

Article

A Grounded Theory Examination of Supervisory Boards' Governance Capability Indicators in Publicly Traded Firms: A Sustainability Perspective

Baorong Guo ¹ , Xinan Zhao ^{1,*} and Lizhi Hu ²

¹ School of Business Administration, Northeastern University, Shenyang 110167, China

² Sujiatun District Tax Bureau, Shenyang 110101, China

* Correspondence: zxn_118@mail.neu.edu.cn

Abstract: Embedded within the sustainable development framework, our research leverages proceduralized grounded theory to refine and universalize supervisory governance capabilities, thereby aiming to assess the theoretical saturation of the resultant model and to devise a comprehensive, sustainability-inclusive index of supervisory board governance competence. Focusing on five publicly traded Chinese companies, the research employs a tripartite coding process integral to grounded theory methodologies. By methodically refining case studies, it identifies sustainability-oriented governance capacity indicators. Data are conceptualized and compartmentalized via open coding, then divided into five primary clusters via axial coding, resulting in sustainability-focused governance capacity indicators for supervisory boards. Using selective coding strategies, the study uncovers forty-two competency indicators pertinent to sustainable corporate governance, organized into three domains across eight sustainability-related dimensions. These include individual characteristics, sustainability value judgment, experiential wisdom, collaborative communication for sustainable practices, resource integration, general employment prerequisites, professional application in sustainability, and sustainable business acumen. The findings enhance supervisory board member selection and performance assessment processes, promoting sustainable corporate governance. They also clarify supervisory roles in sustainability, offering a holistic view of supervisory board internal governance mechanisms. By maintaining the objectivity of these indicators, the study advances the field.

Keywords: grounded theory; supervisory board; governance capacity; sustainability; indicator identification; publicly traded firms; corporate governance



Citation: Guo, B.; Zhao, X.; Hu, L. A Grounded Theory Examination of Supervisory Boards' Governance Capability Indicators in Publicly Traded Firms: A Sustainability Perspective. *Sustainability* **2023**, *15*, 10666. <https://doi.org/10.3390/su151310666>

Academic Editor: Tungju Wu

Received: 28 May 2023

Revised: 23 June 2023

Accepted: 28 June 2023

Published: 6 July 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Supervisory boards are integral to the corporate governance landscape, serving to uphold legal compliance and protect the interests of minority shareholders and employees [1,2]. The supervisory board primarily discharges its duties through rigorous oversight of the company. This process involves tracking operational trends, examining financial accounting details, and enforcing compliance with legal and regulatory standards. Such comprehensive supervision requires an understanding of the firm's financial strength, operational efficiency, and administrative expertise. Through a sustainable corporate lens, the supervisory board maintains regular evaluation of these aspects, acting as a steadfast guardian of the company's financial well-being, operational success, and governance competence.

Corporate sustainability denotes companies' strategy to generate long-term stakeholder value by implementing business strategies grounded in ethical conduct, social responsibility, and environmental stewardship. Within the corporate governance framework, the supervisory board has a dual role in cultivating sustainability. Firstly, they must align the organization's strategic direction with sustainability principles, thereby achieving

a balance between profitability and social good, coupled with environmental preservation. Secondly, they need to ensure that the operational practices of the company mirror these strategic decisions, thus weaving sustainability into the organization's entire operations.

However, in the Chinese context, the role of the supervisory board in fostering sustainability remains largely underexploited [3]. The existing literature underscores issues with the governance capacity of supervisory boards, especially their struggle to proficiently guide and stimulate sustainable practices within their organizations [3–6].

This research aims to clarify the ambiguities surrounding the extent of supervisory capabilities. It seeks to portray an all-encompassing image of the supervisory board's internal governance mechanisms, examining it through the prism of governance capacities. Moreover, it emphasizes the objectivity of the metrics applied in assessing these governance capabilities. It offers valuable insights to augment the selection, performance appraisal, and training of supervisory board members. This enhancement bolsters overall corporate governance effectiveness and promotes sustainability within organizations. Ultimately, this aligns with the key tenet of corporate sustainability—balancing shareholder value creation with contributions to social and environmental well-being.

Initially, existing research on supervisory boards' governance capabilities was often inferred broadly from literary analysis, absent a unified standard or a comprehensive systemic framework. This study, using grounded theory, identifies specific indicators of governance capabilities within the supervisory board. This approach addresses the lacunae left by previous research, fostering the development of related theories. Furthermore, this study illuminates the intricate relationships between primary and core factors, thereby establishing a strong foundation for future research. Additionally, a thorough examination of the supervisory board's capability requirements is conducted. This analysis will solidify the criteria for supervisory board appointment and enhance function-matching expectations. The outcomes of this research will provide valuable insights into the supervisory board's role in corporate governance.

The remaining sections of this study are organized as follows: Section 2 discusses the research background. Section 3 provides an overview of the theoretical perspectives related to the topic. Section 4 proposes variable measurement methodologies and introduces empirical models and estimation methods. Section 5 presents the research findings, employing open coding, axial coding, and selective encoding of cases. Section 6 concludes the study with a summary [7].

2. Background

Emerging from Germany, the supervisory board system functions as a strategic method for company owners—predominantly shareholders—to oversee and equilibrate the operators. This system astutely defines and assigns the rights and duties between owners and operators through organized arrangements. China's "Company Law" mandates the establishment of a supervisory board for joint stock companies. Acting as a permanent institution under regulatory guidelines, this board is accountable to all shareholders, tasked with supervising the company's management actions and financial health, thereby safeguarding the legitimate interests of both the company and its shareholders. The board is composed of representatives from shareholders and employees [8].

Uniquely among emerging markets, China synthesizes the American and German corporate governance models. Its formal structure reflects American board governance, while its essence corresponds to German double-layer governance, both underscored by China's distinct socio-economic features [3,9,10]. These specific supervisory board systems possess the advantages of a dual governance model: increased independence of the supervisory board from the executives, in conjunction with the benefits of a single-layer governance structure—unrestricted access to business-related information, thereby playing a pivotal role in corporate governance [11].

However, the "Beijing Listed Companies Supervisory Board Governance Index" released in June 2018 by the Beijing Listed Companies Association Supervisory Board, re-

vealed numerous issues through an extensive survey of Beijing's listed companies. Issues ranged from lack of duty fulfillment, gaps between actual performance and statutory responsibilities, noticeable differences in the value ascribed to the supervisory board and its role by listed companies, to an urgent need to enhance the supervisory board's efficacy. The subpar performance of the supervisory board has triggered a decline in its priority among companies, affecting the allocation of human resources and instigating a harmful cycle. The supervisory board frequently ends up marginalized, struggling to carry out its supervisory roles effectively, and in extreme cases, becoming a party to illegal activities by the board of directors and management, detrimental to the company's interests.

