

Mapping Four Decades of Foreign Direct Investment Research in Malaysia: A Bibliometric Analysis

*Hafizah Hammad Ahmad Khan¹, Rosmaiza Abdul Ghani², Muhammad Hanif Othman¹,
Handri Handri³, Azib Azib³

¹Faculty of Business and Management, Universiti Teknologi MARA, Kampus Sungai Petani,
Kedah, Malaysia

²Faculty of Business and Management, Universiti Teknologi MARA, Kampus Alor Gajah,
Melaka, Malaysia

³Faculty of Economics and Business, Universitas Islam Bandung, Indonesia

Email: *hafizahhammad@uitm.edu.my

Corresponding Author: Hafizah Hammad Ahmad Khan

Abstract: This bibliometric analysis explored the research landscape of Foreign Direct Investment (FDI) in Malaysia from 1984 to 2024. By systematically reviewing 480 scholarly articles, this study identified the evolution of research themes, key contributors, and the significant impact of seminal works in the field. The findings highlight the strong focus on the economic impact of FDI, its role in environmental sustainability, and the influence of global economic changes on FDI flows into Malaysia. The analysis further elucidates the pivotal role of Malaysian institutions and scholars in shaping the FDI discourse. Emerging research trends indicate a growing interest in the interplay between FDI and Malaysia's digital economy, labor markets, and regional economic integration within ASEAN. This study maps the historical and current academic focus on FDI in Malaysia. It outlines future research directions that could assist policymakers and practitioners in leveraging FDI for sustainable and inclusive economic development.

Keywords: *Foreign direct investment, Malaysia, Bibliometric analysis, Systematic review, Harzing's Publish or Perish, VOSviewer*

1. Introduction

Foreign Direct Investment (FDI) acts as a crucial driver of economic growth and development, particularly in developing and underdeveloped countries (Sauvant & Mallampally, 2015; Pagavathi & Rajkumar, 2019). One of the key benefits of FDI is its capacity to facilitate the transfer of technology and knowledge from home to host countries, thereby enhancing the integration of host countries into global markets (Igweh and Chukwuka, 2024; Rogmans and Ebberts, 2013). However, the expansion of foreign enterprises may also impose pressure on local producers due to increased competition (Rasit et al., 2020).

Malaysia, along with Indonesia, the Philippines, Singapore, Thailand, and Vietnam, has been a significant recipient of FDI within ASEAN (Pham et al., 2023). According to the 2022 Global Opportunity Index, Malaysia has been identified as the leading destination for foreign investment among the five largest emerging economies in Southeast Asia (Contreras et al., 2022). Notably, Malaysia outperformed its regional counterparts in several critical areas including recovery and resolution processes, public governance, transparency, and workforce talent. These strengths underscore Malaysia's robust institutional framework and effective policy environment, which are essential to attracting and sustaining FDI.

Given Malaysia's significant role in the regional FDI landscape and its institutional competitiveness, the country has garnered increasing scholarly interest. This academic interest is driven by the need to understand the intricate relationship between foreign investment and economic outcomes. Due to the significant impact of FDI on the economic landscape of emerging markets, such as Malaysia, there is a pressing need to systematically review the existing literature. A comprehensive literature review aids in understanding the accumulated knowledge in the field, identifying emerging themes, and highlighting research gaps for future research directions.

The primary objective of this study is to conduct a comprehensive bibliometric analysis of the literature on FDI in Malaysia. Bibliometric analysis is a robust tool that quantitatively evaluates literature on a specific topic and offers insights into the evolution and dissemination of knowledge over time. Hence, this study seeks to address

the following research questions (RQs): RQ1. What is the current state of research on Malaysia's FDI? RQ2. Who is the main contributor to the literature? RQ3. What are the themes that emerge in this area of research?

Following this introduction, Section 2 presents a literature review, followed by the methodology used to conduct the bibliometric analysis in Section 3. Section 4 details the results obtained from the analysis and Section 5 presents future research avenues. Finally, Section 6 concludes the paper.

2. Literature Review

FDI has long played a vital role in Malaysia's economic development. Numerous studies have highlighted the positive contribution of FDI to Malaysia's gross domestic product (GDP), employment, and industrial transformation. FDI has been instrumental in facilitating Malaysia's transition from a commodity-based to a manufacturing-led economy, particularly in the electronics and high-technology industries (Perkins et al., 2022).

The determinants of FDI inflows to Malaysia have been widely studied, with consistent findings indicating that trade openness and political stability are significant facilitators (Kamowa and Arunasalam, 2020). These factors create a business-friendly environment, which attracts foreign investors. Additionally, financial market development and large market size are positively correlated with FDI, whereas high corporate tax rates act as deterrents (Solomon et al., 2015).

Malaysia's position as an FDI hub in Asia is bolstered by its strategic location, regional integration through ASEAN, and participation in initiatives, such as China's Belt and Road Initiative (Lim & Kam, 2024). These developments have led to significant Chinese investment in infrastructure and services. Compared to regional competitors such as Vietnam and Indonesia, Malaysia offers a more diversified economy and developed infrastructure, although it is facing increasing competition (Kam, 2024).

Despite Malaysia's appeal for foreign investors, several challenges remain. According to a study by Ali et al. (2013), FDI distribution remains uneven with higher inflows concentrated in more developed regions. Furthermore, the absorptive capacity of local firms varies by industry, affecting the extent to which FDI generates technological spillovers and productivity gains (Zhang and Yang, 2022). Recent disruptions such as the COVID-19 pandemic and political uncertainties have also dampened Malaysia's FDI attractiveness, underscoring the need for regulatory and institutional resilience (Keita et al., 2023).

