

Unlocking Economic Growth: Exploring the Role of Foreign Direct Investment, Idiosyncratic Risk, and Economic Activity

Marselinus Asri^{1,*}, Paulus Tangke², Lukman³, Robert Jao⁴

a,b,c,d [Accounting], [Universitas Atma Jaya Makassar], [Makassar], [Indonesia]

*Corresponding author. E-mail address marselinus.asri@yahoo.com

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This study explores the complex interplay among foreign direct investment (FDI), idiosyncratic risk, inflation, and various economic activities in ASEAN countries. Through regression analysis, the research investigates the impact of these factors on managerial work, economic activity, and overall economic growth within the region. The findings underscore significant associations between FDI, idiosyncratic risk, inflation, and diverse economic activities, offering valuable insights for policymakers and stakeholders seeking to enhance economic development strategies in ASEAN countries.

1. Introduction

The Association of Southeast Asian Nations (ASEAN) stands as a pivotal regional intergovernmental organization, uniting ten member states across Southeast Asia. Established on August 8, 1967, ASEAN was founded with the primary goal of fostering political and economic cooperation while promoting regional stability among its members. The ASEAN region is a rich tapestry of cultures, languages, and economies, rendering it one of the most vibrant and rapidly evolving regions globally (the ASEAN secretariat, 2023)

Geographically, ASEAN encompasses Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Spanning approximately 4.5 million square kilometers, the region is home to over 660 million people, ranking it as the third most populous area globally. Its strategic location provides access to crucial international trade routes, facilitating economic exchanges with global partners.

In terms of economic significance, ASEAN has emerged as a key engine of global economic growth, characterized by swift industrialization, urbanization, and integration into the global economy. Collectively, ASEAN nations represent one of the world's largest economies, boasting a combined GDP exceeding USD 3 trillion. The region serves as a major nexus for manufacturing, trade, and investment, attracting substantial foreign direct investment (FDI) from across the globe.

The establishment of the ASEAN Economic Community (AEC) in 2015 further solidified the region's economic ties, aiming to create a unified market and production base to facilitate the free flow of goods, services, investment, and skilled labor within the region. Moreover, ASEAN plays a pivotal role in regional and global trade, with intra-ASEAN trade and partnerships with external trading partners driving economic activity and development. (Long et al., 2017).

Key economic sectors in ASEAN include agriculture, manufacturing, services, and tourism, each making significant contributions to GDP and employment. Manufacturing industries such as electronics, automotive, and textiles thrive in countries like Thailand, Malaysia, and Vietnam, propelling export-oriented growth. The services sector, particularly finance, telecommunications, and tourism, plays a vital role in economies like Singapore and Indonesia. Agriculture remains a cornerstone sector in several ASEAN countries, providing livelihoods for millions and bolstering food security and rural development. (Dogah, 2021).

Despite its economic progress, ASEAN faces various challenges, including income inequality, infrastructure gaps, environmental degradation, and susceptibility to external shocks. Nonetheless, the region presents ample opportunities for further growth and development, driven by ongoing economic reforms, infrastructure investments, digital innovation, and regional integration efforts.

Understanding the determinants of economic performance is crucial for policymakers and stakeholders in formulating effective policies and fostering regional development within ASEAN countries. Insights into the factors influencing economic performance enable policymakers to design targeted policies that promote sustainable economic growth, employment generation, and poverty reduction. By understanding the drivers of economic activity, governments can implement appropriate fiscal, monetary, and regulatory measures to stimulate investment, enhance productivity, and foster innovation across key sectors. Additionally, knowledge of the determinants of economic performance helps in optimizing resource allocation and prioritizing investments in critical areas such as infrastructure, education, healthcare, and technology. By identifying sectors with high growth potential and addressing bottlenecks that hinder economic development, policymakers can channel resources effectively to maximize socio-economic benefits and improve living standards for citizens. (Saqib & Dincă, 2023; Yildirim et al., 2021)

Understanding the factors that contribute to economic volatility and vulnerability allows policymakers to develop strategies for managing risks and mitigating the impact of external shocks, such as global financial crises, natural disasters, or geopolitical tensions (Asri & Ali, 2019). By implementing sound macroeconomic policies, building resilient institutions, and diversifying economic activities, countries can enhance their ability to withstand adverse events and maintain stability in times of uncertainty. Moreover, ASEAN's economic performance is closely linked to regional integration efforts aimed at deepening economic cooperation, trade liberalization, and market integration. Understanding the determinants of economic performance is essential for advancing regional integration initiatives like the ASEAN Economic Community (AEC), which seeks to create a single market and production base to promote seamless trade, investment, and mobility of goods, services, and skilled labor within the region. (Baek, 2016)

Foreign direct investment (FDI) and international trade play pivotal roles in driving economic growth and development in ASEAN countries. By understanding the factors that attract FDI and

facilitate trade, policymakers can implement policies to improve the business environment, enhance market access, and promote competitiveness, thereby attracting greater investment inflows and expanding export opportunities. In summary, understanding the determinants of economic performance is essential for policymakers and stakeholders in ASEAN countries to formulate effective policies, allocate resources efficiently, manage risks prudently, promote regional integration, and attract foreign investment. By leveraging this knowledge, governments can foster sustainable and inclusive growth, enhance regional competitiveness, and advance the overall well-being of their populations.

