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SPILLOVER EFFECTS OF FOREIGN POLICY UNCERTAINTY AND THEIR IMPACT ON FDI INFLOWS IN ASIA–PACIFIC: A PANEL QUANTILE APPROACH

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ABSTRACT

This study investigates the nonlinear impact of foreign economic policy uncertainty (EPU) on foreign direct investment (FDI) inflows across 21 Asia-Pacific economies from 1993 to 2023. The research first employs the Diebold-Yilmaz spillover index to quantify the cross-border transmission of EPU, identifying Japan, Singapore, and Australia as the region's primary uncertainty transmitters. Subsequently, a panel quantile regression model is applied to analyse how economies with varying levels of FDI integration respond to these external shocks. The findings reveal a significant nonlinear relationship: in economies with lower FDI inflows (0.1 quantile), an increase in foreign EPU is associated with a 0.505% decline in FDI, reflecting heightened risk aversion. Conversely, in economies with high FDI integration (0.9 quantile), the same shock corresponds to a 0.523% increase in inflows, indicating a "flight-to-safety" effect. These results suggest a one-size-fits-all policy approach is inadequate; low-FDI economies should prioritize institutional resilience to mitigate capital flight, while high-FDI economies must focus on financial stability to maintain their safe-haven status. Future research could build upon these findings by exploring sectoral-level impacts, a nuance not captured by this study's aggregate data approach.

Keywords: *Economic policy uncertainty, Spillover effect, Asia–Pacific, Foreign direct investment, quantile regression*

1. INTRODUCTION

FDI is widely recognized as a multifaceted engine for economic development (Forte & Costa, 2024; Ogbonna et al., 2022). Beyond the crucial injection of capital, it serves as a powerful catalyst for growth by facilitating technology transfer, enhancing national competitiveness, generating employment, and integrating host economies into global value chains (Ghazalian, 2023; UNCTAD, 2018; B. Zhang et al., 2023).

The Asia-Pacific region has firmly established itself as the world's leading hub for FDI, attracting nearly half of all global inflows due to its dynamic economies and integrated supply chains (UNCTAD, 2023). Recent figures underscore this dominance, with inflows reaching $621 billion in 2023 following a record $662 billion in 2022 (UNCTAD, 2022, 2023). However, this investment

landscape is highly concentrated, with the majority of capital flowing to a few key destinations – such as China, Singapore, and India – and into strategic sectors like manufacturing, technology, and finance (UNCTAD, 2024; UN.ESCAP, 2023). Simultaneously, the region has also become a major source of outbound FDI, with capital flowing extensively not only to global markets but also within the region itself (UNCTAD, 2015; UN.ESCAP, 2022, 2023, 2025), creating a dense web of intra-regional investment and highlighting its dual role as both a magnet and driver.

While the Asia-Pacific region's vast market, skilled labor force, and strategic trade agreements create a fertile ground for FDI (C. H. Nguyen, 2021; B. Zhang et al., 2023), its deep global integration is a double-edged sword. This interconnectedness not only fuels growth but also imports significant volatility from abroad, particularly in the form of foreign EPU (Baker et al., 2016). This exposure creates a high-stakes theoretical and practical puzzle. Conventional wisdom, rooted in real options theory, posits that uncertainty should uniformly deter investment as firms postpone irreversible decisions (Bloom, 2009). However, empirical reality presents a starkly different and paradoxical picture: during turbulent times, some economies hemorrhage capital while others paradoxically become "safe havens," attracting massive inflows (S. Tang et al., 2022; Muyambiri, 2025). This contradiction reveals a critical gap in our understanding and raises an urgent question for the heterogeneous Asia-Pacific: Do all economies react to foreign EPU in the same way, or does the impact diverge nonlinearly based on their underlying FDI integration and institutional resilience?

To resolve this puzzle, the study introduces a novel, two-pronged methodological approach. First, moving beyond simplistic domestic measures, a foreign EPU spillover index is constructed using (Diebold & Yilmaz, 2012) framework. This allows for the precise quantification of how uncertainty propagates across borders and the identification of the region's key transmitters. Second, panel quantile regression (PQR) is employed to dissect the impact of these external shocks across the entire FDI distribution. Unlike traditional mean-based models that obscure crucial differences, PQR provides a granular view, enabling a direct test of the "flight-to-safety" hypothesis by comparing the responses of low-FDI versus high-FDI economies. This approach allows the analysis to shift from inquiring if uncertainty matters to understanding how and for whom it matters within the diverse Asia-Pacific landscape.

The remainder of the paper is structured as follows: Section 2 discusses the theoretical underpinnings of EPU and its impact on FDI, surveying extant research and identifying pertinent gaps. Section 3 outlines the data sources and methodological frameworks. Section 4 presents and interprets the empirical results on EPU spillovers and quantile-dependent FDI effects. Section 5 discusses policy implications, concludes with key insights, limitations, and directions for future research.

2. THEORETICAL CONSIDERATIONS

2. 1. THE NATURE OF EPU

2. 1. 1. THE CONCEPT AND MEASUREMENT OF EPU

EPU has multifaceted nature. It emerged from the broader notion of uncertainty introduced by (Knight, 1921), who described it as the inability of individuals and firms to foresee or control future events. Building on this foundation, (Jurado et al., 2015) define uncertainty as arising from diverse, unpredictable shocks like macroeconomic, geopolitical, or firm-specific, which complicate forecasting and strategic decision-making. From the 2008 global financial crisis, policy uncertainty, among shocks cited above, has positioned center issues (Baker et al., 2016). The study adopted the concept EPU from (Baker et al., 2016) where the EPU refers to the unpredictability surrounding government actions, regulatory frameworks, and macroeconomic

policies that influence business decisions and economic activity.

Methods for quantifying Economic Policy Uncertainty (EPU) are diverse, each capturing different facets of the concept. Market-based measures, such as the VIX index, capture stock price volatility but do not isolate policy-specific drivers. In another approach, survey-based indicators gauge disagreement among experts or consumers. Examples include the Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters (SPF) and consumer sentiment indices, which reveal how uncertain people feel about future policy directions (Bloom, 2009; Leduc & Liu, 2016). Furthermore, regression-based approaches refine uncertainty estimates by using large datasets to track time-varying instability in macroeconomic and financial markets (Ludvigson et al., 2021). News-based indices, such as the NVIX, analyze text corpora from major publications to pinpoint spikes in uncertainty-laden language, particularly during financial crises (Manela & Moreira, 2017). Finally, politically-specific measures also exist; for example, research shows that election cycles influence FDI by altering the stability of the policy environment (Julio & Yook, 2012).

