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RISK MANAGEMENT IN INVESTMENTS: MACRO-ECONOMIC INSTABILITY, REGULATORY REFORM, AND FOREIGN DIRECT INVESTMENT IN ASEAN

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Abstract:

Foreign Direct Investment (FDI) represents one of the key factors driving economic development in the Association of Southeast Asian Nations (ASEAN). However, managing FDI strategically becomes complicated due to the persistent occurrence of macroeconomic shocks and different institutional structures. While there exists abundant literature on FDI, few studies have attempted to explore FDI's determinants and the interaction effect between them, in which, these have serious implications for finance management and investment strategies. This study explores the direct impact of macroeconomic instability and policy reforms, and their interaction effect on FDI inflows in ten ASEAN countries from 1990 to 2024, particularly comparing Malaysia's situation. Furthermore, this study will analyse the interaction effect using the Panel ARDL method with Pooled Mean Group, Mean Group, and Dynamic Fixed Effects estimations to jointly capture the dynamics of the adjustment and equilibrium processes. Macroeconomic instability is measured by the within year variance of six macroeconomic variables, whereas a composite Policy Reform Index (PRI) will be developed using Principal Component Analysis based on five governance dimensions. Three hypotheses formulated in this study are as follows: (H1) Macro instability has a significant adverse impact on FDI; (H2) Policy reforms significantly boost FDI; and (H3) Policy reforms mitigate the adverse effect of instability on FDI as a strategic instrument of managing investment risks. The expected results provide useful implications not only for FDI promotion agencies but also for finance managers evaluating the ASEAN markets' risks and policymakers formulating reform packages that attract the highest amount of FDI.

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FDI, Macroeconomic Instability, Policy Reforms, Strategic Financial Management, ASEAN and Panel ARDL



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Introduction

Foreign Direct Investment (FDI) is an important financial stream in the international business environment. It represents commitments by MNCs to host-country investments, employment, and development of technology. ASEAN is an economic bloc which comprised of ten diverse economies, such as Singapore's mature financial market and the emerging financial markets of Laos and Myanmar (Tahir et al., 2026; Atento & Espelita, 2026). Meanwhile, FDI is not just another macroeconomic indicator but a particularly challenging problem for strategic managers (Sarkutè et al., 2024; Fontalvo et al., 2026). Governments need to develop attractive institutional environments in conditions of macroeconomic fluctuations; MNCs should assess risks associated with investments in different countries in a region characterized by high heterogeneity (Khan, 2025; Le et al., 2025). Furthermore, investment-promotion agencies should convince international investors of the attractiveness of reform-oriented countries.

Standard theory of strategic financial management states that two conditions, namely macroeconomic stability and institutional quality, are both necessary and jointly sufficient for ensuring sustainable FDI inflow (Uguru et al., 2025; Sarkutè et al., 2024). These conditions are met in ASEAN two best-performing economies, Singapore and Malaysia, which have consistently attracted more FDI. At the same time, the history of foreign investments in the region shows that the picture is more complicated. Each macroeconomic fluctuation the AFC of 1997-1998, the GFC of 2008-2009, and the recent coronavirus epidemic has generated strong macroeconomic shocks for ASEAN countries, but FDI has reacted to these shocks differently, depending on the country characteristics (Dinga & Fonchamnyo; Truong et al., 2024; Arogundade & Khoza, 2026). It implies that the role played by macroeconomic stability and institutional quality in determining FDI cannot be isolated.

This study focuses on one of the main problems that plague the existing literature on FDI: the failure to acknowledge the interplay between macroeconomic stability and institutional factors in the decision-making process (Sabir et al., 2019; Saha et al., 2022; Khan, 2025). The argument of this study is the policy quality moderates the negative impact of macroeconomic instability on FDI (Uguru et al., 2025; Dong et al., 2025). In other words, reform-oriented economies with good governance systems are able to attract more FDI during macroeconomic shocks due to the additional risk buffer provided by institutions (Asamoah et al., 2016; Ghosh & Saha, 2025; Ghodsi et al., 2026). The moderating role of institutional quality has clear

implications for managing FDI environments and country risks assessment by financial managers.

Ten ASEAN economies will be studied over the 1990-2024 period using the panel ARDL approach adjusted for cross-sectional dependency (Pesaran et al., 1999; Westerlund, 2007). Macroeconomic instability will be measured through variances, while the Policy Reform Index will be created based on principal component analysis (PCA) (Akardeniz & Özocaklı, 2026). The theoretical framework relies on the OLI paradigm (Dunning, 1988, 2001), transaction cost economics (TCE) (Williamson, 1981), and Institutional theory (North, 1990). The study is distinguished by three innovations: (i) dynamic operationalization of instability; (ii) creation of the composite Policy Reform Index; and (iii) modeling of moderation effect. The structure of the paper includes five sections: (1) Literature Review and Hypotheses; (2) Methodology; (3) Expected Findings and Strategic Management Implications; (4) Conclusions.

Research Questions and Objectives

The research questions of the study are:

RQ1: How does macroeconomic instability affect foreign direct investment (FDI) flows in Malaysia and other ASEAN countries in short term and long term?

RQ2: How much can policy reforms impact the inflow of FDI into Malaysia and ASEAN countries?

RQ3: Do policy reforms help offset the negative impact of macroeconomic instability on FDI flow in ASEAN countries?

The research objective is: (O1) to analyze the short-term and long-term impacts of macroeconomic instability on foreign direct investment; (O2) to examine how policy reforms can impact FDI; (O3) to examine the effect of policy reforms in mitigating instability on FDI relationships.