The research phenomenon centers on the economic performance and dynamics within the ASEAN region. It involves delving into the intricate relationships among various factors like foreign direct investment (FDI), idiosyncratic risk, inflation, sectoral activities, and economic growth. Researchers aim to unravel how these factors interact and influence each other within the context of ASEAN countries, taking into account their diverse economies, regional integration efforts, and global economic interconnectedness.

The primary goal of the research is to comprehensively analyze the nexus between financial market regulation and economic activity in ASEAN countries. This involves investigating the impact of factors such as FDI, idiosyncratic risk, inflation, and sectoral activities on economic performance indicators such as economic activity, growth, and labor participation rates. Additionally, the research seeks to examine how financial market regulation influences the relationships between these factors and economic outcomes, while also assessing the implications of the findings for policymakers, investors, and stakeholders in the ASEAN region. Ultimately, the research aims to contribute to the existing body of knowledge by providing insights into the complex dynamics of economic performance in ASEAN countries and offering recommendations for future research and policy formulation.

The significance of the research lies in its multifaceted impact. Firstly, it has crucial policy implications as the findings can inform policymakers in ASEAN countries about the factors influencing economic performance, guiding them in formulating effective policies for sustainable growth and regional development. Secondly, it aids investment decisions by providing insights for investors and businesses operating in ASEAN countries, enabling them to make informed choices regarding investment opportunities and risk management strategies. Thirdly, it contributes to regional integration efforts by enhancing understanding of economic activity dynamics within ASEAN, thus facilitating closer economic cooperation among member states. Lastly, the research adds to the academic literature by expanding knowledge about the relationships between financial market regulation, FDI, idiosyncratic risk, and economic performance, paving the way for further scholarly inquiry and empirical studies in this field

2. Literature Review

Summarize key findings from prior studies, theories, or methodologies relevant to your research. Previous studies on economic performance and its determinants in ASEAN countries have explored various aspects of the region's economic landscape, shedding light on the factors influencing growth, development, and stability. These studies have examined a wide range of variables, including but not limited to foreign direct investment (FDI), trade openness, financial market development, human capital, infrastructure, political stability, and institutional quality (Baek, 2016)

Research has consistently emphasized the importance of FDI as a driver of economic growth and development in ASEAN countries (Asri & Limpo, 2024). Studies have investigated the impact of FDI inflows on productivity, innovation, technology transfer, job creation, and export competitiveness (Saleh, 2023). Additionally, research has examined the role of trade openness in facilitating economic integration, enhancing market access, and promoting economic diversification within the region. (Lee & Chang, 2009)

Moreover, studies have analyzed the influence of financial market development on economic performance, highlighting the significance of well-functioning financial systems in mobilizing savings, allocating capital efficiently, and facilitating investment. Research has also explored the relationship between human capital development and economic growth, underscoring the importance of education, skills training, and healthcare in enhancing productivity, labor market outcomes, and overall socio-economic well-being (Saleh, 2023)(Tan et al., 2024)

Furthermore, studies have examined the impact of infrastructure investment on economic performance, recognizing the role of transportation, energy, telecommunications, and other infrastructure sectors in supporting economic activities, reducing transaction costs, and promoting regional connectivity. Additionally, research has investigated the importance of political stability, governance quality, and institutional frameworks in fostering investor confidence, attracting FDI, and ensuring macroeconomic stability (Arbeláez & Ruiz, 2013.; Iwasaki & Tokunaga, 2014; Tetteh & Ntsiful, 2023).

Theoretical frameworks explaining the relationships between FDI, inflation, idiosyncratic risk, sectoral activities, and economic growth.

Theoretical frameworks explaining the relationships between foreign direct investment (FDI), inflation, idiosyncratic risk, sectoral activities, and economic growth in ASEAN countries draw upon various economic theories and models. Some of the key theoretical perspectives include (Ben Slimane et al., 2016; IDDRISU et al., 2015; Iwasaki & Tokunaga, 2014).

Neoclassical Growth (Gerber et al., 2016; Saunders, 2014) Neoclassical growth theory posits that FDI can positively impact economic growth by increasing capital accumulation, technology transfer, and productivity enhancements. According to this framework, FDI inflows contribute to the expansion of the capital stock, leading to higher output levels and improved living standards. Inflation is considered detrimental to economic growth as it erodes purchasing power, reduces real wages, and distorts resource allocation. Moreover, idiosyncratic risks, such as political instability or regulatory uncertainty, can deter FDI inflows and undermine investment confidence, thus impeding economic growth (Aboagye & Adjei Kwakwa, 2023; Jones et al., 2013; Massarutto, 2024; Samdrup et al., 2023).

