finally, extant literature provides strong evidence that emerging markets suffer significant falls in private consumption and investments and experience

greater capital outflows in times of exogenous uncertainty than developed economies. In particular, [Caldara and Iacoviello \(2022\)](#) provide evidence that geopolitical risk exacerbates the decline in real economic activities and stock returns and increases the capital outflows from emerging economies. Further, [Cheng and Chiu \(2018\)](#) provide empirical estimates of GPR's impacts on the business cycle contraction in emerging countries. Our paper contributes to this strand of literature on uncertainty and emerging markets by analysing how GPR impacts emerging market M&A activities.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.econlet.2023.111062>.

References

- Ahmed, S., Hasan, M.M., Kamal, M.R., 2022. Russia–Ukraine crisis: The effects on the European stock market. *Eur. Financial Manag.*
- Aldhawayn, S., Paudyal, K., Rao, S., Thapa, C., 2020. Immigration fear induced populism and cross-border acquisitions. Available At SSRN 3635023.
- Bernanke, B.S., 1983. Irreversibility, uncertainty, and cyclical investment. *Q. J. Econ.* 98 (1), 85–106.
- Bloom, N., Bond, S., Van Reenen, J., 2007. Uncertainty and investment dynamics. *Rev. Econom. Stud.* 74 (2), 391–415.
- Bouoiyour, J., Selmi, R., Hammoudeh, S., Wohar, M.E., 2019. What are the categories of geopolitical risks that could drive oil prices higher? Acts or threats? *Energy Econ.* 84, 104523.
- Busse, M., Hefeker, C., 2007. Political risk, institutions and foreign direct investment. *Eur. J. Political Econ.* 23 (2), 397–415.
- Caldara, D., Iacoviello, M., 2022. Measuring geopolitical risk. *Amer. Econ. Rev.* 112 (4), 1194–1225.
- Cheng, C.H.J., Chiu, C.-W.J., 2018. How important are global geopolitical risks to emerging countries? *Int. Econ.* 156, 305–325.
- Duchin, R., Schmidt, B., 2013. Riding the merger wave: Uncertainty, reduced monitoring, and bad acquisitions. *J. Financ. Econ.* 107 (1), 69–88.
- Greenwald, B.C., Stiglitz, J.E., 1990. Macroeconomic models with equity and credit rationing. In: *Asymmetric Information, Corporate Finance, and Investment*. University of Chicago Press, pp. 15–42.
- Hao, Z., Prapan, A.A., Gavriilidis, K., Petmezas, D., Vagenas-Nanos, E., 2020. Does geopolitical risk affect acquisitions? Available At SSRN 3475537.
- Kahneman, D., Tversky, A., 2013. Prospect theory: An analysis of decision under risk. In: *Handbook of the Fundamentals of Financial Decision Making: Part I*. World Scientific, pp. 99–127.
- Kelly, B., Pástor, L., Veronesi, P., 2016. The price of political uncertainty: Theory and evidence from the option market. *J. Finance* 71 (5), 2417–2480.
- Marshall, A., Rao, S., Koirala, S., Farag, H., 2022. The market for corporate control and risk-taking: Evidence from global M&A laws. *Br. J. Manag.*
- McDonald, R., Siegel, D., 1986. The value of waiting to invest. *Q. J. Econ.* 101 (4), 707–727.
- Shen, H., Liang, Y., Li, H., Liu, J., Lu, G., 2021. Does geopolitical risk promote mergers and acquisitions of listed companies in energy and electric power industries. *Energy Econ.* 95, 105115.