

*Determining the dimensions of corporate resilience: Insights
from Resource Based View (RBV) and Transaction Cost Economic
(TCE) perspectives*

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Abstract

Exploring the resilience capability of corporate firms is significant for finance, projects, and social recovery during highly disruptive circumstances. Yet, a limited conceptualization of corporate resilience is under-measured in the corporate governance literature. Moreover, this research aims to gap this knowledge by exploring a proper model to investigate corporate resilience dimensions. This research focuses on the resource-based view (RBV) and transactional cost economic (TCE) perspectives to measure a conceptual approach. The symmetric analysis (PLS-SEM) approach validated the measurement and structural model, addressing the dataset from the Bangladeshi corporate firms. The research finds significant and insignificant results via the PLS-SEM approach. PLS-SEM results revealed that benevolence, commitment, and recovery achieved corporate resilience during disruptive events. Conversely, flexibility, information sharing, and the response were not significantly supported as core conditions for reaching high corporate resilience. For practitioners and professionals, the significance of resource-based view (RBV) and transactional cost economics (TCE) as a core concept to adequately adapt to disruptions is extensively addressed by the findings of this study. However, this research insights to adapt better how important RBV and TCE in functions and corporate firms remain for prominent responses to achieve a higher level of corporate resilience during disruptive conditions.

Keywords: Corporate resilience, dimensions, the resource-based view (RBV), transactional cost economic (TCE), corporate firm, PLS-SEM

Table of Contents

Abstract	I
Table of Contents	II
List of Tables	IV
List of Figures	IV
1 Introduction	- 1 -
1.1 Research Background	- 1 -
1.2 Problem Statement	- 3 -
1.3 Significance of Corporate Resilience	- 3 -
1.4 Research Aim	- 4 -
2 Literature Review	- 5 -
2.1 Corporate resilience literature	- 5 -
2.1.1 Resilience	- 5 -
2.1.2 Resilience in corporate firms	- 7 -
3 Theoretical and Hypothesis Establishment	- 14 -
3.1 Theoretical perspective: Resource-Based Theory (RBT) and Transaction cost economic (TCE)	- 14 -
3.1.1 Benevolence	- 17 -
3.1.2 Commitment	- 18 -
3.1.3 Flexibility	- 19 -
3.1.4 Information sharing	- 20 -
3.1.5 Recovery	- 21 -
3.1.6 Response	- 22 -
4 Research Methodology	- 24 -
4.1 Respondents, procedures, and sample	- 24 -
4.2 Measures	- 25 -
4.2.1 Benevolence	- 25 -
4.2.2 Commitment	- 26 -
4.2.3 Flexibility	- 26 -
4.2.4 Information sharing	- 26 -
4.2.5 Recovery	- 27 -
4.2.6 Response	- 27 -

4.2.7 Corporate resilience.....	- 27 -
4.3 Analytical approach.....	- 28 -
4.4 Data analysis and findings.....	- 28 -
4.4.1 Measurement model	- 30 -
4.4.2 Structural model	- 31 -
4.4.3 Hypothesis testing	- 33 -
5 Discussion and conclusions.....	- 36 -
6 Implications	- 39 -
6.1 Implications for theory	- 39 -
6.2 Managerial implications	- 40 -
6.3 Limitations and future research	- 42 -
References	- 43 -

List of Tables

Table 2.1: Resilience definition-----	6-
Table 2.2: Systematic literature review of resilience.....	8-
Table 4.1: Demographic Variable.....	29-
Table 4.2: Factors Loading.....	29-
Table 4.3: Reliability and validity results.....	33-
Table 4.4: Structural model results.....	34-
Table 4.5: PLS-predict results.....	35-

List of Figures

Fig 3.1: Conceptual Model.....	17-
Fig 3.2: Hypothesized effects.....	23-
Fig 4.1: Research roadmap.....	25-
Fig 4.2: Measurement Model.....	31-
Fig 4.3: Structural Model.....	32-

1 Introduction

1.1 Research Background

Globalization and competitiveness have transformed the functions of a firm so much that organizational resources and appropriate governance management no longer provide a competitive benefit [1]. Although the concept of supply chain resilience is not novel, thus, corporate resilience has recently focused on the propositions in corporate governance research [2]. Consequently, firms have discovered that enhancing the productivity and functionality of the overall corporate function is the way ahead rather than focusing on the quality and profitability of individual firms [3]. Corporate mechanisms are frequently subjected to various turbulent conditions due to the growing uncertainty of global markets [4]. The disruptive effects of such uncertainties are noticeable if these uncertainties are not rectified on time [5]. The increasing number of disruptive situations has revitalized scholarly attention on corporate resilience (CR) [5], [6], as corporate risk governance techniques are no longer enough in today's extremely complex and turbulent corporate contexts [7]. However, corporate firms must adopt a resilient technique to confront the constraints of unpredictable and dynamic situations [8], which is defined as the capability of a firm to endure, adjust, and expand in turbulent conditions [9].

This study applies the resource-based view (RBV) as a theoretical approach [10]. In particular, the notion of corporate resilience articulated in the scope of RBV is deployed to accomplish the proposed objectives [11]. Tactical and significant resources are widely explored if utilized efficiently [10]. In contrast, the notion of compatibility highlights how one resource affects another to change the challenging situations of firms [12]. Firms must emerge with creative techniques of combining resources that could be complicated for competitors to replicate, thus, generating comparative benefits [11]. Accordingly, Brandon Jones et al. (2014) propose that information sharing and connectivity are significant antecedents of a resource-based view to exploit an opportunity or reduce crises to monitor corporate disruptions [8]. Moreover, flexibility, agility, and redundancy are all dynamic resources to be creative for firms during turbulent environments, whereas flexibility is considered the significant core construct for assessing crises to maintain a competitive advantage in the global and local markets during disruptive conditions [13]. Furthermore, Scholten et al. (2014) also argue that firms may struggle to handle their resources during a high disruption crisis; response represents the

prevalent resources in RBV to mitigate the risk and quickly respond to the disruptive scenarios [14]. However, corporate resilience may become beneficial and attain strategic opportunity when disruptions arise through recovery as the antecedents of RBV [15]. Therefore, this study employs the RBV to achieve corporate resilience during high disruptive conditions.

Accordingly, the TCE theory in business research was the most common theory merged with the resource-based view theory [16]–[18]. The transaction cost economic (TCE) approach is an important principle that has been collaborated on as the leading theory to address phenomena in corporate governance [16], supply chain management [19], [20], sustainability [21], and constructive risk assessment [22]. This study expands transaction cost economics (TCE) on Acquah et al. (2021) research by investigating transaction costs across the entire corporate firm as a strategy to minimize the transaction risk [18]. This study argues that the antecedents of TCE address the cost-effectiveness of the corporate firm during disruptive events. Accordingly, Zhang & Cao. (2018) explore the extant literature on trust as the dimension by investigating that benevolence and credibility lead to the resilience process with opportunistic perceptions and reduce transactional risk among collaborative organizations [23]. Furthermore, commitment supports the joint operations between inter-organizational stakeholders or partners to improve the organization efficiently in disruptive conditions to achieve corporate resilience [24]–[26].

The study proposes that collaborative practice is a combination of central principles developed by the firm as it determines how to deal with internal and external uncertainties [27]. Besides, successful corporate resilience builds trust, the magnitude of which a company relies on another company's commitment and benevolence in uncertain environments [28]. A surplus of prior research proposes that collaborative practice [29], [30] and trust [29], [31]–[33] investigates essential antecedents of effective resilience process, yet limited research has explored the significance of the dimensions of collaborative practice and trust in confirming successful corporate resilience.

This empirical research expands this gap and amplifies the understanding of corporate resilience by investigating the earlier research to determine the antecedents in the sub-antecedents phase of corporate resilience. This research examines the effect of collaborative practice and trust-antecedents on corporate resilience. More particularly, this research measures the effects of information sharing, flexibility, recovery, response, benevolence, and commitment on corporate resilience from the resource-based (RBV) perspective and the corporate firms' transaction cost economics (TCE) in Bangladesh. Thus, the study contributes to the current studies and is simultaneously significant in the context of a growing economy.

This research's results have a threefold contribution according to the PLS-SEM approach. First, First, in analyzing how corporate resilience is affected through its collaborative practice and trust-based constructs, the study responded to the expectation to investigate how the construct levels of the dimension of collaborative practice and trust affect corporate resilience [30]. Second, this research contributes to applying symmetric analysis (PLS-SEM) to explore the antecedents of corporate resilience. Thus, symmetric analysis analyzed the measurement and structural models based on the antecedents and found a significant implication among the antecedents to achieve corporate resilience during disruptive events. Following the practical framework, this research finds the significance of corporate firms in investigating the antecedents of collaborative practice and trust that achieve successful corporate resilience. Third, this research employed Bangladeshi corporate firm data as the developing country to enlarge the extensive literature on the correlation between corporate resilience and its antecedents. Consequently, recommendations have been suggested on how corporate managers should foster successful corporate resilience during disruptive conditions.

The research work is structured as follows after the introduction. Sections 2 and 3 describe the conceptual framework, theoretical perspective, and hypotheses. Section 4 represents the research methodology. Respectively, sections 5 and 6 contain this study's discussion, conclusion, and implications.

1.2 Problem Statement

This research investigates the corporate resilience literature based on the corporate governance perspective to explore the conceptual context of corporate resilience. Yet, limited scholars have employed the measurement scale of its dimensions for achieving corporate resilience. The measurement scale of dimensions of corporate resilience is empirically still constrained to deploy the PLS-SEM model. Consequently, this research has addressed organizational, project, and supply chain resilience perspectives to explore our research model. This research is merely related to developing countries, for instance, Bangladesh; this study should be concentrated on developed countries like Denmark and Sweden to measure the dimensions of corporate resilience to evaluate the more authentic results from different perspectives from this research on corporate resilience.

1.3 Significance of Corporate Resilience

The empirical studies on corporate resilience remain new, extensively obscure, and undefined despite the growing resilience concept of this context in the research articles.

Moreover, resilience can facilitate corporate firms in managing corporate functions across measurable, context-specific, structural approaches to explore their effectiveness during disruption conditions. Corporate resilience defines the contingency plans to recover from disruptive crises through the resource-based view (RVB) and transactional cost economic (TCE) perspectives. Accordingly, corporate resilience remains novel and growing to explore the potential qualitative and quantitative approaches in scientific research. This concept represents the extant model for corporate governance to adapt the theoretical perspectives that could significantly mitigate the disruptions from the goal of a corporate firm. This study has three core significance in exploring the dimensions of corporate resilience. First, this study investigates the following dimensions to measure the total effects of the relationship among all the sub-antecedents through the symmetric analysis (PLS-SEM). Second, symmetric analysis measures the theoretical context by investigating the hypotheses of all the antecedent constructs to reveal this study's measurement model and structural model through the PLS-SEM technique. Finally, this study recommends a series of findings based on the hypothesis testing results to suggest corporate professionals. Therefore, corporate firms could employ the absence of resource-based view (RVB) and transactional cost economic (TCE) perspectives to figure out the disruptive issues in the Bangladeshi context.

