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LA GOBERNANZA EMPRESARIAL EN CHINA Y SUS EFECTOS EN LA INFORMACIÓN SOBRE LOS OBJETIVOS DE DESARROLLO SOSTENIBLE

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CORPORATE GOVERNANCE IN CHINA AND THE EFFECTS ON SUSTAINABLE DEVELOPMENT GOALS REPORTING

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RESUMEN

En las últimas décadas China ha experimentado un rápido crecimiento económico convirtiéndose en una de las mayores economías del mundo. Al mismo tiempo, China se caracteriza por poseer un sistema de gobierno corporativo único debido a su especial contexto político, jurídico y cultural. Así, estudiar dicho sistema permite una comprensión académica y teórica más amplia del gobierno corporativo, especialmente en países en desarrollo, comparándolo y diferenciándolo de los sistemas de gobierno corporativo de otros países desarrollados. Por ello, la muestra de estudio de esta investigación está formada por empresas cotizadas chinas e intenta examinar los distintos aspectos del gobierno corporativo, lo que permite distinguir e identificar la validez de las teorías occidentales en el contexto particular chino e informar sobre los resultados de nuevas investigaciones para complementar el conocimiento del gobierno corporativo en el contexto de las economías emergentes o en transición.

El propósito de esta investigación es doble. En primer lugar, ofrecer una revisión bibliográfica sistemática y un análisis teórico sobre la literatura y evidencia previa del gobierno corporativo en China. En segundo lugar, explorar cómo las características del consejo de administración y los factores de propiedad influyen en el reporte del cumplimiento con los denominados Objetivos de Desarrollo Sostenible (ODS). En el capítulo 1, así, ofrecemos una revisión sistemática de la literatura y un análisis teórico sobre el gobierno corporativo en las empresas chinas basado en 357 estudios publicados entre 2010 y 2022. Realizamos una revisión sistemática que considera tres aspectos claves a analizar: el marcos teórico que sustenta la evidencia hasta la fecha, los determinantes y las consecuencias. Aplicando la herramienta Science Mapping Analysis Tool (SciMAT), se identifican cinco aspectos clave: economías emergentes, impacto, empresas, grupos empresariales y costes. Otros temas, como las conexiones políticas y las empresas estatales también han cobrado protagonismo en los últimos años. Además, el análisis longitudinal pone de relieve tres rutas de evolución destacadas, que son "economías emergentes - economías emergentes - conexiones políticas", "impacto - costes/empresas - costes", e "incentivos - impacto - costes". Por último, señalamos tres futuras vías de investigación analizando la conocurrencia de palabras clave mediante VOSviewer: (1) conexiones políticas, (2) responsabilidad social de las empresas, y (3) mecanismos de mercado.

El capítulo 2 explora cómo las características del consejo de administración y los factores de propiedad afectan al reporte informe de las empresas chinas sobre el cumplimiento con los ODS y cuáles son los factores que ejercen una mayor influencia. Analizando 455 empresas cotizadas chinas de 2016 a 2018, concluimos que la

independencia del consejo, el tamaño y la existencia de un comité de sostenibilidad favorecen que las empresas reporten sobre su cumplimiento con los ODS, mientras que los mayores niveles de propiedad extranjera o institucional están relacionados negativamente con dicha divulgación. En segundo lugar, los resultados de regresiones en dos etapas muestran como los factores del consejo de administración ejercen una mayor influencia y peso en el reportig sobre los ODS.

Nuestras principales contribuciones pueden resumirse en lo siguiente. En primer lugar, se revisa e integra la literatura sobre gobierno corporativo en China en los últimos 12 años y se presenta un resumen actualizado de la misma, identificando los principales paradigmas teóricos y las tendencias en la investigación sobre gobierno corporativo. En segundo lugar, hemos sido pioneros en el uso de SciMAT para estudiar la estructura temática del gobierno corporativo y visualizar su evolución, las interrelaciones y la dinámica en forma de clusters y redes. En tercer lugar, el estudio de la literatura en el contexto chino ha contribuido a poner de relieve los rasgos distintivos de su gobierno corporativo y a proporcionar un conocimiento más profundo de su naturaleza dinámica y compleja. En cuarto lugar, esta investigación contribuye a la literatura al examinar los impulsores del reporting sobre ODS en el sector privado y ofrecer evidencia empírica a esta corriente de investigación emergente que se encuentra en estado embrionario. Además, esta investigación, es pionera al ponderar los factores del consejo de administración y de propiedad en dicha divulgación, lo que resulta esclarecedor para que futuras investigaciones se centren en estudiar los factores vinculados con el consejo de administración.

