

# How Do Economic Policy Uncertainty, Geopolitical Risk, and Environmental Performance Affect Capital Flows? Evidence from Emerging Markets

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**Abstract** The present study empirically verifies the potential determinants of capital flows into the emerging countries. The study mainly focuses on the role of recently proposed variables viz economic policy uncertainty, geopolitical risk, and environmental performance index. We use balanced panel data for 13 countries spanning from the year 2002 to 2021. The study employs recently developed Machado and Silva (2019) method of moments quantile regression analysis to examine the drivers of capital flows. The study also employs dynamic panel data estimators which contain fully modified ordinary least square (FMOLS), and dynamic ordinary least square (DOLS), models to check the robustness and consistency of the results. The overall results show that lagged  $FDI_{t-1}$ , market size (GDPG), trade openness, economic freedom index, GPRC, and EPI have positive and significant effects on FDI inflows in the sample countries. The findings of the study bear significant implications for government, policy makers, and investors in several ways. The market size plays an important role in determining FDI inflows. Policymakers need to mainly focus on economic conditions of the developing countries. The findings also help to formulate the economic and monetary policies that can boost the FDI inflows. Finally, foreign investors (home countries) carefully look at the state-of-affairs of the economic policy uncertainty, geopolitical risk, and environmental sustainability before they park their money in the host countries.

**Keywords:** Capital Flows, Economic Policy Uncertainty, Environmental Performance Index, Geopolitical Risk

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## I. Introduction

Foreign direct investment (FDI) has been a subject of debating over its contribution to the developed and developing economies' advancement and prosperity (Emako, et al., 2022). Emerging markets continue to be the most significant investment avenue attracting surplus

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money from the developed countries (Das et al., 2019). Recent literature shows that FDI is also employed to ensure the sustainable development which is the need of the hour for developed and developing countries. Over the period of time, there is a sizeable number of studies which have been undertaken to study the drivers of FDI. Hence, it is imperative to verify whether FDI's arrival to a country can be impacted by traditional and recently proposed variables. It is a fact that emerging countries continuously require more overseas capital to accelerate their investment and achieve rapid economic growth (Kumari and Sharma, 2017; Saini and Singhania, 2018). The advent of FDI in developing countries mainly depends on economic and political conditions, quality of infrastructure, technology advancement, good governance, and environmental sustainability factors (Dupasquier and Osakwe, 2006). In order to attract more capital inflows, most of the countries provide several incentives in the form of grants, tax holidays, physical infrastructure, and liberalized trade policies to foreign firms (Bouoiyour 2007; Opoku et al., 2022). Further, many host countries attract capital inflows by providing natural resources, well-educated workforces, growth prospects, market conduciveness, and trade openness to global markets (Lee and Houde, 2000; Michie, 2001; Opoku et al., 2022). It creates a substantial interest in the host country's economy through generating employment opportunities, increasing the standard of living, productivity growth, accelerating economic growth, generating revenue, welfare of society, managerial skills, and technology transfer facility of the receiving country (Asiedu and Lien, 2011; Biswas, 2002; Kok and Ersoy, 2009; Kumari and Sharma, 2017; Levine, 2001; Meyer and Sinani, 2009; Opoku et al., 2022). According to Blomstrom (1989) and Michie (2001) FDI paved the way for transferring modern technology to domestic firms. Thus, FDI bridges the technological gap between developed and emerging countries (Kumari and Sharma, 2017). It clearly reveals that increasing capital inflows lead to international financial integration.

Post globalisation, the world economy has been intertwined; because any significant event<sup>1)</sup> occurring in a country tends to affect other countries across the globe (Cheng, 2017; Contractor, 2022). In recent years, the impact of time-varying uncertainty on the economy has gained more attention after the global financial recession. Economic policy uncertainty (EPU) has been a key driver of an "economic cycle, investment, and policy decision making." The prior empirical studies have not considered these variables despite they tend to have direct bearing on the cross-border capital mobility. Since EPU is not comprehensively tested in the realm of FDI, the present study makes sincere attempts to demonstrate the drivers of FDI combining newly proposed variables with conventional macroeconomic factors. Baker et al. (2016) have constructed a news-based economic policy uncertainty index which empirically proves to be a key

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1) For instance, "Great Depression (1929), Asian financial crisis (1997), terror attack 9/11 (2001), Global financial meltdown (2008), European sovereign debt crisis (2010), and recent COVID-19 (2019), and Russia-Ukraine invasion (2022)".

determinant of FDI. Hence, the contribution of Baker et al. (2016) has drawn the attention of researchers, academics, market regulators, and policymakers worldwide to have a considered view on EPU so as to be employed in different dimensions<sup>2</sup>). Further, prior studies document that those countries with high EPU might attract fewer investments ultimately resulting into low productivity (Caggiano, et al., 2017; Gulen and Ion, 2015). It is found from the literature that a few studies attempted to examine the effect of EPU on overseas capital inflows (Avom, et al., 2020). Subsequently, Canh, et al., (2020) have investigated the effect of both domestic and world EPU on foreign direct investment (net inflows) for 21 countries covering the period from 2003- 2013. The study reveals mixed results that domestic EPU has a negative effect on FDI inflows while world EPU tends to increase the flows of FDI. Zhu, Jia, and Wu (2019) explore the effect of EPU on foreign direct investment entry and exit. The study finds that the bankruptcy resolution channel through which EPU affects the entry and exit of FDI. Hence, the impact of EPU on foreign capital inflows is still nascent stage.

On the other hand, geopolitical risk (GPR) is another inevitable factor that might be considered by the international investors before investing in the global markets (Lu and Liu, 2022). Also, few studies examine geopolitical risk in different aspects. For example, Liu, et al., (2014) document that increased political uncertainty may cause stock prices to decline and these companies are policy oriented. Shanaev and Ghimire (2019) investigate the political risk in Russia and its impact on stock market returns. In recent years, GPR has played a vital role in determining foreign direct investment in the global context<sup>3</sup>). Moreover, increasing geopolitical risks and uncertainty could adversely affect the FDI (Bussy and Zheng, 2023). Studies like Krane (2022) and Lu and Liu (2022) employ the geopolitical risk index to assess the influence of geopolitical risk on FDI outflows. The study's results find that GPR negatively affects FDI outflows particularly in the energy sector. Recently Bussy and Zheng (2023) and Yu and Wang (2023) have examined the impact of GPR on foreign capital flows. The authors find that GPR significantly influences foreign capital flows. Considering the rapidly changing political environment globally, we consider geopolitical risk as a variable in our study<sup>4</sup>). In the recent years, environmental sustainability has gained momentum in undertaking different projects including research project which can potentially offer advises and suggestions to have pristine

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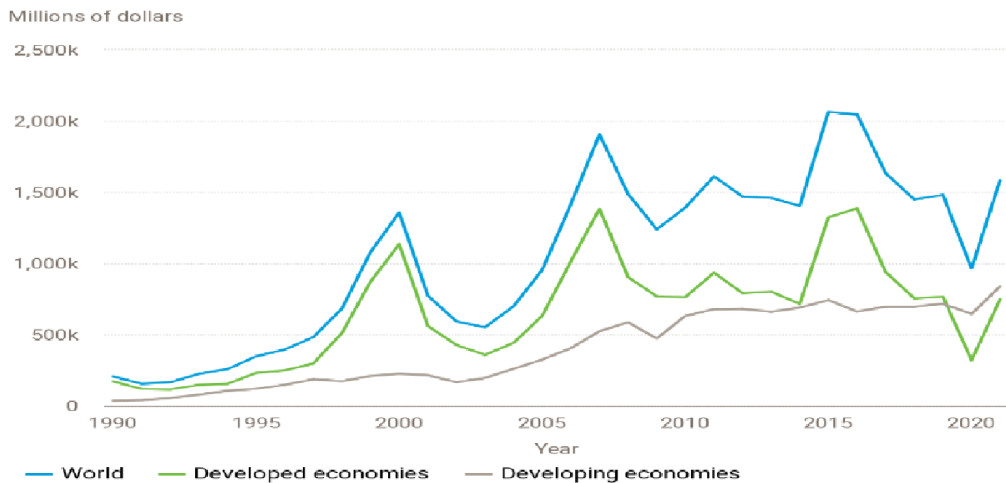
2) There are few studies exploring the effects of EPU on other different areas such as policy uncertainty of the economy and its effects on corporate investment (Gulen and Ion 2016; Wang, et al., 2014; Klayme, et al., 2023), investment and output (Jeong, 2002), firm level investment (Kang, et al., 2014), global trade flows Tam (2018), stock market returns and volatility (Arouri, et al., 2016; Si, et al., 2021; Rehman, et al., 2021; Duan, et al., 2018; Yu and Song, 2018), cryptocurrency returns and volatility (Umar, et al., 2023; Yen, and Cheng, 2021; Shaikh, 2020)

3) Geopolitical risk refers to that the major events happened around the world related to economic crisis, war threats, nuclear threats, political instability, and global political situations. For example, Brexit, Korean War, Cuban Missile Crisis, Sino-US trade war, China-US trade war, and recent Russia-Ukraine war.

