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Navigating Uncertainty: The Impact of Economic Policy Uncertainty on FDI Location Choices

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ABSTRACT

This study investigates the impact of economic policy uncertainty on FDI location choices, analyzing 112,793 Greenfield investment projects across 21 countries from 2003 to 2018. Using a mixed logit model, the findings reveal a significant positive relationship between economic policy uncertainty and FDI, suggesting that higher uncertainty attracts more FDI, particularly in countries with lower financial development. Conversely, economic policy uncertainty holds a negative relationship with FDI in countries with higher financial development. This positive relationship remains consistent across different sectors, during the financial crisis, after excluding outliers, and when using a conditional logit model, although adding fixed effects to the conditional logit model or using the monetary amount of FDI as the dependent variable yields negative results. These findings challenge existing literature and suggest that companies consider economic policy uncertainty differently when deciding on an FDI location versus determining the investment amount.

Keywords: Uncertainty, Greenfield FDI, Location Choice, Economic Policy Uncertainty

JEL codes: F20, P40, L20

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CHAPTER 1 Introduction

In recent decades, the world has faced unprecedented levels of uncertainty, caused by events such as the COVID-19 pandemic, and the ongoing war between Ukraine and Russia. These events have not only disrupted global economy but have also led to periods of higher economic policy uncertainty due to the unpredictability in government actions and policies that affect economic activities (Al-Thaqeb et al., 2022). This uncertainty surrounding economic policies plays a key role in shaping Foreign Direct Investment (FDI), which is essential for a country's economy as it impacts the domestic market, competitive landscape, and human capital interactions (Balasubramanyam et al., 1999). More specifically, the economic policy uncertainty within a country significantly complicates decisions regarding the location choices of FDI, as companies often consider this uncertainty when determining where to allocate their resources. Investing in countries with higher economic policy uncertainty may offer potential opportunities for higher returns but also entails greater risks due to uncertain economic policies. Conversely, waiting for some uncertainty to resolve before investing may offer a more stable investment environment but could mean missing out on early opportunities or competitive advantages. Ultimately, this poses a strategic choice that companies must carefully consider, balancing the potential benefits of investing in uncertain economic environments against the risks involved.

It is generally argued that higher levels of economic policy uncertainty create an uncertain business environment in a country. According to the real options theory (Myers, 1977), firms benefit from postponing investment decisions, including FDI, in uncertain environments until some of the uncertainty is resolved. Consequently, foreign investors are likely to invest less in destinations with higher economic policy uncertainty (Al-Thaqeb & Algharabali, 2019). This notion is supported by Nguyen and Lee (2021), who find that higher levels of economic policy uncertainty led to lower FDI inflows as a percentage of GDP, and by Canh et al. (2020), who demonstrate that the growth rate of domestic economic policy uncertainty adversely affects FDI relative to a country's GDP. Similarly, Haque et al. (2022) observed that increases in domestic economic policy uncertainty of high-income countries negatively impact FDI inflows. However, an inverse relationship could be argued based on the risk-return trade-off investment principle, which suggests that higher risk is often correlated with the potential for higher rewards (Bonomo et al., 2015). This is supported by empirical evidence from Hartman (1972), who finds that economic uncertainty can lead to increased investment opportunities and potential profits, thereby

encouraging non-risk-averse enterprises to expand their investments. Additionally, Zhang and Colak (2022) discovered that economic policy uncertainty originating from China does not necessarily deter FDI inflows into China.

Overall, the literature presents contrasting views on the relationship between economic policy uncertainty and FDI. To address this inconsistency, this paper examines how economic policy uncertainty influences FDI location choices, exploring variations across different levels of financial development. This study makes two key contributions: First, while most research has focused on the monetary amount of FDI, such as net inflows as a percentage of GDP or capital flows (e.g., Nguyen & Lee, 2021; Canh et al., 2020; Zhang & Colak, 2022; Haque et al., 2022), this study shifts the focus to FDI location choices, investigating factors that influence where investors choose to establish projects. I employ a mixed logit model to account for the differential value firms attribute to particular characteristics in their location choices by allowing regression coefficients to vary across firms. To my knowledge, this is the first study to use the mixed logit model within the framework of FDI location choices under economic policy uncertainty. Second, whereas previous research has often used interaction effects to analyze the role of financial development in the relationship between economic policy uncertainty and FDI (e.g., Karaman & Yıldırım-Karaman, 2019; Nguyen & Lee, 2021), this study explores how this relationship varies across different quantiles of financial development. This approach addresses potential non-linearities and variations, recognizing that economic policy uncertainty may influence a country's attractiveness for FDI differently depending on its level of financial development. Overall, this research provides valuable insights for policymakers and businesses, helping them make more informed policy decisions and strategic investments, which can ultimately promote economic stability and growth.

To examine the relationship between economic policy uncertainty and FDI and how this differs across quantiles of financial development, I analyze 112,793 Greenfield investment projects across 21 countries from 2003 to 2018. The analysis reveals a significant positive relationship between economic policy uncertainty and FDI, indicating that countries experiencing higher uncertainty tend to attract more FDI. Furthermore, the results show that in countries with higher financial development, there is a negative relationship between economic policy uncertainty and FDI. In contrast, in less financially developed countries, this relationship is positive. The significant positive relationship between economic policy uncertainty and FDI remains consistent across

various sectors, during the financial crisis, after excluding outliers observed in the EPU data, and when using a conditional logit model. However, adding fixed effects to the conditional logit model renders the results negative and negligible. Additionally, when comparing the results with the monetary amount of FDI as the dependent variable, a negative and insignificant relationship is revealed. This suggests that companies consider economic policy uncertainty differently when deciding on an FDI location compared to determining the investment amount.

The remainder of this paper is organized as follows: In the next section, I will provide a theoretical framework and present hypotheses regarding the relationship between economic policy uncertainty and FDI, drawing from the existing literature. This will be followed by a section discussing the data, variables, and methodology used for testing the hypotheses. Additionally, an analysis of the results will be presented, followed by a range of robustness checks. Lastly, the conclusion will be provided, along with a discussion on policy implications and suggestions for future research, as well as addressing the limitations of the paper.

CHAPTER 2 Theoretical Framework

This chapter reviews the theoretical and empirical literature on the relationship between economic policy uncertainty and FDI, as well as the moderating role of financial development. The theoretical framework is divided into two sections. The first section examines the relationship between economic policy uncertainty and FDI, starting with various theories that explain this relationship. Subsequently, it presents supporting empirical evidence and concludes with a summary that introduces Hypothesis 1. The second section examines this relationship across different quantiles of financial development, using the same theories to discuss their implications for the role of financial development. Similarly, it is supported by empirical evidence and concludes with a summary and the introduction of Hypothesis 2.

2.1 Economic Policy Uncertainty and FDI

Economic policy uncertainty is a type of risk in which future government policies are uncertain, often delaying an individual's investment or spending decision on a firm level (Ogbonna et al., 2022). The underlying theories of the relationship between economic policy uncertainty and FDI in a country are primarily based on location choice theories and firm-level investment theories.