Esta investigación no está exenta de limitaciones. Aunque es una de las contribuciones, la muestra se limita al contexto chino. En cuanto al capítulo 1, la recopilación de datos fue restringida al centrarse únicamente en los artículos en inglés publicados en WOS entre 2010 y 2022 en cinco categorías principales. En cuanto al Capítulo 2, dada la disponibilidad de información proporcionada por la base de datos GRI, el periodo de análisis se limita a 2016 a 2018. Estudios adicionales podrían abordar esta limitación expandiendo el periodo de análisis así como el número de empresas examinadas, tratando de imponer ponderaciones homogéneas para cada industria en la muestra total. Además, la falta datos adicionales limita la posibilidad de análisis de robustez con medidas alternativas. Los modelos de regresión propuestos pueden adolecer de algunas deficiencias relacionadas con variables de control que no se han incluido. Se recomienda que futuras investigaciones refuercen los resultados aquí obtenidos incluyendo variables de control adicionales que afecten a la relación examinada, así como medidas de robustez al reporting sobre ODS (por ejemplo, complejidad de la divulgación) y a las principales variables explicativas. Futuros

estudios podrían considerar examinar individualmente el impacto de cada variable explicativa sobre cada uno de los diecisiete ODS (por ejemplo, cambio climático, agua limpia y saneamiento, o eliminación de la pobreza).

Palabras clave: gobierno corporativo, China, análisis bibliométrico, mapeo científico, revisión sistemática de la literatura, consejo de administración; propiedad, información sobre los ODS.

ABSTRACT

Over the past decades, China has experienced rapid economic growth and is now one of the largest economies in the world. At the same time, China has a unique corporate governance system due to its special political, legal and cultural background. Studying this corporate governance can contribute to a broader academic and theoretical understanding of it, especially in developing countries, by comparing and differentiating it from corporate governance systems in other developed countries. Therefore, this research is based on an examination of Chinese companies and try to reveal the different aspects of corporate governance in China, thus enabling a good way to distinguish and identify the validity of western theories in the Chinese context and report on new research findings to complement the knowledge of corporate governance in the context of emerging or transition economies.

The purpose of this study is twofold. Firstly, to offer a systematic literature review and mapping analysis on corporate governance in China. Secondly, to explore how board characteristics and ownership factors affect Chinese firms' report in Sustainable Development Goals (SDGs). In Chapter 1 we provide a systematic literature review and mapping analysis on the topic of corporate governance in Chinese firms based on 357 studies published from 2010 to 2022. We conduct a systematic review that considers three aspects: the theoretical frameworks, determinants, and impacts of corporate governance in China. By applying the Science Mapping Analysis Tool (SciMAT), five dynamic motor themes are identified for the whole analysis period, which are emerging economies, impact, firms, business groups, and costs. Other themes like political connections and state-owned enterprises have also become increasingly prominent in the last few years. In addition, three prominent evolution routes are highlighted by the longitudinal analysis, which are "emerging economies – emerging economies - political connections", "impact - costs/firms - costs", and "incentives – impact – costs". Finally, we point out three future research pathways by analysing keyword co-occurrence using VOSviewer: (1) political connections, (2) corporate social responsibility, and (3) market mechanisms.

Meanwhile, Chapter 2 explores how board characteristics and ownership factors affect Chinese firms' report in SDG and which set of these two drivers exerts a greater influence. By analysing a sample of 455 Chinese listed companies from 2016 to 2018, we conclude that board independence and size and the existence of a sustainability committee favours firms addressing SDG reporting while greater levels of foreign or institutional ownership are negatively related to this reporting. Secondly,

results of two-stage logit regression reveal that board factors exert greater explanatory power and have bigger weights in affecting the SDG reporting.

Our main contributions can be outlined as follows. Regarding the first chapter, we have reviewed and integrated the corporate governance literature in China from the past 12 years and presented an updated summary of this, refining the main themes of the theoretical and practical development of this corporate governance and identifying trends in corporate governance research. Second, we have pioneered the use of SciMAT to study the thematic structure of corporate governance and to visualize its evolution, interrelationships, and dynamics in the form of clusters and networks. Third, the study of the literature focused on China has helped to emphasize the distinctive features of Chinese corporate governance and provide a deeper understanding of its dynamic and complex nature. Regarding the second chapter, we have enriched previous literature by examining the drivers of SDGs in the private sector and offered some empirical evidence to this emerging research stream that is in an embryonic state. This study is the first attempt to compare the weighting of board and ownership factors in adopting SDG reporting, which is enlightening for future research to put more efforts on the board-level factors.