4) A few studies examine the impact of geopolitical risk in different aspects. Stock market reactions (Das, et al., 2023), bank indices (Yıldırım et al., 2023), Oil price volatility (Zhang, et al., 2023; Wang, et al., 2023).

global atmosphere. Against this backdrop, we are encouraged to employ environmental sustainability in the present study. Some studies document that natural resources are key drivers in determining FDI inflows in developing countries (Asiedu and Lien, 2011). Studies like (Ahmed, et al., 2022; Chang and Li, 2019; Demena and Afesorgbor 2020; Duodu, et al., 2021; Opoku et al., 2021; Xie, et al., 2020) have considered environmental factors to determine the FDI flows. Recently, Wang, et al., (2023) examine the effect of environmental sustainability on overseas capital inflows, financial development, innovation, globalisation, and economic growth. The results show that environmental sustainability negatively and significantly influences FDI. However, a handful of studies have demonstrated the determinants of FDI using newly proposed variables and conventional macroeconomic factors. The present study aims to verify how economic policy uncertainty, geopolitical risk, and environmental performance index affect foreign direct investment in emerging countries. We mainly examine the role of recently proposed variables and conventional macroeconomic factors namely inflation, interest rate, GDP, etc., in determining the capital inflows in emerging countries. Until recently, most of the studies have examined the determinants of FDI, and these empirical studies assess the role of traditional variables. Kravis and Lipsey (1982) suggest that traditional factors are insufficient to determine the FDI inflows. There is a need for other recently proposed variables to elucidate the FDI completely. With these backdrops, the present study intends to seek answers to this question "What drives the foreign capital inflows into emerging countries?" The present study sheds light on the existing literature in several ways. The idea of the study is conceived from the prior research works of this domain. However, the study is manifestly different from the previous studies from an important dimension. The study demonstrates the joint role of EPU, GPR, and EPI on the FDI inflows in the emerging countries. Further, we employ dynamic panel data estimators which have a uniqueness that makes the work to stand out from the previous works. Moreover, the study has a great novelty of using widely used methodological procedures which could certainly ensure the reliability and appropriateness of the results. Lastly, the study brings out the findings which are apposite to the current global environment from the perspective of EPU, GPR and EPI. The present study employs a dataset which covers more recent periods which will further strengthen the quality of the work. It is the convention that the OLS regression modelling is not fragmented into many rather all the variables are brought in one estimation. Finally, the study contributes to the existing literature in the field of determining FDI from the emerging markets perspective. Hence, the findings of the study could be immensely useful to the global readers, policymakers, and regulators of host and home countries.

Figure 1 reveals the trend of foreign direct investment inflows of the developed and developing economies from 1990 to 2021. It clearly shows that FDI inflows tend to have upward and downward trends.

**Figure 1.** Trends of FDI inflows from 1990 to 2021

(Source) UNCTAD World Investment Report 2022

The rest of the paper is organised as follows: We discuss the literature review in Section 2, Section 3 explains the detailed data and methodology. The empirical results are presented in Section 4, and Section 5 provides concluding remarks.

## II. Review of Literature

It is well documented in the academic literature that a handful of studies that have examined the determinants of FDI and their relationship with economic growth in developed and emerging countries. Macroeconomic variables are considered as indispensable factors in determining FDI inflows. Prior literature documents that instead of considering firm-level micro factors, country-specific factors might have a strong association with capital inflows (Walsh and Yu, 2010). Country-specific variables such as real GDP, per capita income, inflation, interest rate, exchange rate, infrastructure, external debt, labour cost, political risk, and trade openness play a vital role in attracting FDI inflows into developed and developing countries (Saini and Singhania, 2018). Biswas (2002) documents that traditional and nontraditional variables play a significant role in determining the FDI inflows in a country. Kok and Ersoy (2009) and Kumari and Sharma (2017) explore the best determinants of FDI inflows in developing countries. The study documents that communication variables and market size are the most prominent factors to determine the FDI inflows in developing countries. Economou et al., (2016) investigate the key drivers of FDI inflows into OECD and developing countries. The authors find that lagged

FDI, size of the market, gross capital formation, and corporate tax structure positively and significantly affect the FDI inflows in OECD countries. In the case of developing countries, lagged FDI, size of the market, labour costs, and institutional variables significantly influence capital inflows. Saini and Singhania (2018) examine the potential drivers of FDI in both developed and emerging countries. The study finds mixed results in developed countries that GDP growth, trade openness, etc., mainly determine capital inflows while developing countries' capital inflows positively correlate with trade openness and gross fixed capital formation. Sabir, Rafique, and Abbas (2019) study institutional quality and its impact on FDI inflows into developed and developing countries. The authors find that institutional quality positively and significantly affects FDI inflows in both the set of countries. Emako, et al., (2022) assess the crucial factors that affect FDI inflows in developing countries. They reveal that institutional quality is the most significant factor in determining FDI inflows in developing countries. However, the domestic market size is one of the key factors in attracting FDI. Shamsuddin (1994) and Tsai (1994) study the determinants of FDI in less developed countries (LDC). They use per capita GDP and per capita public aid. The study documents that per capita GDP and public aid play an essential role in attracting foreign capital inflows. Aristotelous and Fountas, (1996) and Dorakh, (2020) analyse the European Union (EU) foreign direct investment. Whereas (Dees, 1998; Panthamit and Chaiboonsri, 2020) investigate China inflows and outflows of foreign investment. The authors find that real GDP and political stability significantly influence the foreign capital inflows and outflows in China. Studies like (Temiz and Gokmen, 2014; De Castro et al., 2013; Jadhav, 2012; Goswami and Saikia, 2012; Yang et al., 2000) explore the determinants of FDI in Turkey, Brazil & Mexico, BRICS countries, India, and Australia. They use real GDP and per capita GDP as a proxy for domestic market size.

Further, several studies find a positive relationship between trade openness and foreign direct investment (Asiedu, 2002; Asiedu and Lien, 2004; Bagli and Adhikary, 2014; Ceviz and Çamurdan, 2007; Rogmans and Ebbers, 2013; Tintin, 2013). On the other hand, few studies document that infrastructure facilities are the significant factor in determining foreign capital inflows. Also, they are positively associated with FDI and economic growth (Apaydin, 2009; Kinoshita and Campos, 2003; Hubler and Keller, 2010; Rogmans and Ebbers, 2013; Sirag et al., 2018; Tsen, 2005). However, Haruna et al., (2023) find that foreign capital inflows significantly reduce the poverty in the short as well as long run. Immurana (2021) documents that host countries population health substantially and positively attracts FDI. Paweenawat (2019) finds a positive and significant impact on wage spillover on international capital inflows. Durmaz (2017) documents that democracy positive and significant impact on FDI inflows in Turkey. On the contrary, inflation has an adverse effect on FDI (Ceviz and Çamurdan, 2007; Kalirajan and Singh, 2010; Kok and Acikgoz Ersoy, 2009; Kumari and Sharma, 2017). The host country's exchange rate depreciation may enhance the foreign capital inflows. Blonigen (1997) and Froot