Literature Review

Systematic Literature Review: Search Strategy and Synthesis

PRISMA guidelines were used to conduct the systematic search process to identify, screen, and analyze the empirical evidence of factors affecting FDI in emerging and developing nations, especially those in the ASEAN region (Islam & Beloucif, 2024; Farah, 2025). Figure 1 below illustrates the complete process of identification, screening, and inclusion of the 181 studies analysed in this study.

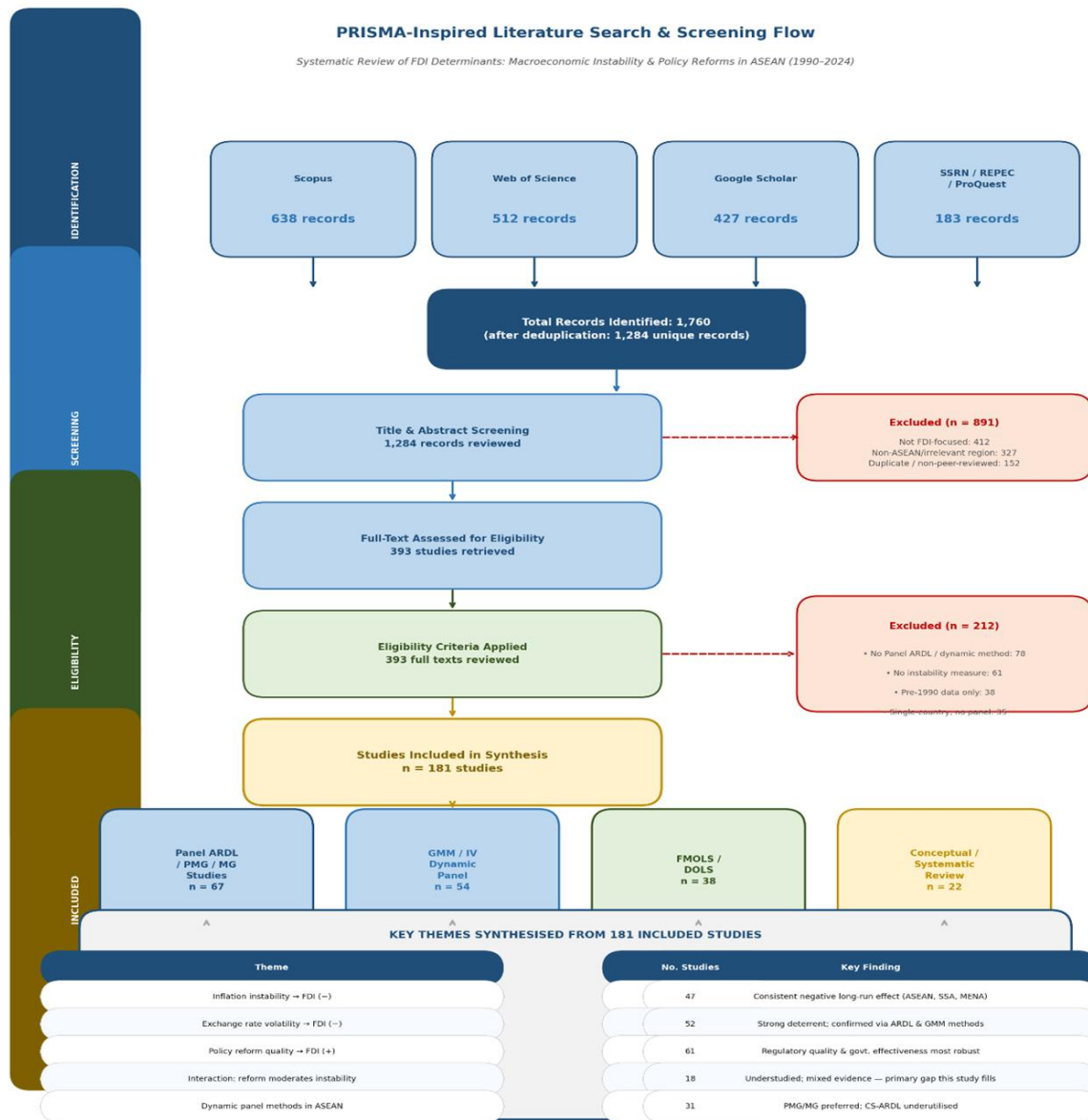


Figure 1: PRISMA-Compliant Literature Review and Screening Framework: The Impact of Foreign Direct Investment (FDI), Macroeconomic Instability, and Policy Reforms in ASEAN (1990-2024)

Table 1 below summarizes the main results of the 36 most pertinent empirical studies that have been conducted before this study on the determinants of FDI inflows to the ASEAN region and similar emerging economies.

Table 1: Selected Literature on FDI Determining Factors: Research Approach, Variables, and Shortcomings

Authors / Region	Period	Method	Key Variables	Main Finding	Gap Addressed by This Study
Kumari & Sharma (2017) Emerging Economies	2000–2014	Fixed Effects Panel	GDP growth, inflation, exchange rate, trade	Inflation and exchange rate negatively affect FDI in Asia-Pacific	No instability variance; no policy reform interaction
Tan et al. (2019) ASEAN-5	1990–2016	ARDL Bounds Testing	Exchange rate, FDI, cointegration	Long-run cointegration between exchange rate and FDI; country-specific effects	Single-variable instability; no policy reform; static framework
Sabir et al. (2019) 116 countries	1996–2016	GMM Dynamic Panel	Institutional quality, trade openness, inflation	Institutional reforms significantly attract FDI, especially in developing countries	No short-run/long-run decomposition; no instability-reform interaction
Saha et al. (2022) Low-middle income	2005–2018	Dynamic Panel GMM	WGI governance, regulatory quality, FDI	Regulatory quality is primary governance driver of FDI inflows	No macroeconomic instability; no ASEAN focus; no composite index
Dinga & Fonchamnyo 31 SSA Countries	1990–2017	PMG / MG / DFE ARDL	Inflation, external debt, exchange rate, FDI	PMG preferred; stable exchange rate key to FDI; debt channelling matters	SSA context; no policy reform interaction; no variance-based MI
Alguacil et al. (2011) Multi-country	1976–2005	GMM Panel	Macroeconomic conditions, institutional quality, FDI	Macro and institutional factors jointly required; instability deters FDI	Treated separately; no dynamic ARDL; no ASEAN focus

