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Exploring the Heterogenous Effect of Political Risk on Corporate Investment in Emerging Markets¹

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Abstract

Emerging markets are increasingly important in the global economy but remain vulnerable to political shocks and instability. This study examines how political risk affects corporate investment in emerging markets, accounting for both country- and firm-level heterogeneity. The dataset covers firms listed in 21 emerging markets from 2001 to 2021. The analysis uses a two-way fixed effects panel regression model, complemented by subsample analyses to identify heterogeneous effects. The findings indicate that the effects of political risk vary across subsamples characterized by high and low political risk. Firm-level characteristics such as industry affiliation, cash holdings, asset tangibility, and financial flexibility contribute to these heterogeneous effects. Capital-intensive firms are more exposed to political risk; high asset tangibility amplifies negative effects, while greater cash holdings mitigate them. The study also presents notable findings on key variables in investment theory based on countries' political risk levels. For example, the Tobin's Q ratio, which reflects growth opportunities, has a higher coefficient in low-risk countries. Cash flow sensitivity is lower in these countries, while financial leverage is statistically significant only in high-risk countries. Overall, the study underscores the importance of a stable political environment in emerging markets and recommends that firms carefully manage financial policies, particularly cash holdings, investment irreversibility, and capital budgeting decisions to mitigate the adverse effects of political risk.

Keywords: corporate investments, firm investments, political risk, country risk, emerging markets, developing economies

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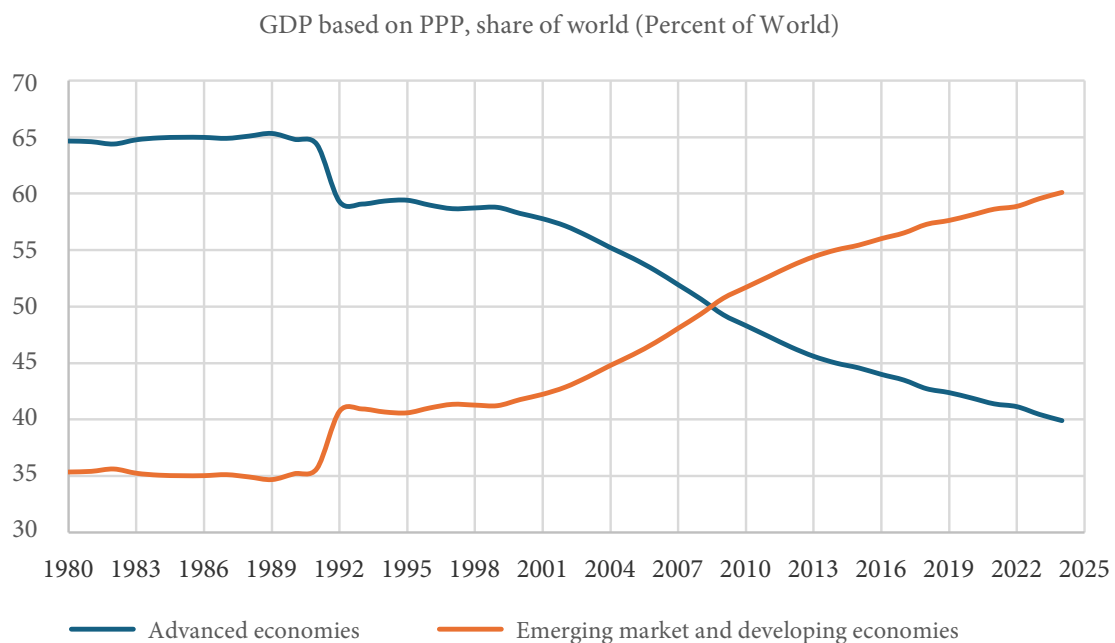
Introduction

Capital expenditures on fixed assets refer to corporate investment in the corporate finance literature. The determinants of the level of corporate investment can be classified into two main groups: firm-level and macro-level factors. Firm-level factors, such as financial constraints, cash flow sensitivity, debt level, growth opportunities, and firm size, are largely interrelated and have been extensively examined in empirical studies [1–5]. Macro-level factors arise from economic, political, and social conditions, and their effects are typically observed at the national or global level [6]. These factors – such as economic policy uncertainty, economic conditions, geopolitical risk, and many others – shape the business environment and affect the level of corporate investment [7–9]. Policy and economics are closely related. In their seminal work *“Why Nations Fail: The Origins of Power, Prosperity, and Poverty”*, Acemoglu and Robinson explain cross-national developmental differences through the lens of political institutions and structures [10]. Beyond their long-term impact and role as a key determinant of national development, political factors are also crucial for the business environment. There is a growing interest in the business finance literature regarding political risk and its impact on various financial management decisions, including cash holdings, capital structure, cost of capital, dividend policy, and corporate investment [11–18]. Political risk studies emerged following the financial liber-

alization movement in the 1970s. Financial liberalization and globalization presented new market opportunities to multinational corporations [6]. Early studies assessed political risk within this framework, primarily viewing it as the negative impact of government interventions on foreign direct investment (FDI) [19–21]. The literature has extensively examined the relationship between political risk and foreign direct investment [22–24]. However, this approach restricts the scope of political risk and neglects other sources of political risk and their effects on domestic investments.

The conceptual assessment of political risk poses challenges because there is no consensus on its definition [6; 25]. Therefore, considering political risk definitions from a holistic perspective allows for a more comprehensive understanding of the concept, moving beyond a narrow focus on government actions and foreign direct investment. According to Howell and Chaddick, political risk refers to the likelihood that political decisions, events, or conditions in a country may adversely affect the business environment [26]. Bremmer and Keat define political risk as any political event that directly or indirectly affects the value of an economic asset. They cite examples of political risk such as wars, economic sanctions, terrorist acts, civil unrest, coup attempts, civil disobedience, corruption, and discriminatory taxation policies [27].

Figure 1. GDP Based on Purchasing Power Parity: Emerging vs. Developed Economies



Source: Compiled by authors from IMF DataMapper (<https://www.imf.org/external/datamapper/profile/OEMDC>).

The study focuses on the relationship between political risk and corporate investment in 21 emerging markets. The role of emerging economies in the global economy has been increasing steadily over time. According to Figure 1, which compares the GDP (gross domestic product) of emerging and developed economies, the share of emerging econo-

mies was approximately 35% in 1980. It began to increase rapidly after the 1990s and surpassed that of developed economies after 2008. Despite their significant economic role, emerging markets are often characterized by high levels of risk and are vulnerable to political shocks. For instance, China, one of the largest emerging markets, has

experienced ongoing trade tensions with the United States due to tariffs, while India faces geopolitical disputes with its neighbor, Pakistan. Although some emerging markets are exposed to high political risk, others, including Poland, South Korea, and Chile, maintain relatively stable political environments. While the main purpose of this study is to explain the relationship between political risk and corporate investment, it also takes into account this heterogeneity.

The research sample consists of firms listed on emerging market stock exchanges, covering the period from 2001 to 2021. We employed a two-way fixed effects estimator in the panel regression analysis. To examine the heterogeneous impact of political risk, the research sample was classified based on the political risk ratings of their respective countries. Moreover, we conducted subgroup analyses based on firm characteristics such as cash ratio, asset tangibility, and financial flexibility to further explore the sources of firm-level heterogeneities. To the best of our knowledge, no prior study has examined the impact of political risk on corporate investment in emerging markets using a large research sample and considering their heterogeneous profiles.

The rest of the paper is organized as follows: Section Two presents the theoretical framework and hypotheses; Section Three describes the research method; Section Four includes the findings and discussion; and Section Five concludes the study.

Literature and Hypotheses

The relationship between political risk and corporate investment can be addressed with capital budgeting techniques, particularly net present value (NPV), which is the most preferred method in practice. Expected cash flows and cost of capital are two determinants of the net present value of an investment project [6]. Political issues can lead to negative deviations in expected cash flows and increase the cost of capital. These components can be adapted to mirror political risk [25; 28]. In addition to the NPV perspective, real options theory emphasizes investment irreversibility and sunk costs when facing uncertainties. Within the context of the real options theory, firms tend to adopt a “wait and see” approach, postponing new investments until uncertainties diminish and business conditions become more favorable.

Shareholders and creditors increase risk premiums in response to political risk. Empirical findings support the theoretical expectation regarding the relationship between political risk and the cost of capital. For instance, it has been documented that political risk increases the cost of capital in MENA countries [29]. Another study focuses on developed and emerging markets and shows that terrorism increases the cost of debt, with the effect being more pronounced in emerging markets [30]. Similarly, other studies report consistent findings regarding the cost of equity in relation to firm-level political risk and geopolitical risk [17; 31].

These findings indicate that political risk affects the cost of capital. In light of this, firms may delay, cancel, or reduce their investments due to the increased cost of capital. For example, it has been found that firms lower their investment levels during national elections due to political uncertainty [32]. Various forms of political risk such as geopolitical tensions, corruption, and terrorism have also been shown to negatively influence corporate investment [5; 33–35]. Likewise, recent studies highlight that firm-level political risk seriously influences corporate investment decisions [36; 37]. Drawing upon the theoretical framework, the relevant empirical literature, and the distinctive economic roles and political structures of emerging markets, we propose the following hypothesis:

Hypothesis 1: Political risk adversely affects corporate investments in emerging markets.

To explain country-level and firm-level heterogeneities, we developed sub-hypotheses. First, we addressed country differences based on their political risk levels. The main hypothesis employs a holistic approach. However, the political risk profiles of emerging markets differ substantially. While some emerging markets are more exposed to political risk, others aren't [6]. This difference affects the investment evaluation process. Firms operating in countries with high political risk take it into account in investment decisions, and political risk lowers their investment levels. An important example is the Russia–Ukraine war, which also illustrates the heterogeneous effects of political risk. According to the findings of Caldara et al. [38], based on firms from 50 countries, companies that explicitly discussed the war in their reports reduced their investment. This indicates the importance of country-level heterogeneities in shaping firm investment policies. Another example concerns the China-USA trade war. China, one of the major emerging markets, has long experienced tariff tensions with the United States. These trade wars decrease capital expenditures, and firms affected by tariff sanctions tend to reduce corporate investments [39]. Accordingly, we proposed the following hypotheses:

Hypothesis 1a: Political risk negatively affects corporate investment in emerging markets with high levels of political risk.

