

Geopolitical Shift in Capital Preference: The Differential Impact of Geopolitical Risk and Political Fragmentation on Cross-Border Capital Allocation

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Abstract

Since the Russia-Ukraine War in 2022, geopolitical risks have become a structural force reshaping the pattern of global capital allocation. This paper constructs a framework for analyzing the structure of capital preference and decomposes the influence of geopolitics on cross-border capital allocation into risk-hedging preference (aggregate effect) and camp-allocation preference (structural effect), aiming to reveal the independent effects of the two mechanisms and their interaction. Based on panel data of 22 major economies from 2006 to 2024, this paper uses the proportion of net FDI inflows to GDP as the dependent variable and the GPR index and the United Nations voting ideal point as the core independent variables, employing two-way fixed effects regression for empirical testing. The results show that for every one-unit increase in GPR, the net FDI inflow decreases by 1.55 percentage points ($p < 0.01$). The independent effect of the ideal point is not significant, but the interaction term is significantly positive (coefficient 0.78, $p < 0.01$), indicating that pro-Western countries experience smaller FDI shocks under high geopolitical risk. The two mechanisms exhibit a substitution relationship rather than an additive relationship. This study provides new empirical evidence for understanding the logic of capital allocation in the geopolitical era.

Keywords

geopolitical risk, political fragmentation, capital allocation, FDI, fixed effects

1. Introduction

Since the 2022 Russo-Ukrainian War, geopolitics has evolved from sporadic shocks to a structural force reshaping the global financial landscape. The global GPR index soared from 82.07 in 2021 to 157.58 in 2022, a record high. At the same time, the pattern of cross-border capital flows has undergone a profound restructuring. Capital is no longer driven only by economic returns, but is increasingly subject to geopolitical risks and ideological distances. For example, emerging markets experienced large capital outflows in 2022, while some pro-Western economies received net capital inflows over the same period. This divergence suggests that geopolitics changes not only the total amount of capital, but also the preferred structure of capital.

How does geopolitics change the preference structure of global capital? Existing research focuses on the total volume change of the traffic dimension, and less in-depth analysis of the differentiation mechanism of capital preferences [1]. The risk faction emphasizes that GPR triggers risk aversion [2], and the faction

emphasizes that political distance leads to capital recapitalization [3], but the two are divided and lack a unified framework. This theoretical gap makes it difficult for policymakers to accurately assess the differentiated impact of geopolitical shocks on specific countries.

The core contribution of this paper is embodied in three aspects. First, this paper builds a unified framework for the structure of capital preference, incorporating the risk effect and the camp effect into the same regression equation, and tests the additive or substitution relationship between the two through interaction terms, thereby filling the gap between the two research paths in the existing literature. Second, using the net FDI inflow from the World Bank WDI as the dependent variable, all data are obtained directly from official sources to conduct genuine panel regression (coefficient, standard error, p-value, R-squared), rather than remaining at the level of descriptive statistics. Third, based on panel data of 22 major economies from 2006 to 2024, this paper employs the two-way fixed effects method to identify the differential impact of geopolitics on capital allocation, and multiple robustness tests—such as excluding the COVID period, pre-war sub-samples, and excluding G7—ensure that the conclusions are reliable.

2. Literature Review and Theoretical Assumptions

2.1 Measurement Evolution of Geopolitical Risks

The quantification of geopolitical risk has undergone an evolution from qualitative judgments to quantitative indices. In earlier research, Baker et al. tried to use the economic policy uncertainty (EPU) index to indirectly capture geopolitical factors, but the EPU is essentially a measurement of policy-level uncertainty, not a direct response to geopolitical risks, and there is a bias in reflecting purely geographic events such as military conflicts and territorial disputes [4].

This dilemma was not resolved until Caldara and Iacoviello constructed the GPR index [2]. By automating text mining of the electronic archives of 10 major English-language newspapers, the method retrieves the frequency of articles containing geopolitical tension keywords, constructs a monthly GPR index from 1900 to the present, and innovatively decomposes it into a threat component (GPRT) and an actual action component (GPRA). The threat component captures market expectations of potential conflict escalation, while the action component reflects actual military events that occurred. The GPRT value of 199.27 in 2022, well ahead of the GPRA's 124.80, suggests that market expectations of escalating conflicts are the main driver - this decomposition provides an important tool for analyzing the expected transmission mechanisms of capital flows. The advantages of text mining methods are: wide coverage, dating back to 1900, high frequency (monthly), and cross-national comparability through standardized processing.

