

Moderating Effect of Business Ecosystem Volatility between Dynamic capabilities and Firm Performance in Sri Lankan Multinational Corporations

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Abstract - The evolution of the theories of Dynamic Capabilities and its importance in paving the path of success for organizations has been studied and researched for decades. Evolving from the resource-based view, theories of Dynamic Capabilities state that organizations should have the ability to adapt to changing environments by integrating, building and reconfiguring internal and external resources. This study focuses on the above-mentioned external environmental conditions and its effect on the Dynamic Capabilities and its relationship to firm performance within the premise of Sri Lankan Multinational Corporations. The dynamic capabilities a firm possesses has paramount importance in sustaining competitiveness. Nonetheless, there are other influential factors in the external environment that dictate the effectiveness of these dynamic capabilities. For instance, the Business Ecosystem Volatility surrounding Organizations can influence the extent to which these dynamic capabilities effect firm performances. Sri Lanka is a unique environment to study this phenomenon due to the emerging market dynamics and multinational activities. This research employs a quantitative approach using surveys sent to Sri Lankan Multinational corporations to collect data. It also contributes to the existing literature in hopes that it will fill certain research gaps prevalent in this area of study. The findings will benefit the management of the Sri Lankan MNCs by providing guidance on how to manoeuvre Dynamic Capabilities under changing environmental conditions and how they can capitalize on their dynamic capabilities properly.

Keywords: Business Ecosystem Volatility, Dynamic Capabilities, Integration, Multinational Corporations, Processes

I. INTRODUCTION

The dynamic capabilities concept suggests that a firm's capacity to renew its resources and capabilities according to market changes enables them to sustain competitive advantage (Augier & Teece, 2009). In the recent studies, researchers like Smith, et al. (2023) and Johnson and Lee (2023) have investigated dynamic capabilities. However, Barreto (2010) & Helfat and Peteraf (2015) states that while some studies have examined the direct relationship between dynamic capabilities and firm performance, relatively fewer studies have focused on the moderating factors that may influence this relationship.

A firm implementing strong dynamic capabilities can sense opportunities and threats, seize opportunities and sustain their competitiveness through enhancing, combining, protecting, and reconfiguring tangible and intangible assets (Teece, 2007). In general studies done on this subject support a positive relationship between dynamic capabilities and firm performance. But there have been some studies that question this view (Drnevich & Kriauciunas, 2011). Therefore, the specific mechanisms and constraints impacting the effectiveness of dynamic capabilities require further examination and study (Wang & Ahmed, 2007). Based on the research survey conducted, which analysed papers published by academic institutions, scholars and researchers, it became evident that the research area has received limited attention within the context of

Sri Lanka. This study aims to address the above research gap. By examining the relationship between dynamic capabilities and firm performance, this study offers valuable insights into how MNCs can enhance their performance in the Sri Lankan Market which is relatively volatile. The findings of the research will be beneficial for making strategic decisions as well.

II. LITERATURE REVIEW

A. Dynamic Capabilities

We define dynamic capabilities as a firm's behavioural orientation to constantly integrate, reconfigure, renew, and recreate its resources and capabilities, and most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage (Wang & Ahmed, 2007). It should be understood that dynamic capabilities are not simply processes.

Resources of an organization can be a source of competitive advantage if they display V.R.I.N characteristics but even so V.R.I.N resources do not persist over time and hence cannot be a source of sustainable competitive advantage. Then we have "Capabilities" which is the next level of the hierarchy; first-order elements. This is when a firm displays the capacity to deploy resources and attain goals while improving firm performance. "Core- capabilities" are the second order of the hierarchy and are a bundle of a firm's resources and capabilities that are strategically important to its competitive advantage at a certain point of time. The third order of a firm's dynamic capability is firm's constant pursuit of the renewal, reconfiguration and re-creation of resources, capabilities and core capabilities to address the environmental change (Wang & Ahmed, 2007). Thus, we contend that dynamic capabilities are the 'ultimate' organizational capabilities that are conducive to long-term performance, rather than simply a 'subset' of the capabilities.

B. Firm Performance

Organizational performance refers to the achievement of desired outcomes and objectives by an organization. The link between dynamic capabilities and firm performance has been extensively researched in the literature when it comes to dynamic capabilities. By enabling businesses to successfully adapt, innovate, and respond to shifting market conditions, dynamic capabilities play a critical role in forming and influencing firm performance. With reference to pertinent literature, this section gives a general overview of the connection between dynamic capacities and firm performance. Dynamic capabilities have been found to positively influence financial performance indicators such as profitability, return on assets, and market value. Firms that possess and leverage dynamic capabilities are more likely to achieve higher financial performance outcomes due to their ability to adapt and exploit new market opportunities (Ambrosini & Bowman, 2009). Dynamic capabilities also have links to a firm's ability to survive and maintain a competitive advantage in turbulent and dynamic environments.

Organizations that possess dynamic capabilities are better equipped to adapt to changing circumstances, navigate uncertainty and sustain their competitive position over time (Helfat & Peteraf, 2009). There are indications in literature as shown above that indicate a strong relationship between dynamic capabilities and Firm performance. Organizations may improve their capacity to accomplish desired results, respond to

market changes, and ultimately improve their overall performance in a dynamic business environment by continually adapting and changing their resources and capabilities.