This research it is not free of limitations. Although it is one of the contributions, this research is focused on the examination of Chinese companies. As for the Chapter 1, the data collection was restricted. We narrowed down our data collection by only focusing on English articles published in WOS from 2010 to 2022 in five main categories. Regarding the Chapter 2, given the availability of information provided by the GRI database, the analysis period is limited to 2016 to 2018. Thus, additional studies might address this limitation by increasing the period of analysis as well as the number of firms examined, trying to impose homogeneous weights for each industry in the total sample. In addition, the lack of data makes robustness checks using alternative indicators for the main variables impossible. And the proposed regression models may suffer some deficiencies related to control variables that have not been included. We recommend that future research reinforce the results obtained here by including additional control variables that affect the relationship here examined as well as robustness measures for SDG (e.g. by examining the comparability of the reporting about SDG) and the main explanatory variables. Future studies might consider individually examining the impact of each explanatory variable on each one of the seventeen SDGs (e.g. climate change, clean water and sanitation, or eliminating poverty).

Keywords: corporate governance, China, bibliometric analysis, science mapping,

systematic literature review, board of directors, ownership, SDG reporting.

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INTRODUCTION

Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. It involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government, and the community. The concept of corporate governance can be traced back to the early 20th century when the first modern corporations were established. Berle and Means (1932) first proposed the separation of ownership and control: divided interests of owners and operators resulted in conflicting goals of corporate behavior. However, it was not until the 1980s that the term "corporate governance" became widely used. During this time, there were several high-profile corporate scandals, such as the collapse of the Penn Central Railroad and the bankruptcy of the Lockheed Corporation, which led to increased scrutiny of corporate practices. In 1983, Fama and Jensen pointed out that the main purpose of corporate governance studies under the separation of ownership and control is to reduce agency costs. Along the way of agency theory, some researchers aim at exploring the governance mechanism, both internally and externally, to reduce the agency problems. In the 1980s, the focus of corporate governance began to expand from shareholders to a wider range of stakeholders against the background of hostile takeovers that caused great damage to the shareholders and other stakeholders (Jensen and Meckling, 1976).

In the 1990s, there was a growing recognition of the importance of corporate governance in ensuring the long-term success of companies. This led to the development of various codes and guidelines, such as the Cadbury Report in the United Kingdom and the Sarbanes-Oxley Act in the US, which aimed to improve corporate governance practices. These codes and guidelines focused on issues such as board composition, executive compensation, and financial reporting.

Today, corporate governance continues to be a key issue for companies and investors. In this respect, corporate governance research has tended to analyze mature economies for quite some time, such as the UK and the U.S., where financial markets are well developed, corporate disclosure is relatively regulated, property rights are clear, and both formal and informal institutions are efficient (Kumar and Zattoni, 2019). In Western developed capital markets, the definition of corporate governance is based more on the first type of agency problem, namely, the conflict between interest of shareholder and managers (Shleifer and Vishny, 1997). In emerging capital markets, the share in companies is highly concentrated thus the controlling shareholders control the board of directors, send their direct representatives or themselves as the

chairman or chief executive officer (CEO) of the company, and finally have the power to dominate the company's resources. They may infringe upon the interests of small and medium-sized shareholders through connected transactions and misappropriation of funds and so on. Therefore, the major agency problem is more manifested in the conflicts between the controlling shareholders and the minority shareholders (Shleifer and Vishny, 1997).

After 2010 there is a growing emphasis on corporate governance in the emerging and less developed economies, with a substantial increase in studies on emerging markets and transition economies (Li, 2016) and national-level institutions began to receive unprecedented attention (Kumar and Zattoni, 2019).

Though the practice and academic research on corporate governance in China have not been there for a long time, domestic and overseas scholars have paid high priority to it. As the second-largest economy in the world, China has achieved great economic success. At the same time, its unique cultural and institutional background provide a great opportunity for understanding corporate governance in emerging or transition economies which have not been uncovered previously.

At first, China's political economy is characterized by a mix of market-oriented reforms and state intervention. This hybrid system can create tensions and conflicts in corporate governance practices. The conflicts between government intervention and market force have always been an important character in Chinese economic development (Lennox & Wu, 2022). For example, while market-oriented reforms have led to the emergence of private companies and the development of corporate governance mechanisms, state intervention can still exert significant influence over these entities. It is obvious that the influence of government in China is pervasive, which is like an invisible hand behind all the laws and regulations on corporate governance. Largely, almost all factors regarding corporate governance, for instance, market behavior, market order, shareholder protection, financial reporting standards accounting and transparency requirement, etc. are dependent on the legislation and regulation by the Chinese government.