Along with this, Bailey et al. based on the voting records of the United Nations General Assembly from 1946 to the present, using the Item Response Theory (IRT) model to estimate the ideal point of each country; the higher the ideal point, indicating that the political position of the country is to the US-led liberal order [3]. The model compresses tens of thousands of votes into a cross-country, year-round comparable political axis, removing the noise and issue specificity of a single vote. The ideal points in this sample range from -1.354 (China) to 2.696 (United States), covering the complete spectrum from opposition to the US-led liberal order to high alignment with that order, providing an operational tool for quantifying the camp effect. From indirect proxies to text mining, and from qualitative judgment to IRT model estimation, the root cause of this shift lies in the growth of computing power and the availability of large-scale digitized text archives. These advances enable researchers to process massive amounts of unstructured data and extract systematic geopolitical signals.

2.2 Total and Structural Effects

The aggregate effect refers to the phenomenon of capital flowing from high-risk countries to safe assets for hedging motives when geopolitical risks rise, and its core transmission mechanism is the change in risk premium. Rey's theory of the global financial cycle provides a theoretical basis for this effect: changes in global risk premiums drive the flow of capital between center countries and peripheral countries; GPR rises trigger flight to safety, and capital flows back from high-risk emerging markets to safe assets such as US Treasuries [5]. Aiyar et al. further found that geopolitical tensions led to the transfer of capital from emerging markets to developed markets, and this effect was particularly significant during periods of increased risk [1]. Empirical studies by Agoraki et al. confirmed a significant negative relationship between GPR and cross-

border capital flows [6], while Feng et al. found that GPR also inhibited cross-border portfolio investment [7]. Together, these studies point to a conclusion: geopolitical risk systematically reduces the cross-border allocation of capital by raising the uncertainty premium.

The structural effect refers to the phenomenon that the distance between political positions leads to the reallocation of capital between different camps. The core transmission mechanism is the influence of ideological affinity on investment decisions. Aiyar et al. proposed a geo-economic fragmentation framework and found that the greater the distance between political positions, the less bilateral capital flows, and the fragmentation pressure is reshaping the global financial integration pattern [8]. Kempf et al. confirmed from the perspective of international lending that ideological distance significantly inhibits cross-border lending - banks are more inclined to lend to borrowers from countries with similar political positions [9]. Ciminelli et al. used the data of 30,000 fund holdings to provide micro evidence: when the GPR rose, the fund leaned toward the pro-China economy and stayed away from the pro-American economy, indicating that there was a clear camp preference for capital allocation [10]. Yang et al. further showed that GPR has a sustained negative impact on cross-border capital flows [11]. At present, the mainstream view is that the aggregate effect and the structural effect exist simultaneously. However, whether the two are additive or substitutive remains empirically untested within a unified framework integrating both mechanisms. This is precisely the gap this paper attempts to fill.

2.3 Theoretical Assumptions

Based on the above analysis, the existing research has the following limitations. First, the risk-hedging literature and the camp-allocation literature each tell only half the story, and no empirical test has incorporated the two mechanisms into a unified framework. Second, it remains impossible to answer the key question of whether the two effects are additive or substitutive. Some studies remain at the level of descriptive statistics due to the lack of variable data. They cannot complete rigorous regression analysis, making it difficult to provide credible coefficient estimates and statistical inferences. Based on these gaps, this paper explores the differential effects of GPR and political position distance on FDI using two-way fixed effects panel regression, and proposes the following three research hypotheses.

H1 (Risk - Hedge): Rising GPR results in reduced net inflows of FDI. It is based on the theory that rising risk premiums drive capital to seek safe havens.

H2 (Faction - Configuration): The higher the ideal point (i.e., closer to the US-dominated Western liberal order), the greater the net inflow of FDI. It is based on the theory that political distance inhibits capital flows.

H3 (Interaction Effect): The interaction term between GPR and the ideal point reflects the additive or substitution relationship between the two mechanisms. If the interaction term is negative, it supports the double-penalty hypothesis (additive effect). If the interaction term is positive, it suggests a substitution relationship, meaning that a pro-Western position has a hedging buffer effect in high-risk periods.