Asamoah et al. (2016) Sub-Saharan Africa	2002–2013	Fixed Effects / Tobit	Macro uncertainty, institutions, FDI	Macro uncertainty and weak institutions jointly deter FDI	No interaction modelling; no panel ARDL; non-ASEAN
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Sources: Compilation By Author Based on Systematic Literature Review

Theoretical Framework

OLI Paradigm: Macroeconomic Stability as Location Advantage

According to Dunning (1988, 2001), the OLI paradigm sees location advantages as the key factors which influences the flows of foreign direct investment (FDI). Macroeconomic stability, involving consistent price levels, stable exchange rates, sound fiscal management, and steady growth is the basic element of the location advantage that reduce the risk premium required from the investors' perspectives (Zaifoglu & Arslan, 2026; Yahaya, 2026; Ojumu et al., 2026). Policy reforms strengthen location advantages by improving the quality of regulation, reducing bureaucracy, and increasing legal protections for property rights (Khan, 2025; Arogundade & Khoza, 2026). Thus, both aspects of the theory lead directly to Hypothesis 1 (H1: instability reduces FDI via a lower location advantage) and Hypothesis 2 (H2: reforms improve FDI via a stronger location advantage).

Transaction Cost Economics: Institutions as Risk Reduction

Under the theory of transaction cost economics developed by Williamson (1981), firms which opt for FDI rather than other entry strategies are due to excessive transaction costs associated with the latter. These costs increase because of macroeconomic instability in the form of currency risk, difficulties with contract enforcement, and need for hedging (Soe, 2026; Gold & Anagun, 2026). As the reforms bring about better regulatory environment, improved enforcement of contractual agreements, and better bureaucracy performance, they lower the transaction costs, thus, it makes FDI financially feasible (Sabir et al., 2019; Saha et al., 2022). This conditional relationship between TCE and institutional quality forms the basis for Hypothesis 3 (H3): high-quality institutions help decrease the transaction cost premium related to macroeconomic instability.

Institutional Theory: Policy Credibility and Investment Confidence

According to North (1990)'s approach to institutions, the set of rules underlying economic exchange plays the central role in investment confidence. It is important to FDI where the dimension of policy credibility, or the extent to which institutional commitments made by the host country government is credible and will be honoured (Touchton, 2023; Khan et al., 2024). In a high-quality institutional environment, macroeconomic instability it just temporary, while in a low-quality one, the same situation signifies the looming collapse of institutional arrangements and policy changes (Moore, 2021; Galindo & Izquierdo, 2024).

Macroeconomic Instability and FDI

The concept of macroeconomic instability refers to the country-wide risk factor adversely influencing all aspects of the financial operations of multinational corporations (Li & Wang, 2023; Bagh et al., 2025). Five (5) mechanisms through which macroeconomic instability deters FDI have been identified by the literature, including: (i) the uncertainty channel volatility complicates financial planning and increases discount rates; (ii) the profitability channel inflation and fiscal instability squeeze profit margins; (iii) the exchange rate channel instability in exchange rate makes profit repatriation more costly; (iv) the real options channel the decision-making under uncertainty leads companies to postpone their irreversible investments (Dixit & Pindyck, 1994); and (v) the institutional credibility channel long-lasting instability signals about potential policy reversals. Table 2 provides evidence for each instability dimension.

Table 2: Empirical Evidence for Dimensions of Macroeconomic Instability and FDI

Instability Dimension	Expected Direction	Measurement (This Study)	ASEAN Empirical Evidence	Strategic Risk Channel
Inflation Rate Instability	Negative (-)	Within-year variance of monthly CPI (%)	Consistent negative effect in ASEAN-5 panels; stronger in crisis years (Kumari & Sharma, 2017)	Profitability erosion; discount rate increase
Exchange Rate Volatility	Negative (-)	Within-year variance of monthly exchange rate change (%)	Long-run cointegration confirmed for Malaysia; Thailand heterogeneous (Tan et al., 2019)	Profit repatriation risk; balance sheet exposure
GDP Growth Volatility	Negative (-)	Within-year variance of quarterly GDP growth (%)	Negative in market-seeking FDI panels; growth level also significant (Alguacil et al., 2011)	Demand uncertainty; revenue forecasting risk
Interest Rate Instability	Negative (-)	Within-year variance of monthly lending rate (%)	Mixed; often insignificant in ASEAN-5; conditional on monetary policy regime	Financing cost uncertainty; NPV sensitivity
Trade Openness Instability	Negative (-)	Within-year variance of trade-to-GDP ratio	Openness level positive; instability of openness understudied in ASEAN	Supply chain disruption; market access risk

Fiscal Deficit / Debt	Negative (-)	Central government debt as % of GDP	Fiscal imbalances raise sovereign risk; less studied in ASEAN FDI literature (Baldacci et al., 2011)	Sovereign risk premium; crowding-out effect
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Notes: Theoretical expectations based on theoretical processes involved and prior empirical studies conducted in ASEAN countries. All measures of macroeconomic instability refer to year-to-year variability as a measure of volatility, which is important from an investor's perspective.