The regulatory environment is characterized by a centralized and interventionist approach, with the government playing a significant role in the oversight and control of listed companies with the Communist Party of China (CPC) holding significant control over the government and decision-making processes. The Chinese legal system is not independent from the government, and the enforcement of laws and regulations can be inconsistent because the courts are often seen as an extension of the government and can't guarantee the fairness. The media is heavily controlled and

regulated by the state. The government exercises strict censorship and has the power to suppress or manipulate information that is deemed sensitive or against the state's interests. Moreover, the Chinese government owns State-Owned Enterprises (SOEs) in many key industries and sectors that play an important role in the national economy to achieve the strategic goals of the country's economic development. For example, the selection of CEOs or board members of SOEs is usually subject to government intervention. The government may be more concerned with the candidates' understanding and support of national strategies and policies to appoint government officials or representatives as executives or board members to ensure that national interests and policy objectives are met. They usually consider factors such as political factors, industry experience and government background.

In addition, China has totally different culture and social norms from western countries where the contracts are the foundation in the business and the law is often used as a mechanism for enforcing the commercial contracts. By contrast, Guanxi or relationships are often valued more highly than individual achievements, and people tend to prioritize their connections with others over their own personal interests. As a result, building strong relationships with business partners, suppliers, and customers is seen as essential for success. Guanxi can help businesses navigate the complex regulatory environment in China. In many cases, having the right connections can help companies secure permits, licenses, and other approvals more quickly and easily than they would be able to otherwise. Additionally, Guanxi can help businesses avoid potential legal or regulatory issues by providing them with insider knowledge and access to key decision-makers. In China, many business deals are done through personal connections rather than formal channels. By cultivating strong relationships with key players in their industry, businesses can gain access to new markets, customers, and suppliers that they might not have been able to reach otherwise. Overall, Guanxi is a critical component of doing business in China. By building strong relationships with key players in their industry, businesses can establish trust, gain access to new opportunities, and navigate the complex regulatory environment more effectively.

All these differences undoubtedly lead to varied arrangements in corporate governance in China. First, administrative, and economic governance have long coexisted. The government has a significant influence on resource allocation and the state has a great deal of dominance over listed companies. Second, the prevalence of large controlling shareholders has led to a horizontal conflict between controlling and minority shareholders, rather than a vertical one between managers and shareholders (Jiang and Kim, 2020). Third, the absence of laws during the transition period and the

limitation of the market's error correction function led to a low level of investor protection and the omission of the stakeholders concerned. Therefore, we can clearly see the influence of the macro-level institution on the corporate governance in China.

To get a comprehensive picture of corporate governance in China, Chapter 1 therefore presents a systematic review of the literature on corporate governance based on the latest published journal papers from 2010 to 2022, to assess the current state of research and to identify valuable topics and directions through an in-depth content analysis of the theoretical foundations, drivers and resulting impacts of corporate governance. This chapter considers a sample of 357 articles published in the 107 most prestigious journals on business, management, ethics, and environmental sciences according to the journal citation reports created by the Institute for Scientific Information Web of Knowledge. We also quantify the various features of the latest articles by applying a bibliometric analysis and distinguish future research frontiers by using VOSviewer. By applying the Science Mapping Analysis Tool (SciMAT), strategic mapping as well as longitudinal and period analyses have been performed to reveal the evolution of scientific knowledge in this field. Five dynamic motor themes are identified for the whole analysis period, which are emerging economies, impact, firms, business groups, and costs. Other themes like political connections and SOEs have also become increasingly prominent in the last few years. In addition, three prominent evolution routes are highlighted by the longitudinal analysis, which are "emerging economies--emerging economies--political connection", "impact -costs/firms--costs", and "incentives--impact--costs". Finally, we point out three future research pathways by analysing keyword co-occurrence using VOSviewer: (1) political connections, (2) corporate social responsibility, and (3) market mechanisms.