C. Effect of Moderating Factors on Dynamic Capabilities

Dynamic capabilities represent an organization's ability to adapt, innovate, and transform its resources and capabilities in response to changing market conditions. But the effect of these dynamic capabilities is conditioned or influenced by various moderating factors. This section examines how moderating factors affect dynamic capabilities, illuminating the ways in which various contextual elements might influence the connection. Business ecosystem volatility is the degree of turbulence and unpredictability in the external business environment. It has been found to moderate the effect of dynamic capabilities on organizational performance. In highly dynamic environments, where market conditions are rapidly changing, dynamic capabilities play a more significant role in driving performance outcomes (Jansen et al., 2006). Additionally, the culture and organizational structure of an organization can influence how dynamic capabilities and performance are related. For instance, flexible and decentralized organizational structures that foster autonomy, collaboration, and information flow tend to enhance the effectiveness of dynamic capabilities (Teece, 2007). Similarly, a culture that encourages experimentation, learning, and risk-taking can support the development and utilization of dynamic capabilities (Zhang & Li, 2010). Organization slack is also another moderating factor that affects dynamic capabilities. The excess resources that an organization has beyond what is needed for its current operations are referred to as organizational slack. When organizations have sufficient slack resources, it provides them with the flexibility to invest in innovation, experimentation, and strategic initiatives, amplifying the positive effect of dynamic capabilities on performance (Makadok, 2001). Numerous moderating elements can affect how dynamic capabilities impact organizational results. Some of the main elements that influence the connection include business ecosystem volatility, organizational slack, organizational structure, and organizational culture. Organizations must comprehend these moderating elements to fully utilize their dynamic capabilities and maximize the influence they have on performance results.

D. Business Ecosystem Volatility

Business ecosystem volatility refers to the degree of uncertainty, turbulence, and rapid changes within the ecosystem. It encompasses factors such as technological advancements, market shifts, regulatory changes and competitive dynamics that create a highly unpredictable and dynamic environment (Adner, 2017). Political volatility refers to the frequency and magnitude of changes in political institutions, policies, and leadership that can affect business operations. It is an important aspect of the business ecosystem, especially for multinational corporations operating in diverse political environments. Jiang et al. (2020) argue that political volatility significantly shapes the business ecosystem by influencing regulatory frameworks, economic policies and institutional stability. Market volatility refers to the fluctuations in demand, supply, prices, and competitive dynamics. It is a fundamental aspect of the business ecosystem that directly impacts firm strategies and performance. Schilke (2022) argues that market volatility is a critical component of the business ecosystem that influences the effectiveness of dynamic capabilities.

E. Market Volatility

Several studies have examined the moderating effect of market volatility on the dynamic capabilities-firm performance relationship. Drnevich and Kriauciunas (2011) found that the impact of dynamic capabilities on firm performance is contingent on the environmental context, with market volatility playing a moderating role. Wilden and Gudergan (2015) demonstrated that the relationship between dynamic capabilities and firm performance is stronger in volatile market environments, suggesting that dynamic capabilities are more crucial in turbulent conditions. Farsani et al. (2020) revealed that organizational agility, as a dynamic capability, has a stronger positive effect on firm performance when market volatility is high, indicating that the moderating role of market volatility is significant. Karna et al. (2016) found that the positive relationship between a firm's dynamic capabilities and its export performance is stronger in highly volatile export markets.

Schilke (2014) demonstrated that the impact of dynamic capabilities on a firm's competitive advantage is amplified in volatile market conditions, as dynamic capabilities enable firms to respond to changes more effectively. Weerawardena et al. (2019) showed that the positive effect of dynamic marketing capabilities on firm performance is more pronounced in turbulent market environments, underscoring the importance of dynamic capabilities in volatile markets. In conclusion, the recent literature provides substantial evidence that "Market Volatility" can moderate the relationship between dynamic capabilities and firm performance. Firms with stronger dynamic capabilities are better equipped to navigate and perform well in volatile market environments, as their ability to sense, seize, and reconfigure resources and capabilities becomes more critical in such conditions.

F. Political Volatility

Recent studies have examined the impact of political volatility on the dynamic capabilities-firm performance relationship. Prange and Verdier (2011) found that political instability, as a dimension of environmental volatility, moderates the relationship between a firm's dynamic capabilities and its international performance.

Buyl et al. (2020) demonstrated that the positive effect of a firm's dynamic capabilities on its financial performance is weakened in politically volatile environments. Cui et al. (2018) revealed that the relationship between a firm's dynamic capabilities and its innovation performance is contingent on the level of political instability in the firm's operating environment. Buyl et al. (2020) found that the positive impact of dynamic capabilities on firm financial performance is weaker in politically volatile environments, as political instability can disrupt a firm's ability to effectively utilize its dynamic capabilities. The findings highlight the importance of considering the political context in which firms operate when examining the relationship between dynamic capabilities and firm performance (Cui et al., 2018; Prange & Verdier, 2011). In conclusion, the recent literature provides evidence that "Political Volatility" can moderate the relationship between dynamic capabilities and firm performance. Firms operating in politically volatile environments may find it more challenging to effectively leverage their dynamic capabilities, as political instability can disrupt their ability to sense, seize, and reconfigure resources, ultimately impacting their performance.

