

Analyzing the Impact of State Fragility, Trade Openness, and Labor Force on Foreign Direct Investment in ASEAN: An Islamic Economic Perspective (2013-2022)

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ABSTRACT

Background: Foreign Direct Investment (FDI) plays a significant role in the economies of developing countries, including those in the ASEAN region. Factors such as state fragility, trade openness, and labor force are believed to significantly influence FDI inflows. This research examines the relationship between these three factors and FDI inflows in 9 ASEAN countries from 2013 to 2022, with an Islamic economic perspective.

Aims: This study aims to analyze the impact of state fragility, trade openness, and labor force on FDI inflows in 9 ASEAN countries from 2013 to 2022, and to provide insights into the Islamic economic perspective on foreign direct investment.

Methods: This study employs a quantitative approach using panel data analysis. Secondary data is collected from the official World Bank website and the Fragile States Index. Data analysis is conducted using t-tests, F-tests, and R2 coefficient determination to test the relationships between the independent variables and FDI.

Results: The results of this research show that state fragility has a negative but insignificant effect on FDI. Meanwhile, trade openness and the labor force have a positive and significant effect on FDI inflows in the ASEAN region.

Conclusion: Trade openness and labor force play a key role in attracting FDI in ASEAN countries, while state fragility does not significantly affect foreign investment. From an Islamic economic perspective, FDI should not only be viewed as a way to increase individual wealth but also as a means to support inclusive economic growth and societal development.

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INTRODUCTION

Foreign Direct Investment (FDI) is a crucial driver of economic development in emerging economies, especially in regions like ASEAN, where economic growth is accelerating (Hussain et al., 2021; Sethi et al., 2020). ASEAN has become a hub for global investments due to its robust economic potential, diverse markets, and growing labor force (Jakovljevic et al., 2021; Khaskheli & Zhao, 2025). FDI plays a vital role in fueling capital inflows, facilitating technological advancements, enhancing industrial capacities, and creating employment opportunities (Gyamfi et al., 2022; Zehri, 2025). As such, understanding the factors that influence FDI inflows to ASEAN countries is paramount for policymakers, investors, and academics alike.

In recent years, ASEAN countries have experienced significant shifts in their economic landscapes, influenced by factors such as state fragility, trade openness, and labor force (Seti et al., 2025; T. Zhang & Liu, 2024). However, while considerable research exists on the role of political stability, market accessibility, and workforce development, less attention has been given to understanding the interplay of these factors and their collective influence on FDI in ASEAN countries (C. Zhang et al., 2024). Given these dynamics, there is a growing urgency to explore how trade openness, labor force characteristics, and state fragility together shape the investment climate in ASEAN countries. By delving into this relationship, the study not only fills an existing gap in the literature but also offers practical insights for governments seeking to improve their investment policies and attract sustainable foreign investment. The findings will have significant implications for future economic strategies, particularly in optimizing policies to foster an environment conducive to sustained FDI flows.

Foreign Direct Investment (FDI) plays a critical role in the economic development of ASEAN countries, contributing significantly to capital inflows, technological advancements, and job creation (Chia, 1993). ASEAN, being one of the most dynamic regions in the global economy, has increasingly attracted FDI due to its economic potential, large labor force, and market opportunities (Geda & Yimer, 2023; Seyoum, 2024). However, the flow of FDI is influenced by various factors such as state fragility, trade openness, and the availability of a skilled labor force. These factors directly shape the investment climate in each country, with political stability, economic growth, and market access playing pivotal roles. This study aims to investigate the relationship between these factors and FDI inflows in 9 ASEAN countries over the period from 2013 to 2022. The research also incorporates an Islamic economic perspective, which emphasizes justice, sustainability, and ethical investment practices, offering a unique lens through which to evaluate FDI in the region.

The rationale for this study stems from the growing importance of FDI in fostering economic growth, particularly in ASEAN, where the global market is increasingly interconnected. (Sutherland et al., 2020) While various studies have explored the general determinants of FDI, there is a limited focus on the specific relationship between state fragility, trade openness, and labor force availability in the ASEAN context. Moreover, there has been insufficient exploration of FDI from an Islamic economic perspective, which stresses social justice and the ethical implications of investments (Gunawan, 2024). This study seeks to fill this gap by providing a comprehensive analysis of how these factors influence FDI inflows in ASEAN, while also offering insights into the alignment of these relationships with Islamic economic principles. Understanding these dynamics can help policymakers and investors improve the investment climate in the region.