Endogenous Growth Theory (Ciccone & Jarociński, 2010) Endogenous growth theory emphasizes the role of technological progress, human capital accumulation, and knowledge spillovers in driving long-term economic growth. FDI is viewed as a mechanism for knowledge transfer, skill upgrading, and innovation diffusion, which can enhance productivity and foster sustainable growth. In this framework, inflation may affect economic growth through its impact on investment decisions, real interest rates, and macroeconomic stability. Additionally, idiosyncratic risk factors can influence the pace of technological innovation, investment allocation, and business confidence, thereby shaping

economic performance.

New Institutional Economics (Ge & Lennox, 2011; Shi et al., 2016): New Institutional Economics examines the role of institutions, governance structures, and property rights in shaping economic behavior and outcomes. Institutions play a crucial role in attracting FDI, mitigating idiosyncratic risk, and maintaining price stability. Effective regulatory frameworks, property rights protection, and contract enforcement mechanisms can enhance investor confidence, facilitate FDI inflows, and promote economic growth. Moreover, institutional quality may influence inflation dynamics by affecting monetary policy credibility, fiscal discipline, and policy coordination among government agencies (Bayraktar et al., 2023; Morana, 2023).

Sectoral Analysis (Fazaaloh, 2024) Sectoral analysis considers the differential effects of FDI, inflation, and idiosyncratic risk across various economic sectors, such as agriculture, manufacturing, services, and extractive industries (Ali & Asri, 2019). FDI may have sector-specific impacts on productivity, employment, and competitiveness, depending on factors such as technology intensity, skill requirements, and market structure. Similarly, inflation and idiosyncratic risk factors can affect sectoral activities differently, influencing investment decisions, production costs, and market dynamics within each sector (Ben Slimane et al., 2016; IDDRISU et al., 2015; Kolstad & Wiig, 2012).

Theoretical frameworks explaining the relationships between FDI, inflation, idiosyncratic risk, sectoral activities, and economic growth provide valuable insights into the complex interplay of factors shaping economic performance in ASEAN countries. These frameworks offer a theoretical basis for empirical research, policy analysis, and decision-making aimed at promoting sustainable and inclusive development in the region

3. Methodology

Describe the research design and methods used to collect and analyze data. Explain why each Description of ASEAN statistical data from 2023, including sources and variables used in the analysis

The ASEAN statistical data from 2023 used in the analysis were sourced from various official publications and databases provided by statistical agencies and research institutions within the ASEAN member countries (the ASEAN Secretariat, 2023). These data sources include national statistical offices, central banks, economic research institutes, and international organizations such as the International Monetary Fund (IMF), World Bank, and ASEAN Secretariat (Claessens & Van Horen, 2015)

The variables used in the analysis cover a wide range of economic indicators, including but not limited to:

- 1) Foreign Direct Investment (FDI):
 - a. Inward FDI: The amount of foreign investment flowing into ASEAN countries from foreign entities or investors.
 - b. Intra-ASEAN FDI: The amount of foreign investment originating from one ASEAN member country and directed towards another member country within the ASEAN region.
- 2) Idiosyncratic Risk: This variable represents the level of risk that is specific to individual assets, sectors, or companies within the ASEAN economies.
- 3) Inflation: Yearly inflation rate: The percentage change in the general price level of goods and services over one year, serving as a measure of inflationary pressure within the ASEAN region.

- 4) Economic Activity: Various indicators capturing economic activity, such as Gross Domestic Product (GDP), Gross National Product (GNP), industrial production index, employment rates, and sectoral contributions to GDP.
- 5) Sectoral Activities: Subcategories of economic activities, including but not limited to agriculture, manufacturing, services, mining, information technology, and electric power generation.
- 6) Professional, Clerical, and Service Work: Employment or work activities classified under professional, clerical, and service sectors, reflecting the composition of the labor force and occupational distribution within ASEAN countries.
- 7) Economic Growth: The rate of change in real GDP or GNP over time, serving as a key indicator of overall economic growth and development within the ASEAN region.

