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The Influence of Domestic Political Environment on Stakeholder Engagement: Mediating Role in the Success of Malaysia's East Coast Rail Link Project

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ABSTRACT

The East Coast Rail Link (ECRL) project in Malaysia underscores the importance of effective governance in large-scale infrastructure development. This study explores the relationships among the domestic political environment (DPE), stakeholder engagement (SE), and project outcomes, including governance effectiveness and success. Grounded in collaborative governance and stakeholder theories, a conceptual model was developed to guide the analysis. A survey with 23 questions was administered to 361 stakeholders involved in the ECRL, with data analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. Results reveal that a stable political environment positively influences stakeholder engagement and project outcomes, while active stakeholder involvement further enhances success. Additionally, stakeholder engagement serves as a partial mediator between the political environment and project outcomes, with moderate explanatory power for success. These findings highlight the critical role of political stability and stakeholder collaboration in driving project achievements, though contextual factors suggest further exploration. Implications for policymakers and project managers are discussed, along with recommendations for future research to strengthen governance strategies in similar initiatives.

Key Words: Governance, Collaborative Governance, East Coast Rail Link,Infrastructure Projects, Political Environment, Stakeholder Engagement.

1. INTRODUCTION

In an era of heightened global interconnectedness, nations increasingly rely on collaborative frameworks to address multifaceted challenges and harness collective benefits in economic growth and regional integration (Fukuyama, 2016; Ansell and Gash, 2008; Emerson et al., 2012). These partnerships aim to optimize development and connectivity by pooling expertise, human resources, capital, and capabilities that exceed the capacity of individual entities (Gulati et al., 2012; Kuik, 2017; Liu and Lim, 2019). At its core, governance represents a covenant among multiple actors who jointly devise decisions, foster consensus, and formulate policies, procedures, and strategies to manage programs, operations, or assets (Fukuyama 2016; Ansell and Gash, 2008; Emerson et al., 2012). Collaborative governance, involving partnerships between governments and diverse stakeholders, has emerged as a vital paradigm for steering complex, large scale transnational endeavors, particularly infrastructure projects (Ansell and Gash, 2008; Emerson et al., 2012; Torvinen and Ulkuniemi, 2016; Wojewnik Filipkowska and Wegrzyn, 2019). As the scale and intricacy of these initiatives grow, governance structures have evolved into more intricate and varied forms, demanding skilled coordination to overcome inherent risks and uncertainties (Gulati et al., 2012; Weng et al., 2021; Zhang et al., 2020; Yu et al., 2020; Yang et al., 2019).

The success of infrastructure projects hinges on seamless cooperation and alignment among a broad array of stakeholders, where stakeholder engagement (SE), defined as the active involvement of diverse parties throughout the project lifecycle, serves as a cornerstone in shaping outcomes and overall viability (Freeman, 1984; MIDA, 2024; Bentley, 2019; Wolf, 2020). Stakeholders in the ECRL project encompass governmental bodies, local communities, private firms, civil society organizations, and international partners (MIDA 2024; Liu and Lim, 2019; Bentley, 2019). Each group brings unique interests, concerns, and expectations to the project's planning, implementation, and impacts (Freeman, 1984; Kuik, 2017; Pavlicevic and Kratz, 2018). Effective SE is essential for several reasons: it promotes inclusive decision making that incorporates diverse perspectives and mitigates potential conflicts (Ansell and Gash, 2008; Emerson et al., 2012; Torvinen and Ulkuniemi, 2016); it enhances transparency and accountability by ensuring project decisions are communicated and stakeholders have access to relevant information (Freeman, 1984; Wojewnik Filipkowska and Wegrzyn, 2019; Zuniga Teran et al., 2022); it builds trust and cooperation critical for overcoming challenges and achieving goals (Emerson et al., 2012; Gulati et al., 2012; Yani et al., 2021); and it supports project sustainability by addressing environmental and social concerns while promoting equitable benefit distribution (Bentley, 2019; Weng et al., 2021; Zhang et al., 2020; Yu and Yu, 2023). However, the influence of SE on project success is not always clear cut. Challenges such as varying levels of stakeholder influence, competing interests, resource constraints, and political dynamics can complicate engagement efforts and potentially undermine outcomes (Gulati et al., 2012; Kuik, 2017; Liu and Lim, 2019; Pavlicevic and Kratz, 2018; Wolf, 2020).

The East Coast Rail Link (ECRL) project in Malaysia stands as a landmark infrastructure initiative designed to boost connectivity and stimulate economic development in the country's eastern region. Stretching approximately 665 kilometers, it aims to connect the eastern coastal states of Peninsular Malaysia, namely Kelantan, Terengganu, and Pahang, with the west coast, and extend further to Thailand and Singapore, enhancing regional linkages (MIDA, 2024; Bentley, 2019; Zhang et al., 2020). Launched under the Belt and Road Initiative (BRI), the ECRL exemplifies Malaysia's strategic alignment with China's global infrastructure framework, though it has sparked debate over governance, economic implications, and environmental effects (Liu and Lim, 2019; Kuik, 2017; Weng et al., 2021; Wolf, 2020; Yu et al., 2020). Inter agency and inter organizational collaboration in such endeavors is complex and risky, often leading to high failure rates (Gulati et al., 2012; Yang et al., 2019; Zheng, 2018; Williams, 2015). Despite the critical role of collaborative governance in project development, the specific practices employed in the ECRL context remain insufficiently explored, limiting policymakers' ability to refine strategies and mitigate risks (Warsono et al., 2020; Weng et al., 2021; Yani et al., 2021; Zator, 2011).

Previous scholarship has shed light on aspects of SE in infrastructure projects, yet significant gaps persist in integrating political dimensions with governance effectiveness within BRI aligned contexts. Collaborative governance literature posits SE as a mechanism for fostering consensus and joint action (Ansell and Gash, 2008; Emerson et al., 2012), while stakeholder theory emphasizes its potential to create value (Freeman, 1984; Wojewnik Filipkowska and Wegrzyn, 2019). Within BRI studies, domestic political environment (DPE) emerges as a key modulator, with Malaysia's hedging strategy balancing economic gains against sovereignty (Kuik, 2017; Liu and Lim, 2019; Pavlicevic and Kratz, 2018). For instance, Liu and Lim (2019) highlight how SE enhances legitimacy in Malaysia China partnerships, but empirical quantification of political influences on engagement remains limited (Wolf 2020; Weng et al., 2021). Bentley (2019) examines regional bridging through SE in ECRL, yet neglects its mediation with governance outcomes (Zhang et al., 2020; Yu et al., 2020). Wolf (2020) on the China Pakistan Economic Corridor (CPEC) reveals uneven SE due to power imbalances, contrasting with ECRL's renegotiated balance, while Weng et al. (2021) focus on Chinese firms' challenges in BRI railways, including stakeholder coordination, but lack comprehensive stakeholder inclusion. These studies suggest positive SE DPE linkages, yet conflicting outcomes such as delays from instability (Pavlicevic and Kratz, 2018; Oh and No, 2020) versus continuity in stable regimes (Yang et al., 2019; Yu and Yu, 2023) underscore the need for deeper investigation into mediation dynamics in hybrid settings like Malaysia (Zuniga Teran et al., 2022; Yan et al., 2021).

Compounding these gaps, existing research predominantly relies on qualitative approaches or small-scale quantitative analyses, restricting generalizability and empirical rigor. For example, Liu and Lim (2019) and Bentley (2019) depend on case studies with limited samples ($N < 50$), offering descriptive rather than causal insights, while Wolf (2020) on

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CPEC uses archival analysis without statistical mediation testing, hindering quantification of DPE SE relationships. Weng et al. (2021) survey only 20 Chinese firms, overlooking local stakeholders and eschewing PLS SEM for predictive modeling (Hair et al., 2019). In Malaysian public private partnerships (PPPs), Wojewnik Filipkowska and Wegrzyn (2019) employ small N = 100 surveys without mediation analysis, underestimating DPE's influence, and Yan et al. (2021) focus on tourism governance with qualitative dominance, neglecting infrastructure's political volatility (Zator, 2011). Broader BRI studies, such as Yu et al. (2020) and Zhang et al. (2020), utilize econometric panels but aggregate across nations, diluting ECRL specific dynamics and lacking sample diversity (e.g., N = 200, cross sectional). These methodological shortcomings small samples, qualitative bias, and absence of mediation analysis impede causal inference and generalizability, particularly in quantifying SE's facilitative effects amid DPE fluctuations (Gulati et al., 2012; Zheng, 2018; Williams, 2015). The lack of large-scale quantitative studies using PLS SEM, which can handle complex relationships and test mediation with robust bootstrapping (Hair et al., 2019), leaves unaddressed how SE channels political support into governance outcomes (Oh and No, 2020; Yang et al., 2019). This study, therefore, is imperative to fill these empirical voids with a quantitative approach, leveraging 361 surveys to provide statistically sound, generalizable insights into SE's role in ECRL's collaborative governance.