What's more, in the field of corporate governance, there is increasing recognition of the importance of environmental, social, and governance factors in corporate decision-making. Particularly, the Sustainable Development Goals (SDGs) are paid increasing attention, which are a set of 17 goals adopted by the UN in 2015, aimed at ending poverty, protecting the planet, and ensuring prosperity for all. The SDGs report provides an overview of the progress made towards achieving each of the 17 goals, as well as the challenges and opportunities that lie ahead. It helps to raise awareness about the importance of the SDGs and to mobilize support for their implementation. By analysing SDG report, we can obtain a comprehensive picture of the progress made towards achieving the SDGs, as well as the gaps that still need to be addressed.

To make the SDGs reached, the private sector plays a crucial role. To start with, the companies can invest in sustainable development projects that align with the SDGs, including investment in renewable energy, sustainable agriculture, and clean water

and sanitation projects. Also, the private sector can develop new technologies and business models that promote sustainable development, for example, waste reduction and recycling promotion. Moreover, the new jobs created by the enterprises can support sustainable development, including jobs in renewable energy, sustainable agriculture, and other sectors that promote environmental sustainability. Meanwhile, the private sector can partner with governments, civil society organizations, and other stakeholders to achieve the SDGs, like collaborating on projects and initiatives that promote sustainable development. Translated, the private sector has a critical role to play in achieving the SDGs. By investing in sustainable development projects, promoting innovation, creating jobs, and partnering with other stakeholders, the private sector can help to build a more sustainable and prosperous future for all.

However, the overall action to meet SDGs is not advancing at the speed or scale expected, and the outbreak of COVID-19 has been a huge setback to achieving the 2030 goals (PwC and UNDP, 2020). Previous evidence has shown that the percentage of companies reporting their commitment to SDGs achievement is still very low, with only 16% of companies in an international sample (Rosati and Faria, 2019b), 24.6% in a European sample (Martínez-Ferrero and García-Meca, 2020) and no more than 14% of companies, including specific SDGs targets in their business strategies (PwC & UNDP, 2020). In this scenario, it is urgent to explore what encourages or compels companies to commit to SDGs in their reports.

Undoubtedly, the adoption of SDGs reporting in business varies across developed and developing countries. Most of studies about firms' reporting on SDGs focused on developed countries (Monteiro et al., 2022 with Portuguese companies; Pizzi et al., 2021 with Italian companies; Toukabri and Mohamed Youssef, 2023 with US companies; Lopez, 2020 with Spanish companies) or worldwide companies (Rosati and Faria, 2019a; Martinez-Ferrero and Garcia-Meca, 2020). As for developing countries, investigations in this field are still in their infancy and there is few literatures on how to promote business to step forward SDGs in these regions from the academic circles with very few exceptions (Buniamin et al., 2020 with Malasian companies; Kazemikhasragh et al., 2021 with African and Asian companies). To bridge the gap and add evidence to the limited and heterogeneous prior literature, we take China, one of the most influential developing countries, as an example to investigate what drives business in developing countries to engage with SDGs.

In Chapter 2 we explore the following research questions: (i) how board characteristics affect Chinese firms' report in SDGs? (ii) how ownership factors affect this reporting? And, (iii) which set of these two drivers exerts a greater influence? By analysing a sample of 455 Chinese firm-year observations from 2016 to 2018, we

tested seven hypotheses regarding the influence that board or ownership factors have on the companies' engagement in SDG reporting. And we concluded that board independence, board size and the Corporate Social Responsibility (CSR) committee positively relate to companies' engagement in SDG reporting while foreign and institutional ownership have a negative impact. Thus, Chinese firms that adopted SDG reporting are those with a larger board, more independent directors, and the presence of a CSR committee; and are those companies with higher levels of foreign or institutional ownership which are less likely to assume SDG reporting. Moreover, we further confirmed that board-level factors provide the greater capacity to predict SDGs reporting. Results revealed that, compared to ownership factors, board-level factors provide a greater explanatory capacity to predict SDG reporting, indicating the importance of board characteristics in promoting SDG reports.

In summary we have two different objectives: The first is to get a comprehensive picture of corporate governance in China by assessing the current state of research and identifying valuable topics and directions through an in-depth content analysis of the theoretical foundations. In China, the important legal, financial and institutional environment, as well as its business practices, are in a constant state of revision and adaptation. The explosive economic growth over the past 20 years has been accompanied by many changes, including many regulatory changes, the introduction of new rules affecting corporate governance in China, and so on. As a result, many even recently published articles on corporate governance in China are outdated. This not only affects the accumulation of scholarship in the field of corporate governance, but sometimes even misleads the practice of Chinese companies, making it difficult to produce real guidance. Most importantly, we aim at exploring the generalization and possible limitations of existing theories in analysing and explaining corporate governance issues in China by taking into account China's institutional background and corporate reality, as well as how to carry out and analyse relevant corporate governance research in China, and how to construct and improve relevant corporate governance mechanisms in a more efficient manner. In general, the corporate governance theories have developed based on the institutional context and corporate practices of Western countries. China has a special institutional context, the conclusions drawn from the theory applied in Western countries may differ significantly in China. So it is important to study relevant corporate governance issues in close relation to these institutional contexts.

