

TDM Berhad Malaysia's Belt and Road Initiative: Opportunities, Risks and Policy Implications

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Received: 23 September 2025 Accepted: 02 January 2026

Abstract

This study examines the implications of China's Belt and Road Initiative (BRI), focusing on the East Coast Rail Link (ECRL) and its effects on TDM Berhad, a government-linked company in Terengganu. Employing a mixed-method approach with financial data and director interviews, the research explores political economy and corporate governance dimensions of Malaysia's BRI participation. The study rests on two premises: (a) the BRI generates economic and social impacts, and (b) policy shifts shape firms' adaptation strategies. Findings indicate that the ECRL strengthens regional connectivity and attracts investment for TDM Berhad, yet raises concerns over debt sustainability, governance transparency and state autonomy. Governance indicators such as board size, compensation and gender diversity influence how TDM Berhad aligns strategies with federal priorities and international expectations. Moreover, the TDM Berhad's dual role in healthcare and plantation highlights the balancing act between development pressures and sustainability under ESG frameworks. By situating TDM Berhad as a case study, the research contributes to debates on global economic initiatives, domestic politics and governance practices. It concludes that Malaysia's BRI engagement offers both opportunities and risks, emphasizing the need for policies that safeguard sovereignty while fostering inclusive growth and long-term resilience.

Keywords: BRI; TDM Berhad; Corporate Governance; Political Economy; ESG

Introduction

Malaysia has long been a pivotal actor in regional geo-politics and economic development through its strategic location in Southeast Asia. Over the decades, Malaysia has maintained a careful balance between openness to foreign investment and the preservation of its sovereignty, navigating periods of rapid industrialization, the 1997 Asian Financial Crisis and shifts in domestic political leadership.¹ The launch of China's Belt and Road Initiative (BRI) by President Xi Jinping in 2013 marked a new phase in Malaysia and China relations. Positioned as a central hub in the Southeast Asia, Malaysia emerged as one of China's most significant partners, hosting large-scale infrastructure projects such as the East Coast Rail Link (ECRL).² These projects reflect China's strategic interests in strengthening regional connectivity, ensuring access to critical resources and addressing vulnerabilities in maritime trade routes. Terengganu, a state traditionally reliant on petroleum, agriculture and plantation industries, has been directly impacted by the ECRL project.³ The state's strategic location along the East Coast Corridor makes it a beneficiary of new foreign direct investment (FDI). Within this context, TDM Berhad a government-linked company (GLC) headquartered in Terengganu emerges as a crucial case study. As one of the state's leading enterprises with significant involvement in healthcare and

plantation sectors, TDM Berhad provides a unique venue through which to analyze the intersection of corporate governance, state policy and FDI. From a political economy perspective, the ECRL project in Terengganu highlights the project promises to bring new trade routes, job opportunities and regional integration, yet it also raises concerns over foreign influence, financial sustainability and the autonomy of state-level decision-making.

This gap raises important questions: (RQ1) To what extent does the ECRL project reshape the political economy of Terengganu? (RQ2) How do corporate actors such as TDM Berhad navigate the opportunities and risks presented by Malaysia's participation in the BRI? This study begins by examining the BRI, within the broader context of shifting global political economy especially in Terengganu. The BRI has emerged as a transformative force, raising concerns over its long-term economic implications for recipient countries.⁴ Additionally, from an economic perspective, China's BRI projects in Terengganu reflect a strategy to strengthen regional connectivity and secure access to resources.⁵

Company Background

TDM Berhad, established in 1965 and listed on Bursa Malaysia in 1970, is a GLC of the state of Terengganu through its majority ownership by Terengganu Incorporated Sdn. Bhd. TDM has evolved into a key corporate actor balancing economic performance with sustainable governance. Its inclusion in the FTSE4Good Bursa Malaysia Index and FTSE4Good Bursa Malaysia Shariah Index in 2023 underscores the company's commitment to ethical, Shariah-compliant and sustainability-driven business practices.⁶ Due rapid development, TDM has also participated in Bursa Malaysia's Public Listed Companies Transformation Programme 2022 to 2025, which promotes stronger governance, financial resilience and sustainability integration. These initiatives reflect TDM's role not only as a business entity but also as a strategic extension of state-led development in Terengganu. Table 1 report the TDM Berhad's top 10 investors are institutional shareholders, led by Terengganu Incorporated Sdn. Bhd. with a 59.67% stake and Lembaga Tabung Amanah Warisan Negeri Terengganu with 1.36%, as shown.

Table 1: Top 10 Investor for TDM Berhad

No.	Investor Name	Percentage (%)	Investor Type	Investor Sub-Type	Country
1	Terengganu Incorporated Sdn Bhd	59.67%	Strategic Entities	Corporation	Malaysia
2	Lembaga Tabung Amanah Warisan Negeri Terengganu	1.36%	Strategic Entities	Corporation	Malaysia
3	Wong (Yu)	0.88%	Strategic Entities	Individual Investor	Malaysia
4	Kong (Kok Choy)	0.88%	Strategic Entities	Individual Investor	Malaysia
5	Tee (Kim Tee)	0.83%	Strategic Entities	Individual Investor	Malaysia
6	Ooi (Chin Hock)	0.56%	Strategic Entities	Individual Investor	Malaysia
7	Teh (Koon Chai)	0.55%	Strategic Entities	Individual Investor	Malaysia

8	Low (Keng Joo)	0.37%	Strategic Entities	Individual Investor	Malaysia
9	Goh (Hian Tim)	0.35%	Strategic Entities	Individual Investor	Malaysia
10	Tee (Lip Sin)	0.33%	Strategic Entities	Individual Investor	Australia

Source: Refinitiv Eikon DataStream (2024).

Table 2: Corporate Governance Structure of TDM Berhad

TDM Bhd	2024	2023	2022	2021
Board Size	8	8	7	7
Number of Board Meetings	14	10	17	19
Female on Board (%)	12.5	12.5	0	0
Audit Board Committee	Yes	Yes	Yes	Yes
Nomination Board Committee	Yes	Yes	Yes	Yes
Compensation Board Committee	Yes	Yes	Yes	Yes
Corporate Governance Board Committee	No	No	No	No
CSR Sustainability Committee	Yes	Yes	Yes	Yes
Highest Remuneration Package (USD)	160,942.5	153,224.4	209,204.5	
Total Senior Executives Compensation (USD)	160,942.5	153,224.4	209,204.5	130,643.6
Board Member Compensation (USD)	299,655.1	220,442.3	202,413.9	215,071.8

Source: Refinitiv Eikon DataStream (2024).

