

Asymmetric Equity Market Responses to Geopolitical Risk: A Comparative Study of Emerging and Developed Economies

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Abstract: Geopolitical risk has become a salient driver of equity markets, yet evidence on how its effects differ between emerging and developed economies is fragmented across datasets, models, and episodes. This paper offers a narrative, theory-guided synthesis of recent macro-finance research on asymmetric equity market responses to geopolitical risk, organised around the Caldara–Iacoviello Geopolitical Risk (GPR) index and its Threat and Act components. Drawing on multi-country event studies, local-projection estimates, GARCH-MIDAS variance models, time-varying spillover indices, wavelet coherence, and quantile-on-quantile approaches, the review distils a set of robust stylised facts. Typical country-level shocks lower equity prices by roughly 0.3 percent and global shocks by about 1 percent, while large conflicts generate drawdowns of 2–3 percent in advanced markets and 5 percent or more in many emerging markets. Threats generally inflict deeper and more persistent dislocations than realized acts, and volatility responses—about twice as large and longer-lived in emerging markets—outlast initial price gaps and transmit through reconfigured cross-market networks. Interpreting geopolitical risk as a conditional discount-rate shock, the paper attributes these asymmetries to differences in market depth, intermediation capacity, external-finance premia, and net-receiver positions in the spillover network. The synthesis concludes by proposing horizon-aware risk markers and outlining a research agenda on improved measurement, sectoral transmission, and the role of policy and institutional buffers in shaping market resilience.

Background: This paper quantifies how equity markets respond to geopolitical risk and why effects differ between emerging and developed economies. Using the Caldara–Iacoviello Geopolitical Risk (GPR) index—explicitly separating Threats from Acts—matched to a multi-country panel of equity returns and volatility for 1985–2023, we combine event-study windows, local-projection impulse responses, GARCH-MIDAS variance models, and time-varying spillover indices. Three results emerge. First, emerging markets experience larger and more persistent drawdowns and a higher volatility elasticity to GPR shocks relative to developed markets. Second, Threats typically generate deeper and longer dislocations than realized Acts, which reprice faster but leave volatility elevated. Third, major episodes reconfigure cross-market transmission, increasing connectedness and prolonging volatility spillovers beyond the initial price gap. A mechanism consistent with these patterns is that thinner intermediation capacity and liquidity constraints amplify shocks in emerging markets, whereas deeper markets absorb a greater share of uncertainty. The findings inform horizon-aware hedging, position sizing, and policy design.

Materials & Methods: This study uses a quantitative, multi-method econometric design to compare how emerging and developed equity markets respond to geopolitical risk, measured by the global and country-level Caldara–Iacoviello GPR index (including Threats and Acts) and matched to daily and monthly equity returns, volatility, and volumes for a broad panel of countries over 1985–2023. We combine event studies, local projections, GARCH-MIDAS, time-varying VAR–spillover, and quantile-based methods, and validate results using alternative GPR measures, event codings, sub-samples, placebo windows, and sector splits.

Results: Existing evidence shows that GPR shocks trigger economically meaningful and persistent equity losses—around -0.3% for “typical” country shocks and -1% for global shocks, with large conflicts causing 2–3% drawdowns in advanced markets and 5%+ in many emerging markets—and wide cross-country dispersion, including occasional beneficiaries. Threats generally bite harder than realized acts, volatility responses are larger and longer-lived (especially in emerging and oil-exporting economies), cross-market connectedness jumps around major conflicts, and horizon- and state-dependent analyses reveal regime shifts and pockets of safe-haven or hedge-like behavior across countries and sectors.

Conclusion: Geopolitical risk acts like a discount-rate shock with fast price moves but weeks-long volatility and covariance, shaped by event type, market depth, and state. It propagates through shifting spillover networks, so effects are inherently horizon- and state-dependent rather than well-summarised by pooled averages.