G. Sri Lankan Multinational Corporations

Although there is a plethora of research done on Sri Lankan Multinational corporations regarding topics like social responsibility, best management practices, sustainability, and Knowledge transfer, research on dynamic capabilities and their effects on Sri Lankan MNEs cannot be found. But this is a prominent category of study in other parts of the world.

H. Gaps and Contradictions

Since the publication of Teece et al. (1997) seminal work on dynamic capabilities, which was a milestone in this study area, there has been immense interest in the field of dynamic capabilities. If anything, interest in this topic has been increasing, as evidenced by citation counts and the amount of program time devoted to it at major conferences, such as those sponsored by the Strategic Management Society and the Academy of Management (Teece, 2007; Helfat et al., 2007).

While the literature on dynamic capabilities has made a vast contribution to our understanding on how organizations should adapt and perform in dynamic environments, there are some gaps and contradictions that could be identified. Following are those gaps and contradictions.

First and foremost, there is a lack of consensus on a proper definition and means of measuring dynamic capabilities. Due to this, a conceptual ambiguity exists on which leads to challenges in making measurements. Different scholars have proposed varying definitions and frameworks, resulting in inconsistencies and difficulties in comparing research findings (Foss & Saebi, 2017). The understanding of the causal relationship between dynamic capabilities and organizational outcomes is limited in this area of study. It is challenging to determine whether dynamic capabilities drive performance or if high-performance outcomes enable the development of dynamic capabilities (Zollo & Winter, 2002).

The effect of various moderating factors and their effectiveness in shaping these dynamic capabilities are mostly overlooked. There is a need for further research to explore how factors such as industry characteristics, firm size, national culture, and technological trajectories moderate the relationship between dynamic capabilities and performance outcomes.

So, to summarize the major debates or contradictions in this area of study are two critical issues which are the ambiguity surrounding the definition and their effects or consequences. Furthermore, there is a lack of study of dynamic capabilities in the context of Sri Lanka

III. METHODOLOGY

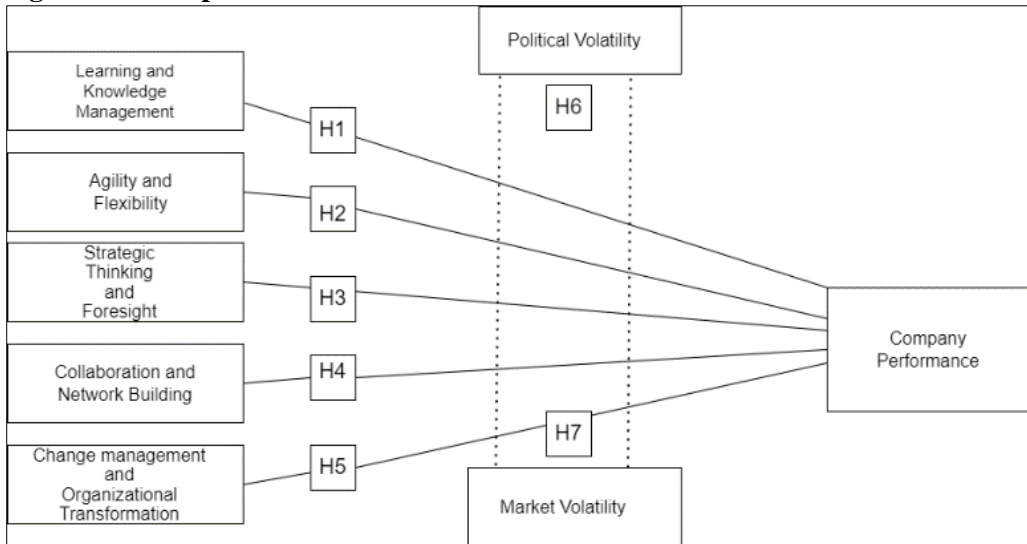
A. Conceptual Framework

Business ecosystem volatility refers to the degree of uncertainty, turbulence, and rapid changes within the ecosystem. It encompasses factors such as technological advancements, market shifts, regulatory changes and competitive dynamics that create a highly unpredictable and dynamic environment (Adner, 2017). Political volatility refers to the frequency and magnitude of changes in political institutions, policies, and leadership that can affect business operations. It is an important aspect of the business ecosystem, especially for multinational corporations operating in diverse political environments. Jiang et al. (2020) argue that political volatility significantly shapes the

business ecosystem by influencing regulatory frameworks, economic policies and institutional stability. Market volatility refers to the fluctuations in demand, supply, prices, and competitive dynamics. It is a fundamental aspect of the business ecosystem that directly impacts firm strategies and performance. Schilke (2022) argues that market volatility is a critical component of the business ecosystem that influences the effectiveness of dynamic capabilities. Thus, the moderating variables were narrowed down to political volatility and Market volatility.

Based on the Literature, five of the most prominent dynamic capabilities were extracted as the independent variables of the conceptual framework.

Figure 1. Conceptual Framework



Source: Authors' compilation.