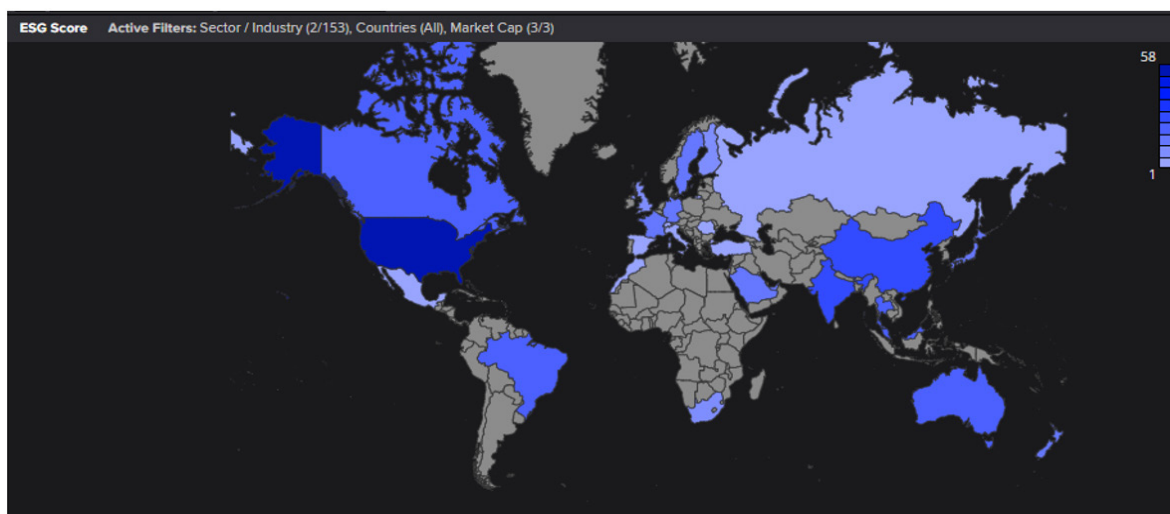
Table 2 presents the corporate governance structure of TDM Berhad for the period 2021 to 2024. Similar with the Malaysian Code on Corporate Governance (MCCG) 2021 recommendation, the company recorded an increase in female representation on its board, averaging 12% between 2021 and 2024. However, unlike other committees, TDM Berhad has not established a dedicated Corporate Governance Board Committee since 2021, reflecting the voluntary nature of this MCCG 2021. Notably,⁷ board compensation (reported in USD) is disclosed alongside the company's financial performance and upcoming project ventures, demonstrating the linkage between governance practices, remuneration policies and strategic growth. Indirectly, this governance configuration is significant in the context of Terengganu's participation in BRI through the ECRL project,⁸ as it underscores how TDM Berhad balance compliance with national governance codes, stakeholder expectations and the strategic demands of large-scale FDI projects that shape the political economy of the state.

TDM Berhad is selected as the focal case study due the following justifications. First, TDM Berhad operates in two primary sectors consist of oil palm plantation and healthcare services, with additional activities under investment holding. Its plantation segment, managed through TDM Plantation Sdn. Bhd., covers approximately 13 oil palm estates in Terengganu, supported by two palm oil mills, two composting plants and two biogas plants.⁹ Meanwhile, the healthcare segment focuses on medical consultancy and specialist healthcare services. This dual-segment structure positions

TDM Berhad as a diversified group with operations spanning both agriculture-based industries and healthcare services. Secondly, the BRI, is a 665-kilometer rail corridor designed to connect Malaysia's East Coast states with the western economic hub of Klang Valley. Its objective is to enhance national connectivity, cutting travel time and facilitating freight movement, thereby integrating the nation into broader regional networks. Importantly, the project expected to contribute 1.5% additional annual GDP growth to states such as Terengganu upon completion.

Lastly, China's BRI has positioned Malaysia as a central node in the China–Indochina Economic Corridor.¹⁰ However, geo-politic tension for instance geopolitical rivalries, terrorism, and shifting patterns of regional integration open Malaysia to faces the dual task of leveraging Chinese investments for national development while safeguarding its autonomy in economic and political decision-making. This raises two dominant challenges for TDM Berhad (a) *To what extent do federal state political dynamics influence the outcomes of the BRI in Terengganu?* and (b) *How has TDM Berhad adapted its governance practices in response to the economic and political implications of the ECRL project?*

The aim of this study is to examine the impact of BRI on the political economy of TDM Berhad from the opportunities, risks and policy implications. Therefore, at the corporate level, the study analyzes how TDM Berhad has adjusted its governance structures and strategic direction in response to the implications of the ECRL. In this context, the research analyzes the economic spillover effects of the ECRL project on TDM Berhad's operations and long-term business sustainability. It also examines stakeholder perspectives regarding the risks and opportunities that arise from the company's involvement in the project. Finally, the study considers how TDM Berhad balances its commitments to sustainability and environmental, social and governance (ESG) compliance with the developmental pressures of large-scale infrastructure initiatives in Malaysia. Map 1 and Table 3 present a global overview of the healthcare industry in 2024, where TDM Berhad is ranked 80th among 151 countries, in comparison to IHH Healthcare Bhd, which holds the 6th position. According to Business Today, TDM Berhad has also allocated RM129.3 million for the construction of a hospital dedicated to serving the East Coast region. Accordingly, positioning TDM Berhad as a case study within the broader BRI framework enables this research to further examine how such mega projects contribute to regional development, income generation and the attraction of FDI into Malaysia.



Map 1: Global Coverage Map of healthcare industry globally.
Source:Refinitiv Eikon DataStream (2024).

Table 3: Global Coverage Map of Plantation and Healthcare industry globally

Rank	Company Name	HQ	Industry Group	Mkt. Cap (Million)	ESG Score
1	CVS Health Corp	United States of America	Healthcare Providers & Services	\$88,998	87.85
2	Fresenius Medical Care AG	Denmark	Healthcare Providers & Services	\$14,675	84.80
3	Ramsay Health Care Ltd	Australia	Healthcare Providers & Services	\$5,840	82.90
4	Elevance Health Inc	United States of America	Healthcare Providers & Services	\$69,652	82.43
5	Life Healthcare Group Holdings Ltd	South Africa	Healthcare Providers & Services	\$1,167	81.83
6	IHH Healthcare Bhd	Malaysia	Healthcare Providers & Services	\$14,314	81.21
7	Fleury SA	British	Healthcare Providers & Services	\$1,426	80.15
8	H.U. Group Holdings Inc	Japan	Healthcare Providers & Services	\$1,328	79.90
9	Clariane SE	France	Healthcare Providers & Services	\$1,990	78.77
10	DaVita Inc	United States of America	Healthcare Providers & Services	\$9,527	77.58
80	TDM Bhd	Malaysia	Healthcare Providers & Services	\$72	45.95

Source: Refinitiv Eikon DataStream (2024). Mkt. Cap (Million) represent Market capitalisation in Million.