Although previous studies have extensively explored the economic impact, determinants, and sectoral dynamics of FDI in Malaysia, there is a lack of comprehensive synthesis regarding the evolution of research in this field over time. Few studies have systematically mapped the intellectual landscape or identified thematic trends and influential contributions in the FDI literature. To address this gap, the present study conducts a bibliometric analysis of FDI research related to Malaysia. By examining publication trends, influential authors, and thematic clusters, this study provides a structured overview of the academic discourse on FDI in Malaysia, offering valuable insights for researchers and policymakers seeking to understand the trajectory and future direction of this important field.

3. Methodology

Data Collection

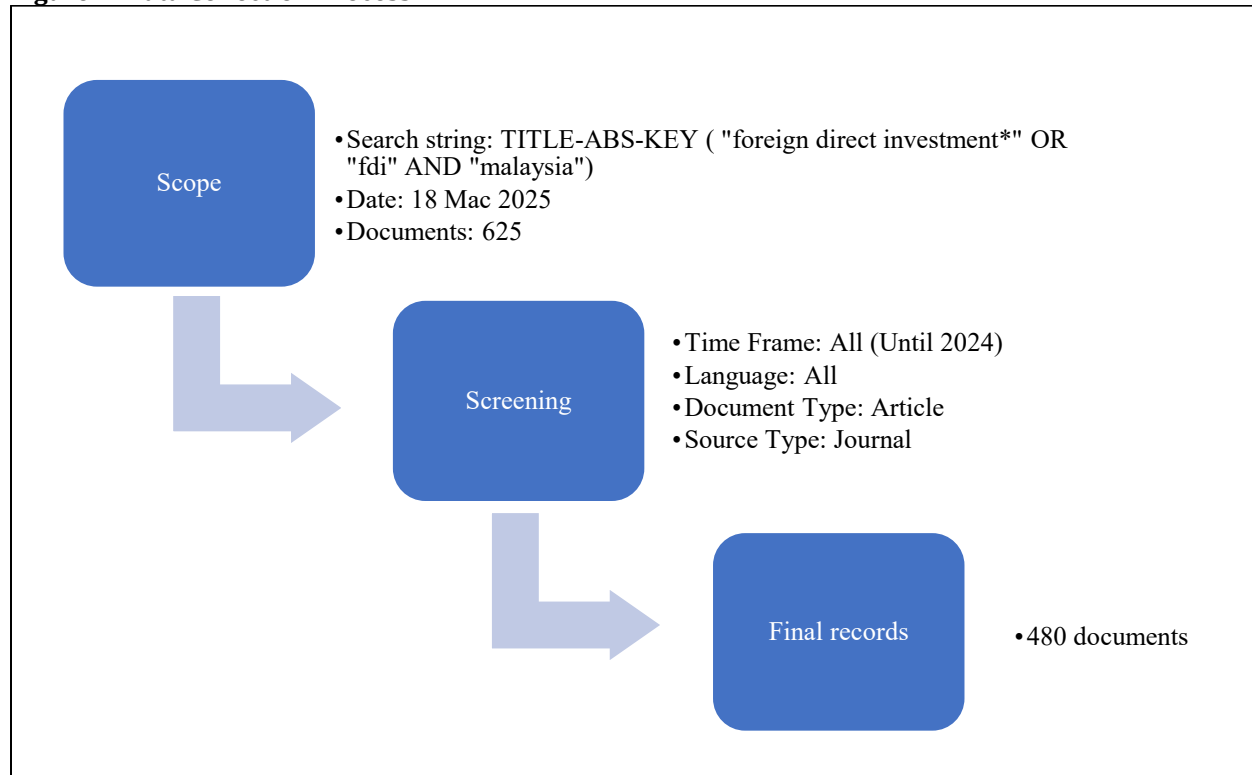
The first step in the bibliometric analysis was to develop a specific search string to capture the most relevant literature on FDI in Malaysia. The search string used was TITLE-ABS-KEY ("foreign direct investment*" OR "fdi" AND "malaysia"). The use of the Boolean operators "OR" and "AND" facilitated the inclusion of various terminologies related to FDI while focusing specifically on the Malaysian context.

The Scopus database was used as the primary source for the bibliometric data collection. Scopus was chosen for its comprehensive coverage of peer-reviewed literature across diverse disciplines, particularly in economics, business, and social sciences. Notably, Scopus offers broader journal coverage of high-quality articles relevant to Malaysian studies, making it particularly suitable for research on FDI in Malaysia.

Additionally, it provides robust citation tracking capabilities, consistent metadata, and seamless integration with bibliometric tools, such as VOSviewer and Harzing's Publish or Perish, which are essential for conducting quantitative analyses and generating network visualizations.

The initial query on the Scopus database yielded 625 documents. By restricting the selection to documents published up to 2024 and specifying the document type as "articles" and the source type as "journals," 480 documents were deemed suitable for bibliometric analysis. The data collection process is illustrated in Figure 1.

Figure 1: Data Collection Process



Data Analysis

Bibliometric analysis, based on a refined dataset of 480 journal articles, provides a comprehensive overview of the research landscape in the field up to 2024. This dataset serves as a robust foundation for examining various bibliometric indicators, offering insights into the evolution and current state of research within the domain. The analysis delves into publication trends to reveal the trajectory of research output over time. Citation patterns were scrutinized to assess the impact of research within the field, whereas collaboration networks revealed the interconnectedness of research across geographical boundaries. Finally, the investigation of the main themes provided a thematic mapping of the research landscape, identifying dominant areas of inquiry and potential gaps in the literature.

This study utilized Microsoft Excel for the management and analysis of basic data. Subsequent analyses were conducted using Harzing's Publish or Perish for a comprehensive citation analysis. Finally, VOSviewer was employed to create visual maps of bibliometric networks, including co-authorship and keyword co-occurrence networks, which are instrumental in identifying the main clusters of research, relationships between key topics, and trends in research over time.