1.4 Research Aim

Corporate resilience has been explored to assess the dimensions based on the Bangladeshi corporate firms in the realm of corporate governance discipline as a fundamental concept. However, this research will be carried out from corporate resilience perspective. The broad objective is to fulfill the dissertation for a post-graduation degree, and the specific aims are to:

1. Investigate the systematic literature and theoretical concept of corporate resilience as a core context
2. Explore the dimensions of corporate resilience
3. Employ the symmetric analysis (PLS-SEM) model to test the hypotheses.

2 Literature Review

2.1 Corporate resilience literature

2.1.1 Resilience

Research on resilience covers a wide range of disciplines and fields [34], and there are numerous ways to conceptualize the concept [35]. In general, the term "resilience" denotes the ability and capability of an organization to return to its pre-disturbed condition following an incident that disrupted its normal state [36]. A pioneering researcher of resilience, Holling (1973), defined resilience as the system's ability to adapt [37]. So many others studies and researches have used the term "resilience" to refer to the control of the ability of a system to recover and restore to its normal form [15], [38], [39]. SCRES is "the corporate firm's adaptive ability to develop for unforeseen circumstances, act to interruptions, and rebound by ensuring the stability of processes at the appropriate level of resilience and governance over function and structure"[40]. The studies on resilience assessment and dimensions constructs are equivocal; therefore, scholars continue to dispute how the components should be constructed and evaluated [7], [13]. A conceptual model and empirical evaluation of corporate resilience assessment methods are required to fill the current work gaps.

The resilience of the focal organization and its supply chain is measured in terms of how effectively organizations can withstand a disruption occurrence or crisis [41], [42]. However, the effect of a worldwide epidemic is considerably more destructive, and keeping corporate firms running effectively during an epidemic time is a bit more challenging to adapt [43]. Disruption in any part of the corporate mechanism can have far-reaching consequences for other parts of the corporate function [44], [45]. Consequently, there is a possibility that the whole function could be impeded if one component of the corporate mechanism is not operating properly [46]. After this, the disruptive impacts are more complex and could endure for a long time, and a response is required while the disruption is still active. Research on corporate disruption mitigation and restructuring methods to assure corporate resilience following an outbreak has been scarce in research on corporate resilience since the pandemic's beginning [44], [47]. Hence, few studies have been conducted employing comparable real-world recovery data to investigate which corporate resilience measures were undertaken in advance of the epidemic, thus reducing the disruptive consequences [48].

The capability of effectively managing resources and reorganizing those resources in response to changes in the external environment is essential to a company's continued existence

and its ability to perform incredibly well [49]. *Corporate disruptions* are situations associated with high unpredictability [50] that interrupt the stream of operations and services throughout the corporate lifecycle [51]. Due to the high instability around corporate disruptions, it is difficult to determine the significance of current resources in producing capabilities that facilitate recovery from disruptions [52]. Confronted with unexpected events, corporations may perceive potential challenges or possibilities and require refreshment, restructure, or realignment of their risk mitigation system [53]. The capability of a firm to reorganize and reconfigure its resources is essential in emerging abilities that pertain to the expansion and sustainability of a firm in contexts where there is a high degree of turbulence, such as the advancement of innovation or the entrance of the corporation into a new target market [52]. A firm's ability to respond to market changes necessitates reconfiguring and realigning current innovative resources and capabilities [15], [54]. Restructuring of resources is necessary when corporations encounter environmental disruption owing to corporate divergences [55]. A firm's current resources must be restructured to better cope with a transforming corporate environment [40]. However, a corporation capable of restructuring and reconfiguring its resources in a dynamic situation could have a stronger possibility of generating competencies that reduce the negative effects of disruption [41].

Table 2.1 Resilience definition

Definitions	References
Managers' abilities translate to the corporation's ability to recognize, respond to, and recover from uncertainty.	[56]
The capacity of a company to remain productive under difficult and adapting situations.	[57]
The capacity to adapt, modify an individual's form of action, and emerge in the presence of obstacles	[58]
The ability of a corporation in the context of adversity and change	[59]
A company's ability to sustain operations, adapt to an emergency, and rebound	[60]
A company's ability to handle unexpected occurrences	[61]
The ability to handle disruptions and transform barriers into opportunities	[62]
Capacity both for avoiding disruptions and for quickly recovering from them during encountered	[63]
Having a strong understanding of both internal and external threats, as well as the ability to respond to them quickly and effectively	[35]
a company's capacity to respond to environmental challenges	[64]

Ability to adapt and recover from catastrophe in a corporation	[65]
Resilience to change and mitigate turbulence in the company	[66]
The capacity to establish a history of resilience and to integrate oneself into challenging situations	[67]
Capacity for foreseeing, adjusting to, and recovering from unfavorable occurrences	[68]
The capacity of a company to rapidly adapt and respond to unexpected incidents on time	[69]
capability to both improve overall business knowledge and act in response to uncertainty	[70]
The ability of a firm to recognize and adjust to disturbances and implement appropriate modifications in the face of those disruptions	[71]
The capacity to adapt rapidly and efficiently to issues as well as risks while disregarding disruptions and remaining focused on the task at hand	[72]
The capacity of a firm to enhance awareness and adaptability in a competitive culture	[73]
The firm's capacity to adapt and thrive in the situation of adversities.	[5]

2.1.2 Resilience in corporate firms

At the corporate level, Firms require resilience to adapt to a dynamic corporate environment [74]. According to Chewning et al. (2012), corporate resilience is the ability to mend existing processes and adopt new processes as necessary [75]. Linnenluecke (2017) also defines corporate resilience as the capability to rebound from adverse shocks and sustain proper operations and outcomes [76]. In addition, flexibility, recovery, avoiding disruptions, capturing alterations and disruptions, and modifying and sustaining structures and functions are all generic terms in corporate resilience concepts [36]. According to the corporate perspective, corporate resilience includes new competencies and an expanded capability to measure and generate emerging prospects [77], [78]. A firm's ability to combine its resources and competencies to address existing challenges and seek new possibilities is a crucial aspect of the current research [56]. Linnenluecke (2017), on the other hand, emphasizes that the conceptual model of corporate resilience is a drawback that has been little addressed by the literature because there are numerous categorization and assessment techniques [76]. In addition, inadequate consideration has been placed on corporate resilience's implications and dynamic viewpoint and outcomes. Corporations require a hybrid business approach incorporating known

quality criteria in calm environments with resilience [71] and competitive endurance during economic and corporate disruption [79].

Kamalahmadi & Parast (2016) demonstrates some resilience strategies for corporate organizations: 1) resilience is a versatile ability of a firm that highlights the capacity to develop and adapt to situations, 2) resilience is immensely reliant on the individual acts, communities, and components that comprise a platform 3) To possess a resilient corporation, the leaders must have comprehensive insights of the setting and its correlations of transformation [80]. These strategies necessitate the acquisition of particular corporate competencies [15]. Corporate firms need to prepare for disturbances since they are unavoidable [5]. On the other hand, corporations must be aware of the changing situation and adjust to disruptive events to strengthen their firms [81]. According to Fiksel et al. (2015), participants in the corporate lifecycle need to be cognizant that each disturbance offers a teaching prospect that may suggest moving to a new phase of operational processes [9]. To initiate the system of operation, corporate structures with the capability of restoration and adaptation are more competent than those that cannot continue their presence for a prolonged period during disruptive events or crises [82]. Therefore, this research framework could help us develop effective instructions for achieving corporate resilience through the systematic literature review on corporate resilience described in table 2.2.

Table 2.2 Systematic literature review of resilience

Author (s)	Data Type	Method	Key Findings
[83]	Interview session	Conceptual method	Strategies of adaptive resilience differentiate the potential dangers from the scenarios that could interrupt the enterprise.
[84]	Meta-analysis	Conceptual method	Developing adaptation, collaboration, consistency, and the capacity to respond have been the primary focus of recent efforts, with increasing resilience as the primary objective.
[85]	Survey questionnaires	PLS-SEM	This study shows how firm personnel can increase functional distinctions, goals, and adhesive approaches to improve proactive and reactive resilience.
[86]	Survey questionnaires	Quantitative method	Corporate resilience strategy affects company performance results more than responsive qualities such as awareness and agility, showing that more importance is attached to the proactive method of developing corporate resilience.

[87]	Survey questionnaires	Regression assessment equation	The researchers of this study outlined methods for creating more resilient firms in the face of the severe risk associated with a disruption to an enterprise.
[88]	Interview session	Conceptual method	The study explored three primary concepts for corporate resilience: resilience cycles, strategies, and crisis-recovered resilience during disruptions.
[89]	Interview session	Conceptual method	Resilience techniques were beneficial in reducing vulnerabilities for the firms and allowing managers to establish proactive and reactive management techniques for competitive advantages.
[90]	Secondary data	Conceptual method	The study identifies overall corporate resilience, groups and highlights the important aspects of resilience in proactive and reactive post-disruption measures, and analyzes corporate resilience across assessment criteria.
[91]	Observation and survey analysis	Mixed methods	The corporate resilience aspects assessed and employed to categorize firms into separate groups exemplify the firms' resilience capacities to operate reactively and proactively with all corrective activities at the beginning of the crisis.
[92]	Case data	Conceptual method: case study	The research examined the causes of the disruptions, the tactics of resilience, and the correlations' effects throughout the corporate emergency.
[93]	Interview session	Conceptual method	This study focuses on the firm's ability to deal with uncertainties and systematic inefficiencies that bolster its resilience to demonstrate its adaptability.
[94]	Secondary data	Regression assessment	Throughout many aspects, the enterprise cycles in Polish are less durable, resulting in significant disruptions to the operation.

[95]	Primary data	Regression assessment	A project's creative performance is significantly influenced by its corporate resiliency.
[96]	Secondary data	Networking model	The cost of implementing resilience and adaptability in a system is superseded by its advantages in terms of lowering efficiency inadequacies.
[97]	Survey questionnaires	SEM method	Corporate resilience requires a flexible corporate cycle approach, and a project's capacity to mitigate disruptions is linked to its resources and capabilities.
[98]	Secondary data	PLS-SEM	The resilience of individual enterprise stages is not correlated with overall corporate attributes.
[99]	Primary and secondary datasets	Quantitative approach: factor analysis	Strategies for resiliency such as self-assurance, the sharing of knowledge, and relationships with businesses are necessary.
[100]	Observations	QCA approach	It was discovered that using the recommended dimensions was advantageous during disruptions.
[101]	Primary and survey data	SEM method	The findings demonstrated that the corporation's ability to withstand a crisis depends heavily on its ability to maintain its level of resilience.
[102]	Primary data	SEM approach	Increased resiliency can improve consignments, expenditures, and recovery times.
[103]	Survey questionnaires	SEM approach	Lean methods improve enterprise performance more than resilient methods.
[104]	Conceptual data	QCA approach	Corporate resilience characteristics include governmental support, an effective approach, capability maintenance, and frequent performance assessments during disruptions.
[105]	Survey questionnaires	SEM approach	The efficacy of a firm is affected by accessibility risk controls and resilience capacity because of a participant's inclination towards rationality.