Problem Statement

This study addresses the gap in understanding the impact of China's BRI toward TDM Berhad. Although China's BRI had been widely studied as part of its rise in global economic governance, there was limited understanding of its impact in Malaysia, particularly through the ECRL. In Terengganu, the political economy of the ECRL was significant, as it intersected with local development priorities, federal political agendas and China's strategic interests. TDM Berhad, closely linked to the East Coast economy, demonstrated how BRI-related projects could simultaneously create opportunities for growth while exposing governance vulnerabilities and long-term dependencies.¹¹

Despite the BRI has been regarded as beneficial to Malaysia's economic geography, there is limited scholarly analysis on how it reshapes regional governance and planning regimes. The ECRL raises the critical issue of how such projects transform multilevel governance at the state level, especially in relation to policymaking, institutional authority and territorial control in TDM Berhad. This research problem highlighted the need to critically examine how such mega projects redefined regional development pathways and their implications for Malaysia's economic future.

Literature Review

The literature review provides an in-depth analysis of China's BRI, focusing on Malaysia and the ECRL project. It examines Malaysia's political and institutional landscape and its impact on the ECRL's implementation, while also evaluating Chinese financial strategies in infrastructure development within Malaysia. The ECRL project¹² aims to improve connectivity between Malaysia's, significantly increase commercial and tourism development along its route.

The prior studies had identified several political economy challenges associated with the ECRL project. For instance, The Institute for Democracy and Economic Affairs (IDEAS) claim due to the heavily reliant on loans from China's Export-Import Bank, has raised concerns about debt dependency and the absence of robust parliamentary oversight.¹³ Additional criticism has focused on the issues of governance and transparency on the ECRL. Researchers argue that these dynamics highlight broader challenges relating to institutional trust, accountability and the balance of federal state relations in the governance infrastructure projects.¹⁴ Beyond governance, in Terengganu specifically, where significant portions of the railway pass through, communities have expressed optimism regarding economic growth while simultaneously voicing concerns about limited consultation and inadequate information sharing.¹⁵ As a key component of China's BRI in Malaysia, the ECRL is managed by China Communications Construction ECRL Incorporation. Malaysia, as China's largest trade partner in Southeast Asia, plays a pivotal role in the BRI.

Political Economy from Federal and State level

According to past literature,¹⁶ Malaysia's political economy was shaped by its federal structure and historical trade activities, primarily concentrated on the west coast. Despite significant petroleum resources in East Coast states like Kelantan and Terengganu, which have driven infrastructure development by PETRONAS, these states remain among the least developed in Malaysia. Hence, a key issue in Terengganu's political economy is the distribution of resources between federal and state governments.

The literature situates the ECRL within Malaysia's political economy, emphasizing its importance for both federal political agendas and state-level development priorities. At the state level, especially in Terengganu, the ECRL intersects with concerns over local economic development, stakeholder participation, governance capacity and territorial control, where communities express both anticipation of growth and insufficient consultation. In addition, concerns regarding the transparency of the ECRL project have been consistently highlighted in the literature.¹⁷ Since the project's initial proposal in 2007, multiple feasibility assessments, financing models and market analyses were undertaken to evaluate its viability by McKinsey in 2016. However, none of this report have been made publicly available, thereby limiting public scrutiny of decision-making processes, this led into tension about the weaknesses in governance, institutional accountability and public trust in the management infrastructure projects. Accordingly,¹⁸ notes that Terengganu, faces ongoing challenges in securing sufficient federal funding to address poverty and inequality. This study's first argument examines this relationship:

Premise 1: BRI framework has direct economic and social impact to the TDM Berhad, Malaysia.

Policy changes in response to ECRL

According to IDEAS, the past studies highlighted the pressure between local communities and government officials on the BRI.¹⁹ For instance, research on China's BRI in Malaysia has primarily concentrated on four flagship projects: ECRL, the Gemas-Johor Bahru Electrified Double-Tracking Project, the Melaka Gateway and the Trans-Sabah Gas Pipeline.²⁰ Most of these projects were launched following former Prime Minister Najib Razak's 2016 official visit to Beijing, during which a series of Memoranda of Understanding were signed under the BRI framework, yet the framework is unclear thus delayed the project progress. Meanwhile, in 2018, the Terengganu state government also formed a Community Development Committee aimed at managing development initiatives and offering job training opportunities to affected communities.²¹ Despite these measures, the project has continued to face governance challenges lead for the project incomplete.²² Criticism has also come from political leadership questioning the high costs of the ECRL²³ and its perceived limited benefits for local communities.²⁴ Taken together, the dispute and unresolved tension lead for second arguments:

***Premise 2:** There are changes of governmental and corporate policy in response BRI framework to the TDM Berhad, Malaysia.*

Political Institutional Constraints on ECRL

The implementation of the ECRL has exposed the complex dilemma between China's BRI ambitions and Malaysia's domestic political-institutional environment. In Terengganu, TDM Berhad, deeply embedded in the East Coast economy, illustrate how local actors intersect with both federal policies and China's strategic interests, where a critical research issue highlights the significance of GLC and local stakeholder involvement.

Past studies argue that political dynamics in the host country are crucial for the success of Chinese infrastructure projects.²⁵ As such, the researchers highlight that the ECRL has faced major challenges due to Malaysia's political landscape, limiting the impact of Chinese financial strategies. This situation indicates that the Malaysian federal government holds substantial influence over the ECRL's construction and ownership. Meanwhile, to compare, past studies belief that Chinese financial statecraft, particularly in infrastructure provision, has less impact than expected. The researchers²⁶ highlight that the ECRL in Malaysia has not met China's desired outcomes due to political-institutional constraints.²⁷ To maintain neutrality as per the Zone of Peace, Freedom and Neutrality Declaration of 1971²⁸ play crucial impact.