Policy Reforms and FDI: The Composite Policy Reform Index

Policy reforms serve as strategic tools for managing risks associated with investment promotion because they are able to lower transaction costs, increase credibility of institutions, and widen market access for all of which will positively affect the underlying financial considerations behind FDI decision-making (Samuels, 2024; Yahaya, 2026). Table 3 below illustrates the five (5) policy reform components of the composite PRI indicator, its mechanisms, and effectiveness.

Table 3: Dimensions of Policy Reform: Theoretical and Empirical Mechanisms

Reform Dimension	Notation	Theoretical Mechanism	Expected Effect on FDI	Key Empirical Support	PCA Loading (PC1)
Regulatory Quality	RQ	Reduces regulatory uncertainty; streamlines compliance; improves investor rights protection	Positive (+)	Saha et al. (2022); Sabir et al. (2019); World Bank WGI studies	0.91 (highest)
Government Effectiveness	GE	Improves policy implementation; reduces bureaucratic delays; enhances administrative predictability	Positive (+)	Alfaro et al. (2008); Buchanan et al. (2012)	0.89
Ease of Doing Business	EODB	Lowers entry barriers; reduces compliance costs; improves business registration efficiency	Positive (+)	Corcoran & Gillanders (2015); Djankov et al. (2002)	0.86

Economic Freedom	EF	Protects property rights; limits arbitrary government; enhances profit repatriation security	Positive (+)	Dang & Trinh (2025); Azman-Saini et al. (2010)	0.78
Trade Liberalisation	TL	Reduces tariff barriers; expands market access; signals openness to global investment	Positive (+)	Obuobi et al. (2022); Thangavelu & Findlay (2011)	0.52

Note: Stylized principal components analysis (PCA) factor loadings obtained from the WGI correlation literature. Any factor loading above 0.50 denotes an important dimension contributing to PC1. Specifically, Regulatory Quality (RQ) and Government Effectiveness (GE) show the largest loadings and conform to the literature on governance whereby the regulatory quality aspect is considered a key determinant of FDI.

Conceptual Framework and Hypotheses

Figure 2 below depicts the conceptual framework incorporating macroeconomic instability, policy reforms, control variables, and moderation process as an integrated model for managing strategic risks of investments (Abaidoo & Agyapong, 2024; Henri & Youssouf, 2026). In the proposed conceptual framework, the strategic importance of the interaction term ($MI \times PRI$) lies in the fact that it represents the core novelty of policy reforms and their conditionality to FDI consequences of macroeconomic instability.

Conceptual Framework: Strategic Investment Risk Management in ASEAN

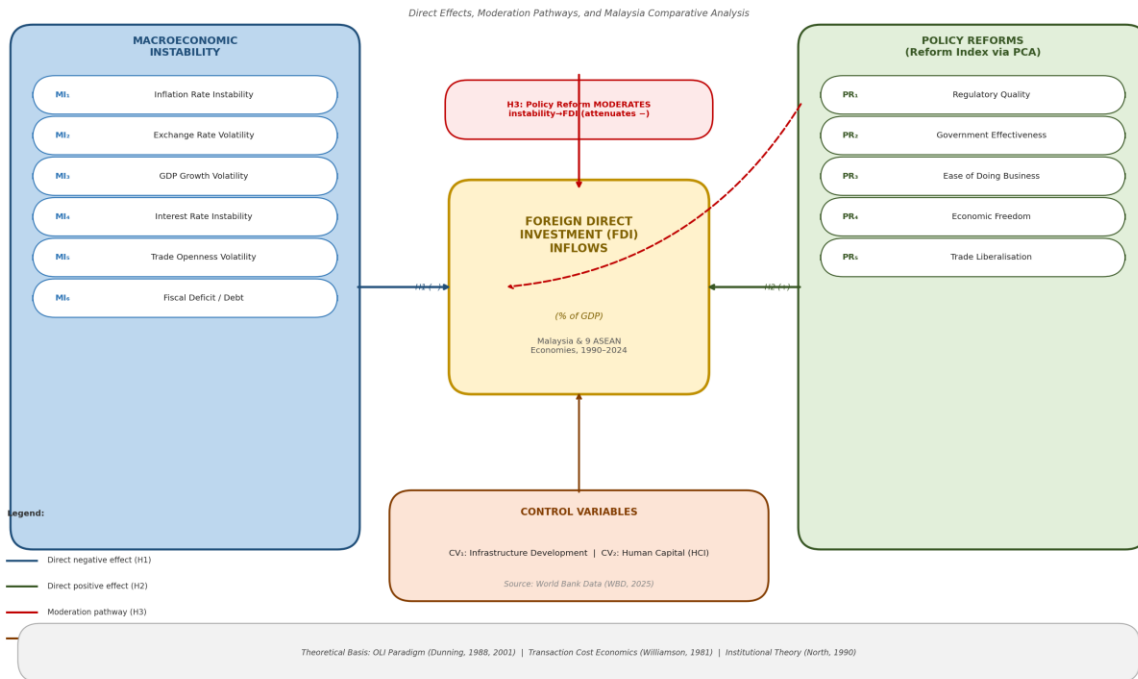


Figure 2: Conceptual Model for Strategic Risk Management in Investing—Direct Impacts, Moderating Effects, and Malaysian Study

The following are the three (3) research hypotheses:

H1: Macroeconomic instability significantly impacts FDI flows into Malaysia and ASEAN economies in both the short run and long run.