Hypothesis 1b: Political risk negatively affects corporate investment in emerging markets with low levels of political risk.

Cohen and Yagil explain the differences across industries in terms of their unique financial needs and operating conditions, as well as the imitation effect, which refers to firms mimicking the financial behavior of other firms operating in the same industry [40]. Sectoral dynamics alter the relationship between political risk and corporate investment. Factors such as sectoral growth trends, sectoral responses to macroeconomic conditions, capital or labor intensity, and government incentives may either mitigate or amplify the effect of political risk on corporate investment. The literature provides evidence of sector-specific studies examining the impact of political risk and its different forms on corporate investment. For example, it has been document-

ed that firm-level political risk adversely affects corporate investment in the hospitality and tourism sector [41]. Similarly, geopolitical risk has been reported to negatively influence corporate investment in the Australian metals and mining sector [42]. Based on these findings, we developed the following hypothesis:

Hypothesis 1c: The relationship between political risk and corporate investment varies across sectors.

Firms can maintain their investment activities despite operating in politically risky environments due to their specific characteristics. On the other hand, they are also more vulnerable to political risk because of these characteristics [6]. We addressed firm-level heterogeneities with respect to financial flexibility, cash holdings, and tangibility. These factors respectively represent the firm's ability to access external funds, a buffer against uncertainty, and the degree of investment irreversibility.

Financial flexibility refers to a firm's ability to preserve debt capacity without experiencing financial distress. It enables firms to sustain their investment activities during periods of crisis. Financially flexible firms rely less on internal funds for investment and perform better than financially inflexible firms [43]. In the context of emerging markets, financial flexibility offers several advantages: it enhances firms' investment capacity, reduces cash-flow sensitivities, increases firm value, and mitigates the negative effects of unexpected shocks [44]. Similarly, Chortareas and Noikokyris [45] highlight its positive impact on corporate investment in conditions of uncertainty. Considering these findings, we argue that financial flexibility can attenuate the adverse effects of political risk on corporate investment. When political risk rises and access to external finance becomes more difficult, financially flexible firms are able to rely on their unused debt capacity to continue investing [6]. Therefore, we develop the following hypothesis to compare the effect of political risk on financially flexible and inflexible firms.

Hypothesis 1d: Financial flexibility moderates the relationship between political risk and corporate investment in emerging markets.

Cash policy is closely related to investment policy, as cash assets are one of the main sources of internal funding for corporate investments [46]. The precautionary motive is one of the primary reasons behind cash holdings. Firms hold cash to maintain operations in the presence of uncertainty [47]. In addition, firms tend to hold more cash in response to political risk [13]. When political risk is high, the cost of capital also increases [29], making it more difficult to access external finance. In this context, cash holdings

serve as a source of liquidity, helping to mitigate financial constraints and smooth the effects of cash flow volatility. According to Le and Tran [35], cash holdings mitigate the adverse impact of geopolitical risk on corporate investment. To examine the moderating effect of cash holdings on the relationship between political risk and corporate investment, we develop the following hypothesis:

Hypothesis 1e: Cash holdings moderate the relationship between political risk and corporate investment in emerging markets.

Tangibility is defined as the ratio of fixed assets to total assets. A higher level of tangibility implies greater investment irreversibility, and vice versa. Firms with higher tangibility tend to delay new investments under uncertainty due to the costly nature of exit options [48]. Capital expenditures are typically considered sunk costs and are therefore irreversible. Investment irreversibility increases firms' exposure to uncertainty not only in regard to future costs and prices but also in terms of the optimal timing of investments and the unpredictability of their ultimate cost. Firms may postpone investment decisions when these factors are unclear – particularly when the capital involved is highly specific and difficult to recover [49]. Empirical studies indicate that firms delay and reduce their investments under uncertainty, and this effect is more pronounced for firms with higher investment irreversibility [50; 51]. We argue that firms with higher tangibility may respond to political risk by delaying new investments due to the greater irreversibility of their capital. Based on this reasoning, we propose the following hypothesis:

Hypothesis 1f: Tangibility moderates the relationship between political risk and corporate investment in emerging markets.

Research Method

The research sample consists of firms listed on stock exchanges in emerging markets. Emerging markets are determined based on the MSCI classification. Although Colombia, Hungary, and Czech Republic are classified as emerging markets by MSCI, they are excluded from the study due to insufficient firm-level data. Appendix 1 provides a detailed overview of the final sample, displaying the number of firms by country. The study covers the period from 2001 to 2021. To mitigate the influence of outliers, firm-level variables are winsorized at the 1st and 99th percentiles. To test the stationarity of the variables, we employed the Fisher ADF and Fisher PP unit root tests, and the results are reported in Appendix 2.

$$INV_{i,t+1} = \beta_0 + \beta_1 PR_{j,t} + \beta_2 TQ_{i,(t)} + \beta_3 CF_{i,t+1} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 NWC_{i,t} + \beta_7 SG_{i,t} + \beta_8 DDIV_{i,t} + \beta_9 GDP_{j,t} + \beta_{10} Firm_{i,t} + \beta_{11} Year_{i,t} + \varepsilon_{i,t} \quad (1)$$

To test the relationship between political risk and corporate investment, we employed the model illustrated in Equation 1. Following prior literature, we specified the model using lagged values of all independent and control variables, except for CF [3; 5; 32].

Table 1. Variables

Variables	Measurement
<i>INV</i>	Corporate Investment = CAPEX / Total Assets
<i>TQ</i>	Tobin's Q = (Total Assets – Book Value of Equity + Market Value) (<i>t</i>) / Total Assets (<i>t</i>)
<i>CF</i>	Cash Flow Ratio (<i>t</i>) = (EBITDA – Dividends + Depreciation) (<i>t</i>) / Total Assets (<i>t</i> –1)
<i>LEV</i>	Leverage (<i>t</i>) = Total Liabilities (<i>t</i>) / Total Assets (<i>t</i>)
<i>SIZE</i>	Firm Size (<i>t</i>) = Natural Logarithm of Total Assets
<i>NWC</i>	Net Working Capital Ratio = (Current Assets – Short-term Liabilities) (<i>t</i>) / Total Assets (<i>t</i>)
<i>SG</i>	Sales Growth (<i>t</i>) = [Sales (<i>t</i>) – Sales (<i>t</i> –1)] / Sales (<i>t</i> –1)
<i>DDIV</i>	Dividend Dummy: 1 if dividend is paid, 0 otherwise
<i>IND_LEV</i>	Industry-level average leverage values
<i>MTB</i>	Market-to-Book Ratio = Market Value / Book Value
<i>TANG</i>	Asset Tangibility = Net Fixed Assets / Total Assets
<i>GDP</i>	GDP growth rate
<i>PR</i>	ICRG Political Risk Ratings
<i>INF</i>	Consumer Price Index

All firm-level variables were obtained from the Refinitiv. Political risk ratings are taken from the ICRG. GDP growth rate and consumer price index data were obtained from the World Bank. Since GDP data for Taiwan is not provided by the World Bank, Taiwan's GDP growth rate was obtained from the DGBAS (Directorate General of Budget, Accounting and Statistics Taiwan).

Table 1 presents the details of the variables used in the study. The theoretical framework of the variables is explained below [6]:

INV is defined as the ratio of capital expenditures to total assets and serves as a measure of corporate investment. Capital expenditures refer to the acquisition of fixed assets intended to maintain and expand a firm's operations. The funds allocated to capital expenditures are generally used for new projects.

TQ refers to Tobin's Q ratio and serves as a proxy for growth opportunities, being one of the main determinants of corporate investment. According to Q theory, firms should invest until the marginal cost of investment equals the marginal increase in the market value of the firm. Eberly et al. investigate various investment models and find that Q theory-based models provide the best statistical explanatory power [52]. Q theory states that corporate investment is a function of firms' market value and the replacement cost ratio. When the q ratio is above 1, firms are more likely to invest; conversely, when the q ratio is below 1, firms tend to avoid new investment activities [53].

CF stands for cash flow and allows the firm to invest during periods of financial constraint. With higher cash flows,

firms can invest using internal financing and do not need to rely on external debt. According to Q theory, explaining corporate investment through the Q ratio alone is considered sufficient. However, the literature argues that the Q ratio is insufficient to fully account for investment behavior, and that additional factors are required [54]. Based on this argument, we employ cash flow (*CF*) to capture the role of internal funds in corporate investment.

LEV denotes financial leverage. According to the pecking order theory, the relationship between financial leverage and corporate investment is expected to be negative [46]. The pecking order theory suggests that external financing should be considered the last resort for funding investments. Empirical findings provide evidence in support of this theory [55; 56]. On the other hand, this argument may not hold when the cost of external funds is relatively low. A lower cost of debt reduces the cost of capital, thereby encouraging firms to undertake more investment.

SIZE represents firm size. Smaller firms are generally driven by stronger growth motives compared to larger firms. On the other hand, larger firms face fewer financial constraints and can access external funds more easily. Empirical studies provide no clear consensus on the relationship between firm size and corporate investment [9; 57].

Table 2. ICRG Political Risk Components

Bekaert et al. [67]	ICRG	Ratings
Quality of institutions	Law and order	6
	Bureaucratic quality	4
	Corruption	6
Conflict	Internal conflict	12
	External conflict	12
	Religious tensions	6
	Ethnic tensions	6
Democratic tendencies	Military in politics	6
	Democratic accountability	6
Government actions	Government stability	12
	Socioeconomic conditions	12
	Investment profile	12
Political risk		100

Source: Adopting from Bekaert et al. [67].