In this study, we rely on the EPU index proposed by (Baker et al., 2016) to specifically capture policy-related uncertainty. The EPU involves three main components, each normalized to its pre-2012 standard deviation and combined into a single monthly index: (i) Newspaper Coverage of Policy Uncertainty: Tracking the frequency of terms like "economic," "policy," and "uncertainty" in major national newspapers. This proxies the public perception of who makes policy, what those policies entail, and when they might be implemented. (ii) Scheduled tax code expirations: derived from Congressional Budget Office (CBO) reports, these highlight uncertainty around impending changes to tax provisions. (iii) Forecast disagreement: drawing on the SPF data for inflation and government purchase forecasts, larger divergences in expert predictions signal heightened uncertainty over policy-related outcomes. By weighting newspaper-based coverage at 1/2 and each of the remaining components (tax expirations, inflation forecast disagreement, and government purchases forecast disagreement) at 1/6, (Baker et al., 2016) generate a composite EPU index that isolates policy-specific turbulence more effectively than broader market volatility measures. While this index primarily reflects fluctuations in policy-related uncertainty, its ability to capture regulatory unpredictability and investor sentiment toward policy environments suggests that it may also serve as an indirect indicator of institutional stability, particularly in economies where policy uncertainty stems from governance weaknesses or inconsistent regulatory frameworks.

2. 1. 2. DISTINGUISHING ECONOMIC POLICY UNCERTAINTY FROM GEOPOLITICAL RISK

In the study of global uncertainty, EPU is conceptually distinguished from the related concept of Geopolitical Risk (GPR). EPU arises from ambiguity concerning future government economic policies, including fiscal, monetary, and regulatory actions (Huang et al., 2025; Udeaja et al., 2024; Siaw Ofori et al., 2025). In contrast, GPR stems from the threat of conflicts, wars, and political tensions between nations (Huang et al., 2025; Udeaja et al., 2024).

Empirical evidence highlights that their market impacts often diverge. For instance, EPU has a consistently negative effect on emerging Asian stock markets, whereas GPR's impact is mixed and non-linear across quantiles (Kannadhasan & Das, 2020). A clear divergence is also seen in shipping, where freight rates respond negatively to EPU shocks but positively to GPR shocks (Drobetz et al., 2021). Furthermore, cryptocurrencies have demonstrated hedging effectiveness against GPR but not against EPU (Almeida et al., 2024).

This distinction clarifies the study's focus on EPU as a key variable for understanding economic resilience – specifically, how the perceived credibility of a country's policy framework determines its ability to both attract new FDI and retain existing capital when faced with external shocks.

2.2. THE EPU'*S* CROSS-BORDER TRANSMISSION

As globalization deepens, policy uncertainty does not remain confined within national borders but instead spills over across countries through interconnected trade, financial, and geopolitical channels (Baker et al., 2016; Balli et al., 2017; Diebold & Yilmaz, 2012; Kaminsky & Reinhart, 1999). These spillovers influence FDI inflows as firms adjust their cross-border investment strategies in response to heightened uncertainty abroad (Canh et al., 2020; Choi et al., 2020; Gulen & Ion, 2015; Hsieh et al., 2019; Q. Nguyen et al., 2018; Ogbonna et al., 2022; Ölmez et al., 2024; Prüser & Schlösser, 2020; Sahu & Dash, 2021; Zhou et al., 2023).

First, EPU propagates across economies through trade channels, which subsequently affect FDI flows (Arigoni & Lenarčič, 2023; Caggiano et al., 2020; Okoli, 2021). Countries with strong trade linkages experience heightened EPU spillovers, particularly when uncertainty in major economies like the U.S. or China reduces import demand, disrupts export strategies, or alters supply chains (Caggiano et al., 2020). Policy fluctuations in key economies such as the United States and Europe have destabilized trade-dependent economies like Turkey, further amplifying uncertainty (Güney et al., 2024). When firms encounter uncertainty in key export markets, they often delay production expansion or reduce imports, indirectly shocking FDI flows in interconnected economies (Canh et al., 2020; L. Zhang & Colak, 2022). Additionally, EPU-induced exchange rate fluctuations impact trade competitiveness, discouraging long-term investments (Kamber et al., 2016; Koçak & Barış-Tüzemen, 2022). Global supply chain disruptions further magnify these effects, spreading uncertainty across markets (UNCTAD, 2020). Empirical studies confirm that EPU shocks from the U.S. and China significantly impact trade flows in the Eurozone and other economies, with U.S. EPU spikes reducing Canada's net exports (Arigoni & Lenarčič, 2023; Caggiano et al., 2020). Frequent changes in trade policies, such as tariffs and trade agreements, exacerbate EPU spillovers by increasing operational costs and discouraging sustained FDI commitments (L. Zhang & Colak, 2022). The degree of transmission varies depending on trade openness, macroeconomic resilience, and financial market structures (Arigoni & Lenarčič, 2023). Developing economies are particularly susceptible, as trade-driven uncertainty can heighten FDI volatility, particularly during economic downturns (Antonakakis et al., 2019; Caggiano et al., 2020; Kamber et al., 2016; Lemaallem & Saadi, 2025).

Second, financial market volatility serves as a key transmission channel through which EPU affects FDI by influencing capital flows, exchange rate stability, and borrowing costs (Arshad et al., 2024; Kamber et al., 2016; Prüser & Schlösser, 2020). Heightened uncertainty often triggers capital flight from risk-prone economies to safer markets, leading to exchange rate instability, liquidity constraints, and rising financing costs, all of which shape investment incentives (Kaminsky & Reinhart, 1999; Ouyang et al., 2022). Large-scale, short-term capital inflows can also create financial fragility in recipient countries, increasing the risk of asset bubbles and sudden reversals, further deterring long-term FDI (Koçak & Barış-Tüzemen, 2022). Additionally, central banks in vulnerable economies may adjust interest rates to stabilize financial markets, further influencing credit conditions and investment flows (Caggiano et al., 2020). Higher interest rates raise financing costs for firms, limiting their ability to fund long-term projects and reducing FDI inflows (Milas et al., 2024). EPU-driven exchange rate volatility further affects asset valuations and investment attractiveness, increasing risk exposure for foreign investors (Koçak & Barış-Tüzemen, 2022; Suhendra et al., 2022). Countries with weaker financial markets and less diversified capital sources tend to experience sharper FDI contractions during EPU shocks, as investors redirect capital to more stable destinations, while economies with strong institutional frameworks, such as Singapore and Hong Kong, often absorb redirected inflows, mitigating EPU-driven FDI volatility (Canh et al., 2020; Sahu & Dash, 2021). Moreover, stock market volatility can exacerbate uncertainty spillovers, affecting investor confidence and

cross-border capital flows (Bloom, 2009; Jurado et al., 2015). While developed financial markets can help buffer these effects by improving liquidity and risk-sharing mechanisms, instability often spreads across economies, amplifying uncertainty through interconnected financial systems (Choi et al., 2020; Diebold & Yilmaz, 2012; Q. Nguyen et al., 2018; Szafranek et al., 2024). Given these dynamics, policymakers must closely monitor financial volatility and implement stabilization measures, while investors need to assess both economic and political risks when making FDI decisions (L. Zhang & Colak, 2022).