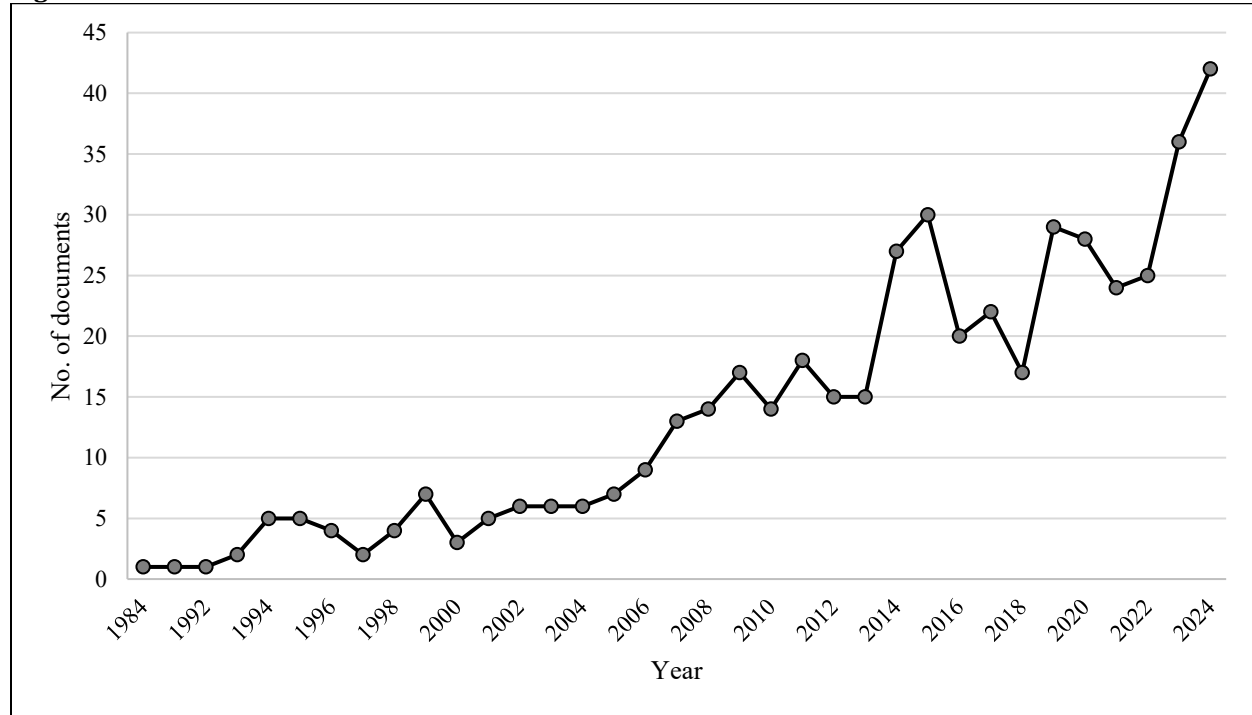
4. Findings and Discussion

This section begins by exploring the publication trends observed in this field of study. It then addressed the most influential source titles that have been pivotal in disseminating research in this area. Following this, the discussion turns to the most productive countries, institutions, and researchers leading the way in this domain. Additionally, this section delves into the collaboration patterns between countries to evaluate the extent of international cooperation. Finally, research impact is assessed through citation analysis, and emerging themes are discussed to highlight the growing topics of interest and identify research gaps.

Publication Trend

To address Research Objective 1 (RO1), which seeks to evaluate publication trends and patterns in FDI-related research concerning Malaysia, the publication trend depicted in Figure 2 indicates that scholarly interest in this field began approximately four decades ago and has exhibited consistent growth. This upward trajectory reflects the increasing academic recognition of FDI's role in Malaysia's economic development and the expanding scope of research in this domain. The data revealed a steady increase in publications from 2000 onward, reflecting a burgeoning scholarly interest in this domain. This trend can be attributed to Malaysia's increasing integration into the global economy and the consequent rise in FDI flows following the financial reforms and liberalization policies implemented in the late 1990s and the early 2000s.

Figure 2: Publication Trend



Since 2014, there has been a significant increase in publications, with 27 recorded in that year, and this upward trend has continued over the past three years, reaching a peak of 42 publications in 2024. This trend underscores the significance of FDI in Malaysia's economic discourse and reflects strong academic interest in exploring its various dimensions and impacts over time. The growing number of publications suggests that FDI will continue to be a vital area of study, particularly in understanding its influence on Malaysia's evolving economic landscape in response to internal policy changes and external economic pressure.

Subsequently, Research Objective 2 (RO2), which seeks to identify the most influential sources, authors, and scholarly contributions within this domain, is addressed through an analysis of the publication outlets and citation patterns. Table 1 summarizes the distribution of publications across various journals, highlighting the primary venues for disseminating research on FDI in Malaysia. This table provides an overview of the journals

central to the academic discourse on FDI, underscoring the interdisciplinary nature of research and its significance in multiple fields.

Table 1: Leading Source Title

Item	Total publications	Percentage
Int. Journal of Energy Economics & Policy	13	2.7
Journal of The Asia Pacific Economy	13	2.7
Jurnal Ekonomi Malaysia	12	2.5
International Journal of Business & Society	10	2.1
Environmental Science & Pollution Research	8	1.7
Journal of Asian Economics	7	1.5
Journal of Economic Cooperation & Development	7	1.5
Sustainability	7	1.5
Asian Economic Journal	6	1.3

The "International Journal of Energy Economics & Policy" and the "Journal of the Asia Pacific Economy" each account for 2.7% of the total publications, highlighting their importance in the field. These journals' focus on energy economics and regional economic issues aligns closely with the prevalent themes in FDI research, such as economic growth, energy policies, and regional economic integration.