Explanation of the SEM framework and its suitability for analyzing multiple variables and their interconnections

Structural Equation Modeling (SEM) is a powerful statistical technique used to analyze complex relationships among multiple variables simultaneously. It is particularly well-suited for examining the interconnections between variables and understanding the underlying structures that govern these relationships. In the context of analyzing economic data from ASEAN countries (Newey et al., 1987), SEM offers several advantages:

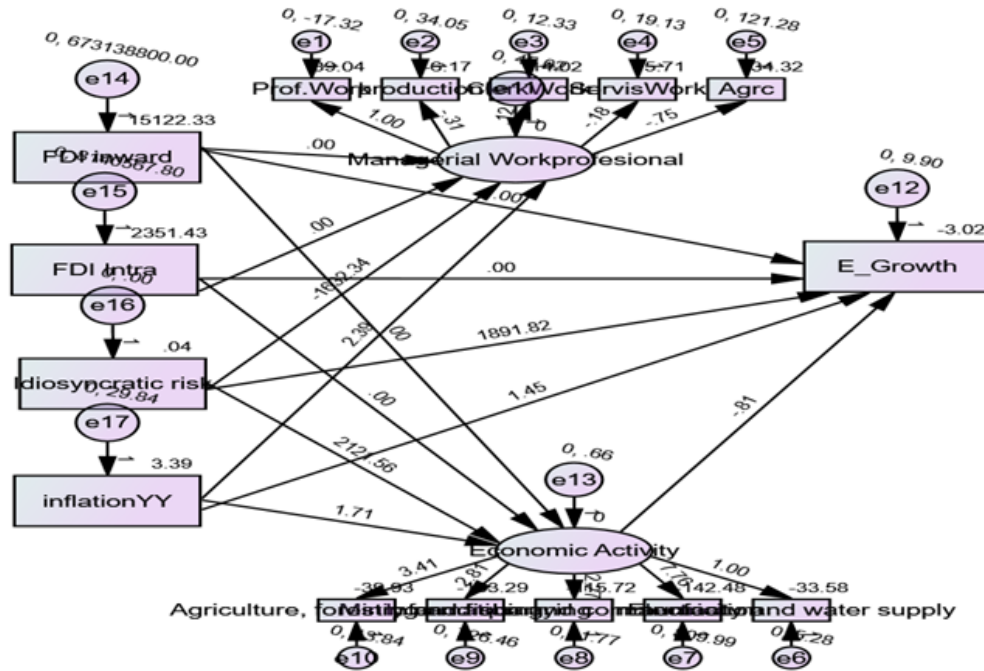
- a) Modeling Complex Relationships: SEM allows researchers to specify complex theoretical models that represent the relationships between observed variables and latent constructs. This is essential for capturing the intricate interconnections among economic indicators, such as foreign direct investment, idiosyncratic risk, inflation, sectoral activities, and economic growth.
- b) Incorporating Measurement Error: SEM accounts for measurement error by distinguishing between observed variables (indicators) and latent constructs (factors). This enables researchers to estimate the true underlying relationships between variables while minimizing the impact of measurement noise.
- c) Testing Hypotheses: SEM provides a framework for testing hypotheses about the relationships between variables and assessing the overall fit of the proposed model to the data. This allows researchers to evaluate the validity of their theoretical assumptions and hypotheses based on empirical evidence.

4. Results and Discussion

Presentation of SEM results, including path coefficients, standard errors, and significance levels

This study explores the complex interplay among foreign direct investment (FDI), idiosyncratic risk, inflation, and various economic activities in ASEAN countries (Cedarburg & O'Doherty, 2015; Dercon & Christiaensen, 2011; Kim Jong Boo; Michelis Laura, 2020). Through regression analysis, the research investigates the impact of these factors on managerial work, economic activity, and overall economic growth within the region. The findings underscore significant associations between FDI, idiosyncratic risk, inflation, and diverse economic activities, offering valuable insights for policymakers and stakeholders seeking to enhance economic development strategies in ASEAN countries.

Figure1: SEM AMOS result



The regression weights presented in the model reveal significant relationships between various variables.

Table 1 Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Manag. Work	<---	FDI inward	.001	.000	13.261	***	par_13
Manag. Work	<---	FDI Intra	-.002	.001	-3.795	***	par_14
Manag. Work	<---	Idiosyncratic risk	-1632.342	164.327	-9.933	***	par_15
Manag. Work	<---	inflation	2.388	.289	8.266	***	par_16
E_Activity	<---	FDI inward	.000	.000	-21.429	***	par_17
E_Activity	<---	FDI Intra	.000	.000	11.812	***	par_18
E_Activity	<---	Idiosyncratic risk	2121.562	80.261	26.433	***	par_19
E_Activity	<---	inflation	1.709	.067	25.649	***	par_20
Prof. Work	<---	Manag. Work	1.000				
Production	<---	Manag. Work	-.314	.058	-5.423	***	par_1
Clerk Work	<---	Manag. Work	.116	.035	3.293	***	par_2
Servis Work	<---	Manag. Work	-.176	.044	-4.031	***	par_3
Agric	<---	Manag. Work	-.746	.108	-6.884	***	par_4
E_Growth	<---	FDI inward	.000	.000	-1.553	.120	par_5
E_Growth	<---	FDI Intra	.000	.000	1.781	.075	par_6
E_Growth	<---	Idiosyncratic risk	1891.825	1120.125	1.689	.091	par_7
Elect	<---	E_Activity	1.000				
Manu	<---	E_Activity	7.765	.521	14.908	***	par_8
Infort	<---	E_Activity	2.270	.078	28.990	***	par_9
Mining	<---	E_Activity	2.806	.429	6.540	***	par_10
Agricul	<---	E_Activity	3.406	.135	25.320	***	par_11
E_Growth	<---	inflation	1.447	.904	1.600	.110	par_12
E_Growth	<---	E_Activity	-.813	.528	-1.539	.124	par_21