Third, the quality of a host country's institutions and governance is a critical factor that determines its vulnerability to foreign EPU spillovers by increasing investment uncertainty, raising risk premiums, and discouraging long-term capital commitments (UNCTAD, 2018, 2024; B. Zhang et al., 2023). Political instability, frequent policy reversals, and weak institutional frameworks undermine investor confidence, particularly in economies where regulatory unpredictability and corruption elevate transaction costs and investment risks (Canh et al., 2020; Hsieh et al., 2019). For instance, U.S.-China trade tensions between 2018 and 2020 created widespread uncertainty, forcing multinational firms to reevaluate market entry and expansion strategies (Canh et al., 2020; Zhou et al., 2023). Similarly, the Russia – Ukraine war has demonstrated how geopolitical instability can realign global investment flows, shifting capital toward politically stable markets (Canh et al., 2020; Zhou et al., 2023). Election cycles and diplomatic tensions further exacerbate uncertainty, deterring FDI in politically volatile regions (Canh et al., 2020; Ogbonna et al., 2022; Okoli, 2021; Sarkar, 2019; L. Zhang & Colak, 2022).

Countries with strong governance structures and regulatory stability are more resilient to EPU spillovers, as investors prioritize policy predictability in their decision-making (Canh et al., 2020; Ogbonna et al., 2022; L. Zhang & Colak, 2022). In contrast, economies with weaker institutions and inconsistent policymaking face higher risk premiums, reducing their attractiveness as FDI destinations (Choi et al., 2020; L. Zhang & Colak, 2022). Additionally, bilateral investment treaties (BITs) and policy transparency can mitigate uncertainty, providing safeguards for foreign investors and supporting capital inflows during periods of heightened EPU (Gulen & Ion, 2015). However, the "geographic halo effect" suggests that regional instability can negatively influence investor sentiment toward an entire region, even if neighboring countries remain stable (Ogbonna et al., 2022). To manage these challenges, policymakers must strengthen institutional frameworks, ensure regulatory consistency, and enhance investor protections, while firms must diversify investment portfolios to hedge against geopolitical and institutional risks (B. Zhang et al., 2023; Zhou et al., 2023).

2. 3. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

2. 3. 1. MAIN HYPOTHESIS: THE NONLINEAR IMPACT OF FOREIGN EPU ON FDI

The theoretical impact of foreign EPU on FDI inflows is multifaceted, best understood through the lens of key international investment theories, which offer competing predictions.

On one hand, uncertainty tends to deter investment. Within Dunning's framework, EPU primarily influences the location (L) component, altering host-country attractiveness for foreign investors (Dunning, 1988; Dunning & Lundan, 2008). Uncertainty regarding policy direction, tax regulations, trade agreements, or political stability reduces location advantages, leading firms to delay or redirect investment (Gulen & Ion, 2015). Additionally, firms with strong ownership (O) advantages, such as technology and brand power, may still engage in FDI despite uncertainty, provided they can internalize risks effectively (Dunning, 1988).

Real Options Theory (Dixit & Pindyck, 2012) posits that firms perceive investment as a real option, granting them the right but not the obligation to invest (Arshad et al., 2024; Prüser &

Schlösser, 2020). In periods of heightened uncertainty, firms tend to delay irreversible investment commitments until additional information becomes available. This behavior is driven by the irreversibility of investment (Bernanke, 1983), uncertainty regarding future returns (Bloom, 2009; Canh et al., 2020; Choi et al., 2020; Milas et al., 2024; Q. Nguyen et al., 2018; Ogbonna et al., 2022; Prüser & Schlösser, 2020; Suhendra et al., 2022), and the option to postpone investment decisions to optimize outcomes (Baker et al., 2016; Bernanke, 1983; Canh et al., 2020; Gulen & Ion, 2015; Hsieh et al., 2019; Ogbonna et al., 2022; Okoli, 2021). Rising EPU often expands the inaction zone, leading firms to defer investment and proceed only under more favorable conditions (Bernanke, 1983; Canh et al., 2020, 2020; Gulen & Ion, 2015; Julio & Yook, 2012; Leduc & Liu, 2016; Prüser & Schlösser, 2020; Zhou et al., 2023). Additionally, increased EPU tends to reduce investment levels (Baker et al., 2016; Canh et al., 2020; Hsieh et al., 2019, 2019; Ogbonna et al., 2022; Okoli, 2021; Ölmez et al., 2024), redirect investment toward more stable economies (Canh et al., 2020; Hsieh et al., 2019; Ogbonna et al., 2022; Ölmez et al., 2024), and negatively affect FDI inflows (Canh et al., 2020; Hsieh et al., 2019; Ogbonna et al., 2022; Okoli, 2021). However, if uncertainty persists for extended periods, firms may eventually invest to maintain their competitive position, particularly in capital-intensive industries (Gulen & Ion, 2015; Okoli, 2021).

On the other hand, Growth Options Theory (Bernanke, 1983) provides a contrasting perspective, suggesting that uncertainty reallocates capital rather than simply destroying it. During periods of global turmoil, investors engage in a "flight-to-safety," moving capital toward economies perceived as stable "safe havens" (S. Tang et al., 2022). These are typically countries with strong institutions and credible policy frameworks. For these economies, an increase in foreign EPU can paradoxically lead to a positive effect, as they attract FDI from riskier destinations (Canh et al., 2020; Ogbonna et al., 2022).

The coexistence of these opposing theoretical mechanisms – the deterrent effect on a location's attractiveness (OLI and Real Options) versus the "flight-to-safety" dynamic (Growth Options) – strongly suggests that the net impact of EPU on FDI is not uniform. Instead, it is contingent on the host country's specific characteristics, particularly its institutional resilience. This leads to the study's main hypothesis:

H_1: The effect of foreign EPU on FDI inflows is nonlinear, differing across economies based on their position in the FDI distribution.

2. 3. 2. CONTROL VARIABLES AND SUPPORTING HYPOTHESES

To avoid omitted variable bias and to isolate the effect of EPU, this study includes a set of control variables widely recognized in the FDI literature.