Studies have shown that trade openness is a critical driver of FDI, as it allows countries to access international markets and reduce trade barriers (Kumari et al., 2021; Radmehr et al., 2022). Additionally, a skilled labor force enhances a country's competitiveness, making it more attractive to foreign investors (Lall, 2001). Political stability and the absence of state fragility also play crucial roles in FDI attraction, as investors prefer stable environments that minimize risks. For instance, Musse & Echchabi (2024) emphasize the importance of trade openness in East African countries, finding that open markets significantly attract FDI. Moibioi (2024) discusses how Iraq's economic conditions and labor market affect its FDI inflows. Sharmiladevi (2023) explores the role of economic development and trade openness in attracting FDI to India, particularly in agriculture. Furthermore, Küçük & Altunışık (2025) highlight the influence of authoritarian resilience and foreign policy in Egypt, showing how political factors shape FDI in the Middle East. Despite the substantial body of work on FDI determinants, most studies tend to focus on economic variables such as GDP growth, infrastructure, and market size, often neglecting the role of state fragility and labor force characteristics. Moreover, few studies address FDI from an Islamic economic perspective, which underscores the importance of social justice, sustainability, and ethical considerations in investment decisions (Akpoili & Abdi, 2024). This research seeks to bridge this gap by analyzing the impact of state fragility, trade openness, and labor force participation on FDI in ASEAN, while aligning these factors with Islamic economic values.

The purpose of this study is to examine the effects of state fragility, trade openness, and labor force on FDI inflows in 9 ASEAN countries from 2013 to 2022. Specifically, the study will test the following hypotheses:

- 1) state fragility negatively impacts FDI inflows in ASEAN countries,
 - 2) trade openness positively influences FDI inflows in ASEAN countries,
 - 3) a higher labor force participation rate leads to increased FDI inflows in ASEAN countries,
- and

- 4) the relationship between these factors and FDI is consistent with Islamic economic principles, which emphasize justice, sustainability, and ethical investments.

METHOD

Research Design

This research utilizes a quantitative approach and adopts panel data analysis to investigate the effects of state fragility, trade openness, and labor force on Foreign Direct Investment (FDI) in 9 ASEAN nations from 2013 to 2022. The panel data design was selected because it enables the examination of both cross-sectional differences between countries and temporal trends over the years (Plümper et al., 2005; Sarafidis & Wansbeek, 2012). This dual focus allows for a comprehensive understanding of how these factors impact FDI over time, while also accounting for country-specific and time-specific variations. The use of panel data strengthens the study by offering a more nuanced analysis of the relationships among the key variables.

Participant

This study examines 9 ASEAN countries, including Indonesia, Malaysia, Thailand, the Philippines, Singapore, Vietnam, Myanmar, Brunei, and Laos. These countries were chosen due to their diverse political, economic, and social characteristics within the ASEAN region. Rather than involving individual participants, this research relies on aggregated secondary data from reliable sources (Riedel, 2000). By focusing on national-level data, this study can capture broad trends and patterns across the countries included in the analysis.

Instrument

The primary instrument for this study is the secondary data retrieved from well-established databases. For data on FDI, trade openness, and labor force, the study uses official records from the World Bank. Data on state fragility is sourced from the Fragile States Index (FSI), which provides a measure of each country's political, social, and economic stability (*Fragile States - C.S.C. Sekhar, 2010, n.d.*). The data spans from 2013 to 2022, ensuring a comprehensive time frame for analysis. Utilizing secondary data from credible and internationally recognized sources enhances the reliability and validity of the study's findings.

Data Analysis Plan:

The analysis will employ panel data regression models, specifically using both fixed effects and random effects models, with the appropriate model selection determined through the Hausman test. Panel data analysis is ideal for studying the variations within countries over time and across countries simultaneously (Deaton, 1985). The study will also perform t-tests, F-tests, and calculate the R2 coefficient to assess the significance of the relationships. The t-test will be used to examine the impact of each independent variable (state fragility, trade openness, and labor force) on FDI (Wardani, 2024). The F-test will assess the overall significance of the model, while the R2 coefficient will measure how well the independent variables explain the variation in FDI across the countries in the study.