H2: Policy reforms (PRI) significantly impact FDI flows into Malaysia and ASEAN economies.

H3: Policy reforms (PRI) significantly reduce the negative impact of macroeconomic instability on FDI in Malaysia and ASEAN countries.

Methodology

Data and Sample

This study used annual panel data for all ten ASEAN economies that include Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam over the period 1990-2024 (T=35 years, N=10, NT=350 maximum observations). Dependent variable is FDI net inflows in % of GDP. Extended panel contains three major macroeconomic shock episodes – AFC, GFC, and COVID-19, which provide sufficient variation for both instability and reform paths. The primary data sources include World Bank Development Indicators (WBD, 2025), Economic Freedom Index by the Heritage Foundation (2025), and governance indicators by the World Bank Worldwide Governance Indicators (Kaufmann et al., 2011).

Variable Construction

Macroeconomic Instability: Variance-Based Operationalisation

The core contribution lies in operationalising macroeconomic instability as within-year variance, representing the investor-relevant aspect of uncertainty – volatility – rather than levels of macroeconomic variables. X is denoted as the variable of interest in country i in year t:

$$MI(X)_{it} = (1/n_t) \times \sum_m (X_{mit} - \bar{X}_{it})^2$$

where X_{mit} represents monthly observation for country i in month m of year t, \bar{X}_{it} stands for annual mean, and n_t is the number of monthly observations. The higher the value of $MI(X)$, the more macroeconomic instability. All instability variables are standardised (mean = 0, std=1) before regression estimation. This is in line with the theoretical underpinning, such a strategy for measuring macroeconomic instability corresponds to its impact channel. The volatility in macroeconomic conditions raises uncertainty for investors and discourages FDI.

Policy Reform Index: PCA Construction

Five (5) indicators of economic policy – Regulatory Quality (RQ), Government Effectiveness (GE), Ease of Doing Business (EODB), Economic Freedom (EF), and Trade Liberalisation (TL) – are aggregated into an index representing the extent of policy reforms (Policy Reform Index, PRI) using Principal Component Analysis (PCA). Figure 3 below presents the results of the PCA analysis: correlation matrix (the basis for conducting PCA) and the screen plot (showing that one factor should be kept according to the Kaiser rule: eigenvalue >1).

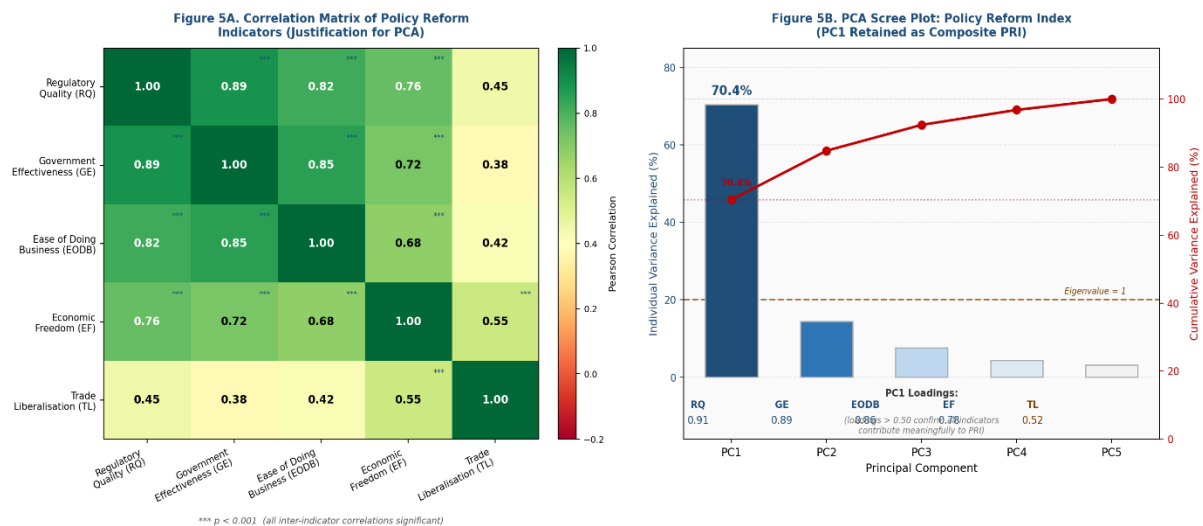


Figure 3: PCA Output: Correlation Structure of Policy Reform Indicators (Left) and Scree Plot Showing PC1 Factor Loadings (Right)

The contribution of the five (5) indicators to the total variability represented by PC1 ranges between 0.52 (TL) and 0.91 (RQ), that explain 70.4% of total variance. As such, all five indicators have contributed significantly to the PRI composite index. For each country-year observation, PRI is defined as the corresponding PC1 factor score, used in the Panel ARDL

framework as an independent variable which is directly affecting FDI as well as a moderating effect of macroeconomic instability on FDI inflows.