The prevalent perception in China associates the supervisory board as a ceremonial adjunct to the board of directors, questioning its significant role in corporate governance [12,13]. Given its nomination by the board of directors, it is susceptible to internal manipulation and has become a symbolic "rubber stamp" [14]. Diverse literature presents the supervisory board in various roles, from an honored guest and a friendly advisor to a scrutinized watchdog [15]. The deputy chairman of the China Securities Regulatory Commission has voiced similar sentiments, stating, "The Supervisory Board might portray an illusion of checks and balances to listed companies, but in reality, no such equilibrium exists" [16].

In light of this situation, it becomes essential to concentrate research efforts on the indicators of the supervisory board's governance capabilities. Such research aspires to maximize the supervisory board's overall governance potential and enhance the broad governance quality of enterprises.

3. Theoretical Literature Review

This research proposition is positioned at the intersection of two substantial academic domains: corporate governance and sustainability, both being rich in intellectual history and intricate complexities. Historically, corporate governance has been the primary focus, specifically scrutinizing the responsibilities of boards and supervisory boards. Jensen and Meckling's seminal Agency Theory [17] emphasized the fiduciary duties of boards to protect shareholder interests by mitigating agency costs, a sentiment echoed by Salancik, G.R. et al. [18]. At the same time, a supervisory board, as a prerequisite, must have the necessary qualifications to perform its crucial role in overseeing the board of directors and senior management of listed companies [19], while also taking responsibility for company performance [20]. The scope of board supervision expanded with the introduction of Resource Dependence Theory by Ashfaq, K. et al. [21], highlighting the advisory function and legitimacy that boards provide to corporations—a concept that has since been further examined by Hillman, A.J. et al. and Zahra, S.A. et al. [22,23].

In terms of internal control and disclosure, the research by Nguyen et al. [24] provides insights into the effectiveness of board and audit committees in different regulatory environments, with a particular emphasis on South Asia. This study offers a broad perspective on the complexities of global corporate governance, underscoring the pivotal role regulatory environments play in shaping board responsibilities. Complementing this narrative, Dang and Nguyen's work [25] delves into the effects of internal corporate governance on stock price crash risk, providing a tangible measure of the impact of robust governance structures and their role in mitigating financial risks using evidence from Vietnam.

Focusing on the banking sector, Nguyen's cross-country study [26] sheds light on the factors determining bank risk governance structures, clarifying the influences on risk management in banks. Furthermore, Nguyen [26] explores the effect of risk governance structures on the effectiveness of bank risk management in ASEAN countries, emphasizing the necessity of solid governance structures in managing financial risks, a theme that aligns with the Agency Theory.

The research setting—publicly traded firms in China—adds another layer of complexity. This rapidly developing economic giant poses unique corporate governance challenges, as outlined by Young et al. [27], Lau et al. [28], and Tam, O.K [29]. Therefore, a localized

study that addresses these complexities holds significant relevance. The methodological approach of grounded theory, championed by Glaser and Strauss [30,31], brings additional depth. Despite its potential to explore complex phenomena, it remains an underexplored tool in corporate governance research [32], thus highlighting a research gap that this study aims to address.

In reaction to the increasing complexity of corporate governance, there is an urgent call to redefine board responsibilities and capacities. The research by Ashfaq and Rui [21], Dang and Nguyen [25], and Nguyen [24,26] signals a shift towards a more comprehensive and integrated understanding of corporate governance. These studies highlight the critical role of risk management and internal control in achieving financial stability and sustainability, suggesting a proactive approach for boards and supervisory boards in these areas.

However, while these theoretical frameworks have wide recognition and extensive application [33], they do not explicitly define the role of boards and supervisory boards in advancing sustainability within corporations. In today's era, characterized by heightened socio-environmental awareness, the integration of sustainability into corporate governance is gaining momentum [34]. Pioneering studies by Aras and Crowther, Villiers et al. [35], and Jizi et al. [36] underline the importance of boards and supervisory boards to promote sustainability within organizations. Yet, the exact mechanisms and necessary capabilities for boards and supervisory boards to achieve this remain largely unexplored. Specifically, supervisory boards must possess capabilities to conduct comprehensive supervision to minimize the occurrence of interest violation events during corporate operations [8]. Not only should the supervisory board of a listed company comprise members with accounting, auditing, and legal expertise, and corresponding work experience for effective company supervision [32–34], but also individuals with extensive communication skills to engage with shareholders, employees, and other stakeholders [35]. Additionally, considering corporate sustainability, the education level and individual characteristics of supervisory members can also influence the supervisory outcomes [36,37]. A review of the relevant research reveals that a comprehensive analysis of the governance capabilities of supervisory boards from multiple perspectives is lacking. Most research has been conducted from a single perspective, such as knowledge or skills, which may result in a one-sided conclusion as these influencing factors often operate concurrently in practice [38]. This noticeable gap in the literature forms the basis for the proposed research.

The proposed research aims to apply these insights to the context of publicly traded firms in China. In light of the unique corporate governance challenges posed by China, as identified by Young et al. [27], Lau et al. [28], and Tam [29], this research intends to bridge the existing gaps in the literature, thereby contributing to the ongoing discourse on corporate governance and sustainability.

4. Research Design

4.1. Research Methods and Ideas

The rationale behind employing the grounded theory research approach in this investigation is twofold. Firstly, current studies into supervisory boards and empirical evaluations of various elements from a micro-perspective grapple with clearly elucidating the evolving phenomena within the realm of supervisory board members' engagement in corporate governance, particularly in relation to sustainability. Secondly, grounded theory, as a prime example of qualitative inquiry, follows a rigorous, standardized operational procedure firmly rooted in pragmatic theories or empirical data. This methodology helps to cultivate a theory that authentically mirrors reality, demonstrating robustness and contributing to the development of a more sustainable governance model [37,38].

In this investigation, we utilize Strauss's tripartite analysis [39,40]. The initial step of open coding enables the comparison of each category and emerging concept across multiple cases, establishing the basis for sustainable governance considerations. Following this, the paradigmatic model of axial coding allows for the hierarchical organization and causal interconnection of each category and concept relevant to the supervisory board's

governance capacity, in line with the inherent characteristics of each category. Finally, through selective coding, the multifaceted aspects of supervisory board governance capacity are distilled into specific, sustainability-oriented indicators. The research paradigm is represented graphically in Figure 1.