An organization's capacity to adapt, combine, and reorganize its resources and competencies in response to quickly shifting circumstances and new possibilities is referred to as having dynamic capabilities. Breznik and Hisrich (2014) found that organizational learning positively influences a firm's dynamic capabilities, which in turn improve its performance. Kuuluvainen (2012) highlighted that effective knowledge management, including knowledge creation, transfer, and application, is a vital dynamic capability that allows firms to adapt and innovate in turbulent environments. Arend and Bromiley (2009) argued that the development of dynamic capabilities, including learning and knowledge management, is crucial for firms to achieve superior performance in dynamic and competitive environments. Furthermore, deliberate learning processes are important for the evolution of dynamic capabilities (Zollo & Winter 2002). In conclusion, the recent literature provides strong evidence that Learning and Knowledge Management can be considered key dynamic capabilities that significantly influence firm performance.

Teece (2007) and Helfat and Peteraf (2015) state that agility, which refers to a firm's ability to sense and respond quickly to changes in the business environment, is widely recognized as a key dynamic capability. Eisenhardt and Martin (2000) and Teece (2007) have highlighted that flexibility, the ability to adapt and reconfigure resources and capabilities, is considered an integral component of dynamic capabilities. Barreto (2010) emphasized that the capacity to alter the firm's resource base was a key aspect of dynamic

capabilities, and this flexibility enables firms to respond to changes in the environment. Sambamurthy et al. (2003) found that organizational agility, enabled by digital options and entrepreneurial alertness, positively influences firm performance in terms of market capitalization and revenue growth. Kang and Kang (2014) also have revealed that manufacturing flexibility, as a dynamic capability, enhances a firm's financial and operational performance by enabling it to respond to changes in customer demands and market conditions. In conclusion, the recent literature provides strong evidence that Agility and Flexibility can be considered key dynamic capabilities that significantly influence firm performance.

Teece (2007) and Helfat and Peteraf (2015) state that strategic thinking, the ability to envision and anticipate future market changes, is recognized as an essential dynamic capability. Schoemaker et al. (2018) have emphasized that strategic thinking, which involves identifying opportunities, anticipating threats, and envisioning innovative solutions, is a critical dynamic capability that enables firms to adapt and thrive in complex environments. According to Teece (2007) and Helfat and Peteraf (2015), foresight, the ability to anticipate and prepare for future events, is closely linked to strategic thinking and is considered a vital dynamic capability. Rohrbeck and Kum (2018) have argued that organizational foresight, which involves scanning the environment, anticipating changes, and developing strategic options, is a dynamic capability that enables firms to adapt and innovate. In conclusion, the recent literature provides strong evidence that Strategic Thinking and Foresight can be considered key dynamic capabilities that significantly influence firm performance.

Researchers have identified collaboration as a key dynamic capability that enables firms to sense opportunities. Lichtenthaler and Lichtenthaler (2009) found that a firm's capacity to manage internal and external knowledge flows, through collaborative mechanisms, is a dynamic capability that enhances its innovation and financial performance. Network building, the ability to develop and manage strategic alliances and partnerships, is recognized as an essential dynamic capability (Teece, 2007; Helfat & Peteraf, 2015). Mitrega et al. (2017) found that network capability, which encompasses relationship initiation, development, and termination, is a dynamic capability that enables firms to access resources, acquire new knowledge, and improve their competitiveness.

Fainshmidt et al. (2016) demonstrated that firms with strong collaborative capabilities, such as the ability to form and manage strategic alliances, exhibit higher levels of dynamic capabilities and financial performance. In conclusion, the recent literature provides strong evidence that "Collaboration and Network Building" can be considered key dynamic capabilities that significantly influence firm performance. In conclusion, the recent literature provides strong evidence that Collaboration and Network Building can be considered key dynamic capabilities that significantly influence firm performance.

Researchers have recognized the ability to manage organizational change as a crucial dynamic capability (Teece, 2007; Helfat & Peteraf, 2015). Barreto (2010) emphasizes that a firm's capacity to change and reconfigure its resource base is a key aspect of dynamic capabilities, enabling it to adapt to environmental shifts. Organizational transformation, the ability to fundamentally change and restructure the firm's operations, processes, and strategies, is considered a dynamic capability (Teece, 2007; Helfat & Peteraf, 2015). Ambrosini and Bowman (2009) argued that the capacity to renew and reconfigure the firm's resource base, through organizational transformation, is a critical dynamic capability. Bingham et al. (2015) showed that firms with higher levels of change

management capabilities, such as the ability to reconfigure resources and routines, outperform their competitors in terms of financial and market-based measures. In conclusion, the recent literature provides strong evidence that Change Management and Organizational Transformation can be considered key dynamic capabilities that significantly influence firm performance.

B. Hypothesis Development

Based on the above conceptual model, the following hypotheses were developed along with the endorsement of the literature.

Table 1. List of Hypothesis

Number	Hypothesis
H1	Greater learning and knowledge management abilities positively impact Company performance.
H2	Higher levels of Agility and Flexibility in a company make a positive impact on Company performance.
H3	A company that is more collaborative with great levels of network building shows higher levels of performance.
H4	Strategic thinking and foresight capabilities increase a company's performance.
H5	Proper change management and organizational transformation abilities positively affect a company's performance.
H6	Greater political volatility weakens the positive association between dynamic capabilities and company performance.
H7	Greater market volatility weakens the positive association between dynamic capabilities and company performance.

Source: Authors' compilation.