Milestones

Despite BRI's growth and development, the ECRL's influence appears constrained by several factors. Firstly, domestic local governance frameworks and regulatory institutions significantly mediate project outcomes, while socio-environmental concerns shape public acceptance and sustainability prospects. This indicates that the ECRL as an outcome of complex interactions between national policy priorities and local realities.

The China's unilateral dominance risks oversimplifying the essence of the dynamics at play in TDM Berhad's development trajectory. A critical gap from literature therefore exists in examining how Chinese financial support interacts with Malaysia's domestic structures and community responses

and to what extent BRI's reshape ESG landscapes at the state level.²⁹ Past studies³⁰ note Malaysia's commitment to neutrality, a principle shared by ASEAN members especially in term of diplomatic and economic engagements. Policymakers and stakeholders both nations consider these factors in international infrastructure partnerships. Table 4 summarizes the TDM Berhad Income Statement from 2018 to 2023 milestones and expected impacts. The data indicates that TDM Berhad's gross profit has steadily increased from RM107,981 in 2018 to RM217,908 in 2023. Interestingly, the company's revenue rose to RM593,406, a growth trend that appears to be indirectly influenced by the ECRL project. Table 5 report balance sheet for TDM Berhad from 2018 to 2023. Table 6 presents an overview of the sequence of literature on the BRI from 2004 to 2022, highlighting the significance of this study for the future of TDM Berhad and its indirect linkage to the BRI.

Table 4: Income Statement for the TDM Berhad from 2018 to 2023

Period	2023	2022	2021	2020	2019	2018
Auditor Name	Ernst & Young	Ernst & Young	Ernst & Young	Ernst & Young	Ernst & Young	Ernst & Young
Auditor Opinion	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified
Revenue	594,406	614,372	511,582	442,877	425,070	397,947
Net Sales	594,406	614,372	511,582	442,877	425,070	397,947
Total Revenue	594,406	614,372	511,582	442,877	425,070	397,947
Cost of Revenue	376,498	392,557	316,154	296,604	308,131	289,966
Gross Profit	217,908	221,815	195,428	146,273	116,939	107,981

Source: Refinitiv Eikon DataStream (2024).

Table 5: Balance Sheet for TDM Berhad from 2018 to 2023

Period	2023	2022	2021	2020	2019	2018
Cash	168,150	68,704	139,762	169,660	33,411	24,273
Short Term Investments	--	38,480	54,681	63,239	56,891	51,132
Total Inventory	26,428	39,223	32,728	25,941	25,843	34,745
Other Current Assets	110,275	102,124	105,666	184,677	190,380	0
Other Current Assets	3,753	--	--	--	--	--
Total Current Assets	400,752	332,259	412,993	522,707	381,988	181,103

Source: Refinitiv Eikon DataStream (2024).

Table 6: Systematic Literature Review of Past Literatures

No.	Authors Name	Year	Journal	Title	Country	Main variable	Experiment variables	Findings	Conclusion
1	Min Ha Lee, Inkyo Cheong	2011	Journal of International Logistics and Trade	A Critical Review on Regional Integration Processes in East Asia	ASEAN	Regional Integration	Multilateral trade liberalization	East Asia now faces a second opportunity to achieve its economic independence from the extra-regional influences via regionalization: the 2009 Global Credit Crunch.	This paper urged the urgent need for economic growth, the pursuit of open regionalism as a natural choice for the export-oriented economies in East Asia.
2	Jung Taik Hyun, Jin Young Hong	2004	Journal of International Logistics and Trade	Characteristics and Problems of Free Trade Agreements Involving East Asian Countries	East Asia	Free Trade Agreement	Trade Policy	East Asia FTAs provide incomplete coverage of sectors and are likely to lead to an inefficient resource allocation. FTA movements are not matched with actual trade flows.	The overall assessment is that the recent policy shift in East Asian countries from multilateral trade orientation and regional trade approach will not produce much gain.
3	Krzysztof Kozłowski	2020	Journal of Science and Technology Policy Management	BRI and its digital dimension: twists and turns	China	People's Republic of China (PRC) Belt and Road strategy	Silk Road Economic Belt, Maritime Silk Road	The Post-Soviet Central Asia shows the way Beijing thinks about integration, concentrating on economic expansion, while other Powers provided relative regional security and stability.	The comparison of the beginnings of the New Silk Diplomacy in the 1990s with the plans of the New Digital Road gives a unique angle to grasp the specific features of the Chinese approach to international integration.
4	Fengqi Qian	2021	Journal of Cultural Heritage Management and Sustainable	Ancient routes, new dream: the Silk Roads and China's Belt and Road Initiative	Maritime Silk Routes	Maritime Silk Road	The Communist Party of China's	The state-backed Silk Roads narrative as well as the planning for the World Heritage: nomination of the MSR is guided by the Chinese Communist Party's perception of the BRI.	The paper contributes to the existing literature on the BRI through its enquiries into how the CPC reconcile nationalist ambitions with notions of peace, harmony and cosmopolitanism of the BRI.
5	Liudmila V. Shkvarya and Hailing Yu	2022	Research in Economic Anthropology	Belt and Road Initiative and China's Economic Challenges	China	Belt and Road	economy and trade	The initiative uniting more than 80 countries in Asia, Africa and Oceania, will strengthen China's role in the world economy and trade.	The paper focus the economic goals and objectives of the People's Republic of China (PRC) under the BRI and the possibilities of using the trade and economic system created by the PRC for developing the PRC and the BRI member countries.

Source: Authors' Work (2024).

The balance sheet trends from 2018 to 2023 reveal a decline in total inventory by RM12,795 and fluctuating current assets peaking in 2020, signaling financial adjustments that position the firm for greater resilience. These shifts not only reflect internal efficiency measures but also suggest an indirect spillover effect from the ECRL project under the BRI, where enhanced connectivity and regional development create avenues for TDM Berhad to strengthen its balance sheet and expand its role in supporting future infrastructure-driven growth in Terengganu (Table 5). Table 7 outlines the milestones of the BRI framework, highlighting key factors that may contribute to emerging risk implications.