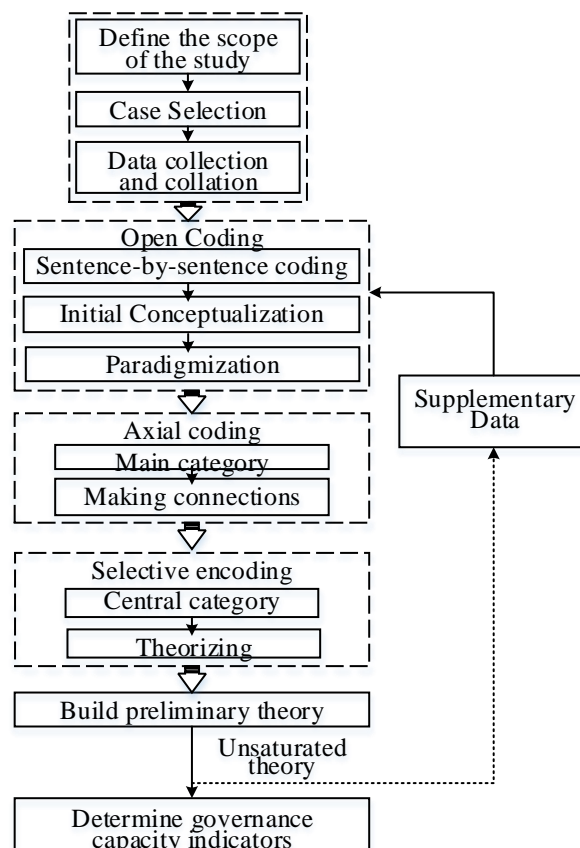


Figure 1. Research idea diagram.

4.2. Case Selection

In line with the rationale proposed by Eisenhardt, K.M. and Graebner, M.E. [41], the ideal number for a case study is between four and ten entities, striking a harmonious balance between the depth and breadth of the ensuing analysis. Drawing upon “Best Practice Cases of Supervisory Boards of Listed Companies”, we selected five exceptional corporations for our study, namely China Merchants Bank (Shenzhen, China), Pan Ocean Holdings (Beijing, China), Tsingtao Beer (Qingdao, China), Dansheng Technology (Beijing, China), and Suning Yunshang Company (Nanjing, China).

The selection of these firms is justified on several grounds. Firstly, they are noted for their active participation in supervisory board affairs and wield substantial influence within their respective industries. As role models of sustainable business practices, their inclusion helps portray an accurate representation of contemporary supervisory board governance within a sustainability framework. Secondly, these organizations were chosen based on the principle of differentiation [42,43]. Having a diversified selection of case companies allows for a comprehensive view of supervisory board requirements from various perspectives [44], especially concerning sustainability initiatives. This approach reduces the risk of narrow focus in our analysis.

Lastly, transparency—a vital element of sustainability—and the availability of ample information were influential factors in the selection of case companies. Each of the chosen cases boasts abundant related documentation, regulations, and consistent practice of information disclosure, facilitating an in-depth exploration of their governance requirements from an internal viewpoint. Furthermore, these companies have a prominent media

presence, affording an external view of their supervisory board practices and how these align with sustainable development goals. Detailed information about each selected case is provided in Table 1.

Table 1. Basic information of the case.

Name		Industry	Type	Reason for Selection
China Merchants Bank (CMB)	Shenzhen, Guangdong Province, China	Finance	State-owned enterprise	A Fortune 500 company, winner of the “Best Practice Award”, the highest award in the “Best Practice Awards for Supervisory Boards of Listed Companies”, and able to participate in the formulation of the Supervisory Regulations of the Securities and Futures Commission
Oceanwide Holdings Co., Ltd.	Beijing, China	Real Estate and Construction	Joint stock private enterprise	A China Top 500 company that has won the Top 30 Best Practices Award in the “Best Practices of Supervisory Boards of Listed Companies”, and the first overall score among companies in the real estate and construction industries
Tsingtao Brewery Co., Ltd. (TSGTF)	Qingdao, Shandong Province, China	Manufacturing	State-owned enterprise	Top 500 Global Brand Company, Top 30 Listed Company Supervisory Board Effectiveness, with the highest overall score among manufacturing companies
Beijing Easpring Material Technology Co., Ltd.	Beijing, China	Manufacturing	Central enterprise-owned enterprise	A leading professional supplier in China, awarded the “Excellent Research Award” in the seminar on the Supervisory Board System of Listed Companies, and included in the “Excellent Essay Collection of the Seminar on the Supervisory Board System of Listed Companies
Suning.com Co., Ltd. (SUNING.COM D)	Nanjing, Jiangsu Province, China	Electrical sales	Privately owned enterprise	2018 Fortune Future 50, Asia’s Top 100 Brands, compilation of the best time cases of listed companies

Source: Compiled by the author based on news reports, statistics as of October 2021.

As illustrated in Table 1, all selected cases are part of the top 50 best practice cases of supervisory boards, with some as industry leaders. This selection underscores their exemplary governance and commitment to sustainability. By selecting companies with high standings in sustainability ratings, we underscore the critical role that supervisory boards can play in directing organizations toward sustainable practices.

The cases cover a broad spectrum of industries and company types, including private businesses, state-owned enterprises, and central corporations. This diversity enhances the external validity of our findings, ensuring broader applicability across various contexts, and provides insights into the different approaches to sustainable governance adopted across sectors.

Regarding data accessibility, these case companies engage extensively with the public. A wealth of secondary information is available on their official websites, third-party media, and sustainability reports, ensuring the credibility and accessibility of our case references. Their high public profiles further support a detailed exploration of the internal functional matching mechanism of the supervisory board, particularly its alignment with corporate sustainability objectives. This approach, in turn, ensures the robustness and comprehensiveness of our findings within the context of sustainable corporate governance.

4.3. Data Collection

For data collection, grounded theory treats all information as data. The case study's diverse information and data help to triangulate the data for verification [45]. Therefore, to limit the subjective nature of qualitative data, we sourced information from internal and external company resources, including the company's official website, annual reports, media reports, stock exchange disclosures, and relevant literature. Based on this, we organized the data into coded extracts for the study, enhancing the reliability and validity of our findings in terms of both quantity and quality. Detailed data sources are presented in Table 2.

Table 2. Data sources.

Source	Name	Website	Quantity
Enterprise official website	Official Website	Chinese and English website	Total 14 pages of information about CMB;
	Official Website	Chinese and English website	Total 17 pages of information about
	Official Website	Chinese and English website	Oceanwide; Total 26 pages of information
	Official Website	Chinese and English website	about TSGTF; Total 7 pages of information
	Official Website	Chinese website	about Easpring Material; Total 22 pages of information about SUNING.COM D
News and Related Disclosure	Baidu	Chinese news platform	
	China Securities Journal; Shanghai Securities News; Securities Daily; Bulletin of China Listed Companies IV Association	Authoritative financial newspapers	Total 45 pages of information about CMB; Total 30 pages of information about Oceanwide; Total 60 pages of information about TSGTF; Total 45 pages of information about Easpring Material; Total 29 pages of information about SUNING.COM D
	China International Business; ifeng; eastmoney; business.sohu	Large financial information disclosure website	
Related Industry Literature	Cnki	The world's leading Chinese digital publishing platform	Total 242 papers in CSSCI source journals

Source: Compiled by the author.

Data Source 1: Corporate Digital Footprint. We utilized targeted keyword searches to glean a wealth of information from the official websites of the selected companies. The data extracted comprised press releases, annual reports, sustainability reports, statements issued by new board members, and announcements concerning changes in supervisory board members' terms. This process yielded 86 pages of relevant data from China Merchants Bank, Pan Ocean Holding Company, Tsingtao Brewery Company, Dansheng Technology Company, and Suning Yunsheng Company.