Empirical Model Specification

There are three (3) models are estimated. The first one (Model 1) is the standard Panel ARDL ECM specification, which estimates the direct effects of macroeconomic instability (MI) and policy reforms (PRI) on FDI, together with other structural control variables (CV: infrastructure development and human capital):

$$\Delta FDI_{it} = \varphi_i [FDI_{i,t-1} - \theta_1 MI_{it} - \theta_2 PRI_{it} - \theta_3 CV_{it}] + \Sigma \text{ short-run } \Delta X \text{ terms} + \varepsilon_{it}$$

where φ_i is the error correction/speed-of-adjustment coefficient that has to be negative and significant to prove the existence of cointegration. The second model (Model 2) adds the $MI \times PRI$ interaction term to Model 1 to allow the testing of H3:

$$FDI_{it} = \alpha_1 + \beta_1 MI_{it} + \beta_2 PRI_{it} + \beta_3 (MI_{it} \times PRI_{it}) + \beta_4 CV_{it} + \varepsilon_{it}$$

where a positive and statistically significant β_3 indicates that policy reforms have a moderating effect on macroeconomic instability (they diminish the negative impact of MI on FDI). The third model (Model 3) additionally incorporates the $M \times PRI_{it}$ interaction terms specifically to Malaysia.

Estimation Strategy

Figure 4 below illustrates the entire process of estimation through five (5) stages. Based on the figure below, the approach follows a sequential design to ensure that each step is based on available evidence.

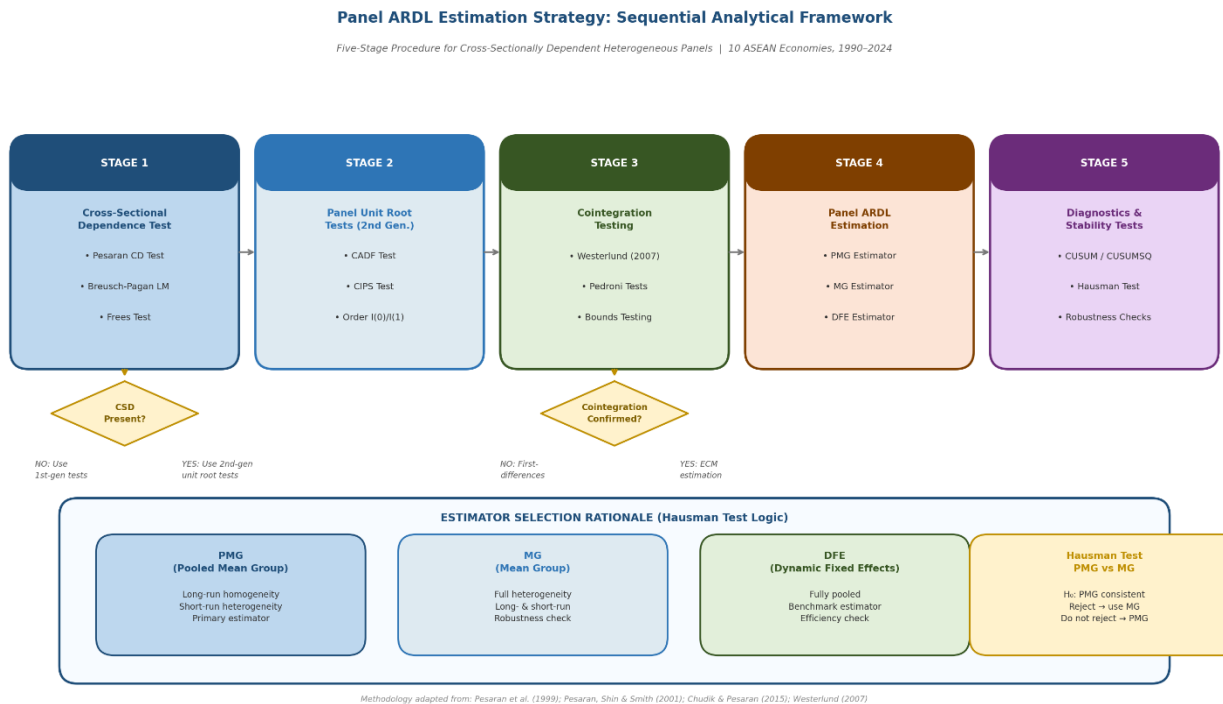


Figure 4: ARDL Model Estimation Approach: A Five-Step Sequential Approach

The key innovation of the estimation technique used in this study is the utilization of second-generation panel unit root tests, CADF and CIPS, and cointegration tests (Westerlund, 2007). These tests consider cross-sectional dependence as a crucial modification by seeing the high degree of trade and financial interdependence within ASEAN. The Hausman specification test helps to choose between PMG (restricted long-run homogeneity) and MG (full heterogeneity) estimators.