Close behind is the "Jurnal Ekonomi Malaysia," which contributed to 2.5% of the publications. As a locally based journal, it underscores the significance of national scholarly platforms for fostering academic discourse on FDI in Malaysia. This journal covers a wide array of economic topics, including the direct impact of FDI on the Malaysian economy.

The "International Journal of Business and Society" and "Environmental Science and Pollution Research" also contribute significantly to the field, with shares of 2.1% and 1.7%, respectively. The presence of an environmental journal highlights the growing academic interest in the environmental impacts of FDI, such as its effects on pollution and sustainability practices. This diversity suggests that FDI research in Malaysia goes beyond mere economic analysis and intersects with environmental and societal considerations.

Other journals, such as "Journal of Asian Economics," "Journal of Economic Cooperation & Development," "Sustainability," and "Asian Economic Journal," hold smaller shares but are vital in disseminating research across various FDI dimensions. These publications demonstrate a multidisciplinary approach to FDI studies encompassing perspectives on economic development, sustainable practices, and regional cooperation.

The prominence of international journals in disseminating research on this topic highlights the global importance and impact of this subject matter. This widespread interest indicates that research findings have broad applicability across diverse cultural and geographical contexts, potentially influencing policies, practices, and understanding on a global scale. The preference for international publications may also reflect the quality and rigor of the research, as these journals often employ stringent peer-review processes and maintain high standards for acceptance.

Key Contributors

Table 2 presents an analysis of the leading countries in scholarly output related to FDI in Malaysia, highlighting global academic interest and geographical diversity of research contributions. Malaysia, as the primary focus, accounted for 52.9% of the total publications.

China emerged as the second most prolific contributor, accounting for 6.7% of publications. The involvement of Chinese scholars is likely due to the substantial economic ties between Malaysia and China, particularly in terms of investment flows and joint ventures, making it a significant area for academic investigation in both countries.

Table 2: Most Productive Countries

Countries	Total publications	Percentage
Malaysia	254	52.9
China	32	6.7
Australia	28	5.8
United Kingdom	28	5.8
Indonesia	27	5.6
United States	22	4.6
India	16	3.3
Singapore	15	3.1
Japan	14	2.9
Viet Nam	12	2.5

Australia and the United Kingdom each contributed 5.8% of the total publications, reflecting a strong international perspective on Malaysia's FDI dynamics. These contributions may be driven by the broader implications of Malaysia's economic policies, active participation in international trade, and strategic position in the global market.

Indonesia, another key player in the ASEAN region, had a publication output of 5.6%. This interest likely arises from regional economic interactions and shared interests within the ASEAN, where FDI dynamics are crucial to regional competitiveness and economic integration. Despite its geographical distance, the United States exhibits a notable scholarly output of 4.6%, underscoring global interest in Malaysia's economic environment, which is likely influenced by the country's position as a strategic market in Southeast Asia.

Contributions from India, Singapore, Japan, and Vietnam, although smaller, reflect diverse international interest in Malaysia's FDI landscape, underscoring its significance as a key player in the broader Asian economic context. Each country has unique economic ties and strategic interests in Malaysia, highlighting the complex and multifaceted nature of FDI's impact on the region.

The geographical distribution of scholarly work underscores not only the global significance of Malaysia's FDI issues but also reveals a range of international perspectives that enrich academic discourse on economic investment and development strategies in Malaysia. The variety of contributing countries highlights Malaysia's role as a key player in both regional and global economic contexts, thereby drawing scholarly interest across Asia and beyond.

Examining the most influential institutions in Table 3, Universiti Kebangsaan Malaysia (UKM) stands out as the foremost contributor, responsible for 10.0% of the publications. This prominent position underscores the significance of UKM in shaping FDI research in Malaysia. Close behind are Universiti Malaya (UM) and Universiti Teknologi MARA (UiTM) contributed 7.3% and 7.1% of the publications, respectively. These institutions are pivotal in the Malaysian higher education sector, renowned for their strong research outputs and influence in economics and business studies

Universiti Putra Malaysia (UPM) and Universiti Sains Malaysia (USM) also significantly contribute to the academic landscape, accounting for 6.5% and 5.4% of the publications, respectively. Universiti Utara Malaysia (UUM) follows closely, contributing 5.2% of the total scholarly output, further highlighting the concerted efforts of Malaysian higher education institutions in this research domain. Additional noteworthy contributions came from Universiti Malaysia Sabah (UMS) and Universiti Tunku Abdul Rahman (UTAR), each representing 3.3% of the publications.

