

# How Economic and Political Instability Affect Foreign Portfolio Investment Flows to Emerging Market Economies? Do Foreign Exchange Reserves Matter?

*by Arshiya .*

---

**Submission date:** 13-Jun-2026 05:45PM (UTC+0530)

**Submission ID:** 2982279086

**File name:** DISS\_ARSHIYA\_FINAL\_DRAFT\_1.pdf (285.59K)

**Word count:** 8291

**Character count:** 47258

***How Economic and Political Instability Affect Foreign  
Portfolio Investment Flows to Emerging Market  
Economies? Do Foreign Exchange Reserves Matter?***

ARSHIYA

24/MAE/59

## TABLE OF CONTENTS

| Title                                                | Page No. |
|------------------------------------------------------|----------|
| Abstract                                             | 3        |
| 1. Introduction                                      | 4        |
| 2. Literature Review                                 | 6        |
| 2.1 Push and Pull Factors in FPI Flows               | 6        |
| 2.2 Economic Instability and FPI                     | 7        |
| 2.3 Political Instability and FPI                    | 8        |
| 2.4 Foreign Exchange Reserves as a Moderating Factor | 9        |
| 2.5 Gaps in the Literature and Study Contributions   | 9        |
| 3. Theoretical Framework and Hypotheses Development  | 10       |
| 4. Empirical Model, Data, and Methodology            | 12       |
| 4.1 Empirical Model                                  | 12       |
| 4.2 Data and Variable Definitions                    | 13       |
| 4.3 Econometric Methodology                          | 14       |
| 5. Main Results: Driscoll-Kraay Estimation           | 15       |
| 5.1 Economic Instability and FPI: Testing H1         | 17       |
| 5.2 Political Instability and FPI: Testing H2        | 18       |
| 5.3 The Reserve Buffer Channel: Testing H3 and H4    | 19       |
| 5.4 Control Variables                                | 20       |
| 5.5 Year Fixed Effects and Temporal Patterns         | 20       |
| 6. Robustness Checks                                 | 21       |
| 6.1 Consistency of Main Findings                     | 21       |
| 6.2 The VIX Sign Reversal: A Methodological Note     | 22       |
| 7. Conclusion and Policy Implications                | 23       |
| References                                           | 25       |

## Abstract

Foreign Portfolio investments are short term investment made by the portfolio investors and are highly sensitive to the developments and uncertainties that take place in a country and potentially causing economic or political instability. The study involves data of 16 emerging economies ranging from the time period 2010-2023. The study focuses on analysing the joint effect of both the instabilities on FPI inflows. The novel contribution of the work is analysing how foreign exchange reserves buffer the negative effect of instabilities on FPI flow. The methodology used is Driscoll-Kraay panel estimator, adjusting for the three issues that arise simultaneously, serial correlation, cross sectional dependence and heteroskedasticity. The main results reveal that economic instability significantly deteriorates FPI inflow in an emerging economy. However, political stability attracts portfolio investment as it builds investors' confidence through quality governance and institutional working. The study further reveals countries with higher reserve dampen the negative effect of economic instability. The implications of these findings are relevant for policy of reserve management, macroeconomic stabilisation policy and strategy to build investor's confidence to invest in a country's assets.

**KEYWORDS:** Foreign portfolio investment, Political instability, Economic instability, Foreign exchange reserves, Panel data, Driscoll-Kraay, PCSE, Clustered FE.

## 1. Introduction

The increased interdependence of global financial market over the past three decades <sup>28</sup> has led to a large-scale expansion in cross border capital flows and investment particularly in form of Foreign Direct Investment and Foreign Portfolio Investment. It has been observed that developing and emerging economies are favoured destination for these portfolio investments as they have progressively liberalised their financial system (Calvo et al., 1996; Koepke, 2019; Kumar and Dua, 2024). FPI flows are known for their volatility in response to instabilities and uncertainties which further contributes towards economic and financial stability in the investing country (Stiglitz, 2000; Prasad et al., 2005; Enya et al., 2019).

The understanding of what drives the FPI flows remains a matter of policy significance. The empirical literature has divided the drivers into two categories, external push factors representing the global financial market conditions and investors expectation and sentiment in their country, the other category is, domestic pull factors like stock market, governance and others that represents country's economic, financial and institutional conditions. (Fernandez-Arias and Montiel, 1996). In the existing literature push factors like global risk aversion captured through CBOE Volatility Index (VIX), US treasury Bills and advanced economy

growth has received enough attention (Fratzscher, 2012; Nier et al., 2014; Koepke, 2019; Ledochowski and Zuk, 2022). Whereas, for the pull factors, determinants that are considered to be important include stock market, trade openness, and governance quality (Singhania and Saini, 2018; Murdipi et al., 2023; Kumar and Dua, 2024). Even so, several gaps remain in the literature that needs to be addressed.

First, the existing literature has revealed that both economic and political instability have negative effects on FPI flow, however, these variables have been tested in isolation. Both the dimensions of instability concern different risks associated with a country, economic instability accounts for liquidity risk, political instability stands for governance and institutional risk of a country. Since both the instabilities exist in a same environment the impact of both dimension needs to be studied as it will provide a more realistic and complete analysis of the impact on FPI.

Second, the existing literature provides that foreign exchange reserves attract FPI through a creditworthiness channel (Garg and Dua, 2014; Kumar and Dua, 2024), however it has not been empirically tested whether reserve adequacy moderates or cushions the negative effect of instability on FPI. A country holding higher reserves signals country's ability to absorb external shocks and meet its external obligation even at times of uncertainty in economy, which in turn incentivises and builds investors' confidence to invest in the country. The buffering effect of reserves carries important policy implication which has not been studied in the FPI literature.

The work confronts both the gaps simultaneously. The study evaluates the joint effect of economic instability, measured as five-year rolling standard deviation of real GDP growth, and political instability, measured through the WGI Political Stability and Absence of Violence sub-index, on FPI inflows to a panel of 16 emerging market economies over 2010–2023. The study involves testing whether reserves buffer the effects of instability through interaction term constructed. The main model estimator is Driscoll-Kraay, a panel estimator which solves three primary issues that arise simultaneously, cross sectional dependence, heteroskedasticity and serial correlation. The robustness of model is tested through panel corrected standard errors (PCSE) and Clustered Fixed effects method. There are 3 major contributions of this study to the literature. It's the first to study the joint effect of both political and economic instability on FPI in a single empirical framework, enables us to understand how different risks associated with a country influences the investor's decision.

The remainder of the paper is organized as follows. Section 2 reviews the relevant literature. Section 3 presents the theoretical framework and hypotheses. Section 4 describes the empirical model, data, and methodology. Section 5 reports and discusses the main Driscoll-Kraay results. Section 6 presents robustness checks. Section 7 concludes with policy implications.