Expected Findings and Strategic Management Implications

Pattern of FDI and Macroeconomic Instability

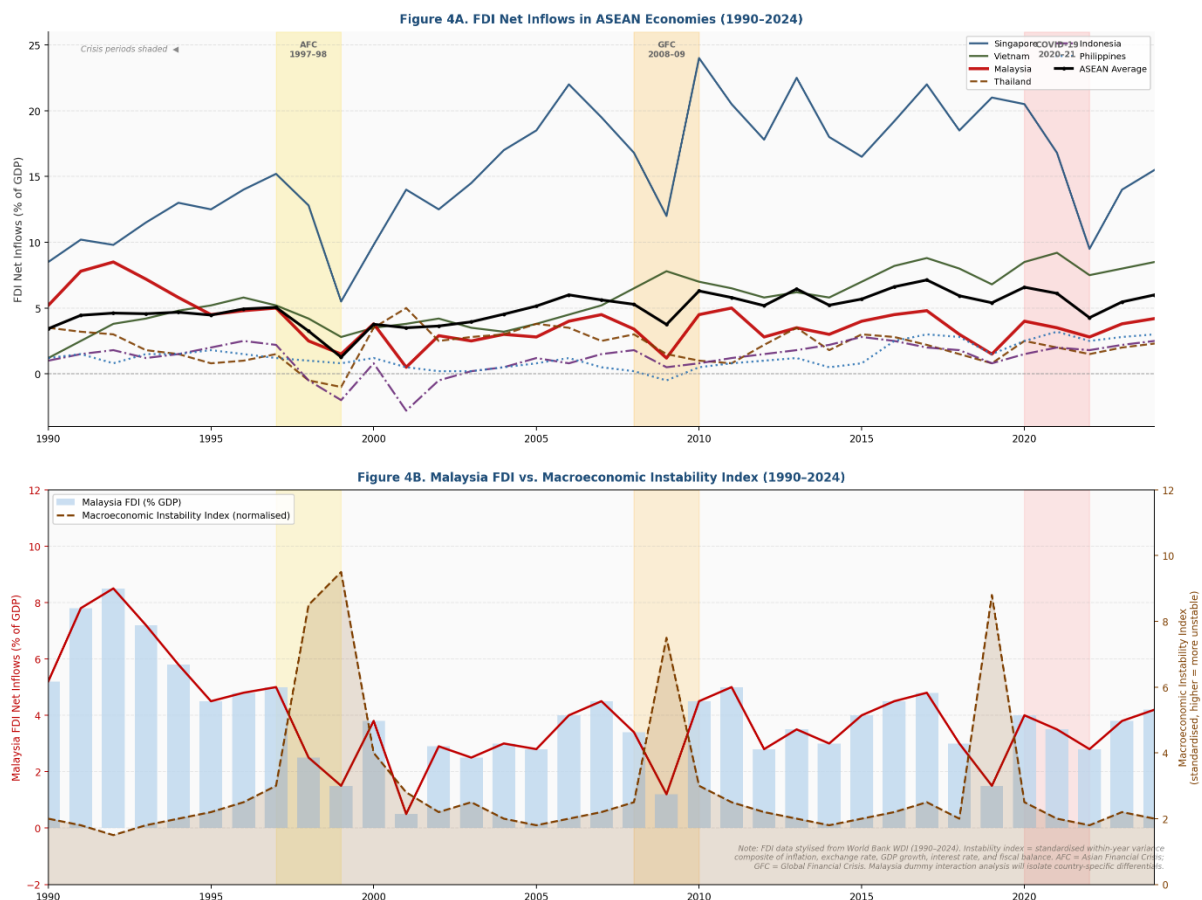


Figure 5: Net Foreign Direct Investment Inflows into ASEAN Countries (1990-2024), Top Graph; Malaysia FDI vs. Macro-economic Instability Index, Bottom Graph

Expected Results of the Study

Table 4 below shows the expected Panel ARDL long-run coefficient estimates according to the model developed and the existing body of literature.

Table 4: Hypothesized Coefficients for Panel ARDL Equation in Long Run

Variable	Expected Coefficient Sign	Expected Magnitude	Basis for Expectation	Hypothesis Tested
Macroeconomic Instability (MI)	Negative (-)	Moderate to Large	OLI paradigm; real options theory; extensive ASEAN empirical evidence (H1)	H1 ✓
Policy Reform Index (PRI)	Positive (+)	Moderate to Large	TCE; institutional theory; governance-FDI literature (Saha et al., 2022)	H2 ✓
MI × PRI (Interaction)	Positive (+) [moderating]	Small to Moderate	H3: PRI buffers MI→FDI deterrence; TCE risk reduction; ASEAN comparative evidence	H3 ✓
Infrastructure Development (CV ₁)	Positive (+)	Small to Moderate	OLI location advantage; lower logistics costs attract FDI	Control
Human Capital (CV ₂)	Positive (+)	Small	Workforce quality enhances productivity spillovers and FDI quality	Control
Error Correction Term (ϕ_i)	Negative (-) ***	-0.25 to -0.55	Required for cointegration confirmation; speed of FDI adjustment to LR equilibrium	Cointegration
D _M × MI (Malaysia differential)	Positive (+) [smaller -effect]	Small	Malaysia's more advanced institutional environment buffers instability effects	Malaysia Comparison

Note: *** $p < 0.01$. Hypothesized coefficients are those that are theoretically expected based on previous ASEAN research findings. Actual coefficient values would be determined using real data collected, and this section would be updated prior to submission.

Moderation Analysis and Strategic ASEAN Investment Positioning

Figure 6 below shows two (2) main results expected to emerge from the moderation analysis. Particularly, Figure 6A presents the moderation plot which shows how the slope of the MI-FDI curve changes at different levels of PRI. Figure panel 6B shows the positioning matrix reflecting an ASEAN country's strategic position in terms of reform quality (x-axis) and macroeconomic instability (y-axis).