[106]	Observation	Case study	Risk management, adaptable agreements, logistics resource management, and inventory levels are all in place to ensure corporate cycle success in the oil firm's contingency planning.
[107]	Primary and survey dataset	SEM: CFA	Increasing prices, operational limits, and the impact of financial disruptions on wine transactions through customers are all examples of resilience challenges.
[108]	Model data	Conceptual method: case study	The authors identified critical characteristics that corporate managers should consider while constructing corporate resilience.
[109]	Survey dataset	SEM: EFA	Recovery efficiency is closely linked to the resilience mechanism.
[110]	Interview session	Conceptual method	Intrinsic distractions tend to recover more rapidly than external disruptions.
[111]	Interview session	Conceptual method: case analysis	Collaboration improves quality management, producer engagement, and supplier vulnerability, which increases corporate resilience.
[112]	Interview session	Conceptual method: case analysis	The apparel industry strongly influences the ability of corporations to rebound from disruptions.
[113]	Case study dataset	Programming approach	Acquisition concerns include location and the ability to execute substantively in the event of a disruption.
[114]	Survey questionnaires	SEM approach	When several layers of contextual conception are applied, it contributes to greater mechanisms of collaborative activity, which ultimately results in higher corporate resilience.
[115]	Primary and survey dataset	DEA approach	A method and a literature study suggest that the petroleum industry requires more acquisition channels and capacities for the resilience plan.

[116]	Primary data	SEM approach	The corporation generates diverse solutions based on the enterprise's threat factors, resources, programs, and capability.
[52]	Primary data	SEM approach	Firms require resources for mitigation assessment, and corporate transition approaches to enhance their resilience.
[117]	Primary data	SEM approach	Corporate resilience is governed through knowledge, orientation, and a risk mechanism. Risk management practices support the relationship between corporate orientation and resilience.
[118]	Interview session	Conceptual method: case analysis	Collaborative initiatives improve corporate resilience by increasing corporate accessibility, flexibility, and performance.
[119]	Primary data	SEM approach	Logistics management capability improves firm collaboration and transparency. Collaboration, flexibility, connectivity, and velocity enhance corporate resilience and performance.
[15]	Survey questionnaires	SEM approach	Corporate resilience relies heavily on the capability to respond quickly and effectively, as well as the ability to perform tasks.
[120]	Conceptual data	SEM approach	Corporate resilience can be significantly adjusted by optimizing fundamental capabilities.
[121]	Survey dataset	SEM approach: EFA	Resilient tactical sourcing competencies include current prices, susceptibility, manufacturing capacity and capability limitations, availability, and input resource issues.
[122]	Interview session	CA approach	Resilience is boosted by organizational excellence in determining the threats.
[92]	Interview session	CA approach	Due to the corporation's minimal and long-lasting instabilities, the risk of corporate resilience was characterized as substantial.
[123]	Survey questionnaires	SEM approach	The research found that strategic coherence was found to have the greatest impact on resilience.

[124]	Survey questionnaires	SEM approach	Resilience improves the prosperity of a firm, which in turn improves the firm's resilience.
[18]	Survey questionnaires	SEM approach	Collaboration and communication between corporate partners enhance strategic efficiency, and corporate resilience improves corporate results during disruptions.
[14]	Interview session and case study	CA approach	The study examined six techniques for enhancing corporate resilience.

3 Theoretical and Hypothesis Establishment

3.1 Theoretical perspective: Resource-Based Theory (RBT) and Transaction cost economic (TCE)

The Resource-Based Theory (RBT) indicates that the unique resources acquired by every firm distinguish it from other organizations and benefit it significantly over other firms [10]. This theory has seen much use in various sectors and offers a theoretical explanation of how resources might be used to achieve better results [23]. Research and many other management fields use RBT as one of the most persuasive theories to define the connection between corporate resources and corporate success [125], where resources are instruments that allow the corporation to devise and implement techniques that enhance operational productivity [126]. RBT focuses on an enterprise as bundles of resources. It provides an effective mechanism for bringing together numerous capabilities and resources which can be used together to achieve a comparative benefit [127]. More specifically, RBT suggests that an organization consists of resources and capabilities. However, to provide a comparative benefit, a resource must first be valued, unique, and exceptional [10], [125]. The Resource-based theory has also seen extensive use in corporate governance research, where it has been utilized to investigate the connection between corporate resources, capabilities, and productivity [128].

In corporate governance research, RBT has captivated significant interest because it suggests that firms can be seen as compilations of resources that may or may not be tactical [16]. RBT speculates that corporations can be seen as strategic compilations of resources [18]. As a result, RBT is established on capabilities, processes, and significant advantages as fundamental concepts in the corporate governance field [129]. According to the RBV, a corporation can gain a comparative benefit by assembling a collection of key resources and competencies [8]. RBV focuses on particular resources that can be quantified by the advantages received through permeable and functional capacities, among other aspects [85]. As a result of RBV, finding and collecting scarce resources might be beneficial [130], [131]. The ability to connect to the competencies and abilities needed to deploy innovations and increase the collaborative practice of a corporate firm can be further enhanced by discovering the necessary resources during turbulent environments [48], [132], [133].

Collaborative practice is defined as a system of key corporate principles and techniques that assist corporate enterprises in overcoming corporate operational constraints and adapting to external circumstances [27]. Accordingly, this research deploys resource-based theory to

explore the connection between collaborative practice and corporate resilience. The major focus of a collaborative approach is to establish long-term relations and multi-faceted connections, even at the risk of changing corporate objectives [134], [135]. Similarly with Cao and Zhang (2012) [136], the study employed the four corporate-level dimensions for instance, information sharing [8], flexibility [13], response [117], [118], and recovery [15] of regional collaborative aspects [18]. Other collaborative factors, including credibility, were left out since they could not be expressed from the corporate resilience perspective. Therefore, credibility [32] is reflected in redundancy by more dependability and inconsistency [137]. Agility is also one of the collaborative factors of corporate resilience [130]. Agility performs when demand is uncertain, and the need for variability is not significant for corporate disruption in crises [138]. Consistently, visibility is not significantly reflected in the corporate disruptions during turbulent environments [139]. Accordingly, visibility is thus required more capability that could capture data and information availability [8].

Transaction cost economic (TCE) theory discusses inter-firm interactions from an economic perspective. It highlights environmental instability, transaction velocity, and resource diversity as the main components influencing inter-organizational partnerships [140]. The minimization of operational costs, which may be separated into distinct categories: operating costs and transaction expenses, is the primary objective of the transaction cost concept when it comes to implementing inter-firm connections [26]. A significant aspect of TCE's theory is that high resource specialization exposes a corporation to opportunity since there are few possibilities for reconfiguring resources to other functions, which restricts transaction preferences [141]. The high resource uniqueness of corporate partners necessitates inter-firm trust to keep transaction expenses at a minimum [142]. Corporate resilience is the ability of a corporation's structure to provide a low transaction expense condition that benefits both businesses and consumers [85]. According to TCE, firms can still manage transaction expenses to a minimum in partner development activities by structural or commercial regulation of partnerships [26]. Partnership investment opportunities have a theoretical basis in TCE, but their future use as intermediaries needs further exploration [143].

In the context of corporate resilience, the theoretical perspective of Transaction Cost Economics (TCE) is the potential for corporate transaction expenses to become unacceptable under particular situations [144]. As a result, TCE proposes that a corporation coordinate its inter-firm practices to optimize corporate operating costs and transactional expenses inside the corporate firms [145]. Investing in efficient recovery techniques is one approach to strengthening corporate resilience and avoiding the long-term economic consequences of unexpected events while retaining service quality and economic advantages [85]. Subsequently,

TCE is employed to describe correlations between corporate firms, such as collaborative practices [141]. Since Zhang and Cao (2018) also applied TCE to explore trust dimensions [30], we adapt this research by claiming that benevolence and commitment contribute to corporate resilience by decreasing the inclination of cooperating firms to engage in self-interested operations [18].

According to Min et al. (2007), inter-firm relationships are necessary for corporate stakeholders [146]. This relationship can be established through trust, which is described as "confidence in the ethical credibility of transaction associates, which emerges through commercial encounters and contributes to inter-firm linkages in concepts of mutual aims, thoughts, and relations in the conditions of adversity" [147]. In operational constraints, trust also refers to sharing thoughts and actions, which contributes to the interchange of ideas and consolidating facilities with stakeholders [148], [149]. Sustainable corporate networks require a high level of inter-firm trust to foster long-term sustainability, establish reliable connections, and make trust easier to invest in new initiatives and work together on existing services [150].

In corporate resilience, trust reflects how optimistic a firm is about its stakeholders' reliability and recognition in the presence of adversity [151]. In contrast to the majority of scholars [30], [152], such quantified trust is a result of corporate resilience [28]. Civelek et al. (2017) and Zhang and Cao's (2018)'s operationalization of trust as a prerequisite to, instead of a result of, corporate resilience is consistent with the findings of the research [30], [152].

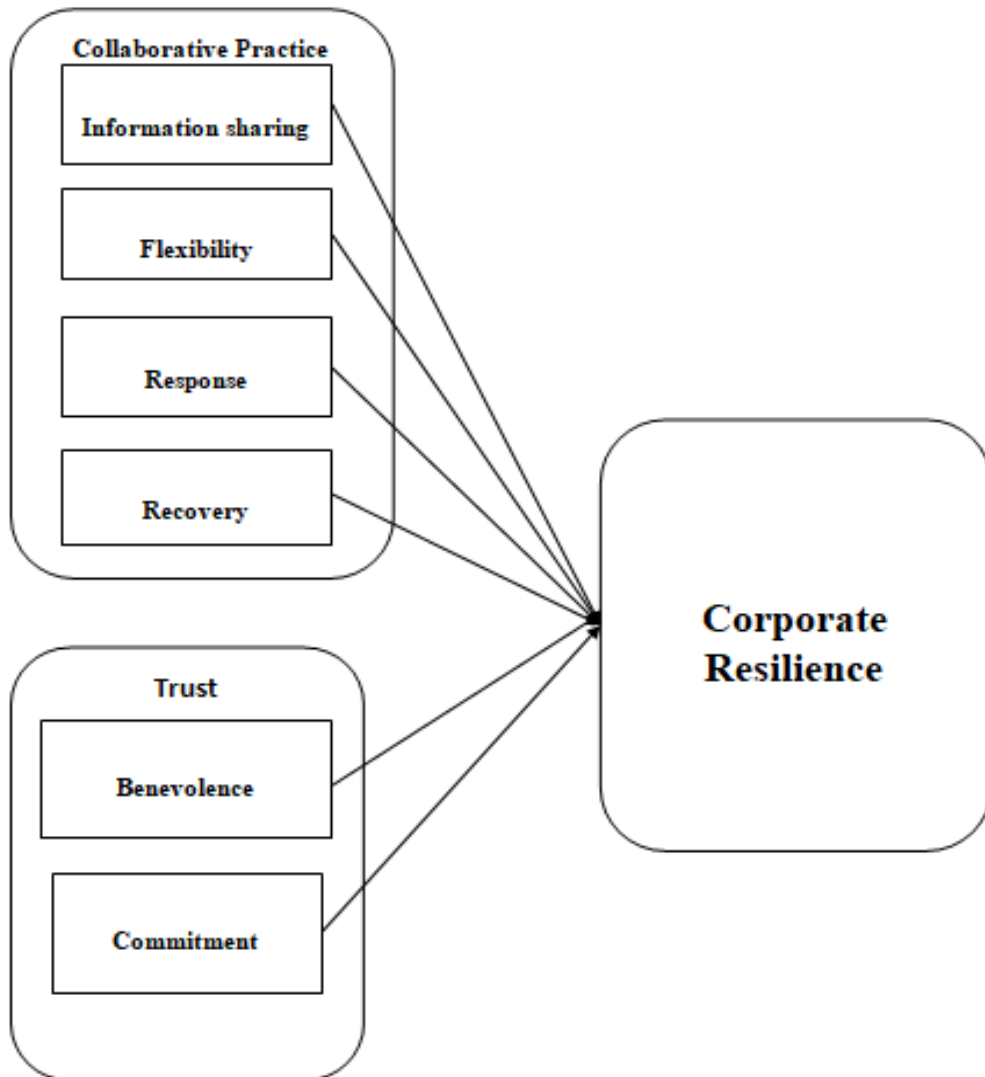


Figure 3.1: Conceptual model

3.1.1 Benevolence

Benevolence is a measure of whether or not both sides in a connection have an authentic concern for the well-being of the other and a solid willingness to mutate for mutual benefit [153]. Benevolence helps to establish a sense of commitment throughout the corporate cycle [150]. Benevolence also improves the partnership developed between the two partners and promotes collaborative efforts to address sustainability concerns [18]. Furthermore,

benevolence has been shown to mitigate risks in partnerships and economically strongly affect inter-firm collaborative learning [148] on sustainability challenges [154].