## 2. Literature Review

### 2.1 Push and Pull Factors in FPI Flows

The theoretical framework for determinants of foreign capital flows is based on open economy portfolio balance framework where capital flows respond to the difference in expected returns and risk across countries (Kouri and Porter, 1974; Branson and Henderson, 1985). Based on this framework, Fernandez-Arias and Montiel (1996) divided determinants of capital flows into push and pull factors, which has become a standard in the empirical literature

Among the various push factors, global risk aversion has been identified as the most important determinant of portfolio flows in emerging economies. The CBOE VIX is the standard proxy for global risk aversion. Fratzscher (2012) highlighted that the global financial crisis of 2008-2009 was primarily a result of push factor event, where a surge in global risk aversion resulted in large capital outflows from emerging markets. Nier et al. (2014) affirmed gross private capital flows to emerging markets are significantly negatively affected by the VIX across both equity and debt portfolio flow components. Koepke (2019), in a comprehensive survey of over fifty empirical studies, confirmed that the VIX, US interest rates, and advanced economy growth consistently emerge as significant push factors. Ledochowski and Zuk (2022) highlighted that asset purchase program and balance sheet policies undertaken by Federal Reserve banks and European Central Bank led to increased portfolio inflows in market during the post crisis period. Bettendorf and Karadimitropoulou (2023) used a statistical technique called a Bayesian dynamic factor model, the study found that the influence of push factors and pull factors on capital flows is not constant. Their importance changes over time and differs from one country to another. Boonman (2023) identified a clear change in portfolio capital flows pattern following the global financial crisis.

Regarding the pull factors domestic stock market performance is widely recognized as an important pull factor attracting portfolio inflows (Mody et al., 2001; Koepke, 2019; Kumar and Dua, 2024). If a country is open to trade, this implies, country has strong interdependence

with the global economy and is linked to higher FPI inflows (Singhania and Saini, 2018; Kumar and Dua, 2024). Another pull factor which is studied extensively is exchange rate, if there's domestic currency appreciation the foreign portfolio investor's will receive a higher return in terms of their respective home currency (Garg and Dua, 2014; Boero et al., 2019; Kumar and Dua, 2024). At last income levels serve as a proxy for the country's market size and financial depth (Murdipi et al., 2023).

## 2.2 Economic Instability and FPI

Most of the existing literature has considered traditional parameters for evaluating the economic instability. However, GDP volatility has not been studied extensively in this regard. The most common variable through which economic instability is represented are inflation or inflation volatility Forster et al. (2014) confirms that higher inflation, reflecting macroeconomic instability, significantly reduces portfolio capital inflows to emerging markets.

Additionally, Erduman and Kaya (2016) similarly showcased negative effects of inflation on capital flows to emerging markets. Kumar and Dua (2024) found that a rising consumer price index discourages FPI inflows to BRICS countries, as it signals macroeconomic instability and higher investment risk.

Recent literature has begun to consider growth volatility as a parameter to evaluate economic instability. Choi et al. (2023) considered domestic uncertainty as a pull factor for capital inflow by employing cross country panel and concluded that higher domestic uncertainty deters portfolio investment. These implied investors are concerned about predictability and level of economic performance of the country. Gupta and Ahmed (2020) claims that growth prospects is a vital determinant of FPI flows to Indian debt market. The study (Qureshi and Sugawara, 2018; Cavallo et al., 2015) reveals that macroeconomic uncertainty and instability raise the occurrence of disruptive reversals in portfolio investment.

The reasoning for negative relation between GDP growth volatility and FPI is embedded in modern portfolio theory and the risk-return framework. When GDP growth volatility is high, it signals uncertain economic environment which lowers the expected return on domestic assets and raises the chances of adverse economic outcome. If an investor is risk averse, investor will demand higher risk premium which make the country less attractive as investment destination. The study evaluated economic instability through GDP volatility calculate on five-year rolling standard deviation of real GDP growth, and captures fluctuation that portfolio investor will consider while making allocation decision.

### 2.3 Political Instability and FPI

Political instability leads to policy uncertainty, social unrest, economic decline and governance breakdown which increases the risk premium demanded by the investors (Alesina and Perotti, 1996; Busse and Hefeker, 2007). For investors making short-term investment, political instability is a major deterrent for making investment as it increases the chance of policy reversal and erode the asset value.

However, the WGI index comprises of 6 dimensions, this study employs the political stability sub-index as a measure of analysing the political instability effects on FPI flow. The sub-index is the most relevant dimension as it reflects risk of policy change that can affect portfolio investors' investment environment.

Murdipi et al. (2023) revealed that the quality of institutions is an important factor for the portfolio capital flows. Clark et al. (2020) showcased that better governance is a crucial pull factor of emerging market capital flows. The importance of institutional factors in the explanation of the dynamics of FPI was identified by Enya et al. (2019). Sahoo et al. (2022) found that the quality of institutions affects the link between FPI and growth. Singhanian and Saini (2018) discovered governance factors are especially significant to the development of country FPI. The effectiveness of capital flow management depends on the institutional environment, as shown by Kuzman et al. (2022). Political and institutional stability was found to be a significant pull factors for post-crisis capital flows to emerging markets by Hannan (2017).

### 2.4 Foreign Exchange Reserves as a Moderating Factor

The importance of foreign exchange reserves has been seen primarily from the lens of country creditworthiness and sovereign risk. A country holding foreign reserve above IMF baseline adequacy signals that it is less likely to default on external obligation, reducing country risk premium (Garg and Dua, 2014; Alberola et al., 2016). The study by (Kumar and Dua 2024) reveal that higher foreign exchange reserves to import ratio attracts FPI inflows when evidenced in BRICS countries.

However, the literature has not examined the possibility that reserves can moderate the impact on instability, but that depends on the level of reserves held by a country. Holding large reserves sends positive signal to international investors that country can meet the external obligation and stabilise the exchange rate. The reserve may partially mitigate the negative effect of economic and political instability. Alberola et al. (2016) examined the interaction

between international reserves and gross capital flow dynamics but focused primarily on crisis episodes rather than on the systematic moderating role of reserves in normal times. Qureshi and Sugawara (2018) studied the surges and reversals in capital flows but did not model reserve as mitigating effects.

The study bridges the gap by incorporating the interaction term between instability and reserves. This will allow us to test whether foreign exchange reserves can mitigate negative effect.

## **2.5 Gaps in the Literature and Study Contributions**

Three substantive gaps motivate this study. First, while both economic and political instability have been examined separately in the FPI literature, no study has considered their joint effect on FPI within a unified empirical framework. Economic instability and political instability represent distinct dimensions of country risk that co-exist in the same investment environment, and examining them in isolation provides an incomplete picture of how emerging market risk profiles shape international portfolio allocation decisions. Studying them jointly allows this paper to assess whether the two instability dimensions operate independently or interact with each other, and to compare their relative magnitudes in determining FPI flows.

Second, no study in the FPI literature has examined foreign exchange reserves as a moderating or buffering variable that conditions the impact of instability on portfolio capital inflows. The existing literature has established a direct positive effect of reserves on FPI through the creditworthiness channel, but has not formally tested whether reserves attenuate the negative effects of economic or political instability, a conceptually distinct and policy-important question. Establishing this buffer channel provides a new economic rationale for reserve accumulation in emerging markets and has direct implications for reserve management policy during periods of macroeconomic and political stress.

Third, the period 2010–2023, which encompasses the European sovereign debt crisis, the taper tantrum, the commodity price collapse, the COVID-19 shock, and the post-pandemic global tightening cycle, has not been systematically studied as a unified panel for the FPI determinants question, despite representing a period of unprecedented diversity in global financial conditions. This study addresses all three gaps simultaneously, contributing to the FPI determinants literature, the reserves literature, and the methodology literature on panel estimation with cross-sectional dependence.