The above hypothesis was developed with further confirmation from literature. Organizations are able to discover and distribute resources more effectively with the use of learning and knowledge management skills. Companies may better spend resources where they are most needed, cutting down on waste and raising overall performance, by having a better awareness of their internal knowledge assets. (Li & Wang, 2010). Flexibility enables business to modify their goods, services and, operational procedures to satisfy client requirements. The improved customer satisfaction and loyalty brought about by this customer-centric strategy can have a significant effect on long-term performance. (Reeves et al., 2015). Tortoriello and Krackhardt (2010) demonstrated that bridging ties that span organizational boundaries contribute to innovation, particularly when these ties are associated with a strong collaborative relationship. Setting specific long-term goals and figuring out how to get there need strategic thinking. This proactive planning makes sure that the business is concentrated on its goals and more likely to succeed in achieving them, thus improving performance (Bryson, 2018). Jones et al. (2019) showed that organizations with strong dynamic capabilities, including the ability to sense and seize opportunities for change, demonstrated better performance in turbulent environments. Firms may be forced to divert resources away from building dynamic capabilities to deal with immediate political challenges and regulatory compliance. This diversion of resources can weaken the development of dynamic capabilities focused on

innovation and adaptation (Helfat & Peteraf, 2015). Fainshmidt et al. (2016) in their meta-analysis found that the performance effects of dynamic capabilities are weaker in more dynamic environments, which aligns with the statement.

C. Survey Design

An operationalization table was constructed to identify specific indicators for the five selected variables. On the grounds of these indicators, questions were formulated to measure each construct. After determining that these questions were reflective of their respective constructs, a comprehensive survey questionnaire was formulated. This systematic approach ensured that the survey instrument was grounded in the theoretical framework and capable of effectively measuring the constructs under investigation in this research. The study used a structured questionnaire to gather data from 148 middle and upper-level managers of Sri Lankan MNCs. A 5-point Likert scale was used to rate their agreement with the survey's statements. After data cleansing, 143 responses were used, with a minimum sample size of 137 determined by the Cohen table.

The data collected were analyzed through PLS-SEM. Based on the provided literature, there is a strong justification for using Partial Least Squares Structural Equation Modeling (PLS-SEM) as the analysis method for the research. Hair et al. (2011) have advocated for the use of PLS-SEM, describing it as a "silver bullet" for researchers, particularly when dealing with complex models and relationships.

IV. RESULTS

A. Evaluation of Measurement Model

Evaluating the measurement model in PLS-SEM is important for ensuring reliable and valid constructs. Reflective measurement models assume that indicators are caused by an underlying latent construct and are characterized by high inter-correlation between items which can be interchanged without altering meaning. Formative modelled constructs are defined by their indicators, where changes to indicators directly change conceptual meaning. As this research utilizes reflective indicators adhering to a reflective measurement approach, three assessments were conducted to evaluate measurement validity and reliability in the PLS-SEM model: internal consistency checks the reliability of indicators supposed to measure the same construct, convergent validity examines if indicators positively correlate for the same construct, and discriminant validity tests if measurements discriminate between distinct constructs as intended. Applying this comprehensive measurement validation solidifies conclusions drawn from the model. As can be seen below, a reflecting model of the research variables was developed in order to do additional analysis.

The results of the first test of Internal Consistency Reliability showed that the Cronbach's alpha values of all the constraints are greater than 0.7 which is the acceptable threshold value. It means that all the measurement indicators are well reflected and measured well within the questionnaire. The next test of the assessment of measurement model is convergent validity test. The outer loadings values for all the indicators of all the variables are higher than 0.7 which is the acceptable threshold value.

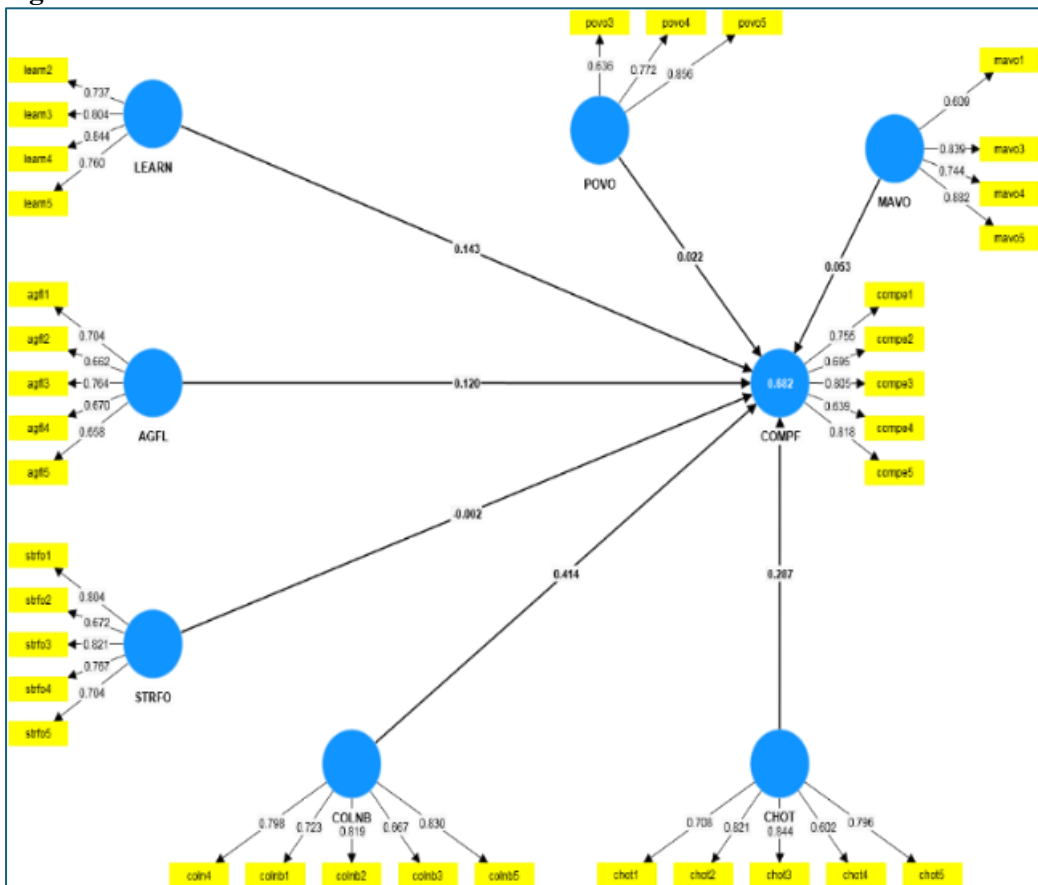
To assess discriminant validity, the standardized factor loadings are examined for each indicator across constructs. Strong discriminant validity is demonstrated when the factor loading between an individual indicator and its associated construct is substantially higher than its cross-loadings on other constructs. In other words, indicators should