NWC refers to net working capital and serves as a proxy for the firm's ability to meet short-term liabilities. A higher level of net working capital indicates stronger liquidity and reduces the need for external financing. The contribution of NWC to corporate investment is analogous to the positive role of cash holdings. The literature highlights the positive effect of cash holdings on corporate investment [58–60]. Moreover, this relationship becomes more pronounced under conditions of heightened uncertainty [32]. SG, sales growth, is employed as a proxy for firm efficiency. Increased revenues reflect the demand for a company's products and services. Firms facing sustained demand are more likely to undertake additional investment, which is consistent with the accelerator theory. Moreover, sales growth serves as an indicator of growth opportunities [57]. Accordingly, it is expected that sales growth positively affects corporate investment.

DDIV, a dummy variable for dividend payments, serves as an indicator of financial constraints [3; 61]. Firms that have difficulty paying dividends may be subject to financial

constraints even during periods of low financing costs [3]. A finding by Fazzari et al. [62] shows that firms with low dividend payout ratios are more dependent on cash flow for their investment activities. This situation indicates that firms that pay low dividends are more exposed to financial constraints [61].

GDP, the annual growth rate of gross domestic product, is included to control for the effect of country-level conditions. PR represents the political risk rating of ICRG and serves as the main independent variable in this study. There is no consensus on the dimensions of political risk. Howell [63] discussed various political risk assessment models and their deficiencies. The ICRG political risk rating is considered the most comprehensive among these models. Moreover, it is frequently preferred by scholars in empirical research as a proxy for political risk [29; 64–66]. Therefore, the ICRG political risk rating was adopted in this study.

The dimensions of the ICRG political risk rating are illustrated in Table 2. Additionally, we refer to the classification approach proposed by Bekaert et al. [67], which enables the

Table 3. Descriptive Statistics of Political Risk

	Brazil	Chile	China	Egypt	Greece	India	Indonesia
Mean	34.31	23.70	37.07	42.00	26.84	39.02	42.70
S.D.	(2.15)	(2.91)	(4.83)	(4.74)	(4.16)	(2.45)	(3.59)
	South Korea	Kuwait	Malesia	Mexico	Peru	Philippines	Poland
Mean	22.76	28.58	27.69	32.40	36.18	36.97	22.91
S.D.	(1.31)	(4.35)	(2.37)	(4.98)	(1.78)	(2.18)	(1.82)
	Russia	Saudi Arabia	South Africa	Taiwan	Thailand	Turkiye	UAE
Mean	38.68	32.25	33.81	21.75	39.97	42.45	22.68
S.D.	(3.99)	(2.01)	(2.40)	(1.83)	(5.86)	(5.15)	(1.34)

S.D. is standard deviation. UAE is United Arab Emirates.

Source: Derived from the ICRG political risk ratings by the authors.

alignment of conceptually similar components within political risk indices. To examine the effect of political risk in a more detailed manner, the model presented in Equation 1 is re-estimated using the newly constructed components. According to the ICRG methodology, political risk ratings range from 0 to 100, where 0 indicates the highest level of political risk and 100 – the lowest. This coding may lead to confusion in regression analysis. To address this issue, researchers often reverse the scale by subtracting the ICRG score from 100 [29; 35]. We followed this approach; therefore, in our analysis, a score of 0 represents the lowest level of political risk, while a score of 100 indicates the highest.

Findings

Descriptive Statistics

Appendix 3 demonstrates the descriptive statistics for all variables. In this section, we limit our discussion to the political risk ratings. Table 3 presents the descriptive statistics of political risk ratings.

According to the mean PR values during the research period (2001–2021), the countries with the highest political risk are Indonesia (42.70), Egypt (42.01), and Türkiye (42.45). Among the BRICS countries (Brazil, Russia, India, China, and South Africa), which are considered key emerging markets, Russia (38.68), India (39.02), and China (37.07) exhibit relatively higher mean political risk levels, while South Africa (33.81) and Brazil (34.32) have lower values. Chile (23.70), Poland (22.91), South Korea (22.76), Taiwan (21.75), and the United Arab Emirates (22.68) display the lowest mean political risk values among the countries in the sample.

Correlation Analyses

Table 4 presents the correlation matrix. The correlations between INV and the independent variables are relatively low. Among the independent variables, CF shows the highest correlation with INV. The correlation between NWC and INV is -0.19. Although liquid assets are useful for short-term financing in corporate investment, their negative correlation with INV may indicate a trade-off between cash holding and investment decisions. The other variables do not exhibit a strong correlation with INV.

While the correlation between TQ and CF is positive (0.257), the correlation between LEV and TQ is negative (-0.116). There is a strong negative correlation between NWC and LEV (-0.591). Overall, the low intercorrelations among most explanatory variables support the reliability of the regression model and indicate the absence of multicollinearity.

Main Findings

Regression results based on the model specified in Equation 1 are reported in Table 5. As shown in Appendix 1, the research sample may introduce bias due to the overrepresentation of certain countries. Specifically, China, South Korea, Taiwan, and India comprise nearly 70% of the total sample. To mitigate this issue, and in line with previous studies, we employed the Weighted Least Squares (WLS) method, assigning weights based on the inverse of the number of firms per country [35; 68; 69].

Additionally, we categorized the sample into two groups based on the political risk levels of the countries: low-risk and high-risk. Countries with a mean political risk score below 30 are classified as low-risk countries, including

Table 4. Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) INV	1.000									
(2) TQ	0.070	1.000								
(3) CF	0.263	0.257	1.000							
(4) LEV	0.041	-0.116	-0.198	1.000						
(5) SIZE	0.018	-0.056	-0.065	0.261	1.000					
(6) NWC	-0.187	0.141	0.156	-0.591	-0.273	1.000				
(7) SG	0.087	0.077	0.259	0.062	0.001	-0.008	1.000			
(8) DDIV	0.050	0.008	0.149	-0.146	0.208	0.146	-0.064	1.000		
(9) GDP	0.085	0.098	0.015	0.041	0.032	-0.021	0.133	-0.026	1.000	
(10) PR	0.039	0.188	-0.014	0.060	0.125	-0.045	0.008	-0.029	0.145	1.000

Source: Authors' calculations.

Table 5. Political Risk and Corporate Investment

$INV_{i,t+1}$	I	II WLS	III Low PR	IV High PR
$TQ_{i,t}$	0.001*** (0.000)	0.001*** (0.000)	0.004*** (0.000)	0.001*** (0.000)
$CF_{i,(t+1)}$	0.077*** (0.003)	0.048*** (0.007)	0.068*** (0.005)	0.081*** (0.004)
$LEV_{i,t}$	-0.006** (0.002)	0.000 (0.004)	0.004 (0.004)	-0.012*** (0.003)
$SIZE_{i,t}$	-0.006*** (0.001)	-0.010*** (0.001)	-0.007*** (0.001)	-0.005*** (0.001)
$NWC_{i,t}$	0.028*** (0.002)	0.029*** (0.004)	0.033*** (0.003)	0.024*** (0.003)
$SG_{i,t}$	0.003*** (0.000)	0.003*** (0.001)	0.004*** (0.001)	0.003*** (0.000)
$D_DIV_{i,t}$	0.006*** (0.001)	0.004*** (0.001)	0.005*** (0.001)	0.007*** (0.001)
$GDP_{j,t}$	0.025*** (0.006)	0.063*** (0.014)	0.036*** (0.008)	0.076*** (0.013)
$PR_{j,t}$	-0.033*** (0.008)	-0.022* (0.013)	0.025 (0.017)	-0.023** (0.011)
Constant	0.165*** (0.011)	0.237*** (0.022)	0.156*** (0.019)	0.154*** (0.014)
Firm Effect	Yes	Yes	Yes	Yes
Time Effect	Yes	Yes	Yes	Yes
Adjusted R ²	0.090	0.081	0.080	0.099

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Authors' calculations.

Chile, Greece, South Korea, Kuwait, Malaysia, Poland, Taiwan, and the UAE. Conversely, countries with a mean political risk score above 30 are considered high-risk countries, including Brazil, China, Egypt, India, Indonesia, Mexico, Peru, the Philippines, Russia, Saudi Arabia, South Africa, Thailand, and Turkiye.

The findings presented in Table 5 are consistent with the theoretical framework. TQ refers to Tobin's Q ratio and serves as a proxy for growth opportunities. Firms with greater growth opportunities and higher market valuation tend to invest more. Furthermore, the relationship between TQ and investment (INV) differs between the low political risk (PR) and high political risk (PR) subsamples. The coefficient of TQ is higher in the high PR subsample compared to the low PR group. This suggests that political risk ampli-

fies the sensitivity of investment to growth opportunities in countries with high political risk [6].

Similarly, the relationship between CF and INV is also positive; however, cash flow sensitivity is higher for firms operating in countries with high political risk compared to those in low-risk countries. Firms operating in countries with elevated political risk tend to depend more on internal financing, as external funding becomes more costly or uncertain in such environments [6].

As shown in Column 1, LEV has a negative and statistically significant effect on corporate investment in the unadjusted sample. On the other hand, the relationship between LEV and INV is statistically insignificant in the findings based on the WLS method. Furthermore, this relationship differs across the high-risk and low-risk country samples.

LEV has a negative effect on corporate investment in politically high-risk countries. This can be addressed from two perspectives. First, external funds tend to be more costly in countries with higher political risk. Second, firms may prefer to avoid financing their investments through debt [6].

SIZE is negatively associated with investment across all model specifications. The role of firm size in corporate investment does not change with respect to political risk levels. On the other hand, the effect of firm size on corporate investment indicates that larger firms make fewer capital expenditures. The results suggest that smaller firms tend to invest more, driven by growth motivations [6].