Location choice theories

The first location choice theory that can partially explain the relationship between economic policy uncertainty and FDI is internationalization. Internationalization theory analyzes how multinational enterprises (MNEs) decide to enter foreign markets, focusing on transaction cost analysis. According to this theory, firms pursue FDI to leverage advantages in host countries rather than relying solely on domestic resources (Verbeke & Kano, 2016). The characteristics of host countries play a critical role in firms' decisions to internationalize through FDI, as firms invest abroad when the benefits of internalizing operations outweigh the costs of external transactions (Buckley & Casson, 2015). However, a key challenge in internationalization theory is the risk posed by insufficient foreign market knowledge, which increases risk exposure for firms expanding internationally. This theory posits that firms with limited knowledge about foreign markets mitigate their risk exposure by minimizing resource commitment. Consequently, economic policy uncertainty significantly influences the transaction costs analysis of investment decisions by reducing return predictability. Specifically, higher economic policy uncertainty exacerbates the

lack of foreign market knowledge by increasing uncertainty about future market conditions. For instance, Al-Thaqeb and Algharabali (2019) highlight that elevated levels of economic policy uncertainty create an unpredictable business environment, leading businesses and individuals to postpone spending and investments.

Institutions also play a crucial role in FDI inflows and location choices (Uddin et al., 2019). The institutional theory underscores this by highlighting how international investment decisions are influenced by institutional factors such as business costs, the macroeconomic environment, political stability, institutional quality, and policy predictability (Zhang et al., 2023). Many of these factors are linked to a country's economic policy uncertainty, explaining how economic policy uncertainty can constrain or benefit FDI inflows. For instance, higher uncertainty surrounding a country's economic policy decreases policy predictability.

Lastly, Dunning's electric OLI paradigm (Dunning, 2000) can be connected to previously discussed theories to provide a comprehensive understanding of FDI location determinants (Batschauer da Cruz et al., 2022). This paradigm demonstrates that firms internationalize when the competitive advantages gained are substantial enough to outweigh the associated risks and costs. Specifically, three categories of advantages drive the internationalization of firms: ownership advantages, location advantages, and internalization advantages. In essence, the OLI paradigm posits that when the benefits of ownership, location, and internalization make foreign manufacturing more cost-effective, domestic firms are more likely to engage in FDI. The primary drivers for international investments include expected returns, investment security, and the ability to repatriate funds when needed. Foreign investors' perceptions of FDI are shaped by the host country's socioeconomic conditions and regulatory environment, as well as the degree of uncertainty surrounding these investments. Therefore, greater uncertainty in a country's economic policies is likely to deter FDI.

Firm-level investment theories

The relationship between economic policy uncertainty and FDI can also be explained through firm-level investment theories. For instance, the real options theory (Myers, 1977) suggests that firms are better off postponing their investment decisions in uncertain environments until some of the uncertainty is resolved. Consequently, foreign investors are inclined to invest less in destinations characterized by higher economic policy uncertainty.

Conversely, the risk-return trade-off investment principle suggests that higher risk is often correlated with the potential for higher rewards. This theory posits that investors face a trade-off between risk and return when making investment decisions, known as the risk-return trade-off (Bonomo et al., 2015). Essentially, while higher risk can lead to greater uncertainty and potential losses, it also opens the door to higher returns and unique investment opportunities that are not available in low-risk environments. This principle underscores that economic uncertainty may lead to increased investment opportunities and potential profits, encouraging non-risk-averse enterprises to expand their investments (Hartman, 1972). By navigating and capitalizing on these high-risk environments, firms can achieve significant competitive advantages and higher returns.

Hypothesis 1

In summary, each theory addresses crucial aspects of FDI that are closely linked with economic policy uncertainty. Internationalization theory emphasizes the challenge posed by limited knowledge of foreign markets, exacerbated by higher economic policy uncertainty levels. Institutional Theory underscores how factors like business costs, political stability, and policy predictability affect FDI decisions, all of which are significantly influenced by varying levels of uncertainty in a country's economic policies. Furthermore, Dunnings' comprehensive electric paradigm highlights that there are specific categorized advantages that drive the internationalization of firms. Additionally, real option theory suggests that firms may postpone investment decisions in uncertain environments until economic policy uncertainty resolves, reflecting how investors tend to avoid locations with elevated economic policy uncertainty. Thus, these theoretical perspectives indicate that economic policy uncertainty negatively impacts FDI by increasing unpredictability, thereby raising risks and transaction costs.

Consistent with the rationale of these theories, empirical evidence supports the negative relationship between economic policy uncertainty and FDI. Ramasamy (2003), in one of the earliest studies on this topic, observed that uncertainty not only delays FDI but can also lead to withdrawals in severe cases. The author found that the ability to postpone or reverse investments during uncertain times significantly diminishes FDI inflows. Additionally, Nguyen and Lee (2021) found that countries with higher levels of economic policy uncertainty receive lower FDI inflows relative to their GDP. Consequently, foreign investors tend to reduce investments in countries with higher economic policy uncertainty, favoring stable, higher-income economies—a phenomenon

described as the "safe haven" effect. Furthermore, Canh et al. (2020) found that the growth rate of domestic economic policy uncertainty adversely affects FDI relative to a country's GDP. Similarly, Haque et al. (2022) observed a negative and statistically significant long-term impact of uncertainty on FDI inflows for selected high-income economies. Overall, based on the insights from underlying theories and empirical evidence, it is rational to anticipate that, economic policy uncertainty negatively influences FDI location choices. This leads to the following hypothesis:

Hypothesis 1: There is a negative relationship between the economic policy uncertainty of a country and the probability of foreign direct investment.

2.2 Financial Development

Financial development is crucial for fostering investment and economic growth (Levine et al., 2000). Within the context of FDI, financial development in the host country plays a pivotal role in the internationalization process, which can be linked to the OLI paradigm and the institutional theory. For instance, a well-developed financial system can provide the necessary financial resources and services that help firms leverage their ownership, location, and internalization advantages more effectively. High levels of financial development can enhance the ability of firms to manage risks associated with economic policy uncertainty, thereby making FDI more attractive. Conversely, in countries with lower levels of financial development, firms may find it more challenging to obtain financing and manage risks, exacerbating the negative impact of economic policy uncertainty on FDI inflows. Moreover, financial development is closely linked with institutional factors such as business costs, the macroeconomic environment, political stability, institutional quality, and policy predictability (Khan, 2001).

Additionally, empirical evidence from Carrière-Swallow and Céspedes (2013) and Karaman and Yıldırım-Karaman (2019) demonstrated that less-developed financial markets amplify the adverse effect of uncertainty on domestic investment. Supporting this notion, Choi et al. (2021) found robust evidence that domestic policy uncertainty in host countries significantly reduces FDI inflows, especially in countries with less financial development. The authors suggest that financial deepening may help moderate the adverse impact of policy uncertainty, as the negative effect of economic policy uncertainty on FDI seems to be softened in countries with developed financial markets. Conversely, Nguyen and Lee (2021) found that while countries with

higher levels of financial development attract more FDI inflows, the adverse effect of economic policy uncertainty on FDI is also stronger in these financially developed countries. This indicates that the greater a country's financial development, the stronger the negative impact of economic policy uncertainty on FDI.