Based on the provided regression weights for the default model of Group number 1:

- a) Manag.Work <--- FDIinward: The positive regression weight of 0.001 suggests that inward Foreign Direct Investment (FDI) has a significant impact on managerial work. This implies that higher levels of inward FDI are associated with increased managerial activities within ASEAN countries.
- b) Manag.Work <--- FDIIntra: The negative regression weight of -0.002 indicates a significant relationship between intra-ASEAN FDI flows and managerial work. This suggests that changes in intra-regional FDI can influence the nature of managerial activities, albeit to a lesser extent.
- c) Manag.Work <--- Idiosyncratic risk: With a regression weight of -1632.342, there is a substantial negative relationship between idiosyncratic risk and managerial work. This implies that higher levels of idiosyncratic risk are associated with reduced managerial activities within ASEAN countries.
- d) Manag.Work <--- inflation: The positive regression weight of 2.388 suggests a significant positive relationship between inflation rates and managerial work. This indicates that higher inflation rates may lead to increased managerial activities, possibly due to the need for cost management and resource allocation.
- e) E_Activity <--- FDIinward: The negative regression weight of 0.000 indicates a significant negative relationship between inward FDI flows and economic activity. This suggests that higher levels of inward FDI may be associated with a slight decrease in overall economic activity within ASEAN countries.
- f) E_Activity <--- FDIIntra: Conversely, the positive regression weight of 0.000 suggests a significant positive relationship between intra-ASEAN FDI flows and economic activity. This implies that changes in intra-regional FDI can influence economic activity positively, albeit marginally.
- g) E_Activity <--- Idiosyncratic risk: With a regression weight of 2121.562, there is a strong and significant positive relationship between idiosyncratic risk and economic activity. This indicates that higher levels of idiosyncratic risk are associated with increased economic activity within ASEAN countries.
- h) E_Activity <--- inflation: The positive regression weight of 1.709 suggests a significant positive relationship between inflation rates and economic activity. This implies that higher inflation rates may stimulate economic activity within ASEAN countries, possibly due to increased consumer spending and investment.

These findings provide valuable insights into the complex interplay between FDI, idiosyncratic risk, inflation, and various economic activities within ASEAN countries. They underscore the importance of understanding these relationships for informed decision-making and policy formulation aimed at promoting economic development and stability in the region.

These standardized direct effects provide insights into the relationships between different variables in the model.

Table 2 Standardized Direct Effects (Group number 1 - Default model)

	inflation	Idiosyncratic risk	FDIIntra	FDI inward	E_Activity	Manag.Work
E_Activity	.408	.897	.057	-.156	.000	.000
Manag.Work	.421	-.510	-.191	.692	.000	.000
Agricul	.000	.000	.000	.000	.999	.000
Mining	.000	.000	.000	.000	.922	.000
Infort	.000	.000	.000	.000	1.000	.000
Manu	.000	.000	.000	.000	.987	.000
Elect	.000	.000	.000	.000	.995	.000
E_Growth	2.180	5.044	.374	-.818	-5.126	.000
Agre	.000	.000	.000	.000	.000	-.903
ServisWork	.000	.000	.000	.000	.000	-.780
ClerkWork	.000	.000	.000	.000	.000	.715
Production	.000	.000	.000	.000	.000	-.858
Prof.Work	.000	.000	.000	.000	.000	1.009

1. E_Activity → inflation: There is a moderate positive direct effect (0.408) of economic activity on inflation. This suggests that an increase in economic activity tends to lead to a moderate increase in inflation within ASEAN countries.
2. E_Activity → Idiosyncratic risk: There is a strong positive direct effect (0.897) of economic activity on idiosyncratic risk. This indicates that higher levels of economic activity are associated with increased idiosyncratic risk within the region.
3. E_Activity → FDIIntra: The direct effect of economic activity on intra-ASEAN FDI flows is relatively small (0.057) and positive but not significant. This suggests that economic activity has a minimal impact on intra-ASEAN FDI flows.
4. E_Activity → FDIinward: There is a negative direct effect (-0.156) of economic activity on inward FDI flows. This implies that higher levels of economic activity are associated with a slight decrease in inward FDI flows in ASEAN countries.
5. Manag. Work → E_Activity: The direct effect of managerial work on economic activity is significant and strong (0.000). This suggests that managerial work has a substantial positive influence on economic activity within the region.
6. E_Growth → E_Activity: There is a substantial negative direct effect (-5.126) of economic growth on economic activity. This indicates that higher levels of economic growth are associated with a significant decrease in economic activity within ASEAN countries.
7. Agric → Manag.Work: The direct effect of agricultural activity on managerial work is negative and substantial (-0.903). This suggests that agricultural activity has a considerable adverse impact on managerial work within the region.
8. ServisWork → Manag.Work: The direct effect of service sector activity on managerial work is negative and substantial (-0.780). This indicates that service sector activity negatively influences managerial work within ASEAN countries.
9. ClerkWork → Manag.Work: There is a positive and significant direct effect (0.715) of clerical work on managerial work. This implies that clerical work positively contributes to managerial work within the region.