Data Source 2: Media Outputs and Disclosures. We focused on high-authority, widely recognized mainstream media outlets leveraging their online platforms to gather news reports spanning different periods. Notable sources included the China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily, China Listed Four Association Bulletin, and prominent financial disclosure platforms such as China Finance and Economics, Phoenix.com, Oriental Fortune, Caixin, and Sohu Finance. Alongside news broadcasts, we also considered supplementary materials such as interview videos, speeches, and books authored by directors, supervisors, and senior members of the case companies. After deduplication and organization, we compiled 209 pages of documents from the aforementioned firms.

Data Source 3: Industry-Specific Scholarly Literature. We consulted relevant industry literature to deepen our understanding of the supervisory board's composition, responsibilities, and rights, delineate the board's governance capacity indicators from a sustainability perspective, and clarify the selection and recruitment mechanism of the supervisory board. Using the CSSCI database, we identified papers featuring the keyword "supervisory board" published from 2010 to 2021, excluding irrelevant content such as newspaper articles and

short reviews. After processing, coding, and cataloging the gathered data, we constructed a textual database.

4.4. Coding Ideas

To ensure the objectivity of the study and the generalizability, replicability, accuracy, rigor, and verifiability of our findings, we adhered to several points while coding the data. (i) Formation of a professional coding team: To mitigate subjective interpretations caused by coders' differing knowledge structures, we assembled a coding team composed of PhD students specializing in qualitative analysis and supervisory board governance, a master's student studying corporate governance, and a professor experienced in corporate governance. Although team members independently labeled a portion of the cases, conceptualization, categorization, and axial coding for each case were performed collectively. Disagreements were resolved through discussion until consensus was reached. (ii) Faithful completion of the research memo: During data analysis, we maintained comprehensive records of discussions and revisions, diligently noting all research memos to avoid overlooking crucial information [46]. (iii) Repeated comparative analysis: When new or complex concepts and attributes emerged, we compared them with previously obtained concepts and categories, returning to the cases when necessary to revise concepts and categories. (iv) Theoretical saturation test: We coded the data obtained from the cases step-by-step, testing the saturation of the constructed theories. Discrepancies and issues in coding were addressed by returning to the data for recoding, conducting a spiral iterative comparison, and holding joint discussions to reach a unified opinion [39,47,48].

Throughout these processes, we infused the coding process with a sustainability context, ensuring that perspectives on corporate sustainability management were effectively incorporated and addressed. This approach enhanced the sustainability aspect of our study, making it more pertinent to the current business environment.

5. Findings

Based on the research question, we used the grounded theory approach to sequentially code the data material, employing open, axial, and selective coding as guided by Pandit's findings [49].

5.1. Open Coding

Open coding is the process of deconstructing, identifying, and categorizing raw data, transforming narratives, ideas, or events into labeled components, which are then clustered to create distinct categories [50]. This process involves two critical steps: conceptualization and categorization. Conceptualization entails breaking down raw data into separate narratives, ideas, or events and assigning them specific designations. Categorization involves assimilating related concepts into one encompassing category and assigning it a distinct terminology.

In the context of our research, we began by "defining the phenomenon", which involved carefully identifying and marking terms and phrases related to the study in the original dataset, summarizing them with concise terms (labeled with an "a" prefix). This was followed by the conceptualization phase, during which we collated similar tags and abstracted them into more conceptual forms (denoted by an "A" prefix). It is important to note that the coding process is "theory-sensitive", meaning the researcher refines abstract concepts from primary sources into appropriate terminology, informed by the underlying theoretical framework.

To summarize, we performed open coding of the governance requirements for each case study. We present some open coding results for elements of the Supervisory Board of China Merchants Bank in Table 3 as an example.

Table 3. CMB’s open coding examples.

Case Content	Phenomenon	Conceptualization
A supervisory board is established. The supervisory board shall consist of 5 to 9 supervisors	a1: Number of personnel	A1: Number of supervisors
Staff Supervisors are nominated by the supervisory board and the Bank’s trade unions and are elected, dismissed, and replaced by the Bank’s Staff Congress, Staff Assembly, or other democratic procedures.	a2: Election of employee supervisors	A2: Sources of employee supervisors
Since the 6th Supervisory Board, China Merchants Bank has established 2 external supervisory seats in the supervisory board, and the overall structure has been adjusted to 4 equity supervisors, 3 staff supervisors and 2 external supervisors.	a3: External supervisors	A3: Supervisory board structure
In the current structure of the supervisory board, the four shareholder supervisors are all heads of large and medium-sized state-owned enterprises	a4: Extensive management experience	A4: Management experience
with extensive experience in corporate management and financial and fiscal expertise.	a5: Expertise	A5: Knowledge base
The 2 external supervisors are experts in financial enterprises.	a6: Professional in finance	A6: Financial literacy
The external supervisors are experts in the supervision of large state-owned enterprises	a7: Possessing supervisory competence	A7: Supervisory experts
The Chairman of the Supervisory Board is an employee supervisor and is the first full-time Chairman of the Bank’s Supervisory Board	a8: Full-time supervisors	A8: Dedicated staff
The Chairman of the Supervisory Board has long experience in domestic banking supervision	a9: Domestic industry perspective	A9: Regulatory experience
The Chairman of the Supervisory Board has a long-term international perspective	a10: International perspective	A10: Big picture view
The structure of the Supervisory Board of China Merchants Bank is becoming increasingly professional	a11: Professional reserve	A11: Professional judgement
The structure of the Supervisory Board of China Merchants Bank is becoming increasingly independent	a12: Ensure independence	A12: Independence judgement
The supervisory board has set up an office with professional staff responsible for specific supervision and inspection work.	a13: Specialized personnel	A13: Dedicated body
The main duties of the Supervisory Board’s Supervisory Committee are: to draw up specific plans for the exercise of the supervisory board’s supervisory powers	a14: Develop a monitoring program	A14: Workflow
Performing supervisory and audit functions under the authority of the supervisory board	a15: Overseeing audits	A15: Data insights
...

Source: Compiled by the author.

Throughout this process, we integrated sustainability perspectives, ensuring we sufficiently captured and represented all aspects (aspects of governance capacity indicators) of corporate sustainability management. This holistic and contextually relevant approach enriched our understanding of governance requirements within the framework of sustainability.

This study employs a “replication logic” approach in its analysis of various case studies. Two distinct types of replication logic, literal and theoretical, are utilized to examine patterns and variations across categorized groups, addressing the research question. This iterative comparative analysis isolates universal and opposing propositions, culminating in a theoretical model. Literal replication identifies recurrent patterns within the same category due to shared traits, while theoretical replication offers expanded perspectives on the subject matter.