3. Study Design

3.1 Sample and Data Sources

This paper builds a panel dataset covering 22 major economies, 2006-2024. The sample was selected according to three principles: G7 developed economies (United States, Germany, United Kingdom, Japan, France, Italy, Canada, as the main source of capital); BRICS and G20 core emerging economies (China, Russia, India, Brazil, South Korea, Australia, Saudi Arabia, Turkey, Mexico, Indonesia, Argentina, South Africa, Egypt, as important capital destinations); Countries involved in major geopolitical conflicts (Ukraine, Israel). Covering more than 80% of global GDP, the sample is broadly representative. All data are obtained directly from official sources without any interpolation or manual values. FDI, GDP and financial deepening data are from the World Bank's WDI database [12], the GPR index is from the official websites of Caldara and Iacoviello [2], and the ideal point is estimated from Harvard Dataverse by Bailey et al. [3].

3.2 Variable Definitions

The variable system includes dependent variables (net FDI inflows as a proportion of GDP), core independent variables (GPR, ideal points), interaction terms, and control variables (ln (GDP), financial deepening). The specific definitions are shown in Table 1. As can be seen in Table 1, the dependent variable FDI comes from the World Bank's WDI indicator BX.KLT.DINV.WD.GD.ZS, which measures the scale of a country's attraction of foreign direct investment. A positive value indicates net capital inflows, while a negative value indicates net capital outflows [12]. The core independent variable GPR is the annual average of the national monthly indexes constructed by Caldara and Iacoviello, and the higher the value, the greater the geopolitical risk facing the country [2]. The ideal point is the UN voting ideological coordinate estimated by Bailey et al. The higher the value, the closer the political position is to the US-led liberal order [3]. Among the control variables, ln(GDP) controls for the economic scale effect—countries with larger economies usually attract more capital. Fin (domestic credit as a proportion of GDP) controls for the depth of financial development—the more developed the financial system, the higher the efficiency of capital allocation. It should be noted that the institutional quality variables were removed from the model because the World Bank WGI database API is no longer available for the relevant indicators.

Table 1: Variable definitions and data sources

Variable Category	Variable Name	Symbol	Definition	Data Source
Explained Variable	FDI Net Inflows	FDI	FDI net inflows (% of GDP)	World Bank WDI [12]
Explanatory variable	Geopolitical Risk	GPR	Country-level GPR monthly index annual mean	Caldara & Iacoviello [2]
	Ideal Point	IdealPoint	UN voting ideological coordinate	Bailey et al. [3]
Control Variable	Economic Scale	ln(GDP)	Natural logarithm of GDP	World Bank WDI [12]
	Financial Depth	Fin	Domestic credit (% of GDP)	World Bank WDI [12]
Interaction	Risk x Position Interaction	GPR x IdealPoint	Mean-centered GPR x IdealPoint product	Constructed by this study

3.3 Empirical Model Setting

In this paper, two regression models are set up. Model (1) is the benchmark model, which aims to test the independent influence of GPR and ideal point on FDI, that is, whether GPR is significantly negative (validation H1) and ideal point is significantly positive (validation H2) after controlling for each other's effects and other control variables. The inclusion of two core independent variables at the same time is to avoid the bias of missing variables - if only GPR is included without the ideal point, the GPR coefficient may absorb the influence of political position distance. Model (2) is the interaction effect model, and the interaction term between GPR and ideal point is added on the basis of the benchmark model to test whether the two mechanisms are additive or substitutive (verify H3). GPR and IdealPoint are mean-centered before constructing the interaction term to mitigate multicollinearity. Both models control for the fixed effects of the country (absorbing the national characteristics that do not change with time, such as geographical location, resource endowment) and the fixed effects of the year (absorbing the time shocks that do not change with the country, such as the global financial crisis and the epidemic), and standard errors are clustered at the country level.

$$FDI = \alpha + \beta_1 \cdot GPR + \beta_2 \cdot IdealPoint + \gamma_1 \cdot \ln(GDP) + \gamma_2 \cdot Fin + \mu_i + \lambda_t + \varepsilon_{it} \quad (1)$$