correlate more strongly with their own hypothesized construct versus competing constructs. The criteria for adequate discriminant validity are met when indicators load more highly on their intended construct than on other models, as evidenced in the provided factor analysis. Meeting this threshold verifies that the measurement model differentiates between distinct latent variables as intended.

In the results of the Fornell-Larker criteria assessments all diagonal values of constructs, which are square roots of AVE values, were shown to be larger than the corresponding column and row values of other constructs.

According to the Heterotrait-Monotrait Ratio (HTMT) evaluations, all constructions' HTMT test results should be less than 0.85 or 0.9. But there is one value which is greater than 0.9 (COMPF → COLNB). All others except this construct have achieved a less correlation with each other.

Figure 2. Measurement Model of the Base Constructs



Source: Authors' compilation.

B. Evaluation of Structural Model

By following well-established practices from the literature, a robust and rigorous evaluation of the structural model could be ensured, including the assessment of the base model relationships and the examination of the moderating effects. The following steps were followed in evaluating the Structural Model. The first step was hypothesis testing on the base model. Evaluating the path coefficients, confidence intervals, t-values, and p-

values for the base model are a standard and recommended approach in PLS-SEM. Hair et al. (2019) emphasize the importance of reporting the path coefficients, t-values, and p-values to assess the significance and relevance of the structural model relationships. Henseler et al. (2009) also highlight the use of bootstrapping to obtain the confidence intervals for the path coefficients, which is crucial for evaluating the significance of the relationships.

As the second step Hypothesis testing on the moderator analysis was done. Examining the moderating effects is a crucial step in understanding the boundary conditions and contingencies of the relationships in the structural model. Hair et al. (2019) provides guidance on analyzing moderating effects in PLS-SEM, including the use of categorical analysis and multi-group analysis. Categorical analysis, where the sample is divided into groups based on the moderator variable, and the significance of the path differences between groups is assessed, is a recommended approach (Hair et al., 2019.). Multi-group analysis, where the moderating effect is tested by comparing the path coefficients between different groups, is also a well-established method in PLS-SEM (Henseler et al., 2009.). This approach aligns with the recommended guidelines and best practices in the PLS-SEM literature, providing confidence in the reliability and validity of the research findings.

Figure 3 shows the conceptual framework which depicts the dynamic capabilities and its relationship to firm performance and the influence of moderating factors in that relationship. Learning and Knowledge Management (LEARN), Agility and Flexibility (AGFL), Strategic Foresight (STRFO), Collaboration and Network Building (COLNB), Change Management and Organizational Transformation (CHOT), Company Performance (COMPF), political volatility (POVO), Market volatility (MAVO). Each hypothesis was tested using the PLS-SEM software.