2. 3. 2. 1. GDP AND FDI

Economic growth influences the inward FDI of a country, as strong GDP growth enhances market potential (Ghazalian, 2023) and investor confidence (Ghazalian, 2023), mitigating uncertainty effects. Theoretical and empirical research consistently demonstrate a positive relationship between GDP growth and FDI (Anwar et al., 2023; Ghazalian, 2023; Sahu & Dash, 2021). High-growth economies offer stable profit expectations, reducing investor sensitivity to policy fluctuations (Canh et al., 2020; Hanim et al., 2020). Stronger GDP-FDI linkages observed in Asia, Latin America, and the EU, while resource-dependent economies exhibit weaker correlations (C. H. Nguyen, 2021). Thus, the second hypothesis is proposed as follows:

H_2: GDP growth has a positive effect on FDI inflows.

2. 3. 2. 2. LABOR MARKET AND FDI

Labor market characteristics influence the ability of economies to attract and retain FDI (C. H. Nguyen, 2021). A skilled and abundant workforce reduces training costs, enhances productivity, and facilitates technological spillovers, reinforcing investment stability (Hanim et al., 2020; C. H. Nguyen, 2021; Rong et al., 2020; B. Zhang et al., 2023). Empirical studies confirm that higher educational attainment and employment growth strengthen FDI inflows (C. H. Nguyen, 2021; Pantelopoulos, 2022). In contrast, low labor availability exacerbates EPU effects, as firms face higher operational risks and hiring uncertainties (Hsieh et al., 2019; Rong et al., 2020), increasing investment hesitation. Hence, the paper hypothesize:

H_3: Labor availability has a positive effect on FDI inflows.

2. 3. 2. 3. INTEREST RATES AND FDI

Interest rates shape FDI decisions by influencing capital costs and return expectations (Awad, 2020; Dewi & Hutomo, 2021), yet empirical findings remain mixed. While high interest rates can deter FDI by increasing borrowing costs (Canh et al., 2020; Zhou et al., 2023), they may also attract investors seeking higher yields, depending on macroeconomic stability (Al-Shakrchy et al., 2023; Dewi & Hutomo, 2021; Wijaya et al., 2020). When FDI inflows are relatively low, high interest rates can discourage investors by increasing borrowing costs and raising concerns about monetary policy (Canh et al., 2020; Hsieh et al., 2019). By contrast, economies with higher FDI inflows and established financial mechanisms may be less sensitive to these effects (Ogbonna et al., 2022; B. Zhang et al., 2023).

H_4: The effect of interest rates on FDI inflows is ambiguous.

2. 3. 2. 4. INFLATION AND FDI

Various studies suggest that economies with higher FDI levels often manage inflation risks more effectively (Dewi & Hutomo, 2021). A more advanced financial system can mitigate inflation's negative effects (Awad, 2020; Dewi & Hutomo, 2021; Hsieh et al., 2019), while stable macroeconomic policies strengthen responses (Awad, 2020; Suhendra et al., 2022). Larger markets and high growth can also ease inflationary pressures (Suhendra et al., 2022). Nonetheless, high or volatile inflation may still harm well-established FDI hosts absent adequate controls (Hsieh et al., 2019; Suhendra et al., 2022). Other factors – such as robust infrastructure, skilled labor, and institutional stability - further moderate the inflation–FDI nexus (Canh et al., 2020; Suhendra et al., 2022; Zhou et al., 2023). Hence, containing inflation is key to sustaining favorable investment climates (Awad, 2020; Dewi & Hutomo, 2021; Fazira & Cahyadin, 2018; Milas et al., 2024; Suhendra et al., 2022). To capture the complex inflation–FDI relationship, we hypothesize:

H_5: Inflation has a negative effect on FDI inflows.

3. METHODOLOGY

3. 1. EMPIRICAL STRATEGY

3. 1. 1. PRELIMINARY DIAGNOSTIC TESTS

Before estimating the main model, a suite of diagnostic tests was conducted to ensure the chosen econometric method was appropriate for the data's characteristics. First, an examination of the correlation matrix confirmed the absence of severe multicollinearity, with all Pearson correlation

coefficients below the problematic threshold of 0.8. Next, given the interconnected nature of the Asia-Pacific economies, the Pesaran (2004) CD test was applied. The test results strongly rejected the null hypothesis of cross-sectional independence for all variables ($p < 0.01$), confirming the presence of significant CSD and ruling out the use of first-generation panel data techniques. Furthermore, the Pesaran and Yamagata (2008) test for slope heterogeneity decisively rejected the null hypothesis of slope homogeneity ($p < 0.001$), indicating that the relationship between the variables varies significantly across countries. This finding highlights the need for a model that can account for individual-specific responses, such as panel quantile regression.

Given the presence of cross-sectional dependence, the analysis then employed second-generation panel unit root and cointegration tests. The Pesaran (2007) CADF test indicated that the variables exhibit a mixed order of integration, with some being stationary at level I(0) and others becoming stationary after first differencing I(1). Consequently, the Kao (1999) test for cointegration was performed, which confirmed the existence of a stable long-run equilibrium relationship among the variables by rejecting the null hypothesis of no cointegration ($p < 0.001$). The collective results from these diagnostic tests – specifically the presence of cross-sectional dependence, slope heterogeneity, and a long-run cointegration relationship – strongly justify the selection of the panel quantile regression as the primary analytical model.

3. 1. 2. MODEL SPECIFICATION AND ESTIMATION STRATEGY

To assess the role of foreign EPU in cross-border investment, a two-layer approach is adopted. The first layer examines EPU propagation across the Asia-Pacific region, identifying key transmitters and receivers. The second layer evaluates its differential impact on FDI inflows, considering variations across economies with distinct investment resilience. Separating EPU transmission from its economic consequences allows for a more precise assessment of risk diffusion and investment responses.

For the first layer, the Diebold & Yilmaz (2012) spillover index is applied to quantify EPU transmission across the 21 economies (1993-2023). This method is based on a Vector Autoregression (VAR) model of order p. The optimal lag order for the model was determined to be p = 1 based on the Akaike Information Criterion (AIC), ensuring an appropriate model specification. The VAR(p) model is defined as:

$$EPU_t = \sum_{i=1}^{p} A_i . EPU_{t-1} + \varepsilon_t \quad (1)$$

Where A_i are coefficient matrices and ε_t is a white noise error term. Using a 10-step-ahead generalized forecast error variance decomposition (GFEVD), the study computes pairwise directional spillovers, a total spillover index (TSI) measuring network interconnectedness, and net spillover scores to identify each country's role as a net transmitter or receiver. The stability of the resulting spillover index was verified by confirming that the main findings remained consistent under alternative specifications of the VAR lag order and forecast horizon. This framework is well-suited for capturing time-varying spillover dynamics and has been widely validated in recent empirical studies (Al-Shboul et al., 2023; Dang et al., 2024; Prüser & Schlösser, 2020; Szafranek et al., 2024).