Among them, μ_i is the country fixed effect, λ_t is the year fixed effect, ε_{it} is the random error term, and standard errors are clustered at the country level. $\beta_1 < 0$ confirms H1, $\beta_2 > 0$ confirms H2.

$$FDI = \alpha + \beta_1 \cdot GPR + \beta_2 \cdot IdealPoint + \beta_3 \cdot (GPR \times IdealPoint) + \gamma \cdot Controls + \mu_i + \lambda_t + \varepsilon_{it} \quad (2)$$

β_3 is the core coefficient of H3. If $\beta_3 < 0$, the double penalty hypothesis (additive effect) is supported; if $\beta_3 > 0$, a substitution relationship is suggested (a pro-Western position has a hedging buffer effect in high-risk periods).

3.4 Descriptive Statistics

Table 2: Descriptive statistics

Variable	N	Mean	Std. Dev.	Min	Max
FDI (%GDP)	383	2.205	1.593	-0.894	12.000
GPR	383	0.404	0.562	0.014	3.609
IdealPoint	383	0.583	0.934	-1.354	2.696
ln(GDP)	383	28.077	1.132	25.234	31.009
Fin (%)	383	91.868	51.916	11.910	219.126

Table 2: a total of 383 observations in the sample, covering data from 22 countries from 2006 to 2024. The average FDI was 2.205%, with a standard deviation of 1.593, ranging from -0.894% (net capital outflows) to 12.000%, with significant cross-country differences, reflecting the huge differentiation of countries' ability to attract foreign investment. The GPR averaged 0.404, but reached a maximum of 3.609 (Russia 2022), nearly nine times the average, reflecting the high concentration and time-varying nature of geopolitical risks. The ideal point average is 0.583, ranging from -1.354 to 2.696, with a standard deviation of 0.934, covering the complete spectrum from opposition to the US-dominated Western liberal order to a high approximation to that order, providing sufficient cross-sectional variation for testing the camp effect. The control variables of ln(GDP) and Fin also exhibit reasonable variability.

4. Empirical Results and Analysis

Table 3: Benchmark regression results

Variable	Model (1) Baseline	Model (2) Interaction
GPR	-1.031*** (0.248)	-1.546*** (0.226)
IdealPoint	-0.042 (0.419)	0.079 (0.483)
GPR x IdealPoint	—	0.776*** (0.234)
ln(GDP)	-0.134 (0.550)	-0.083 (0.499)
Fin	-0.006 (0.006)	-0.004 (0.006)
Country FE / Year FE	Yes / Yes	Yes / Yes
R2	0.501	0.509
N	383	383

Note: clustered standard errors in brackets. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In Table 3, the GPR coefficient in model (1) is -1.031 ($p < 0.01$), that is, for every unit of increase in the GPR, the net FDI inflow decreases by 1.03 percentage points, confirming H1. Taking Russia in 2022 as an example, its GPR soared from 0.82 to 3.69, an increase of about 2.87 units, corresponding to a decrease in FDI of about 2.95 percentage points - the actual FDI plummeted from a positive value to a negative value, which is highly consistent with the forecast. Among them, the GPR data were taken from the monthly index at the country level published by the official websites of Caldara and Iacoviello (2022) [2], and the FDI data were taken from the World Bank WDI database (indicator code BX.KLT.DINV.WD.GD.ZS). It should be noted that the above Russian case reflects only the independent effect of GPR and is not related to the ideal point coefficient. The independent effect of the ideal point itself is separately characterized by its coefficient: the ideal point coefficient in model (1) is -0.042 ($p = 0.920$), which is not significant, indicating that the political position distance alone does not affect FDI without considering geopolitical risks, and H2 is not supported as an independent effect. One possible explanation is that in normal times (low GPR), economic fundamentals (market size, level of financial development) dominate capital flow decisions, and differences in the political stances of investment destinations are masked by economic motivations. Only when geopolitical risk rises does position distance amplify the impact on FDI through the risk perception channel - and whether this adjustment mechanism holds is the question to be tested by the interaction term in Model (2).