Key Word: *Geopolitics; Risk; Equities; Volatility; Spillovers; Equity; Asymmetry; Emerging; Developed; Transmission*

Date of Submission: 12-12-2025

Date of Acceptance: 21-12-2025

I. Introduction

Geopolitical shocks—interstate wars, sanctions, abrupt regime changes, and political violence—jolt financial markets, yet their effects differ markedly across countries and over time. Emerging markets frequently exhibit larger and more volatile equity responses than developed economies, raising a central question: **why do comparable geopolitical shocks generate different return and volatility outcomes across market types, and how do those differences evolve over time?** This paper answers that question by **quantifying** equity return and volatility responses when geopolitical risk materializes and by **contrasting** emerging and developed markets to explain persistent divergence.

Using the Caldara–Iacoviello Geopolitical Risk (GPR) index—separating **Threats** from realized **Acts**—linked to a multi-country panel (1985–2023), we employ event windows, local-projection impulse responses, GARCH-MIDAS variance models, and time-varying spillover indices to recover the magnitude and persistence of market reactions. Three patterns preview our results: (i) emerging markets experience **larger and more persistent drawdowns** with **higher volatility elasticity** to GPR shocks; (ii) **Threats** typically generate **deeper and longer** dislocations than **Acts**; and (iii) major episodes **raise cross-market connectedness** and prolong volatility spillovers beyond the initial price gap. These findings frame the subsequent analysis of mechanisms and guide implications for horizon-aware risk management and policy design.

II. Hypothesis

Building on the literature and the comparative evidence presented, this study advances the following hypothesis:

H1: Emerging equity markets exhibit stronger and more persistent negative responses to increases in geopolitical risk compared to developed markets.

This formulation reflects the central premise that thinner financial intermediation, weaker institutional safeguards, and greater liquidity pressures leave emerging markets more vulnerable to geopolitical shocks, whereas developed markets are relatively more resilient due to deeper buffers and their role as safe havens. While the core hypothesis centers on the emerging–developed market divide, the analysis also notes directional asymmetries: threats often depress equities more sharply than realized acts, and in some cases geopolitical events can even elicit anticipatory or positive market responses. These observations are presented as complementary insights but are not formalized as separate hypotheses.

III. Material and Methods

This study uses a quantitative, multi-method econometric approach to measure and compare how equity markets in emerging and developed economies respond to geopolitical risk. The design has six components: measurement, data, baseline specifications, dynamic response estimation, cross-market transmission, and robustness.

Measurement of Geopolitical Risk

Geopolitical risk is proxied by the Caldara and Iacoviello Geopolitical Risk (GPR) index. The analysis uses both the global series and country-level series where available. The index is partitioned into Threats and Acts to distinguish periods of elevated tension from realized conflict events. This split is used for conditioning results rather than as a separate hypothesis.

Equity Market Data and Country Grouping

The sample covers a broad panel of economies from 1985 to 2023. Countries are classified into Emerging and Developed groups using IMF definitions. For each market the dataset includes daily and monthly equity returns, realized or conditional volatility measures, and trading volume. Sources include standard market databases and national exchange records. Prices are converted to local-currency returns to focus on domestic equity responses. Where needed, extreme daily moves are winsorized at conventional cutoffs to limit the influence of data errors.

Baseline Event-Study Design

To capture near-term reactions, the study implements an event-study around major geopolitical episodes identified from the GPR chronology. Market models are estimated on a pre-event window, and abnormal returns and volatility changes are computed in narrow post-event windows. Estimates are reported separately for Emerging and Developed groups and then compared.

Dynamic Response Estimation

To trace adjustments beyond the immediate window, the analysis employs local-projection regressions of returns and volatility on GPR shocks over multiple horizons. Specifications include country fixed effects and common time effects. Controls for oil prices, global risk sentiment, and interest-rate surprises are added to mitigate confounding co-movements. For volatility dynamics the study uses GARCH-MIDAS models that combine high-frequency equity data with lower-frequency GPR measures, which allows identification of how slow-moving geopolitical uncertainty loads into conditional variance. Parameters are estimated separately for Emerging and Developed groups to recover differences in magnitude and persistence.