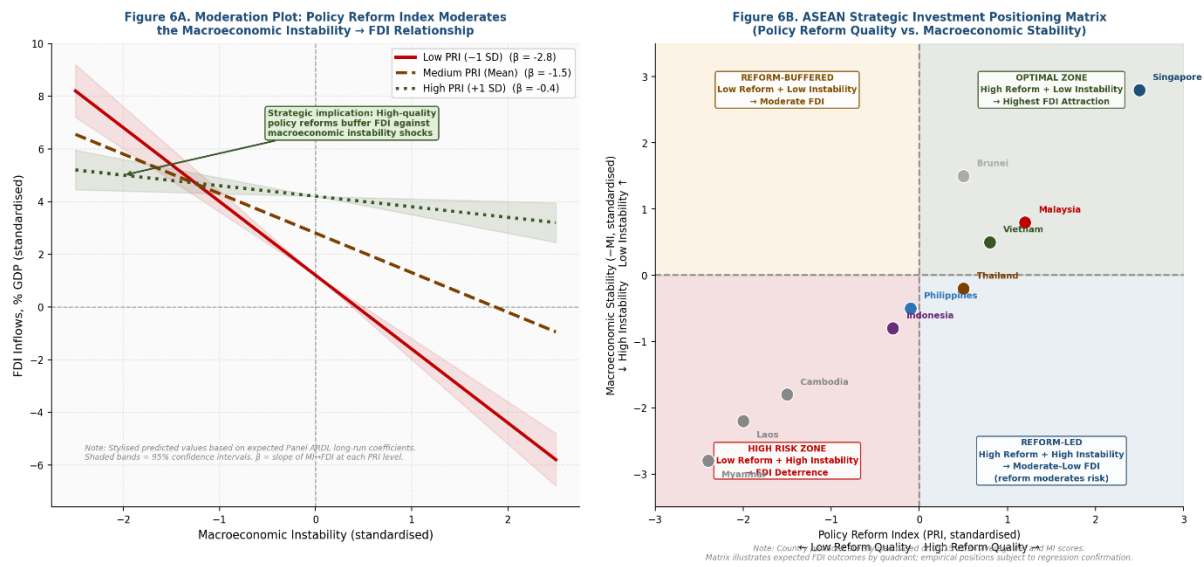


Figure 6: Graphical Representation of Moderation Effect (A) and ASEAN Strategy Positioning Matrix for Investment (B): Policy Reform as Protection Against Risk

Moderation analysis (Figure 6A) shows that the high levels of PRI (one standard deviation above the mean), and the slope of the MI-FDI curve significantly decrease ($\beta_1 + \beta_3 \times \text{PRI} \approx -0.4$ versus $\beta_1 \approx -2.8$ at low PRI). This supports the strategic hypothesis of the study which claims that institutional reform protects FDI flows from macroeconomic instability. According to the strategic positioning matrix (Figure 6B), Singapore and Malaysia belong to the 'Optimal Zone' with the highest reform quality and the lowest instability, while Laos, Cambodia, and Myanmar belong to the 'High Risk Zone'.

Implications for Strategic Management

Implications for Investment Promotion Agencies and Policymakers

The moderation hypothesis that policy reforms reduce the negative effect of macroeconomic instability on FDI flows is a subtle message for investment promotion agencies to be excluded from the study results. In addition, to improve FDI inflows directly through the process of reform (H2), reform of the investment environment also acts as an institutional buffer to protect the FDI inflows from macroeconomic shocks (H3). Therefore, a sequential approach to investment promotion suggests that countries initiate regulatory reforms when the macroeconomic environment is favourable, thereby it creates credibility in advance of the next macroeconomic shock. For ASEAN economies which fall in the 'Reform-Led' quadrant (Figure 6B), namely to those that have high reform quality but high instability, macroeconomic stability

should be pursued as the complementary action that turns reform quality into optimum FDI attraction.

Implications for Financial Managers and MNC Strategy

For the financial manager who is assessing the FDI risk of entering an ASEAN market, the finding of moderation implies that when evaluating risk based on macroeconomic volatility (exchange rate or inflation volatility), the same level of volatility represents lower risk in countries with high PRI index compared to those with low PRI index. The multi-faceted PRI index is a composite indicator of institutional quality which includes regulatory quality, government effectiveness, ease of doing business, economic freedom, and trade liberalisation that enables a broader country risk evaluation than conventional macroeconomic indicators alone. The ASEAN Strategic Positioning Matrix is a convenient instrument to facilitate cross-country stratification of FDI risks.

Regional Policy Implications

Regionally, the results highlight the importance of ASEAN Economic Community's dual-track approach of macroeconomic and institutional policies. Since PRI is composed of the indicators that carry relatively high weights regulatory quality and government effectiveness, the best way to increase the PRI marginally would be targeting these two indicators for capacity building in ASEAN lower-PRI economies (e.g., Laos, Cambodia, Myanmar). Regional tools such as the Chiang Mai Initiative Multilateralization for macroeconomic stability, and the ASEAN Comprehensive Investment Agreement for institutional cooperation, would be the most suitable candidates to make use of the moderation effect discovered in this study.

Conclusion

This study has contributed to the literature on macroeconomic stability and policy reforms as determinants of FDI inflow in Malaysia and ASEAN, emphasising on strategic financial management. The study shows that the quality of institutional reforms moderates the adverse influence of macroeconomic instability on FDI inflows. Hence, the institutional reforms, which have been conventionally considered as a static factor that attracts foreign capital, are now seen as a dynamic financial management strategy in which the utility is fully realized when macroeconomic conditions turn unfavourable.

The three contributions of this study to theory and methodology are discussed below. Firstly, the use of variance in defining macroeconomic instability ensures that the measure reflects the aspect of uncertainty and riskiness, which are emphasized in real option and TCE approaches. Secondly, the PCA-computed PRI offers a simplified but reliable indicator of institutional quality, which eliminates the potential issues with multicollinearity that may arise if multiple governance measures were used simultaneously. Thirdly, the panel ARDL regression technique employed in this study enables estimation of both short-run and long-run models at once, which was a significant gap in the previous literature on ASEAN FDI.

The strategic management implications are clearly discussed. The findings of this study suggest that ASEAN policymakers must focus on institutional reforms when the economy is stable so that they can develop reform credibility, which will cushion the impact of FDI in future shocks. Financial managers should include PRI-adjusted risk assessment into their country risk analysis

of ASEAN countries. Promoting agencies should use their reform plans as risk mitigation strategies while interacting with the international capital market. Future research may use this framework to analyse green and digital FDI inflows in ASEAN countries.

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