SG has a positive impact on corporate investment, and this effect is more pronounced in the low-PR sample. The result supports the accelerator theory, as firms facing stronger demand are more likely to increase their investment [6].

The relationship between *NWC* and *INV* is positive, as expected. This indicates the importance of short-term liability and liquid asset management for corporate investment levels. Moreover, this finding is more evident in the low-PR sample. Firms operating in low-PR environments appear to rely less on *NWC* compared to those in high-PR environments [6].

The relationship between *PR* and *INV* is significantly negative in the analysis based on the unadjusted sample. However, the *PR-INV* relationship becomes statistically weaker under the *WLS* estimation. In addition, the nature of this relationship varies depending on the political risk level of the sample. Firms in countries with low political risk are not significantly affected by political risk, whereas firms in high-risk countries face a significant negative effect. These findings reflect the heterogeneity among emerging markets in terms of political risk exposure. The firm-level differences mentioned above support the presence of heterogeneity across countries. Notably, the *LEV-INV* relationship differs

significantly between the low- and high-risk country samples. Further differences are observed in the *CF-INV* and *NWC-INV* relationships. Cash flow sensitivity is higher in countries with high political risk, indicating that firms in these environments rely more heavily on internal financing. Conversely, firms in countries with low political risk appear to finance investment more through net working capital [6].

The main finding of the study confirms Hypothesis 1: Political risk negatively affects corporate investment in emerging markets. This finding is consistent with theoretical expectations and with empirical evidence from previous studies, most of which are based on relatively small samples or examine specific types of political risk [5; 33; 35–37; 42; 70–72].

Moreover, Hypothesis 1a, which states that political risk negatively affects corporate investment in emerging markets with high levels of political risk, is supported by the empirical results. Political risk has a significant impact on corporate investment in countries with high levels of political risk. Finally, Hypothesis "1" – "b", which posits that political risk negatively affects corporate investment in emerging markets with low levels of political risk, is not supported by the findings. The effect of political risk varies according to the level of political risk [6].

Political Risk Components and Corporate Investment

As demonstrated by the findings above, the impact of political risk varies according to the political risk level classification of the sample. To gain a deeper understanding of this relationship, we employed the main regression models for the individual components of political risk, based on the classification proposed by Bekaert et al. [67]. Table 6 presents the results on the relationship between these political risk components and corporate investment.

Table 6. Political Risk Components and Corporate Investment

<i>INV</i> _{i,t+1}	High PR Sample			
	Yes	Yes	Yes	Yes
Control Variables				
Quality of institutions	0.031 (0.08)			
Conflict		-0.14*** (0.03)		
Democratic tendencies			0.52*** (0.07)	
Government actions				-0.12*** (0.013)
Firm and time effects	Yes	Yes	Yes	Yes
R ²	0.09	0.09	0.09	0.09

$INV_{i,t+1}$	Low PR Sample			
Control Variables	Yes	Yes	Yes	Yes
Quality of institutions	0.18*** (0.07)			
Conflict		0.005 (0.038)		
Democratic tendencies			0.06 (0.07)	
Government actions				0.02 (0.02)
Firm and time effects	Yes	Yes	Yes	Yes
R ²	0.07	0.07	0.07	0.07

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Authors' calculations.

As mentioned, Table 2 shows that the “quality of institutions” variable is constructed as the sum of the *ICRG* indicators for “law and order,” “bureaucratic quality,” and “corruption.” This component has a positive and statistically significant effect on corporate investment in the sample with low political risk, whereas its effect is not significant in the high-risk sample. Moreover, other political risk components namely conflict, democratic tendencies, and government actions do not significantly influence corporate investment in low-risk countries. However, these relationships differ substantially in high-risk environments [6].

The “conflict” component consists of *ICRG* scores for internal conflict, external conflict, religious tensions, and ethnic tensions. This dimension reflects violence-oriented political risks such as terrorism, war, and civil unrest. In the sample with high political risk, conflict is found to negatively affect corporate investment. A similar adverse relationship is observed for the “government actions” component, which includes government stability, socioeconomic conditions, and the investment profile. Firms operating in high-risk countries reduce their investment in response to increases in these risk factors [6].

The “democratic tendencies” component is composed of two *ICRG* indicators: military involvement in politics and democratic accountability. Interestingly, the relationship between democratic tendencies and corporate investment is positive. Firms in countries with high political risk appear to maintain their capital expenditures despite the presence of such risks. Two possible explanations may account for this finding. First, firms might not incorporate these risks into the capital budgeting process, thereby underestimating their potential impact on future cash flows and the cost of equity indicating a valuation issue in project

evaluation. Second, firms may choose to proceed with investments despite these risks in an effort to avoid a future increase in the cost of capital [6; 36].

Sectoral Analyses

The reaction of the sectors to political risk can be different for several reasons. Firstly, firms may be operating with low tangible assets and their operations may be closely related with human capital. Secondly, some sectors have sustainable demand, and their cash flow is not significantly affected by political shocks [6]. Moreover, some sectors can be under government protection, and their cost of capital may not increase in the presence of political risk. To address the effect of political risk on corporate investment in different sectors, we examined the main regression model for the main sectors. Table 7 provides a detailed overview of the sectoral regression results, illustrating the heterogeneous impact of political risk on investment decisions.

The findings reveal remarkable sectoral variations in the impact of political risk on corporate investment. A statistically significant negative relationship between political risk and investment is observed in the logistics, manufacturing, retail, and mining sectors. In contrast, no statistically significant relationship is monitored for the energy, healthcare, and tourism sectors. Interestingly, firms in the technology sector in emerging markets tend to increase their investments even in the presence of political risk. Overall, the sectoral analysis suggests that sectors with high levels of tangible assets are more vulnerable to the adverse effects of political risk [6]. By contrast, human capital-oriented sectors, such as healthcare and technology, are not significantly affected by political risk. In line with these findings, Hypothesis “1” – “c” cannot be rejected. The effect of political risk on corporate investment differs across sectors.

Table 7. Political Risk and Corporate Investment: Sectoral View

$INV_{i,t+1}$	Energy	Technology	Healthcare	Logistics
$TQ_{i,t}$	0.003*** (0.001)	0.001*** (0.000)	0.002*** (0.000)	0.003** (0.001)
$CF_{i,(t+1)}$	0.097*** (0.021)	0.079*** (0.007)	0.045*** (0.011)	0.145*** (0.028)
$LEV_{i,t}$	-0.045*** (0.016)	0.007 (0.006)	0.005 (0.008)	-0.008 (0.016)
$SIZE_{i,t}$	-0.006 (0.004)	-0.005*** (0.001)	-0.012*** (0.002)	-0.003 (0.005)
$NWC_{i,t}$	-0.021 (0.014)	0.029*** (0.005)	0.042*** (0.007)	0.025* (0.015)
$SG_{i,t}$	0.001 (0.002)	0.003*** (0.001)	0.004*** (0.001)	0.003 (0.002)
$DDIV_{i,t}$	0.022*** (0.004)	0.005*** (0.001)	0.004* (0.002)	0.004 (0.005)
$GDP_{j,t}$	0.077 (0.063)	0.023* (0.013)	0.035 (0.031)	0.023 (0.050)
$PR_{j,t}$	-0.021 (0.060)	0.064*** (0.024)	0.019 (0.031)	-0.114* (0.068)
Constant	0.191*** (0.069)	0.128*** (0.024)	0.262*** (0.037)	0.152* (0.091)
Firm and Time Effects	Yes	Yes	Yes	Yes
Adjusted R ²	0.14	0.095	0.082	0.11
$INV_{i,t+1}$	Manufacturing	Retailing	Mining	Tourism
$TQ_{i,t}$	0.001*** (0.000)	0.001* (0.001)	0.003** (0.001)	0.002 (0.001)
$CF_{i,(t+1)}$	0.089*** (0.005)	0.074*** (0.015)	0.072*** (0.018)	-0.000 (0.027)
$LEV_{i,t}$	-0.004 (0.004)	-0.002 (0.011)	-0.013 (0.014)	-0.029* (0.016)
$SIZE_{i,t}$	-0.007*** (0.001)	-0.008*** (0.003)	-0.001 (0.003)	-0.010** (0.005)
$NWC_{i,t}$	0.037*** (0.003)	0.013 (0.011)	0.005 (0.011)	0.036** (0.014)
$SG_{i,t}$	0.004*** (0.001)	0.005** (0.002)	0.002 (0.002)	0.006* (0.003)
$DDIV_{i,t}$	0.008*** (0.001)	0.005 (0.003)	0.010*** (0.004)	0.008* (0.005)
$GDP_{j,t}$	0.015* (0.009)	0.033 (0.033)	0.146** (0.061)	0.017 (0.059)
$PR_{j,t}$	-0.051*** (0.012)	-0.117*** (0.041)	-0.161*** (0.052)	-0.021 (0.060)
Constant	0.184*** (0.017)	0.245*** (0.058)	0.150*** (0.052)	0.263*** (0.086)
Firm and Time Effects	Yes	Yes	Yes	Yes
Adjusted R ²	0.11	0.13	0.16	0.083

*** p < 0.01, ** p < 0.05, * p < 0.1.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Authors' calculations.

Exploring Firm-level Heterogeneities

Corporate investment decisions are closely linked to firm-specific characteristics. Even firms operating in the same country may respond differently to political risk, depending on various factors such as managerial behavior, political connections, and financial structure. For instance, Giambona et al. [73] find that risk-averse managers are more likely to avoid politically risky countries. Political connections have also been shown to mitigate the adverse effects of political risk on investment and cost of capital [18; 72].

Among financial characteristics, factors such as financial flexibility, cash holdings, and asset tangibility are frequently cited as key sources of firm-level heterogeneity in response to uncertainty [5; 35; 45; 51]. As discussed in the theoretical framework (Section 2), these factors respectively reflect a firm's access to external finance, its liquidity

buffer, and the degree of investment irreversibility. Based on these distinctions, we re-estimated our main models across subgroups defined by each factor to examine whether the effect of political risk on investment varies across different firm profiles.