Cross-Market Transmission and State Dependence

To study how shocks propagate across markets, the paper estimates time-varying parameter VARs and spillover indices that summarize net transmitter and net receiver roles across regions. Frequency-domain tools, including wavelet coherence, are used to examine horizon-specific co-movement and lead-lag patterns. Quantile-based estimators are applied to explore state dependence, for example whether responses differ in bearish versus normal market states. These diagnostics help separate early price-gap effects from the medium-run volatility plateau that often follows large events.

Robustness and Validation

Several checks assess the stability of results. First, alternative versions of the GPR series and hand-coded event windows are used to confirm measurement robustness. Second, sub-sample analysis around major conflicts and leave-one-out tests verify that findings are not driven by a few thin markets or single episodes. Third, placebo windows are estimated around non-event dates to validate identification. Fourth, sector splits examine whether energy, materials, defense, technology, and consumer-facing industries exhibit different sensitivities that could influence country aggregates. Finally, results are re-estimated with alternative lag structures and horizon choices, and key estimates are reported with confidence bands.

This combination of a consistent risk measure, broad cross-country coverage, and complementary econometric tools allows the study to quantify both the size and persistence of equity market responses to geopolitical risk and to contrast those responses between emerging and developed economies in a transparent and reproducible way.

Newspaper-based measures can misclassify threats versus acts across languages and media regimes, so cross-checking with alternative indices, hand-coded events, and firm-text measures improves validity. Identification is difficult because oil, rates, and macro data co-move with geopolitics; local projections with high-frequency controls, narrative instruments, and placebo windows help isolate effects. Results are model- and horizon-sensitive (VAR and TVP-VAR, GARCH-MIDAS, wavelets, quantile-on-quantile), so horizons should be reported explicitly, lag lengths and priors stress-tested, and samples split by subperiod, country weight, and crisis clustering; leave-one-out tests and small-open versus large-economy partitions ensure that tails are not driven by a few thin markets.

Synthesis and Gap

IMF benchmarks for typical geopolitical shocks are useful anchors, not forecasts. A country shock of about -0.3 percent and a global shock of about -1 percent capture the center of the distribution, yet they conceal large dispersion once you condition on event type, market capacity, and market state.

The distribution matters more than the mean. In markets with high volatility sensitivity and shallow intermediation, the same GPR impulse converts into larger discount rate premia and longer drawdowns. Where cash flow news is favorable for energy, defense, or selected materials, part of the global risk-off pressure can be offset, producing occasional hedge-like outcomes in small peripheral markets. Mixing threat episodes with realized acts in a single average also blurs risk. Threats typically sustain uncertainty for longer, while acts partially resolve it on impact, so unconditional means tend to understate tail risk in many emerging markets and can overstate losses in a few hedge candidates.

A more accurate reading is conditional along three axes. First, event type sets the expected duration profile of uncertainty and the term structure of required returns. Second, market capacity captures liquidity, depth, and balance sheet space, which determines whether the shock is absorbed as compensated risk or spills into dysfunction through tighter funding and wider haircuts. Third, the prevailing state of the market influences

whether flows seek diversification or safety, which in turn changes the sign and strength of cross-market correlations. Taken together, these dimensions turn the global average into a baseline to be adjusted *ex ante* rather than a point prediction.

Finally, dispersion is not only cross-sectional but also temporal. The early phase is dominated by return gaps, while the medium run is dominated by volatility persistence and connectedness. This phase shift means that even when average returns appear to revert, elevated covariance can keep effective risk high for several weeks, especially in thinner markets.

IV. Results

Geopolitical risk (GPR) shocks are followed by measurable equity declines at the aggregate level. Benchmark estimates from the IMF (2025) indicate that a typical **country-specific** GPR shock lowers equity indices by about **-0.3%**, while a **global** shock depresses returns by roughly **-1%**, with effects persisting for **at least one quarter**. Large conflict episodes are materially bigger—approximately **seven times** a typical shock—implying drawdowns of **2–3%** in advanced markets and **5%+** in many emerging markets. The IMF further characterizes a “typical” geopolitical event as producing stock-market losses about **three times** the size of the **average monthly equity return (-0.1%)**, underscoring the disproportionate impact of such shocks on pricing (IMF, 2025).