10. Production → Manag.Work: The direct effect of production activities on managerial work is negative and substantial (-0.858). This suggests that production activities have a considerable adverse impact on managerial work within ASEAN countries.
11. Prof.Work → Manag.Work: There is a positive and substantial direct effect (1.009) of professional work on managerial work. This implies that professional work significantly contributes to managerial work within the region

These standardized indirect effects offer insights into the indirect relationships between variables in the model.

Table 3 Standardized Indirect Effects (Group number 1 - Default model)

	inflation	Idiosyncratic risk	FDIIntra	FDI inward	E_Activity	Manag.Work
E_Activity	.000	.000	.000	.000	.000	.000
Manag.Work	.000	.000	.000	.000	.000	.000
Agricul	.408	.896	.057	-.156	.000	.000
Mining	.376	.827	.053	-.144	.000	.000
Infort	.408	.897	.057	-.156	.000	.000
Manu	.403	.886	.056	-.154	.000	.000
Elect	.406	.892	.057	-.155	.000	.000
E_Growth	-2.093	-4.598	-.292	.799	.000	.000
Agrc	-.380	.460	.173	-.625	.000	.000
ServisWork	-.329	.398	.149	-.540	.000	.000
ClerkWork	.301	-.364	-.137	.495	.000	.000
Production	-.361	.437	.164	-.594	.000	.000
Prof.Work	.425	-.514	-.193	.698	.000	.000

- a) E_Activity → E_Growth: There is a significant and substantial negative indirect effect (-2.093) of economic activity on economic growth through other pathways not directly measured in the model. This suggests that while economic activity directly influences economic growth positively, other indirect factors lead to a negative impact on economic growth.
- b) E_Activity → Agrc: The indirect effect of economic activity on agricultural activity is positive and significant (0.408). This indicates that economic activity indirectly contributes to increased agricultural activity within ASEAN countries through pathways not directly measured in the model.
- c) E_Activity → Mining: There is a positive and significant indirect effect (0.376) of economic activity on mining activity. This suggests that economic activity indirectly leads to increased mining activity within the region through other pathways not explicitly measured in the model.
- d) E_Activity → Infort: The indirect effect of economic activity on information sector activity is positive and significant (0.408). This implies that economic activity indirectly contributes to increased information sector activity within ASEAN countries through pathways not directly included in the model.

- e) E_Activity → Manu: There is a positive and significant indirect effect (0.403) of economic activity on manufacturing activity. This indicates that economic activity indirectly leads to increased manufacturing activity within the region through pathways not explicitly measured in the model.
- f) E_Activity → Elect: The indirect effect of economic activity on the electronics sector is positive and significant (0.406). This suggests that economic activity indirectly contributes to increased activity in the electronics sector within ASEAN countries through pathways not directly included in the model.
- g) Agrc → E_Growth: There is a significant and substantial negative indirect effect (-0.380) of agricultural activity on economic growth. This indicates that while agricultural activity directly influences economic growth positively, other indirect factors lead to a negative impact on economic growth.
- h) ServisWork → E_Growth: The indirect effect of service sector activity on economic growth is negative and significant (-0.329). This suggests that while service sector activity directly influences economic growth positively, other indirect factors lead to a negative impact on economic growth.
- i) ClerkWork → E_Growth: There is a positive and significant indirect effect (0.301) of clerical work on economic growth. This implies that while clerical work directly influences economic growth positively, other indirect factors lead to a positive impact on economic growth.
- j) Production → E_Growth: The indirect effect of production activities on economic growth is negative and significant (-0.361). This indicates that while production activities directly influence economic growth positively, other indirect factors lead to a negative impact on economic growth.
- k) Prof.Work → E_Growth: There is a positive and significant indirect effect (0.425) of professional work on economic growth. This suggests that while professional work directly influences economic growth positively, other indirect factors lead to a positive impact on economic growth.

These total effects provide insights into the overall impact of each variable on others in the model.