and Stein (1991) find weak evidence of foreign capital inflows and exchange rate. Besides, political risk factors considering a critical factor in determining capital inflows (Root and Ahmed, 1979; Schneider and Frey, 1985). In recent years, a handful of studies has considered a set of recently proposed variables which focus on foreign direct investment inflows into developed and developing countries. These studies concentrate on international reserves, economic polity uncertainty, geopolitical risk, and environmental performance measures. Next, we also present some of the notable studies which are found to be important. Dooley et al., (2004) and Jung and Pyun (2016) examine the international reserves (liquidity) and foreign capital investment in emerging economies. The empirical results of the studies confirm the presence of endogenous association between over-the-counter capital inflows and reserves holding. The study also contends that highly liquid properties of international reserves (US T-bonds) may be the medium of exchange for foreign capital investments in emerging economies. Similarly, Cheung and Qian (2009) document that international reserve is considered as a financial health measure. It also helps to attract more foreign capital inflows and FDI. On the other hand, Jenne and Ranciere, (2011) and Summers, (2006) document that this is an excess reserve accumulation puzzle tends to have adverse effect. Studies like (Avom, et al., 2020; Canh, et al., 2020; Zhu, Jia, and Wu, 2019) explore the effect of EPU on foreign direct investment flows. While, a few studies document that countries with higher EPU could reduce FDI (Caggiano, et al., 2017). On the other hand, geopolitical risk (GPR) is an inevitable factor in determining foreign capital inflows. Moreover, increasing geopolitical risks and uncertainty might negatively impact the FDI's arrival (Bussy and Zheng, 2023). Few studies like (Bussy and Zheng, 2023; Krane, 2021; Lu and Liu, 2022; Yu and Wang, 2023) use geopolitical risk to measure the effect of geopolitical risk on FDI outflows. In recent years, sustainability factors are found to be key drivers in determining FDI inflows. Studies like (Ahmed, et al., 2022; Chang and Li, 2019; Demena and Afesorgbor, 2020; Opoku et al., 2021; Xie, et al., 2020; Wang, et al., 2023) have considered environmental factors to determine the FDI flows. Hence, it is found that most of the studies employ traditional macroeconomic factors to determine foreign capital inflows. Thus, only limited studies that have employed recently proposed variables to determine foreign direct investment. Hence, we consider recently proposed indicators to examine the impact of economic policy uncertainty, geopolitical risk, and environmental performance index on foreign direct investment inflows.

### III. Data and Methodology

The study uses domestic and foreign macroeconomic variables consisting of annual data covering from 2002 to 2021 over 19 years for 13 emerging countries. We have selected the

sample countries based on the data availability of GEPU, GPRC and other variables. The study considers FDI net inflows (% of GDP) as dependent variable and proxy for capital flows into emerging countries (Canh, et al., 2020; Saini and Singhania, 2018). The study also uses real GDP growth (annual %) as a proxy for market size (Bilgili et al., 2012; Canh, et al., 2020; Rogmans and Ebbers, 2013; Sun et al., 2002). Inflation rate (Cevis and Çamurdan, 2007; Kalirajan and Singh, 2010; Kok and Acikgoz Eesoy, 2009; Kumari and Sharma, 2017), real interest rate (Cevis and Çamurdan, 2007; Kumari and Sharma, 2017; Onyeiwu and Shrestha, 2004), trade openness (% of GDP) (Cevis and Çamurdan, 2007; Kumari and Sharma, 2017; Onyeiwu and Shrestha, 2004; Rogmans and Ebbers, 2013; Tsai, 1994; Yang et al., 2000), economic freedom index (Dia and Ondo, 2023; Saini and Singhania, 2018; Sambharya and Rasheed, 2015; Shokhrukh et al., 2023). The study considers secondary school enrollment rate (%gross) as a proxy for Human capital (Azam and Ahmed, 2015; Glassand Saggi, 2002; Na and Lightfoot, 2006; Musibau, et al., 2019). All the macroeconomic variables data are collected from the world development indicator database of the World Bank. The economic freedom index data are obtained from the Heritage Foundation database (<https://www.heritage.org/index/explore>). The study uses recently proposed variables such as global economic policy uncertainty (Avom, et al., 2020; Canh, et al., 2020; Zhu, Jia, and Wu, 2019), and geopolitical risk ((Bussy and Zheng, 2023; Krane, 2021; Lu and Liu, 2022; Yu and Wang, 2023) and environmental performance index (Ahmed, et al., 2022; Chang and Li, 2019; Demena and Afesorgbor, 2020; Opoku et al., 2021; Xie, Wang, and Cong, 2020; Wang, Yang, and Yang, 2023). The recently proposed variables are downloaded from the policy uncertainty website (<https://www.policyuncertainty.com/>). Further, we construct our modified environmental performance index (EPI) consisting of six categories with 23 indicators for 13 emerging countries and use it as a control variable. It is considered a prominent variable that significantly influences the FDI inflows. In order to construct our modified environmental performance index, we download an environmental indicators data from Yale university environmental performance index (<https://epi.yale.edu/>) website. It is extensively used index to measure the environmental performance of the country. There are several studies which have used this database (see Grafton and Knowles, 2004; Samimi et al., 2018; Pimoneko et al., 2018).

### **A. Environmental performance index for developing countries**

We construct a modified EPI for developing countries by considering 6 issue categories and 23 indicators that is tree cover loss, grassland loss, wetland loss, wastewater treatment, household solid fuels, PM 2.5 exposure, ozone exposure, N<sub>2</sub>O exposure, SO<sub>2</sub> exposure, CO<sub>2</sub> exposure, VO<sub>2</sub> exposure, unsafe sanitation, unsafe drinking water, controlled solid waste, recycling, ocean plastics, adjusted emissions growth rate for carbon dioxide, methane, F gases,



nitrogen oxide, black carbon, greenhouse gas intensity growth rate, and greenhouse gas emissions per capita for developing countries. We use the Wolf et al., (2022) data and methodology for constructing indicators as:

$$Y_{jt} = \frac{(X_{jt} - W_{jt})}{(B_{jt} - W_{jt})} \times 100$$

Where  $X_{jt}$  refers to the value of the country's indicator,  $B_{jt}$  indicates the best performance,  $W_{jt}$  is the worst performance. If the value of the country's is greater than  $B_{jt}$ , we cap its indicator score at 100. Similarly, if the value of the country's is less than  $W_{jt}$ , we set its indicator score to zero.  $Y_{jt}$  represents the summed up and divided by twenty-three to arrive at the EPI percentage for each country ( $Y_{jt}$ ), which is represented as follows:

$$EPI_{it} = \sum_{j=0}^{23} Y / 23$$

The countries' scores are calculated based on the targets for best and worst performance, and the country's having a score of 0 indicates the worst performance; 100 represents the best performance.

## 1. Methodology

In this section, we present our estimation models to examine how the traditional, GEP, GPRC, and EPI affect FDI. The study estimates baseline regression models using the following equations (1) to (4).

$$FDI_{it} = \alpha_0 + \beta_1 FDI_{t-1} + \beta_2 GDPG_{it} + \beta_3 INF_{it} + \beta_4 IR_{it} + \beta_5 TO_{it} + \beta_6 EFI_{it} + \beta_7 HC_{it} + \beta_8 GEP_{it} + e_{it} \quad (1)$$

$$FDI_{it} = \alpha_0 + \beta_1 FDI_{t-1} + \beta_2 GDPG_{it} + \beta_3 INF_{it} + \beta_4 IR_{it} + \beta_5 TO_{it} + \beta_6 EFI_{it} + \beta_7 HC_{it} + \beta_8 GPRC_{it} + e_{it} \quad (2)$$

$$FDI_{it} = \alpha_0 + \beta_1 FDI_{t-1} + \beta_2 GDPG_{it} + \beta_3 INF_{it} + \beta_4 IR_{it} + \beta_5 TO_{it} + \beta_6 EFI_{it} + \beta_7 HC_{it} + \beta_8 EPI_{it} + e_{it} \quad (3)$$

$$FDI_{it} = \alpha_0 + \beta_1 FDI_{t-1} + \beta_2 GDPG_{it} + \beta_3 INF_{it} + \beta_4 IR_{it} + \beta_5 TO_{it} + \beta_6 EFI_{it} + \beta_7 HC_{it} + \beta_8 GEP_{it} + \beta_9 GPRC_{it} + \beta_{10} EPI_{it} + e_{it} \quad (4)$$