Role of Financial Flexibility

Financial flexibility refers to a firm's ability to borrow without experiencing financial distress. Firms that exhibit a positive difference between their unused debt capacity and their actual debt levels are considered financially flexible [6; 74]. Financially flexible firms are less exposed to financial constraints and, consequently, are more capable of undertaking investments. Moreover, they can access external financing more easily when facing growth opportunities [43].

$$LEV_{i,t} = \alpha_1 LEV_{i,t-1} + \beta_1 INDLEV_{i,j,(t-1)} + \beta_2 MTB_{i,t-1} + \beta_3 SIZE_{i,t-1} + \beta_4 TANG_{i,t-1} + \beta_5 INF_{i,t-1} + \text{firm fixed effects} + \text{time fixed effects} + \varepsilon_{i,t} \quad (2)$$

Table 8. Political risk and corporate investment: Role of financial flexibility

$INV_{i,t+1}$	I (Financially inflexible)	II (Financially flexible)
$TQ_{i,t}$	0.001*** (0.000)	0.001*** (0.000)
$CF_{i,(t+1)}$	0.082*** (0.004)	0.063*** (0.005)
$LEV_{i,t}$	-0.008*** (0.003)	0.003 (0.005)
$SIZE_{i,t}$	-0.005*** (0.001)	-0.010*** (0.001)
$NWC_{i,t}$	0.025*** (0.002)	0.035*** (0.003)
$SG_{i,t}$	0.003*** (0.000)	0.003*** (0.001)
$D_DIV_{i,t}$	0.008*** (0.001)	0.003*** (0.001)
$GDP_{j,t}$	0.072*** (0.012)	-0.002 (0.008)
$PR_{j,t}$	-0.013 (0.011)	-0.057*** (0.014)
Constant	0.145*** (0.013)	0.231*** (0.021)
Firm and time effects	Yes	Yes
Adjusted R ²	0.093	0.085
Sample count	87.018	48.561

*** p < 0.01, ** p < 0.05, * p < 0.1.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Author's computations.

Following prior literature, we employed the model presented in Equation 2, where subscripts i , t , j , and l denote firm, time, sector, and country, respectively, to classify the sample based on financial flexibility. LEV represents firm leverage; IND_LEV , the industry-average leverage; MTB , the market-to-book ratio; $SIZE$, firm size; $TANG$, the ratio of fixed assets to total assets; and INF , the consumer price index. First, we estimated Equation 2 using a two-way fixed effects model to measure predicted leverage levels. Then, we calculated the deviation between actual and predicted leverage. Firms that had a positive deviation for at least three consecutive years were classified as financially flexible [75; 76]. We referred to the other firms as financially inflexible.

Table 8 presents the findings based on the adjusted sample of financially flexible firms. The analysis in Column I corresponds to financially inflexible firms, while Column II pertains to financially flexible firms.

The relationship between PR and INV is significantly negative for financially flexible firms. In contrast, the $PR-INV$ relationship is not statistically significant for firms operating without financial flexibility. These results suggest that, although financially flexible firms have access to borrowing, they may still cancel or postpone investment decisions in the presence of political risk. This indicates that financial

flexibility does not necessarily mitigate the adverse effects of political risk. This finding is also consistent with the study that examines the role of financial flexibility in the context of political risk [75]. Based on the findings for the two groups, Hypothesis 1d is not supported.

The results for the $CF-INV$ and $LEV-INV$ relationships are consistent with theoretical expectations. Cash flow sensitivity is greater for financially inflexible firms, as they lack borrowing capacity. Moreover, the $CF-INV$ relationship shows a higher coefficient for financially inflexible firms, highlighting the greater importance of internal funds for these firms. While the $LEV-INV$ relationship is not significant for financially flexible firms, it has a significantly negative effect on financially inflexible firms.

Role of Cash Holdings

Companies need funds to finance their investments. Financial constraints limit access to external funding and increase firms' sensitivity to internal cash flows. Cash holdings can reduce dependence on external financing and lower this sensitivity. Moreover, political risk may lead to a higher cost of debt and constrain firms' cash flows [6]. To examine these arguments, we estimated the main regression model across subsamples grouped by firms' levels of cash holdings. The findings are presented in Table 9.

Table 9. Political Risk and Corporate Investment: Role of Cash Holdings

$INV_{i,t+1}$	Low Cash	Middle Cash	High Cash
$TQ_{i,t}$	0.001*** (0.000)	0.002*** (0.000)	0.001*** (0.000)
$CF_{i,(t+1)}$	0.073*** (0.009)	0.089*** (0.007)	0.055*** (0.006)
$LEV_{i,t}$	-0.013** (0.005)	-0.009* (0.005)	0.003 (0.006)
$SIZE_{i,t}$	-0.010*** (0.002)	-0.007*** (0.001)	-0.008*** (0.001)
$NWC_{i,t}$	0.030*** (0.005)	0.017*** (0.005)	0.038*** (0.005)
$SG_{i,t}$	0.003*** (0.001)	0.003*** (0.001)	0.004*** (0.001)
$D_DIV_{i,t}$	0.008** (0.001)	0.005*** (0.001)	0.005*** (0.001)
$GDP_{j,t}$	0.034** (0.014)	0.036*** (0.013)	0.015 (0.011)
$PR_{j,t}$	-0.049** (0.021)	-0.025 (0.017)	-0.024 (0.017)
Firm and Time Effects	Yes	Yes	Yes
Adjusted R ²	0.07	0.08	0.07

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Author's computations.

The findings indicate that cash holdings mitigate the negative effect of political risk on corporate investment. The $PR-INV$ relationship is statistically significant in the low-cash sample, but not in the others. The results are consistent with the existing literature [16; 35]. In light of these findings, Hypothesis "1" _ "e" cannot be rejected.

Additionally, Cash flow sensitivity is similar in the low- and middle-cash samples, yet it is remarkably lower in the high-cash sample. Finally, a notable difference is observed in the relationship between LEV and INV . While this relationship is negative in the low- and middle-cash samples, it is not statistically significant in the high-cash sample.

Role of Tangibility

Tangibility, the ratio of fixed assets to total assets, is also associated with investment irreversibility. Higher tangibility may lead to greater sunk costs when firms attempt to reverse investments in response to risks. In contrast, firms with lower tangibility are more flexible in managing their investments and are less likely to cancel or postpone them [6; 35].

An alternative perspective argues that fixed assets enhance firm credibility and facilitate access to external financing due to their pledgeability. This, in turn, mitigates finan-

cial constraints and reduces sensitivity to internal cash flows [41]. To examine the role of tangibility in the relationship between political risk and corporate investment, we estimated the main models for subsamples categorized according to their levels of tangibility. The results are presented in Table 10.

The negative effect of political risk on corporate investment increases with the level of tangibility. These findings support the investment irreversibility perspective discussed above. Moreover, the stronger $CF-INV$ relationship observed in the high-tangibility subsample suggests that the alternative view based on pledgeability may not be valid for emerging markets. The result is parallel to existing literature [41; 77]. Considering the findings, Hypothesis 1f cannot be rejected.

Conclusion

This study examines how political risk affects corporate investment in emerging markets. The findings reveal significant heterogeneity in the relationship between political risk and corporate investment, both across countries and at the firm level. While political risk has a negative impact on corporate investment in countries with high political risk, the relationship is not statistically significant in coun-

Table 10. Political Risk and Corporate Investment: Role of Tangibility

$INV_{i,t+1}$	Low Tangibility	Middle Tangibility	High Tangibility
$TQ_{i,t}$	0.000** (0.000)	0.001*** (0.000)	0.002*** (0.000)
$CF_{i,(t+1)}$	0.050*** (0.005)	0.076*** (0.005)	0.095*** (0.007)
$LEVi_{,t}$	0.000 (0.004)	0.000 (0.005)	-0.005 (0.005)
$SIZE_{i,t}$	-0.005*** (0.001)	-0.008*** (0.001)	-0.013*** (0.001)
$NWC_{i,t}$	0.025*** (0.003)	0.049*** (0.004)	0.046*** (0.005)
$SG_{i,t}$	0.001** (0.000)	0.004*** (0.001)	0.004*** (0.001)
$D_DIV_{i,t}$	0.004*** (0.001)	0.006*** (0.001)	0.007*** (0.001)
$GDP_{j,t}$	0.014 (0.009)	0.020* (0.010)	0.030** (0.013)
$PR_{j,t}$	-0.011 (0.011)	-0.025* (0.013)	-0.054*** (0.017)
Firm and time effects	Yes	Yes	Yes
Adjusted R ²	0.06	0.09	0.11

*** p < 0.01, ** p < 0.05, * p < 0.1.

Robust standard errors clustered at the firm level are presented in parentheses.

Source: Author's computations.

tries with lower levels of political risk. Firms' responses to political risk vary depending on the specific type of risk involved. Firm-level characteristics such as industry affiliation, financial flexibility, cash holdings, and asset tangibility also moderate the impact of political risk on corporate investment. The results are consistent with prior literature [5; 33; 35–37; 42; 70–72]. The findings of this study are more robust than those of earlier research due to its broad cross-country coverage, use of firm-level data, and disaggregation of political risk by type. These features distinguish it from previous studies.

The findings show the difference in investment and political risk mechanism because of the home countries' political environment and firm-level factors as cash holding and tangibility. They support the previous research and also emphasize the political risk management policy that should be adopted with regard to home countries and above-mentioned financial factors [16; 35; 41; 77].