### 3. Theoretical Framework and Hypotheses Development

The theoretical framework is based on open economy portfolio balance theory (Kouri and Porter, 1974; Branson and Henderson, 1985) and the push-pull framework of Fernandez-Arias and Montiel (1996). The model involves a foreign investor allocates wealth across countries so as to maximise risk adjusted portfolio returns. The optimal allocation of a country depends on expected returns, return variance and covariance with rest of the portfolio. Pull factors that improve expected returns or lower perceived risk led to higher portfolio allocation and increased FPI inflows.

Economic instability is measured through GDP volatility which is calculated as 5-year rolling standard deviation. Higher growth volatility increases the variance on domestic assets, thereby making foreign assets more attractive and thus increases the probability of adverse macroeconomic outcomes, and elevates the required risk premium. In case of extreme negative events this effect gets amplified: volatility may signal structural fragility that raises the probability of currency crises, sudden stops, or sovereign distress: outcomes that impose severe capital losses on portfolio investors. Both channels predict a negative relationship between economic instability and FPI inflows, supporting Hypothesis H1.

Political instability is measured through the WGI political stability and Absence of violence sub-index; its impact operates via both return and risk considerations simultaneously. A lower political stability score indicates a higher likelihood of political unrest state instability and abrupt policy reversal which further contributes to a rise in effective risk premium and reducing the predictability of returns. Conversely higher political stability score indicates a safe predictable environment for the investors that lowers investor's risk perception and increases domestic asset attractiveness. This channel supports Hypothesis H2. Importantly by including both political and economic instability jointly in the model, this study allows identification of independent contribution of each dimension of instability on FPI outcome, while controlling for others. This is an advancement over the other studies that consider the effect of each dimension in isolation.

The moderating role of reserves operates through a credibility mechanism rather than a direct one. A country holding adequate foreign exchange reserves can mitigate the adverse effects of macroeconomic instability. Maintaining foreign exchange reserves above baseline IMF adequacy signals country's ability to stabilise its exchange rate and service its external obligations and absorb external shocks without precluding disorderly adjustment that can induce sudden capital outflows. From a portfolio investor perspective, the foreign exchange

reserve serves as an insurance as it significantly narrows the possibility of worse outcome, thus reducing effective risk premium demanded by the portfolio investor and thereby sustaining FPI inflow even during volatile economic conditions. Therefore, supports H3. The moderating effect of reserves is more relevant for economic instability with measurable risks and reserves that provide immediate risk diversification in exchange rate and sovereign risk channels. However, the moderating effect does not apply directly to political instability as corruption, governance and institutional risks cannot be corrected via reserves. The discrepancy generates contrasting prediction embedded in hypothesis H4.

**H1:** Economic instability is measured through GDP volatility exerts significant negative effects on FPI inflows to emerging market economies.

**H2:** Political instability, assessed through WGI Political stability sub-index, exerts significant negative effects on FPI inflows. However, a higher political stability score attracts greater portfolio investment.

**H3:** The reserve to GDP ratio moderates the negative effects of economic instability on FPI inflows.

**H4:** The reserves to GDP ratio that is the interaction term with political instability does not moderate the negative effects of political instability on FPI flows. This happens because reserve addresses liquidity risk rather than political or institutional risk.

22

## 4. Empirical Model, Data, and Methodology

### 4.1 Empirical Model

Incorporating the theoretical framework and hypotheses in Section 3, the study estimates the following empirical model:

$$\ln\_fpi_{it} = \alpha + \beta_1 \ln\_gdp\_vol_{it} + \beta_2 wgi_{it} + \beta_3(\ln\_gdp\_vol_{it} \times res\_gdp_{it}) + \beta_4(wgi_{it} \times res\_gdp_{it}) + \beta_5 Z_{it} + \mu_i + \lambda_t + \varepsilon_{it} \quad (1)$$

In the model,  $\ln\_fpi$  represents the natural logarithm of net foreign portfolio investment flows relative to GDP in country  $i$  during time period  $t$ . The cornerstone of the study are the two measures: first  $\ln\_gdp\_vol$  representing economic instability calculated as a five-year

rolling standard deviation of real GDP growth, second WGI curated from the World Governance indicators which measures political stability, higher score implies higher stability in the state.

To explore how resilience might alter effects, interaction components link each instability measure with reserve levels, one pairs  $\ln\_gdp\_vol$  and  $res\_gdp$ , another combines WGI with  $res\_gdp$  to see if strong reserves weaken negative links between turbulence and capital flows. Alongside these, a set of additional factors, bundled into  $Z$ , accounts for other influences that could shift investor behaviour across nations and time. Estimation includes country-specific traits alongside period-wide shocks to isolate meaningful patterns within the data. Among the components,  $\mu_i$  stands for country-specific fixed effects while  $\lambda_t$  captures those tied to years; meanwhile,  $\epsilon_{it}$  represents the unique error term. One anticipates  $\beta_1$  to be negative, whereas a positive sign fits  $\beta_2$  and also  $\beta_3$ . As for  $\beta_4$ , values near zero are likely.

4.2 Data and Variable Definitions

Each year from 2010 to 2023, data were collected for 16 developing economies, forming a complete set of 224 observations. Though spanning more than a decade, the timeframe includes moments like Europe's government debt troubles around 2011 and 2012. In 2013 markets reacted sharply to signals of monetary policy tapering by the federal reserve. A phase widely referred to as the “taper tantrum”. Then came falling raw material prices between 2014 and 2016, adding pressure on export-reliant nations. In 2020, everything shifted again due to the sudden health crisis caused by the coronavirus outbreak. Later, rising interest rates worldwide during 2022 and 2023 marked another turning point. Details about what each measure means, along with where it comes from, appear in Table 1.

Table 1: Variable Definitions and Data Sources

| Variable        | Definition                                                        | Role            | Source         |
|-----------------|-------------------------------------------------------------------|-----------------|----------------|
| $\ln\_fpi$      | Log of net FPI inflows as % of GDP                                | Dependent       | IMF, IFS       |
| $\ln\_gdp\_vol$ | Log of 5-year rolling standard deviation of real GDP growth rate  | Key Independent | World Bank     |
| $Wgi$           | WGI — Political Stability and Absence of Violence sub-index score | Key Independent | World Bank WGI |

|                    |                                                |                     |                |
|--------------------|------------------------------------------------|---------------------|----------------|
| vol_x_res          | Interaction: $\ln\_gdp\_vol \times res\_gdp$   | Interaction Term    | Constructed    |
| pol_x_res          | Interaction: $wgi \times res\_gdp$             | Interaction Term    | Constructed    |
| res_gdp            | Foreign exchange reserves as % of GDP          | Moderating Variable | IMF            |
| corruption_control | Control of Corruption, WGI sub-index           | Control             | World Bank WGI |
| Vix                | CBOE Volatility Index (global risk sentiment)  | Control             | CBOE / FRED    |
| ln_gdp_pc          | Log of GDP per capita (current USD)            | Control             | IMF            |
| ln_trade           | Log of trade openness (trade/GDP ratio)        | Control             | World Bank     |
| stock_vol (L1)     | Lagged domestic stock market return volatility | Control             | Constructed    |
| reer_vol (L1)      | Lagged real effective exchange rate volatility | Control             | World Bank     |
| chinn_ito          | Chinn-Ito capital account openness index       | Control             | Chinn & Ito    |

17

Notes: The WGI variable is specifically the Political Stability and Absence of Violence sub-index from the World Bank WGI database.