Hypothesis 2

In summary, varying levels of financial development can significantly influence firms' ability to manage risks associated with economic policy uncertainty, thus impacting the attractiveness of FDI, as explained within the OLI paradigm and institutional theory. Empirical evidence underscores diverse effects of financial development on the relationship between economic policy uncertainty and FDI: Nguyen and Lee (2021) emphasize a heightened adverse impact of economic policy uncertainty on FDI in financially developed countries, whereas studies by Carrière-Swallow and Céspedes (2013), Karaman and Yıldırım-Karaman (2019), and Choi et al. (2021) highlight stronger negative effects in less developed financial markets. Rather than treating financial development as a linear moderator, there are several reasons to expect a non-linear moderating effect, which is underexplored in the literature. For instance, this relationship could vary across different levels of financial development, as an increase in economic policy uncertainty may affect countries differently based on their financial maturity. In nations with advanced financial systems, robust institutions and mature markets can mitigate the adverse effects of heightened economic policy uncertainty, thereby sustaining resilience and attractiveness for FDI. Conversely, in countries with lower financial development, weaker financial infrastructure and greater market volatility may exacerbate the negative impacts of economic policy uncertainty, reducing their appeal to foreign investors. Overall, the sensitivity of FDI to economic policy uncertainty is likely to differ depending on the country's financial development level. This forms the foundation for my second hypothesis:

Hypothesis 2: The relationship between economic policy uncertainty and the probability of foreign direct investment differs across the distribution of financial development.

CHAPTER 3 Data and Methods

3.1 Data

To examine the effect of economic policy uncertainty on the attraction of FDI, I use investment project-level data as the unit of analysis. For FDI data, I use fDi Markets from the Financial Times. Although there is no official minimum investment size, investment projects that create fewer than ten full-time jobs or involve a total investment of less than US$1 million are uncommon (Karreman et al., 2017). Therefore, I exclude such projects from my sample. Furthermore, the economic policy uncertainty index is obtained from the Economic Policy Uncertainty database (2024). I aggregated the economic policy uncertainty data from monthly to yearly by calculating the annual average. Additionally, I use data from The World Bank (2023) on trade, GDP growth, labor participation, population size, inflation, and tertiary education. Lastly, I used data from the International Monetary Fund database (2023) on the Financial Development Index. Overall, my database consists of 112,793 investment projects across 21 countries worldwide for the period 2003–2018[1].

Table 1 presents descriptive statistics of the key variables used in the analysis. FDI is represented as a binary choice variable and economic policy uncertainty shows significant variation in uncertainty levels across countries and over time. Table 2 presents correlations among these variables to evaluate potential issues of multicollinearity. The correlations are moderate, with a small correlation between economic policy uncertainty and FDI, which will be formally tested later in this study. Additionally, Table 3 provides an overview of the number and distribution of the 112,793 Greenfield investments across four quantiles of financial development. This table highlights that the majority of FDI projects, 37.7%, were located in countries within the fourth quantile, indicating the lowest level of financial development.

[1] I examined all countries with available policy uncertainty indices, which includes Australia, Brazil, Canada, France, Germany, India, Italy, Mexico, South Korea, Russia, United Kingdom, United States, Chile, China, Greece, Ireland, Japan, Pakistan, Singapore, Spain, and Sweden.

Table 1. Descriptive statistics

Name	Description	N	Mean	SD	Min	Max
FDI	Probability of FDI in a country	2,364,294	0.05	0.21	0	1
Amount of FDI	Monetary amount of FDI (in millions)	323	21303.04	26084.48	168	213649.1
EPU	Economic Policy Uncertainty Index	2,364,294	127.35	61.7713	27.00	542.77
Financial	Financial Development Index	2,364,294	0.70	0.19	0.20	0.97
Trade	Exports and imports of goods and services as a % of GDP	2,364,294	74.95	73.47	20.45	437.33
GDP growth	GDP growth (annual %)	2,364,294	2.75	3.64	-10.15	24.48
Inflation	Inflation, consumer prices (annual %)	2,364,294	3.1157	3.13	-4.48	20.29
Labor	Labor force participation rate (% of total population, ages 15+)	2,364,294	60.56	5.72	48.14	75.72
Population Size	Population Size (in tens of millions) natural logarithmically transformed	2,364,294	19.71	36.41	0.39	139.62
Human Capital	Tertiary Education (% of total population, ages 25+)	1,853,112	60.50	27.54	2.70	136.60

Note. This table shows the descriptive statistics for the key variables in my analysis. The control variables and EPU are displayed with a one-year lagged value. Mean represents the average value of each variable, and the standard deviation measures the dispersion of the data.

Table 2. Pairwise Correlations of the Main Variables in the Analyses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) FDI	1.0000							
(2) EPU	0.0463	1.0000						
(3) Trade	-0.0698	0.0660	1.0000					
(4) GDP growth	0.0668	-0.1397	0.0446	1.0000				
(5) Inflation	-0.0116	-0.1634	-0.2945	0.1838	1.0000			
(6) Labor	0.1014	0.2120	0.2166	0.2631	-0.1837	1.0000		
(7) Population	0.1365	0.0328	-0.2586	0.5155	0.2428	0.1924	1.0000	
(8) Human Capital	-0.0322	0.1572	0.2310	-0.3880	-0.4198	0.0835	-0.5159	1.0000

Note. This table shows the correlation between the key variables in the analysis. The independent variables are displayed with a one-year lagged value. The total number of observations is 2,364,294.

Table 3. Number of FDI projects across quantiles of financial development

Financial Development quantiles	Number of FDI projects	% of Total FDI projects
First quantile	21,593	19.14
Second quantile	23,692	21.00
Third quantile	24,961	22.13
Fourth quantile	42,547	37.72
Total	112,793	100.00

Notes. This table shows the number of Greenfield investments across quantiles of financial development from 2003-2018.

3.2 Variables

3.2.1. Main Variables

Foreign Direct Investment. The dependent variable is the probability of choosing a certain country as a location for FDI. This includes Greenfield investment projects recorded on the basis of formal media announcements by financial information providers, industry organizations, and market and publication companies. The covered projects include new investments, expansions, and joint ventures but exclude mergers and acquisitions. Greenfield FDI is particularly useful for examining country characteristics that affect the location choices of MNEs because Greenfield investments are not constrained by previous capital installations, unlike mergers and acquisitions. Therefore, firms are assumed to target Greenfield FDI investments in locations that maximize firm benefits (Schiller et al., 2015).

Economic Policy Uncertainty. My main independent variable of interest is the Economic Policy Uncertainty (EPU) within a country, constructed by Baker et al. (2016). While the measure for this variable may vary across countries, the methodology largely follows the approach used for the United States, where the index originated. In the US context, this variable quantifies policy-related economic uncertainty through an index with three underlying components. Firstly, it involves newspaper coverage of policy-related economic uncertainty, which is derived from an index based on search results from 10 large newspapers, providing a normalized measure of the volume of news articles discussing economic policy uncertainty. Secondly, it includes the number of federal tax code provisions scheduled to expire annually over the next decade, providing a dollar-weighted measure of uncertainty regarding the future trajectory of the federal tax code. Lastly, the third component involves the dispersion between individual forecasters' predictions regarding future levels of the Consumer Price Index, Federal Expenditures, and State and Local expenditures, which

are used to construct indices of uncertainty concerning policy-related macroeconomic variables. It is noteworthy that the EPU index has gained broad acceptance among researchers as a reliable measure of policy uncertainty in recent years (Tajaddini & Gholipour, 2021). Its popularity stems from its ability to accurately capture the comprehensive nature of economic uncertainty, encompassing both risk and uncertainty components (Istiak and Serletis, 2018).