Where  $FDI_{it}$  represents FDI net inflows (% of GDP),  $FDI_{t-1}$  presents lagged form of FDI net inflows,  $GDPG_{it}$  denotes real GDP growth (annual %),  $INF_{it}$  indicates inflation,  $IR_{it}$  denotes real interest rate,  $TO_{it}$  is the trade openness (% of GDP),  $EFI_{it}$  represents economic freedom index,  $HC_{it}$  denotes human capital,  $GEPUI_{it}$  indicates global economic policy uncertainty,  $GPRC_{it}$  presents geopolitical risk,  $EPI_{it}$  denotes environmental performance index,  $e_{it}$  is the error term,  $i$  denotes individual country from 1 to 13 and  $t$  represents the time period from 2002 to 2021. We consider the FDI net inflows (% of GDP) as dependent variable and used its lagged form of FDI inflows as one of the independent variables. The study uses lagged independent variable adds dynamic in nature while estimations are done. Because the gross inflows and outflows are more volatile and voluminous in nature while net inflows are more stable (Majumder and Nag, 2015; Saini and Singhanian, 2018).

The standard panel regression analysis has its own limitations. For instance, it is mainly on mean based regression. Whereas Koenker and Bassett (1978) have developed quantile regression analysis. It is also known as median based regression. It is an alternative to standard regression which enables the researcher to estimate the linear relationship across the distribution of an outcome. The quantile regression could produce robust results when the dataset contains outliers. Further, it also examines the asymmetric characteristics of the variable distributions. However, this model fails to capture the unobserved heterogeneity across the cross-sectional panel (Zhu et al., 2016). Similarly, it does not address the endogeneity issue which may lead to invalid estimation (Jahanger et al., 2023). The equations (1) to (4) are remodelled as follows:

$$FDI_{it}(Q/X_{it}) = \alpha_0(Q) + \beta_1(Q)FDI_{t-1} + \beta_2(Q)GDPG_{it} + \beta_3(Q)INF_{it} + \beta_4(Q)IR_{it} + \beta_5(Q)TO_{it} + \beta_6(Q)EFI_{it} + \beta_7(Q)HC_{it} + \beta_8(Q)GEPUI_{it} + e_{it} \quad (5)$$

$$FDI_{it}(Q/X_{it}) = \alpha_0(Q) + \beta_1(Q)FDI_{t-1} + \beta_2(Q)GDPG_{it} + \beta_3(Q)INF_{it} + \beta_4(Q)IR_{it} + \beta_5(Q)TO_{it} + \beta_6(Q)EFI_{it} + \beta_7(Q)HC_{it} + \beta_8(Q)GPRC_{it} + e_{it} \quad (6)$$

$$FDI_{it}(Q/X_{it}) = \alpha_0(Q) + \beta_1(Q)FDI_{t-1} + \beta_2(Q)GDPG_{it} + \beta_3(Q)INF_{it} + \beta_4(Q)IR_{it} + \beta_5(Q)TO_{it} + \beta_6(Q)EFI_{it} + \beta_7(Q)HC_{it} + \beta_8(Q)EPI_{it} + e_{it} \quad (7)$$

$$FDI_{it}(Q/X_{it}) = \alpha_0(Q) + \beta_1(Q)FDI_{t-1} + \beta_2(Q)GDPG_{it} + \beta_3(Q)INF_{it} + \beta_4(Q)IR_{it} + \beta_5(Q)TO_{it} + \beta_6(Q)EFI_{it} + \beta_7(Q)HC_{it} + \beta_8(Q)GEPUI_{it} + \beta_9(Q)GPRC_{it} + \beta_{10}(Q)EPI_{it} + e_{it} \quad (8)$$

Where  $Q$  represents quantile,  $0 < Q < 1$ ,  $\beta_k(Q)$  indicates the Quantile regression coefficients.

The present study could use econometric models which are capable of handling the non-linear and non-normality issues present in the variables. Against this backdrop, the standard ordinary

least square regression model may not be an efficient one to address the above issues. Hence, the present study employs recently developed novel method of moments quantile regression analysis (MMQREG) developed by Machado and Silva (2019) which is a superior one to capture the relation between macroeconomic variables (recently proposed variables & conventional variables) and FDI in a nonlinear condition. The model is warranted to address the heterogeneity and distributional variations between dependent and independent variables at different quantiles. This dimension of heterogeneity and distributional variations is missed out by other models. Hence, the MMQREG is found to be a better approach to address the endogeneity issue. Further, the above model provides more valid and robust results in a context when the non-normality and non-linearity issues are present (Jahanger et al., 2023). Besides, the model also captures and accommodates the location-based asymmetries when the presence of endogenous properties is found in explanatory variables (Awan et al., 2022; Jahanger et al., 2023). Hence, this methodology carries several advantages compared to traditional panel regression and generalized method of moments (GMM) as this method allows the exploration of non-linear effects by capturing the complex relationships between recently proposed variables and FDI inflows more accurately. We therefore strongly believe that there is rationality in adopting the above methodology. Hence, the location-scale variant conditional quantile of a dependent variable  $Q_{yit}(\delta/X_{it})$  is expressed as follows<sup>5</sup>):

$$Y_{it} = \alpha_i + X_{it}\beta + (\partial_i + N_{it}\theta)U_{it} \tag{9}$$

Where  $Y_{it}$  represents dependent variable,  $X_{it}$  is the vector of independent variables, the probability  $P \{ \partial_i + N_{it} > 0 \} = 1$ ,  $(\alpha, \beta, \partial, \theta)$  parameters are to be estimated

$$Z_l = Z_l(X), \quad l = 1, \dots, k \tag{10}$$

$$Q_{yit}(\delta/X_{it}) = (\alpha_i + \partial_i r q(\delta)) + X_{it}\beta + (N_{it}\theta) r q(\delta) \tag{11}$$

Where  $Q_y(\delta/X_{it})$  presents quantiles distribution of  $Y_{it}$ ,  $\alpha_i(\delta) \equiv \alpha_i + \partial_i r q(\delta)$  denotes scalar distribution of quantile  $(\delta)$  indicates quantile fixed effect for individual  $i$ .

$$\min_q \sum_i \sum_{\delta} \rho_{\delta}(R_{it} - (\partial_i + N_{it}\theta)q) \tag{12}$$

Where  $\rho_{\delta}(A) = (\delta - 1) AI\{A \leq 0\} + TAI\{A > 0\}$  denotes the check functions as being explained in equation (12).

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5) Refer Machado and Silva (2019)

To check the robustness and consistency of the results, we employ nonparametric based fully modified ordinary least square (FMOLS) proposed by Phillips and Hansen (1990) to address the endogeneity and heterogeneity issues across the cross-sectional data. On the Contrary, the study also uses parametric nature dynamic ordinary least squares (DOLS) model developed by Kao and Chiang (2001). The DOLS model is mainly helpful in generating unbiased estimators and addressing the endogeneity issues by using lead lag differences. These models are more efficient than standard OLS regression model.

## IV. Empirical Results

Table 1 presents the descriptive statistics for the study variables. The average FDI is 2.73% with standard deviation of 1.60 in developing countries. Further, the maximum and minimum of FDI inflows are in the range of 9.86% and -0.25% respectively. Similarly, the average GDP growth rate is 3.85% with standard deviation of 4.30. On the other hand, the recently proposed variables such as GEPU, GPRC, and EPI mean values are 152.45, 0.36, and 37.08 with standard deviation of 77.11, 3.13, and 6.80 respectively.