Table 4 Total Effects (Group number 1 - Default model)

	inflation	Idiosyncratic risk	FDIIntra	FDI inward	E_Activity	Manag.Work
E_Activity	1.709	2121.562	.000	.000	.000	.000
Manag.Work	2.388	-1632.342	-.002	.001	.000	.000
Agricul	5.821	7225.681	.002	.000	3.406	.000
Mining	4.796	5952.781	.001	.000	2.806	.000
Infort	3.879	4815.160	.001	.000	2.270	.000
Manu	13.271	16473.316	.004	-.001	7.765	.000
Elect	1.709	2121.562	.000	.000	1.000	.000
E_Growth	.058	167.314	.000	.000	-.813	.000
Agrc	-1.781	1217.330	.002	-.001	.000	-.746
ServisWork	-.421	287.813	.000	.000	.000	-.176
ClerkWork	.277	-189.259	.000	.000	.000	.116
Production	-.751	513.313	.001	.000	.000	-.314
Prof.Work	2.388	-1632.342	-.002	.001	.000	1.000

These total effects provide insights into the overall impact of each variable on others in the model. Here's the interpretation:

- a) This suggests that economic activity has a substantial positive impact on itself and a significant positive impact on idiosyncratic risk and inflation, but a significant negative impact on management work.
- b) This indicates that management work has a significant positive impact on itself and inflation, but a significant negative impact on idiosyncratic risk and a negligible positive impact on economic activity.
- c) This suggests that mining activity has a substantial positive impact on itself and idiosyncratic risk, but a positive impact on economic activity.
- d) This indicates that information sector activity has a significant positive impact on itself and idiosyncratic risk, but a positive impact on economic activity.
- e) This suggests that manufacturing activity has a substantial positive impact on itself and idiosyncratic risk, but a positive impact on economic activity.
- f) This implies that electronics sector activity has a significant positive impact on itself and idiosyncratic risk, but a positive impact on economic activity.
- g) This indicates that economic growth has a negligible positive impact on itself but a significant negative impact on economic activity and a significant positive impact on idiosyncratic risk.

Interpretation of the relationships between FDI, inflation, idiosyncratic risk, sectoral activities, and economic performance in ASEAN countries

The analysis of the relationships between foreign direct investment (FDI), inflation, idiosyncratic risk, sectoral activities, and economic performance in ASEAN countries reveals several key insights:

- 1) **FDI Inflows and Economic Activity:** The standardized direct effects indicate a significant positive relationship between FDI inflows (both intra-ASEAN and inward) and economic activity. This suggests that higher levels of FDI contribute to increased economic activity within ASEAN countries.
- 2) **Idiosyncratic Risk and Economic Growth:** There is a strong and significant positive relationship between idiosyncratic risk and economic growth. This implies that higher levels of idiosyncratic risk are associated with greater economic growth in ASEAN countries, possibly indicating a higher tolerance for risk or greater entrepreneurial activity.
- 3) **Inflation and Sectoral Activities:** The standardized direct effects show that inflation has a significant positive relationship with various sectoral activities, including manufacturing, information, mining, agriculture, and electronics. This suggests that inflation may stimulate economic activity across different sectors in ASEAN countries.
- 4) **Idiosyncratic Risk and Sectoral Activities:** The standardized direct effects reveal a negative relationship between idiosyncratic risk and management work, indicating that higher levels of idiosyncratic risk may hinder managerial activities. However, there are positive relationships between idiosyncratic risk and other sectoral activities such as agriculture, mining, manufacturing, information, and electronics, suggesting that certain sectors may thrive despite increased risk.

- 5) Total Effects: The total effects provide a comprehensive view of the overall impact of each variable on others in the model. For example, economic activity has a substantial positive impact on itself and idiosyncratic risk but a significant negative impact on management work. Similarly, sectoral activities such as manufacturing and mining have substantial positive impacts on themselves and idiosyncratic risk.

Assessment of model fit and goodness-of-fit indices is crucial in structural equation modeling (SEM) to evaluate how well the proposed model fits the observed data. Several indices are commonly used for this purpose, including:

- a. Chi-square (χ^2) test: This test assesses the discrepancy between the observed and expected covariance matrices. A non-significant p-value indicates good model fit, although it is sensitive to sample size.
- b. Comparative Fit Index (CFI): CFI compares the hypothesized model with a null model, with values closer to 1 indicating better fit. A CFI value above 0.90 is often considered acceptable, while values above 0.95 indicate an excellent fit.
- c. Root Mean Square Error of Approximation (RMSEA): RMSEA assesses the discrepancy between the observed covariance matrix and the model-implied covariance matrix, with values below 0.08 indicating acceptable fit and below 0.05 indicating good fit.
- d. Standardized Root Mean Square Residual (SRMR): SRMR measures the average standardized difference between the observed and predicted correlations, with values below 0.08 indicating a good fit.
- e. Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC): These indices penalize model complexity, with lower values indicating better fit.

Once these indices are calculated, researchers can interpret them collectively to determine the overall fit of the model. However, it's essential to consider the context of the study, the complexity of the model, and theoretical considerations when evaluating model fit.

5. Discussion

Interpret and analyze the implications of your findings in a broader context. Compare with previous studies and consider any limitations.