Benevolence is the extent to which a firm needs equality and justice from a significant corporate stakeholder—a probability derived from the trust that stakeholders could perform genuinely [31]. Trust is considered more important than this variety of benevolence since it is grounded in relationships and creates real trust rather than logical configurations of relevant facts [18], [137]. Benevolence is based on the concept that corporate stakeholders will engage in the best interests of partnerships even if these actions cannot be controlled or validated [24]. As a result, benevolence demonstrates one's loyalty to the other [31]. Benevolence about the significance of corporate resilience can be derived from the existing research on trust, but this conclusion needs to be verified quantitatively. Therefore, the study defines hypotheses:

H1: Benevolence significantly relates to corporate resilience

3.1.2 Commitment

Commitment denotes an exchanging partner's conviction that a continuing connection with another corporation is so significant that it demands tremendous effort to keep it; after all, the devoted group considers the relationship essential to assure it continues everlasting [24]. In a corporate collaboration, commitment benefits internal and external stakeholders [155]. The ability to enhance performance is frequently facilitated by long-term commitments undertaken by corporations [156]. Jap and Ganesan (2000) observed that corporate perceptions of their partners' commitment affected the merchants' judgment of performance measurement and their contentment with the efficiency of their stakeholders [157], [158]. If focus enterprises receive the same rewards as stakeholders or experience the same challenges as partners, they are more committed [150]. This commitment will promote collaborative relationships [13]. The partners will have better enunciated or written credibility when contacting prospective professionals. Partner commitment is necessary whenever firms incorporate environmental concerns into corporate governance [26].

Organizational commitment is characterized as an attitude of enablers towards a firm that believes strongly in organizational vision and objectives [13]. Managing transnational [159] and lowering operational risk can be facilitated by implementing a corporate commitment antecedent that fosters a culture of cooperation, mutual support, and cost-effectiveness [18], [160]. In addition, effective corporate relationships are built on trust, shared thinking skills, and commitment to expectation [161]. However, managers must develop confidence, coordination,

commitment, and collaboration between inter-organizational stakeholders to improve organizational efficiency and corporate resilience [25]. Therefore, the study defines hypotheses:

H2: Commitment significantly relates to corporate resilience

3.1.3 Flexibility

According to Erol et al. (2010), flexibility is the capability of corporations to quickly and easily adjust to altering situations and partners [162]. According to Millar (2015), flexibility is a feature of corporate resilience, affecting a firm's capacity to adapt to adjustments beyond the corporate environment's operation [163]. Hosseini et al. (2019) advocated a dynamic flexibility technique to improve corporate resilience [164]. Flexibility strategies, such as movement, procurement, vibrant labor arrangements, and rescheduling, contributed to the strength of corporate resilience [5], [165]. Christopher and Holweg (2011) claimed that flexibility promotes corporate firm resilience through improving quick adaptation during disruptive events [165] "Supply Chain 2.0": Managing supply chains in the era of turbulence. The literature on flexibility is often called "flexible ability" [166]. Pettit et al. (2013) argued that corporate firms with less flexibility in acquiring and executing demand are increasingly prone to disruptions [5]. The degree to which corporate flexibility affects availability, cost, distribution, order processing, and industrial operations vary; Tang and Tomlin (2008) analyzed five scenarios to indicate that a firm does not require a significant level of flexibility to minimize source, function, and value threats [167]. They also claimed that the majority of the advantages derived from limited flexibility. The opportunity to modify sources (outcomes and impacts) or delivery methods is a critical strategy and production planning constraint connected to instability, intense pressure, resource restrictions, connectivity, and stakeholder instabilities [5]. They also claimed that the majority of the advantages derived from limited flexibility. The opportunity to modify sources (outcomes and impacts) or delivery methods is a critical strategy and production planning constraint connected to instability, intense pressure, resource restrictions, communication, and stakeholder instabilities [168]. Firms can quickly respond to changes without redistributing specific resources [169]. Corporate flexibility helps a firm adjust to unexpected situations as an aspect of corporate resilience control [88]. Hence, flexibility increases the capability to respond quickly and efficiently to disruptions and improves administrative effectiveness in usual conditions [169]. A firm's ability to adapt to changes rather than sustain them is facilitated by adopting flexible decisions [88], [170], [171].

Innovative approaches to challenges and disturbances are always more developed and executed by the corporation's connection if the connection or management of the organization

is particularly flexible [172]. A corporate firm is quite resilient when an innovative culture promotes various mitigation strategies for a crisis and the responsiveness of solutions during turbulent environments [15]. Firms could benefit from new prospects for growth by utilizing strategic flexibility in their corporate models to mitigate disruptions from unexpected events or crises [173]. A review of current literature has examined how the concept of immense significance might be studied to spread the relevance of flexibility in the face of disruption, including the potential concurrent crises; this could offer further exploration [174]. Therefore, the study defines hypotheses:

H3: Flexibility significantly relates to corporate resilience

3.1.4 Information sharing

Information sharing is a primary factor of corporate resilience [166], [175]. Sharing information can assist in reducing uncertainties in the context of distractions between each organization [164], [176]. Accordingly, information sharing is thus necessary to obtain and associate between inter-organization partners before and after disruption for the corporate firms [176]. Information sharing and rapid backup and distribution facilities may enhance stability and flexibility in organizations [177]. Information sharing in corporate resilience is one of the key sources of inter-organizational threat [8], as inter-organizational firms prefer assertion-driven evidence instead of demand-driven information, which resists them through sharing information [164].

In corporate resilience, corporate partners are referred to as "information sharing partners" when a corporation provides them with accurate and appropriate information [178]. Many researchers have argued that effective corporate coordination is built on the concept that information sharing is the essence [175], [179]. Firms are inclined to share information about their collaboration partnerships, including projections, stock levels, promotional campaigns, and operational strategy [30]. Developing a corporate network to facilitate sharing ideas among its partners must be a primary objective for reducing corporate uncertainty [166]. Most firms rely on projections instead of actual demand to make decisions, which places them vulnerable as they cannot exchange information with others [180].

Yang and Fan (2016) used a strategy based on combining RBV and computation to demonstrate the effect that information sharing has had on mitigating disruptions during turbulent environments [181]. Brandon-Jones et al. (2014) analyzed survey responses from 264 manufacturing organizations in the United Kingdom and hypothesized that exchanging information following higher corporate connections could enhance corporate resilience and

adaptability [8]. Information sharing throughout multiple stages of the corporate network increases the corporate's resilience and reduces ambiguity concerning corporate partner competency [179]. In the literature on dependable sourcing, the availability of information for corporate partners and the lack of accessibility of information for other companies are crucial determinants [182], [183]. Therefore, the study defines hypotheses:

H4: Information sharing significantly relates to corporate resilience

3.1.5 Recovery

The recovery process develops on the activation framework to shorten the length toward smooth inter-corporate function [180]. Once corporate resilience is restored quicker than competitive rivalry, inter-corporate resilience can become beneficial and achieve strategic benefits when disruptions arise [184]. However, recovery strategies are necessary to ensure regular operations in the eruption of a corporate prevalence [88].

Analyzing corporate mitigation plans in the post-disruption stages strengthens a firm's capacity to recover from disruption [117]. Such mitigation plan practices include corporate incorporation [185], [186], resource configurations [52], capacity building [187], and contingency planning [188], [189] for designing efficient contingency initiatives. Furthermore, building a favorable position in the market strengthens a firm's capacity to recover from corporate emergencies due to monetary stability [186], operational competence [40], and process competitiveness [190]. When a corporation has an influential position in the market, it is more likely to acquire a market position [187] and generate high profitability [169], both of which allow for investments in corporate resilience and sustain healthy connections with customers [189]. Resource management after a disruption allows a supply chain to restart its understanding of turbulent incidents. Corporate resilience strengthens their capacity to understand and respond to circumstances by obtaining development and skills [171], obtaining responses after the incident, and recognizing the potential benefits [185]. SCRES depends on the capacity to adapt to a disturbance and build more robust strategies for future disruptions [40].

From the above discussion, a firm's and its corporate's distinctive ability to recover from disruptions is a significant aspect of corporate resilience [117]. Some mechanisms, such as a corporate network, an economic network, or even a community, can quickly recover from disruptions [88]. The literature emphasizes the recovery period as an assessment of resilience [40], [169], [180]. The expense was a factor that Martin (2004) considered while assessing resilience [191]. Scholars like Vugrin et al. (2011) have also highlighted the cost of resilience

[192]. A framework can recover quicker [193], with less expense and effort [192], if it can withstand disruption [37], minimize distraction [15], or recover to its initial condition [180]. Thus, resilience can be evaluated by restoration process, expense, disturbance retention, and mitigation, which concentrates on a system's post-uncertainty capacity [117]. Therefore, the study defines hypotheses:

H5: Recovery significantly relates to corporate resilience

3.1.6 Response

Fast response means that time is reduced to respond to disruption and retrieve through the resilience of inter-organizational settings [194]. Current capacity is required to respond promptly and effectively to inter-organizational developments, eliminate disruptive risk, or adjust implications to establish a desirable result [88]. Rapid response requires initiating the restoration cycle as soon as interruptions are significantly reduced [194]. Indeed, corporate resilience must retain stability, uphold function and operation, adjust, quickly respond, and address disruptive developments [117].