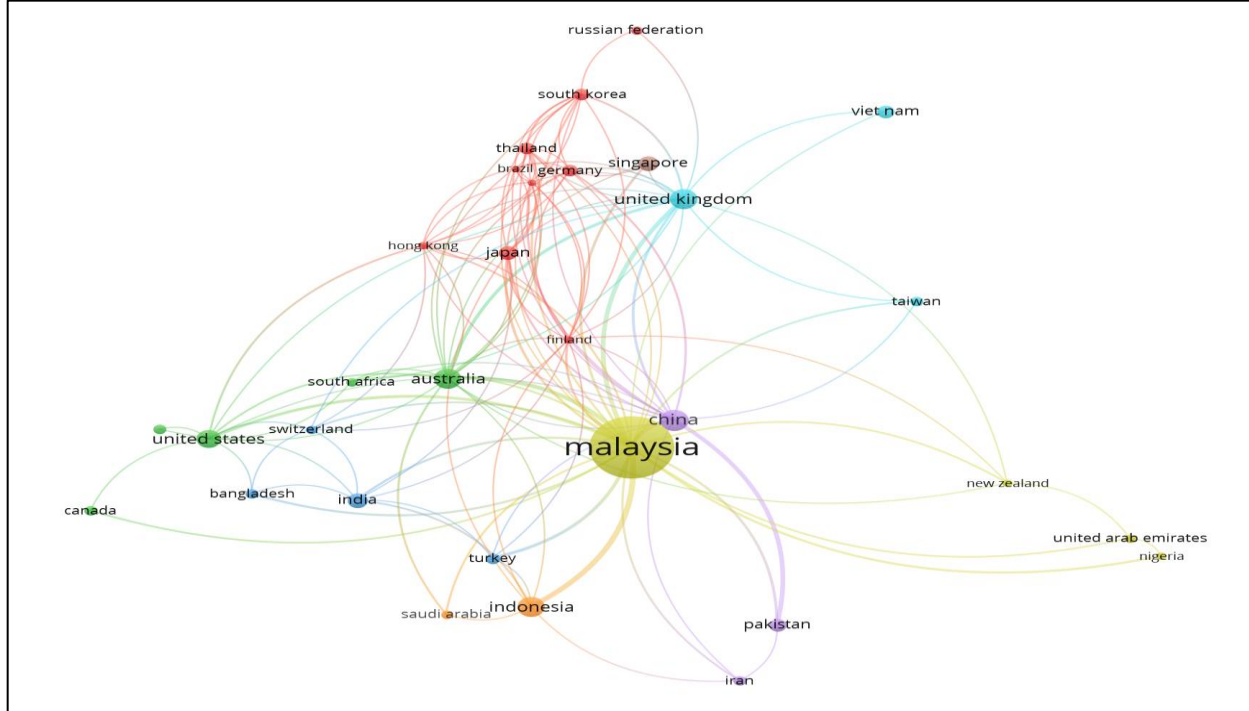
Multimedia University and Monash University Malaysia each contributed 2.3% of the publications, underscoring their diverse institutional involvement in FDI research, including both private and international universities operating within Malaysia. This diversity represents a comprehensive range of perspectives across various types of institutions, thereby enriching both academic and practical understanding of FDI research in the Malaysian context.

Table 3: Most Influential Institutions

Institutions	Total publications	Percentage
Universiti Kebangsaan Malaysia	48	10.0
Universiti Malaya	35	7.3
Universiti Teknologi MARA	34	7.1
Universiti Putra Malaysia	31	6.5
Universiti Sains Malaysia	26	5.4
Universiti Utara Malaysia	25	5.2
Universiti Malaysia Sabah	16	3.3
Universiti Tunku Abdul Rahman	16	3.3
Multimedia University	11	2.3
Monash University	11	2.3

The network visualization map depicted in Figure 3 further elucidates research collaborations between Malaysian researchers and their international counterparts. This graphical representation provides valuable insights into the global scope of FDI research related to Malaysia, emphasizing the intensity and extent of international cooperation.

Figure 3: Collaboration Pattern between Countries



This visualization highlights the strong connections between Malaysia and China. China's prominence in Malaysia likely reflects substantial economic ties and FDI flows between the two nations, making it a critical area of research. Additionally, countries within the ASEAN region, such as Singapore, Indonesia, and Thailand, demonstrate significant connectivity, suggesting a regional focus for this research.

The map also shows connections to Western countries, including the United States and the United Kingdom, as well as other regions such as Australia and South Africa. This indicates a global interest in Malaysia's FDI environment, with research potentially covering global investment trends, policy impacts, and comparative analysis. In conclusion, the visualization not only underscores Malaysia's strategic importance in global FDI research but also highlights the diverse interests and collaborative potential among various global actors.

Research Impact

A citation analysis was conducted to assess the impact of FDI research in Malaysia, revealing significant insights into the scholarly contributions and influence of publications from 1984 to 2024. Table 4 provides an overview of various citation metrics, offering a quantitative assessment of the research impact within the academic community.

Table 4: Citation Metrics

Metrics	Data
Citation years	41 (1984-2024)
Papers	480
Total citations	7910
Citations/year	192.93
Citations/paper	16.48
Authors/paper	2.59
h-index	40
g-index	72

The data analysis revealed that 480 papers have been published, collectively accumulating 7910 citations, underscoring this body of research's substantial influence and utility within the academic community.

On average, these research outputs garnered approximately 192.93 citations annually, with each paper receiving an average of 16.48 citations. This reflects the ongoing interest in and sustained impact of these studies. Additionally, the average of 2.59 authors per paper underscores the collaborative nature of this research community, often involving interdisciplinary efforts that enhance analytical depth and broaden the perspectives presented.

The h-index for this body of research is 40, indicating that at least 40 papers have been cited, a minimum of 40 times each. This metric underscores the high quality and significant impact of the research, as it demonstrates that a considerable number of individual papers have exerted a profound influence on the field. Furthermore, the g-index of 72 further emphasizes the impact of the research, indicating that the top 72 most-cited papers collectively received at least 5184 total citations. This index highlights the exceptional influence of the most impactful papers, suggesting that leading research outputs have been extensively cited and have substantially shaped subsequent research in this area.

The analysis of the highly cited articles in Table 5 reveals a diverse range of topics that underscores the significant impact and extensive scope of these studies. The list offers insights into the critical areas of academic focus and the substantial influence of these studies on subsequent research.

The article by Zhu, Duan, Guo, and Yu (2016), cited 683 times, investigates the impact of FDI, economic growth, and energy consumption on carbon emissions in ASEAN-5 countries using panel quantile regression techniques. This study underscores the significant intersection between economic activities and environmental outcomes, emphasizing the importance of sustainable development in the region.