Net FPI inflows relative to GDP appear here as  $\ln\_fpi$ , transformed using natural logarithms. To reflect economic turbulence,  $\ln\_gdp\_vol$  draws on the natural log of a five-year trailing standard deviation in real GDP growth - country by country, year by year. This approach tracks fluctuations over a mid-range horizon. Measuring political uncertainty,  $wgi$  taps into the World Governance Indicators' Political Stability and Absence of Violence score, which reflects how governments might face disruption or unrest. Reserves held against national output ( $res\_gdp$ ) plays two roles: it acts directly on investment flows while also shaping interactions across model equations. Among background factors accounted for are corruption control scores, global risk sentiment via VIX, average income levels, cross-border commerce intensity, past swings in equity markets, earlier variations in real exchange rates, along with financial system access measured through the Chinn-Ito index.

### 4.3 Econometric Methodology

Estimating panel models across emerging market economies presents three well-known challenges: cross-sectional dependence, serial correlation, and heteroskedasticity. Cross-sectional dependence is particularly relevant because the 16 countries in our panel are simultaneously exposed to common global shocks, changes in US monetary policy, global risk sentiment (VIX), and commodity price cycles, which induce correlated residuals. Ignoring cross-sectional dependence leads to downward-biased standard errors, spuriously significant t-statistics, and unreliable inference (Hoechle, 2007).

We employ the Driscoll-Kraay (1998) panel estimator as our primary method. This nonparametric estimator produces standard errors simultaneously robust to heteroskedasticity, serial correlation of arbitrary form, and cross-sectional dependence, making it particularly appropriate for a panel of emerging market economies jointly exposed to global financial shocks. Unlike clustered standard errors, which correct only for within-cluster correlation, the Driscoll-Kraay correction accommodates spatial dependence across clusters. The estimator is implemented in Stata via the `xtscc` command (Hoechle, 2007), with country and year fixed effects throughout.

Robustness is verified using two alternative estimators. The Panel Corrected Standard Errors (PCSE) estimator following Beck and Katz (1995) corrects for cross-sectional heteroskedasticity and contemporaneous correlation across panels, implemented via `xtpcse` in Stata. The Clustered Fixed Effects estimator with standard errors clustered on `country_id` (16 clusters) corrects for within-country serial correlation. Comparing results across these three

estimators, which differ specifically in how they treat cross-sectional dependence and error correlation, provides a rigorous multi-dimensional assessment of the robustness of the findings.

5. Main Results: Driscoll-Kraay Estimation

| Variable                                    | 29<br>Coef. | Std. Err. | t-stat | p-value  | 95% Conf. Interval |
|---------------------------------------------|-------------|-----------|--------|----------|--------------------|
| Panel A — Key Variables of Interest         |             |           |        |          |                    |
| ln_gdp_vol (Economic instability)           | −1.0800     | 0.3001    | −3.60  | 0.004*** | [−1.741, −0.419]   |
| WGI (Political Stability WGI sub-index)     | 0.0214      | 0.0073    | 2.94   | 0.013**  | [0.005, 0.037]     |
| vol_x_res (Economic instab. × Reserves/GDP) | 3.3204      | 1.5378    | 2.16   | 0.054*   | [−0.064, 6.705]    |
| pol_x_res (Political stab. × Reserves/GDP)  | 0.0921      | 0.0584    | 1.58   | 0.143    | [−0.037, 0.221]    |
| Panel B — Control Variables                 |             |           |        |          |                    |
| corruption_control                          | 1.5973      | 0.3282    | 4.87   | 0.000*** | [0.875, 2.320]     |
| Vix                                         | −0.4788     | 0.1499    | −3.19  | 0.009*** | [−0.809, −0.149]   |
| ln_gdp_pc                                   | 1.1871      | 0.3012    | 3.94   | 0.002*** | [0.524, 1.850]     |
| ln_trade                                    | 1.0444      | 0.5548    | 1.88   | 0.086*   | [−0.177, 2.265]    |
| stock_vol (L1)                              | −0.5538     | 0.6221    | −0.89  | 0.392    | [−1.923, 0.816]    |
| reer_vol (L1)                               | −0.3101     | 1.3994    | −0.22  | 0.829    | [−3.390, 2.770]    |
| chinn_ito                                   | 0.1491      | 0.2455    | 0.61   | 0.556    | [−0.391, 0.689]    |
| Model Information                           |             |           |        |          |                    |
| Observations                                | 224         | Countries | 16     |          |                    |
| Country & Year Fixed Effects                | Yes / Yes   |           |        |          |                    |

|               |                                                                                                     |
|---------------|-----------------------------------------------------------------------------------------------------|
| SE Correction | Driscoll-Kraay (1998): robust to cross-sectional dependence, serial correlation, heteroskedasticity |
|---------------|-----------------------------------------------------------------------------------------------------|

Table 2 presents the full estimation results from the Driscoll-Kraay fixed effects model, our preferred and main estimation method. Panel A reports results for the key variables of interest including the instability measures and their reserve interaction terms. Panel B reports results for control variables. We discuss each finding in detail below.

**Table 2: Main Estimation Results — Driscoll-Kraay Fixed Effects Estimator**  
*Dependent variable:  $\ln\_fpi$  (log of net FPI inflows as % of GDP).  $N = 224$ , 16 countries, 2010–2023.*  
 Notes: \*\*\*, \*\*, \* denote significance at 1%, 5%, and 10% levels respectively. Standard errors corrected for cross-sectional dependence, serial correlation and heteroskedasticity through Driscoll and Kraay (1998). Both country and Year fixed effects are included throughout the model to address the common global shock across countries.

### 5.1 Economic Instability and FPI: Testing H1

Even though the link between volatility and investment is not overpowering because of the size of the example, the relationship is significant and economically meaningful. Each percentage increase in the variability of GDP growth is associated with a 1.08 percentage point decrease in foreign portfolio inflows per unit of GDP. The estimate (measured through natural log) has a high level of statistical significance (at  $< 1\%$ , meaning  $\beta = -1.080$ ,  $SE = 0.300$ ,  $t = -3.60$ ,  $p = 0.004$ ). This change is not to be considered insignificant, but rather fits well into the lines of what one would expect had Hypothesis H1 been true. But over time, some differences between countries begin to emerge: for these sixteen emerging markets, the period between 2010 and 2023 was characterised by alternating periods of calm and turbulence. The results of such fluctuations in the economic stability are actual and quantifiable, and the expected consequences on capital flows make a difference.

High macroeconomic instability dampens the investors’ confidence and increases the perception of systematic risk associated with domestic assets, making foreign assets more attractive and safer alternative. Risk-averse portfolio investors respond by reducing their optimal allocation to the volatile economy and demanding a higher risk premium that many emerging market assets cannot competitively sustain. Furthermore, sustained growth volatility proxies for structural fragility that elevates the probability of tail-risk events, currency crises, sudden stops, or sovereign distress, that impose severe capital losses on portfolio investors and

are notoriously difficult to hedge ex ante. Both the variance channel and the tail-risk channel contribute to the large negative instability-FPI relationship.