Table 7: Milestones of BRI framework

Factor	Expected Impact
Input/Material Factors	Increased foreign direct investment and currency stability: The internationalization of the Chinese currency and the effective use (or rebalancing) of foreign currency reserves is one of the main motives for the BRI. Improved access to primary resources: Infrastructural projects to facilitate access to primary resources make up a substantial part of the BRI.
Cost	Easier access to (cheap) labor: Reduced transportation time allows for relocating in a larger geographical area providing access to a larger labor pool.
Labor	Need for human resource development: Access to new labor often means low skilled or poorly qualified labor. A major issue is therefore the development of human resources.
Logistics	Increased availability and reliability of transportation: Improvement of the infrastructure is a key objective of the BRI. Reduced transportation time: Reducing the transportation time is a main objective of the BRI.
Supply Chain Interruption Risk	The risk of disruption by disaster and/or terrorism increases: The BRI potentially extends the supply chain over a larger geographical distance and through several countries. The risk of disruption by disaster and/or terrorism decreases: The BRI links supply chain partners closer together by reducing the 'perceived' geographical (distance).
Strategic Access	The access to suppliers and markets is increased: The BRI links peripheral countries to developed economies providing new markets and new possibilities for sourcing.
Country Risk	Increased risk through bilateral relations: Cooperation with one country may increase tension with another country disturbing the status quo. This in turn may significantly affect the supply chain since sourcing, manufacturing and access to a market may become easier for the former but almost impossible for the latter. Different degrees of investment risk: There are significant discrepancies in the development of BRI countries and investment risk.
Government Trade Policies	Different taxation and custom rules: At this stage there are no free trade agreements. Hence, taxation and customs play major roles in supply chain costs.

Source: Authors' Work (2024).

Data and Methodology

Sample selection

This study adopts a mixed-method approach, utilizing both primary and secondary data sources. Secondary data are obtained from the Refinitiv Eikon DataStream, focusing on financial information from the Top 100 public listed companies (PLCs) in 2023 and 2024 that provide complete board directorship disclosures. The initial population consists of 493 observations from Main Market companies with full board directorship for both years. After data screening and the removal of incomplete information, the final sample comprises 447 observations. The operational definitions applied in the secondary data analysis are presented in Table 8.

Table 8: Operational Definitions for Secondary Data

No.	Acronym	Items	Descriptive	Sources	Data Collection
1	BSize	Board Size	The total number of board members.	Refinitiv Eikon DataStream	Hand Collect
2	B_Compensation	Board Member Compensation (in USD)	This formula returns the total compensation package of the board members.	Refinitiv Eikon DataStream	Secondary Data
3	B_Attendance	Board Attendance	A binary / qualitative indicator showing whether the company discloses board attendance data.	Refinitiv Eikon DataStream	Secondary Data
4	B_Diversity	Board Gender Diversity	Percentage of female on the board.	Refinitiv Eikon DataStream	Secondary Data
5	B_Skills	Board Specific Skills	The metric is based on disclosure: 0 if the company doesn't explicitly state board members' skills in its annual or sustainability reports, 1 if otherwise.	Refinitiv Eikon DataStream	Secondary Data

Source: Authors' Work (2024).

Measurement for Dependent Variable and Independent Variables

Table 8 presents the definitions of the variables employed in this study. Unlike prior studies that have commonly treated board size (BSize) as a control variable, this study designates BSize as the dependent variable, consistent with the approach adopted in past literature.³¹ BSize is measured by the total number of board members in PLCs. The rationale for employing BSize as the key measurement lies in its ability to capture the balance of board composition in terms of gender, ethnicity and religiosity.

The same table also outlines the composition of the independent variables, which are derived from board demographics and include Board Member Compensation (B_Compensation), Board Attendance (B_Attendance), Board Gender Diversity (B_Diversity) and Board Specific Skills (B_Skills). In contrast to previous studies that focus on individual directorship characteristics, this study emphasizes board-level demographic factors as a unique contextual setting. Furthermore, while the primary data of this research are collected through interview protocols, the financial data serve primarily for descriptive analysis especially for TDM Berhad. Meanwhile, the descriptive analysis indicates that BSize, remained stable across the two years, with a mean of 7.63 in 2023 and 7.59 in 2024, suggesting limited variation in the structural composition of boards among Malaysian PLCs (Table 9). When compared to the independent variables, several patterns occurred. Board compensation (B_Compensation) exhibited extreme variation, with highly skewed distributions.

Furthermore, board attendance (B_Attendance) remained consistent across both years, averaging 0.78, which suggests that commitment levels are generally maintained regardless of BSize. Additionally, board diversity (B_Diversity) showed a slight upward trend, increasing from 24.41% in 2023 to 26.62% in 2024, potentially reflecting gradual inclusivity efforts that could influence optimal board size settings. Similarly, board background (B_Background) demonstrated relatively high averages (59.53% in 2023, 62.35% in 2024), indicating that diverse professional and educational expertise is a common characteristic of boards and may contribute to determining the appropriate number of directors required.

Table 9: Descriptive Analysis

Variables	Period	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
BSize	2024	4.00	16.00	7.59	1.76	0.62	0.12	0.52	0.23
	2023	4.00	15.00	7.63	1.88	0.81	0.12	0.90	0.23
B_Compensation (in USD)	2024	9421.27	1967102.51	172298.56	229373.83	3.59	0.12	17.95	0.23
	2023	6089.88	5785227.27	188640.90	358270.10	9.69	0.12	137.11	0.23
B_Attendance	2024	0.00	1.00	0.78	0.41	-1.39	0.12	-0.07	0.23
	2023	0.00	1.00	0.78	0.41	-1.36	0.12	-0.16	0.23
B_Diversity	2024	0.00	100.00	26.62	12.22	0.73	0.12	2.52	0.23
	2023	0.00	100.00	24.41	13.16	0.60	0.12	2.05	0.23
B_Background	2024	0.00	100.00	62.35	16.73	-0.02	0.12	-0.06	0.23
	2023	20.00	100.00	59.53	15.56	-0.04	0.12	-0.55	0.23

Source: Generated from SPSS software (analysis).

This study further employs interviews to collect primary data, complemented by secondary data analysis to justify the selection of TDM Berhad as the focal case. Comprehensive interviews and in-depth company-level exploration provide valuable insights, thereby enriching the overall findings

and strengthening the justifications for case selection.³² The choice of a qualitative research design is primarily driven by its ability to generate rich, in-depth data that capture meaning, experiences and perspectives from participant's viewpoints.³³ Such an approach facilitates a comprehensive understanding of the political economy and policy changes associated with the ECRL project, particularly in the context of TDM Berhad. The unit of analysis is the individual PLC, with TDM Berhad serving as the specific case. Data collection includes interviews with two of TDM Berhad's directors, as summarized in Table 10.