Survey-based research in the existing literature shows that companies rarely incorporate political risk into the capital budgeting process [78; 79]. Our findings, however, indicate that political risk significantly affects corporate investment decisions, especially in countries with high levels of political instability. Financial managers should consider political risk and its various dimensions when making capital budgeting decisions. The results also underline the important role of cash holdings and the tangibility ratio. While the theoretical framework remains closely tied to investment policy [80], our findings suggest that cash assets can mitigate the negative effects of political risk. Firms are advised to manage their cash reserves strategically in line with their exposure to such risks. Additionally, investment irreversibility should not be overlooked. Political risk has a greater impact on firms with higher levels of asset tangibility, which supports the application of the real options theory and a "wait-and-see" approach to avoid significant sunk costs in politically unstable environments.

The study sample includes firms from 21 emerging markets over the period from 2001 to 2021. The study offers a comprehensive examination of the relationship between political risk and corporate investment, covering an extensive sample of emerging markets over two decades. The study has certain limitations. First, no alternative index as comprehensive as the ICRG was identified. As a result, ICRG ratings serve as proxy for political risk, and the robustness of the findings could not be tested using other indicators. Second, potential endogeneity concerns remain. Although dynamic panel regression techniques such as system GMM and difference GMM were employed, the validity of the instrumental variables could not be confirmed, and the related results are not reported. These limitations present opportunities for future research to extend and validate the current findings. The analysis also addresses firm-level heterogeneity in terms of financial flexibility, cash holdings, and asset tangibility. Other relevant dimensions discussed in the literature, such as the behavioral traits of top management [73] and political connections [18; 72], were not included. Incorporating these factors may enhance future

research, particularly in the context of emerging markets.

The findings of the study highlight the significance of political structures in emerging markets and their impact on the economy. While political risk negatively affects corporate investment in countries with high political risk, firms in low-risk countries are not significantly affected. Governments should build strong political systems, enhance bureaucratic quality, prioritize the rule of law, and foster a conducive business environment, particularly in countries facing high levels of political risk. The results also emphasize the importance of effective cash management and investment reversibility in mitigating the adverse effects of political risk.

References

1. Chen B, Yang J, Zhang C. Corporate investment and financing with uncertain growth opportunities. *International Review of Finance*. 2021;21(3):821–42. <https://doi.org/10.1111/irfi.12298>
2. Ozdagli AK. Financial Leverage, Corporate Investment, and Stock Returns. *Review of Financial Studies*. 2012;25(4):1033–69. <https://doi.org/10.1093/rfs/hhr145>
3. Ozkan A, Santillán-Salgado RJ, Yildiz Y, del Rocío Vega Zavala M. What Happened to the Willingness of Companies to Invest After the Financial Crisis? Evidence From Latin American Countries. *Journal of Financial Research*. 2020;43(2):231–62. <https://doi.org/10.1111/jfir.12206>
4. Reuer JJ, Tong TW. Corporate investments and growth options. *Managerial and Decision Economics*. 2007;28(8):863–77. <https://doi.org/10.1002/mde.1335>
5. Demirci F, Karacaer S. Politik Risk ve Firma Yatırımları: Gelişmekte Olan Piyasalarda Bir Araştırma. *İşletme Araştırmaları Dergisi*. 2024;16(2):1081–97. <https://doi.org/10.20491/isarder.2024.1844>
6. Demirci F. Politik Risk ve Firma Yatırımları: Gelişmekte Olan Piyasalarda Bir Araştırma [dissertation]. [Ankara]: Hacettepe University; 2025.
7. Bilgin MH, Gozgor G, Karabulut G. How Do Geopolitical Risks Affect Government Investment? An Empirical Investigation. *Defence and Peace Economics*. 2020;31(5):550–64. <https://doi.org/10.1080/10242694.2018.1513620>
8. Farooq U, Tabash MI, Hamouri B, Daniel LN, Safi SK. Nexus between Macroeconomic Factors and Corporate Investment: Empirical Evidence from GCC Markets. *International Journal of Financial Studies*. 2023;11(1). <https://doi.org/10.3390/ijfs11010035>
9. Wang Y, Chen CR, Huang YS. Economic policy uncertainty and corporate investment: Evidence from China. *Pacific Basin Finance Journal*. 2014;26:227–43. <https://doi.org/10.1016/j.pacfin.2013.12.008>

10. Acemoglu D, Robinson JA. Why nations fail: The origins of power, prosperity, and poverty. Crown Currency; 2013.
11. Ahmad MF, Aziz S, El-Khatib R, Kowalewski O. Firm-level political risk and dividend payout. *International Review of Financial Analysis*. 2023;86:102546. <https://doi.org/10.1016/j.irfa.2023.102546>
12. Cashman GD, Harrison DM, Seiler MJ. Capital Structure and Political Risk in Asia-Pacific Real Estate Markets. *Journal of Real Estate Finance and Economics*. 2016;53(2):115–40. <https://doi.org/10.1007/s11146-013-9436-x>
13. Hasan SB, Alam MS, Paramati SR, Islam MS. Does firm-level political risk affect cash holdings? Review of Quantitative Finance and Accounting. 2022;59(1):311–37. <https://doi.org/10.1007/s11156-022-01049-9>.
14. Huang T, Wu F, Yu J, Zhang B. Political risk and dividend policy: Evidence from international political crises. *Journal of International Business Studies*. 2015;46(5):574–95. <https://doi.org/10.1057/jibs.2015.2>
15. Kesternich I, Schnitzer M. Who is afraid of political risk? Multinational firms and their choice of capital structure. *Journal of International Economics*. 2010;82(2):208–18. <https://doi.org/10.1016/j.jinteco.2010.07.005>.
16. Le AT, Tran TP. Navigating through Political Risk in Vietnam: The Role of Corporate Cash Holdings. *International Journal of Public Administration*. 2022;45(5):427–41. <https://doi.org/10.1080/01900692.2021.2001525>
17. Mishra DR. Firm-level political risk and implied cost of equity capital. *International Review of Finance*. 2023;23(3):615–44. <https://doi.org/10.1111/irfi.12411>
18. Pham AV. Political risk and cost of equity: The mediating role of political connections. *Journal of Corporate Finance*. 2019;56:64–87. <https://doi.org/10.1016/j.jcorpfin.2019.01.001>
19. Kobrin SJ. Political Risk: A Review and Reconsideration. *Journal of International Business Studies*. 1979;10(1):67–80. <https://doi.org/10.1057/palgrave.jibs.8490631>
20. Robock SH. Political risk: Identification and assessment. *Columbia Journal of world business*. 1971;6(4):6–20.
21. Simon JD. A Theoretical Perspective on Political Risk. *Journal of International Business Studies*. 1984;15(3):123–43. <https://doi.org/10.1057/palgrave.jibs.8490499>
22. Gonchar K, Greve M. The impact of political risk on FDI exit decisions. *Economic Systems*. 2022;46(2). <https://doi.org/10.1016/j.eco-sys.2022.100975>
23. Goswami GG, Haider S. Does political risk deter FDI inflow?: An analytical approach using panel data and factor analysis. *Journal of Economic Studies*. 2014;41(2):233–52. <https://doi.org/10.1108/JES-03-2012-0041>
24. Jiménez A. Political risk as a determinant of southern European FDI in neighboring developing countries. *Emerging Markets Finance and Trade*. 2011;47(4):59–74. <https://doi.org/10.2753/REE1540-496X470404>
25. Clark E. Valuing political risk. *Journal of International Money and Finance*. 1997;16(3):477–90. [https://doi.org/10.1016/S0261-5606\(97\)00008-9](https://doi.org/10.1016/S0261-5606(97)00008-9)
26. Howell LD, Chaddick B. Models of political risk for foreign investment and trade. An assessment of three approaches. *Columbia Journal of World Business*. 1994;29(3):70–91. [https://doi.org/10.1016/0022-5428\(94\)90048-5](https://doi.org/10.1016/0022-5428(94)90048-5)
27. Bremmer I, Keat P. The fat tail: The power of political knowledge in an uncertain world. Oxford: Oxford University Press; 2010.
28. Belghitar Y, Clark E. Capital Budgeting with Political/Country Risk. In: Baker HK, English P, editors. *Capital Budgeting Valuation: Financial Analysis for Today's Investment Projects*. John Wiley & Sons; 2011. p. 241–57. <https://doi.org/10.1002/9781118258422.ch13>
29. Belkhir M, Boubakri N, Grira J. Political risk and the cost of capital in the MENA region. *Emerging Markets Review*. 2017;33:155–72. <https://doi.org/10.1016/j.ememar.2017.08.002>
30. Procasky WJ, Ujah NU. Terrorism and its impact on the cost of debt. *Journal of International Money and Finance*. 2016;60:253–66. <https://doi.org/10.1016/j.jimonfin.2015.04.007>
31. Carney RW, El Ghouli S, Guedhami O, Wang H (Helen). Geopolitical risk and the cost of capital in emerging economies. *Emerging Markets Review*. 2024 July;61:101149. <https://doi.org/10.1016/j.ememar.2024.101149>
32. Julio B, Yook Y. Political uncertainty and corporate investment cycles. *Journal of Finance*. 2012;67(1):45–83. <https://doi.org/10.1111/j.1540-6261.2011.01707.x>
33. Du Q, Heo Y. Political corruption, Dodd–Frank whistleblowing, and corporate investment. *Journal of Corporate Finance*. 2022;73. <https://doi.org/10.1016/j.jcorpfin.2021.102145>
34. Kim HJ, Mun S. Terrorist attacks and corporate investment: The beneficial value of CEO overconfidence. *International Review of Financial Analysis*. 2022;84. <https://doi.org/10.1016/j.irfa.2022.102363>