The study first implements literal replication. Using China Merchants Bank as a case study, it concludes that to enhance the supervisory board's effectiveness, consideration must be given to both general and specialized capabilities. General capabilities, such as work experience, communication, and collaboration skills, primarily stress the importance of managerial experience and relationship maintenance. In contrast, specialized capabilities highlight the significance of professional knowledge, its practical application, and job-specific skills. These include finance, legal knowledge, review skills, advisory actions, and financial analysis. Through literal replication, the study provides a more precise understanding of essential requirements, enhancing its broad applicability.

Following this, theoretical replication is undertaken. This phase of the study amplifies and builds upon the existing results, drawing from the last three case studies. For instance, in cases subject to legal constraints, the stakeholder perspective becomes evident. This insight clarifies who the supervisory board should be accountable to and supervise, providing a refined definition of supervisory objectives. The need for general capabilities is also partially reaffirmed in tasks such as meeting organization. Particularly in professional capabilities, the reserve of personnel knowledge in the Dangsheng Technology case offers a valuable supplement to the supervisory board's required abilities. Through theoretical replication, the study broadens the understanding of supervisory board capacity requirements, delivering a more accurate reflection of these necessities. Based on the case study logic of item-by-item replication and differential replication, the concepts and categories of the five cases were coded and summarized, resulting in a total of 15 subcategories and 90 concepts (see Table 4).

Table 4. Open coding.

No.	Sub-Category	Concept (Frequency)
1	Statutory constraints	Mainly supervisory board matters specified in the law, including: number of proportions 20, structure of supervisory board 3, association of interests 27, term of office requirements 9.
2	Legal Interpretation	Refers to the ability to analyze the law and to integrate legal requirements with the development of the company, including: legal analysis 21, compliance with the law 7, adaptation to change 2.
3	Corporate regulation	Includes the elements of the supervisory board specified in the corporate regulations, including: source of candidates 6, assessment of candidates 9, method of election 4, executive structure 2, exclusivity 12.
4	Individual characteristics	Includes internal and external competence characteristics, including: social evaluation 8, colleague evaluation 4, shareholder evaluation 3, general outlook 4, self-management 8, professional ethics 15, government resources 5, networking resources 2.
5	Discriminatory methods	Refers to the strengths of supervisors judged from the perspective of their individual competencies, including: individual strengths 1, single strengths 1, hierarchical strengths 1, systematic clustering 1.
6	Value judgement	Refers to the value perceptions and reputation developed in the course of growth, including: self-perception 1, motivation 1, authority 2, independent judgement 22, values 3, commitment to work 14.
7	Experience	Mainly refers to the experience and perceptions accumulated during the course of work, including: industry perspective 3, work gains 7, management experience 19, work experience 1.
8	Communication and collaboration	Communication and co-ordination skills required to carry out the job, including: relationship maintenance 17, articulate communication 5, rapport 2, conflict management 2, teamwork 15.

Table 4. Cont.

No.	Sub-Category	Concept (Frequency)
9	General job requirements	Mainly work skills required for general work, including: organizational skills 6, innovation 3, data handling 13, learning 7, generalization 1, application 13, logical analysis 5, execution 12.
10	Professional knowledge	Knowledge base for conducting oversight work, including: personnel knowledge 4, management knowledge 13, financial knowledge 18, legal knowledge 17, data technology 2, regulatory expertise 1.
11	Application of knowledge	Knowledge and skills required to facilitate supervision, including: financial analysis 10, review of financial statements 14, financial planning 1, operational analysis 15, selection and recruitment analysis 3, remuneration analysis 2, professional judgement 2.
12	Operational competence	The corresponding professional skills required for the supervisory board to carry out its work, including: workflow control 9, advocacy 24, risk prevention 9, strategic control 14, system monitoring 5, evidence gathering 6, questioning 9, internal audit communication 2, external audit 24, audit function 15, motion review 7, reporting 6.
13	Regulatory objectives	The supervisory board should ultimately achieve the supervision requirements, including: supervision of workflow 7, supervision of decision implementation 15, supervision of strategy implementation 8, supervision of material matters 17, supervision of financial 41, supervision of risk 19, supervision of compliance 42, supervision of internal control 27, supervision of asset quality 2, supervision of connected transactions 5, supervision of business 24, supervision of executive performance 23, supervision of executive selection 3, supervision of information disclosure 10.
14	Integration of resources	The ability to integrate and allocate various working tools, including: integration of approaches 3, combination of resources 4, integration of innovation 3.
15	Competency matching	This refers to the way in which the individual competencies of the supervisory board are matched, including: competency mix 4, division of labor planning 3.

Source: Compiled by the author.

5.2. Axis Coding

Axial coding, the next stage, involves discovering inherent connections among sub-categories through clustering the segmented data from open coding. This necessitates an analytical approach to ascertain potential linkages at the conceptual level between the different categories, providing cues to deeper layers of understanding. During this phase, we employed the “condition-strategy-result” paradigm [40] to transpose the aforementioned content into primary axes, creating categories such as “Regulatory Requirements”, “Fundamental Characteristics”, “Underlying Characteristics”, and several “Subcategories”.

The axial coding process, thus, yielded five pivotal categories—“Regulatory Requirements”, “Fundamental Characteristics”, “Generic Competencies”, “Specialised Competencies”, and “Function Matching” (refer to Table 5).

Importantly, this process also included considerations of sustainability to ensure that the connections among subcategories adequately reflected the strategic role of sustainability in shaping governance requirements and practices. Thus, in crafting these primary categories, we considered how each one interacted with corporate sustainability management principles and goals, providing a comprehensive view of the governance landscape from a sustainability perspective.

Table 5. Axis coding.

Main Category	Corresponding Sub-Categories			Description of the Relationship
	Conditions	Strategies	Results	
Regulatory requirements	Regulatory constraints	Legal interpretation	Corporate norms	Regulatory requirements are the basic requirements for supervisors set out in the articles of association and the corresponding supervisory by-laws. The regulatory constraints are the prerequisites that must be complied with, and the legal interpretation is used to promote the development of the company's supervisory regulations and the improvement of the company's regulatory requirements.
Characteristics	Individual characteristics	Discriminatory approach	Value judgements	The characteristics are the composite competence characteristics that the employees of the company need to possess. The internal and external characteristics of an individual are the prerequisites for forming his or her value judgement, and after the discriminatory analysis of the characteristics, different ways of value perception are presented, i.e., different characteristics of value judgement are formed.
General competencies	Experience	Communication and collaboration	General job requirements	Generic competence refers to the ability to govern in a universal way. In other words, based on the experience accumulated in daily work, and in the process of continuous and effective communication and collaboration, it promotes the improvement of working ability, forming a general competence with general needs.
Professional competencies	Professional knowledge	Applying knowledge	Business Competencies	Professional competence refers exclusively to the use of professional skills and the need for job skills that the supervisory board position requires must be possessed. In particular, professional knowledge is a prerequisite for meeting the business competency requirements, and through the application of knowledge, the business competency is promoted.
Functional match	Regulatory objectives	Integration of resources	Competence matching	Competence matching refers to matching the supervisor's competence with the content of his or her supervision. That is, from the enterprise supervision objectives, the development and integration of supervision methods are brought into play in order to meet the needs of complementary human person competencies, matching human post competencies, and matching job organizational requirements, so as to achieve the matching of governance competencies.