Besides that, although this study adopts a qualitative approach through interviews with two anonymous representatives of TDM Berhad conducted on mid-2024, the participants were deliberately selected to ensure diverse perspectives. One director represents the executive role, providing insights from internal management, while the other serves in a non-executive capacity, reflecting stakeholder interests that encompass government, corporate governance and local community considerations.³⁴ This dual perspective strengthens the credibility of the findings by enhancing objectivity and reducing potential bias, thereby ensuring a more balanced analysis. The insights gained from these interviews contribute to a comprehensive understanding of the research topic and establish a valuable foundation for further academic inquiry in future studies.

Table 10: Summary of Interview Session Conducted with TDM Berhad

Form of Interview	Location	Duration	Designation	Gender	Board Size	Tenure
Physical	TDM Berhad	2 hours	NINE	Male	8	5 years
Online	TDM Berhad	2 hours	EXE	Male	8	6 years

Source: Authors' Work (2024). (2024). NINE represents Non-Independent Non-Executive Director and EXE represents Executive Director.

Sample Size and Data Collection

First, this study utilizes a secondary dataset comprising 447 observations over the period 2023–2024. The selection of PLCs across both years was undertaken to assess the economic implications of the BRI framework (Premise 1), with particular attention given to the East Coast region through interview sessions. TDM Berhad, identified among the Top 100 PLCs, serves as the representative firm for the East Coast region. The financial years 2023 and 2024 were chosen as the study period, as they align with the project's implementation timeline and capture the prevailing financial and economic developments of TDM Berhad, as reported in Tables 5 and 6. It is important to note, however, that the financial data for financial year ended 2024 had not been released at the time of data collection.³⁵

Secondly, regarding the interview protocol, the data collection process commenced with the acquisition of institutional approval from the respective authority. Following this, the researchers formally requested a confirmation letter from the institution to obtain authorization to conduct research at TDM Berhad, thereby ensuring compliance with institutional and administrative requirements. Once approval was granted, semi-structured interviews were carried out through both online sessions and field visits to the identified institutions. In addition, to address the second research objective, the interview protocol incorporated one structured question specifically designed to generate focused insights. Next, a comparative analysis of the BRI framework was undertaken, the results of which are presented in Table 11. This analysis highlights the differences in the BRI's economic and strategic implications between Malaysia and the broader ASEAN region within the scope of this study.

Table 11: Comparative Analysis

Aspect	Malaysia-China	Thailand-China	Myanmar-China	Philippines-China
Major BRI Projects	East Coast Rail Link, Kuantan Port.	High-Speed Rail (Bangkok–Nong Khai).	China-Myanmar Economic Corridor.	Infrastructure projects.
Economic Focus	Industrial hubs, trade facilitation and logistics.	Connectivity with Laos and ASEAN trade.	Energy, ports, and special economic zones.	Infrastructure development, trade, agriculture.
Strategic Importance	Enhances connectivity between East Coast and West Malaysia, ASEAN trade.	Links Thailand to China’s southern provinces and ASEAN.	Provides China with access to the Indian Ocean.	Strengthens China’s influence in maritime Southeast Asia
Geopolitical Concerns	Debt sustainability, political scrutiny.	Domestic resistance over sovereignty issues.	Concerns over loss of control in port facilities.	Allegations of excessive Chinese influence in infrastructure projects.
Social Impacts	Local employment concerns, mixed reception from communities.	Mixed opinions on the High-Speed Rail’s value to locals.	Concerns over displacement and environmental degradation.	Protests against perceived over-reliance on Chinese investments
Environmental Issues	Environmental impact assessments required for ECRL.	Environmental impact of infrastructure on rural areas.	Deforestation and biodiversity loss.	Issues with coastal and agricultural sustainability.
Governance and Policy	Strict governance through GLC.	Collaboration under ASEAN frameworks.	Limited transparency and weak governance.	Government shifting between support and hesitation based on political leadership.
Impact on Local Communities	Mixed response: some benefits from job creation but concerns about cultural change.	Mixed benefits, including tourism potential, but rural communities’ express concerns.	Displacement, with few benefits seen by local communities.	Public backlash over lack of local involvement in planning.
References	BRI Monitor; Jomo ³⁶	Storey ; Benbourenane ³⁷	Dossi ³⁸	Tritto ³⁹

Source: Authors’ Work (2024).

Results and Findings

Secondary Data

The findings reported in bivariate analysis. The Pearson Correlation Analysis in Table 12 provides insights into the relationships among board characteristics across the years 2023 and 2024. The board demographic represents the Hypothesis 1 on the impact of BRI framework towards economic and social of TDM Berhad, Malaysia. For the year 2023, BSize is positively correlated with B_Compensation ($r = 0.275, p < .01$), suggesting that larger boards tend to be associated with higher overall compensation. Furthermore, B_Attendance shows a negative correlation with both BSize ($r = -0.158, p < .01$) and B_Compensation ($r = -0.097, p < .05$), indicating that as board size and compensation increase, directors' attendance rates tend to decline. Interestingly, B_Diversity demonstrates no significant correlation with other variables, implying that diversity was relatively independent of board structure and compensation in 2023. Lastly, B_Background has a negative association with Board Size ($r = -0.167, p < .01$) and B_Compensation ($r = -0.144, p < .01$), suggesting that boards with more diverse professional backgrounds may not be aligned with larger or more highly compensated boards.

Table 12: Correlation Analysis for the year 2023 and 2024

No.	Variables	2023				
		1	2	3	4	5
1	BSize	1.000				
2	B_Compensation	0.275**	1.000			
3	B_Attendance	-0.158**	-0.097*	1.000		
4	B_Diversity	0.07	0.080	-0.050	1.000	
5	B_Background	-0.167**	-0.144**	0.050	-0.020	1.000
No.	Variables	2024				
		1	2	3	4	5
1	BSize	1.000				
2	B_Compensation	0.472**	1.000			
3	B_Attendance	-0.107*	-0.070	1.000		
4	B_Diversity	0.050	0.133**	0.000	1.000	
5	B_Background	1.000	-0.132**	0.104*	0.090	1.000

Source: Generated from SPSS software (analysis).