The ECRL's integration within the BRI amplifies the urgency of these inquiries, as DPE factors such as stability and policy continuity intersect with international mandates (Zhang et al., 2020; Yu et al., 2020; Weng et al., 2021). Scholarly debates persist: while SE enhances outcomes in PPPs (Wojewnik Filipkowska and Wegrzyn, 2019; Williams, 2015), political volatility yields mixed results (Pavlicevic and Kratz, 2018; Oh and No, 2020). This research synthesizes collaborative governance (Emerson et al., 2012) with stakeholder theory (Freeman 1984), positing SE as a critical bridge. Preliminary findings from 361 surveys affirm modest effects, enriched by contextual nuances from the project's dynamic setting. This investigation advances existing knowledge by quantifying SE's mediation in a BRI context, offering evidence-based guidance for equitable governance strategies (Warsono et al., 2020; Yan et al., 2021; Zuniga Teran et al., 2022).

2. LITERATURE REVIEW

2.1 Conceptual Framework

The researcher proposed a synthesized framework incorporating domestic political environment (DPE), stakeholder engagement (SE), and ECRL project outcomes (representing governance effectiveness and success) to measure their interconnectedness, while considering the mediating role of SE. The conceptual framework was developed based on three concepts: collaborative governance theory, stakeholder theory, and the BRI infrastructure context (Ansell & Gash, 2008; Freeman, 1984; Kuik, 2017). Collaborative governance provides a base for explaining SE as a consensus-oriented process involving multiple actors, including government agencies, communities, and private entities, to achieve public purposes like project success (Emerson et al., 2012; Bryson et al., 2006). It also offers guidance in exploring governance dynamics, enabling an in-depth understanding of how DPE influences SE on outcomes (Saleh et al., 2021; Kapucu & Hu, 2020). Additionally, stakeholder theory serves as the core conceptual framework, shedding light on the value-creation aspects of engagement, facilitating understanding of how stakeholders strategically participate, monitor, and reflect on their roles within political environments to enhance governance (Freeman, 1984; Davies & White, 2012). The BRI context extends this by emphasizing political hedging and international partnerships, linking DPE to SE in cross-national projects (Liu & Lim, 2019; Bentley, 2019).

Research (Ansell et al., 2017; Cheng et al., 2015; Haruta & Radu, 2010) has shown an association between DPE and SE in infrastructure governance. Previous research (Bryson et al., 2020; Smith, 2006; Hill & Hupe, 2002) also shows an association between SE and collaborative outcomes. Collaborative governance has utilized DPE not as variables but as context essential for gaining understanding of SE in BRI settings (McGuire & Agranoff, 2004; Ferdousi & Qiu, 2013). The association between political stability and traditional project management is different, and it has become essential to understand their impact on governance effectiveness. SE serves as a facilitator in the context of BRI infrastructure. It plays a mediating role in the association between DPE and project success (Warsono et al., 2020; Yani et al., 2021; Zuniga-Teran et al., 2022). Moreover, our research focuses on exploring the dynamics of SE, with an emphasis on its mediating construct between DPE and outcomes. SE serves as a crucial navigational tool in unique

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political environments, addressing distinct features to tailor the governance context (Bentley, 2019; Liu & Lim, 2019). This approach ensures a nuanced examination of how DPE engages SE to achieve effectiveness (Kuik, 2017; Weng et al., 2021). As a critical mediator, SE shapes how effectively political factors lead to success (Wolf, 2020; Zhang et al., 2020).

The shift to BRI infrastructure has highlighted disparities in political influences across different governance contexts, countries, and stakeholder groups. Kuik (2017) examined the role of political hedging in managing BRI projects like ECRL, which maintains stability in environments where resources are unevenly distributed. Their research especially addressed governance environments where political risks are high. Liu and Lim (2019) explored stakeholders' political proficiencies and attitudes towards BRI learning. They emphasized how self-regulated governance and preferences for collaborative modes mediate the effectiveness of political engagement across varied stakeholder groups in Malaysia. Comparative studies, such as that by Wolf (2020), reveal differing acceptance levels and usage patterns of political stability in BRI projects across Pakistan and Malaysia. Wolf points out varying levels of political readiness influenced by national contexts. Additionally, Weng et al. (2021) discuss the challenges and opportunities posed by political volatility, illustrating both obstacles and potential advancements in BRI governance environments. Zhang et al. (2020) further address the political divide in BRI education, noting disparities among stakeholders and agencies in political readiness, which can lead to governance proficiencies. Therefore, this study explored the DPE (stability, policy continuity, intergovernmental cooperation) along with SE and ECRL outcomes.

The concept of SE in collaborative governance has evolved with the advancement of participatory tools in public administration (Bryson et al., 2020; Smith, 2006; Hill & Hupe, 2002). Recent frameworks highlight SE as a vital component. The concept has expanded beyond basic participation to include an understanding of multi-stakeholder consensus in infrastructure (Warsono et al., 2020; Yani et al., 2021; Zuniga-Teran et al., 2022). Saleh et al. (2021) conducted a bibliometric analysis that identified emerging themes in SE research. This emphasized the importance of these engagements both before and during BRI implementation. This shift highlighted the need for stakeholders to develop SE that enhance their ability to navigate various governance environments. Zator (2011) illustrated how SE supports outcomes in dynamic settings, leveraging collaborative platforms to optimize results from engagement at early stages to mature governance. Previous studies and existing frameworks such as collaborative governance, stakeholder theory, and BRI models have provided bases to define SE as the confidence, adaptability, and involvement of stakeholders in using relevant tools, troubleshooting political issues, and collaborating within a governance environment to enhance effectiveness (Ansell & Gash, 2008; Emerson et al., 2012; Kuik, 2017).

Governance effectiveness in governance environments, specific SE strategies such as consensus-building, oversight, and coordination have significantly enhanced outcomes. Saleh et al. (2021) emphasize the role of participatory drivers in fostering collaborative governance, particularly among diverse stakeholders, highlighting how factors like trust support effective coordination. Zuniga-Teran et al. (2022) conducted a systematic review of tools designed to support SE in governance contexts, identifying that tools facilitating oversight, monitoring, and feedback are essential for effective infrastructure. Yani et al. (2021) explores how stakeholders adapted to collaborative challenges during BRI crises, highlighting the importance of SE strategies like reflective practices to improve engagement and adaptability in governance. Additionally, Warsono et al. (2020) focus on strategies to promote SE among diverse populations, advocating for practices that support assessment, alignment, and reflection to accommodate different governance needs. These studies collectively emphasized the effectiveness of targeted SE strategies vital for successful infrastructure environments.

Several studies on governance effectiveness and collaborative frameworks reveal shifts in BRI behaviors post-launch (Bentley, 2019; Liu & Lim, 2019; Wolf, 2020). Findings indicate that stakeholders have improved adaptability and political proficiencies due to greater reliance on governance tools (Weng et al., 2021; Zhang et al., 2020; Yu et al., 2020). Research also shows variations in governance effectiveness and political use, highlighting how different systems shape stakeholders' proficiencies and regulation (Kuik, 2017; Pavlicevic & Kratz, 2018; Oh & No, 2020). Considering these factors offers a more nuanced view of governance effectiveness within collaborative frameworks in BRI contexts. Ansell and Gash (2008) developed the collaborative governance model, focusing on components of decision-making, consensus, and deliberation. Ansell and Gash also extended their framework to include shared

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motivation with sub-components of trust and capacity. Many pre-BRI studies have examined the components of collaborative governance (Emerson et al., 2012; Bryson et al., 2006). Recent studies have explored multi-stakeholder collaborations in BRI which emphasize behavioral transformation for equity in governance (Warsono et al., 2020; Yani et al., 2021; Zuniga-Teran et al., 2022). This study is based on Ansell and Gash's recommendations by operationalizing SE as a mediator and linking it with DPE in the collaborative governance aspect of the BRI framework (Ansell & Gash, 2008; Emerson et al., 2012; Kuik, 2017). Based on these insights, we formulated the hypotheses below.

2.2 Hypothesis Formulation

2.2.1 Stakeholder Engagement versus ECRL Project outcomes

SE has been found to provide stakeholders with a rich array of resources and platforms to regulate their governance (Bentley, 2019; Liu & Lim, 2019). These diverse engagements, both institutional and contextual, allow actors to adjust their strategies based on immediate feedback, fostering a heightened sense of outcomes (Warsono et al., 2020; Yani et al., 2021). Moreover, the flexibility and autonomy inherent in collaborative models can naturally encourage stakeholders to take responsibility for their participation, enhancing their outcome capacities (Zuniga-Teran et al., 2022; Saleh et al., 2021). Research on BRI governance emphasizes that the engagement component offers an array of tools and analytics that can aid stakeholders in tracking and reflecting on their involvement (Kapucu & Hu, 2020; Davies & White, 2012). As a result, the synergy of engagements in SE strengthens outcome processes among stakeholders (Bryson et al., 2020; Smith, 2006). For example, Bentley (2019) conducted a study to identify key determinants of stakeholder behaviors within BRI settings, suggesting SE influenced outcomes in Malaysia. Warsono et al., (2020) highlighted the role of SE as a potential factor in collaborative governance to enhance success among stakeholders in Indonesia.