Financial Development. For the second hypothesis, the data will be divided into four quantiles of financial development, as the relationship between economic policy uncertainty and FDI is expected to vary across these quantiles. The Financial Development Index provides a relative ranking of countries based on the depth, access, and efficiency of their financial institutions and markets (International Monetary Fund, 2023).

3.2.2 Control Variables

This study employs several control variables that have been previously used by researchers in estimating the relationship between economic policy uncertainty and FDI. Specifically, I use the following variables: trade openness, GDP growth, inflation, labor participation, and population size. Trade openness, measured as the ratio of the sum of imports and exports of goods and services to GDP, is considered crucial for attracting FDI, with higher levels of trade openness positively influencing FDI inflows (Donghui et al., 2018). Following Hsieh et al. (2019) and Kalotay and Sulstarova (2010), GDP growth is used as a proxy for market size. Iamsiraroj and Doucouliagos (2015) highlight economic growth as a key factor in attracting foreign direct investment (FDI). Higher economic growth within a country typically indicates a stronger and more dynamic local market, which is appealing to foreign investors. GDP growth is quantified as the annual percentage growth rate of GDP at market prices, based on constant local currency. GDP encompasses the sum of gross value added by all resident producers in the economy, inclusive of any product taxes and excluding any subsidies not factored into the product values. Additionally, Asongu et al. (2018) highlight inflation as a significant determinant for FDI, as a low and stable inflation generates a more stable macroeconomic environment. Labor participation, measured as the labor force participation rate for ages 15–64, indicates workforce availability. High labor participation rates indicate a larger available workforce, which can attract foreign investors seeking significant human resources (Calimanu, 2023). Population size can influence FDI by indicating market potential, with

larger populations suggesting a bigger market for goods and services (Aziz & Makkawi, 2012). For a subset of the data, I also control for human capital, which influences FDI inflow by providing a skilled and educated workforce that enhances productivity and operational efficiency, thereby making countries more attractive to foreign investors (Noorbakhsh et al., 2001).

3.3 Methodology

To assess the relationship between economic policy uncertainty and FDI, I use a mixed logit model. Discrete choice models are often used to estimate the location choices of firms (Schmidheiny & Brülhart, 2011). In these models, each project's location decision is considered to be the outcome of a discrete choice among available alternatives, in which a utility-maximizing firm is assumed to choose to invest in the location that maximizes the expected returns on investment. A multinomial model relies on the assumption of Independence of Irrelevant Alternatives (IIA). This assumption is violated if there are correlations between certain countries as a location choice for a company, which is often the case. This indicates that the relative probabilities of choosing one alternative over another are not solely determined by country characteristics, as assumed by a multinomial model. The violation of the IIA assumption introduces bias into multinomial models as they do not take into account the influence of correlated alternatives on decision-making, potentially leading to inconsistent and biased estimates of location choices (Glasgow et al., 2012). The mixed logit model allows regression coefficients to vary across firms by capturing company-specific preferences that are not explained by observed covariates alone, accommodating the varying valuations of specific characteristics in location decisions (Karreman et al., 2017). By allowing for heterogeneity in preferences across firms, the mixed logit model relaxes the IIA assumption as random coefficients allow the alternatives to be correlated. The corresponding equation for a mixed logit model is as follows:

$$P_{in} = \int \frac{\exp\left[\beta_i \chi_{in}\right]}{\sum_I \exp\left[\beta_i \chi_{In}\right]} f(\beta|\varphi) d\beta$$

In this equation, P_{in} represents the probability of choosing country i for FDI project n. The vector χ_{in} includes explanatory variables such as economic policy uncertainty, trade openness, GDP growth, inflation, labor participation, population size, and human capital. The vector β_i contains

the parameters to be estimated, while $f(\beta|\varphi)$ denotes the density function of β, with φ representing the parameters (mean and variance) of this density function. This allows β to account for project-specific variations in the effect of χ on location choice probabilities. Thus, the mixed logit probabilities become a weighted average for different values of β, where some elements of β may be fixed while others are randomly distributed. For random parameters, the weights in the mixed logit model are determined by the density function $f(\beta|\varphi)$, providing a flexible approach to capture the heterogeneity in FDI location decisions across projects (Gkritza & Mannering, 2008). For Hypothesis 1, I use the following equation estimated using a mixed logit model:

$$Probability\ of\ FDI_{it} = \beta_0 + \beta_1 EPU_{it} + \beta_2 Trade_{it} + \beta_3 GDP\ Growth_{it} + \beta_4 Inflation_{it} + \beta_5 Labor_{it} + \beta_6 Population\ Size_{it} + \varepsilon_{it}$$

In this equation, the dependent variable is the probability that a country is chosen for an FDI project, β_1 represents the coefficient of interest, and trade to population size are control variables. To incorporate the setup time required for FDI in response to its determinants, I use a one-year lagged value for the independent variables. For the second hypothesis, I apply the same equation, but the dependent variable changes to the probability of FDI within the corresponding quantile of financial development. Here, the sample is divided into four quantiles of financial development: bottom 25%, second 25%, third 25%, and top 25%. Additionally, the same model, which includes all the variables from the equation as well as human capital as a control variable for both Hypotheses 1 and 2, is presented in the appendix.

CHAPTER 4 Empirical Results & Discussion

4.1 Economic Policy Uncertainty

The baseline estimates of the mixed logit regressions are presented in Table 3. Inconsistent with Hypothesis 1, economic policy uncertainty has a positive and significant effect on the probability of attracting Greenfield investments. Specifically, a one-point increase in the economic policy uncertainty score increases the probability of attracting Greenfield FDI by 0.14 percentage points, ceteris paribus. This indicates that during periods of higher economic policy uncertainty in a country, the probability of that particular country being chosen as a location choice for FDI increases. This finding contradicts most existing literature on the relationship between economic policy uncertainty and the monetary amount of FDI, which typically finds a negative relationship (e.g. Canh et al., 2020; Nguyen and Lee, 2021; Haque et al., 2022).

This unexpected positive relationship between economic policy uncertainty and FDI location choices can be understood through the lens of the risk-return trade-off principle in investment theory. According to this principle, higher risk is often associated with the potential for higher rewards. Economic uncertainty, as captured by economic policy uncertainty, introduces risk into investment environments but also presents unique opportunities for higher returns not typically available in low-risk environments (Bonomo et al., 2015; Hartman, 1972). By navigating and capitalizing on these high-risk environments, firms can achieve significant competitive advantages and higher returns, thereby potentially making economic policy uncertainty in a country an attractive characteristic for firms looking to invest.

Additionally, most of the control variables align with existing literature. Note that the random parts coefficients for economic policy uncertainty, trade, labor participation, and human capital indicate that companies making Greenfield investments do not uniformly value these aspects when choosing a country location for investment. When controlling for human capital in a subset of the data, as illustrated in Table A1 in the appendix, the relationship between economic policy uncertainty and FDI remains positive and significant. This suggests that even after accounting for a country's human capital level, higher economic policy uncertainty tends to increase the probability of attracting Greenfield investments.