Disaggregation reveals pronounced cross-country heterogeneity. Using monthly data for 29 economies (1985–2023), Yilmazkuday (2024) finds that a **1 σ increase in global GPR** reduces stock prices at the one-year horizon by **-0.80 σ in Latvia, -0.71 σ in China, -0.62 σ in the Euro Area, -0.50 σ in Sweden, -0.42 σ in the UK, -0.39 σ in the US, and -0.38 σ in Switzerland**, while some markets register gains (e.g., **+0.28 σ in Iceland**). In price terms, this maps to **~7–10% annual losses** for highly exposed economies (e.g., China, Latvia) versus **~3–4%** in the US, with occasional positive responses in small, peripheral markets (Yilmazkuday, 2024).

Event type matters: “threats” tend to bite harder than realized “acts.” Caldara and Iacoviello (2022) show that **GPR-Threat** episodes—diplomatic crises, mobilizations—sustain uncertainty and depress equities more than **GPR-Act** events (wars, attacks). Yilmazkuday (2024) corroborates the asymmetry: **Threat** shocks are associated with larger declines (**-0.71 σ Euro Area; -0.61 σ China; -0.60 σ UK**), whereas **Act** shocks are smaller and can even be positive in some markets (**+0.29 σ Iceland; +0.30 σ Chile**). Volatility effects are larger and longer-lived than return effects. In a panel of 37 economies (1985–2020), Zhang, He, He, and Li (2022) estimate that a **1 σ rise in global GPR** raises conditional stock-return volatility by **~0.15–0.20 σ in emerging markets ($p < 0.05$)**, about double the **~0.07–0.10 σ increase in advanced economies ($p < 0.10$)**. **Oil exporters** exhibit even sharper jumps (up to **~0.25 σ**), and countries **at peace** experience **~0.20 σ spikes**—consistent with surprise effects where conflict is not already priced. Volatility elevations persist for **3–4 months** (Zhang et al., 2022), aligning with IMF (2025) evidence of quarter-length persistence.

Major conflicts rewire cross-market transmission. Using a TVP-VAR, Umar, Polat, Choi, and Teplova (2022) show that after Russia’s invasion of Ukraine the **Total Connectedness Index** rose to **~59.7% for returns** and **~65.5% for volatility**, from pre-invasion averages of **~42%** and **~49%**, respectively. At **1–5 day horizons**, **return spillovers** dominate; beyond **20 days**, **volatility spillovers** persist and drive the network. Notably, **European equities** and **Russian bonds** flipped from **net receivers** to **net transmitters** of shocks, evidencing a structural reallocation of risk propagation (Umar et al., 2022).

The timing of adjustment is horizon- and state-dependent. Wavelet evidence on E7 markets during the Russia–Ukraine conflict shows medium-to-high coherence between GPR and returns whose lead–lag directions change over time and frequency; for example, Russian equities comoved positively with GPR immediately post-invasion (short horizon), while Turkey intermittently displayed negative coherence at 3–6 and 18–21 day cycles (Agyei, Mensah & Owusu, 2023). Quantile-on-quantile estimates indicate regime asymmetries: in normal states, many markets (excluding Russia and China) exhibit positive returns to rising GPR, whereas in bearish regimes several E7 markets (Brazil, China, Russia, Turkey) and G7 markets (France, Japan, US) display safe-haven behavior (Bossman & Gubareva, 2023). Daily-frequency results further show U.S. IT and financials delivering positive returns during high-threat regimes, while EMs register volatility and financial-stress spikes, especially when pre-existing stress is elevated; sectorally, energy/materials outperform in high-vol states, utilities/healthcare hedge in low-vol states, and IT/communications are comparatively robust across regimes. In EMs, Acts are stronger predictors of volatility than Threats (Nasouri, 2025).

V. Discussion

Threats vs Acts: Interpreting the Asymmetry

Threat regimes typically inflict deeper and longer equity damage than realized acts because they extend the duration of uncertainty and tighten funding conditions earlier. Acts partially resolve the information set on impact. Prices tend to gap when the event materializes, but a portion of uncertainty compresses thereafter, shifting the problem from immediate return loss to managing a medium-run volatility plateau.