Furthermore, responding swiftly in a crisis is also a key antecedent of corporate resilience [195]. Firms and processing services could lose millions if they respond too late to a catastrophic event [5]. For example, Ericsson lost \$400 million due to a late response to a fire at a company's plant [196]. After a fire in the same distributor's factory, Nokia's rapid response benefited them surpass a chip deficit and achieving a comparative benefit [169]. According to Ponomarov and Holcomb (2009a), the function of corporate resilience necessitates the ability to respond and recover to achieve competitive advantages [40]. Corporate resilience can also be related to the capacity to respond and recover in turbulent environments [193]. Therefore, it can be claimed that a firm's capacity to respond and restructure resources and recover swiftly from threats rapidly is significant to the stability of corporate firms [117]. Therefore, the study defines hypotheses:

H6: Response significantly relates to corporate resilience

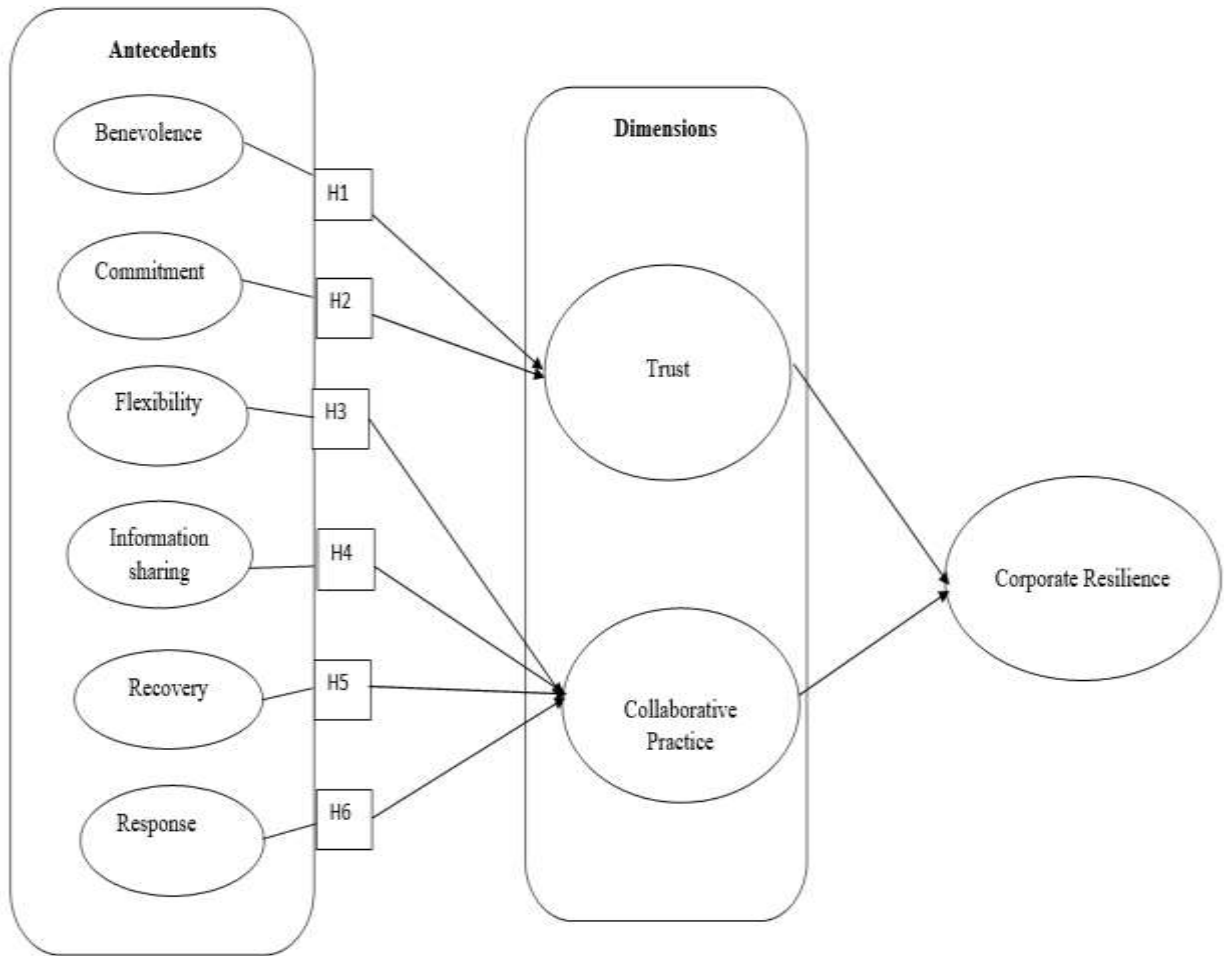


Figure 3.2 Hypothesized effects

4 Research Methodology

4.1 Respondents, procedures, and sample

The study explored how the dimension of collaborative practice and trust affects corporate resilience. Accordingly, the study distributed an online questionnaire to Bangladeshi corporate professionals directly associated with corporate firms to generate quantifiable statistics to support the hypothesis. This study considered the participants who were the targeted respondents of corporate firms in Bangladesh regarding population and sectors using purposive sampling [197]. Firms in the corporate sector perform in highly turbulent and uncertain conditions, driven by technical, political, financial, organizational, and other volatility. Thus, corporate firms provide an ideal platform for studying the various dimensions of the resource-based view and transaction cost economic characteristics of corporations in disruptive events. Corporate enterprises comprise a specific research focus for measuring the dimension items in the quantitative investigation. The qualified participants maintain strategic performance in their firms to understand the corporate's partnerships and resilience techniques during turbulent environments. The survey did not include participants not part of corporate teams or operations. More than 50 Bangladeshi corporate enterprises were surveyed online as part of this study. A survey form was answered over a month in 2022, and 349 acceptable respondents were received for this study. The participants' literacy ability and occupations assured that the questionnaires could be administered in an unaccompanied context [129]. When PLS-SEM path coefficients are statistically considerable, the lower the value of the population-level path coefficients, the larger the sample size required [198]. The most commonly accepted requirement for sample population in PLS-SEM is the '10-times', which specifies that a sample size must exceed ten times the maximal number of inner or outer correlations obtained through any construct [199]. This study exceeds ten times the maximum number of items of each antecedent. Before beginning data collection, the study ensured the privacy and consent of the participants and acquired their ethical clearance for the survey items. Each firm's consent was requested, and the respondents' permission was also acquired. Figure 4.1 shows that the entire research approach explores data resources from theoretical perspectives.

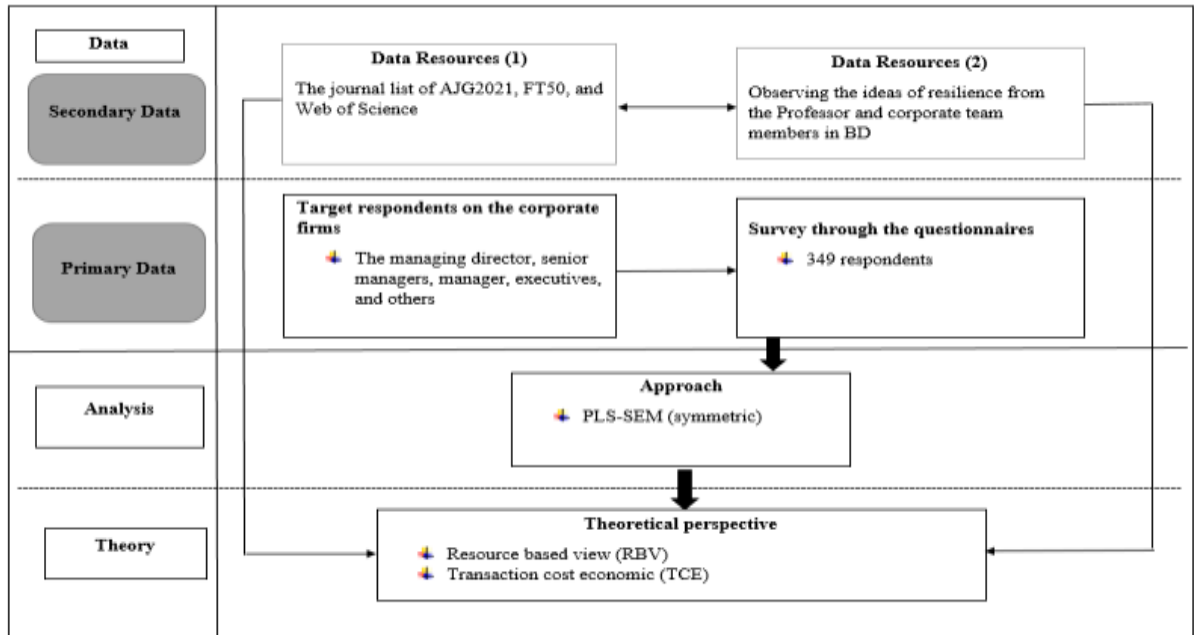


Figure 4.1: Research roadmap

4.2 Measures

4.2.1 Benevolence

The empirical measurement scale of benevolence assesses the participant's perceptions by the survey in terms of corporate context [18], [26], [28]. Four items crucially address the measurement scale of corporate benevolence to measure the constructs of corporate resilience, for instance, corporate success, collaborative partnerships, corporate goals, and uncertainty. These four items are investigated in the prior literature on corporate resilience to assess the prevalent antecedents for acquiring project resilience in turbulent conditions of a corporate firm. The Cronbach's alpha (CA) value of benevolence is 0.892, which exceeds the threshold value of 0.7 [200]. Each item of benevolence is measured through Likert's scale (strongly disagree for 1 and strongly agree for scale 5) for the measurement of benevolence. The core correlation scale is tailored based on financial, organizational, political, and technical corporate cycle crises to measure the appropriate dimensions during disruptions.

4.2.2 Commitment

This research deploys the screened assessment phase to measure the participant's scale of commitment from the corporate firms' perspective [13], [24], [26]. It explores six items to measure corporate commitment during a highly disruptive crisis. Each commitment item is assessed by the Likert's scale (1 for low-level and 5 for high-level indicators). The assessment level of the corporate commitment is investigated on the following scale: investment of time and resources for the partnerships, enlargement of business functions, commitment to agree with the terms and conditions, sufficient buyers, sufficient suppliers, and divergent geographic locations. The Cronbach's alpha outperformed the 0.7 literature threshold scale [199]. The corporate cycle during crises is explored based on the political, technical, organizational, and financial crisis levels.

4.2.3 Flexibility

This research's assessment of corporate flexibility represents the empirically tested level for the corporate perspective [13] and explores six items to test corporate flexibility. The Cronbach's alpha exceeds the threshold value of 0.7 [199] of this antecedent, and table 4.3 shows that the value of Cronbach's alpha (CA) is 0.869, which is above the standard value. In the Likert's scale of measurement construct, all items are assessed on corporate resilience, like 1 for strongly disagree, and 5 for strongly agree. Furthermore, the corporate professional's perceptions of responsibility for attaining corporate resilience aims, the scale assesses a corporate professional's sense of adjustability in maintaining process, assurance of opportunities to meet partner's demands, availability of human resources, affability of contracts, ingenuity in sourcing, and networking in logistics.

4.2.4 Information sharing

The assessments applied to this research on information-sharing antecedents are tailored by various researchers [8], and they are significantly employed and have been measured several times. The measurement approach estimates information sharing antecedents in five items with a concentration on relevant information, up-to-date information, accurate information, comprehensive information, and confidential information during uncertainty. Each item of information sharing is measured by the Likert's scale (5 for the largest agreement scale and 1 for the lowest level of agreement). The Cronbach's alpha (CA) value of information sharing is

0.790, which exceeds the threshold value of 0.7 [199]. The corporate cycle is conducted based on the crises, for instance, political, organizational, financial, and technical, during disruptive events.