Table 4. Mixed Logit Estimates for FDI location choices

	(1)
EPU	0.0014***
	(0.0001)
Control Variables	
Trade	0.0033***
	(0.0002)
GDP growth	-0.0484***
	(0.0015)
Inflation	-0.0609***
	(0.0012)
Labor	0.0379***
	(0.0006)
Ln Population Size	0.5156***
	(0.0039)
Random Parts Coefficients	
EPU	0.0050***
	(0.0002)
Trade	0.0021***
	(0.0003)
Labor	-0.0000
	(0.0001)
Number of observations	2,364,294
Number of investment decisions	112,793

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018, using a mixed logit model. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

4.2 Financial Development

The estimates of the mixed logit regressions across different quantiles of financial development are presented in Table 4. Consistent with Hypothesis 2, the relationship between economic policy uncertainty and the probability of attracting Greenfield investments varies across these quantiles of financial development. The results show that this relationship transitions from negative to positive across the quantiles. Specifically, the relationship is significantly negative in the first and second quantiles and significantly positive in the third and fourth quantiles. This shift indicates that financial development plays a crucial role in how economic policy uncertainty impacts the attraction of FDI projects.

When examining the sample with available human capital data, as shown in Table A2 of the appendix, the relationship between economic policy uncertainty and FDI shows notable changes. Specifically, in this subset, the sign in the second quantile shifts from negative to positive, while in the fourth quantile, it changes from positive to negative. Although these results differ from

those observed in the full sample, comparing models with and without human capital indicates that the inclusion of human capital does not influence the overall findings.

4.2.1 High Financial Development (First and Second Quantiles)

The relationship is negative and significant for the first and second quantiles, representing the highest 50% of financially developed countries. This indicates that countries with higher financial development attract fewer FDI projects when there is higher uncertainty surrounding their economic policies. Specifically, a one-point increase in the economic policy uncertainty score for countries in the highest quantile of financial development decreases the probability of attracting Greenfield FDI by 0.16 percentage points, ceteris paribus. This finding aligns with Nguyen and Lee (2021), who discovered that the adverse effect of economic policy uncertainty on FDI is more pronounced in financially developed countries. This indicates that the greater a country's financial development, the stronger the negative impact of economic policy uncertainty on FDI.

4.2.2 Low Financial Development (Third and Fourth Quantiles)

In contrast, the positive relationship in the two lowest quantiles of financial development suggests that in countries with lower financial development, higher uncertainty surrounding economic policies holds a positive relationship with the probability of attracting Greenfield investments. Specifically, a one-point increase in the economic policy uncertainty score for countries in the third quantile of financial development increases the probability of attracting Greenfield FDI by 1.17 percentage points, ceteris paribus.

These findings contrast with most of the existing literature, which generally finds that the relationship between economic policy uncertainty and FDI is more negative for less financially developed countries (e.g. Carrière-Swallow & Céspedes, 2013; Karaman & Yıldırım-Karaman, 2019; Choi et al., 2021). However, my results indicate the opposite trend: in countries with lower financial development, there is a positive relationship between economic policy uncertainty and FDI, whereas in countries with higher financial development, there is a negative relationship. This can be explained by firms' expectations in countries with varying levels of financial development. For instance, businesses might anticipate a more stable economy and predictable policies in countries with higher financial development. Consequently, economic policy uncertainty in these

countries can provoke a stronger reaction from businesses. On the other hand, in countries with lower financial development, businesses often have lower expectations and may even perceive this uncertainty as an opportunistic environment (Claessens et al., 2000). Additionally, another possible explanation could be that in less financially developed countries, economic uncertainty might lead to unexpected opportunities. For example, while the economic situation may have previously been unattractive, high economic policy uncertainty could potentially signal changes that make these markets more appealing, thereby increasing FDI (Kulatilaka & Perotti, 1998).

Table 5. FDI location choices in quantiles of financial development

	(1)	(2)	(3)	(4)
EPU	-0.0016***	-0.0022***	0.0117***	0.0019***
	(0.0002)	(0.0003)	(0.0005)	(0.0002)
Control Variables				
Trade	0.0350***	-0.0042***	0.0034***	-0.0087***
	(0.0007)	(0.0002)	(0.0002)	(0.0003)
GDP growth	0.0407***	0.0146***	-0.0592***	0.0952***
	(0.0042)	(0.0025)	(0.0070)	(0.0048)
Inflation	-0.0301***	-0.0459***	0.0464***	0.1083***
	(0.0027)	(0.0035)	(0.0079)	(0.0086)
Labor	0.1293***	0.0331***	0.0997***	-0.0286***
	(0.0027)	(0.0020)	(0.0063)	(0.0026)
Ln Population Size	0.8754***	0.4579***	0.3167***	0.6546***
	(0.0094)	(0.0099)	(0.0099)	(0.0069)
Random Parts Coefficients				
EPU	-0.0059***	-0.0097***	0.0083***	0.0086***
	(0.0006)	(0.0007)	(0.0005)	(0.0006)
Trade	0.0002	0.0000	-0.0001	0.0000
	(0.0002)	(0.0000)	(0.0001)	(0.0001)
Labor	-0.0027	0.0003	0.1489***	0.0009
	(0.0037)	(0.0000)	(0.0074)	(0.0006)
Number of observations	115,955	134,871	147,915	227,199
Number of investment decisions	21,593	23,692	24,961	42,547

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018 in different quantiles of financial development, using a mixed logit model. Column 1 displays the results for the first quantile of financial development, Column 2 for the second quantile, Column 3 for the third quantile, and Column 4 for the fourth quantile. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

CHAPTER 5 Robustness Checks

To assess the validity of my findings, I conduct several robustness checks. These include evaluating different models and outputs, experimenting with the inclusion and exclusion of fixed effects, analyzing data under various conditions such as during a crisis, examining models with and without outliers, and conducting sector-specific subsample analyses. These checks help ensure the reliability and consistency of the conclusions drawn from my research.

5.1 Conditional Logit and Fixed Effects

The mixed logit model is complex and accounts for random effects, allowing for variation in the effect of a variable on the dependent variable across companies due to unobserved factors. In this robustness check, I will experiment with a different model, the conditional logit model, and examine the differences when including or excluding fixed effects. I will first run a conditional logit model without fixed effects to observe the outcomes without accounting for random coefficients. Due to the complexity of the mixed logit model, I could not include country-fixed effects. In the literature, fixed effects are particularly appropriate because it accounts for unobserved heterogeneity. More specifically, fixed effects isolate the effect of a variable while keeping all observed and unobserved time-invariant characteristics of each country constant, thus correcting for all unobserved time-invariant variation. The simpler conditional logit model does not account for the IIA assumption but does allow for the easier inclusion of fixed effects. Therefore, I included fixed effects in the conditional logit model to examine the influence on my results. By comparing both conditional logit models, I can assess whether similar insights can be drawn with and without the inclusion of fixed effects. This comparison ensures that my main results are not unduly driven by time-invariant characteristics in the error term correlated with economic policy uncertainty.