Source: Compiled by the author.

5.3. Selective Encoding

Selective encoding was undertaken by systematically and logically associating categories while abstracting concepts and advancing theoretical constructs to render them more nuanced and tangible [51]. Anchored in the action strategies identified in selective encoding, the primary narrative surrounding the supervisory board's governance capacity was built by further comparing and refining the core categories.

Regulatory requirements, viewed as essential prerequisites for supervisors' governance competencies, are fulfilled by aligning fundamental characteristics with both general and specialized competencies. This process aims to regulate supervisors' qualifications at

the source, electing supervisors who exhibit high quality and competence, and mitigating the imperfections inherent in the selection and recruitment mechanism for supervisors.

Specifically, regulatory requirements represent the obligatory constraints the supervisory committee must adhere to, thus forming the foundational basis for constructing the supervisory committee. Fundamental characteristics, alongside general and specialized abilities, are prerequisites for supervisory work and pivotal for enhancing supervisory capacity and effectiveness. Function matching is the ultimate goal of the supervisory committee's selection and recruitment and serves as the standard for assessing the scientificity and effectiveness of the selection and recruitment process and for facilitating the proper discharge of the Board's oversight responsibilities.

5.4. Theoretical Saturation Test

The theoretical saturation test is applied to determine the endpoint of the sampling analysis coding, specifically, the point at which new samples cease to generate novel theories or reveal additional attributes of the core categories. After completing the coding and analysis of the remaining event samples in this study, no emerging concepts, categories, or new characteristics associated with core categories were found, thereby confirming the theoretical model's saturation.

5.5. Supervisory Board Governance Capacity Indicator System

After applying the three-tiered coding scheme rooted in procedural grounded theory and carrying out a theoretical saturation test, we were able to identify three discrete categories—fundamental characteristics, general competency, and specialized competency. These categories, spanning eight dimensions, namely individual characteristics, value judgment, experience acquisition, communication and collaboration, resource integration, general work obligations, professional application, and business acumen, form the bedrock of sustainable governance practices, thereby aligning corporate conduct with overarching sustainability objectives. Moreover, we established a set of 42 specific indicators pertaining to supervisory board governance competence (see Table 6). Each of these indicators embeds a sustainability viewpoint, further strengthening the board's commitment to sustainable development.

Table 6. Governance capacity indicator system for supervisory board members oriented towards governance capacity strengths.

Type	Ability Profile	Breakdown of Competency Needs
Features	Individual characteristics	Personal reputation, big picture, work ethic, government resources, people resources, self-management
	Value judgements	Motivation, authority, independent judgement, values, job diligence
	Experience	Industry perspective, management experience, work experience and rewards
General purpose capabilities	Communication and collaboration	Relationship building, rapport, presentation skills, conflict management, teamwork
	Integration of resources	Integration of approaches, resource mix, innovative mix
	Job requirements	Organizational skills, application skills, data processing, logical analysis, learning and summarizing, execution
Specialized capabilities	Professional application	Financial knowledge and application, legal knowledge and application, personnel knowledge and application, management knowledge and application, professional judgement
	Business competence	Workflow control, advocacy, risk prevention, strategic control, system monitoring, forensic skills, questioning skills, audit collaboration, report review

Source: Compiled by the author.

As outlined in Table 6, the “characteristics” category comprises individual traits, notably a person’s social resources, broad-based vision, and credible resources. These traits highlight the social reputation and external networking resources of supervisory board members, providing external support for the progression of oversight responsibilities. Value judgments encapsulate board members’ core values and motivations, acting as internal drivers for supervisory tasks.

Experience acquisition is attributed to the supervisory board members’ managerial and other experiences, which form a foundation for stability and efficiency in board work aligned with sustainable corporate practices. Communication and coordination involve establishing connections with the audit department, attentively considering employee needs, communicating these needs to management, and demonstrating proficiency in resolving disagreements and internal collaboration issues. Resource integration refers to the harmonization of working methods, requiring accurate and efficient supervision in the oversight process, in collaboration with the audit committee, external auditors, and internal oversight members from each department.

General work obligations involve organizing and evaluating work, enforcing oversight policies promptly, identifying underlying trends from past cases, and guiding current and future work practices with increased sensitivity towards duties. The last four elements pertain to general work abilities and are thus categorized as “general competencies”.

The professional application represents the specific skills required of supervisory board members to fulfill oversight duties, such as financial and legal knowledge, and the capacity to conduct financial and compliance oversight. This category denotes the standby ability of the supervisory board to assess potential violations by directors and executives.

Business acumen, an all-encompassing requirement for the various facets of the supervisory board’s work, encompasses risk control, advisory roles, evidence collection, and auditing. These represent the necessary business skills to achieve oversight objectives and, together with professional application, form the “professional competencies” category.

6. Summary and Conclusions

6.1. Conclusions

Prevailing research maintains that, within the Chinese context, supervisory boards have traditionally lacked substantial influence over corporate governance [12,13]. Consequently, a pressing need has arisen to establish reliable indicators of supervisory board governance capabilities. Such metrics are vital to amplifying the overarching efficacy of supervisory boards and thus enhancing the cumulative governance standards of corporations. The purpose of this study is twofold: first, to elucidate the somewhat vague boundaries of supervisory competencies, and second, to offer a thorough representation of the internal governance mechanisms within supervisory boards. This approach enables us to view the board from a governance capability standpoint and ensure the impartiality of the corresponding indicators. Utilizing the grounded theory methodology, this study embarked on an empirical journey exploring five distinct cases, thus summarizing and refining the governing capabilities of supervisory boards. This analysis culminated in a comprehensive collection of governance capacity indicators, neatly categorized into three domains: basic characteristics, general competence, and professional competence. These domains further diverge into eight dimensions, incorporating forty-two detailed items. This meticulous examination across a variety of industries and case types demystifies the previously unclear boundaries of a supervisor’s capabilities, offering an exhaustive portrayal of the supervisory board’s internal governance mechanisms.

6.2. Theoretical Implications

Contributing substantially to theoretical discourse, this research meticulously identifies specific indicators defining the governance capabilities of supervisory boards in listed companies, with a special focus on corporate sustainability. Countering the limited scope often exhibited in preceding research, it acknowledges the intricate, interconnected influences

that shape supervisory governance collectively [52–54]. These past studies, by virtue of their single-faceted analysis of factors such as knowledge or expertise, have inadvertently ignored the multifaceted dynamics in practical applications [55]. This study addresses these shortcomings, employing grounded theory to build a comprehensive framework encapsulating sustainability governance capability [19]. Second, the research sheds light on the essential determinants of a supervisory board's sustainability governance capability. In the existing literature, individual case studies have often examined the impact of specific factors, but they fail to provide a holistic understanding of the various governance capabilities critical to supervisory boards of listed companies in a sustainable context [56,57]. This lacuna not only thwarts practical work from utilizing theoretical research but also impedes the conduct of targeted investigations in subsequent studies [19]. The research underscores the necessity for a supervisory board to encompass a broad range of qualifications, allowing it to play an indispensable role in monitoring the board of directors and senior management in listed companies. Finally, this study, through the lens of a competency–job match, pinpoints the leading elements and core sustainable factors in supervisory board governance capabilities in five different industry companies. In doing so, it lays an empirical groundwork for future research and concurrently expands the theoretical perspective of supervisory board sustainability.