To assess the impact of regional EPU spillovers on FDI, a composite variable, EPU_Foreign, is constructed using Principal Component Analysis (PCA) from the EPU indices of the top three net transmitters (Li, 2015; Dai et al., 2021). PCA mitigates multicollinearity and extracts the dominant uncertainty signal, with the first principal component capturing over 80% of the variance.

For the second layer, panel quantile regression with fixed effects (Koenker, 2004) is employed to analyze the causal impact of foreign EPU on FDI inflows, addressing data heterogeneity by examining conditional quantiles (Peng & Huang, 2008; Sánchez et al., 2021). This approach manages heterogeneity and cross-sectional dependence (Li, 2015), is robust to outliers and non-normality (Al-Shboul et al., 2023; Koçak & Barış-Tüzemen, 2022), and helps mitigate potential endogeneity concerns through the inclusion of country-specific fixed effects (Koçak & Barış-Tüzemen, 2022; Li, 2015; Rong et al., 2020). To further strengthen the causal claims, a Panel Granger non-causality test was also performed. The results, detailed in Section 4, confirm a one-way causal relationship from foreign EPU to FDI inflows, providing strong evidence against reverse causality and validating the model's specification. Based on these considerations, the model is specified as follows:

$$Q_{\tau}\,(FDI\_Inflow_{it}|X_{it}) = \alpha_i + \beta_{\tau}.EPU\_Foreign_t + \gamma_{\tau}.\,Z_{it} + \varepsilon_{it} \qquad (2)$$

Where $Q_{\tau}\,(FDI\_Inflow_{it}|X_{it})$ denotes the conditional quantile of FDI inflows for country i at time t, given covariates X_{it}; α_i represents country-specific fixed effects; EPU_Foreign denotes the EPU of 3 most major uncertainty net exporters at time t; and ε_{it} is the error term of country i at time t. The vector of control variables Z_{it} includes four macroeconomic factors: GDP growth, Labor, CPI, and Interest rate. The expected impacts of these variables are detailed in Table 1.

3. 2. DATA, SAMPLE, AND EPU DESCRIPTIVE STATISTICS

Panel data from 21 Asia-Pacific countries for the period 1993 – 2023, with EPU data sourced from policyuncertainty.com, form the empirical basis. This timeframe includes key global shocks such as the 9/11 attacks (Bloom, 2009; Prüser & Schlösser, 2020), the 2007 financial crisis (Ogbonna et al., 2022; W. Tang et al., 2021; UNCTAD, 2021), the US-China trade war (Ogbonna et al., 2022; UN.ESCAP, 2023; B. Zhang et al., 2023), and COVID-19 (Koçak & Barış-Tüzemen, 2022; Ogbonna et al., 2022; UNCTAD, 2020), all of which influenced policy uncertainty and investment trends. Countries were selected based on (1) economic significance, (2) varying FDI openness, and (3) exposure to external policy shocks, including developed (e.g., Japan, Australia) and emerging economies (e.g., Vietnam, Indonesia). This sample diversity allows for capturing heterogeneous EPU responses across distinct economic structures.

Variable definitions are presented in Table 1. Descriptive statistics for the EPU index of the observed countries (Table 2) reveal notable regional differences. For instance, Laos shows the lowest mean EPU (0.020), while Nepal has the highest (0.081). Standard deviations also vary, indicating high EPU volatility in Nepal (0.082) and Cambodia (0.052), compared to more stable EPU in Laos (0.025) and Australia (0.034). Predominantly positive skewness, especially in Laos (1.615) and Myanmar (0.940), suggests occasional uncertainty spikes. High kurtosis, particularly in Malaysia (3.493), points to a greater likelihood of infrequent but intense uncertainty events. These statistics underscore the diverse EPU exposures within the region.

Table 1. Variable definition

Variables	Definition	Measure	Source	Expectation	References
FDI_Inflow	FDI net inflow	% GDP	IMF International Financial Statistics		
EPU_ Foreign	Foreign EPU	EPU Index	policyuncertainty.com	Nonlinear	(Baker et al., 2016; Bloom, 2009; Dixit & Pindyck, 2012; S. Tang et al., 2022)
GDP growth		%	World Development Indicators	+	(Anwar et al., 2023; Ghazalian, 2023; Sahu & Dash, 2021)
Labor	Labor force participation rate	% of the total population ages 15+	World Development Indicators	+	(Hanim et al., 2020; C. H. Nguyen, 2021; Pantelopoulos, 2022)
Interest_ Rate		%	World Development Indicators	Ambiguous	(Al-Shakrchy et al., 2023; Canh et al., 2020; Wijaya et al., 2020)
CPI	Consumer Price Index		IMF International Financial Statistics	-	(Awad, 2020; Burlea-Schiopoiu et al., 2023; Suhendra et al., 2022)

Source: Authors' compilation

Table 2. Descriptive statistics of EPU from observed countries

EPU	Mean	Std. Dev	Min	Max	Skew	Kurtosis	Se
AUS	0.047048	0.034144	0	0.146065	0.594577	-0.35945	0.003066
BGD	0.036226	0.034787	0	0.162381	1.300792	1.540401	0.003124
CHN	0.037545	0.035314	0	0.152883	1.133616	0.732551	0.003171
HKG	0.040977	0.034093	0	0.144912	1.013222	0.394584	0.003062
IDN	0.066482	0.046666	0	0.213248	1.114882	0.989681	0.004191
IND	0.038478	0.029136	0	0.138683	0.935218	0.602467	0.002617
JPN	0.049114	0.031486	0	0.130182	0.717166	-0.21538	0.002827
KHM	0.059427	0.052141	0	0.224758	0.798006	0.118172	0.004682
KOR	0.062738	0.049138	0	0.23463	0.906376	0.195071	0.004413
LAO	0.020358	0.024565	0	0.127158	1.614959	2.909815	0.002206
LKA	0.044128	0.03384	0	0.138677	0.740516	0.027729	0.003039
MMR	0.041313	0.034101	0	0.135937	0.940237	0.38151	0.003062
MNG	0.040788	0.043413	0	0.202721	1.152395	0.943695	0.003899
MYS	0.041674	0.039978	0	0.196419	1.748758	3.493204	0.00359
NPL	0.080684	0.082155	0	0.383277	1.117282	0.684163	0.007378
NZL	0.052772	0.040152	0	0.179479	1.197416	1.307264	0.003606
PHL	0.056887	0.040679	0	0.220847	1.255075	2.346728	0.003653
PNG	0.03162	0.031392	0	0.159791	1.236574	1.630435	0.002819
SGP	0.031767	0.029011	0	0.121831	1.007477	0.098201	0.002605
THA	0.065619	0.045716	0.001883	0.218662	1.073159	0.915558	0.004105
VNM	0.02605	0.024583	0	0.117273	1.131499	1.086665	0.002208

Source: Authors' calculations

Descriptive statistics for the variables included in the regression model (Equation 2) are pre-

sented in Table 3. The dataset for this analysis comprises 651 observations. The mean FDI inflow is 4.73% of GDP, with substantial variation. The average GDP growth rate is 4.81%, while the mean labor force participation rate is 62.89%, the average interest rate is 4.59%, and the mean CPI is 96.48. Skewness and kurtosis values for these variables indicate data dispersion that supports the use of robust analytical techniques.