Table 6 presents estimates from the conditional logit model, with and without fixed effects. Column 1 displays results from the original mixed logit model in the main analysis. Column 2 shows estimates from the conditional logit model without fixed effects, where all signs and significance levels remain consistent, though coefficients are notably smaller. This reduction in coefficients can be explained by a potential violation of the IIA assumption. In Column 3, the conditional logit model includes fixed effects, revealing a change in the sign of the EPU variable

from positive to negative. Notably, the coefficient decreases to such a small number that the effect is negligible. The change in sign from positive to negative upon including fixed effects suggests that unobserved time-invariant characteristics may influence both economic policy uncertainty and FDI location choices. This potentially introduces bias by violating the zero conditional mean assumption, which is crucial for causal inference. Therefore, the results from the model with fixed effects appear more convincing, as it accounts for these unobserved time-invariant characteristics. Additionally, these results align with the majority of the literature, indicating that firms become more cautious in the face of increased uncertainty.

Table 6. Conditional logit and fixed effects

	(1)	(2)	(3)
EPU	0.0014***	0.0001***	-0.0000***
	(0.0001)	(0.0000)	(0.0000)
Control Variables			
Trade	0.0033***	0.0001***	0.0000***
	(0.0002)	(0.0000)	(0.0000)
GDP growth	-0.0484***	-0.0018***	0.0001***
	(0.0015)	(0.0001)	(0.0000)
Inflation	-0.0609***	-0.0024***	-0.0000***
	(0.0012)	(0.0001)	(0.0000)
Labor	0.0379***	0.0014***	0.0001***
	(0.0006)	(0.0000)	(0.0000)
Ln Population Size	0.5156***	0.0203***	0.0052***
	(0.0039)	(0.0006)	(0.0009)
Random Parts Coefficients			
EPU	0.0050***		
	(0.0002)		
Trade	0.0021***		
	(0.0003)		
Labor	-0.0000		
	(0.0001)		
Country dummies	NO	NO	YES
Number of observations	2,364,294	2,364,294	2,364,294
Number of investment decisions	112,793	112,793	112,793

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018, using a mixed logit model in Column 1, a conditional logit in Column 2 and a conditional logit with country fixed effects in Column 3. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

5.2 Monetary Amount of FDI

In the following robustness check, I estimate the relationship between economic policy uncertainty and the monetary amount of FDI with a pooled OLS model to assess its alignment with existing literature and its comparison to the mixed logit estimation on location choices. The Pooled OLS regression has the following equation, with β_1 being the coefficient of interest:

$$Monetary\ amount\ of\ FDI_{it} = \beta_0 + \beta_1 EPU_{it} + \beta_2 Trade_{it} + \beta_3 GDP\ Growth_{it} + \beta_4 Inflation_{it} + \beta_5 Labor_{it} + \beta_6 Population\ Size_{it} + \mathcal{E}_{it}$$

The results from Table 7 show the outcomes of the Pooled OLS analysis. Consistent with previous studies (e.g., Nguyen & Lee, 2021; Canh et al., 2020; Haque et al., 2022), I find a negative and statistically insignificant relationship between a country's economic policy uncertainty and the monetary amount of FDI inflow. It is crucial to highlight that this finding contrasts with the mixed logit model's results, which revealed a positive and statistically significant relationship between economic policy uncertainty and FDI. This suggests that companies may perceive and prioritize economic policy uncertainty differently when selecting an FDI location compared to determining the monetary investment amount in a given country.

Additionally, since it is important to consider fixed effects, Column 2 shows a Pooled OLS model with country-fixed effects. Adding these fixed effects results in an increase in the size of the negative coefficient.

Table 7. Pooled OLS Estimates for the monetary amount of FDI

	(1)	(2)
EPU	-6.0177	-18.7367
	(18.5945)	(16.7317)
Control variables		
Trade Openness	69.5154***	143.7783*
	(25.9863)	(87.0766)
GDP growth	566.7446**	481.4245**
	(228.8254)	(237.0342)
Inflation	-324.2356	-172.9163
	(272.0598)	(248.5256)
Labor Participation	1328.568**	650.944
	(602.2602)	(1819.547)
Ln Population Size	12540.13***	38607.59
	(2093.207)	(29460.65)
Country dummies	NO	YES
Number of observations	323	323
Number of countries	21	21
R-squared	0.5430	0.7173

Notes. This table shows the pooled OLS estimates with and without country dummies of the relationship between EPU and the monetary amount of FDI from 2003-2018. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

5.3 Financial Crisis

To assess the robustness of my findings under varying conditions, particularly during periods of crisis, I also investigate the impact of the financial crisis of 2007-2008 on the relationship between economic policy uncertainty and FDI. This crisis period was characterized by significant economic uncertainty, political instability, and global economic downturns (Foster & Magdoff, 2009). Consequently, this period witnessed an economic shift that led to a decrease in Greenfield investments (Ucal et al., 2010). Hence, I explore whether the relationship between economic policy uncertainty and FDI varies during crisis years.

To examine this, I extend the original mixed logit model from my baseline hypothesis by including an interaction term between the financial crisis years and economic policy uncertainty, aiming to verify the robustness of my findings across diverse economic scenarios. The results presented in Table 8 indicate that the positive and significant effect of economic policy uncertainty on the location choice of FDI remains consistent. Importantly, the interaction term is statistically insignificant, suggesting that the global financial crisis did not significantly alter the relationship

between economic policy uncertainty and FDI. These findings provide additional confidence in the robustness of the initial results.

Table 8. Mixed Logit Estimates for FDI location choices including financial crisis

	(1)
EPU	0.0015***
	(0.0001)
EPU*Financial Crisis	-0.0014
	(0.0006)
Control Variables	
Trade	0.0032***
	(0.0002)
GDP growth	-0.0482***
	(0.0015)
Inflation	-0.0608***
	(0.0012)
Labor	0.0381***
	(0.0006)
Ln Population Size	0.5147***
	(0.0039)
Random Parts Coefficients	
EPU	0.0050***
	(0.0002)
Trade	0.0021***
	(0.0003)
Labor	-0.0000
	(0.0001)
Number of observations	2,364,294
Number of investment decisions	112,793

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018 including an interaction term between the financial crisis and EPU, using a mixed logit model. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

5.4 Outliers

Next, I perform a robustness check by excluding outliers from the economic policy uncertainty dataset. This allows the assessment of whether excluding these outliers makes a significant difference in the findings. Outliers, characterized by extreme values, can introduce biases into statistical analyses, leading to incorrect conclusions about the relationship between policy uncertainty and FDI. Figure 1 depicts the distribution of EPU, highlighting the presence of some outliers, whereas Figure 2 presents the distribution after their removal. Hence, it is interesting to examine if my findings remain consistent if outliers are excluded from the economic policy uncertainty dataset.

Table 9 displays the results of the mixed logit model excluding outliers. These results indicate that the relationship between economic policy uncertainty and FDI remains positive and significant, with a slight decrease in the coefficient. This implies that, regardless of the presence of outliers, the relationship consistently remains positive and significant.