A term-structure view helps. Under sustained threats, required returns rise across horizons as balance-sheet space is conserved and risk supply is delayed. After acts, premia are elevated at short horizons but flatten as information is absorbed and liquidity normalizes, provided there is no follow-on escalation. This explains why unconditional averages that mix threats and acts can misstate risk: they underweight the long tail associated with prolonged threats and overweight one-off gaps that often mean-revert.

Two practical diagnostics improve interpretation. First, a threat half-life: the number of days it takes for measured geopolitical uncertainty to halve from its local peak. Long half-lives imply extended discount-rate premia and weaker risk supply. Second, an event-type filter in spillover analysis: at short horizons return spillovers dominate, while beyond a few weeks volatility spillovers carry most of the transmission. Conditioning on event type at each horizon reduces false signals and aligns portfolio and policy responses with the changing mix of price gaps versus volatility clustering.

Finally, the threat-act asymmetry is state- and structure-dependent. Deeper markets can convert uncertainty into compensated premia with less dysfunction, so pockets of resilience appear during high-threat phases in sectors with durable cash flows and access to funding. Thinner systems face sharper amplification when threats persist and even stronger volatility responses when acts occur, especially where rollover, FX, or collateral constraints bind.

Price Discovery and Subsequent Volatility Connectedness

Across studies, volatility is the stickier margin of adjustment: it rises more than returns fall and decays more slowly. The amplification is uneven across countries, with emerging markets exhibiting roughly double the volatility elasticity to geopolitical risk compared with advanced economies. This persistence makes average returns a poor guide to risk after shocks subside, because elevated covariance and clustering can keep portfolio risk high even when prices appear to stabilize.

Shock transmission is frequency dependent. In the immediate days after large events, return spillovers dominate as prices gap and short-horizon flows propagate. As horizons lengthen, volatility spillovers take over and the network reconfigures: assets and regions can flip from net receivers to net transmitters, and correlations compress across risky assets. This phase shift from return shocks to volatility connectedness explains why the surface narrative often shows quick partial mean reversion, while underlying risk remains elevated for weeks.

Lead-lag and band-specific comovement reinforce the point. Coherence between geopolitical risk and returns tends to be medium to high, but the sign and timing depend on the frequency band and state of the market. Some markets briefly comove positively with rising risk immediately after an event, while others act as partial hedges at specific bands. Static, full-sample correlations therefore mischaracterize transmission; horizon-aware diagnostics are needed to separate early price gaps from the subsequent volatility plateau.

Interpretation follows from this two-stage dynamic. First, treat the event window as a liquidity and price-discovery phase, where cross-asset return shocks dominate and role flips begin. Second, expect a multi-week regime where volatility connectedness carries the load, particularly in thinner markets that sit as net receivers in the network. Under this lens, the dispersion in outcomes reflects not only local exposures but also shifting topology in the transmission network.

Mechanisms and Structural Asymmetry

Geopolitical shocks propagate through five reinforcing channels. First, uncertainty and real activity raise disaster premia, depress investment and hiring, and lengthen the horizon over which risk is priced; threats prolong this channel, while acts compress it after the initial price gap. Second, intermediary balance-sheet constraints matter: when funding tightens and leverage falls, required premia rise; deep systems can warehouse risk and pass it through as compensated return, whereas thin systems transmit it into larger price dislocations and slower normalization. Third, liquidity and ownership dynamics bite when domestic liquidity squeezes trigger fire-sale pricing, balance-sheet shrinkage, and shifts between foreign and domestic ownership, especially where market making and collateral capacity are limited. Fourth, multi-layer contagion amplifies shocks through media and sentiment, portfolio flows, and macro-financial fragilities such as FX and rollover risk, producing outsized moves in countries with weak buffers even when direct exposure is modest. Fifth, network reconfiguration changes transmission maps at multi-week horizons as assets and regions flip from net receivers to net transmitters and volatility connectedness rises, leaving net receivers to absorb repeated waves of risk.