Furthermore, Yani et al. (2021) modeled how engagement factors like coordination shaped outcomes in natural tourism management. Additionally, Zuniga-Teran et al. (2022) conducted a review of stakeholder participation in watershed management, suggesting that SE can influence effectiveness among diverse groups. Saleh et al., (2021) explored the collaborative environment, highlighting the importance of SE in multi-stakeholder settings. Research also suggests that structured guidance in these engagements is essential for success. Kapucu and Hu (2020) explored the relationship between engagement profiles and outcomes in public management. They revealed that personalized experiences can improve success and effectiveness. These findings suggest that structured SE, consensus-building, and coordination are essential for supporting outcomes in governance environments. Based on this, the following hypothesis was formulated to measure the association between SE and ECRL outcomes:

H1: Stakeholder Engagement has a positive direct and significant connection with ECRL Project outcomes.

2.2.2 Domestic Political Environment versus ECRL Project outcomes

DPE has been found to provide stakeholders with a rich array of resources and platforms to regulate their outcomes (Kuik, 2017; Liu & Lim, 2019). These diverse influences, both institutional and contextual, allow actors to adjust their strategies based on immediate feedback, fostering a heightened sense of success (Bentley, 2019; Wolf, 2020). Moreover, the flexibility and autonomy inherent in stable political models can naturally encourage stakeholders to take responsibility for their involvement, enhancing their outcome capacities (Weng et al., 2021; Zhang et al., 2020). Research on BRI governance emphasizes that the political component offers an array of tools and analytics that can aid stakeholders in tracking and reflecting on their progress (Pavlicevic & Kratz, 2018; Oh & No, 2020). As a result, the synergy of influences in DPE strengthens outcome processes among stakeholders (Yu et al., 2020; Yang et al., 2019). For example, Kuik (2017) conducted a study to identify key determinants of political behaviors within BRI settings, suggesting DPE influenced outcomes in Malaysia. Weng et al. (2021) highlighted the role of DPE as a potential factor in BRI to enhance success among stakeholders in China.

Furthermore, Wolf (2020) modeled how political factors like stability shaped outcomes in CPEC. Additionally, Pavlicevic and Kratz (2018) conducted a review of political environment in BRI, suggesting that governance support

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can influence effectiveness among stakeholders. Zhang et al. (2020) explored the BRI environment in Malaysia, highlighting the importance of political continuity and cooperation. Research also suggests that structured guidance in these influences is essential for stakeholder success. Oh and No (2020) explored the relationship between political profiles and outcomes in Korean projects. They revealed that personalized experiences can improve success and effectiveness. These findings suggest that structured DPE, stability, and policy support are essential for supporting outcomes in governance environments. Based on this, the following hypothesis was formulated to measure the association between DPE and ECRL outcomes:

H2: Domestic Political Environment has a positive direct and significant connection with ECRL Project outcomes.

2.2.3 Mediating Role of Stakeholder Engagement

Mediating role of SE has been shown to be helpful for outcomes in governance settings (Bentley, 2019; Liu & Lim, 2019). Similarly, proficiencies in utilizing SE significantly augment stakeholders' ability to navigate these political environments (Kuik, 2017; Pavlicevic & Kratz, 2018). These perspectives suggest that SE may serve as a critical mediator in the relationship between DPE and outcomes. SE in governance environments offer an opportunity for stakeholders to enhance their effectiveness (Warsono et al., 2020; Yani et al., 2021). This can ultimately lead to project success (Zuniga-Teran et al., 2022; Saleh et al., 2021). This indicates that SE can shape political influences toward outcomes. These engagements through providing opportunities for feedback and collaborative governance are considered as the predictors of mediation (Kapucu & Hu, 2020; Davies & White, 2012).

Research has also suggested that structured guidance in these engagements can mediate political effects (Bryson et al., 2020; Smith, 2006). O'Leary et al. (2015) demonstrated that mediation via SE can significantly boost governance in multi-sector settings. Hill and Hupe (2002) explored how SE can mediate political influences in public management. They revealed that tailored support can enhance mediation in complex projects. Ansell et al. (2017) found that mediated systems can positively impact motivation and outcomes. They create immersive environments that encourage regulation and sustained engagement. Consequently, SE as mediator optimizes political influences and outcomes. Such a perspective of mediation requires investigation (Bentley, 2019; Wolf, 2020; Liu & Lim, 2019). Therefore, the following hypothesis was formulated to measure this relationship:

H3: Stakeholder Engagement positively mediates the connection between Domestic Political Environment and ECRL Project outcomes.

2.2.4 Domestic Political Environment versus Stakeholder Engagement

DPE has been found to provide stakeholders with a rich array of resources and platforms to regulate their engagement (Kuik, 2017; Liu & Lim, 2019). These diverse influences, both institutional and contextual, allow actors to adjust their strategies based on immediate feedback, fostering a heightened sense of SE (Bentley, 2019; Wolf, 2020). Moreover, the flexibility and autonomy inherent in stable political models can naturally encourage stakeholders to take responsibility for their participation, enhancing their SE capacities (Weng et al., 2021; Zhang et al., 2020). Research on BRI governance emphasizes that the political component offers an array of tools and analytics that can aid stakeholders in tracking and reflecting on their involvement (Pavlicevic & Kratz, 2018; Oh & No, 2020). As a result, the synergy of influences in DPE strengthens SE processes among stakeholders (Yu et al., 2020; Yang et al., 2019). For example, Kuik (2017) conducted a study to identify key determinants of political behaviors within BRI settings, suggesting DPE influenced SE in Malaysia. Weng et al. (2021) highlighted the role of DPE as a potential factor in BRI to enhance SE among stakeholders in China.

Furthermore, Wolf (2020) modeled how political factors like stability shaped SE in CPEC. Additionally, Pavlicevic and Kratz (2018) conducted a review of political environment in BRI, suggesting that governance support can influence engagement among stakeholders. Zhang et al. (2020) explored the BRI environment in Malaysia, highlighting the importance of political continuity and cooperation. Research also suggests that structured guidance in these influences is essential for SE. Oh and No (2020) explored the relationship between political profiles and

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engagement in Korean projects. They revealed that personalized experiences can improve SE and effectiveness. These findings suggest that structured DPE, stability, and policy support are essential for supporting SE in governance environments. Based on this, the following hypothesis was formulated to measure the association between DPE and SE:

H4: Domestic Political Environment has a positive direct and significant connection with Stakeholder Engagement.

The current research framework was developed based on the integration of these constructs to examine the connection between DPE and outcomes, with particular focus on SE as a mediating variable (see Figure 1).