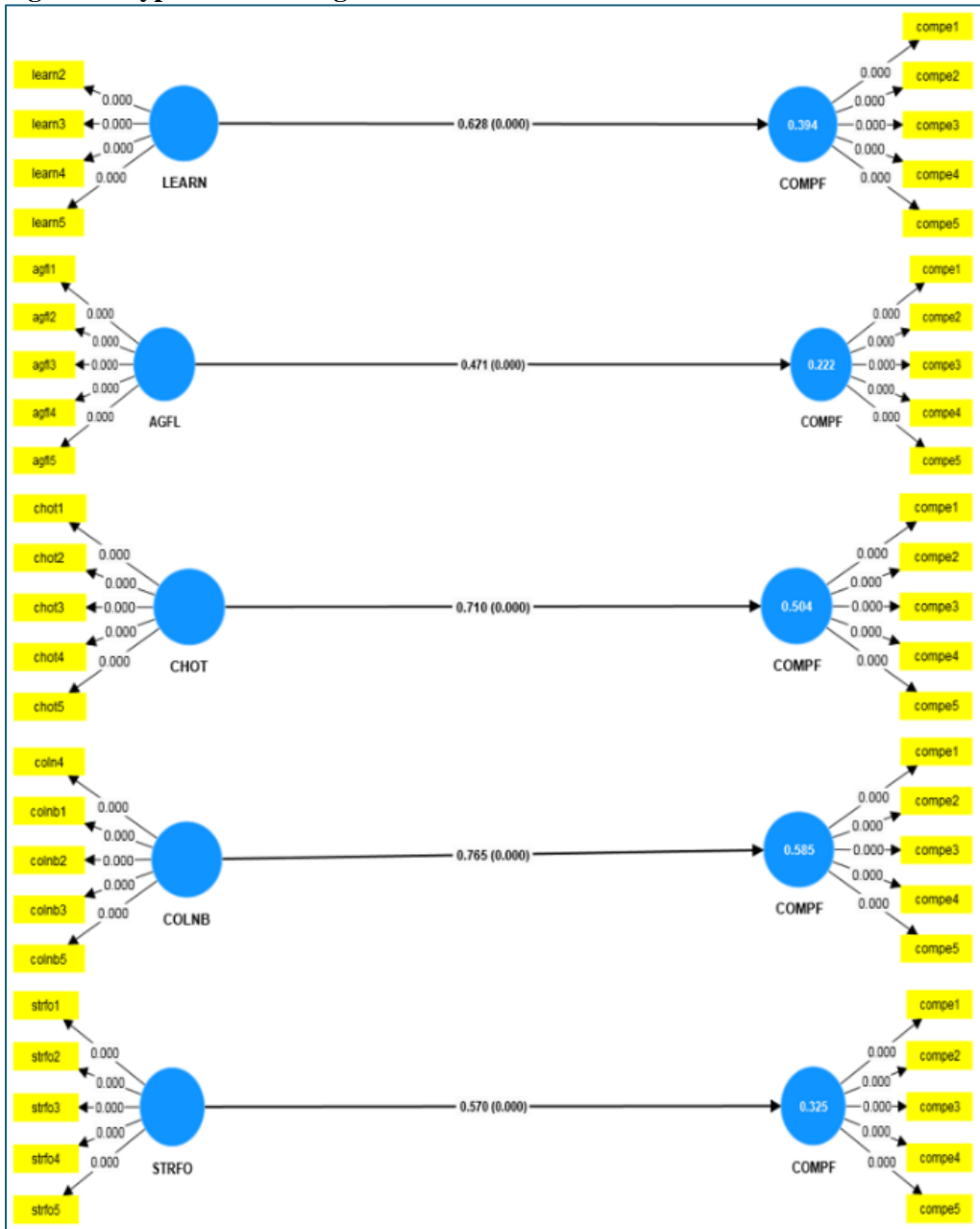
Table 2. Path Coefficients

	Path coefficients		
	Path coefficients	T values	P values
AGFL -> COMPF	0.126	2.396	0.017
CHOT -> COMPF	0.309	5.087	0
COLNB -> COMPF	0.415	5.987	0
LEARN -> COMPF	0.145	2.786	0.005
STRFO -> COMPF	0.57	9.763	0

Source: Authors' compilation.

According to the above table, the path coefficients indicate that there's a positive relationship between all the five relationships. All the p values are lesser than 0.05 which means that the relationships are in fact significant.

Figure 3. Hypothesis Testing on Base Model



Source: Authors' compilation.

C. Hypothesis Testing between Independent and Dependent Variables

Table 3. Results of the Hypothesis Testing

Hypothesis	Relationships	The Results of Hypotheses Testing			
		Path Coefficients	97.5% CI	t-values	p-values

1	LEARN COMPF	->	0.628	[0.146, 0.552]	13.827	0.000
2	AGFL COMPF	->	0.471	[0.357, 0.618]	7.189	0.000
3	COLNB COMPF	->	0.765	[0.693, 0.839]	20.666	0.000
4	STRFO COMPF	->	0.570	[0.464 0.693]	9.763	0.000
5	CHOT COMPF	->	0.710	[0.631, 0.787]	17.462	0.000

Source: Authors' compilation.

According to the above table hypothesis 1 to 5 are proven to be significant. As the data related to the moderating factors are categorical the following steps were followed to conduct the hypothesis testing for the moderating effect. First the two categories (low and high) were tested for their path coefficients, p values and t values. If both categories showed significance, then a Multi group analysis was performed. It is to check whether there is a significant difference between the two categories. If the multi group analysis gives a p value less than 0.05 we can conclude that there is a moderating effect from this moderating variable on this relationship.

If in the first place only one category shows a p value less than 0.05, we can conclude that the moderating effect is shown only when that factor is low or high. If both categories give a p value less than 0.05, we do not need to conduct a Multigroup analysis, we can conclude that there is no moderating effect.

Table 4. The Results of Hypotheses Testing of Moderating the Variable: Political Volatility

H6	P values for Political Volatility		
	P values in low volatility	P values in high volatility	2-tailed p value
LEARN -> COMPF	0	0	0.359
AGFL -> COMPF	0.026	0	0.898
COLNB -> COMPF	0	0	0.387
STRFO -> COMPF	0	0	0.555
CHOT -> COMPF	0	0	0.538

Source: Authors' compilation.