4.2.5 Recovery

The measurement of this study on recovery is addressed by the prior scholars on corporate resilience [15]. The measurement model is applied to the recovery construct by the PLS-SEM approach to achieve a higher level of corporate resilience during disruptive conditions. Consequently, all the recovery items have been applied on a Likert scale during the survey questionnaires. The measurement scale of corporate recovery is assessed in the following phases: recovery in a short time, ability to grasp loss, ability to handle crises quickly, and recovery at less cost. The Cronbach's alpha (CA) value of recovery is 0.865, which exceeds the threshold value of 0.7 [199].

4.2.6 Response

The assessment of response in this research is defined as the empirically tested level for corporate perspective, and this measurement scale has been tested several times [117] [118]. The PLS-SEM technique measures corporate response constructs in four items focusing on responding quickly to disputation, adequately undertaking during crises, collaborating with them to mitigate risks, and responding to a response plan during uncertainty. The Likert scale has addressed these items to test the measurement and structural model. The Cronbach's alpha exceeds the threshold value of 0.7 [199] of the response antecedent, and table 4.3 shows that the value of Cronbach's alpha (CA) is 0.878, which is above the standard value.

4.2.7 Corporate resilience

The assessment applied to conduct corporate resilience as the dependent construct in this study is addressed by many authors [201]. The corporate cycle is employed at the crisis scales of financial, political, organizational, and technical during disruptive conditions. Subsequently, each scales assess the corporate resilience construct in four items: adjustment of the regulations during crises, fast adaption to the disruptions, quickly responding during crises, and regulating the consciousness during cries. This construct's measurement scale used the Likert scale (5 for strongly agree and 1 for strongly disagree). Thus, the Cronbach's alpha of this construct is 0.905, which outperforms the standard scale of 0.7 [202].

4.3 Analytical approach

For the analytical approach, the PLS-SEM (symmetric) technique was used [203] because it has numerous analytical advantages over the prevalent factor-based SEM technique (for example, AMOS) [204] and has been established by current studies in corporate governance and corporate resilience [205]–[208]. PLS-SEM, in particular, is quite significant in analyzing complex structures, networks, and empirically-measured attributes [209], [210]. A balanced approach (PLS-SEM) is recommended because of the research's predictive accuracy [211], [212]. For instance, in the absence of research hypotheses, PLS-SEM assessment shows a larger scale of robustness [204], [209]. On the contrary, PLS-SEM struggles with symmetrical causal links and cumulative impacts due to the limitations of regression measurements and SEM [213], [214]. However, the SmartPLS software 3.2.8 was employed to explore the predictive significance of six antecedents of corporate resilience. The symmetric findings (PLS-SEM) revealed the total effects of benevolence, commitment, flexibility, information sharing, recovery, and response on the model outcome.

4.4 Data analysis and findings

This study applied most of a multidimensional analytical approach, specifically PLS-SEM software [18]. PLS-SEM, particularly SmartPLS 3 software, was employed to evaluate the conceptual framework. The PLS-SEM analysis results are examined and interpreted in two phases in this research; 1) assessment of the measurement items and 2) assessment of the structural mechanism. In particular, the PLS-SEM results revealed the overall effects of information sharing, flexibility, response, and recovery as the collaborative practice dimensions and benevolence and commitment as the trust dimension. The hypotheses were investigated employing the symmetric technique (PLS-SEM). Symmetric (PLS-SEM) investigates the influences of independent variables on the result and the competition among independent variables in determining the dependent variables. Following the age levels, 69.9% of respondents were 21 to 30, 24.6%, 3.4%, and 2% were between 31 to 40, 41 to 50, and more than 50 years old, as shown in Table 4.1. Most participants (49.6%) were executives, while 25.5%, 7.4%, 5.2%, and 12.3% were senior executives, general managers, and others. The corporate life phase contained 39.3% from the financial crisis; 27.8%, 16.6%, 9.5%, and 6.9% were also collected in the corporate cycle from organizational, technical, others, and political crises in table 4.1. Subsequently, the outputs of the factor loadings for each item are presented in Table 4.2. It has been noticed that each factor's loadings are higher than the threshold value

of .706 except for insh 1, insh 5, flx 6, flx 10, res15, and com29, which is evidence of the discriminant validity of the model.

Table 4.1 Demographic characteristics

		Frequency	Percentage
Age	1	244	69.9
	2	86	24.6
	3	12	3.4
	4	7	2.0
	Total	349	100.0
Education	1	4	1.1
	2	14	4.0
	3	223	63.9
	4	108	30.9
	Total	349	100.0
Position	1	18	5.2
	2	26	7.4
	3	89	25.5
	4	173	49.6
	5	43	12.3
Total	349	100.0	
Corporate life cycle	1	24	6.9
	2	58	16.6
	3	137	39.3
	4	97	27.8
	5	33	9.5
Total	349	100.0	

Table 4.2 Factor loading

Items	Information sharing	Flexibility	Response	Recovery	Benevolence	Commitment	Corporate resilience
Ins 2	0.797						
Ins 3	0.893						
Ins 4	0.826						
Flx 7		0.832					
Flx 8		0.868					
Flx 9		0.825					
Flx 11		0.864					

Res 12	0.897		
Res 13	0.920		
Res 14	0.872		
Rec 16		0.811	
Rec 17		0.857	
Rec 18		0.890	
Rec 19		0.815	
Ben 20			0.878
Ben 21			0.875
Ben 22			0.858
Ben 23			0.866
Com 24			0.855
Com 25			0.880
Com 26			0.881
Com 27			0.870
Com 28			0.862
Cor 30			0.850
Cor 31			0.912
Cor 32			0.903
Cor 33			0.862

4.4.1 Measurement model

The PLS-SEM analysis consists of the measurement model and the structural model evaluation section. Reliability and validity (convergent and discriminant) tests were used to assess the antecedents' items' of the measurement scale. Cronbach Alpha (CA) and composite reliability (CR) were used to assess reliability, while item loadings and average variance extracted (AVE) were used to measure convergent validation. Statistics of each construct's Cronbach alpha and composite reliability were all higher than the threshold of 0.7. In contrast, estimations of each construct's average variance extracted (AVE) were higher than the threshold of 0.5 [18], [215]. This study suggests that the model meets the reliability and convergent applicability criterion (follow table 4.1 for details). Table 4.3 shows that the model fulfilled the Fornell Larcker Criterion to meet the coefficient threshold value of 0.7. The model used in this study supported the scale's reliability and validity based on reliability and discriminate validity evaluations. These findings demonstrate the validity of the measurement model in our study and the reliability of the items in each construct as construct metrics, as shown in figure 2.

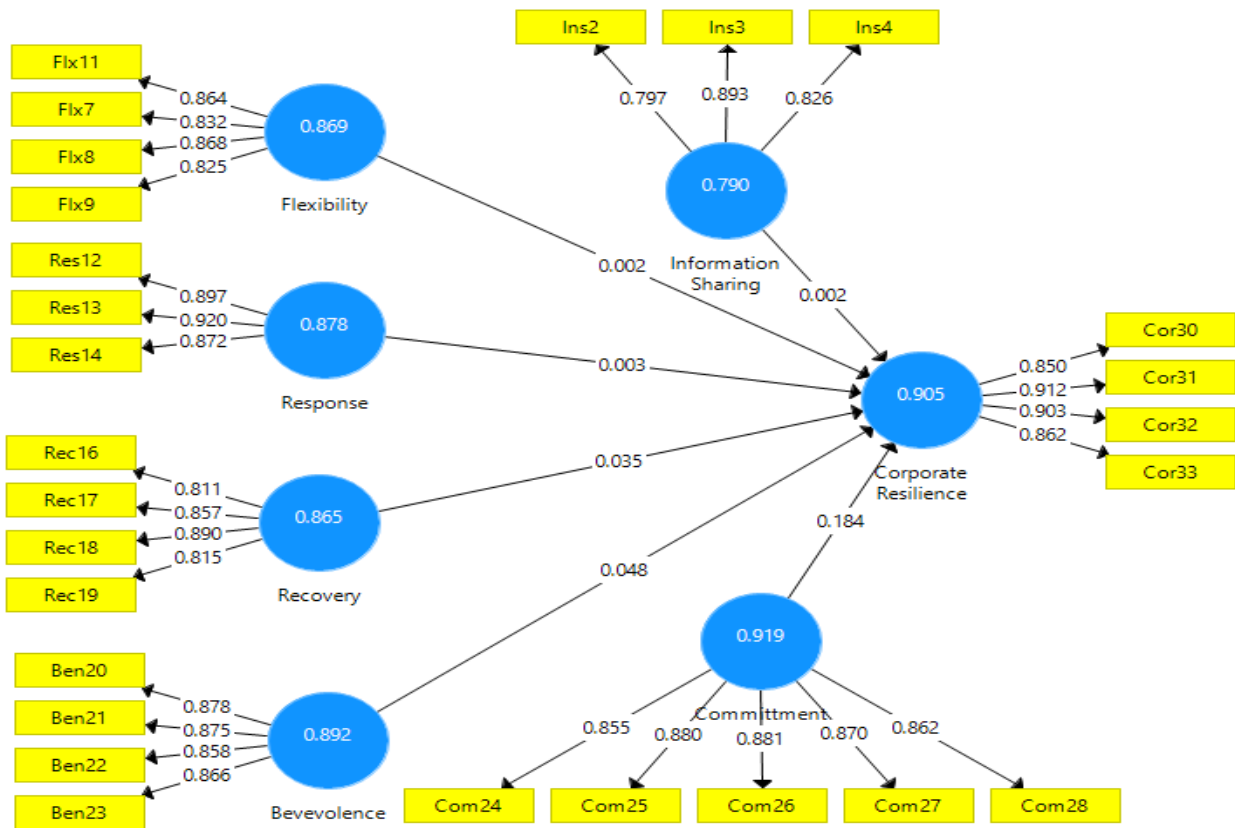


Figure 4.2: Measurement Model

4.4.2 Structural model

Table 4.4 summarizes the structural model outcomes (figure 4.3), including the path structural, T value, P-value, R² correlation, adjusted R², predictive significance (Q²), and variance inflation factor (VIF)[18]. Accordingly, all the VIF scores of less than 5 showed no errors with multicollinearity. The path coefficients reveal the correlations of the independent constructs based on the dependent constructs. The results of the path coefficient show that the three hypotheses are positively supported (P < 0.005), as indicated in table 4.4.