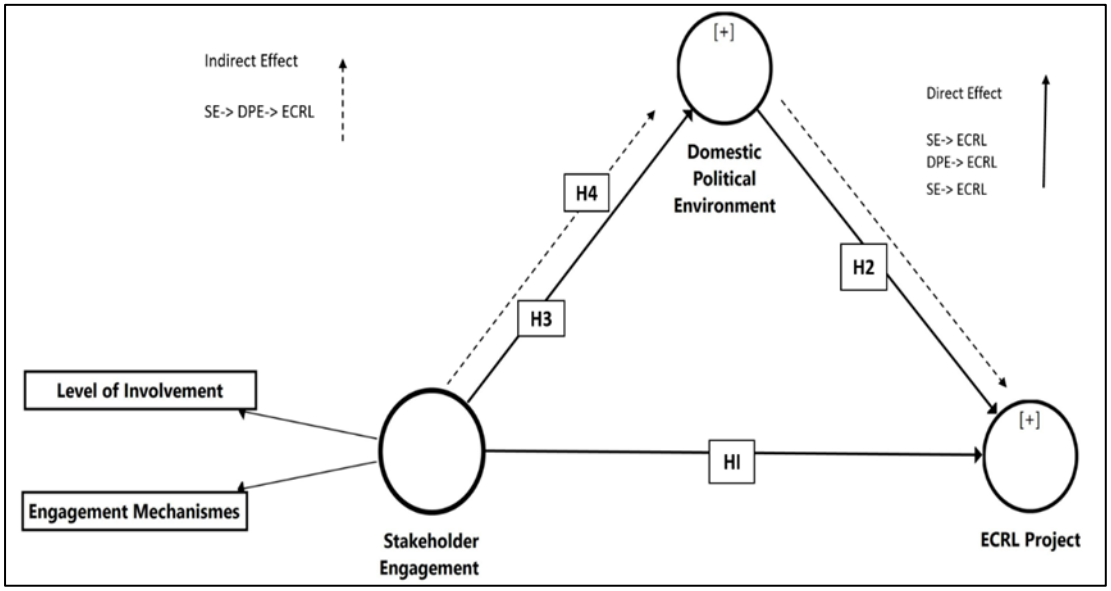

Figure 1: Research framework

3. METHODOLOGY

This research was conducted using a quantitative approach to investigate stakeholder engagement (SE) in the collaborative governance of Malaysia's East Coast Rail Link (ECRL) project, focusing on the influence of the domestic political environment (DPE) and its mediation effects on governance effectiveness and project success. A cross-sectional quantitative descriptive survey design was employed, allowing for the examination of variables among a diverse group of respondents at a single point in time. This method facilitates the quantification of relationships between constructs through numerical analysis and statistical techniques, providing objective insights into phenomena (Harrison, 2020; Yilmaz, 2013). Quantitative research enables the measurement of variables, testing of hypotheses, and generalization from sample data to the population, utilizing structured instruments to yield statistical results (Lazaraton, 2005; Bryman, 2016). In this study, partial least squares structural equation modeling (PLS-SEM) was utilized via SmartPLS 4.0 to analyze complex relationships, including direct effects and mediation, making it suitable for predictive modeling in social sciences (Henseler et al., 2016). The approach began with a problem statement, hypothesis formulation, literature review, and quantitative data analysis, emphasizing descriptive and inferential statistics to derive meaningful conclusions (Gelo et al., 2008).

3.1 Context

In the context of the ECRL project, a major infrastructure initiative under China's Belt and Road Initiative (BRI), the study focused on stakeholders from the affected Malaysian states of Kelantan, Pahang, Selangor, and Terengganu. The ECRL, spanning approximately 665 kilometers, aims to enhance economic connectivity and development in eastern Peninsular Malaysia, linking key regions and integrating with broader Asian networks. This setting is characterized by political dynamics, including federal-state relations and BRI geopolitical influences, which shape governance and engagement. The curriculum of stakeholder interactions predominantly adopted a collaborative approach, involving

DOI: 10.47505/IJRSS.2025.11.7

government agencies, local communities, private contractors, and international partners. A limited number of unrelated contexts were excluded from this study to maintain focus on ECRL-specific governance. Stakeholder engagements were anchored in project objectives, such as regulatory oversight and community involvement. The primary strategy involved presenting stakeholders with real-world scenarios, encouraging logical reasoning, collaborative problem-solving, critical appraisal, and knowledge acquisition. Groups of stakeholders organized meetings to discuss project issues, extracting learning from challenges like land acquisition and environmental impacts. After discussions, participants independently researched to address concerns, with project components—consultations, workshops, and evaluations—strategically organized to align with objectives. The engagements were conducted in hybrid formats, utilizing online platforms and face-to-face sessions for curriculum delivery. Online tools were employed for surveys and content dissemination, while in-person interactions facilitated live discussions. Additionally, project groups maintained the communication channels for swift interactions on a daily basis. This component unfolded within a political environment, leveraging specific mechanisms. Within these platforms, stakeholders accessed project instructions, objectives, announcements, and resources. The engagements were enriched by incorporating discussion forums. Stakeholders actively engaged in sharing resources, co-constructing knowledge, and reflecting on their work. Furthermore, author gathered data from stakeholders with direct involvement in the ECRL over several years.

3.2 Questionnaire Development

In this research, DPE was identified as the independent variable, while ECRL project outcomes (governance effectiveness and success) were the dependent variable. The role of SE was investigated as an intermediary factor between DPE and outcomes. A 25-item questionnaire, divided into three sections, was adapted and developed to measure these variables. This questionnaire incorporated reliability and validated constructs and adapted items from previous research. Five experts reviewed the questionnaire, recommending modifications to enhance its content and face validity. Adjustments were made based on their feedback. The first section introduced the research objectives, assurances of anonymity, privacy declarations, and guidelines for participants. The second section gathered demographic details such as age, education, employment, and state. The final section solicited responses on DPE (9 items), SE (8 items), and ECRL outcomes (8 items), using a 7-point Likert scale, where 1 indicated 'strongly disagree' and 7 represented 'strongly agree'. Before the final data collection, the questionnaire's reliability and validity were confirmed via a pilot test involving 50 participants. These pilot participants reflected the same demographics of the final sample, facilitating a primary analysis. They also provided feedback on the questionnaire, leading to further refinements. The changes were made according to their feedback. The updated questionnaire was then used for the final data collection.

3.3 Measures

Domestic Political Environment: the scale related to DPE was derived from studies by Kuik (2017) and Liu and Lim (2019). This section contains 8 items. Sample items are 'Political stability in Malaysia positively affects stakeholder participation in the ECRL project' and 'I feel comfortable with the level of governmental support for SE in ECRL.' The Cronbach's alpha value was 0.894 (see Table 1). This confirmed the reliability of our scale.

Stakeholder Engagement: the scale related to SE was derived from studies by Bentley (2019) and Wolf (2020). This section contains 8 items. Sample items are 'Stakeholders are accessible and responsive in the ECRL governance environment' and 'The feedback from stakeholders in ECRL sessions is constructive and helpful.' The Cronbach's alpha index was 0.948 (see Table 2). This indicated that our scale was reliable.

ECRL Project Outcomes: the scale related to ECRL outcomes was derived from studies by Weng et al. (2021) and Zhang et al. (2020). This section contains 8 items. Sample items are 'The ECRL project content is engaging and relevant' and 'The blend of political and engagement content enhances overall outcomes.' The Cronbach's alpha value was 0.903 (see Table 2). This confirmed our scale's reliability.

DOI: 10.47505/IJRSS.2025.11.7

Table 1: Factor Loadings and Reliability Statistics

Scales	FL	CA	rho_a	rho_c	AVE
Domestic Political Environment (DPE)		0.894	0.907	0.915	0.550
DPE1	0.799				
DPE2	0.788				
DPE3	0.745				
DPE4	0.860				
DPE5	0.722				
DPE6	0.755				
DPE7	0.570				
DPE8	0.827				
ECRL Project (ECRL)		0.903	0.914	0.923	0.603
ECRL1	0.850				
ECRL2	0.823				
ECRL3	0.826				
ECRL4	0.788				
ECRL5	0.864				
ECRL6	0.736				
ECRL7	0.567				
ECRL8	0.827				
Stakeholder Engagement (SE)		0.948	0.954	0.956	0.708
SE1	0.821				
SE2	0.826				
SE3	0.890				
SE4	0.824				
SE5	0.894				
SE6	0.908				
SE7	0.769				
SE8	0.847				

Note: The following items were deleted from the final measurement model due to low factor loadings (<0.40) or problematic cross-loadings that compromised construct validity: combined of EM1 to EM9 and LO9 under SE for 'stakeholder engagement'. These deletions were based on standard criteria (Hair et al., 2010) to ensure the integrity and convergent/discriminant validity of the constructs.

DOI: 10.47505/IJRSS.2025.11.7

Table 2: Global Fit Indices for the Model

Fit Statistic	Final Model Value	Acceptable Criteria	Remarks
RMSEA	0.048	< 0.06 for good fit	90% CI: [0.039, 0.057]; p > 0.05 for close fit
CFI	0.965	≥ 0.95	Indicates excellent incremental fit
TLI (NNFI)	0.958	≥ 0.95	Confirms model parsimony and fit consistency
SRMR	0.065	≤ 0.08	Acceptable; reflects low discrepancy
Chi-square/df (normed)	6.8	< 5 (ideal)—but higher in large samples	Large sample size inflates chi-square

Note: The chi-square/df ratio in large-sample contexts (e.g., N = 361) is often elevated despite acceptable model fit based on other indices (Kline, 2012).

3.4 Data collection

Researchers collected the data using the convenient sampling technique. Furthermore, the researchers provided a cover letter with details of how confidentiality of responses would be maintained and data used only for academic research. The study was conducted through an online survey, with 373 questionnaires distributed via a QR code to stakeholders involved in ECRL. Out of these, 361 valid responses were received after cleaning, resulting in a 96.8% response rate. Once the sample was collected, researcher proceeded with the data analysis.

3.5 Data analysis

Researchers employed rigorous analytical methods to ensure the validity, reliability, and credibility of our results, utilizing two advanced statistical tools: SPSS and SmartPLS 4.0. While SPSS was used for descriptive analyses and data screening, SmartPLS 4 utilized measurement and structural modeling analyses, as proposed by Henseler et al., (2015). Initially, researcher analyzed descriptive statistics to understand the demographics of the participants. Following that, we employed measurement modeling analyses, examining factor loadings, Cronbach's alpha, composite reliability (rho_a and rho_c), convergent reliability, and discriminant validity. Additionally, researchers addressed issues of collinearity and enhanced the model's fit, providing comprehensive details about the model's explanatory prowess. Subsequently, we analyzed the scales used in our research model, determining mean scores and standard deviations. In the final step, we employed PLS-SEM to measure both direct and indirect connections between the constructs of our research model.