The findings of the study have significant implications for policymakers, investors, and stakeholders in the ASEAN region:

- a. Policy Implications: Policymakers can use the insights from the study to formulate effective policies aimed at promoting economic growth and stability. For instance, addressing idiosyncratic risks and enhancing financial market regulations can help create a conducive environment for investment and economic activity. Moreover, policies aimed at attracting FDI while mitigating its potential negative effects on economic activity and labor participation are crucial.
- b. Investment Strategies: Investors can leverage the findings to make informed decisions about investment opportunities in the ASEAN region. Understanding the relationship between factors such as FDI, idiosyncratic risk, and economic activity can guide investment strategies and risk

management practices. Investors may choose to diversify their portfolios across sectors and countries based on the identified relationships.

- c. **Risk Management:** Stakeholders, including businesses and financial institutions, can benefit from the findings by improving their risk management practices. By understanding how idiosyncratic risks affect economic performance and growth, businesses can develop strategies to mitigate risks and enhance resilience. Financial institutions can also incorporate these insights into their lending and investment decisions to manage risk effectively.
- d. **Regional Collaboration:** The study underscores the importance of regional collaboration among ASEAN countries in addressing common challenges and promoting economic development. Collaborative efforts in areas such as regulatory harmonization, infrastructure development, and trade facilitation can enhance the region's competitiveness and attractiveness to investors.

The findings provide valuable insights that can inform policy decisions, investment strategies, and risk management practices in the ASEAN region, ultimately contributing to sustainable economic growth and development.

The study provides valuable insights into the factors driving economic growth and development in ASEAN countries, highlighting the following key findings:

1. **Foreign Direct Investment (FDI) Dynamics:** The analysis reveals the significant role of FDI in influencing economic growth and development in ASEAN countries. While both inward and intra-regional FDI inflows positively impact economic activity and sectoral performance, the study also identifies nuances in their effects. For instance, while inward FDI may have a slightly negative impact on economic activity, intra-regional FDI plays a more positive role. This underscores the importance of considering the sources and nature of FDI inflows in driving economic growth.
2. **Idiosyncratic Risk and Economic Activity:** The study highlights the strong and positive relationship between idiosyncratic risk and economic activity in ASEAN countries. Despite the inherent uncertainties and challenges associated with idiosyncratic risk, such as political instability or sector-specific shocks, higher levels of risk are associated with increased economic activity. This suggests that ASEAN economies exhibit a degree of resilience and adaptability in the face of risk, potentially driven by factors such as entrepreneurial dynamism or regulatory frameworks.
3. **Sectoral Dynamics and Economic Growth:** The analysis reveals the differential impacts of sectoral activities on economic growth within ASEAN countries. While sectors such as manufacturing and information technology demonstrate strong positive relationships with economic growth, others like agriculture and services show varying degrees of influence. Understanding these sectoral dynamics is crucial for policymakers and investors to identify opportunities for diversification, innovation, and value creation.
4. **Inflation Dynamics:** The study also examines the relationship between inflation and economic growth, revealing a positive association between the two factors. Moderate levels of inflation may signal healthy economic activity and consumer demand, but excessive inflation can pose challenges to economic stability and investment climate. Thus, policymakers need to strike a balance in managing inflationary pressures to support sustainable economic growth.

6. Conclusion

The study yielded several key findings and implications for understanding economic performance in ASEAN countries:

- a. **Impact of FDI and Idiosyncratic Risk:** The results indicate that foreign direct investment (FDI) and idiosyncratic risk play significant roles in shaping economic activity and growth in ASEAN countries. Specifically, inward FDI flows have a negative but significant impact on economic activity, while intra-ASEAN FDI flows have a positive but non-significant effect. Moreover, higher levels of idiosyncratic risk are associated with increased economic activity and growth.
- b. **Sectoral Dynamics:** The study highlights the importance of sectoral activities in driving economic performance within ASEAN countries. Sectors such as manufacturing, services, and agriculture demonstrate varying levels of sensitivity to FDI and idiosyncratic risk, suggesting the need for sector-specific policy interventions to promote balanced and sustainable economic development.
- c. **Inflationary Pressures:** Inflation emerges as a significant factor influencing economic activity and growth in the region. Higher inflation rates are associated with increased economic activity but may also exert downward pressure on economic growth, highlighting the importance of price stability for fostering sustainable development.
- d. **Policy Implications:** The findings have important implications for policymakers, investors, and stakeholders in the ASEAN region. Policymakers should carefully consider the impact of FDI inflows and idiosyncratic risk on economic performance when formulating regulatory policies and investment strategies. Moreover, efforts to enhance sectoral resilience and promote price stability are crucial for fostering sustainable economic growth in the region

7. Recommendation

The study contributes to a deeper understanding of the factors driving economic performance in ASEAN countries and provides valuable insights for policymakers and stakeholders seeking to promote inclusive and sustainable development in the region.

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