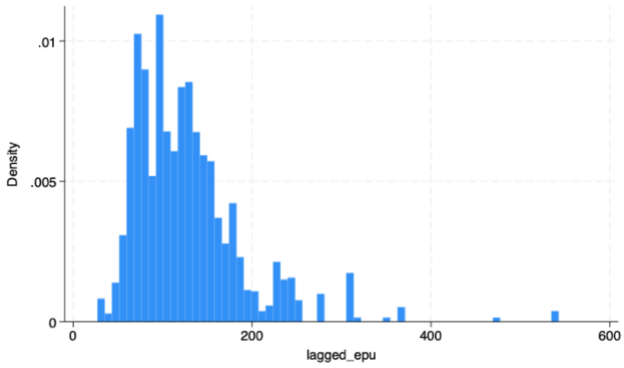

Figure 1. Distribution of EPU with outliers

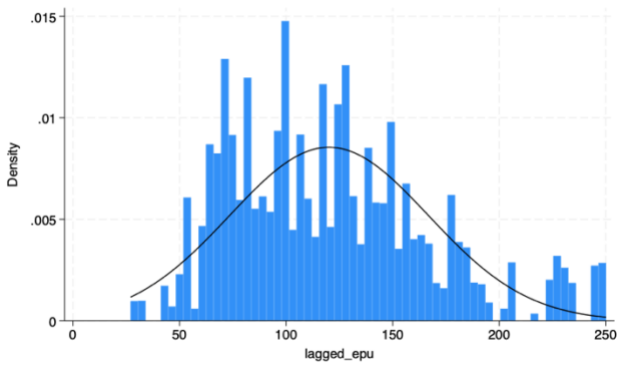

Figure 2. Distribution of EPU without outliers

Table 9. Mixed logit estimates excluding outliers

	(1)
EPU	0.0011***
	(0.0001)
Control Variables	
Trade	0.0025***
	(0.0002)
GDP growth	-0.0533***
	(0.0015)
Inflation	-0.0577***
	(0.0012)
Labor	0.0409***
	(0.0006)
Ln Population Size	0.5379***
	(0.0040)
Random Parts Coefficients	
EPU	0.0000
	(0.0000)
Trade	0.0034***
	(0.0002)
Labor	0.0000
	(0.0001)
Number of observations	2,175,776
Number of investment decisions	106,645

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018 excluding outliers, using a mixed logit model. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

5.5 Sectoral Subsamples

To assess the robustness of my results across different subsets of the data, I examine the relationship between economic policy uncertainty and FDI in various sectors, considering their heterogeneity. Industries vary in their sensitivity to economic policy uncertainty, which affects the responsiveness of firms in these industries during periods of higher economic policy uncertainty. Therefore, I analyze two industries: the financial industry, which is highly sensitive to economic policy uncertainty due to its strong dependency on national economic policies (Smales, 2020), and the transportation sector, which is considered to have lower sensitivity (Pennings, 2023).

Table 10 presents the relationship between economic policy uncertainty and FDI, with Column 1 showing results for the transportation sector and Column 2 for the financial sector, aiming to assess the consistency of this relationship across sectors. It is evident that in both sectors, the positive and significant relationship between economic policy uncertainty and FDI remains. The sectors' sensitivity to economic policies is reflected in the magnitude of the coefficient for economic policy uncertainty: it is smaller in the transportation sector compared to the main results, whereas in the financial sector, this effect is larger than in the main results.

Table 10. Mixed logit estimates across sectors

	(1)	(2)
EPU	0.0008**	0.0032***
	(0.0003)	(0.0002)
Control Variables		
Trade	0.0031***	-0.0014*
	(0.0003)	(0.0008)
GDP growth	-0.0275***	-0.0256***
	(0.0061)	(0.0055)
Inflation	-0.0717***	-0.0880***
	(0.0060)	(0.0041)
Labor	0.0332***	0.0447***
	(0.0029)	(0.0023)
Ln Population Size	0.4509***	0.4466***
	(0.0157)	(0.0145)
Random Parts Coefficients		
EPU	-0.0073***	0.0038***
	(0.0008)	(0.0007)
Trade	-0.0000	0.0077***
	(0.0002)	(0.0006)
Labor	-0.0009	0.0002
	(0.0010)	(0.0004)
Number of observations	104,736	180,627
Number of investment decisions	4,993	8,615

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018, using a mixed logit model. Column 1 displays the relationship in the transportation sector and Column 2 in the financial services sector. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

CHAPTER 6 Conclusion

In this study, I investigated the relationship between economic policy uncertainty and FDI location choices. Previous research has primarily focused on how economic policy uncertainty affects the monetary amount of FDI, given the significant roles both FDI and economic policy uncertainty play in shaping national economies. However, less attention has been given to understanding the factors influencing investors' choices regarding project locations. This study fills this gap by using a mixed logit model, distinguishing my approach from previous research. Moreover, I contribute to the literature with a specific focus by assessing the relationship between economic policy uncertainty and FDI across various quantiles of financial development.

My main results reveal that during periods of higher uncertainty in a country, the probability of choosing that country for FDI increases. This can be explained by the risk-return trade-off principle, which suggests that higher risk often correlates with the potential for higher rewards (Bonomo et al., 2015; Hartman, 1972). By navigating and capitalizing on high-risk environments, firms can gain competitive advantages and higher returns, making economic policy uncertainty an attractive trait for investment. It is important to note that this finding is inconsistent with most existing literature, which typically uses the monetary amount of FDI as the dependent variable and different modeling approaches (e.g., Canh et al., 2020; Nguyen and Lee, 2021; Haque et al., 2022). This discrepancy suggests that companies may perceive and prioritize economic policy uncertainty differently when selecting an FDI location compared to determining the monetary investment amount in a given country. Furthermore, this relationship varies across different quantiles of financial development: in countries with higher levels of financial development, there is a negative relationship between economic policy uncertainty and FDI, whereas in countries with lower levels of financial development, this relationship is positive. This divergence may stem from the fact that in countries with lower financial development, businesses often maintain lower expectations and may even perceive uncertainty as an opportunistic environment (Claessens et al., 2000). Additionally, the previously unattractive financial situation might become more appealing due to potential changes signaled by high economic policy uncertainty, thus increasing FDI (Kulatilaka & Perotti, 1998). This finding contrasts with most of the existing literature, which generally found that the relationship is more negative for less financially developed countries (e.g. Carrière-Swallow & Céspedes, 2013; Karaman & Yıldırım-Karaman, 2019; Choi et al., 2021). These differences can be attributed to the fact that Karaman and Yildrim-Karaman (2019) and Carrière-

Swallow and Céspedes (2013) use stock market volatility as a proxy for economic policy uncertainty. While stock market volatility may be correlated with economic policy uncertainty, it does not directly measure it. Additionally, these studies use the monetary amount of FDI and employ different models to estimate the relationship.

My main results remain consistent across different sectors, under varying conditions such as during a crisis, and when excluding outliers observed in the EPU data. Yet, experimenting with different models, my results indicate that using a conditional logit model keeps the results positive and significant but shrinks their size, while adding fixed effects makes the results negative, but negligible. Furthermore, when comparing my results with the monetary amount of FDI as the dependent variable, the findings are negatively insignificant, consistent with prior studies (e.g., Nguyen & Lee, 2021; Canh et al., 2020; Haque et al., 2022). This suggests that companies prioritize economic policy uncertainty differently when choosing an FDI location compared to determining the investment amount.

Recognizing that economic policy uncertainty potentially can attract FDI, especially in countries with lower levels of financial development, policymakers could consider strategically managing uncertainty to leverage potential benefits while minimizing risks. Furthermore, given that in countries with higher levels of financial development, there is a negative relationship between economic policy uncertainty and FDI, it is particularly important for countries with such characteristics to mitigate policy uncertainty. This can be achieved through enhanced transparency in the policy formulation process and predictability of policy changes. For instance, clear communication about policy objectives and measures can stimulate confidence in investors and reduce uncertainty.