Similarly, the research conducted by Lau, Choong, and Eng (2014) with 536 citations, explores the environmental Kuznets curve for carbon emissions in Malaysia, considering the influences of FDI and trade. This study highlights the environmental consequences of economic policies and the necessity of sustainable practices to balance economic growth with environmental health.

Table 5: Highly Cited Articles

No.	Authors & Year	Title	Source	Cites
1	Zhu, Duan, Guo & Yu (2016)	The effects of FDI, economic growth and energy consumption on carbon emissions in ASEAN-5: Evidence from panel quantile regression	Economic Modelling	683
2	Lau, Choong & Eng (2014)	Investigation of the environmental Kuznets curve for carbon emissions in Malaysia: DO foreign direct investment and trade matter?	Energy Policy	536
3	Chowdhury & Mavrotas (2006)	FDI and growth: What causes what?	World Economy	224
4	Hsiao & Hsiao (2006)	FDI, exports, and GDP in East and Southeast Asia- Panel data versus time-series causality analyses	Journal of Asian Economics	208
5	Tang & Tan (2014)	The linkages among energy consumption, economic growth, relative price, foreign direct investment, and financial development in Malaysia	Quality and Quantity	195

Chowdhury and Mavrotas (2006), cited 224 times, delved into the causal relationship between FDI and economic growth, analyzing fundamental economic interactions and their implications for development strategies. Similarly, Hsiao and Hsiao (2006), with 208 citations, examined the interconnections among FDI, exports, and GDP in East and Southeast Asia, thereby enhancing the understanding of regional economic dynamics.

Lastly, Tang and Tan (2014) explored the link between energy consumption, economic growth, FDI, and financial development in Malaysia. Their study, cited 195 times, elucidates the intricate interdependencies within the Malaysian economy and offers insights into the relationships among various economic factors.

These highly cited articles collectively demonstrate the diverse and interdisciplinary nature of FDI research in Malaysia encompassing economic, environmental, and financial studies. They make significant contributions to the academic discourse and practical policy implications, thereby guiding further research and development strategies in the region.

Emerging Themes

In addressing Research Objective 3 (RO3), which aims to uncover emerging themes in FDI research related to Malaysia, Table 6 highlights the most frequently occurring author keywords, offering insights into the dominant and evolving areas of scholarly focus within this research domain. Beyond the primary keywords, "FDI" and "Malaysia," terms such as "Economic Growth" and "Economic Development" underscore a sustained emphasis on assessing the macroeconomic implications of foreign investment.

In contrast, the keywords "ASEAN" and "Southeast Asia" suggest a regional analytical perspective, indicating that studies often consider the implications of Malaysian FDI within the context of its regional neighbours and the broader Southeast Asian economic landscape. This regional focus is further supported by the presence of "Asia" and "Indonesia," which highlight specific inter-country relations and regional dynamics.

The presence of the keywords "China" and "Eurasia" further underscores the comparative nature of the studies and the impact of foreign economies on Malaysia's economic strategies. Additionally, the presence of the keyword "Developing Countries" suggests that Malaysia's findings are often framed within the broader context of developing economies, offering insights applicable to similar economic settings.

Table 6: Top Keywords

Author Keywords	Total occurrences
Foreign Direct Investment	293
Malaysia	198
Economic Growth	78
ASEAN	54
Investment	45
Asia	39
Southeast Asia	39
Economic Development	37
Developing Countries	35
China	33
Manufacturing	33
Carbon Emission	31
Export	31
Eurasia	28
Indonesia	24

The keyword "Manufacturing" also emerged as an important keyword, indicating a sector-specific focus that is essential for understanding the industrial impacts of FDI. Furthermore, the inclusion of "Carbon Emission" and "Export" underscores an awareness of the environmental implications of FDI and the importance of export activities in the context of foreign investments. These keywords suggest dual emphasis on the environmental consequences and trade-related outcomes of FDI.

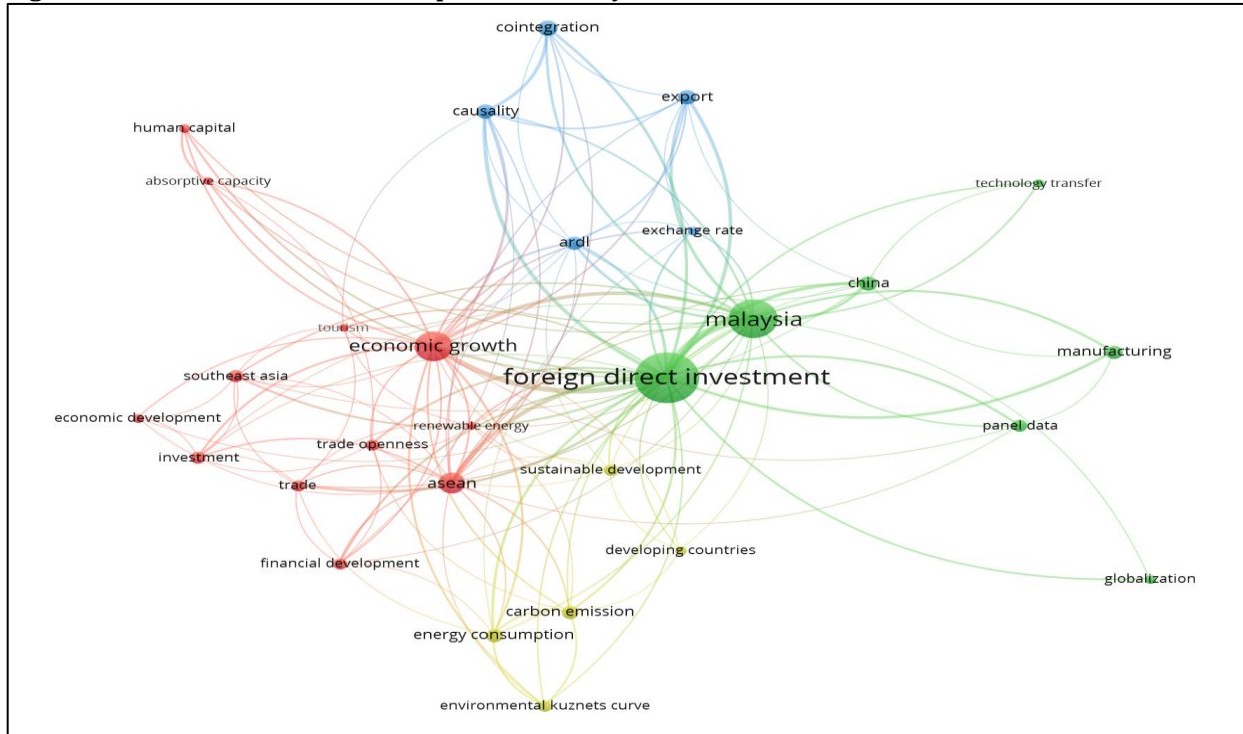
The distribution and frequency of these keywords reflect a multifaceted approach to studying FDI in Malaysia, encompassing economic, regional, environmental, and sector-specific analyses. The diversity of keywords suggests a robust interaction between global economic trends and local economic strategies, thereby providing a comprehensive understanding of FDI's role in shaping Malaysia's economic landscape.