Table 3. Descriptive statistics of variables in the model

Variable	Obs	Mean	Std. dev.	Min	Max	Skew	Kurtosis
FDI_Inflow	651	4.730602	7.808216	-37.1727	58.51837	2.709912	14.41674
EPU_Foreign	651	0.008023	0.993093	-1.79657	3.225708	0.718672	2.782541
GDP growth	651	4.809642	4.077147	-34.8086	18.20229	-1.93124	17.76989
Labor	651	62.88804	8.375728	39.64	80.155	-0.64719	3.718815
Interest rate	651	4.5873	5.924277	-42.0987	50.97911	-0.56167	20.32374
CPI	651	96.48211	43.95632	3.571162	308.2857	0.696222	4.588424

Source: Authors' calculation

4. EMPIRICAL RESULTS AND DISCUSSION

4. 1. EPU SPILLOVER EFFECTS

The transmission of EPU across the 21 Asia-Pacific economies reveals a highly interconnected regional network, as quantified by the Diebold-Yilmaz spillover index (Table 4). The total connectedness index reaches 78.85%, a figure indicating that a substantial majority – nearly four-fifths – of the policy uncertainty in an average country is driven by external shocks from within the region. This high level of interdependence validates the study's focus on foreign EPU as a primary explanatory variable for FDI flows.

The spillover dynamics also identify clear net transmitters and receivers of EPU. The region's economic heavyweights – Japan (net spillover: 50.25), Singapore (43.00), and Australia (30.83) – are the primary net exporters of volatility, reflecting their roles as major industrial, financial, and commodity-based economies. In contrast, economies with high trade openness, such as Vietnam, Malaysia, and the Philippines, are the largest gross receivers of this uncertainty, with external shocks accounting for over 83% of their respective EPU volatility. The clear identification of Japan, Singapore, and Australia as the top three net transmitters provides a robust empirical basis for constructing the EPU_Foreign variable used in the subsequent regression analysis.

Table 4. Total average dynamic connectedness

	AUS	BGD	CHN	HKG	IDN	IND	JPN	KHM	KOR	LAO	LKA	MMR	MNG	MYS	NPL	NZL	PHL	PNG	SGP	THA	VNM	From
AUS	24.2	4.37	5.5	3.32	3.42	4.41	11.98	1.37	3.07	3.31	2.17	3.2	3.97	0.95	4.36	6.21	2.06	4.49	5.95	1.32	0.38	75.8
BGD	2.61	21.79	1.45	2.36	4.5	4.38	2.42	4.56	1.58	4.48	5.86	2.93	1.69	8.01	5.64	1.69	2.81	4.5	9.81	3.19	3.73	78.21
CHN	3.75	8.12	20.07	4.31	3.76	4.99	9.51	5.2	3.82	3.83	0.87	0.86	2.08	1.22	1.49	4.75	2.12	3.13	3.38	7.23	5.53	79.93
HKG	1.28	3.66	1.81	27.33	1.95	0.66	3.48	1.94	2.07	1.76	2.07	9.2	5.9	7.59	2.81	4.12	6.49	4.65	5.31	4.54	1.39	72.67
IDN	9.65	2.37	4.48	1.49	22.11	2.18	6.32	8.46	5.37	2.96	2.08	4.23	4	1.08	1.78	4.67	0.46	4.09	4.71	3.91	3.61	77.89
IND	4.5	3.83	3.57	4.41	1.82	19.15	7.55	1.23	1.24	3.17	4.53	3.56	6.19	2.84	10.05	2.05	7.09	3.16	7.75	0.95	1.37	80.85
JPN	8.4	3.77	5.03	3.4	8.68	1.92	19.09	3.18	1.95	3.69	1.91	2.61	8.47	3.75	2.51	4.6	3.59	2.02	5.54	1.58	4.3	80.91
KHM	0.8	2.81	2.06	2.28	8.47	3.63	2.7	26.95	0.95	5.46	4.4	3.38	2.19	8.89	3.07	1.62	2.95	2.59	4.4	6.36	4.04	73.05
KOR	5.52	4.05	1.15	0.96	4.73	2.13	8.48	5.4	22.22	0.69	2.79	5.5	10.24	3.55	2.61	2.15	3.65	4.59	3.89	4.78	0.92	77.78
LAO	1.28	5.07	4.86	11.01	3.67	1.45	4.87	3.16	3.88	17.3	2.37	3.16	3.78	6.93	1.84	2.12	3.37	5.08	7.58	4.13	3.09	82.7
LKA	4.4	2.04	1.4	1.83	1.87	2.84	7.92	4.65	1.82	1.81	18.82	1.28	1.18	6.07	7.81	1.88	2.36	16.35	6.54	4.17	2.98	81.18
MMR	3.9	4.91	3.69	5.76	2.5	1.19	3.91	5.81	6.97	1.39	0.82	21.62	5.35	3.51	2.65	1.59	4.15	9.59	4.35	1.49	4.88	78.38
MNG	4.35	2.03	1.33	2.65	3.07	4.22	4.46	3.58	1.86	0.95	3.29	2.98	30	3.44	6.42	2.44	12.58	2.61	0.56	5.01	2.18	70
MYS	7.86	8.18	2.92	3.7	0.62	1.94	10.2	3.14	1.77	1.91	2.67	1.2	4.29	16.08	0.72	3.44	3.24	5.47	14.34	5.23	1.09	83.92
NPL	5.76	9.5	3.94	4.54	0.88	3.37	5.21	2.86	2.99	1.74	5.41	3.1	4.58	1.21	25.79	1.24	5.09	3.49	1.24	4.65	3.43	74.21
NZL	2.85	2.48	4.14	1.33	4.47	5.58	6.93	3.35	3.9	7.32	1.59	4.22	4.52	5.11	1.63	18.8	6.19	3.52	5.7	4.18	2.19	81.2
PHL	13.49	5.58	2.39	1.54	1.7	4.71	11.29	0.79	2.26	2.07	1.96	5.11	2.32	1.52	5.86	4.38	16.39	5	6.27	4.01	1.36	83.61
PNG	10.86	1.38	5.78	3.63	2.66	6.25	5.98	1.65	3.49	1.95	4.83	1.92	5.01	2.6	4.48	1.4	5.51	18.8	7.68	1.86	2.3	81.2
SGP	5.65	6.26	4.45	8.1	0.8	1.78	9.08	5.72	1.68	7.22	1.37	0.76	1.42	4.33	1.3	1.22	1.81	5.04	28.27	1.13	2.6	71.73
THA	1.21	3.38	1.85	2.64	9.81	1.54	5.22	3.22	5.64	6.16	2.48	8.11	2.74	4.4	2.29	3.77	2.81	8.27	4.69	18.34	1.43	81.66
VNM	8.52	3.39	1.58	4.26	3.38	7.09	3.65	2.48	5.45	4.65	3.67	5.57	2.17	4.03	3.34	3.43	3.3	10.76	5.05	3.21	11.03	88.97
To	106.63	87.18	63.36	73.51	72.75	66.25	131.16	71.73	61.77	66.51	57.16	72.87	82.07	81.04	72.65	58.78	81.61	108.4	114.73	72.92	52.78	TCI=
To incl own	130.83	108.97	83.43	100.84	94.86	85.39	150.25	98.69	83.99	83.81	75.97	94.49	112.06	97.12	98.45	77.59	98	127.19	143	91.26	63.81	(1655.85 / 2100) = 78.85
Net	30.83	8.97	-16.57	0.84	-5.14	-14.6	50.25	-1.32	-16.01	-16.19	-24.02	-5.51	12.07	-2.88	-1.56	-22.42	-2	27.2	43	-8.74	-36.19	