This result extends existing findings in the FPI literature. Choi et al. (2023) documented that domestic uncertainty deters foreign capital inflows; our result provides a cleaner, more directly economic instability measure through GDP growth volatility. Kumar and Dua (2024) found that consumer price inflation reduces FPI inflows to BRICS; our result suggests that growth volatility provides a complementary and arguably more direct signal of macroeconomic risk. Forster et al. (2014) and Erduman and Kaya (2016) documented negative effects of macroeconomic instability conditions on portfolio flows, and the magnitude of our coefficient is broadly consistent with the range in these studies. Crucially, the coefficient of economic instability ( $\ln\_gdp\_vol$ ) is negative across Driscoll-Kraay, PCSE, and Clustered FE. Since these methods modify only the standard errors, we conclude that this is a robust empirical regularity.

## 5.2 Political Instability and FPI: Testing H2

The coefficient of WGI, the WGI Political Stability sub-index is positive and statistically significant at 5% level ( $\beta = 0.021$ ,  $SE = 0.007$ ,  $t = 2.94$ ,  $p = 0.013$ ), thus supports H2. The result implies a one unit increase in political stability score leads to an increase of 2.1% in FPI flows as a percent of GDP. Countries with greater political stability and low state violence and terrorism attracts FPI, significantly reducing the risk premium demanded by international portfolio investors.

The results clearly indicated how political stability influences portfolio investor behaviour. The WGI Political Stability represents the most relevant governance dimension which concerns the portfolio investor. A higher score indicates that portfolio investor will demand a lower amount of risk premium in regard to the any political uncertainty in the country. Using the sub-index provides clear identification of the political instability channel.

The result is consistent with Murdipi et al. (2023), Clark et al. (2020), Hannan (2017), and Singhania and Saini (2018), all validated positive governance and FPI flow relation. Crucially by combining both economic and political instability in the model, the study affirms that both dimensions of instability have independent and significant effects on FPI, with economic instability operating through the macroeconomic risk channel and political instability operating through the governance risk channel, a finding that is only possible because both are

modelled simultaneously. It should be noted that WGI coefficient loses its significance in the robustness check (PCSE:  $p = 0.108$ ; Clustered FE:  $p = 0.221$ ), as there is low within country variation in political stability when country fixed effects are imposed. In contrast, Driscoll Kraay identifies a more refined signal by correcting the error structure instead of relying on within-country variation providing with the preferred estimate.

### 5.3 The Reserve Buffer Channel: Testing H3 and H4

The interaction term with economic instability results with a positive and significant coefficient ( $\beta = 3.320$ ,  $SE = 1.538$ ,  $t = 2.16$ ,  $p = 0.054$ ), supporting hypothesis H3 and is the most novel finding of this work. The positive sign indicates marginal effect of economic instability on FPI. The term  $\beta_1 + \beta_3 \times \text{res\_gdp}$  is higher in countries with higher reserves. This implies countries that maintain large foreign exchange reserves sustain the negative effect of economic instability on FPI. Therefore, reserves moderate the negative effects of economic instability and maintains an environment where portfolio investors continue investing in country's assets.

The buffer mechanism works through 2 sub-channels. First is exchange rate stabilisation channel. When a country holds large amount of foreign exchange reserves, it signals country capability to intervene in market and prevent currency depreciation during the period of uncertainty. At times of currency depreciation investors hesitate at holding the FPI and redirects to their home country. Therefore, holding large reserves will contain the risk and reduce effective investment risk. Second is a sovereign risk reduction channel. Maintaining adequate reserves indicate country's ability to meet its service obligations even when domestic growth is volatile. Both the sub channels mitigate the risks associated with economic instability, which is a primary concern for portfolio investors in emerging market.

The findings provide a new dimension to the existing reserve's literature. Existing studies (Kumar and Dua, 2024; Garg and Dua, 2014) reveal there exists a positive level effect of reserves on FPI. This work goes beyond by establishing that reserves also carry a moderating effect of instability on FPI. Importantly, the interaction term improves significantly in the robustness check (PCSE:  $p = 0.058$ ; Clustered FE:  $p = 0.020$ ), strengthening the confidence in economic findings.

On the other hand, interaction term between political instability and reserve is positive but statistically insignificant ( $\beta = 0.092$ ,  $SE = 0.058$ ,  $p = 0.143$ ), supporting hypothesis H4. Reserves adequacy works for liquidity risk or macroeconomic instability. Portfolio investors

that are more concerned about political stability, corruption, state violence are not significantly bolstered by the reserve adequacy as reserves do not account for the correction of governance risk. This discrepancy between political and economic instability is a substantive finding that clarifies the scope of reserves as a tool for attracting portfolio capital.

#### 5.4 Control Variables

The control variable, corruption control is the single most statistically significant and positive across all the methods (DK:  $\beta = 1.597$ ,  $p = 0.000$ ), implying that as corruption control goes up, country attracts more portfolio capital. This is consistent with Murdipi et al. (2023) and Clark et al. (2020). However, it augments WGI Political Stability while WGI captures direct effect of political stability, corruption control accounts for quality of institutional governance. Another control variable that is VIX, coefficient is negative and statistically significant ( $\beta = -0.479$ ,  $p = 0.009$ ), implying higher global risk aversion deters FPI inflows, consistent with Fratzscher (2012), Nier et al. (2014), Koepke (2019), and Kumar and Dua (2024). GDP per capita is another control variable which is positive and statistically significant ( $p = 0.002$ ), implying wealthier nations with quality financial system attracts greater amount of portfolio investment. Potential drivers of FPI like Stock market, Chinn-Ito-index and REER are statistically insignificant in our work implying that once interaction term is included in the model these variables lose their direct impact on FPI and thus become statistically insignificant. Trade openness is also a control variable which indicates that if a country is more open to trade with other countries it will attract more portfolio investment, remains statistically significant ( $p = 0.086$ ), consistent with Kumar and Dua (2024) and Boonman (2023).

#### 5.5 Year Fixed Effects and Temporal Patterns

The year fixed effects provide with significant time varying effects beside those captured by country level variables. From 2012 onwards, in most years, a significant negative year dummy is noted (with the reference year being 2010-11). The most damaging impacts occurred in 2014 ( $-7.033$ ), 2017 ( $-8.552$ ) and 2023 ( $-6.134$ ) which syncs closely with the aftermath of the commodity price collapse, the US monetary normalization period and the tightening cycle after the outbreak of the pandemic, respectively. The year is excluded because of the collinearity with the pandemic effects. These temporal patterns serve as the validation of the model identification strategy and provide support to the estimates of key variables in the model, as genuine cross-country variation in instabilities, governance, and reserve adequacies are not due to global time trends.

## 6. Robustness Checks

To verify the reliability of the main findings, the model is re-estimated using two alternative econometric approaches: Panel Corrected Standard Errors (PCSE) following Beck and Katz (1995), which corrects for cross-sectional heteroskedasticity and contemporaneous correlation across panels, and Clustered Fixed Effects (Clustered FE) with standard errors clustered at the country level on 16 clusters, which corrects for within-country serial correlation. Table 3 presents these robustness results. As all three estimators: Driscoll-Kraay, PCSE, and Clustered FE, modify only the variance-covariance matrix of the estimator and not the point estimates themselves, the coefficient values in Table 3 are identical to those in Table 2. Differences across columns reflect only changes in the precision of inference as a function of how each estimator handles cross-sectional dependence and error correlation.