To compare, for the year 2024, the correlation between BSize and B_Compensation strengthens considerably ($r = .472, p < .01$), highlighting a closer link between larger board structures and higher compensation packages. B_Attendance continues to exhibit a negative relationship with Board Size ($r = -0.107, p < .05$), but its association with B_Compensation becomes statistically insignificant ($r = -0.07$). This suggests that attendance issues are more tied to board size than to remuneration. Meanwhile, B_Diversity becomes positively correlated with B_Compensation ($r = 0.133, p < .01$), indicating that firms offering higher compensation in 2024 tended to have more diverse boards, marking a shift from 2023. B_Background remains negatively correlated with both BSize ($r = -0.126, p < .01$) and B_Compensation ($r = -0.132, p < .01$), aligned with period 2023.

However, it is also positively correlated with B_Attendance ($r = 0.104, p < .05$), suggesting that directors with varied professional backgrounds may have contributed to improved participation in 2024. The findings indicate that BSize serves as a key contributor to strengthening and enhancing governance effectiveness, particularly in the context of preparing for the future BRI framework among PLCs. However, the analysis also suggests that the economic dynamics associated with the ECRL project could disrupt board structures and decision-making processes if not properly managed, potentially undermining firms' ability to respond effectively to the opportunities and risks arising from BRI-related developments.

Primary Data

The study found that direct interviews with key stakeholders affected by the ECRL project provided valuable insights into its influence on the state's ESG aspects. Despite several challenges encountered, the qualitative research design proved effective in generating in-depth and rich data that enhanced the understanding of stakeholder perspectives.

***Premise 1:** BRI framework has direct economic and social impact to the TDM Berhad, Malaysia.*

For the first statement, the researchers conducted an interview with a representative from TDM Berhad to gather insights and perspectives relevant to the research topic. The interview further revealed the participant's awareness of the regulations governing the BRI framework, as reflected in the following quote:

“From the perspective of the state, repurposing this land for the ECRL project is expected to generate new economic opportunities and activities. Our current use of the land through plantation activities brings employment and economic benefits to the area. However, the introduction of a transportation link like the ECRL promises to deliver significantly greater economic benefits.

As a GLC, we anticipate receiving fair compensation. Additionally, the broader economic benefits to the people and the state of Terengganu are projected to outweigh the immediate losses, ultimately resulting in a net positive outcome for the region.”
[Non-Independent Non-Executive Director, Healthcare Company]

From the session, it was perceived that the BRI framework holds significant potential for generating economic and social impacts. This finding is consistent with prior literature.⁴⁰ Furthermore, to deepen the understanding of the experimental variables associated with the BRI project, the researchers also examined the demographic aspects of BRI-related developments. As noted by the interviewee:

“We must exercise caution with investments from China.

However, China's investment strategy also includes joint ventures and collaborations that are more integrated than the straightforward investments seen from other multinationals. This duality presents both advantages and disadvantages, necessitating careful consideration of Chinese investments.

Examining cases like Sri Lanka and various African countries reveals a concerning trend: large-scale investments in infrastructure such as ports often lead to situations where the local governments cannot repay the debt, resulting in asset takeovers by Chinese corporations.”

[Executive Director, Healthcare Company]

The statement further provided researchers with valuable insights that BRI projects contribute to enhancing social well-being in Malaysia and TDM Berhad while simultaneously driving economic growth.

***Premise 2:** There are changes of governmental and corporate policy in response BRI framework to the TDM Berhad, Malaysia.*

Beyond the economic and social impacts discussed in Premise 1, the researchers also examined the governmental perspective on policy implementation in advancing the BRI project agenda. Moreover, as highlighted by the interviewee, the BRI project has attracted investment not only through FDI but also via collaborative partnerships with investors.

“Federal policies in Malaysia are increasingly geared towards attracting FDI. Malaysia permits the free flow of FDI, and China has emerged as its largest trading partner, surpassing the US and the UK. China’s immense production capacity, particularly in industrial manufacturing and motor vehicles, highlights its significant economic influence.”

[Non-Independent Non-Executive Director, Healthcare Company]

To further substantiate the premise, the researchers sought additional clarification on government and corporate policies in response to the BRI framework. In comparison, the interviewee responded that:

“When examining the debt-to-GDP ratio and monetary policies, Singapore employs an interventionist approach to maintain a strong currency, contrasting with Malaysia’s managed float against the US dollar.

Significant financial resources are utilized to support these strategies.”

[Executive Director, Healthcare Company]

Although the statement reflects disagreement on whether changes in governmental and corporate policies in response to the BRI framework provide any value-added impact to the nation, the researchers interpret the explanation as indicating that such policy shifts are largely driven by changes in leadership, which in turn influence the current policy direction. Furthermore, the researchers also explore the indirect reason for the changes in governmental and corporate policy toward the success of the ECRL project, as mentioned:

“Economically, we must balance between the Western unipolar world and the BRICS nations, engaging both sides. As a member of the Non-Aligned Movement, we strive to be friends with all and enemies with none.

We welcome investment from China, but not at the cost of selling out our people or our assets.

This partnership should be mutually beneficial, yielding profits and employment opportunities domestically, while allowing them to repatriate their earnings.”

[Non-Independent Non-Executive Director, Healthcare Company]

Governmental changes and corporate policies are often beyond control and largely dependent on the ruling administration.⁴¹ Apart from the explanation given, the researchers also further explore the justification of the ECRL project from TDM Berhad and the interviewee provide this answer:

“In every endeavor, we must adopt a holistic perspective, seeking win-win outcomes to foster progress. This requires not only economic and administrative strength but also military strength to safeguard our interests.

Therefore, we must prioritize the interests of our people to achieve mutually beneficial outcomes. This approach is particularly pertinent when considering the local communities in Terengganu, ensuring that they too benefit from these economic activities.”

[Executive Director, Healthcare Company]

Drawing from the two premises, the researchers assessed the government’s impact through ESG scores using archival data (Table 13). The analysis of 2021 and 2022 revealed consistent overall ESG and ESG Combined Scores of 51% and C+, respectively.⁴² However, the Governance Pillar Score declined from D+ in 2021 to D in 2022, while the ESG Controversies Score dropped from A+ to B+, partly reflecting the influence of the BRI. TDM Berhad also faced heightened scrutiny regarding its ESG Controversies Score following legal setbacks in Indonesia.⁴³ Specifically, the company was ordered to pay RM275.1 million in environmental damages and rehabilitation costs after losing a lawsuit, and in 2023, Indonesia’s apex court ruled against TDM in another case involving environmental losses amounting to RM275.9 million.⁴⁴

Discussion

Main Findings

Table 13: TDM Berhad ESG Controversies

Indicators	2022	2021
Period End Date	12/31/2022	12/31/2021
ESG Report Auditor Name	--	--
ESG Combined Score	C+	C+
ESG Score	C+	C+
Environmental Pillar Score	B-	B-
Social Pillar Score	B+	B+
Governance Pillar Score	D	D+
ESG Controversies Score	B+	A+

ESG Controversies		
Environmental Controversies	TRUE	FALSE
Environmental Controversies Count	1	--
Wages Working Condition Controversies	FALSE	FALSE
Wages Working Condition Controversies Count	--	--
Diversity and Opportunity Controversies	--	--
Employees Health & Safety Controversies	--	--
Management Departures	FALSE	FALSE

Source: Refinitiv Eikon DataStream (2024).