6.3. Practical Implications

The practical outcomes of this research are significant. First and foremost, supervisory boards of publicly traded companies should aim for a wide range of capabilities to counterbalance any inherent deficiencies and achieve robust sustainability governance. While board members with specialized expertise, such as environmental science or social equity, may not encapsulate all governance capabilities, their input can considerably augment the sustainability foundations of the board's decisions. Secondly, priority should be given to those who can proficiently blend general and specialized sustainability-related competencies. Lastly, careful allocation of human resources can help avoid duplicating skills within the supervisory board, particularly those related to sustainability. From the standpoint of resource dependency, enterprises, during the selection process for supervisory board members, might encounter multiple candidates endowed with a legal background. In such instances, evaluating their legal prowess becomes pivotal. Nevertheless, in the interest of sustainable corporate governance, it is advisable to induct just one of these potential supervisors into the board. This tactical decision effectively curtails compositional redundancy within the supervisory board and, consequently, helps circumvent undue financial outlay.

6.4. Limitation and Future Research Direction

Despite the rigorous application of grounded theory to refine governance capacity indicators from a sustainability viewpoint, this study is not without limitations. The potential subjectivity of the methodology may introduce biases. Future research could employ quantitative methods to empirically validate these findings and further refine the categories. Additionally, the universality of the findings is yet to be determined due to the focus on five diverse companies. Future research could strive to validate the theoretical framework of this study through more expansive empirical investigations. Finally, although this study systematically identifies sustainability-related governance indicators, it does not delve deeply into the primary factors, the relationships between core sustainability factors, or the weighted importance of each indicator. This omission leaves room for future scholarly endeavors in the field of corporate sustainability governance.

Author Contributions: Conceptualization, X.Z. and B.G.; methodology, L.H.; writing—original draft preparation, B.G.; writing—review and editing, B.G.; supervision, X.Z. and L.H.; project administration, X.Z. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Ran, G.; Fang, Q.; Luo, S.; Chan, K.C. Supervisory board characteristics and accounting information quality: Evidence from china. *Int. Rev. Econ. Financ.* **2015**, *37*, 18–32. [\[CrossRef\]](#)
2. Tam, O.K.; Hu, H.W. The supervisory board in chinese corporate governance. In *China, Hong Kong and the World Economy: Studies on Globalization*; Palgrave-Macmillan: London, UK, 2006; pp. 329–349.
3. Xi, C. In search of an effective monitoring board model: Board reforms and the political economy of corporate law in China. *Conn. J. Int. L.* **2006**, *22*, 1.
4. Dahya, J.; Karbhari, Y.; Xiao, J.Z.; Yang, M. The usefulness of the supervisory board report in china. *Corp. Gov. Int. Rev.* **2003**, *11*, 308–321. [\[CrossRef\]](#)
5. Wei, G.; Geng, M. Ownership structure and corporate governance in china: Some current issues. *Manag. Financ.* **2008**, *34*, 934–952.
6. Shi-Quan, W.; Jin-Yan, L. The market for controlling rights, independent directors system and supervisory board governance—a new view based on comparative institutional analysis. In *Proceedings of the 2006 International Conference on Management Science and Engineering*, Lille, France, 5–7 October 2006; pp. 736–742.
7. Aldiabat, K.M.; Navenec, C.-L.L. Data saturation: The mysterious step in grounded theory methodology. *Qual. Rep.* **2018**, *23*, 245–261. [\[CrossRef\]](#)
8. Song, X.; Su, W.-H.; Liu, Y. The impact of the supervisory board supervision on firm performance: Evidence from chinese listed firms. *Rev. Econ. Financ.* **2019**, *16*, 47–58.
9. Peck, S.; Ruigrok, W. Hiding behind the flag? Prospects for change in German corporate governance. *Eur. Manag. J.* **2000**, *18*, 420–430. [\[CrossRef\]](#)
10. Syed, M.W.; Li, J.; Junaid, M. Relationship between human resource management practices, relationship commitment and sustainable performance. *Green Financ.* **2020**, *2*, 227–242. [\[CrossRef\]](#)
11. Mutlu, C.C.; Van Essen, M.; Peng, M.W.; Saleh, S.F.; Duran, P. Corporate governance in China: A meta-analysis. *J. Manag. Stud.* **2018**, *55*, 943–979. [\[CrossRef\]](#)
12. Clarke, D.C. The independent director in chinese corporate governance. *Del. J. Corp. L.* **2006**, *31*, 125.
13. Guo, L.; Smallman, C.; Radford, J. A critique of corporate governance in china. *Int. J. Law Manag.* **2013**, *55*, 257–272. [\[CrossRef\]](#)
14. Qian, Y.; Wu, J. China's transition to a market economy. In *How Far across the River*; Stanford University Press: Redwood City, CA, USA, 2003; pp. 31–63.
15. Xiao, J.Z.; Dahya, J.; Lin, Z. A grounded theory exposition of the role of the supervisory board in China. *Br. J. Manag.* **2004**, *15*, 39–55. [\[CrossRef\]](#)
16. Firth, M.; Fung, P.M.; Rui, O.M. Ownership, two-tier board structure, and the informativeness of earnings—evidence from China. *J. Account. Public Policy* **2007**, *26*, 463–496. [\[CrossRef\]](#)
17. Jensen, M.C.; Meckling, W.H. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financ. Econ.* **1976**, *3*, 305–360. [\[CrossRef\]](#)
18. Salancik, G.R.; Pfeffer, J. A social information processing approach to job attitudes and task design. *Adm. Sci. Q.* **1978**, *23*, 224–253. [\[CrossRef\]](#)
19. Fama, E.F. Agency problems and the theory of the firm. *J. Political Econ.* **1980**, *88*, 288–307. [\[CrossRef\]](#)
20. Markman, G.D.; Balkin, D.B.; Schjoedt, L. Governing the innovation process in entrepreneurial firms. *J. High Technol. Manag. Res.* **2001**, *12*, 273–293. [\[CrossRef\]](#)
21. Ashfaq, K.; Rui, Z. The effect of board and audit committee effectiveness on internal control disclosure under different regulatory environments in south Asia. *J. Financ. Rep. Account.* **2019**, *17*, 170–200. [\[CrossRef\]](#)
22. Hillman, A.J.; Dalziel, T. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Acad. Manag. Rev.* **2003**, *28*, 383–396. [\[CrossRef\]](#)
23. Zahra, S.A.; Pearce, J.A. Boards of directors and corporate financial performance: A review and integrative model. *J. Manag.* **1989**, *15*, 291–334. [\[CrossRef\]](#)
24. Nguyen, Q.K. Determinants of bank risk governance structure: A cross-country analysis. *Res. Int. Bus. Financ.* **2022**, *60*, 101575. [\[CrossRef\]](#)
25. Dang, V.C.; Nguyen, Q.K. Internal corporate governance and stock price crash risk: Evidence from vietnam. *J. Sustain. Financ. Invest.* **2021**, 1–18. [\[CrossRef\]](#)
26. Nguyen, Q.K. The impact of risk governance structure on bank risk management effectiveness: Evidence from Asean countries. *Heliyon* **2022**, *8*, e11192. [\[CrossRef\]](#)
27. Young, M.N.; Peng, M.W.; Ahlstrom, D.; Bruton, G.D.; Jiang, Y. Corporate governance in emerging economies: A review of the principal–principal perspective. *J. Manag. Stud.* **2008**, *45*, 196–220. [\[CrossRef\]](#)
28. Lau, C.-M.; Tse, D.K.; Zhou, N. Institutional forces and organizational culture in China: Effects on change schemas, firm commitment and job satisfaction. *J. Int. Bus. Stud.* **2002**, *33*, 533–550. [\[CrossRef\]](#)