35. Le AT, Tran TP. Does geopolitical risk matter for corporate investment? Evidence from emerging countries in Asia. *Journal of Multinational Financial Management*. 2021;62. <https://doi.org/10.1016/j.mulfin.2021.100703>
36. Banerjee P, Dutta S. The effect of political risk on investment decisions. *Economics Letters*. 2022;212. <https://doi.org/10.1016/j.econlet.2022.110301>
37. Choi W, Chung CY, Wang K. Firm-level political risk and corporate investment. *Finance Research Letters*. 2022;46. <https://doi.org/10.1016/j.frl.2021.102307>
38. Caldara D, McHenry M, Iacoviello M, Schott I. The Effects of the War on Ukraine on Global Corporate Investment [Internet]. 2025. Available from: https://www.matteoiacoviello.com/research_files/UKRAINE_PAPER.pdf
39. Li Y, Li D, He J. Sino-US trade frictions and corporate investment. *Finance Research Letters*. 2025 June 1;79:107218. <https://doi.org/10.1016/j.frl.2025.107218>
40. Cohen G, Yagil J. Sectorial differences in corporate financial behavior: an international survey. *The European Journal of Finance*. 2010 Apr 1;16(3):245–62. <https://doi.org/10.1080/13518470903211632>
41. Ozdemir O, Han W, Erkmén E, Madanoglu M. Firm-level political risk and corporate investments in the hospitality and tourism industry: The moderating role of asset tangibility and corporate governance quality. *Tourism Management Perspectives*. 2024;53. <https://doi.org/10.1016/j.tmp.2024.101290>
42. Rumokoy LJ, Omura A, Roca E. Geopolitical risk and corporate investment in the metals and mining industry: Evidence from Australia. *Pacific Basin Finance Journal*. 2023;79. <https://doi.org/10.1016/j.pacfin.2023.101991>
43. Arslan-Ayaydin Ö, Florackis C, Ozkan A. Financial flexibility, corporate investment and performance: Evidence from financial crises. *Review of Quantitative Finance and Accounting*. 2014;42(2):211–50. <https://doi.org/10.1007/s11156-012-0340-x>
44. Yung K, Li DD, Jian Y. The value of corporate financial flexibility in emerging countries. *Journal of Multinational Financial Management*. 2015 Dec 1;32–33:25–41. <https://doi.org/10.1016/j.mul-fin.2015.07.001>
45. Chortareas G, Noikokyris E. Investment, firm-specific uncertainty, and financial flexibility. *Journal of Economic Behavior & Organization*. 2021;192:25–35. <https://doi.org/10.1016/j.jebo.2021.09.042>
46. Myers SC, Majluf NS. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*. 1984;13(2):187–221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
47. Aras G, Furtuna OK, Tezcan N. The determinants of corporate cash holdings: Does country's legal regime matter? Evidence from BRIC and Turkey. *Journal of Economics Finance and Accounting*. 2019;6(4):192–205. <https://doi.org/10.17261/Pressacademia.2019.1150>
48. Drakos K, Tsouknidis D. Investment under uncertainty and irreversibility: Evidence from the shipping markets. *International Journal of Finance & Economics*. 2024;29(2):2139–54. <https://doi.org/10.1002/ijfe.2779>
49. Pindyck RS. Irreversibility, Uncertainty, and Investment. *Journal of Economic Literature*. 1991;29(3):1110–48.
50. Pattillo C. Investment, Uncertainty, and Irreversibility in Ghana. *Staff Papers*. 1998 Sept 1;45(3):522–53.
51. Guiso L, Parigi G. Investment and Demand Uncertainty. *The Quarterly Journal of Economics*. 1999;114(1):185–227.
52. Eberly J, Rebelo S, Vincent N. Investment and Value : a Neoclassical Benchmark. *Cahier de recherche/ Working Paper 09-08*. National Bureau of Economic Research; 2008 p. 1–53. <https://doi.org/10.3386/w13866>
53. Ajide FM. Firm-specific, and institutional determinants of corporate investments in Nigeria. *Future Business Journal*. 2017;3(2):107–18. <https://doi.org/10.1016/j.fbj.2017.05.002>
54. Blundell R, Bond S, Devereux M, Schiantarelli F. Investment and Tobin's Q. Evidence from company panel data. *Journal of Econometrics*. 1992;51(1–2):233–57. [https://doi.org/10.1016/0304-4076\(92\)90037-R](https://doi.org/10.1016/0304-4076(92)90037-R)
55. Akca T, Karan MB, Yıldız Y. The Effect of Financial Leverage on Investment Decisions: The Evidence from Emerging Markets. In: Dinçer H, Yüksel S, editors. *Contributions to Finance and Accounting*. Cham: Springer International Publishing; 2021. p. 137–50. Available from: https://doi.org/10.1007/978-3-030-68612-3_10
56. Haque A. Role of financial leverage in determining corporate investment in Pakistan. *Journal The Business & Management*. 2014;5(3):3–4.
57. Nguyen PD, Dong PTA. Determinants of Corporate Investment Decisions: The Case of Vietnam. *Journal of Economics and Development*. 2013;15(1):32–48. <https://doi.org/10.33301/2013.15.01.02>
58. Almeida H, Campello M, Weisbach MS. The cash flow sensitivity of cash. *Journal of Finance*. 2004;59(4):1777–804. <https://doi.org/10.1111/j.1540-6261.2004.00679.x>
59. Arslan Ö, Florackis C, Ozkan A. The role of cash holdings in reducing investment-cash flow sensi-

- tivity: Evidence from a financial crisis period in an emerging market. *Emerging Markets Review*. 2006;7(4):320–38. <https://doi.org/10.1016/j.ememar.2006.09.003>.
60. Tawiah B, O'Connor Keefe M. Cash Holdings and Corporate Investment: Evidence from COVID-19. *SSRN Electronic Journal*. 2020; <https://doi.org/10.2139/ssrn.3712767>
 61. Guariglia A. Internal financial constraints, external financial constraints, and investment choice: Evidence from a panel of UK firms. *Journal of Banking and Finance*. 2008;32(9):1795–809. <https://doi.org/10.1016/j.jbankfin.2007.12.008>
 62. Fazzari SM, Hubbard RG, Petersen BC, Blinder AS, Poterba JM. Financing Constraints and Corporate Investment. *Brookings Papers on Economic Activity*. 1988;1988(1):141. <https://doi.org/10.2307/2534426>
 63. Howell LD. Evaluating Political Risk Forecasting Models: What Works? *Thunderbird International Business Review*. 2014;56(4):305–16. <https://doi.org/10.1002/tie.21635>
 64. Chang T, Deng X, Zuo J, Yuan J. Political Risks in Central Asian Countries: Factors and Strategies. *Journal of Management in Engineering*. 2018;34(2). [https://doi.org/10.1061/\(asce\)me.1943-5479.0000588](https://doi.org/10.1061/(asce)me.1943-5479.0000588)
 65. Chen H, Liao H, Tang BJ, Wei YM. Impacts of OPEC's political risk on the international crude oil prices: An empirical analysis based on the SVAR models. *Energy Economics*. 2016;57:42–9. <https://doi.org/10.1016/j.eneco.2016.04.018>
 66. Tuncay M. Do political risks matter in the financial markets?: evidence from Turkey. *Eurasian Business Review*. 2018;8(2):209–27. <https://doi.org/10.1007/s40821-017-0077-5>
 67. Bekaert G, Harvey CR, Lundblad C. Does financial liberalization spur growth? *Journal of Financial Economics*. 2005;77(1):3–55. <https://doi.org/10.1016/j.jfineco.2004.05.007>
 68. Kusnadi Y. Cross-listings and corporate cash savings: International evidence. *Journal of Corporate Finance*. 2015;32:91–107. <https://doi.org/10.1016/j.jcorpfin.2015.03.005>
 69. Li X. Economic policy uncertainty and corporate cash policy: International evidence. *Journal of Accounting and Public Policy*. 2019;38(6):106694. <https://doi.org/10.1016/j.jaccpubpol.2019.106694>
 70. Tan OF, Cavlak H, Cebeci Y, Güneş N. The Impact of Geopolitical Risk on Corporate Investment: Evidence from Turkish Firms. *The Indonesian Capital Market Review*. 2022;14(1):16–32. <https://doi.org/10.21002/icmr.v14i1.1138>
 71. García-Gómez CD, Demir E, Díez-Esteban JM, Lizaraburu Bolaños E. Corruption, national culture and corporate investment: European evidence. *European Journal of Finance*. 2024;30(4):411–29. <https://doi.org/10.1080/1351847X.2022.2147443>
 72. Alam AW, Houston R, Farjana A. Geopolitical risk and corporate investment: How do politically connected firms respond? *Finance Research Letters*. 2023;53. <https://doi.org/10.1016/j.frl.2023.103681>
 73. Giambona E, Graham JR, Harvey CR. The management of political risk. *Journal of International Business Studies*. 2017;48(4):523–33. <https://doi.org/10.1057/s41267-016-0058-4>
 74. de Jong A, Verbeek M, Verwijmeren P. Does financial flexibility reduce investment distortions? *Journal of Financial Research*. 2012;35(2):243–59. <https://doi.org/10.1111/j.1475-6803.2012.01316.x>
 75. Gregory RP. Political risk and financial flexibility in BRICS countries. *Quarterly Review of Economics and Finance*. 2020;78:166–74. <https://doi.org/10.1016/j.qref.2020.01.011>
 76. Marchica MT, Mura R. Financial Flexibility, Investment Ability, and Firm Value: Evidence from Firms with Spare Debt Capacity. *Financial Management*. 2010;39(4):1339–65. <https://doi.org/10.1111/j.1755-053X.2010.01115.x>
 77. Burke QL, Wang M, Xu X. How does international trade affect U.S. corporate investment? Evidence from the asset tangibility channel. *International Review of Economics and Finance*. 2020;70:41–54. <https://doi.org/10.1016/j.iref.2020.06.040>
 78. Bakri A, Fifield SGM, Power DM. Capital budgeting practices and political risk: evidence from Lebanon. *Qualitative Research in Financial Markets*. 2022;14(3):483–504. <https://doi.org/10.1108/QRFM-11-2020-0224>
 79. Holmén M, Pramborg B. Capital budgeting and political risk: Empirical evidence. *Journal of International Financial Management and Accounting*. 2009;20(2):105–34. <https://doi.org/10.1111/j.1467-646X.2009.01028.x>
 80. Opler T, Pinkowitz L, Stulz R, Williamson R. The determinants and implications of corporate cash holdings. *Journal of Financial Economics*. 1999;52(1):3–46. [https://doi.org/10.1016/S0304-405X\(99\)00003-3](https://doi.org/10.1016/S0304-405X(99)00003-3)

Appendix 1. Number of Firms in the Sample by Country

Country	Firms	Country	Firms	Country	Firms
Brazil	375	South Africa	193	Indonesia	720
Egypt	197	The United Arab Emirates	71	India	4207
South Korea	2488	Malaysia	942	Mexico	116
Poland	640	Russia	248	Saudi Arabia	193
Taiwan	2014	Kuwait	93	Peru	103
Chile	144	China	5146	Turkiye	420
Greece	125	Thailand	805	Philippines	224

Source: Constructed by the authors using the article dataset.