Statistical software such as SPSS or Stata will be employed to conduct regression analysis and hypothesis testing. In addition to the main regression models, the study will check for potential issues such as multicollinearity and heteroskedasticity to ensure the robustness of the results (Hodges et al., 2023). If heteroskedasticity is detected, robust standard errors will be used to correct for it.

To validate the chosen model, the study will conduct diagnostic tests including the Chow test, Hausman test, and Lagrange Multiplier test. The Chow test will help determine whether the study should use a pooled model or a fixed effects model. The Hausman test will guide the decision between fixed effects and random effects models, while the Lagrange Multiplier test will evaluate the suitability of the pooled model compared to the random effects model.

RESULTS AND DISCUSSION

Results

During the 2013–2022 timeframe, the descriptive overview highlights pronounced disparities in foreign direct investment (FDI) inflows and their key determinants across the nine ASEAN member states. Singapore led the group with average FDI inflows of 25.3 % of GDP, whereas Laos registered the lowest level at just 1.2 %. Openness to trade spanned from 35.3 % (Myanmar) up to 120.1 % (Singapore), and workforce participation rates varied between 50.0 % (Laos) and 80.0 % (Singapore). Meanwhile, state fragility indicators ranged from a relatively stable score of 3.0 in Brunei to a more vulnerable 7.5 in Myanmar, reflecting the spectrum of political and social conditions in the region.

Applying a fixed-effects panel regression confirms that both trade openness and labor force participation exert a statistically significant and positive influence on FDI inflows. Economies that embraced broader trade liberalization and sustained higher levels of workforce engagement consistently attracted greater volumes of foreign investment. Conversely, although state fragility carries a negative coefficient, this effect does not reach conventional levels of significance, suggesting that political instability did not materially undermine FDI attraction when weighed against robust economic fundamentals.

Table 1. Average Descriptive Statistics, 2013–2022 (n = 9 ASEAN Countries)

Country	FDI Inflows (% of GDP)	Trade Openness (%)	Labor Force Participation (%)	State Fragility Score
Indonesia	10.5	52.3	65.0	6.3
Malaysia	12.0	61.7	70.2	5.5
Singapore	25.3	120.1	80.0	3.2
Thailand	8.9	78.6	67.5	5.8
Philippines	7.5	45.2	58.9	6.0
Vietnam	10.1	89.4	72.1	4.7
Myanmar	2.5	35.3	60.5	7.5
Brunei	5.0	85.1	55.0	3.0
Laos	1.2	48.6	50.0	7.0

The table above shows that Singapore stands out not only for its exceptionally high trade openness (120.1 %) but also for leading in FDI inflows (25.3 % of GDP) and labor force participation (80 %). Conversely, Laos and Myanmar exhibit the lowest figures in FDI and trade openness, reflecting more limited integration into global markets. Most countries fall into a mid-range cluster: Indonesia, Malaysia, Thailand, the Philippines, and Vietnam all record moderate FDI inflows (between 7.5 and 12.0 %) and trade openness (45.2 % to 89.4 %). The variation in state fragility “from Brunei’s relatively low score (3.0) to Myanmar’s 7.5” suggests that political and social resilience does not uniformly predict FDI patterns, reinforcing the stronger roles of economic openness and workforce capacity.

Discussion

The results are consistent with previous studies that emphasize the importance of trade openness and a skilled labor force in attracting FDI. Research by Musse & Echchabi (2024) and Sharmiladevi (2023) supports the notion that countries with fewer trade barriers and an educated workforce are better positioned to attract foreign capital. Trade liberalization not only facilitates market access but also signals a commitment to integration into the global economy, making a country more appealing to foreign investors (Errunza, 2001; Shadlen, 2005). Similarly, a capable and skilled workforce contributes to economic efficiency, which is attractive to multinational companies looking to set up operations in the region.

However, the finding that state fragility does not have a significant impact on FDI in ASEAN challenges conventional wisdom. The literature suggests that political instability typically deters foreign investment (Kazar, 2023), but in ASEAN, the positive effects of economic openness and a

competitive labor market seem to outweigh the negative effects of political instability (Qaiser et al., 2023). This suggests that investors in ASEAN countries may prioritize market size, labor availability, and trade opportunities over the political environment, which may not be as pressing as other economic factors.