This study examines the impact of BRI framework on Malaysia's with particular attention to the issue of FDI. Malaysia's strategic position in ASEAN, heightens its exposure to potential threats to national security and autonomy.⁴⁵ The findings show that from an economic perspective, secondary data indicate that Malaysia has increasingly relied on FDI since 2018 to stimulate growth. However, excessive dependence on FDI risks undermining long-term economic independence and development.⁴⁶

The BRI raises questions as to whether its investments primarily benefit host nations or serve China's interests. Back to early question, to what extent do federal state political dynamics influence the negotiation, implementation and outcomes of the BRI in Terengganu, the findings expected that the foreign investments often weaken local industries by relying on imported labor and resources,⁴⁷ leading to job displacement and reduced domestic competitiveness.⁴⁸ As such, Table 13 indicates that the economic dynamics of the ECRL project, if not carefully managed, may disrupt board structures and decision-making processes, thereby weakening firms' capacity to respond effectively to the opportunities and risks associated with BRI-related developments.⁴⁹

Moreover, regarding how the TDM Berhad adapted its governance practices in response to the economic and political implications of the ECRL project, can be seen from the evidence of primary data. This role not only fosters deeper economic integration but also illustrates Malaysia's dual strategy of attracting Chinese investment while maintaining national sovereignty.⁵⁰ As such, the project's financing through a loan from the Export-Import Bank of China mitigate the risks of debt diplomacy. For instance, as stated "*We welcome investment from China, but not at the cost of selling out our people or our assets,*" indicate the dilemma of the local authority such as TDM Berhad on the effective of BRI framework in the long-term projects. Additionally, The BRI project illustrates Malaysia's strategic alignment with China's BRI, positioning itself as a trans-regional corridor that enhances economic integration between the east and west coasts while also advancing Malaysia's dual objectives of securing Chinese investment and protecting national sovereignty.⁵¹

Premise 1: *BRI framework has direct economic and social impact to the TDM Berhad, Malaysia.*

Within the context of the BRI framework's direct economic and social impact on TDM Berhad, there is growing scholarly and policy-related concern regarding the potential for foreign influence⁵² in Malaysia's political landscape. The BRI has heightened apprehensions about China's global expanding

economic and political footprint in Malaysia. For instance, “*Malaysia permits the free flow of FDI, and China has emerged as its largest trading partner, surpassing the US and the UK.*” In term of TDM Berhad, even though the project is anticipated to catalyse economic development, it also underscores the complexities of aligning with China while sustaining constructive relationships with other major powers such as the US. Compared to 2021, no Environmental Controversies occurred, however in 2022 already news of the TDM Berhad controversial matters reflect the company performance.⁵³

Moreover, the ECRL, as a flagship BRI project, must also be assessed within this broader geopolitical framework. Malaysia’s relatively cautious and pragmatic approach to the South China Sea enables Malaysia to pursue the economic advantages associated with the BRI’s framework on managing underlying security and sovereignty concerns. From a socio-economic perspective, the anticipated benefits of the BRI’s framework can be seen from strong PLCs FDI as evidence by board composition.⁵⁴

Premise 2: *There are changes of governmental and corporate policy in response BRI framework to the TDM Berhad, Malaysia.*

Drawing from the TDM Berhad Integrated Annual Report 2023 (Appendix I), the research further examines the project’s political and social implications by analyzing stakeholder engagement.⁵⁵ For instance, TDM Berhad’s corporate social responsibility initiatives, such as the *Ladang Sahabat TDM* program and the distribution of 1,000 packs of *bubur lambuk* during Ramadan, carried out in collaboration with the Terengganu Incorporated Group, demonstrate a sustained commitment to community welfare, knowledge-sharing and strategic partnership-building.⁵⁶ For instance, the project reflects a broader commitment to sustainable development, including support for blue economy strategies and long-term socio-political stability.⁵⁷

Conclusion

Malaysia’s engagement with the BRI, including projects linked to TDM Berhad, offers economic and infrastructural gains but simultaneously raises concerns over national sovereignty and long-term strategic autonomy, reflecting a complex trade-off between opportunity and risk. As such, the ECRL could serve as a model of successful integration for other Southeast Asian nations engaged in BRI projects. This highlights the importance for ASEAN countries to critically evaluate the alignment of BRI initiatives with goals of sovereignty protection, environmental sustainability, and equitable economic growth. In a nutshell, this study, using qualitative methods and secondary data, provides an initial assessment of the ECRL’s economic performance and establishes a foundation for future research based on TDM Berhad.

Malaysia’s engagement in the BRI through TDM Berhad offers substantial economic and infrastructural benefits it must also be contextualized within the broader geopolitical landscape shaped by intensifying United States (US) and China rivalry. The US decoupling measures such as export controls, sanctions and investment restrictions have weakened China’s influence in key sectors, indirectly affecting the pace and financing of BRI projects in partner countries, including Malaysia. Although recent diplomatic efforts have aimed to ease tensions and reopen dialogue, core disputes over technology, trade and geopolitical dominance remain unresolved. Within this context, Malaysia faces the challenge of balancing the opportunities of BRI participation with concerns over sovereignty, debt sustainability and strategic dependence. In the nutshell, projects such as the ECRL highlight the need for sound governance and policy prudence to ensure that collaboration under the BRI aligns with Malaysia’s long-term national and economic interests.

Acknowledgements

This research was funded by Universiti Malaysia Terengganu through the Talent and Publication Enhancement-Research Grant (UMT/TAPE-RG/2022/55392).

Disclaimer

Although this study provides valuable insights from two anonymous directors of TDM Berhad, the viewpoints expressed are based on their experiences with the BRI framework, particularly regarding its political, economic, and social impacts. This may introduce bias into the overall assessment. To mitigate these concerns, the researchers actively sought neutral perspectives and ensured that the information presented is fair and balanced.

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