The network visualization map of author keywords in Figure 4 elucidates several emerging themes and research clusters related to FDI in Malaysia. These clusters are instrumental in understanding academic focus and interconnections within the field. The keywords were organized into distinct clusters, each highlighting a specific aspect of the research emphasis.

Cluster 1 (Red) encompasses keywords such as "ASEAN," "economic growth," "economic development," "financial development," "human capital," "investment," "renewable energy," "Southeast Asia," "tourism," "trade," and "trade openness." The strong link between economic growth and ASEAN underscores the significant focus on regional economic dynamics and Malaysia's role within the ASEAN community. Furthermore, the prominence of "renewable energy" and "tourism" as focal points suggests a sector-specific analysis within broader economic studies, emphasizing the diversification of research on how various sectors are influenced by or contribute to FDI in the region.

Cluster 2 (Green) includes "foreign direct investment," "Malaysia," "China," "globalization," "manufacturing," "panel data," and "technology transfer." The significant association with "China" highlights the geo-economic analyses of FDI flows, with a particular focus on the influence of Chinese investment. The presence of "manufacturing" and "technology transfer" reflects a strong interest in the industrial sector and the mechanisms through which technology is disseminated via FDI.

Figure 4: Network Visualization Map of Author Keywords



Cluster 3 (Blue) focuses on technical and methodological keywords such as "ARDL," "causality," "cointegration," "exchange rate," and "export." This cluster underscores the advances in econometric techniques used to analyze long-term relationships and causality in FDI studies. Such methodological emphasis is crucial for developing robust empirical frameworks to evaluate the impact of FDI on economic variables, including exchange rates and export performance.

Lastly, Cluster 4 (Yellow) focuses on sustainability and environmental considerations, featuring keywords like "carbon emission," "developing countries," "energy consumption," "environmental Kuznets curve," and "sustainable development." The interconnectedness of these keywords highlights growing scholarly interest in the environmental impact of FDI. The emphasis on the "environmental Kuznets curve" and "sustainable development" reflects an academic effort to explore how economic growth driven by FDI aligns with environmental sustainability goals, particularly in developing countries, such as Malaysia.

Overall, the network visualization map provides a comprehensive overview of the primary themes in FDI research related to Malaysia. It depicts an extensive range of scholarly investigations including regional economic impacts, environmental considerations, and methodological approaches. This thematic diversity underscores the complex and multifaceted nature of FDI's impact of FDI in Malaysia, thereby guiding future research in the field.

5. Future Research Avenues and Conclusion

A bibliometric analysis of FDI research in Malaysia reveals several promising avenues for future research. Given the growing concerns about environmental sustainability, future research could explore how FDI contributes to the adoption of green technologies and sustainable practices across various industries, aligning with Malaysia's environmental objectives.

The impact of digital transformation on FDI also presents a promising area for research, particularly in examining how FDI can bolster Malaysia's digital economic sectors, including e-commerce, digital finance, and cybersecurity. Additionally, in the global context, analyzing the impact of geopolitical shifts on FDI inflows into

Malaysia could provide valuable insights into the interplay between international relations and investment patterns.

Another important research direction involves a thorough examination of FDI's effects on Malaysia's labor market, including its influence on employment quality, labor dynamics, and wage structures across different sectors. Furthermore, sector-specific analyses could deepen our understanding of how various industries integrate and benefit from FDI, thereby uncovering unique opportunities and sector-specific challenges.

Finally, assessing the effectiveness of Malaysia's policies in attracting FDI could aid in refining strategic approaches and ensuring that these policies remain competitive and conducive to sustainable economic growth. By delving into these diverse research themes, future studies can provide nuanced insights that not only enhance the understanding of FDI's multifaceted impacts but also assist policymakers and business leaders in maximizing the benefits of foreign investments for Malaysia's ongoing development and integration into the global economy.

Conclusion

A bibliometric analysis of FDI research in Malaysia reveals a complex academic landscape. This comprehensive examination identifies key trends and major contributors that have significantly advanced our understanding of FDI dynamics within the Malaysian context. The analysis also uncovered the evolution of research themes over time, reflecting the nation's changing economic landscape and policy priorities. This study contributes to the literature by providing a structured overview of intellectual development and the thematic focus of FDI research in Malaysia over the past four decades. It not only maps the historical progression of scholarly work but also highlights emerging directions that warrant further academic exploration. From a policy standpoint, the findings offer valuable insights for decision makers seeking to enhance Malaysia's attractiveness to foreign investors by strengthening institutional quality, promoting sustainability, and fostering innovation.