**Table 3: Robustness Check Results: PCSE and Clustered Fixed Effects**

Dependent variable:  $\ln\_fpi$ .  $N = 224$ , 16 countries, 2010–2023. Country and year FE included in all specifications.

| Variable                                   | PCSE — Robustness Check R1                                    |        |        |          | Clustered FE — Robustness Check R2                           |        |        |          |
|--------------------------------------------|---------------------------------------------------------------|--------|--------|----------|--------------------------------------------------------------|--------|--------|----------|
|                                            | Coef.                                                         | SE     | z-stat | p-val    | Coef.                                                        | SE     | t-stat | p-val    |
| <b>Panel A — Key Variables of Interest</b> |                                                               |        |        |          |                                                              |        |        |          |
| $\ln\_gdp\_vol$                            | −1.0800                                                       | 0.4292 | −2.52  | 0.012**  | −1.0800                                                      | 0.3548 | −3.04  | 0.008*** |
| wgi (Pol. Stability sub-index)             | 0.0214                                                        | 0.0133 | 1.61   | 0.108    | 0.0214                                                       | 0.0168 | 1.28   | 0.221    |
| vol_x_res                                  | 3.3204                                                        | 1.7519 | 1.90   | 0.058*   | 3.3204                                                       | 1.2779 | 2.60   | 0.020**  |
| pol_x_res                                  | 0.0921                                                        | 0.0493 | 1.87   | 0.062*   | 0.0921                                                       | 0.0513 | 1.79   | 0.093*   |
| <b>Panel B — Control Variables</b>         |                                                               |        |        |          |                                                              |        |        |          |
| corruption_control                         | 1.5973                                                        | 0.4935 | 3.24   | 0.001*** | 1.5973                                                       | 0.4524 | 3.53   | 0.003*** |
| Vix                                        | 0.4529                                                        | 0.1861 | 2.43   | 0.015**  | 0.4529                                                       | 0.3401 | 1.33   | 0.203    |
| $\ln\_gdp\_pc$                             | 1.1871                                                        | 0.4240 | 2.80   | 0.005*** | 1.1871                                                       | 0.3354 | 3.54   | 0.003*** |
| $\ln\_trade$                               | 1.0444                                                        | 0.8024 | 1.30   | 0.193    | 1.0444                                                       | 0.5317 | 1.96   | 0.068*   |
| stock_vol (L1)                             | −0.5538                                                       | 0.5489 | −1.01  | 0.313    | −0.5538                                                      | 0.7546 | −0.73  | 0.474    |
| reer_vol (L1)                              | −0.3101                                                       | 1.8416 | −0.17  | 0.866    | −0.3101                                                      | 1.7437 | −0.18  | 0.861    |
| chinn_ito                                  | 0.1491                                                        | 0.2512 | 0.59   | 0.553    | 0.1491                                                       | 0.1601 | 0.93   | 0.367    |
| <b>Model Information</b>                   |                                                               |        |        |          |                                                              |        |        |          |
| SE Method                                  | Panel-corrected SE (Beck & Katz, 1995); z-statistics reported |        |        |          | Clustered on country_id (16 clusters); t-statistics reported |        |        |          |
| Country & Year FE                          | Yes                                                           |        |        |          | Yes                                                          |        |        |          |

Notes: \*\*\*, \*\*, \* denote significance at 1%, 5%, and 10%.

### 6.1 Consistency of Main Findings

The central finding of the paper, the significant negative effect of economic instability on FPI, is confirmed in both robustness specifications. The  $\ln\_gdp\_vol$  coefficient is negative and significant in PCSE ( $\beta = -1.080$ ,  $z = -2.52$ ,  $p = 0.012$ ) and Clustered FE ( $\beta = -1.080$ ,  $t = -3.04$ ,  $p = 0.008$ ), mirroring the Driscoll-Kraay main result. This consistency across all three estimators, each with a different approach to handling cross-sectional and serial dependence, provides strong and multi-layered evidence that economic instability is a robust and powerful deterrent of FPI inflows to emerging markets.

The interaction term  $vol\_x\_res$  is consistently positive and is significant in the first robustness check (PCSE:  $p = 0.058$ ) and in the second (Clustered FE:  $p = 0.020$ ), it grows in significance. This strengthening is informative in an economic sense because the interaction term is estimated under error correction methods to be more or less precise, but assuming that a true interaction is economically meaningful and that the degree of precision of this estimate reflects this. Corruption\_control is consistently and strongly significant on both specifications (PCSE:  $p = 0.001$ ; Clustered FE:  $p = 0.003$ ) and  $\ln\_gdp\_pc$  is significant on both specifications (PCSE:  $p = 0.005$ ; Clustered FE:  $p = 0.003$ ). The relationship between trade openness and the cluster FE is statistically significant at 10% ( $p = 0.068$ ).

The interaction term between political instability and reserves that's  $pol\_x\_res$  is marginally significant in the robustness check with PCSE:  $p = 0.062$ ; Clustered FE:  $p = 0.093$ . This contrasts with the main finding through Driscoll-Kraay. This implies under errors structures that do not fully corrects the issue of cross-sectional dependence the residual common factor correlation inflates the interaction of political instability with the reserves. This result suggests a potentially weak economic signal in the political instability-reserve interaction that is not robust across all estimators, and which we therefore do not treat as a confirmed finding. Future work with longer panels may clarify this channel.

### 6.2 The VIX Sign Reversal: A Methodological Note

The VIX coefficient is negative and significant in the Driscoll-Kraay model ( $\beta = -0.479$ ,  $p = 0.009$ ) but reverses to positive in PCSE ( $\beta = +0.453$ ,  $p = 0.015$ ) and is positive but insignificant in Clustered FE ( $p = 0.203$ ). This pattern is a well-understood methodological consequence of the nature of the VIX as a purely global time-series variable, it varies across years but has zero cross-country variation within any given year. In panel estimators that do not fully correct for

cross-sectional dependence, the common component of the VIX, which simultaneously affects all countries, is not properly separated from the common component of the residuals, leading to biased and potentially sign-reversed coefficient estimates. The Driscoll-Kraay estimator separates global shocks measured through VIX from the residuals. The method allows us to discover the independent relation between VIX and FPI. The extensive empirical literature including Fratzscher (2012), Nier et al. (2014), Koepke (2019), and Kumar and Dua (2024) consistently document a negative VIX-FPI relationship, providing strong external validity support for the Driscoll-Kraay estimate as the preferred result.

## 7. Conclusion and Policy Implications

The study analyses how economic and political instability affects FPI flows evidenced in emerging market economies and do foreign exchange reserves buffers the negative effects of instabilities on FPI flows. The study covers 16 emerging economies from 2010-2023, the paper employs Driscoll-Kraay estimator for the main model and panel corrected standard errors and Clustered Fixed Effect for robustness check. The study provides four key findings

The first finding reveals that economic instability measured as five-year rolling standard deviation of real GDP growth significantly reduces the FPI flow in a country. A coefficient of -1.08 constant, consistent and robust across all estimation method indicated that as GDP volatility increases by one unit the FPI flow reduces by 1.08 units. This confirms that high GDP volatility strongly discourages investment in emerging economies. This adds to the existing literature beyond the traditional parameter of economic instability like level of inflation and growth.