After investigating the coefficient of the path confidence and its essence, the assessment evaluated the predictive capacity of the structural model in the sample (Q², R², and F²) and out-of-sample projection (PLS-predict). Here, Q² describes the predictive value of the variables, R² demonstrates the coefficient adequacy of the exogenous construct, and F² denotes the path coefficient of the antecedents. The model represents 71.5% of the variance in corporate resilience (R² = 0.715); consequently, the F² scores, as displayed in table 4.4, indicate that the

effect scale for flexibility ($F^2= 0.002$), information sharing ($F^2= 0.002$), and response ($F^2= 0.003$) were small value. Moreover, the effect sizes for benevolence, commitment, and recovery were large. This outcome indicates that amongst all the antecedents variables, commitment ($F^2= 0.184$) is the highest antecedent factor for corporate resilience, accompanied by benevolence ($F^2= 0.048$) and recovery ($F^2= 0.035$). The outcome of the structural model was a Q^2 score of 0.391, satisfying that the model has predictive power. The outcome of the structural model was a Q^2 score of 0.391, satisfying that the model has predictive power. The Q^2 , R^2 , and F^2 outcomes reveal that the model has sufficient in-sample predictive power for most constructs.

Finally, the model's predictive power was assessed out-of-sample using the PLS-predict evaluation. Table 4.5 shows that the Q^2 predict metrics surpassed the linear function [216]; therefore, the prediction errors of both categories (PLS and LM) were examined. RMSE, MAE, and MAPE were all found to have fewer prediction errors than the naïve standard, indicating that the model has high predictive power (as shown in table 4.5) [215].

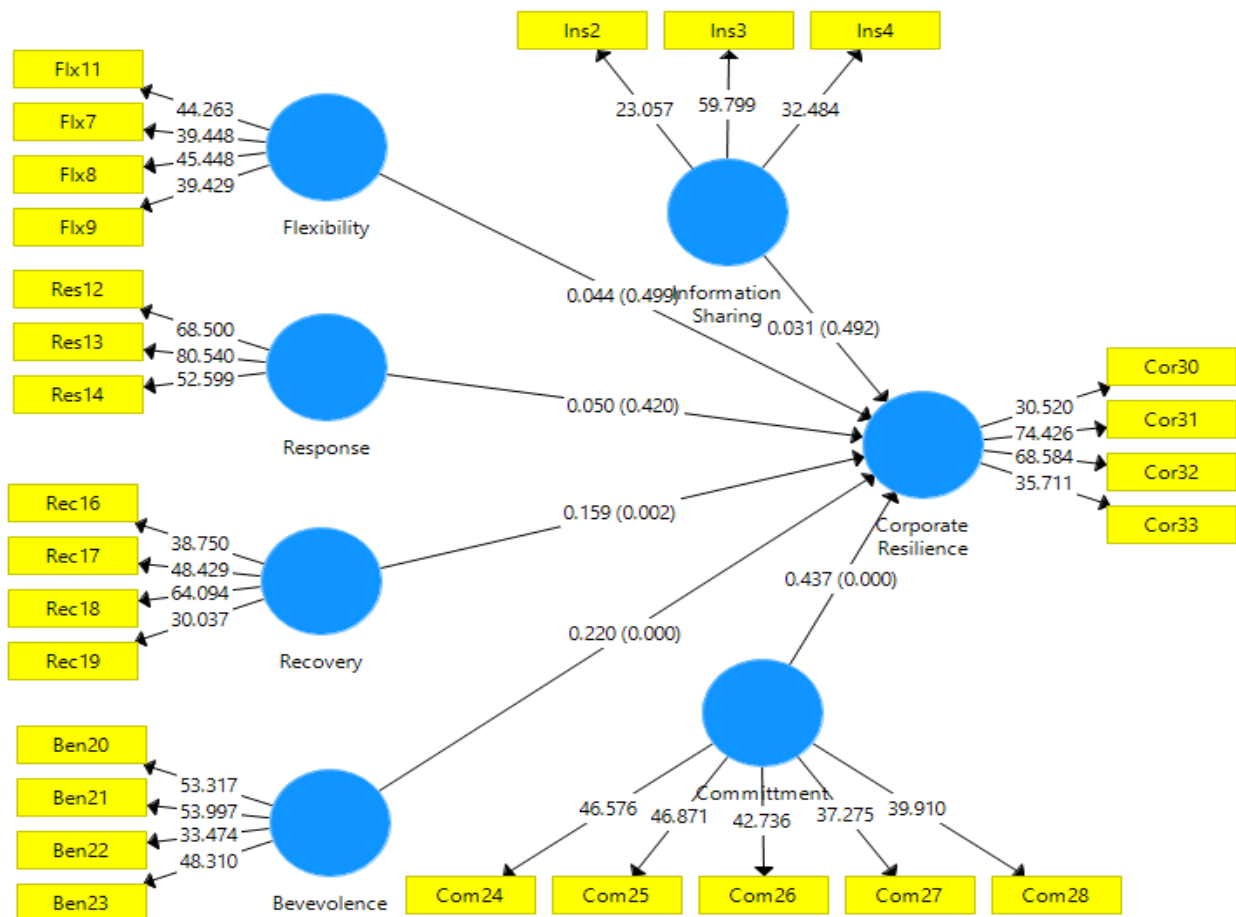


Figure 4.3: Structural model

4.4.3 Hypothesis testing

This research addressed the SmartPLS 3.2.8 tool [209] by exploring a purposive sampling technique applicable to the bootstrapping tactic but with more predictive significance [200]. This research shows hypotheses (H1-H6) by the σ , P, and T values to measure the path coefficient results. As shown in Table 4.4, three of the hypotheses among six hypotheses were supported. Benevolence was found to have a positive effect on corporate resilience ($\sigma = 0.217$, $T= 3.423$, $P= 0.001$). Commitment was addressed to have a positive effect on corporate resilience ($\sigma = 0.439$, $T= 6.834$, $P= 0.000$). Recovery was constructed to have a positive effect on corporate resilience ($\sigma = 0.154$, $T= 3.064$, $P= 0.002$). Furthermore, three of the six hypotheses were not supported, as flexibility was addressed to have a negative effect on corporate resilience ($\sigma = 0.048$, $T= 0.659$, $P= 0.510$). Information sharing was found to have a negative effect on corporate resilience ($\sigma = 0.030$, $T= 0.676$, $P= 0.499$). Response was addressed to have a negative effect on corporate resilience ($\sigma = 0.056$, $T= 0.782$, $P= 0.435$).

Table 4.3: Construct reliability and validity

Criteria	Benevolence	Commitment	Flexibility	Information sharing	Recovery	Response	Corporate resilience
Cronbach's Alpha (CA)	0.892	0.919	0.869	0.790	0.865	0.878	0.905
Composite Reliability (CR)	0.925	0.939	0.911	0.877	0.908	0.925	0.933
Average Variance Extracted (AVE)	0.756	0.756	0.718	0.705	0.712	0.804	0.778

Fornell-Larcker Creterion							
Construct	1	2	3	4	5	6	7
Benevolence	0.869						
Commitment	0.794	0.870					
Corporate resilience	0.767	0.807	0.882				
Flexibility	0.768	0.790	0.720	0.847			
Information Sharing	0.534	0.576	0.543	0.595	0.840		

Recovery	0.709	0.663	0.687	0.649	0.539	0.844	
Response	0.723	0.736	0.701	0.785	0.607	0.729	0.896

Table 4.4: Structural model result

Hypothesis	Structural path	Original Sample Mean (O)	Sample Mean (σ)	Standard Deviation	T Statistic	P Value	Decision	Confidence Interval		Confidence Interval bias correlated		F ²	VIF
								2.5 %	97.5 %	2.5 %	97.5 %		
H1	Benevolence -> Corporate Resilience	0.220	0.217	0.064	3.423	0.001	Supported	0.094	0.341	0.096	0.342	0.048	2.444
H2	Commitment -> Corporate Resilience	0.437	0.439	0.064	6.834	0.000	Supported	0.310	0.561	0.302	0.561	0.184	2.953
H3	Flexibility -> Corporate Resilience	0.044	0.048	0.067	0.659	0.510	Not Supported	-0.086	0.181	0.092	0.175	0.002	2.115
H4	Information Sharing -> Corporate Resilience	0.031	0.030	0.046	0.676	0.499	Not Supported	-0.061	0.122	0.053	0.125	0.002	1.775
H5	Recovery -> Corporate Resilience	0.159	0.154	0.052	3.064	0.002	Supported	0.048	0.249	0.054	0.256	0.035	2.155
H6	Response ->												

Corporate Resilience	0.05	0.05	0.065	0.78	0.435	Not Supported	-	0.17	0.09	0.16	0.00	2.54
	0	6		2			0.07	4	8	0	3	4
							4					

Construct	R ²	R ² Adjusted	Q ²
Corporate resilience	0.715	0.710	0.391

Table 4.5: PLS-predict results

Indicator	RMSE	LR-M	MAE	LR-M	MAPE	LR-M	Q ² _predict	Q ² _predict
	PLS-M		PLS-M		PLS-M		PLS-M	LR-M
Cor30	0.615	0.633	0.442	0.445	14.015	13.713	0.534	0.505
Cor33	0.674	0.724	0.459	0.495	14.910	15.977	0.501	0.425
Cor31	0.583	0.596	0.406	0.417	13.140	13.137	0.597	0.578
Cor32	0.638	0.666	0.437	0.474	14.102	15.180	0.532	0.491

The hypotheses H1, H2, and H5 revealed the important correlations between the resource-based views (RBV) and transactional cost economic (TCE) for corporate resilience in disruptive events. These results confirm the relevance of RBV and TCE, transactional capability, and resource capability to respond to disruptive conditions swiftly. In addition, though RBV and TCE explore the significance of flexibility (H3), information sharing (H4) and response (H6) have no significant to have positive effect on corporate resilience during disruptions. Conversely, many scholars showed a significant effect of flexibility [13], information sharing [8], and response [117] through the resource-based view [15] and transactional cost economic perspective [18] in the presence of corporate resilience during disruptive circumstances.

5 Discussion and conclusions

This research has established a conceptual framework for how corporate managers' resilience processes affect information sharing, flexibility, response, recovery, benevolence, and commitment in corporate firms with different levels of corporate resilience. Research examining corporate managers' resilience processes in complex conditions is a rather extant factor, given that resilience processes are frequently considered problematic and unpredicted, interrupting corporate governance and performance. This research answers the gaps from Chowdhury and Quaddus (2017) and Acquah et al. (2021) to explore how corporate resilience affects the dimensions of collaborative practice and trust and addresses the effect of corporate resilience following resource-based view and transactional cost economic perspectives [15], [18].

The first hypothesis is that benevolence positively affects corporate resilience during highly unanticipated disruptions or crises. The path benevolence \rightarrow corporate resilience ($P = 0.001$) demonstrates a positive effect of this correlation. This outcome is a significant finding in the equivalent literature that exposes the role of corporate resilience. For example, Acquah et al. (2021) claimed that benevolence significantly contributed to corporate resilience in its economically strong effect on inter-firm trust in high-crisis contexts, ultimately mitigating the cost of the transaction [18]. Moreover, the authors also address that benevolence operating in a single condition is not significant to achieving a high level of corporate resilience in terms of cost-effectiveness. Benevolence needs other relevant antecedents to explore the path to corporate resilience [24], [31]. However, our hypothesis 1, measured and validated, figures out the significance of benevolence as an exogenous construct of corporate resilience in extremely disruptive conditions, which significantly affects corporate resilience.