A limitation of this study is the potential bias due to endogeneity. Firstly, despite the inclusion of various control variables, omitted variable bias may be present as it is likely that not every country characteristic influencing both economic policy uncertainty and FDI is accounted for in my model. This omission leads to unobserved variables being captured by the error term, potentially resulting in biased coefficients and inaccurate estimations. Additionally, the inability to include fixed effects increases the risk of omitted variable bias, as highlighted by the flipping sign in the conditional logit model when fixed effects are added. Additionally, sample selection bias could be a concern in this study for two reasons. First, the study only includes countries for which the EPU index is available, and the inclusion of countries for the EPU index is determined by

researchers. Second, several observations are excluded due to missing data on certain determinants for countries in specific years. If the availability of EPU data or missing control variables is not random, the sample may become biased, reflecting factors unique to countries with complete data or an EPU index. This issue is evident in the subset of the data where human capital information is available, as the results for this subset differ from those of the full sample. In this case, the findings in the subset may be influenced by underlying factors specific to the countries and years for which human capital data is available.

Given that the relationship between economic policy uncertainty and FDI location choices has not been extensively studied, this area presents an intriguing opportunity for further exploration. Critically, the results of this study do not appear to be robust to the inclusion of fixed effects, suggesting that the findings regarding the effect of EPU could potentially be biased, affecting the causal inference. Therefore, employing instrumental variables in future research is recommended to address the violation of the zero conditional mean assumption. For instance, I attempted to implement national elections as an instrumental variable; however, the first stage revealed that this variable was not sufficiently relevant. In the future, other political events could be considered that affect the location choices of FDI solely through the independent variable of interest, economic policy uncertainty. This approach would help ensure exogeneity and provide a clearer understanding of the relationship between EPU and FDI. Additionally, to further examine sectoral heterogeneity, future research could delve deeper into the variations in how EPU influences FDI across different sectors. The robustness check has already highlighted differences in this relationship between the financial services and transportation industries. Expanding sector-specific analyses to encompass additional sectors such as manufacturing, technology, or healthcare would yield a comprehensive understanding of how economic policy uncertainty uniquely impacts FDI decisions within these sectors. Such research could reveal insights into diverse regulatory environments, market dynamics, and sector-specific challenges that shape FDI outcomes. Thoroughly investigating these variations, alongside uncovering their underlying mechanisms, would significantly enrich the literature and provide policymakers with insights to craft effective sector-specific policies.

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APPENDIX

Table A 1. Mixed Logit Estimates for FDI location choices human capital

	(1)	(2)
EPU	0.0012***	0.0010***
	(0.0001)	(0.0001)
Control Variables		
Trade	-0.0048***	0.0003
	(0.0003)	(0.0003)
GDP growth	-0.0738***	-0.0439***
	(0.0016)	(0.0017)
Inflation	-0.0793***	-0.0667***
	(0.0015)	(0.0014)
Labor	0.0388***	0.0279***
	(0.0006)	(0.0007)
Ln Population Size	0.5188***	0.6364***
	(0.0043)	(0.0047)
Human Capital		0.0111***
		(0.0002)
Random Parts Coefficients		
EPU	0.0052***	-0.0086***
	(0.0002)	(0.0002)
Trade	0.0116***	0.0088***
	(0.0003)	(0.0003)
Labor	-0.0001	-0.0000
	(0.0001)	(0.0001)
Human Capital		0.0000
		(0.0000)
Number of observations	1,610,921	1,610,921
Number of investment decisions	97,751	97,751

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018 excluding and including human capital as a control variable, using a mixed logit model. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.

Table A 2. FDI location choices in quantiles of financial development human capital

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
EPU	-0.0016***	-0.0034***	0.0090***	0.0081***	0.0109***	0.0083***	-0.0006**	-0.0051***
	(0.0002)	(0.0003)	(0.0009)	(0.0009)	(0.0010)	(0.0005)	(0.0003)	(0.0004)
Control Variables								
Trade	0.0347***	0.0334***	0.0137***	0.0128***	-0.0125***	-0.0262***	-0.0236***	-0.0146***
	(0.0007)	(0.0008)	(0.0008)	(0.0008)	(0.0023)	(0.0034)	(0.0006)	(0.0008)
GDP growth	0.0393***	0.0258***	-0.0667***	-0.0674***	-0.0235**	-0.0553***	0.0745***	0.0451**
	(0.0042)	(0.0041)	(0.0070)	(0.0070)	(0.0118)	(0.0087)	(0.0057)	(0.0070)
Inflation	-0.0300***	-0.0458***	0.0802***	0.0879***	0.0498***	0.1863***	-0.0574***	-0.2713***
	(0.0027)	(0.0029)	(0.0078)	(0.0079)	(0.0177)	(0.0250)	(0.0139)	(0.0172)
Labor	0.1276***	0.1105***	0.0526***	0.0514***	0.0947***	0.0254***	-0.0667***	-0.1308***
	(0.0028)	(0.0032)	(0.0035)	(0.0035)	(0.0127)	(0.0027)	(0.0025)	(0.0042)
Ln Population Size	0.8713***	0.9732***	0.6629***	0.5980***	0.1681***	-0.3055***	0.3691***	0.9003***
	(0.0094)	(0.0118)	(0.0248)	(0.0293)	(0.0322)	(0.0641)	(0.0116)	(0.0221)
Human Capital		0.0093***		-0.0058***		-0.0695***		-0.0258***
		(0.0006)		(0.0015)		(0.0065)		(0.0011)
Random Parts Coefficients								
EPU	-0.0059***	0.0081***	0.0394***	0.0396***	0.0070***	0.0003	0.0148***	-0.0164***
	(0.0006)	(0.0006)	(0.0023)	(0.0022)	(0.0007)	(0.0008)	(0.0006)	(0.0006)
Trade	0.0000	0.0002	-0.0048***	-0.0038**	0.0160***	0.0219***	0.0003	-0.0001
	(0.0002)	(0.0002)	(0.0016)	(0.0017)	(0.0013)	(0.0018)	(0.0002)	(0.0006)
Labor	-0.0013	0.0002	0.0000	0.0000	-0.1293***	-0.0050	0.0011*	0.0022
	(0.0043)	(0.0344)	(0.0007)	(0.0007)	(0.0157)	(0.0058)	(0.0006)	(0.0037)
Human Capital		0.0001		0.0001		-0.0540***		-0.0865***
		(0.0005)		(0.0004)		(0.0063)		(0.0023)
Number of observations	111,605	111,605	57,310	57,310	110,294	110,294	159,837	159,837
Number of investment decisions	21,526	21,526	15,077	15,077	22,146	22,146	39,002	39,002

Notes. This table shows the marginal effects of location choices of FDI projects from 2003-2018 in different quantiles of financial development excluding and including human capital as a control variable, using a mixed logit model. Columns 1 and 2 display the results for the first quantile of financial development, Columns 3 and 4 for the second quantile, Columns 5 and 6 for the third quantile, and Columns 7 and 8 for the fourth quantile. Robust standard errors are in parentheses. Significance level is shown by *** p<0.01, ** p<0.05, * p<0.1. The determinants are displayed with a one-year lag.