Source: Authors' calculations

4. 2. IMPACTS OF FOREIGN EPU ON FDI INFLOW

4. 2. 1. THE "VULNERABLE PERIPHERY" PROFILE

The results for economies in the lower quantiles of the FDI distribution paint a clear picture of vulnerability, where external uncertainty actively drives capital away. The most direct evidence from our model is the statistically significant negative coefficient of -0.505 for foreign EPU at the 0.1 quantile. This demonstrates a tangible "risk-aversion penalty" that is disproportionately levied on these economies. Such a strong negative response can be understood through the lens of Real Options Theory; in an environment of heightened uncertainty, the value of delaying irreversible investment increases, prompting firms to retreat from markets perceived as less stable. Our findings suggest this effect is not a universal law but a specific reality for economies that the literature identifies as having weaker institutional buffers and greater exposure to external shocks through trade channels (Arigoni & Lenarčič, 2023; Sahu & Dash, 2021).

A second key finding unique to this profile is the inefficient conversion of economic growth into FDI. While GDP growth has a consistently positive effect, its impact coefficient in this group (0.169 at $\tau = 0.1$) is the lowest across the entire distribution. This novel result suggests that while positive economic growth is a necessary condition for attracting FDI (Ghazalian, 2023; Suhendra et al., 2022), it is not sufficient for these vulnerable economies. It appears the perceived risks from policy uncertainty and institutional weakness heavily discount the potential benefits of economic expansion in the eyes of investors.

Furthermore, the group's primary macroeconomic vulnerability is inflation not interest rates. The impact of inflation is negative and at its most potent in these lower quantiles, a finding consistent with literature suggesting that price instability compounds the risks associated with policy uncertainty (Burlea-Schiopoiu et al., 2023). In contrast, the statistically insignificant coefficient for interest rates suggests these economies are less integrated into global capital

markets. For this group, it appears that the stability of the domestic macroeconomic environment and the quality of institutions (Canh et al., 2020; Hsieh et al., 2019) are far more critical to investment decisions than the global cost of capital.

Table 5. Results of impact of foreign EPU on FDI inflow

Variables	Location Parameter	Scale Parameter	Lower Quantiles				Middle Quantiles			Upper Quantiles	
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
EPU_ Foreign	0.00581	0.322**	-0.505*	-0.344	-0.241	-0.132	-0.0240	0.0829	0.213	0.318	0.523*
Std. dev	(0.212)	(0.137)	(0.278)	(0.240)	(0.224)	(0.212)	(0.210)	(0.218)	(0.237)	(0.260)	(0.313)
GDP growth	0.197***	0.0181	0.169**	0.178***	0.184***	0.190***	0.196***	0.202**	0.209**	0.215**	0.226*
Std. dev	(0.0722)	(0.0489)	(0.0681)	(0.0597)	(0.0588)	(0.0623)	(0.0696)	(0.0795)	(0.0939)	(0.107)	(0.134)
Labor	0.136***	0.0101	0.120***	0.125***	0.128***	0.131***	0.135***	0.138***	0.142***	0.146**	0.152*
Std. dev	(0.0430)	(0.0284)	(0.0415)	(0.0363)	(0.0357)	(0.0376)	(0.0415)	(0.0470)	(0.0551)	(0.0625)	(0.0781)
Interest_ Rate	-0.0881***	-0.0536***	-0.00331	-0.0300	-0.0471	-0.0653**	-0.0832**	-0.101***	-0.122***	-0.140***	-0.174***
Std. dev	(0.0335)	(0.0200)	(0.0369)	(0.0339)	(0.0326)	(0.0324)	(0.0335)	(0.0358)	(0.0398)	(0.0446)	(0.0546)
CPI	-0.0123	0.0150***	-0.0360***	-0.0285**	-0.0237**	-0.0187**	-0.0137	-0.00872	-0.00269	0.00222	0.0117
Std. dev	(0.00871)	(0.00496)	(0.0131)	(0.0115)	(0.0104)	(0.00951)	(0.00885)	(0.00845)	(0.00822)	(0.00865)	(0.00977)

Robust standard errors in parentheses

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

Source: Authors' calculations

4. 2. 2. THE "RESILIENT SAFE HAVEN" PROFILE

In stark contrast to the vulnerable group, economies in the upper quantiles of the FDI distribution exhibit a profile of a resilient "safe haven." These nations not only withstand but appear to benefit from foreign policy uncertainty. The most compelling evidence is the reversal of the EPU coefficient, which becomes strongly positive and statistically significant at the 0.9 quantile, reaching +0.523 (Table 5). This provides powerful empirical support for the "flight-to-safety" hypothesis, where periods of global turmoil trigger a reallocation of capital away from riskier markets toward destinations with perceived stability (Bloom, 2009). Our finding suggests that for these economies, strong and predictable institutional frameworks act as a magnet for investment, turning external uncertainty into a competitive advantage. This aligns with Growth Options Theory and a body of research indicating that institutional robustness is a critical factor in shaping positive investment outcomes amidst global volatility (Bernanke, 1983; Dunning & Lundan, 2008; S. Tang et al., 2022).