29. Tam, O.K. Ethical issues in the evolution Ofcorporate governance in China. *J. Bus. Ethics* **2002**, *37*, 303–320. [[CrossRef](#)]
30. Glaser, B.G.; Strauss, A.L.; Strutzel, E. The discovery of grounded theory; strategies for qualitative research. *Nurs. Res.* **1968**, *17*, 364. [[CrossRef](#)]
31. Glaser, B.; Strauss, A. Applying grounded theory. *Grounded Theory Rev.* **2014**, *13*, 46–50.
32. Gephart, R.P., Jr. Qualitative research and the academy of management journal. *Acad. Manag. J.* **2004**, *10510*, 454–462. [[CrossRef](#)]
33. Dalton, D.R.; Daily, C.M.; Ellstrand, A.E.; Johnson, J.L. Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strateg. Manag. J.* **1998**, *19*, 269–290. [[CrossRef](#)]
34. Jamali, D.; Lund-Thomsen, P.; Jeppesen, S. SMEs and CSR in developing countries. *Bus. Soc.* **2017**, *56*, 11–22. [[CrossRef](#)]
35. De Villiers, C.; Naiker, V.; Van Staden, C.J. The effect of board characteristics on firm environmental performance. *J. Manag.* **2011**, *37*, 1636–1663. [[CrossRef](#)]
36. Jizi, M.I.; Salama, A.; Dixon, R.; Stratling, R. Corporate governance and corporate social responsibility disclosure: Evidence from the us banking sector. *J. Bus. Ethics* **2014**, *125*, 601–615. [[CrossRef](#)]
37. Charmaz, K. Teaching theory construction with initial grounded theory tools: A reflection on lessons and learning. *Qual. Health Res.* **2015**, *25*, 1610–1622. [[CrossRef](#)] [[PubMed](#)]
38. Liu, F.; Kang, J. A grounded theory approach to the subjective understanding of urban soundscape in Sheffield. *Cities* **2016**, *50*, 28–39. [[CrossRef](#)]
39. Strauss, A.L.; Corbin, J.M.; Niewiarra, S.; Legewie, H. *Grounded Theory: Grundlagen Qualitativer Sozialforschung*; Beltz, Psychologie-Verlag-Union: Weinheim, Germany, 1996.
40. Vollstedt, M.; Rezat, S. An introduction to grounded theory with a special focus on axial coding and the coding paradigm. *Compend. Early Career Res. Math. Educ.* **2019**, *13*, 81–100.
41. Eisenhardt, K.M.; Graebner, M.E. Theory building from cases: Opportunities and challenges. *Acad. Manag. J.* **2007**, *50*, 25–32. [[CrossRef](#)]
42. Simons, H. Interpret in context: Generalizing from the single case in evaluation. *Evaluation* **2015**, *21*, 173–188. [[CrossRef](#)]
43. Yin, R.K. *Case Study Research: Design and Methods*; Sage: Newcastle upon Tyne, UK, 2009; Volume 5.
44. Creswell, J.W.; Hanson, W.E.; Plano, V.L.C.; Morales, A. Qualitative research designs: Selection and implementation. *Couns. Psychol.* **2007**, *35*, 236–264. [[CrossRef](#)]
45. Langley, A.; Kakabadse, N.; Swailes, S. Longitudinal textual analysis: An innovative method for analysing how realised strategies evolve. *Qual. Res. Organ. Manag. Int. J.* **2007**, *2*, 104–125. [[CrossRef](#)]
46. Bryant, A.; Charmaz, K. *The Sage Handbook of Current Developments in Grounded Theory*; Sage: Newcastle upon Tyne, UK, 2019.
47. Corbin, J.; Strauss, A. Grounded theory research: Procedures, canons, and evaluative criteria. *Qual. Sociol.* **1990**, *19*, 418–427.
48. Ma, F.; Chen, J. Research on the evolution mechanism of incubator business model based on grounded theory. *Sci. Sci. Manag. S T* **2014**, *35*, 130–136.
49. Pandit, N.R. The creation of theory: A recent application of the grounded theory method. *Qual. Rep.* **1996**, *2*, 1–15. [[CrossRef](#)]
50. Finlay, L. Five lenses for the reflexive interviewer. In *The SAGE Handbook of Interview Research: The Complexity of the Craft*; Sage: Newcastle upon Tyne, UK, 2012; pp. 317–333.
51. Walker, D.; Myrick, F. Grounded theory: An exploration of process and procedure. *Qual. Health Res.* **2006**, *16*, 547–559. [[CrossRef](#)] [[PubMed](#)]
52. Wang, B.; Liu, M.; Su, W.B. Is the governance of the Supervisory Board effective? Based on the perspective that internal auditors are also members of the supervisory Board. *Nankai Bus. Rev.* **2018**, *21*, 76–89.
53. Zhang, Y. Research on management mechanism of bank group balance sheet based on organizational perspective. *Financ. Regul. Res.* **2021**, *15*, 71–85.
54. Ran, G.K.; Fang, Q.L.; Luo, S. Are Chinese companies' supervisory boards ineffective. *Economist* **2015**, *9*, 73–82.
55. Zhu, D.H.; Chen, G. Narcissism, director selection, and risk-taking spending. *Strateg. Manag. J.* **2014**, *36*, 2075–2098. [[CrossRef](#)]
56. Ren, C.Y.; Li, Q. Study on influencing factors of accounting fraud risk index of listed companies. *Mod. Econ. Sci.* **2017**, *39*, 67–75+126–127.
57. Li, C.E.; Xie, Y.Z. Board power hierarchy, innovation strategy and private enterprise growth. *Foreign Econ. Manag.* **2017**, *39*, 70–83.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.