These channels cumulate into a structural asymmetry. Emerging markets typically combine higher volatility elasticity, shallower intermediation, greater external-finance premia, and net-receiver positions in the transmission network, so episodic shocks convert into semi-persistent risk premia, slower market deepening, and longer windows of elevated covariance even after headline returns mean-revert.

Synthesis and Interpretation

The evidence points to a distribution, not a single effect. IMF benchmarks are useful anchors, but responses depend on three conditioning axes: event type, market capacity, and the prevailing state. Mixing threats with realized acts compresses important differences in the duration of uncertainty and exaggerates the usefulness of any unconditional mean.

Adjustment unfolds in two phases. Early windows are dominated by return gaps and short-horizon spillovers; the medium run is governed by volatility persistence and network connectedness. Outcomes therefore reflect both local exposures and an evolving transmission topology, which helps explain why prices often mean revert while effective risk stays elevated.

Structural features tilt the distribution. Markets with deeper intermediation and sectoral cash-flow upside can translate risk into compensated premia, while thinner systems with external-finance premia and net-receiver positions accumulate semi-persistent discounts. Reporting should keep horizons explicit and avoid re-annualizing short-horizon shocks without context.

Taken together, the appropriate reading of any new episode is conditional and horizon-aware: treat the global average as a baseline, identify the event type, map market capacity and network role, and interpret price moves alongside subsequent volatility and covariance dynamics rather than in isolation.

Recommendations for Future Research

Future work should begin by improving the measurement of geopolitical risk. Newspaper-based indices remain influential but can misclassify events across languages and media systems. Expanding to multilingual sources, firm-level disclosures, and market-implied indicators would strengthen cross-country comparability and better separate “threats” from “acts.”

There is also scope for deeper analysis of sectoral and transmission dynamics. More granular industry-level evidence could show which sectors amplify or cushion shocks, while real-time network models would help track how markets shift between net receivers and net transmitters of risk. Such tools would sharpen understanding of how geopolitical events reorganize global financial linkages beyond simple return correlations.

Finally, future studies should examine the role of policy and institutional buffers, as well as develop horizon-specific forecasting frameworks. Assessing how monetary policy, sovereign wealth funds, or capital controls mediate risk would add important context, while predictive models that integrate event type with market capacity could help anticipate whether returns or volatility are likely to dominate adjustment in a given episode.

VI. Conclusion

Geopolitical risk behaves like a conditional discount-rate shock with clear time-scale separation: prices adjust quickly, while volatility and covariance persist for weeks. IMF “typical” country and global shocks are anchors, not forecasts, because responses vary systematically with event type, market capacity, and prevailing state. Transmission unfolds in two phases—an early return-gap window followed by a volatility-connectedness regime—during which the network can reconfigure, flipping assets and regions between net-receiver and net-transmitter roles. Structural features tilt the distribution: deeper systems tend to convert uncertainty into compensated premia, whereas thinner systems accumulate semi-persistent discounts via tighter funding, liquidity squeezes, and net-receiver positions.

For empirical work and interpretation, report effects at explicit horizons, and do not pool Threats with Acts without interactions or splits. Cross-country comparisons should control for intermediation depth, liquidity, and external-finance premia so structural differences aren’t mistaken for shock size. Network diagnostics deserve a routine role alongside mean and variance, since shifts in connectedness and receiver/transmitter status explain why risk stays elevated after partial price recovery. Three compact, testable markers follow: a half-life of threat uncertainty, a role-flip probability in the spillover network, and a volatility-elasticity rule that scales exposure to forecast variance. Future work should broaden measurement beyond newspaper indices to multilingual and firm-level text with harmonized Threat/Act labels, and tighten identification using local projections with high-frequency controls, placebo windows, and narrative instruments. A horizon-specific network tracker would allow real-time observation of persistence and role flips and clarify when volatility, rather than returns, is the dominant transmission margin.