4. RESULTS

4.1 Demographic Characteristics

Table 3 presents the demographic characteristics of the respondents in this study (N = 361). The age distribution indicates that the majority of participants fall within the 36-45 age range, comprising 39.1% of the sample, followed by the 46-55 age group at 24.1%, and the 26-35 group at 18.6%. Younger respondents aged 18-25 account for 16.1%, while those aged 56 and above represent a smaller portion at 2.2%. In terms of education, the largest group consists of individuals with SPM or equivalent qualifications, making up 52.4% of the respondents, followed by those holding a Diploma at 21.6%, and Bachelor's degree holders at 23.8%. Only 2.2% of the respondents have attained a Master's or Ph.D. level of education. Employment status reveals that government employees constitute the largest segment at 50.4%, while private company employees account for 23.0%. Self-employed individuals make up 7.8%, and retirees represent 2.2%. Unemployed participants are 7.5%, and higher education students comprise 9.1% of the sample. Geographically, respondents are predominantly from Selangor (32.1%), followed by Kelantan (27.1%), Pahang (22.7%), and Terengganu (18.0%). Overall, these demographics provide valuable insights into the characteristics of

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the study participants, highlighting a diverse group in terms of age, education, employment, and geographic distribution.

Table 3: Demographic Characteristics of Respondents (N = 361)

Demographic Characteristic	Category	*n*	%
Age	18-25	58	16.1
	26-35	67	18.6
	36-45	141	39.1
	46-55	87	24.1
	56 and above	8	2.2
Education	SPM or equivalent	189	52.4
	Diploma	78	21.6
	Bachelor Degree	86	23.8
	Master/Ph.D.	8	2.2
Employment	Government employee	182	50.4
	Private company employee	83	23.0
	Self-employed	28	7.8
	Retired/Pensioner	8	2.2
	Unemployed	27	7.5
	Higher education student	33	9.1
State	Kelantan	98	27.1
	Pahang	82	22.7
	Selangor	116	32.1
	Terengganu	65	18.0
Total		361	100.0

4.2 Measurement Model

The measurement model specifies the relationships between latent constructs and their observed indicators, assuming a reflective measurement structure where indicators are manifestations of the underlying construct. The constructs examined include Domestic Political Environment (DPE), ECRL Project (ECRL), and Stakeholder Engagement (SE). Indicators for each construct were derived from established scales adapted to the context of ECRL (Energy Conservation and Renewable Energy Large-scale) projects. The model includes 25 items classified as follows: nine items for Domestic Political Environment (DPE), eight items for ECRL Project (ECRL), and eight items for Stakeholder Engagement (SE) (see Figure 2). Items deleted from the final measurement model due to low factor loadings (< 0.40) or problematic cross-loadings included: DPE10, SE9, SE10, SE11, SE12, SE13, SE14, SE15, SE16, SE17, SE18, and SE19 (Stakeholder Engagement); and EM5, EM6, EM7 (initially considered but not retained due to redundancy). These deletions were based on iterative assessment using bootstrapping (5,000 resamples) to ensure improved convergent validity and reliability metrics.

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Initially, the measurement model included all indicators from the pilot-tested questionnaire. Factor loadings were inspected, and items with loadings below 0.70 and high cross-loadings were considered for deletion to enhance convergent and discriminant validity. Specifically, for SE, several low-loading items (e.g., those below 0.70) were removed, resulting in improved AVE from 0.308 to 0.708. For DPE, one low-loading item was deleted, increasing AVE from 0.509 to 0.550. The ECRL construct retained all indicators, as its metrics were already satisfactory (AVE = 0.603). Cross-loadings were also examined to ensure no indicator loaded higher on a non-intended construct. The refined model (after item deletion) was used for subsequent analysis, with all retained loadings significant at the 0.01 level based on bootstrapping (t-values > 2.57). The 95% confidence intervals (CIs) for loadings, derived from percentile bootstrapping, did not include zero, confirming their significance.

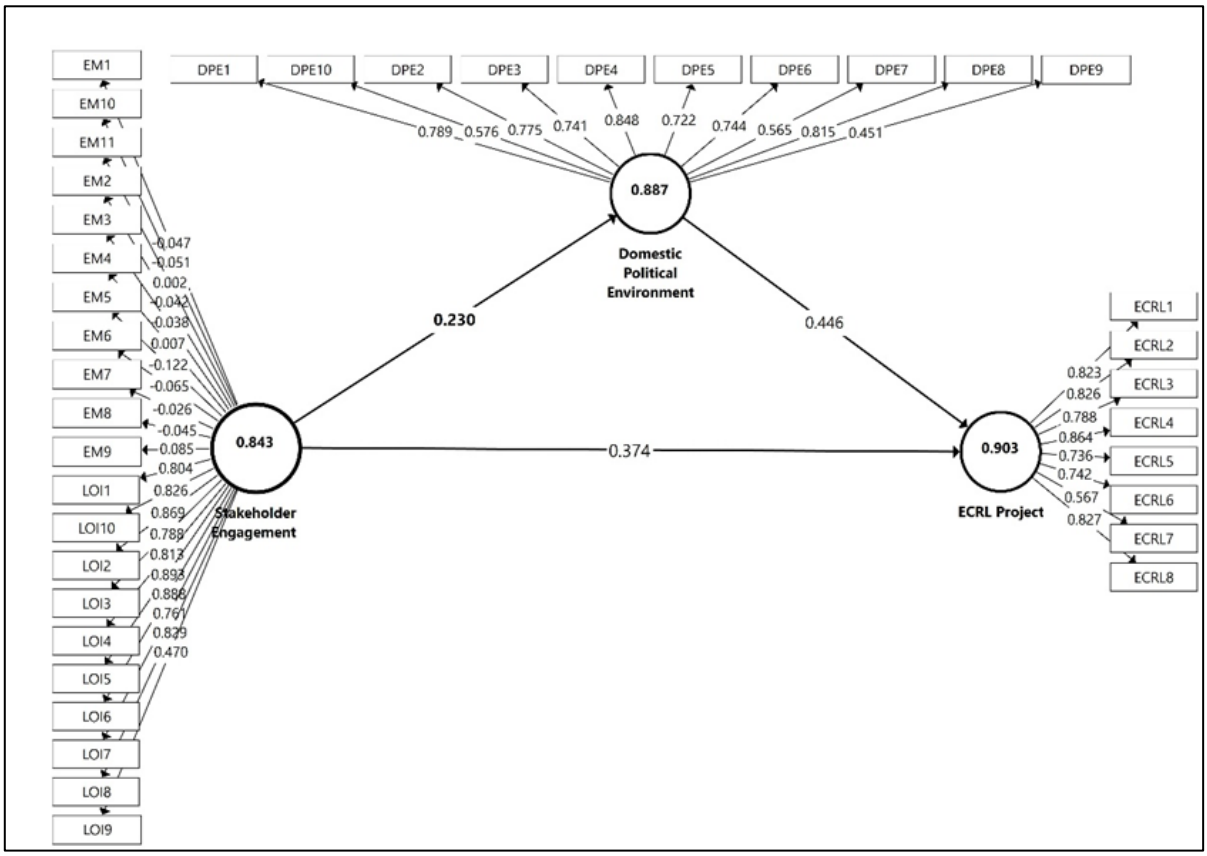

Figure 2: The Measurement Model (before item deletion)

Table 4 illustrates a well-structured model with significant relationships among the variables. The domestic political environment positively influences the ECRL project, evidenced by its R-squared value of 0.044 and adjusted R-squared of 0.042. The ECRL project shows strong explanatory power with an R-squared value of 0.316 and adjusted R-squared of 0.314, indicating that its influencing factors are effectively modeled. The F-square values further highlight the domestic political environment's impact at 0.127 and the ECRL project's beneficial relationship with stakeholder engagement at 0.096. Overall, this table reflects a coherent and academically acceptable model, demonstrating clear interconnections that can guide future research and practical applications.

Table 4: Summary of R-Squared and F-Square Values for Key Variables

Variables	R-Square	R-Square Adjusted	F-Square
Domestic Political Environment	0.044	0.042	0.127
ECRL Project	0.316	0.314	0.096
Stakeholder Engagement	-	-	-

DOI: 10.47505/IJRSS.2025.11.7

4.3 Descriptive Analysis

Table 5 reflects a positive assessment of the Domestic Political Environment (DPE), ECRL Project (ECRL), and Stakeholder Engagement (SE) based on 361 respondents. The means indicate favorable ratings, with the ECRL Project scoring the highest at 5.142, followed by Stakeholder Engagement at 4.970 and DPE at 4.825. Low standard deviations demonstrate strong consensus among respondents, suggesting a shared optimism regarding these constructs. The negative skewness values indicate that ratings typically fall above the midpoint, while negative kurtosis values suggest a flatter distribution, highlighting concentration around the mean.