While Scopus was selected for its comprehensive journal coverage and compatibility with bibliometric tools, future studies could benefit from incorporating data from additional databases such as Web of Science or Google Scholar to provide a more holistic and inclusive analysis of global research trends. Expanding the range of data sources will enrich future bibliometric insights and further deepen our understanding of the role of FDI in Malaysia's economic development.

Acknowledgment: The author would like to thank Universiti Teknologi MARA (UiTM) and Universitas Islam Bandung for their funding support for this project under the Strategic Research Partnership Grant Scheme (Reference No: 100-RMC 5/3/SRP 060/2021).

References

- Ali, H., Er, A. C., Ahmad, A. R., Lyndon, N., & Ahmad, S. (2013). An analysis of the impact of foreign investment on regional disparities: A case of Malaysia. *Asian Social Science*, 9(14), 7-17.
- Chowdhury, A., & Mavrotas, G. (2006). FDI and growth: what causes what? *The World Economy*, 29(1), 9-19. <https://doi.org/10.1111/j.1467-9701.2006.00755.x>
- Contreras, O., Bendix, J., & Smith, B. (2022). Global Opportunity Index 2022: Focus on Emerging Southeast Asia. Milken Institute. <https://milkeninstitute.org/sites/default/files/2022-01/global%20opp%20indexFINAL.pdf>
- Hsiao, F. S., & Hsiao, M. W. (2006). FDI, exports, and GDP in East and Southeast Asia—Panel data versus time-series causality analyses. *Journal of Asian Economics*, 17(6), 1082-1106. <https://doi.org/10.1016/j.asieco.2006.09.011>
- Igweh, F. K., & Chukwuka, E. J. (2024). Strategic impact of knowledge entrepreneurship on foreign direct investment in Nigeria. *World Journal of Advanced Research and Reviews*, 21(1), 1699-1717. <https://doi.org/10.30574/wjarr.2024.21.1.0239>
- Kam, A. J. (2024). Navigating the US–China Decoupling: Malaysia's Response to the US–China Trade War. *Asian Economic Papers*, 23(2), 144-173. https://doi.org/10.1162/asep_a_00899

- Keita, K., Razak, A. B. A., & Abdullah, N. A. (2023). A Regulatory Framework on Foreign Direct Investment as a Factor in Determining the Economic Growth in Malaysia Post-COVID-19 Pandemic. *International Journal of Law and Society*, 2(3), 206-225. <https://doi.org/10.59683/ijls.v2i3.60>
- Lau, L., Choong, C., & Eng, Y. (2014). Investigation of the environmental Kuznets curve for carbon emissions in Malaysia: do foreign direct investment and trade matter? *Energy Policy*, 68, 490-497. <https://doi.org/10.1016/j.enpol.2014.01.002>
- Lim, G., & Kam, A. J. (2024). Chinese Investment in Malaysia:(De) Industrialization amidst Greater Financial and Trade Connectivity. *The European Journal of Development Research*, 36, 571-600. <https://doi.org/10.1057/s41287-024-00645-w>
- Pagavathi, K., & Rajkumar, P. (2019). K. The Progress and Achievement of Top Five Services Sectors through Foreign Direct Investments in India. *International Journal of Recent Technology and Engineering*, 8(2S10), 187-194. 10.35940/ijrte.B1032.0982S1019
- Perkins, D. H., Rasiah, R., & Woo, W. (2022). Explaining Malaysia's past economic growth. In *Malaysia's Leap Into the Future. Dynamics of Asian Development*. Springer, Singapore.
- Pham, M. H., Pham, A. D., & Dang, C. V. P. (2023). Determinants of FDI inflows: Aggregate versus country-specific evidence from ASEAN-6. *The Economics and Finance Letters*, 10(1), 111-121.
- Rasit, N., Singkong, F., & Aralas, S. I. (2019). Tourism and foreign direct investment: an analysis for ASEAN countries. *Malaysian Journal of Business and Economics*, 6(2), 283. <https://doi.org/10.51200/mjbe.v0i0.2217>
- Rogmans, T., & Ebbers, H. (2013). The determinants of foreign direct investment in the Middle East and North Africa region. *International Journal of Emerging Markets*, 8(3), 240-257. <https://doi.org/10.1108/17468801311330310>
- Sauvant, K. P., & Mallampally, P. (2015). Policy options for promoting foreign direct investment in the least developed countries. *Transnational Corporations Review*, 7(3), 237-268. <https://doi.org/10.5148/tncr.2015.7301>
- Solomon, C., Islam, M. A., & Bakar, R. (2015). Attracting foreign direct investment: The case of Malaysia. *International Business Management*, 9(4), 349-357.
- Tang, C. F., & Tan, B. W. (2014). The linkages among energy consumption, economic growth, relative price, foreign direct investment, and financial development in Malaysia. *Quality & Quantity*, 48, 781-797. <https://doi.org/10.1007/s11135-012-9802-4>
- Zhang, M., & Yang, R. (2022). FDI and spillovers: New evidence from Malaysia's manufacturing sector. *Review of Development Economics*, 26(2), 847-877. <https://doi.org/10.1111/rode.12857>
- Zhu, H., Duan, L., Guo, Y., & Yu, K. (2016). The effects of FDI, economic growth and energy consumption on carbon emissions in ASEAN-5: evidence from panel quantile regression. *Economic Modelling*, 58, 237-248. <https://doi.org/10.1016/j.econmod.2016.05.003>