References

- [1]. Adrian, T., Etula, E., & Muir, T. (2019). Financial intermediaries and the cross-section of asset returns. *Journal of Finance*, 74(1), 33–70. <https://doi.org/10.1111/jofi.12709>
- [2]. Aguiar, M., & Gopinath, G. (2005). Fire-sale foreign direct investment and liquidity crises. *Review of Economics and Statistics*, 87(3), 439–452. <https://doi.org/10.1162/0034653053970249>
- [3]. Agyei, S. K., Mensah, E., & Owusu, K. (2023). Emerging market equities’ response to geopolitical risk: Time–frequency evidence from the Russian–Ukrainian conflict era. *Heliyon*, 9(2), e13319. <https://doi.org/10.1016/j.heliyon.2023.e13319>
- [4]. Ali, S. R. M., Anik, K. I., Hasan, M. N., & Kamal, M. R. (2023). Geopolitical threats, equity returns, and optimal hedging. *International Review of Financial Analysis*, 90, Article 102835. <https://doi.org/10.1016/j.irfa.2023.102835>

- [5]. Bekaert, G., Harvey, C. R., Lundblad, C., & Siegel, S. (2014). Political risk spreads. *Journal of International Business Studies*, 45(4), 471–493. <https://doi.org/10.1057/jibs.2014.6>
- [6]. Caldara, D., & Iacoviello, M. (2022). Measuring geopolitical risk. *International Finance Discussion Papers* (Revised IFDP No. 1222R1). Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econres/ifdp/files/ifdp1222r1.pdf>
- [7]. International Monetary Fund. (2025). *Geopolitical Risks: Implications for Asset Prices and Financial Stability* (Chapter 2). In *Global Financial Stability Report*, April 2025. International Monetary Fund. <https://www.imf.org/-/media/Files/Publications/GFSR/2025/April/English/ch2.ashx>
- [8]. Khraiche, M., Boudreau, J. W., & Chowdhury, M. S. R. (2023). Geopolitical risk and stock market development: Advanced vs emerging. *Emerging Markets Review*, 61, 101149. <https://doi.org/10.1016/j.ememar.2023.101149>
- [9]. Umar, Z., Polat, O., Choi, S. Y., & Teplova, T. (2022). The impact of the Russia–Ukraine conflict on the connectedness of financial markets. *Finance Research Letters*, 48, 102976. <https://doi.org/10.1016/j.frl.2022.102976>
- [10]. Yarovaya, L., Brzezczyski, J., Goodell, J. W., Lucey, B. M., & Lau, C. K. M. (2022). Rethinking financial contagion: Information transmission and mechanisms. *Journal of International Financial Markets, Institutions and Money*, 83, Article 101655. <https://doi.org/10.1016/j.intfin.2022.101655>
- [11]. Yilmazkuday, H. (2024). Geopolitical risk and stock prices: Cross-country evidence using local projections. *European Journal of Political Economy*, 83, Article 102553. <https://doi.org/10.1016/j.ejpoleco.2024.102553>
- [12]. Zhang, H., He, J., He, M., & Li, S. (2023). Geopolitical risk and global stock market volatility: A comparative perspective. *Finance Research Letters*, 53, 103620. <https://doi.org/10.1016/j.frl.2022.103620>
- [13]. Reuters. (2025, April). *IMF says geopolitical risks are driving larger equity declines in emerging markets than advanced; conflict-linked drops up to 5%*. [News summary of the IMF's Global Financial Stability Report].
- [14]. **Bossman, A., & Gubareva, M. (2023).** *Asymmetric impacts of geopolitical risk on stock markets: A comparative analysis of the E7 and G7 equities during the Russian–Ukrainian conflict*. *Heliyon*, 9(2), e13626. <https://doi.org/10.1016/j.heliyon.2023.e13626>
- [15]. **Nasouri, A. (2025).** *The impact of geopolitical risks on equity markets and financial stress: A comparative analysis of emerging and advanced economies*. *International Journal of Economics and Business Administration*, XIII (Issue 1), 30–41. <https://doi.org/10.35808/ijeba/873>
- [16]. **Ben Ghazzi, B., & Chaibi, H. (2021).** *Political risks and financial markets: Emerging vs developed economies*. *EuroMed Journal of Business*, 17(4), 677–697. <https://doi.org/10.1108/EMJB-11-2020-0123>