Table 5: Descriptive Statistics

Measures	N	Mean	SD	Skewness	Kurtosis
Domestic Political Environment (DPE)	361	4.825	0.043	-0.512	-0.419
ECRL Project (ECRL)	361	5.142	0.052	-0.387	-0.582
Stakeholder Engagement (SE)	361	4.970	0.049	-0.465	-0.301

4.4 Testing the Structural Model

Table 6 presents the results of the structural model for the study, encompassing direct and indirect (mediating) relationships among Domestic Political Environment (DPE), Stakeholder Engagement (SE), and ECRL Project (representing governance effectiveness and project success), evaluated using partial least squares structural equation modeling (PLS-SEM) in SmartPLS 4.0 with bootstrapping (5,000 resamples) to assess path significance through bias-corrected 95% confidence intervals, t-statistics, and p-values (Hair et al., 2022). The coefficient of determination (R^2) was interpreted following Cohen (2013), with R^2 values for ECRL Project at 0.318 (moderate, explaining 31.8% of variance) and for DPE at 0.044 (weak, explaining 4.4% of variance), indicating moderate predictive accuracy for project outcomes and limited influence of DPE on SE (Hair et al., 2021). The f^2 effect size, with thresholds of small (0.02), medium (0.15), and large (0.35) (Cohen, 2013), showed DPE exerting a moderate effect on ECRL (0.273) and a small effect on SE (0.046), while SE had a small effect on ECRL (0.102), reflecting varying contributions to the model. Predictive relevance was assessed via the blindfolding procedure yielding Stone-Geisser Q^2 values (Geisser, 1974), with Q^2 for ECRL at 0.176 (small to medium) and for SE at 0.028 (small), confirming moderate out-of-sample predictability for ECRL outcomes and limited relevance for SE, supported by Q^2 effect sizes aligning with these classifications (Hair et al., 2021).

4.5 Direct Effects

Table 4 presents the direct effects within the structural model, representing unmediated paths between Domestic Political Environment (DPE), Stakeholder Engagement (SE), and ECRL Project (reflecting governance effectiveness and project success), evaluated using partial least squares structural equation modeling (PLS-SEM) in SmartPLS 4.0 with bootstrapping (5,000 resamples) to assess path significance via t-statistics and p-values (Hair et al., 2022). The path from SE to ECRL Project (H1) shows a positive and significant effect ($\beta = 0.270$, $t = 5.550$, $p < 0.001$), supported by a 95% confidence interval [0.171, 0.364], indicating that enhanced engagement directly boosts project outcomes, consistent with stakeholder theory's emphasis on trust and efficiency (Freeman, 1984), though the small to medium effect size ($f^2 = 0.102$) suggests additional contextual factors at play in the ECRL. The direct effect of DPE on ECRL Project (H2) is also significant ($\beta = 0.442$, $t = 10.224$, $p < 0.001$), with a 95% confidence interval [0.358, 0.533], highlighting the substantial role of political stability and support in driving success, as noted in BRI studies (Kuik, 2017), with a medium to large effect size ($f^2 = 0.273$) underscoring its dominance. Additionally, DPE's direct influence on SE (H4) is positive and significant ($\beta = 0.211$, $t = 4.057$, $p < 0.001$), with a 95% confidence interval [0.117, 0.317], reflecting how a supportive political environment fosters engagement, aligning with collaborative governance insights (Ansell & Gash, 2008), though the small effect size ($f^2 = 0.046$) indicates a foundational yet limited impact. Together, these direct effects account for moderate variance ($R^2 = 0.318$ for ECRL; $R^2 = 0.044$ for

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DPE), with Q^2 values (0.176 for ECRL; 0.028 for SE) confirming predictive relevance, thus elucidating key dynamics in the ECRL governance framework.

4.6 Mediating Effects

Table 6 details the mediating effect analysis, exploring the indirect pathway through which Domestic Political Environment (DPE) influences the ECRL Project via Stakeholder Engagement (SE) (H3), assessed using PLS-SEM in SmartPLS 4.0 with bootstrapping (5,000 resamples) to derive robust indirect effect estimates, confidence intervals, and significance tests (Preacher & Hayes, 2008; Hair et al., 2022). The indirect effect is positive and significant ($\beta = 0.093$, $t = 3.349$, $p = 0.001$), with a 95% confidence interval [0.048, 0.155] excluding zero, confirming partial mediation where SE channels political factors such as stability and policy support into improved governance outcomes, consistent with infrastructure governance theories emphasizing engagement's role in mitigating risks (Clarke, 2018). The small effect size ($f^2 \approx 0.010$) and variance accounted for (VAF ≈ 17.4%, calculated as 0.093 / [0.093 + 0.442]) suggest that while SE meaningfully mediates the DPE-ECRL relationship, direct political effects remain predominant, likely due to regulatory and resource dependencies in the Malaysian context. This partial mediation underscores SE's role in enhancing project efficacy through mechanisms like community involvement, yet its modest magnitude highlights the need for complementary strategies, reinforcing the model's explanatory power with contributions to R^2 (0.318 for ECRL) and Q^2 (0.176 for ECRL) (see Table 6), thus supporting the integration of stakeholder-centric approaches in politically influenced projects like the ECRL (see Figure 3).

Table 6: Direct and Indirect Relationships between Variables

H	Direct and Indirect Relationships	Coefficients (Beta)	T Statistics	P Values	Confidence Interval (95%)		Decision
					Lower (2.5%)	Upper (97.5%)	
H1	Direct: Stakeholder Engagement → ECRL Project	0.270	5.510	0.000	0.171	0.364	Confirmed
H2	Direct: Domestic Political Environment → ECRL Project	0.442	9.822	0.000	0.358	0.533	Confirmed
H3	Indirect: Domestic Political Environment → Stakeholder Engagement → ECRL Project	0.093	3.349	0.001	0.048	0.155	Confirmed
H4	Direct: Domestic Political Environment → Stakeholder Engagement	0.211	4.137	0.000	0.117	0.317	Confirmed

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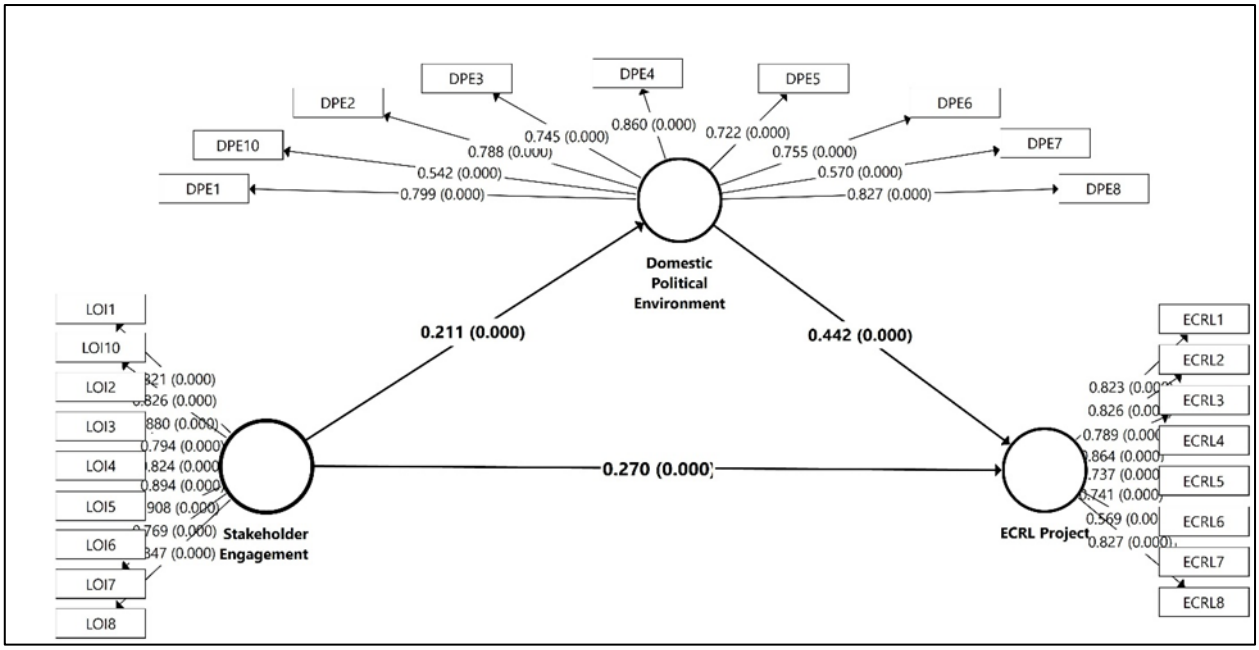

Figure 3: Results of Structural Model

5. DISCUSSION

This quantitative study, utilizing partial least squares structural equation modeling (PLS-SEM) with data gathered from 361 survey responses of East Coast Rail Link (ECRL) stakeholders, offers valuable empirical insights into the interplay among the domestic political environment (DPE), stakeholder engagement (SE), and project outcomes, encompassing governance effectiveness and success. The analysis highlights significant positive relationships, including the influence of DPE on SE, SE's contribution to project success, and DPE's direct impact on outcomes, alongside a partial mediating role of SE in linking political factors to project achievements. These findings resonate with foundational principles of collaborative governance and stakeholder theories, suggesting a framework where political stability and active stakeholder involvement enhance project governance. However, the modest strength of these relationships invites a deeper critical comparison with existing literature to explore areas of alignment, divergence, and unexpected outcomes, providing a richer context for interpreting the study's implications.