**Table 1.** *Descriptive Statistics*

Variables	Mean	Std. dev.	Min	Max
FDI	2.73	1.60	-0.25	9.86
GDPG	3.85	4.30	-15.14	14.23
INF	5.95	5.20	-1.14	48.70
IR	6.15	10.41	-12.86	48.34
HC	88.25	14.19	29.41	110.58
TO	58.12	35.24	4.61	210.37
EFI	47.16	17.26	20.00	201.43
GEPU	152.45	77.11	17.90	302.19
GPRC	0.36	3.13	0.00	50.00
EPI	37.08	6.80	22.27	47.99

(Source) Author's calculation

The correlation matrix results for the explanatory variables are presented in Table 2. The independent variables such as GDPG (0.16), INF (0.01), IR (0.05), TO (0.01), EFI (0.04), and GEPU (0.06) are positively correlated with FDI. On the other hand, HC (-0.05), GPRC (-0.15), and EPI (-0.08) are negatively correlated with FDI. The correlation results clearly indicate that there is no multicollinearity issue among the independent variables. Furthermore, all the correlation coefficients are below the threshold limits.

**Table 2.** *Correlation Matrix*

Variables	FDI	GDPG	INF	IR	HC	TO	EFI	GEPU	GPRC	EPI
FDI	1									
GDPG	0.16	1								
INF	0.01	-0.07	1							
IR	0.05	-0.18	-0.14	1						
HC	-0.05	0.12	-0.10	-0.07	1					
TO	0.01	0.19	0.13	-0.05	0.04	1				
EFI	0.04	0.05	0.06	-0.02	0.03	-0.02	1			
GEPU	0.06	0.08	0.00	-0.07	-0.06	0.14	-0.05	1		
GPRC	-0.15	0.02	0.15	-0.18	0.05	0.07	-0.02	0.04	1	
EPI	-0.08	-0.16	-0.04	0.01	-0.06	-0.11	-0.02	-0.12	-0.02	1

(Source) Authors' own calculation

Tables 3 to 6 present the results of the Method of moments quantile regression to understand the determinants of foreign capital inflows into developing countries. Further, the study accounts for heterogeneity issues in the panel dataset with the help of MMQREG. It explains three sections of quantiles: lower quantiles (10<sup>th</sup> to 30<sup>th</sup> quantiles), the median quantiles (40<sup>th</sup> to 60<sup>th</sup> quantiles) and higher quantiles starting from (70<sup>th</sup> to 90<sup>th</sup> quantiles).

### A. Global economic policy uncertainty and foreign capital inflows

The study considers the recently proposed GEPU in the equation (5). We assess the impact of global economic policy uncertainty on the foreign capital inflows in emerging countries. Table 3 shows FDI as dependent variable and global economic policy uncertainty as the independent variable. The empirical results show that global economic policy uncertainty (GEPU) has a negative and insignificant effect on foreign capital inflows across the quantiles except lower and median quantiles. It implies that the unfavourable economic policy uncertainties negatively influence the host countries' foreign capital inflows.

### B. Geopolitical risk and foreign capital inflows

We are curious to know how geopolitical risk affects the foreign capital inflows in emerging countries. The study considers geopolitical risk in the equation (6) and runs the method of moments quantile regression analysis. The results presented in Table 4 show that the geopolitical risk has positive and significant impact on foreign capital investment inflows across all quantiles. The coefficients reveal that one-unit improvement in the geopolitical risk causes 18 base points of increase in host countries' foreign capital inflows in emerging countries. Further, it is documented that home countries continue to monitor the host countries political stability before the investment is done.



**Table 4.** *Continued*

Variables	Location	Scale	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
HC	1.40*** (0.49)	0.25 (0.33)	1.01* (0.61)	1.15** (0.51)	1.23*** (0.48)	1.32*** (0.47)	1.38*** (0.48)	1.47*** (0.52)	1.56*** (0.58)	1.65** (0.66)	1.79** (0.81)
TO	0.01* (0.00)	0.00* (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01* (0.00)	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)
EFI	0.02 (0.01)	0.01 (0.01)	-0.00 (0.02)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.01)	0.02 (0.01)	0.02 (0.02)	0.03 (0.02)	0.03 (0.02)
GPRC	0.18*** (0.02)	-0.01 (0.01)	0.20*** (0.02)	0.19*** (0.02)	0.19*** (0.01)	0.18*** (0.01)	0.18*** (0.02)	0.18*** (0.02)	0.17*** (0.02)	0.17*** (0.02)	0.16*** (0.02)
Constant	-6.96*** (2.10)	-1.35 (1.43)	-4.84* (2.61)	-5.59** (2.19)	-6.03 (2.05)	-6.50*** (2.01)	-6.85*** (2.07)	-7.33*** (2.24)	-7.79*** (2.49)	-8.27*** (2.83)	-9.05*** (3.47)

(Source) Authors' own calculation; standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5.** *Method of Moments Quantile Regression Results (Environmental Performance Index)*

Variables	Location	Scale	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
FDI <sub>t-1</sub>	0.40*** (0.06)	-0.02 (0.04)	0.44*** (0.08)	0.43*** (0.06)	0.42*** (0.06)	0.41*** (0.06)	0.41*** (0.06)	0.40*** (0.06)	0.39*** (0.07)	0.38*** (0.07)	0.37*** (0.08)
GDPG	0.11*** (0.02)	-0.01 (0.02)	0.13*** (0.03)	0.12*** (0.03)	0.12*** (0.02)	0.11*** (0.02)	0.11*** (0.02)	0.11*** (0.03)	0.10*** (0.03)	0.10*** (0.03)	0.10*** (0.03)
INF	0.04 (0.02)	0.02 (0.02)	0.01 (0.03)	0.02 (0.03)	0.03 (0.02)	0.03 (0.02)	0.04 (0.02)	0.04* (0.03)	0.05* (0.03)	0.06* (0.03)	0.06* (0.03)
IR	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
HC	-0.00 (0.01)	-0.01 (0.00)	0.01 (0.01)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
TO	0.01** (0.00)	0.00** (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01** (0.00)	0.01** (0.00)	0.01*** (0.01)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
EFI	0.02* (0.01)	0.01 (0.01)	0.01 (0.02)	0.01 (0.02)	0.02 (0.01)	0.02 (0.01)	0.02 (0.01)	0.03* (0.02)	0.03* (0.02)	0.03* (0.02)	0.04* (0.02)
EPI	0.08*** (0.02)	0.03*** (0.01)	0.04* (0.02)	0.05*** (0.02)	0.06*** (0.02)	0.07*** (0.02)	0.08*** (0.02)	0.09*** (0.02)	0.10*** (0.02)	0.11*** (0.02)	0.11*** (0.02)
Constant	-3.24*** (0.94)	-0.36 (0.60)	-2.64** (1.26)	-2.85*** (1.06)	-3.02*** (0.96)	-3.14*** (0.93)	-3.22*** (0.94)	-3.36*** (0.99)	-3.49 (1.08)	-3.61*** (1.19)	-3.75*** (1.35)

(Source) Authors' own calculation; standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In Figure 2, the study presents the graphical presentation of the foreign capital inflows interactions with GDP growth rate, inflation, interest rate, human capital, economic freedom index, trade openness, global economic policy uncertainty, geopolitical risk, and environmental performance index.