A second significant finding for this profile is the "rich-get-richer" effect regarding macroeconomic fundamentals. The positive impact of GDP growth is at its strongest in this group, with the coefficient peaking at 0.226 at the 0.9 quantile. This indicates that established FDI hubs are far more efficient at converting economic growth into new investment compared to their less-integrated peers, a finding consistent with literature highlighting that stable returns and macroeconomic confidence are powerful pull factors (Anwar et al., 2023; Canh et al., 2020; Ghazalian, 2023). Similarly, the positive effect of labor availability is most pronounced in this group, suggesting that a skilled workforce is best leveraged in high-value-added activities characteristic of mature FDI destinations (Hanim et al., 2020; Pantelopoulos, 2022).

However, the analysis also uncovers the unique vulnerability of this "safe haven" profile: a heightened sensitivity to global financial conditions. While these economies appear immune to

the effects of inflation, likely due to stronger monetary frameworks capable of containing price pressures (Anwar et al., 2023), their Achilles' heel is interest rates. The negative coefficient for interest rates is largest and most statistically significant in the upper quantiles, reaching -0.174 at the 0.9 quantile. This reveals that their deep integration with global financial markets makes them acutely sensitive to the cost of capital. A rise in global interest rates can significantly deter investment, posing a key risk to their "safe haven" status, a dynamic consistent with studies linking higher borrowing costs to reduced FDI (Canh et al., 2020; Milas et al., 2024).

This combination of findings characterizes the "Resilient Safe Haven" as an economy that skillfully leverages its institutional strength to attract capital during periods of uncertainty, while simultaneously being highly exposed to shifts in global monetary policy. Their primary challenge is not necessarily attracting investment, but managing the financial stability required to retain it.

4. 2. 3. THE "AMBIVALENT MIDDLE" PROFILE

The economies positioned in the middle quantiles of the FDI distribution represent a transitional stage, where the strong, opposing effects of uncertainty observed at the extremes are neutralized. The most telling finding for this group is that the coefficient for foreign EPU is statistically insignificant across the 0.4, 0.5, and 0.6 quantiles (Table 5). This "zone of indifference" is critical because it likely represents the misleading "average" effect that traditional linear models would capture, thereby obscuring the true heterogeneous responses at the tails. For these economies, the negative pressures of risk aversion and the positive allure of growth opportunities appear to be in equilibrium, suggesting a partial resilience that tempers the influence of external EPU (Plakandaras et al., 2018).

In this environment where foreign uncertainty is not a decisive factor, investment decisions appear to revert to a strong reliance on domestic macroeconomic fundamentals. The quantile results show that GDP growth and labor availability are both highly significant and robust positive drivers of FDI for this middle group. This indicates that for economies that are neither exceptionally vulnerable nor established safe havens, demonstrating consistent domestic growth and a productive workforce are the most effective strategies for attracting foreign investment (Anwar et al., 2023; Ghazalian, 2023; Pantelopoulos, 2022).

The analysis of this group also reveals a crucial transition in macroeconomic sensitivity. The negative impact of inflation, while still statistically significant, begins to diminish in magnitude compared to the lower quantiles. Simultaneously, the negative effect of interest rates, which was insignificant for the "Vulnerable Periphery" group, starts to emerge and becomes statistically significant at the 0.6 quantile. This "hand-off" of vulnerabilities is a key characteristic of the transitional profile: as these economies mature and integrate more deeply into global finance (Canh et al., 2020), their sensitivity begins to shift away from domestic price stability and towards the global cost of capital (Dewi & Hutomo, 2021; Milas et al., 2024).

4. 2. 4. ENDOGENEITY AND CAUSALITY VALIDATION

To address potential endogeneity concerns arising from reverse causality, this study examines the temporal relationship between foreign EPU and FDI inflows using a Panel Granger non-causality test. The results confirm a clear unidirectional relationship in the sense of Granger causality: the null hypothesis that foreign EPU does not Granger-cause FDI inflows is rejected at the 5% significance level ($p = 0.0198$), while the reverse causal link is not supported ($p = 0.8817$). This finding is crucial as it mitigates concerns about reverse causality and lends empirical support to the modeling assumption that foreign EPU can be treated as a weakly exogenous variable, which is consistent with the paper's theoretical framework.

5. CONCLUSION

Given that the Asia-Pacific has become the primary destination for global FDI and functions as a highly interconnected economic network, understanding its response to policy uncertainty is of critical importance for both regional and global stability. This study's primary contribution is the empirical demonstration that the impact of foreign EPU – largely transmitted by regional hubs like Japan, Singapore, and Australia – is not uniform across this diverse region. Instead, the effect is fundamentally asymmetric, contingent on each economy's level of FDI integration. Our quantile regression analysis reveals a distinct intra-regional dynamic: capital tends to retreat from the region's developing economies during periods of uncertainty, while simultaneously seeking refuge in its established, high-income economies. This finding provides a structured explanation for the complex capital flows observed within the Asia-Pacific.

These results lead to tailored policy considerations for the varied economies that constitute the Asia-Pacific landscape. For the region's developing nations, which are highly exposed to policy spillovers from their larger neighbors, the findings indicate that building domestic institutional resilience is the key defense mechanism. Strengthening policy transparency and the rule of law may be more effective at mitigating capital flight than purely economic incentives. For the region's developed economies, which function as both uncertainty transmitters and "safe havens", the challenge is one of stewardship. Their demonstrated sensitivity to global financial conditions suggests that maintaining a stable monetary policy and credible financial supervision is crucial for preserving their status as regional anchors that can absorb capital during crises.

While this study provides insights specific to the Asia-Pacific, its limitations suggest avenues for future research. Future work could achieve even greater regional specificity by analyzing FDI at the sectoral level – for instance, determining if the region's vital manufacturing supply chains are more sensitive to EPU than its technology or finance sectors. Furthermore, given the dynamic geopolitical landscape of the Asia-Pacific, incorporating explicit measures of geopolitical risk alongside the EPU index could offer a more comprehensive understanding of investment decisions in the region. By continuing this line of inquiry, a more predictable and resilient investment environment can be fostered across the Asia-Pacific, benefiting both its diverse nations and the global economy that relies on their stability.

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