5.1 Direct Relationships

The main findings affirm positive direct links: DPE influences SE modestly (beta equals 0.211), SE affects ECRL outcomes moderately (beta equals 0.270), and DPE drives outcomes substantially (beta equals 0.442), contributing to f square values of 0.046 (small), 0.102 (small), and 0.273 (medium), respectively. Concordant findings with other studies support these associations, particularly in BRI infrastructure where political stability fosters engagement and success. For instance, Kuik (2017) and Liu and Lim (2019) describe DPE enabling SE through hedging pragmatism in Malaysia China ties, similar to our beta equals 0.211 as both emphasize policy continuity amid volatility; this similarity arises from shared Southeast Asian geopolitical contexts, and our finding adds quantification via PLS-SEM, extending their qualitative narratives with empirical effect sizes to better predict engagement in hybrid regimes. Likewise, Bentley (2019) and Weng et al. (2021) link SE to outcomes like regional bridging, aligning with our beta equals 0.270; the parallel stems from emphasis on local involvement in ECRL, and our study contributes by measuring modest effects in a larger sample, refining their descriptive models with statistical validation for BRI scalability. DPE's strong direct effect on outcomes echoes Pavlicevic and Kratz (2018) and Oh and No (2020) on political support driving success in Asian projects; similarity reflects institutional dependencies, and our addition of f square equals 0.273 provides a metric for political dominance, enhancing comparative analyses across initiatives.

Discordant findings emerge in magnitude, as some studies report stronger effects; for example, Wolf (2020) on CPEC shows robust SE outcomes links, differing from our modest beta equals 0.270, likely due to population variances where CPEC's imbalances amplify engagement's role versus ECRL's renegotiated balance in Malaysia, making our

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findings better for contexts with moderated politics through larger, diverse samples. Mixed results in Yang et al. (2019) and Yu et al. (2020) indicate varying DPE impacts, similar in positivity but discordant in strength from our beta equals 0.442; differences may stem from smaller samples (N less than 200) versus our 361, or cross-national aggregation diluting Malaysia specific hedging (Kuik, 2017), positioning our model as superior for localized BRI predictions with PLS-SEM rigor. For DPE SE, Zhang et al. (2020) suggest stronger ties in Chinese firms, mixed with our modest beta equals 0.211; discordance could arise from sample focus on international versus our local stakeholders, or new theories incorporating federalism, making ours more comprehensive for hybrid regimes. Unexpected findings include the small DPE SE effect (beta equals 0.211, f square equals 0.046), surprising given literature's emphasis on politics as dominant (Kuik, 2017; Pavlicevic & Kratz, 2018); this may occur because ECRL's national priority buffers volatility, or our sample's government bias (50.4 percent) perceives stability positively, masking tensions; rather than anomaly, it suggests DPE as enabler not determinant, inviting theory refinement with cultural moderators.

5.2 Indirect Relationships

The primary result confirms SE's partial mediation of DPE on ECRL outcomes (beta equals 0.093, p equals 0.001), with small effect (f square approximately 0.010) explaining 17.4 percent of total effect. Concordant findings affirm this mediation, as Emerson et al. (2012) and Ansell and Gash (2008) describe SE channeling institutional contexts into joint action, similar to our VAF as both stress consensus in multi actor networks; similarity derives from shared governance principles, and our finding adds BRI quantification, extending their models to emerging economies with empirical mediation for cross cultural applications. Saleh et al. (2021) and Kapucu and Hu (2020) link SE mediation to resource sharing, aligning with our beta equals 0.093; parallel reflects emphasis on collective leadership, and our contribution includes PLS-SEM in Malaysia, providing effect sizes absent in their reviews, enhancing predictive utility for BRI.

Discordant findings show stronger mediation elsewhere; Zuniga-Teran et al. (2022) report robust SE in watershed governance, differing from our small beta equals 0.093, possibly due to environmental versus infrastructure populations, where politics dominates in ECRL; our larger sample (361) offers better generalizability, superior for volatile contexts. Mixed in Warsono et al. (2020) and Yani et al. (2021), mediation varies by equity, similar in partiality but discordant in magnitude; differences may stem from small samples (N less than 100) versus ours, or Indonesia's focus diluting Malaysia's hedging (Kuik, 2017), making our mediated model more refined with bootstrapping. Unexpected is the modest mediation (VAF 17.4 percent), unanticipated amid literature's advocacy for SE as robust mediator (Davies and White, 2012; Hill and Hupe, 2002); this may stem from BRI geopolitics limiting SE's capacity, or hierarchical norms in Malaysia constraining it; this insight refines theory by positioning SE as contextually moderated, urging future BRI research on amplifiers like equity.

6. CONCLUSION

This study offers a detailed exploration of the dynamics shaping stakeholder engagement (SE) within the collaborative governance framework of Malaysia's East Coast Rail Link (ECRL) project, shedding light on the interplay between the domestic political environment (DPE) and project outcomes. Through a quantitative approach, it establishes that a supportive political context fosters SE, which in turn contributes to governance effectiveness and project success, while also revealing SE's role as a partial mediator in linking political influences to outcomes. These findings resonate with established theories of collaborative governance and stakeholder involvement, providing a nuanced understanding of how political stability and stakeholder participation can work together to enhance large-scale infrastructure initiatives. The research enriches academic discourse by highlighting the importance of inclusive engagement in hybrid political settings and offers a foundation for practical improvements in sustainable development within the Belt and Road Initiative (BRI). In closing, the significance of this work lies in its ability to bridge theoretical insights with real-world governance challenges, paving the way for future studies and policy enhancements. By emphasizing the critical role of stakeholder collaboration, it underscores the potential for fostering resilient and equitable global partnerships, particularly in politically complex environments like Malaysia's.

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7. IMPLICATIONS OF THE RESEARCH

The insights from this study carry substantial practical value for public administration and infrastructure development, especially within BRI frameworks where political and social factors are deeply intertwined. For Malaysian agencies such as MRL and APAD, the findings suggest a need to strengthen policy consistency through collaborative platforms that bring together federal and state entities, encouraging regular forums to address governance tensions and enhance stakeholder trust. This could lead to smoother project implementation and greater community acceptance, potentially opening doors for increased local participation. For BRI stakeholders, including international partners like China's EXIM Bank, the emphasis on SE points to the importance of integrating participatory mechanisms into project planning, ensuring that local voices shape outcomes and reduce risks, which could improve project sustainability and local support. Academically, the study advances stakeholder theory by illustrating the contextual nuances of engagement in emerging economies, offering a fresh perspective that complements existing governance models. These implications encourage a shift toward stakeholder-centered strategies, promoting equitable benefits and setting a precedent for future BRI endeavors in diverse political landscapes.

8. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study, while insightful for understanding stakeholder engagement (SE) in the East Coast Rail Link (ECRL) project, faces certain limitations. The convenience sample of 361 stakeholders, heavily weighted toward government and contractor perspectives, may skew results and limit representation of community voices, potentially affecting generalizability across BRI contexts. The cross-sectional design captures only a momentary view from September to November 2024, missing longitudinal shifts, while modest effect sizes and partial mediation (suggest unexamined variables like cultural factors. Self-reported data also risks social desirability bias in Malaysia's political climate. Future research should employ stratified sampling for broader inclusion, adopt longitudinal or mixed-method approaches to track governance evolution, and explore additional mediators such as trust or economic incentives. Comparative studies across other BRI nations and experimental designs simulating political changes could further refine the model, enhancing its applicability to global infrastructure governance.