Appendix 2. Stationary Tests

Variables	Constant		Constant and Trend	
	ADF	PP	ADF	PP
<i>INV</i>	102524 (0.0000)	114977 (0.0000)	76525.9 (0.0000)	98280.6 (0.0000)
<i>TQ</i>	74236.2 (0.0000)	82987.0 (0.0000)	53047.1 (0.0000)	67096.2 (0.0000)
<i>CF</i>	76076.5 (0.0000)	82817.3 (0.0000)	64787.6 (0.0000)	81665.5 (0.0000)
<i>LEV</i>	61734.5 (0.0000)	60541.1 (0.0000)	50281.2 (0.0000)	53598.1 (0.0000)
<i>SIZE</i>	60364.7 (0.0000)	79399.4 (0.0000)	44450.7 (0.0000)	50927.9 (0.0000)
<i>NWC</i>	195422 (0.0000)	195271. (0.0000)	167880. (0.0000)	167880. (0.0000)
<i>SG</i>	115003. (0.0000)	148273. (0.0000)	88658.0 (0.0000)	144941. (0.0000)
<i>D_DIV</i>	23947.5 (0.0000)	72349.8 (0.0000)	20356.0 (0.0000)	52817.7 (0.0000)
<i>GDP</i>	133569. (0.0000)	132472. (0.0000)	142388. (0.0000)	212868. (0.0000)
<i>PR</i>	63034.9 (0.0000)	52204.5 (0.0000)	69190.2 (0.0000)	71252.8 (0.0000)

H0

H0: Panels contain a unit root.

P-values are presented for each variable in parentheses. According to the test results, all panels are stationary.

Source: Author's computations.

Appendix 3. Descriptive Statistics

Variables	Pooled Sample	Brazil	Chile	China	Egypt	Greece	India	Indonesia	South Korea	Kuwait	Malaysia
<i>N</i>	409.731 (100.0%)	7.875 (1.9%)	3.024 (0.7%)	108.066 (26.4%)	4.137 (1.0%)	2.625 (0.6%)	88.347 (21.6%)	15.120 (3.7%)	52.248 (12.8%)	1.953 (0.5%)	19.782 (4.8%)
<i>INV</i>	0.066 (0.088)	0.062 (0.079)	0.052 (0.058)	0.076 (0.086)	0.044 (0.076)	0.041 (0.064)	0.070 (0.100)	0.068 (0.099)	0.071 (0.091)	0.043 (0.080)	0.047 (0.070)
<i>TQ</i>	2.130 (3.137)	1.555 (2.454)	1.261 (2.102)	2.975 (3.192)	2.179 (3.687)	1.204 (1.160)	2.277 (3.696)	2.015 (3.167)	1.456 (1.732)	1.239 (0.892)	1.610 (2.671)
<i>CF</i>	0.084 (0.119)	0.070 (0.127)	0.083 (0.097)	0.098 (0.107)	0.083 (0.113)	0.050 (0.093)	0.078 (0.116)	0.084 (0.128)	0.064 (0.132)	0.071 (0.116)	0.071 (0.114)
<i>LEV</i>	0.473 (0.259)	0.666 (0.329)	0.460 (0.221)	0.441 (0.221)	0.495 (0.267)	0.585 (0.261)	0.554 (0.314)	0.564 (0.305)	0.449 (0.234)	0.423 (0.228)	0.409 (0.234)
<i>SIZE</i>	18.670 (1.890)	20.011 (2.017)	19.500 (2.382)	19.587 (1.494)	18.011 (1.787)	18.619 (1.720)	17.559 (2.054)	18.463 (1.865)	18.692 (1.597)	19.373 (1.338)	18.241 (1.633)
<i>NWC</i>	0.199 (0.265)	0.113 (0.276)	0.116 (0.179)	0.219 (0.268)	0.190 (0.257)	0.128 (0.248)	0.182 (0.282)	0.123 (0.293)	0.193 (0.259)	0.135 (0.263)	0.232 (0.250)
<i>SG</i>	0.179 (0.606)	0.151 (0.569)	0.112 (0.538)	0.232 (0.531)	0.133 (0.669)	0.078 (0.453)	0.173 (0.691)	0.190 (0.672)	0.168 (0.573)	0.173 (0.789)	0.136 (0.592)
<i>DDIV</i>	0.656 (0.475)	0.825 (0.380)	0.922 (0.268)	0.592 (0.492)	0.651 (0.477)	0.663 (0.473)	0.631 (0.482)	0.597 (0.490)	0.657 (0.475)	0.675 (0.469)	0.729 (0.445)
<i>GDP (%)</i>	5.757 (3.580)	2.176 (2.975)	3.638 (3.442)	8.690 (2.484)	4.205 (1.542)	0.098 (4.918)	6.123 (3.152)	4.854 (1.708)	3.668 (1.855)	2.801 (6.062)	4.303 (2.922)
<i>PR</i>	33.246 (8.093)	34.315 (2.151)	23.698 (2.915)	37.071 (4.830)	42.006 (4.742)	26.837 (4.163)	39.018 (2.450)	42.700 (3.595)	22.760 (1.307)	28.581 (4.346)	27.688 (2.368)

Appendix 3. Descriptive Statistics (Continued)

Variables	Mexico	Peru	Philippines	Poland	Russia	Saudi Arabia	South Africa	Taiwan	Thailand	Türkiye	United Arab Emirates
<i>N</i>	2.436 (0.6%)	2.163 (0.5%)	4.704 (1.1%)	13.440 (3.3%)	5.208 (1.3%)	5.040 (1.2%)	4.053 (1.0%)	42.294 (10.3%)	16.905 (4.1%)	8.820 (2.2%)	1.491 (0.4%)
<i>INV</i>	0.059 (0.064)	0.056 (0.068)	0.052 (0.086)	0.072 (0.102)	0.064 (0.078)	0.068 (0.094)	0.060 (0.070)	0.054 (0.079)	0.067 (0.089)	0.058 (0.088)	0.053 (0.076)
<i>TQ</i>	1.423 (1.541)	0.864 (0.839)	2.366 (4.105)	2.183 (3.572)	1.244 (0.906)	4.152 (6.610)	1.621 (1.939)	1.551 (1.438)	1.647 (2.129)	4.931 (7.849)	1.355 (1.663)
<i>CF</i>	0.085 (0.076)	0.108 (0.120)	0.067 (0.127)	0.085 (0.166)	0.097 (0.116)	0.115 (0.122)	0.113 (0.123)	0.085 (0.115)	0.102 (0.121)	0.082 (0.129)	0.088 (0.113)
<i>LEV</i>	0.523 (0.218)	0.420 (0.195)	0.479 (0.323)	0.499 (0.268)	0.507 (0.299)	0.397 (0.225)	0.512 (0.235)	0.417 (0.185)	0.453 (0.264)	0.515 (0.285)	0.405 (0.249)
<i>SIZE</i>	20.847 (1.434)	18.895 (1.796)	18.513 (2.226)	17.423 (2.073)	18.684 (1.921)	19.692 (1.642)	19.666 (1.987)	18.494 (1.515)	18.247 (1.615)	18.468 (1.777)	20.241 (1.652)
<i>NWC</i>	0.126 (0.203)	0.114 (0.188)	0.126 (0.306)	0.180 (0.273)	0.135 (0.269)	0.143 (0.210)	0.136 (0.218)	0.284 (0.223)	0.160 (0.266)	0.153 (0.266)	0.149 (0.239)
<i>SG</i>	0.113 (0.413)	0.117 (0.454)	0.214 (0.836)	0.248 (0.817)	0.095 (0.481)	0.142 (0.539)	0.149 (0.564)	0.161 (0.585)	0.164 (0.606)	0.132 (0.692)	0.156 (0.602)
<i>DDIV</i>	0.696 (0.460)	0.796 (0.403)	0.592 (0.492)	0.422 (0.494)	0.503 (0.500)	0.748 (0.434)	0.798 (0.402)	0.789 (0.408)	0.742 (0.438)	0.444 (0.497)	0.721 (0.449)
<i>GDP (%)</i>	1.346 (3.323)	4.536 (4.535)	4.822 (3.536)	3.691 (2.135)	3.244 (3.889)	3.261 (3.994)	2.286 (2.565)	4.01 (5.77)	3.356 (3.069)	5.005 (4.474)	3.419 (3.850)
<i>PR</i>	32.405 (4.981)	36.181 (1.780)	36.968 (2.179)	22.913 (1.821)	38.681 (3.986)	32.248 (2.011)	33.813 (2.404)	21.752 (1.826)	39.973 (5.862)	42.450 (5.150)	22.677 (1.340)

*In line N, the values in parentheses indicate each country’s share in the total sample, while the values outside the parentheses represent the number of observations for each country.
** In the other rows, the values in parentheses indicate each variable’s mean, while the values outside the parentheses represent the standard deviation.
Source: Constructed by the authors using the article dataset.

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