After the interaction term was added to Model (2), the GPR coefficient became -1.546 ($p < 0.01$), which was stronger than the benchmark model, because the interaction term absorbed part of the variation caused by the heterogeneity of the political stance in the GPR effect. The interaction term coefficient was 0.776 ($p <$

0.01), which was significantly positive, contrary to the double-penalty hypothesis expected under H3. This result shows that countries with pro-Western political stances experience smaller FDI shocks when GPR rises, and the two mechanisms exhibit a substitution relationship rather than an additive relationship. Specifically, when GPR rises by 1 unit, the negative effect on FDI is reduced by 0.776 percentage points for each unit increase in the ideal point (i.e., more pro-Western). In other words, the pro-Western stance has hedging properties in times of high geopolitical risk, partially cushioning the risk shock. Neither the control variables $\ln(\text{GDP})$ nor Fin are significant, indicating that cross-country differences in economic size and financial depth have been absorbed by national characteristics after controlling for national fixed effects. R-squared increased from 0.501 to 0.509, indicating that the interaction term provides additional explanatory power.

5. Robustness Testing

Table 4: Robustness test

Test	GPR Coef.	GPR p-value	Interaction Coef.	Interaction p-value	N
R1: Excluding COVID (2020-2021)	-1.623***	0.000	0.836***	0.002	343
R2: Pre-war (2006-2021)	-1.439**	0.045	0.748*	0.052	327
R3: Excluding G7	-1.900***	0.000	0.935***	0.009	267
Baseline (Reference)	-1.546***	0.000	0.776***	0.001	383

Note: All models contain country fixed effects, year fixed effects, and clustered standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

As shown in Table 4, in order to test the robustness of the conclusions, this paper carries out three tests. After R1 excluded the COVID period (2020-2021), the GPR effect was stronger (-1.623, $p < 0.01$), and the interaction term was more significant (0.836, $p < 0.01$), indicating that the abnormal capital flow policies during the pandemic constituted noise, and the true effect of geopolitics becomes clearer after excluding this period. GPR is still significant (-1.439, $p = 0.045$) in the R2 pre-war sub-sample (2006-2021), and the interaction term is significant at the 10% level (0.748, $p = 0.052$), indicating that the impact of geopolitics on capital allocation is not only driven by the 2022 war, but a persistent structural phenomenon - geopolitical shifts began well before the Russo-Ukrainian War. After excluding the G7 advanced economies in R3, the GPR effect is further strengthened (-1.900, $p < 0.01$), and the interaction term is more significant (0.935, $p < 0.01$), which confirms that emerging markets face higher risk premiums, and the buffering effect of political positions is more obvious in emerging markets - these countries are more vulnerable in international capital markets, and the marginal impact of political positions is greater.

6. Conclusion

Based on the panel data of 22 major economies from 2006 to 2024, this paper uses two-way fixed-effects regression to examine the differential impact of geopolitical risks and political position distances on FDI. The study found that: First, GPR has a strong negative effect on FDI. For every unit increase in GPR, the net inflow of FDI decreases by 1.55 percentage points ($p < 0.01$). After excluding COVID and focusing on emerging markets, the effect is stronger, confirming the risk-hedging preference hypothesis. Second, the independent effect of the ideal point is not significant, but the interaction between the GPR and the ideal point is significantly positive (coefficient 0.78, $p < 0.01$), indicating that pro-Western countries experience smaller FDI shocks under high geopolitical risk, and the two mechanisms exhibit a substitution relationship rather than an additive relationship - the pro-Western stance has a safe-haven property in high-risk periods, partially buffering the risk shock. This finding corrects the simple double-penalty hypothesis in the literature and reveals more complex mechanisms through which geopolitics influences capital allocation.

This study has the following limitations: First, the dependent variable is national FDI rather than bilateral capital flows, which cannot capture changes in capital flows between specific country pairs. In the future, the IMF CPIS bilateral data can be used to deepen the analysis. Second, institutional quality variables were not included due to data availability constraints, and alternative indicators may be found in future research. Third, the measure of distance between political positions relies on UN voting records and may not fully reflect informal diplomatic relations. Based on the above findings, it is recommended that emerging market countries incorporate GPR into the macroprudential framework and establish a geopolitical stress testing mechanism; When balancing strategic autonomy and capital friendliness, China should be wary of the cumulative impact

that excessive political deviation may have on capital inflows and global governance participation. Geopolitical considerations should be incorporated when assessing the prospects of attracting foreign investment. Future research can further deepen the analysis using micro enterprise investment data and bilateral political relationship indicators constructed by NLP.

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Conflicts of Interest

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