Concerning the second hypothesis, this research argued that commitment positively affects corporate resilience in the condition of disruptions. This correlation was positively supported through hypothesis 2, as mentioned by the path commitment \rightarrow corporate resilience ($P = 0.000$). In this regard, commitment is a significant capability that positively facilitates corporate resilience during unexpected events. Current literature scarcely investigates this correlation in contingency scenarios during crises. For instance, commitment was employed as an antecedent of corporate resilience [13], as a dimension of trust [26], and accordingly, as a potential factor of corporate resilience, which strongly affects cost-effectiveness in corporate firms. The hypothesis results indicate that for high crises, commitment, positively determined by the transaction cost economics perspective of the firms' finances, is one of the significant critical

antecedents for a firm's strategy associated with the balance of the transaction cost to achieve high corporate resilience.

The third hypothesis proposed that flexibility positively correlates with corporate resilience in severely turbulent events. Surprisingly, this study investigated a negative relevance, as addressed by the path flexibility \rightarrow corporate resilience ($P = 0.510$); accordingly, hypothesis six was rejected. This outcome opposes the findings Chowdhury & Quaddus (2017) addressed, which explored that the phase of flexibility significantly affects corporate resilience [15]. Consistently, it contrasts the research from Chowdhury & Quaddus (2019), which indicated that flexibility is a significant antecedent of corporate resilience in corporate crises or disruptive events [13]. The study investigated several crises during the corporate operational cycle of a firm, such as financial, organizational, political, and technical issues in highly disruptive conditions. Therefore, this study recommends that corporate managers could emphasize other kinds of resources to achieve a high level of corporate resilience for severe disruptions exposed by the disruptions like COVID-19 (i.e., resources adjustability and affability). Flexibility could be substantiated due to the shortage of resources during a world economic collapse. Furthermore, this finding implies that resilience may diverge in a helpful context depending on the region.

Regarding the fourth hypothesis, this study proposed that 'information sharing positively affects corporate resilience in turbulent environments. Surprisingly, the study investigated a negative relevance, as addressed by the path information sharing \rightarrow corporate resilience ($P = 0.499$); this hypothesis was not supported. This result is opposed to the outcome addressed by Brandon - Jones et al. (2014), which explored that the phase of information sharing positively affects corporate resilience [8]. Consistently, it opposes the research from Hosseini et al. (2019), which found that information sharing is a significant antecedent of corporate resilience concepts in corporate crises or disruptive events [164]. The study claimed several concerns during a firm's corporate cycle, for instance, financial and organizational challenges in highly disruptive events. Moreover, this study proposes that corporate managers could focus on other antecedents of the resource-based view (RBV) to achieve a high level of corporate resilience to acute turbulence exposed by the crises. Information sharing could be adjusted because of the lack of resource capability during global disruptions.

The study investigated how recovery positively affects corporate resilience during unanticipated disruptions in the fifth hypothesis. This study examined a significant relevance in the relationship recovery \rightarrow corporate resilience ($P = 0.002$). This finding follows the previous authors [15] and emphasizes the significance of several contexts for mitigating the crises of corporate firms. However, our H5, measured and validated, figures the importance of

recovery as an exogenous construct of corporate resilience in highly disruptive conditions, which significantly affects corporate resilience. This study's outcome identifies that for severe crises, recovery antecedents, positively connected by the resource-based perspective of the firms' capability, are one of the significant constructs for a corporate's strategy with the balance of the resources to attain high corporate resilience.

Concerning the six hypotheses, the study proposed that response positively affects corporate resilience during turbulent environments. This correlation was rejected, as addressed by the path ($P = 0,043$). In this regard, response defines a negative correlation that negatively affects corporate firms in high crises. This finding contradicts the outcome noted by Chowdhur and Quaddus (2016), which investigated that the response levels positively affect corporate resilience [117]. Accordingly, it also opposes the research from Scholten et al. (2014), which addressed that response is a significant construct of corporate resilience in corporate disruptions [118]. Furthermore, this is a new result for the corporate professionals to focus on the corporate function during high disruptions. This finding also indicated that the resource-based perspective of response to detecting the challenges in the disruptive condition by the corporate managers could be a significant construct of resilience plan and, subsequently, facilitates the firms' effectiveness and risk management.

6 Implications

6.1 Implications for theory

The conclusions of this research have substantial implications for the resilience literature. First, this research implies that resource-based and transaction cost economics is widely accepted approaches [15] for determining and validating an appropriate strategy by coordinating the corporate's resources during immensely disruptive situations. Our measured and validated model suggested by the RBV and TCE represents the literature fostered on disruptive events or crises [52], particularly about the firm's corporate disruptions [18].

According to the resource-based view (RBV), previous research, and investigating gaps in the extant literature, the results of this study have several significant implications for corporate resilience. The developed corporate resilience assessment level suggests the absence of corporate resilience antecedents in the resource-based view to exploring the gaps related to disruptive events in corporate firms. The RBV investigates a combination of resources to adjust to the corporate firm's constraints during disruptive conditions or crises. The effect of disruptive environments is now represented by the total corporate cycle rather than a specific corporate firm. The study proposes that corporate firms require the dimensions of collaborative practice under antecedents such as information sharing, flexibility, recovery, and response in a resource-based view. This study explored how these dimensions mediate the relationship between antecedents and corporate resilience.

Firstly, the effect of information sharing in disruptive crises is broadly considered by resource-based scholars [8]. This research explores the understanding of corporate managers and functions and proposes the negative impact of inter-firm information sharing in highly disruptive events. The scholars of resource-based views could consider information sharing positively significant in firms during disruptive events, and this finding is supported by Hosseini et al. (2019) [164]. Secondly, this study provides more elaborated findings on the effects of flexibility. Extant literature has examined the effect of flexibility on corporate resilience [88], [172]. Moreover, flexibility's effect on corporate function needs further investigation because this study has negatively impacted corporate resilience. This study suggests that the effect of flexibility has a significant implication in corporate firms during disruptive events, as supported by the authors [15]. The authors claim that flexibility reduces corporate risk through the strategic mechanism of reconfiguration to integrate resources in a highly disruptive crisis smoothly. Thirdly, this study explores the positively significant recovery of corporate resilience during crises. This research examined a detailed overview of

recovery by measuring the resilience context in corporate firms in a disruptive context. This research finds that recovery explores the RBV from the perspective of corporate governance to reduce the disruptive losses induced by the disruptions or crises in the firms. Finally, the response is one of the significant aspects of corporate resilience, which is addressed by [118]. This study contrasts the findings that response is not a significant antecedent of corporate resilience, which also contrasts the results [117]. The findings of this study suggest that response could introduce a new aspect of corporate context during disruptive events to achieve high corporate resilience. Alternatively, the scholars could particularly consider a construct of RBV more profoundly concerning corporate governance employed by the corporate managers in disruptive conditions and emphasize RBV of the correlations between corporate managers and corporate firms.

Regarding the transaction cost economics (TCE) theory, the findings of the dimensions as a trust through the antecedents have significant implications for corporate resilience. The positive implication suggests the absence of antecedents of corporate resilience in terms of transaction cost economics (TCE) to optimize the corporate operating costs and transactional expenses in a highly disruptive event. This research explores that corporate firms must adapt the dimension of trust under antecedents such as benevolence and commitment in a transaction cost economics (TCE) view. Benevolence has a positive significance in achieving corporate resilience in turbulent environments of a corporate firm. These findings indicate that the more loyalty in the firm among the corporate stakeholders or entity, the higher the implementation of the resilience process and minimization of the operational cost, which positively affects cost-effectiveness in the firms. This outcome also was reported by [18], which positively correlates with high disruptive events to assure the cost-effectiveness of the firm. Furthermore, commitment is a significant construct of corporate resilience during disruptive crises in the firm, which was also reported by the authors [13]. This finding contributes to the TCE that mutual commitment facilitates a corporate commitment that affects managing transactional and lowering operational risk to achieve corporate efficiency during disruptive crises. This result presents a new context for more significantly considering corporate governance connected by the corporate managers in critical environments and implements TCE theory among the inter-firm relationships.

6.2 Managerial implications

The study finds several significant implications and practical perspectives for corporate managers and practitioners. The outcomes affirm that the dimensions of collaborative practice

and trust significantly correlate to corporate resilience, except for some constructs. This finding is an important suggestion for corporate managers as it proposes possible path correlations for achieving corporate resilience. A recourse-based view and a transactional cost economic (TCE) context are essential for corporate managers to recover from disruptions. For instance, by deploying dynamic resources like the dimension of corporate resilience, reported in this research, corporate managers can achieve the firm's dynamic capacities in determining and controlling the turbulent environments and, accordingly, the entire corporate cycle with more information sharing, flexibility, and recovery coordination. Furthermore, the governance of resources can be more emphasized across resilience. Accordingly, by employing trust among mutual relationships in the corporate firms like the connection of TCE perspectives, corporate managers can facilitate the firm's financial profit by understanding and monitoring the disruptive events. Consequently, operational and transactional expenses could deploy the corporate mechanism with benevolence and commitment. However, these findings can contribute to formulating more accurate forecasts and managing resources and capabilities through inevitable disruptions. Above all, it is useful for a corporation's firm crisis perception because it facilitates the corporate managers in restructuring resources and capabilities following the emergence of disruptive crises.

Also, the study contributes that corporate professionals related to RBV and TCE perspectives, understanding extremely disruptive events, should speculate more time determining the function of resources and capabilities and their implications for corporate resilience [52]. Subsequently, proper resource allocation is a dynamic capability that directly supports corporate resilience in highly disruptive conditions [216]. This study suggests that in the absence of resource contexts, corporate managers emphasize cost minimization and reconstructing resources to achieve corporate resilience. Considering the extant literature, the correlations between corporate mechanisms and the resilience processes of corporate firms are vulnerable and not highly significant. This finding indicates that strategic approaches that only facilitate the optimization of resources and capabilities may not achieve corporate resilience. For instance, the dimensions of trust contribute to cost minimization through the perspective of transaction cost economics. This finding should be on proper techniques that focus on significant resources of the corporate firm, for instance, information sharing, flexibility, and recovery during disruptive conditions, which is supported by the report [8], [13], [15]. This study suggests the fundamental strategies proposed for the cost-effectiveness of the corporate operation and strategies associated with coordinating resources to implement necessary capabilities to achieve corporate resilience.

6.3 Limitations and future research

This research has some drawbacks that could be justified in future studies. Due to the drawback that this study only deployed corporate firms to record, the survey data hurdles the total respondents specifically at a particular level due to time constraints. The longitudinal survey determines if the proposition of the crisis needs different contexts in the RBV and TCE by integrating additional resources to support new antecedents in future research. Another limitation is that the study merely counted corporate professionals that their firms are generating in Bangladesh. The study proposes that future research establish other sectors, for instance, project or temporary organizations, or explore cross-country research to differentiate the significance of resources and capabilities in disruptive environments. This research only focused on the assessment approach of PLS-SEM, which is limited in the constructs' measurement assessment and path correlations. Future research could employ the fsQCA approach to measure the different configurational conditions of each construct. fsQCA could emphasize how necessary conditions correlate to the constructs, and the necessary condition analysis (NCA) and sufficient condition analysis support the different conditions of each construct along with the PLS-SEM approach.

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