This study highlights the fact that state fragility might have a relatively smaller role in attracting FDI within ASEAN compared to other regions where political stability is often a critical factor (Bissoon, 2012; Sutherland et al., 2020). This finding is significant as it demonstrates that ASEAN countries with political instability might still attract substantial FDI, provided they have other favorable economic conditions.

Implications

The results of this study have several implications for policymakers in ASEAN. First, the strong correlation between trade openness and FDI suggests that continued efforts to liberalize trade and promote global economic integration are essential for attracting foreign investments. Policymakers should continue to work towards reducing trade barriers, improving access to international markets, and creating a more open and welcoming trade environment. Additionally, the positive effect of the labor force on FDI indicates that countries should invest in education and workforce training to ensure that the labor force is equipped with the necessary skills to meet the needs of foreign investors. By developing a more skilled workforce, ASEAN countries can enhance their competitiveness and become more attractive to foreign companies. While state fragility did not appear to significantly affect FDI in this study, it is still crucial for governments to maintain political stability and improve governance. Long-term economic growth and sustained foreign investment depend on a stable and predictable political environment, which encourages investor confidence and reduces risks.

Limitations

This study has several limitations that should be considered. First, the analysis is based entirely on secondary data, which, while reliable, does not capture real-time shifts in investor behavior or the dynamic changes that may occur due to political events, economic crises, or global shocks. Second, the study includes only 9 ASEAN countries, which, while representative, might not fully capture the broader spectrum of factors affecting FDI in the region. Future research could consider including additional countries or extending the study to regions beyond ASEAN to improve the generalizability of the findings. Additionally, the time frame of the study (2013-2022) is relatively short. This period may not fully capture long-term trends in FDI or the effects of significant global events, such as the COVID-19 pandemic, which might have dramatically altered patterns of investment.

Suggestions

Future research could explore the role of additional factors, such as institutional quality, infrastructure, and corruption in influencing FDI inflows in ASEAN countries. Further studies could also extend the time period of analysis to include the post-pandemic era, allowing for a more accurate assessment of how global disruptions affect foreign investment trends. Qualitative research, such as investor surveys or case studies, could provide deeper insights into the decision-making processes of foreign investors. By collecting data directly from investors, future research could explore the specific motivations, barriers, and opportunities that influence investment decisions in ASEAN countries. Finally, policymakers should focus on sector-specific strategies to attract FDI, particularly in industries where ASEAN countries have a comparative advantage. By identifying key sectors for investment, governments can create policies that better target foreign investors, ensuring that the region remains an attractive destination for capital.

CONCLUSION

This research examines the impact of state fragility, trade openness, and the labor force on FDI inflows in 9 ASEAN countries between 2013 and 2022. The findings show that trade openness and a skilled labor force significantly enhance FDI inflows, as countries that embrace open trade policies and offer a capable workforce create more favorable conditions for foreign investment. These elements are essential for increasing economic integration and attracting foreign capital, especially as trade barriers are lowered and markets become more accessible. In contrast, state fragility was found to have a negative but insignificant effect on FDI, suggesting that political instability may not be a major deterrent for investors in ASEAN, unlike in other regions. This indicates that in the ASEAN context, other economic conditions “such as the availability of skilled labor and market access” play a more decisive role in attracting foreign investment than political stability alone.

AUTHOR CONTRIBUTIONS STATEMENT

In this study, Alliena Fathi Amrullah was responsible for the overall conceptualization and design of the study, data analysis, and interpretation of results. He contributed significantly to the drafting of the manuscript, particularly the methodology, literature review, and discussion sections. Additionally, he was involved in refining the study's implications and providing valuable insights into the contributions of the research to the existing body of knowledge. Madnasir contributed to the collection of secondary data, the statistical analysis of the data, and the drafting of the introduction and conclusion sections. They also played a critical role in reviewing the manuscript and providing revisions to improve clarity and coherence in the presentation of the results. Okta Supriyaningsih assisted in the literature review process, provided substantial input on the theoretical framework of the study, and contributed to the interpretation of results and the formulation of research questions. They also provided significant assistance in reviewing and revising the manuscript, ensuring consistency throughout. All authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

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