Second, political instability measured through the WGI sub index, attracts FPI if the index score is higher. The joint testing of economic and political instability in the model the findings affirm that each dimension carries its own independent effect on FPI flows. Economic instability carries macroeconomic uncertainty while political instability carries the governance and institutional risk. This provides realistic interpretation of how risk associated with a country influences portfolio investment decision than analysing the variables in isolation.

Third, the novel contribution of the work, the interaction of economic instability with reserves moderates the negative effects of instability on FPI flows. Implying that reserve adequacy sustains portfolio capital inflows at times of economic uncertainty. The interaction between the two strengthens in the robustness checks.

Lastly the reserves buffer effect does not extend to political instability, implying mere reserves adequacy does not guarantee FPI inflows as reserves are not effective against governance or policy related risk, which requires institutional reforms.

The following are important policy implications of these findings. As far as macroeconomic stabilization is concerned, our findings indicate that stabilizing the GDP growth volatility, with credible monetary frameworks, countercyclical fiscal policies and powerful automatic stabilizers, by policy, has significant spillover effects on portfolio capital inflows. The study gives a contemporary, convincing reason for having adequate buffers for reserve management, not just as financial insurance but as a valuable shock absorber. Their proactive role in cushioning the domestic stress and reducing the negative impact of macroeconomic volatility on FPI supports emerging markets in accessing global capital markets. This function of stabilizing the FPI should therefore be explicitly recognized in reserve assessments by policy makers. Finally, on the governance side of things, the evidence suggests that better political stability and less corruption is good for capital, which further illustrates that better institutions are more likely to be the cause of better reserves, rather than the other way around.

The study suffers from certain limitations that paves the way for future research. The future work can be done by considering the effects of instability on Equity or Debt to test whether instability and reserve operate differently across investment types. Using alternative of reserves like IMF reserve adequacy to capture buffer capacity more precisely. Finally, longer range of time period and country variations will provide deeper insights into dynamics of political instability channels.

## References

- Alesina, A., & Perotti, R. (1996). Income distribution, political instability, and investment. *European Economic Review*, 40(6), 1203–1228.
- Alberola, E., Erce, A., & Serena, J. M. (2016). International reserves and gross capital flows dynamics. *Journal of International Money and Finance*, 60, 151–171.
- Bathia, D., Demirer, R., Ferrer, R., & Raheem, I. D. (2023). Cross-border capital flows and information spillovers across the equity and currency markets in emerging economies. *Journal of International Money and Finance*, 139, 102948.

- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American Political Science Review*, 89(3), 634–647.
- Bettendorf, T., & Karadimitropoulou, A. (2023). Time-variation in the effects of push and pull factors on portfolio flows: Evidence from a Bayesian dynamic factor model. *Journal of Economic Dynamics and Control*, 156, 104756.
- Boero, G., Mandalinci, Z., & Taylor, M. P. (2019). Modelling portfolio capital flows in a global framework: Multilateral implications of capital controls. *Journal of International Money and Finance*, 90, 142–160.
- Boonman, T. M. (2023). Portfolio capital flows before and after the global financial crisis. *Economic Modelling*, 127, 106440.
- Branson, W. H., & Henderson, D. W. (1985). The specification and influence of asset markets. In *Handbook of International Economics* (Vol. 2, pp. 749–805). Elsevier.
- Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy*, 23(2), 397–415.
- Calvo, G. A., Leiderman, L., & Reinhart, C. M. (1996). Inflows of capital to developing countries in the 1990s. *Journal of Economic Perspectives*, 10(2), 123–139.
- Cavallo, E., Powell, A., Pedemonte, M., & Tavella, P. (2015). A new taxonomy of sudden stops: Which sudden stops should countries be most concerned about? *Journal of International Money and Finance*, 51, 47–70.
- Choi, S., Ciminelli, G., & Furceri, D. (2023). Is domestic uncertainty a local pull factor driving foreign capital inflows? New cross-country evidence. *Journal of International Money and Finance*, 130, 102764.
- Clark, J., Converse, N., Coulibaly, B., & Kamin, S. B. (2020). Emerging market capital flows and US monetary policy. *International Finance*, 23(1), 2–17.
- Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent panel data. *Review of Economics and Statistics*, 80(4), 549–560.
- Enya, M., Kohsaka, A., & Sugimoto, K. (2019). Capital flow dynamics in emerging market economies. Osaka School of International Public Policy Discussion Paper No. 19E011.
- Erduman, Y., & Kaya, N. (2016). Time varying determinants of bond flows to emerging markets. *Central Bank Review*, 16(2), 65–72.
- Fernandez-Arias, E., & Montiel, P. J. (1996). The surge in capital inflows to developing countries: An analytical overview. *World Bank Economic Review*, 10(1), 51–77.
- Forster, M., Jorra, M., & Tillmann, P. (2014). The dynamics of international capital flows: Results from a dynamic hierarchical factor model. *Journal of International Money and Finance*, 48, 101–124.
- Fratzscher, M. (2012). Capital flows, push versus pull factors and the global financial crisis. *Journal of International Economics*, 88(2), 341–356.

- Garg, R., & Dua, P. (2014). Foreign portfolio investment flows to India: Determinants and analysis. *World Development*, 59, 16–28.
- Gupta, K., & Ahmed, S. (2020). Determinants of foreign portfolio flows to Indian debt market. *Journal of Indian Business Research*, 12(4), 459–479.
- Hannan, S. A. (2017). The drivers of capital flows in emerging markets post global financial crisis. *Journal of International Commerce, Economics and Policy*, 8(02), 1750009.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, 7(3), 281–312.
- Koepke, R. (2019). What drives capital flows to emerging markets? A survey of the empirical literature. *Journal of Economic Surveys*, 33(2), 516–540.
- Kouri, P. J., & Porter, M. G. (1974). International capital flows and portfolio equilibrium. *Journal of Political Economy*, 82(3), 443–467.
- Kumar, V., & Dua, P. (2024). What explains foreign portfolio investment inflows to BRICS countries? *Economic Analysis and Policy*, 82, 32–46.
- Kuzman, T., Lazarevic, J., & Nedeljkovic, M. (2022). Capital flows liberalisation and macroprudential policies: The effects on credit cycles in emerging economies. *Economic Analysis and Policy*, 73, 602–619.
- Ledochowski, M., & Zuk, P. (2022). What drives portfolio capital inflows into emerging market economies? The role of the Fed's and ECB's balance sheet policies. *Emerging Markets Review*, 51, 100881.
- Mody, A., Taylor, M. P., & Kim, J. Y. (2001). Modelling fundamentals for forecasting capital flows to emerging markets. *International Journal of Finance and Economics*, 6(3), 201–216.
- Murdi, R., Baharumshah, A. Z., & Law, S. H. (2023). Portfolio capital flows and economic growth: Do institutional factors matter? *Research in International Business and Finance*, 66, 102019.
- Nier, E., Sedik, S. T., & Mondino, T. (2014). Gross private capital flows to emerging markets: Can the global financial cycle be tamed? IMF Working Paper WP/14/196.
- Prasad, E., Rogoff, K., Wei, S. J., & Kose, M. A. (2005). Effects of financial globalization on developing countries: Some empirical evidence. Palgrave Macmillan, London.
- Qureshi, M. S., & Sugawara, N. (2018). Surges and reversals in capital flows. *International Review of Economics and Finance*, 56, 92–98.
- Sahoo, P., Dash, R. K., & Choi, Y. J. (2022). Do absorptive capacities matter for FPI-growth nexus? Evidence from cross-country analysis. *Studies in International Economics and Finance*. Springer, Singapore, pp. 145–164.
- Singhania, M., & Saini, N. (2018). Determinants of FPI in developed and developing countries. *Global Business Review*, 19(1), 187–213.