Figure 2. Graphical presentation of foreign capital inflows interactions

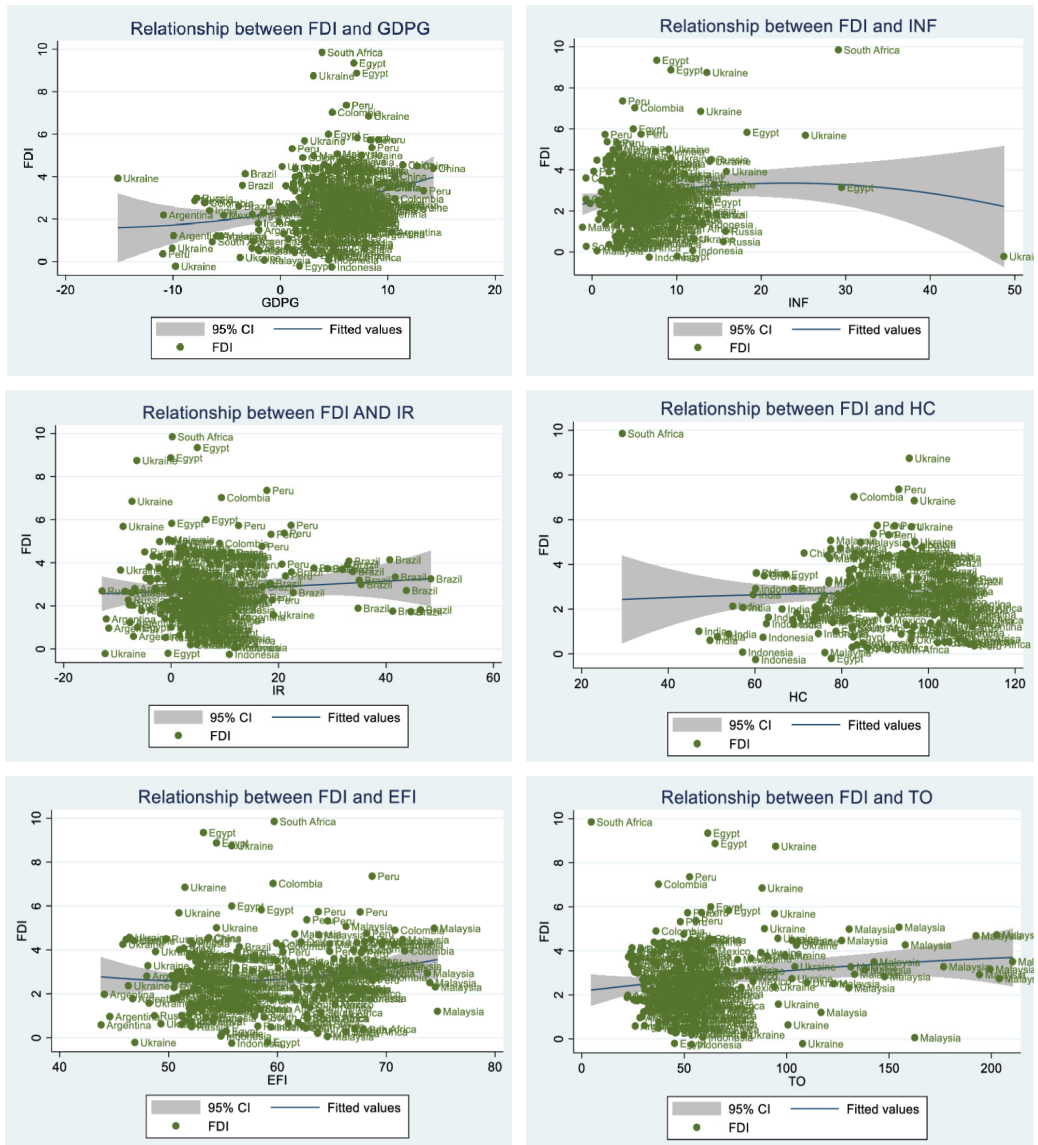




Figure 2. Continued

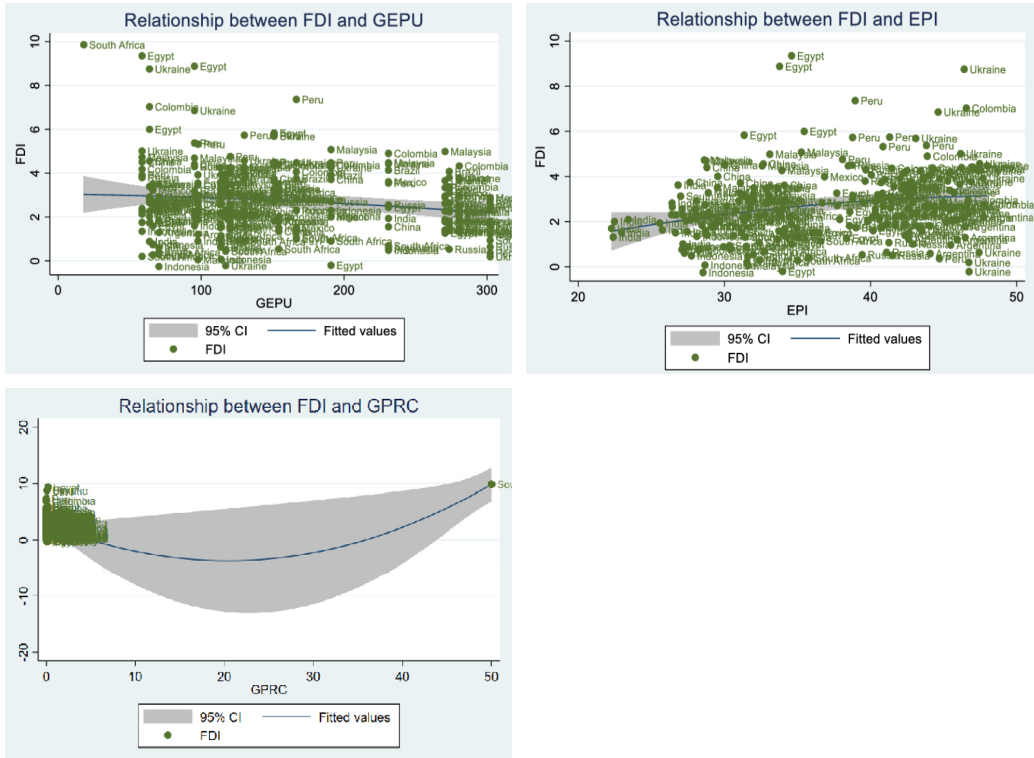


Figure 3. Method of moments quantile regression coefficients (Global economic policy uncertainty)

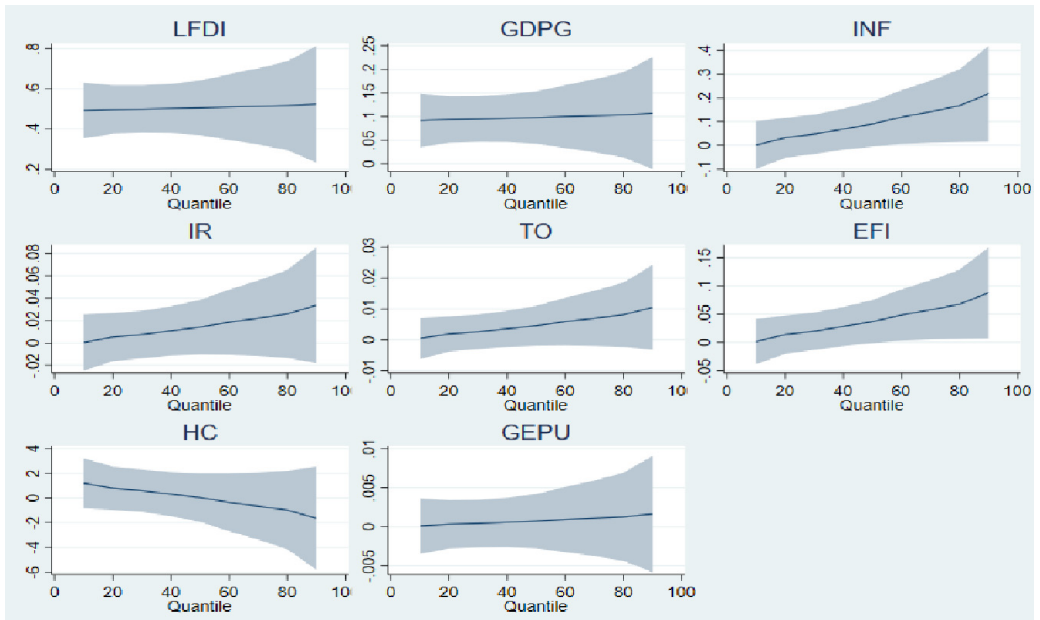


Figure 4. Method of moments quantile regression coefficients (Geopolitical risk)