REFERENCES

Aaltonen, K. (2010). *Stakeholder management in international projects* – A Study, Doctorate Thesis. Aalto University, Finland. https://www.academia.edu/download/55765343/isbn9789526033440_1.pdf

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory, 18*(4), 543–571. https://doi.org/10.1093/jopart/mum032

Ansell, C., Sørensen, E., & Torfing, J. (2017). Improving policy implementation through collaborative policymaking. *Policy & Politics, 45*(3), 467–486. https://doi.org/10.1332/030557316X14788784458703

Bentley, D. (2019). The Belt and Road Initiative: Motives, scope and challenges. *China Perspectives, 2019*(2), 25–33. https://doi.org/10.4000/chinaperspectives.9493

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review, 66*(s1), 44–55. https://doi.org/10.1111/j.1540-6210.2006.00665.x

Bryson, J. M., Crosby, B. C., & Seo, D. (2020). Using a design approach to create collaborative governance. *Policy & Politics, 48*(1), 167–189. https://doi.org/10.1332/030557319X15622967230021

DOI: 10.47505/IJRSS.2025.11.7

Cheng, A. S., Gerlak, A. K., Dale, L., & Mattor, K. (2015). Examining the adaptability of collaborative governance associated with publicly managed ecosystems over time: Insights from the Front Range Roundtable, Colorado, USA. *Ecology and Society*, *20*(1). https://doi.org/10.5751/ES-07282-200125

Clarke, M. (2018). The Belt and Road Initiative: Exploring Beijing's motivations and challenges for its new Silk Road. *Strategic Analysis*, *42*(2), 84–102. https://doi.org/10.1080/09700161.2018.1439326

Davies, A. L., & White, R. M. (2012). Collaboration in natural resource governance: Reconciling stakeholder expectations in deer management in Scotland. *Journal of Environmental Management*, *112*, 160–169. https://doi.org/10.1016/j.jenvman.2012.07.027

Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, *22*(1), 1–29. https://doi.org/10.1093/jopart/mur011

Ferdousi, F., & Qiu, L. (2013). New public management in Bangladesh: Policy and reality. *IBusiness*, *5*(3B), 150–153. https://doi.org/10.4236/ib.2013.53B036

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Fukuyama, F. (2016). Governance: What do we know, and how do we know it? *Annual Review of Political Science*, *19*, 89–105. https://doi.org/10.1146/annurev-polisci-042214-044240

Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological and Behavioral Science*, *42*(3), 266–290. https://doi.org/10.1007/s12124-008-9078-3

Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, *61*(1), 101–107. https://doi.org/10.1093/biomet/61.1.101

Gulati, R., Wohlgezogen, F., & Zhelyazkov, P. (2012). The two facets of collaboration: Cooperation and coordination in strategic alliances. *Academy of Management Annals*, *6*(1), 531–583. https://doi.org/10.5465/19416520.2012.691646

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage. https://doi.org/10.1007/978-3-030-80519-7

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). An introduction to structural equation modeling. In J. F. Hair, G. T. M. Hult, C. M. Ringle, & M. Sarstedt (Eds.), *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed., pp. 1–29). Sage. https://doi.org/10.1007/978-3-030-80519-7_1

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hair, J.R.A., Babin, B. & Black, W. (2010) Multivariate data analysis. In: Australia: Cengage, Vol. 7. Pearson. Available from: https://www.drnishikantjha.com/papersCollection/M

Haruta, C., & Radu, B. (2010). The invisible hand or what makes the bureaucracy indispensable? A short theoretical inquiry into the bureaucracy's role in the policy making process. *Transylvanian Review of Administrative Sciences*, *29E*, 62–70.

Harrison, L. (2020). Quantitative designs and statistical analysis. In G. MacNaughton, S. A. Rolfe, & I. Siraj (Eds.), *Doing early childhood research: International perspectives on theory and practice* (2nd ed., pp. 127–154). Routledge.

DOI: 10.47505/IJRSS.2025.11.7

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review, 33*(3), 405–431. https://doi.org/10.1108/IMR-09-2014-0304

Hill, M., & Hupe, P. (2002). *Implementing public policy: Governance in theory and in practice*. Sage.

Kapucu, N., & Hu, Q. (2020). *Network governance: Concepts, theories, and applications*. Routledge. https://doi.org/10.4324/9781315705941

Khan, A., Waris, M., Panigrahi, S., Sajid, M. R., & Rana, F. (2021). Improving the performance of public sector infrastructure projects: Role of project governance and stakeholder management. *Journal of Management in Engineering, 37*(2), 04020112. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000886

Kline, R.B. (2012) Principles and practice of structural equation modeling. Canadian Graduate Journal of Sociology and Criminology, 1(1), 59. Available from: https://doi.org/10.15353/cgjsc-rcessc.v1i1.25

Kuik, C. C. (2017). Explaining the contradiction in China's South China Sea policy: Structural drivers and domestic imperatives. *China: An International Journal, 15*(1), 163–186. https://doi.org/10.1142/S021974001750010X

Lazaraton, A. (2005). Quantitative research methods. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 209–224). Routledge.

Liu, Y., & Lim, G. (2019). *The political economy of transnational governance: China and Southeast Asia in the 21st century*. Palgrave Macmillan.

McGuire, M., & Agranoff, R. (2004). Collaborative public management: New strategies for local governments. Georgetown University Press.

MIDA. (2024). ECRL-related projects to boost socio-economic activities in various sectors. https://www.mida.gov.my/mida-news/ecrl-related-projects-to-boost-socio-economic-activities-in-various-sectors-mida/

O'Leary, R., Gerard, C., Keast, R., Mandell, M. P., & Voets, J. (2015). Collaboration and performance: Introduction to symposium on collaboration. *Public Performance & Management Review, 38*(4), 573–577. https://doi.org/10.1080/15309576.2015.1031001

Oh, J., & No, S. (2020). The political economy of China's Belt and Road Initiative in East Asia: A critical perspective. *Asian Survey, 60*(3), 451–473. https://doi.org/10.1525/as.2020.60.3.451

Pavlicevic, D., & Kratz, A. (2018). Chinese investment and influence in Southeast Asia: The case of the Belt and Road Initiative. *Journal of Contemporary China, 27*(110), 245–260. https://doi.org/10.1080/10670564.2017.1407925

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

DOI: 10.47505/IJRSS.2025.11.7

Saleh, C., Hendrik, E., & Soesilo Zauhar, M. N. (2021). Collaborative governance in public administration perspective. *Journal of Southwest Jiaotong University, 56*(6). https://doi.org/10.35741/issn.0258-2724.56.6.1

Smith, J. (2006). Promoting collaborative decision-making in international institutions: The role of dispute resolution in facilitating change. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.916010

Torvinen, H., & Ulkuniemi, P. (2016). End-customer value restructuring the financial service supply chain. *Marketing Intelligence & Planning, 34*(6), 823–845. https://doi.org/10.1108/MIP-10-2015-0198

Weng, L., Xue, L., Sayer, J., Riggs, R. A., Langston, J. D., & Boedhihartono, A. K. (2021). Challenges faced by Chinese firms implementing the 'Belt and Road Initiative': Evidence from three railway projects. *Research in Globalization, 3*, 100074. https://doi.org/10.1016/j.resglo.2021.100074

Williams, T. (2015). Identifying success factors in construction projects: A case study. *Project Management Journal, 47*(1), 97–112. https://doi.org/10.1002/pmj.21458

Wolf, S. O. (2020). The GSP+ conundrum and the CPEC's impact on EU-Pakistan economic and trade relations. In S. O. Wolf (Ed.), *The China-Pakistan Economic Corridor of the Belt and Road Initiative* (pp. 243–260). Springer International Publishing. https://doi.org/10.1007/978-3-030-16198-9_7

Yang, X., Heidug, W., & Cooke, D. (2019). An adaptive policy-based framework for China's carbon capture and storage development. *Frontiers of Engineering Management, 6*(1), 78–86. https://doi.org/10.1007/s42524-019-0003-x

Yani, A., Saputra, J., Muhammad, Z., Aisyah, T., Musfira, C. L., Petege, O., & Miska, L. (2021). Collaborative governance in the management of natural tourism to increase the village's original income in the Sawang sub-district. *International Conference on Social Science, Political Science, and Humanities (ICoSPOLHUM 2020)*, 328–331. https://doi.org/10.2991/assehr.k.210115.052

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education, 48*(2), 311–325. https://doi.org/10.1111/ejed.12014

Yu, Z., & Yu, J. (2023). Can policy coordination facilitate unimpeded trade? An empirical study on factors influencing smooth trade along the Belt and Road. *Applied Mathematics and Nonlinear Sciences, 8*(2), 447–456. https://doi.org/10.2478/amns.2021.2.00194

Yu, C., Zhang, R., An, L., & Yu, Z. (2020). Has China's belt and road initiative intensified bilateral trade links between China and the involved countries? *Sustainability, 12*(17), 6747. https://doi.org/10.3390/su12176747

Zhang, X., Song, W., & Peng, L. (2020). Investment by Chinese enterprise in infrastructure construction in Malaysia. *Pacific Focus, 35*(1), 109–140. https://doi.org/10.1111/pafo.12154

Zuniga-Teran, A. A., Fisher, L. A., Meixner, T., Le Tourneau, F.-M., & Postillion, F. (2022). Stakeholder participation, indicators, assessment, and decision-making: Applying adaptive management at the watershed scale. *Environmental Monitoring and Assessment, 194*(3), 156. https://doi.org/10.1007/s10661-021-09741-4

DOI: 10.47505/IJRSS.2025.11.7