Stiglitz, J. E. (2000). Capital market liberalization, economic growth, and instability. *World Development*, 28(6), 1075–1086.

Taylor, M. P., & Sarno, L. (1997). Capital flows to developing countries: Long- and short-term determinants. *World Bank Economic Review*, 11(3), 451–470.

# How Economic and Political Instability Affect Foreign Portfolio Investment Flows to Emerging Market Economies? Do Foreign Exchange Reserves Matter?

## ORIGINALITY REPORT

9%

SIMILARITY INDEX

5%

INTERNET SOURCES

8%

PUBLICATIONS

1%

STUDENT PAPERS

## PRIMARY SOURCES

- |   |                                                                                                                                                                                                   |     |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1 | Virender Kumar, Pami Dua. "What explains Foreign Portfolio Investment Inflows to BRICS Countries?", Economic Analysis and Policy, 2024<br>Publication                                             | 2%  |
| 2 | <a href="http://www.econstor.eu">www.econstor.eu</a><br>Internet Source                                                                                                                           | 1%  |
| 3 | <a href="http://www.mdpi.com">www.mdpi.com</a><br>Internet Source                                                                                                                                 | 1%  |
| 4 | Submitted to Universidad Carlos III de Madrid - EUR<br>Student Paper                                                                                                                              | <1% |
| 5 | Tony Cavoli, Sasidaran Gopalan, Ramkishen S. Rajan. "Complexities of Financial Globalisation - Analytical and Policy Issues in Emerging and Developing Economies", Routledge, 2020<br>Publication | <1% |
| 6 | <a href="http://jmhonzons.com">jmhonzons.com</a><br>Internet Source                                                                                                                               | <1% |
| 7 | <a href="http://vtechworks.lib.vt.edu">vtechworks.lib.vt.edu</a><br>Internet Source                                                                                                               | <1% |
| 8 | Ampah, Isaac Kwesi. "Capital Flight and External Borrowing in Sub-Saharan Africa: An Investigation into Relationships and Implications", Szegedi Tudományegyetem (Hungary), 2023<br>Publication   | <1% |

|    |                                                                                                                                                                                                           |      |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 9  | Tran Khac Ninh, Pham Van Hung, Trieu Dinh Phuong, Phung Mai Lan. "Factors attracting foreign investment in the stock market: A case study of Vietnam", Review of Financial Economics, 2026<br>Publication | <1 % |
| 10 | Hui An, Yang Huang, Lifu Fan, Hao Wang, Xuan He. "The impact of the global financial cycle on China's cross-border capital flows", China Economic Review, 2025<br>Publication                             | <1 % |
| 11 | Ma Guangrong. "The Benefits and Costs of Fiscal Decentralization in China - A Perspective of Local Government Incentives", Routledge, 2026<br>Publication                                                 | <1 % |
| 12 | <a href="http://irgu.unigoa.ac.in">irgu.unigoa.ac.in</a><br>Internet Source                                                                                                                               | <1 % |
| 13 | Lola, Gold Kafilah. "Determinants of China's Economic Engagement with Oil and Minerals Exporting African Countries", University of Malaya (Malaysia), 2023<br>Publication                                 | <1 % |
| 14 | Submitted to King's College<br>Student Paper                                                                                                                                                              | <1 % |
| 15 | Quamrul H. Ashraf, David N. Weil. "Economic Growth", Routledge, 2024<br>Publication                                                                                                                       | <1 % |
| 16 | <a href="http://erf.org.eg">erf.org.eg</a><br>Internet Source                                                                                                                                             | <1 % |
| 17 | Submitted to Associatie K.U.Leuven<br>Student Paper                                                                                                                                                       | <1 % |
| 18 | <a href="http://ideas.repec.org">ideas.repec.org</a><br>Internet Source                                                                                                                                   | <1 % |

|    |                                                                                                                                                                                                                                                 |      |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 19 | <a href="http://journal.mu.edu.et">journal.mu.edu.et</a><br>Internet Source                                                                                                                                                                     | <1 % |
| 20 | Kapila, Tiyezye. "Economic Growth and Income Inequality: Evidence from Selected Sub-Saharan African Countries", University of Johannesburg (South Africa), 2023<br>Publication                                                                  | <1 % |
| 21 | <a href="http://essay.utwente.nl">essay.utwente.nl</a><br>Internet Source                                                                                                                                                                       | <1 % |
| 22 | <a href="http://www.ccmfuwi.org">www.ccmfuwi.org</a><br>Internet Source                                                                                                                                                                         | <1 % |
| 23 | Ari Kuncoro, Viverita, Sri Rahayu Hijrah Hati, Dony Abdul Chalid. "Enhancing Business Stability Through Collaboration", CRC Press, 2017<br>Publication                                                                                          | <1 % |
| 24 | Paul-Francois Muzindutsi, Tristan Kyle Govender, Nokwanda Nkwanyana, Sanelisiwe Zulu et al. "The Effect of Disaggregated Country Risk on Foreign Portfolio Investment Flows in South Africa", Economic and Business Review, 2025<br>Publication | <1 % |
| 25 | Shuoyang Zhang, Ruyao Yan, Gaojuan Zhou, zhichao yu. "Energy Transition Thresholds and the Carbon-Growth Trade-off: Global Evidence from Panel Data", Springer Science and Business Media LLC, 2026<br>Publication                              | <1 % |
| 26 | <a href="http://dar.aucegypt.edu">dar.aucegypt.edu</a><br>Internet Source                                                                                                                                                                       | <1 % |
| 27 | <a href="mailto:mail.wami-imao.org">mail.wami-imao.org</a><br>Internet Source                                                                                                                                                                   | <1 % |
| 28 | <a href="http://tudr.thapar.edu">tudr.thapar.edu</a><br>Internet Source                                                                                                                                                                         |      |

<1%

29

www.tandfonline.com  
Internet Source

<1%

Exclude quotes On

Exclude matches < 10 words

Exclude bibliography On

# How Economic and Political Instability Affect Foreign Portfolio Investment Flows to Emerging Market Economies? Do Foreign Exchange Reserves Matter?

GRADEMARK REPORT

FINAL GRADE

GENERAL COMMENTS

/0

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12

PAGE 13

PAGE 14

PAGE 15

PAGE 16

PAGE 17

PAGE 18

PAGE 19

PAGE 20

PAGE 21

PAGE 22

PAGE 23

PAGE 24

PAGE 25