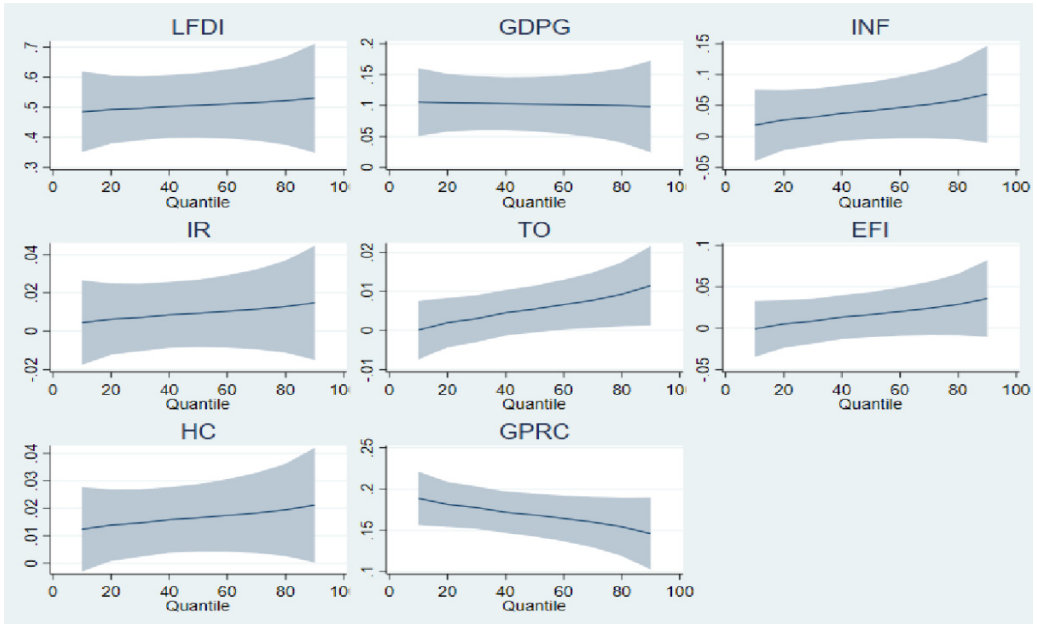


Figure 5. Method of moments quantile regression coefficients (Environmental performance index)

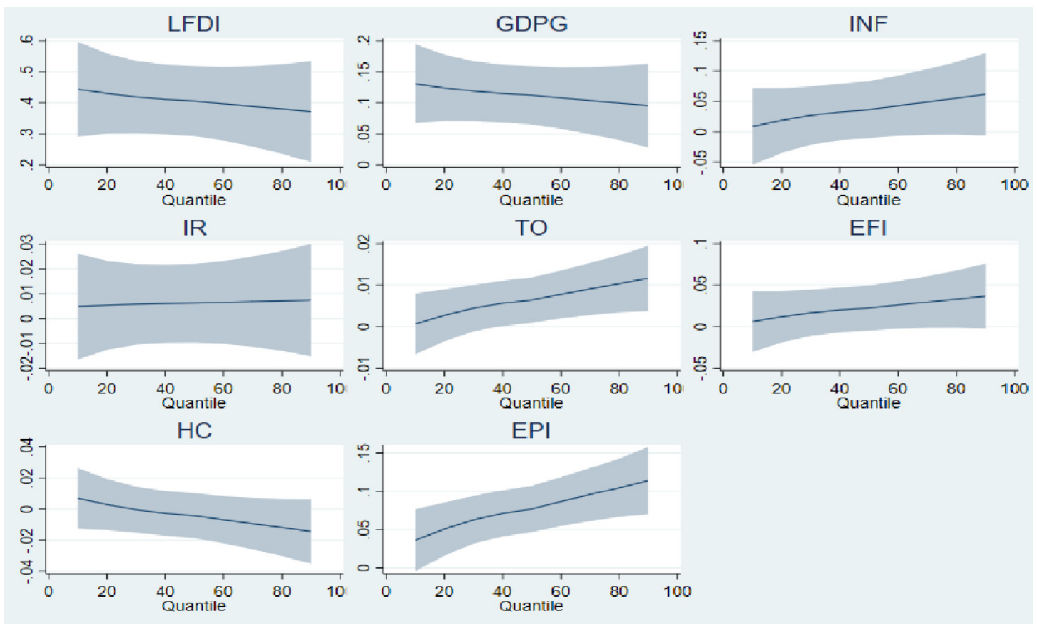


Table 6 presents the overall results of the Method of moments quantile regression to understand the determinants of foreign capital inflows into developing countries. Interestingly,

FDI is strongly influenced by positive and significant prior values.  $FDI_{t-1}$  and GDPG show a positive and statistically significant at 1% level across all quantiles. Further, it highlights stronger mitigation effect in developing countries across all quantiles. It implies that developing countries are found to be an attractive destination for FDI inflows. Because, size of the developing markets tends to be larger as well as unexplored. The results are in line with (Saini and Singhania, 2018). Next, the influence of INF on FDI inflows is found to be positive across all quantiles except 10<sup>th</sup> quantile. It is observed from the literature that market stability and higher inflation appear to have negative impact on developing countries FDI inflows (Kalirajan and Singh, 2010; Kumari and Sharma, 2017). Similarly, developing countries IR shows positive coefficients but not statistically significant. Next, we observe that there is an adverse impact caused by HC on FDI inflows across all quantiles. It indicates that developing countries human capital does not attract home countries. Further, developing countries need to focus more on their human developmental activities. The results are contradictory to Kumari and Sharma, (2017) which argue that HC has positive impact on FDI inflows. On the other hand, TO shows positive coefficients in the lower quantiles (10<sup>th</sup> to 30<sup>th</sup> quantiles). It divulges that lower quantiles fail to attract FDI inflows in developing countries. While median and higher quantiles (40<sup>th</sup> to 90<sup>th</sup> quantiles) document positive and statistically significant relation at 1% and 5% levels respectively. The findings lend support to theory of FDI. The findings are consistent with global findings (Bagli and Adhikary, 2014; Ceviz and Çamurdan, 2007). The study also experiments whether EFI has any effect on developing countries' FDI inflows. The coefficients of EFI show a positive and statistically significant relation at 10%, and 5% levels at lower, median, and higher quantiles except 10<sup>th</sup> and 20<sup>th</sup> quantiles). It reveals that inadequate economic freedom leads to have an adverse effect on developing countries FDI inflows. Further, it shows that coefficients tend to improve as EFI moves from lower to median. The results are alike prior studies (Bengoa and Sanchez-Robles, 2003; Moussa et al., 2016; Saini and Singhania, 2018).

#### **D. Recently proposed variables and foreign capital inflows**

The recently proposed variables GPRC, and EPI significantly affect FDI inflows in the developing countries except GEPU. The GEPU has a negative coefficient across all quantiles. It is further observed that host countries economic policy uncertainty negatively influences the FDI inflows due to unfavourable economic policies and economic environment. The results are echoing the prior studies (Canh et al., 2020; Avom et al., 2020). Unexpectedly, the coefficient of GPRC has a positive and statistically significant relation at 1% level in all quantiles. The results document that host countries have strong political stability which significantly attracts the foreign capital inflows from home countries. Further, an increase in political uncertainty and political risks of host countries could potentially reduce their FDI inflows. Because home

countries always expect the host countries to have congenial atmosphere with regard to their political stability. The results are in line with previous studies (Busse and Hefeker, 2005; Sedik and Seoudy, 2012). The influence of environmental performance index is found to be positive and statistically significant at 5% and 1% levels respectively which state that the environmental sustainability increases FDI inflows in developing countries. It is proved that sustainability plays a significant role in attracting foreign capital. The results are consistent with prior studies (Demena and Afesorgbor, 2020; Kamal et al., 2016; Yue et al., 2023). The overall results document that lagged  $FDI_{t-1}$ , GDPG, trade openness, economic freedom index, GPRC and EPI have positive and significant effects in FDI inflows in developing countries.