Table 5. The Results of Hypotheses Testing of Moderating the Variable: Market Volatility

H7	P values for Market Volatility		
	P values in low volatility	P values in high volatility	2-tailed p value
LEARN -> COMPF	0	0	0.218
AGFL -> COMPF	0.014	0	0.067
COLNB -> COMPF	0	0	0.669
STRFO -> COMPF	0	0	0.906
CHOT -> COMPF	0	0	0.538

Source: Authors' compilation.

The tables 4 and 5 show that both moderating factors Political and Market volatility has no significance in the relationship between Dynamic capabilities and Company performance.

D. Summary of Hypothesis Testing

Table 5. Hypothesis Testing Results

	Hypothesis	Accepted/Rejected
H1	Greater learning and knowledge management abilities positively impact Company performance.	Accepted
H2	Higher levels of Agility and Flexibility in a company make a positive impact on Company performance.	Accepted
H3	A company that is more collaborative with great levels of network building shows higher levels of performance.	Accepted
H4	Strategic thinking and foresight capabilities increase a company's performance.	Accepted
H5	Proper change management and organizational transformation abilities positively affect a company's performance.	Accepted
H6	Greater political volatility weakens the positive association between dynamic capabilities and company performance.	Rejected
H7	Greater market volatility weakens the positive association between dynamic capabilities and company performance.	Rejected

Source: Authors' compilation.

Rejected Hypotheses:

H6: Greater political volatility weakens the positive association between dynamic capabilities and company performance. The significance of this is that the context of Sri Lankan multinational firms, the rejection of this hypothesis suggests that, contrary to predictions, political instability does not considerably impair the favourable association between dynamic skills and corporate success.

H7: Greater market volatility weakens the positive association between dynamic capabilities and company performance. In a similar vein, the hypothesis's denial implies that, in the setting under study, market volatility does not significantly weaken the positive relationship between dynamic skills and corporate success.

V. DISCUSSION

The dynamic capabilities concept suggests that a firm's capacity to renew its resources and capabilities according to market changes enables them to sustain competitive advantage (Augier & Teece, 2009). In the recent studies, researchers like Smith et al. (2023) and Johnson and Lee (2023) have investigated dynamic capabilities. However, Barreto, (2010); Helfat & Peteraf, (2015) states that while some studies have examined

the direct relationship between dynamic capabilities and firm performance, relatively fewer studies have focused on the moderating factors that may influence this relationship.

A firm implementing strong dynamic capabilities can sense opportunities and threats, seize opportunities and sustain their competitiveness through enhancing, combining, protecting, and reconfiguring tangible and intangible assets (Teece, 2007). In general studies done on this subject support a positive relationship between dynamic capabilities and firm performance. But there have been some studies that question this view (Drnevich & Kriauciunas, 2011). Therefore, the specific mechanisms and constraints impacting the effectiveness of dynamic capabilities require further examination and study (Wang & Ahmed, 2007). Based on the research survey conducted, which analysed papers published by academic institutions, scholars and researchers, it became evident that the research area has received limited attention within the context of Sri Lanka. This study aims to address the above research gap. By examining the relationship between dynamic capabilities and firm performance, this study offers valuable insights into how MNCs can enhance their performance in the Sri Lankan Market which is relatively volatile. The findings of the research will be beneficial for making strategic decisions as well.

VI. CONCLUSION

The research results both support and contradict previous studies in interesting ways. The findings support earlier work on the positive impact of dynamic capabilities like learning, agility, collaboration, strategic foresight, and change management on firm performance. This aligns with seminal work by scholars like Teece, Eisenhardt, and Martin on the value of dynamic capabilities, especially in changing environments. However, the rejection of hypotheses regarding political and market volatility as significant moderators contradicts some previous research. For instance, studies by Schilke (2014) and Wilden and Gudergan (2015) found that high environmental dynamism can weaken the relationship between dynamic capabilities and performance. This contradiction in the Sri Lankan context suggests that the impact of environmental volatility may be more context-dependent than previously thought. The rejected hypotheses on the market and political volatility were unsupported, indicating that multinational corporations in Sri Lanka can employ dynamic capacities without much effect from political or market volatility.

This research fills a significant information gap in the literature by identifying critical dynamic competencies for multinational corporations operating in Sri Lanka. The findings help multinational companies choose which capabilities to emphasize and how external factors may affect them, ultimately improving company performance in volatile and dynamic business environments. The implications for theory are significant, as it calls for a more nuanced understanding of how dynamic capabilities operate in different business ecosystems, particularly in emerging markets. For practice, it suggests that multinational corporations in Sri Lanka can confidently invest in developing dynamic capabilities without being overly concerned about political or market volatility undermining their efforts. This finding could inform strategic decision-making for firms operating in or considering entry into the Sri Lankan market.

There are several limitations that should be considered. First, the very short data collecting period raises the possibility that a longer time frame is required to record future fluctuations and nuances—particularly when considering moderating effects. Future studies should gather data longitudinally to address this, since this will enable a more

thorough investigation of the ways in which moderating variables emerge and influence the dynamic capacities that have been revealed.

Furthermore, research in this field may expand the scope of the study by integrating a wider variety of moderating variables, so offering a more intricate comprehension of the contextual dynamics.

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