**Table 6.** Method of Moments Quantile Regression Results (Overall)

Variables	Location	Scale	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
FDI <sub>t-1</sub>	0.42*** (0.07)	-0.08* (0.05)	0.54*** (0.09)	0.50*** (0.07)	0.47*** (0.07)	0.44*** (0.07)	0.42*** (0.07)	0.39*** (0.07)	0.37*** (0.08)	0.36*** (0.09)	0.30*** (0.11)
GDPG	0.10*** (0.03)	-0.02 (0.02)	0.13*** (0.03)	0.12*** (0.03)	0.11*** (0.03)	0.11*** (0.02)	0.10*** (0.03)	0.10*** (0.03)	0.09*** (0.03)	0.09*** (0.03)	0.08** (0.04)
INF	0.01 (0.03)	0.01 (0.02)	-0.01 (0.04)	0.00 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	0.02 (0.03)	0.02 (0.04)	0.02 (0.04)
IR	0.01 (0.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
HC	-0.00 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
TO	0.01** (0.00)	0.01** (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01* (0.00)	0.01** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.01)
EFI	0.02** (0.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01* (0.01)	0.01* (0.01)	0.02** (0.01)	0.02** (0.01)	0.02** (0.01)	0.02* (0.01)	0.02* (0.01)
GEPU	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
GPRC	0.17*** (0.02)	-0.01 (0.01)	0.18*** (0.02)	0.18*** (0.02)	0.17*** (0.02)	0.17*** (0.02)	0.17*** (0.02)	0.16*** (0.02)	0.16*** (0.02)	0.16*** (0.02)	0.15*** (0.02)
EPI	0.06*** (0.02)	0.03*** (0.01)	0.01 (0.02)	0.03 (0.02)	0.04** (0.02)	0.05*** (0.02)	0.06*** (0.02)	0.07*** (0.02)	0.08*** (0.02)	0.09*** (0.02)	0.11*** (0.03)
Constant	-1.83*** (0.70)	0.16 (0.47)	-2.09** (0.89)	-2.00*** (0.75)	-1.94*** (0.69)	-1.87*** (0.68)	-1.83*** (0.70)	-1.77** (0.76)	-1.73** (0.83)	-1.68* (0.91)	-1.59 (1.09)

(Source) Authors' own calculation; standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figure 6. Method of moments quantile regression coefficients (Overall)

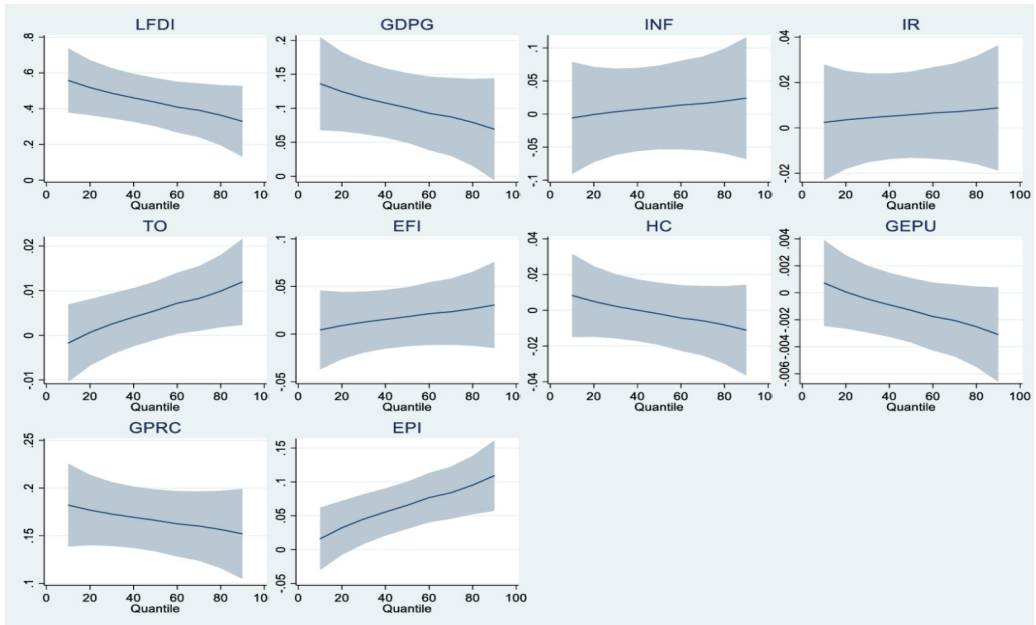


Table 7. Robustness Tests

Models	1		2		3		4	
	FMOLS	DOLS	FMOLS	DOLS	FMOLS	DOLS	FMOLS	DOLS
LFDI	0.08*** (5.16)	0.03** (2.08)	0.01 (0.82)	0.02 (0.40)	0.07*** (6.87)	0.02*** (3.98)	0.06*** (3.47)	0.05*** (4.71)
GDPG	0.12*** (4.43)	0.09** (2.54)	0.13*** (10.63)	0.15*** (17.53)	0.11*** (12.81)	0.09*** (12.71)	0.13*** (10.63)	0.07*** (15.72)
INF	0.01 (0.91)	0.03*** (3.29)	0.03*** (6.10)	0.02** (2.48)	0.03*** (8.61)	0.03*** (7.95)	0.05*** (4.64)	0.00*** (9.76)
IR	-0.00 (-0.52)	0.04*** (3.31)	0.01*** (4.91)	0.03*** (4.78)	0.06*** (13.81)	0.03*** (7.50)	0.04*** (5.71)	0.04 (0.61)
HC	-1.23*** (-2.68)	-3.74** (-2.03)	0.01*** (4.14)	0.02*** (12.01)	-0.03*** (-9.15)	-0.05*** (-12.32)	-0.96*** (-8.78)	-0.67*** (-8.11)
TO	0.04*** (11.67)	0.05*** (13.26)	0.02*** (10.65)	0.00*** (8.16)	0.03*** (20.89)	0.05*** (20.83)	0.03*** (12.27)	0.04*** (15.22)
EFI	-0.03*** (3.78)	-0.04*** (-5.59)	0.01*** (3.63)	0.03*** (5.36)	0.04*** (8.74)	0.02*** (4.66)	0.04*** (3.63)	0.00*** (6.76)
GEPU	-0.00*** (-4.39)	-0.00*** (-6.79)					-0.00*** (-3.33)	-0.00*** (-12.43)
GPRC			5.78*** (3.48)	7.79*** (5.77)			5.69*** (3.65)	4.77*** (9.48)
EPI					0.07*** (8.16)	0.10*** (3.09)	0.02*** (3.93)	0.07** (1.96)

(Source) Authors' own calculation; t statistics in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## E. Robustness check

We confirm the robustness and consistency of the results by employing dynamic regression estimators such as FMOLS, and DOLS and their results are presented in Table 7. The model 1 FMOLS and DOLS results show that global economic policy uncertainty has a negative and significant impact on foreign capital inflows. Interestingly, the model 2 both FMOLS and DOLS results show that geopolitical risk positive and statistically significant on foreign capital inflows. On the other hand, model 3 results reveal that environmental performance index has a positive and significant impact on foreign capital investment inflows. Further, it is observed that the MMQREG results appear to be robust except GEP. The other independent and control variables exhibit almost similar results as that of the method of moments quantile regression.

## V. Conclusion

Over the decades, most empirical studies have examined the impact of traditional macroeconomic variables on FDI inflows. Kravis and Lipsey (1982) document that traditional macroeconomic indicators are not sufficient ones to determine the FDI inflows. However, there is a need to demonstrate the relation between recently proposed variables and FDI. It is noted that several studies have examined the cross-country effect of economic policy uncertainty on FDI. In recent years, policy uncertainty, geopolitical risk, and environmental sustainability have gained momentum in different dimensions of financial literature. The present study verifies the potential determinants of FDI inflows in developing countries. The study considers 13 developing countries by covering the period from 2002 to 2021.

We employ a recently developed method of moments quantile regression by Machado and Silva (2019). We also employ dynamic regression estimators such as FMOLS and DOLS. The findings of the study confirm that method of moments quantile regression results show a strong evidence that GDP growth rate, trade openness, economic freedom index, GPRC and EPI have positive and significant effect on FDI inflows into developing countries. The study results come up with several policy implications to the various stakeholders such as policy makers, government, and investors. FDI inflows have direct bearing on the performance of the manufacturing sectors across the globe. Hence, host countries ought to create a hazard free environment so as to ensure the win-win situation.

In the post pandemic era, advanced and emerging economies are driven by expansionary economic policy. To achieve this, global economies need huge amount of investment. Hence, FDI could be one of the key sources of investment to be mobilized by the global economies.

FDI inflows are deeply affected by geopolitical risk particularly Ukraine - Russia war.

Further, global economies might look for liquidity from some other sources during turbulent time like war. So that manufacturing sectors' routine business operations can have smooth flow. This GPRC could disrupt the free flow of FDI. Hence, political conflict shall be completely discouraged.

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