The second objective is to bridge the gap and add evidence to the limited and heterogeneous prior literature to investigate what drives business in developing countries to engage with SDGs. Addressing SDGs in business is still an emerging

research stream and the reporting of SDGs in business is quite under-investigated in the sustainability literature. In this respect, literature on how to promote implementation of SDG report in business in developing countries is even more scarce. Our study is one of the most needed research projects investigating how to promote business to engage in SDG reporting in China. As further contribution, we examine how board and ownership-level factors are weighted in SDG reporting, concluding that compared to ownership factors, board-level factors have greater capacity to predict SDG reporting. As the first attempt to compare the weighting of board and ownership factors in adopting SDG reporting, our study is enlightening for future research: more studies on the board-level factors, such as board diversity, board composition, CEO non-duality, etc., can be conducted to test their influence.

The implications of this thesis are the following. First of all, in Chapter 1 we offer an updated literature review, summarizing the main themes of the theoretical and practical development of Chinese corporate governance and identifying trends that are closely attached importance to, which helps researchers find future directions to focus their research on. In the content analysis, we examined the literature mainly according to three aspects: the theoretical frameworks, determinants and impacts of corporate governance in China and clearly see the difference between the corporate governance in western countries and China. Therefore, it is easier to distinguish and identify the validity of western theories in the Chinese context and how the distinctive features of Chinese corporate governance influence the arrangement of corporate governance. This has allowed us to examine unresolved research questions and report on new research findings to complement the knowledge of corporate governance in the context of emerging or transition economies.

As for Chapter 2, the implications for those managers, board members, related stakeholders and even policymakers who are concerned with sustainability issues are rich. First, the company should establish a sound governance structure and strengthen its internal governance structure. Specific measures can be taken, such as establishing independent directorships and CSR committee to ensure that the company's SDGs decisions are not influenced by internal interest groups. Also, a large board can attract directors from different backgrounds and fields, thus providing a diversity of perspectives and experiences that can help companies better understand social, environmental and governance issues and develop sustainable strategies. If we really wish the female directors play an important role in the SDG reporting, we must increase the seats of female directors to over three. Moreover, when adopting SDG reporting Chinese companies need to improve the transparency and authenticity of information disclosure and establish good communication channels with foreign and

institutional owners to enhance their involvement in the operations of the company. Policymakers can set standard to improve information transparency to strengthen communication and cooperation with investors and institutions to gain more recognition and support. Thirdly, the government can improve the legal environment to attract more foreign and institutional investors to participate in the management of Chinese companies and increase their decision-making power in the long-term strategy. Some favorable policies can be introduced to attract investors who focus on environmental, social and governance issues as new shareholders or partners to ensure that SDGs are incorporated in their business strategies.

CHAPTER I

Systematic review of the literature: Corporate

Governance in China

1.1 Introduction

The discussion on corporate governance began with the modern divided corporate shareholding structure when shareholders could not reach an agreement on collective action, which weakened the supervision of company operators. Berle and Means (1932) first proposed the separation of ownership and control: divided interests of owners and operators resulted in conflicting goals of corporate behavior. In 1983, Fama and Jensen pointed out that the main purpose of corporate governance studies under the separation of ownership and control is to reduce agency costs. Along the way of agency theory, some researchers aim at exploring the governance mechanism, both internally and externally, to reduce the agency problems.

In the 1980s, the focus of corporate governance began to expand from shareholders to a wider range of stakeholders against the background of hostile takeovers that caused great damage to the shareholders and other stakeholders (Jensen and Mecklin, 1976). After the 1990s, a series of crises arising from the governance processes, such as the collapse of many companies in the UK, the Asian financial turmoil in 1997, the Enron scandal in 2001 and the bankruptcy of Worldcom in 2002, made the scholars and investors in general increasingly realize that corporate governance is the key to ensuring the healthy development of enterprises, which has further promoted the research on corporate governance in academia.

For quite some time, corporate governance research has tended to explore mature economies, such as the UK and the U.S., where financial markets are well developed, corporate disclosure is relatively regulated, property rights are clear, and both formal and informal institutions are efficient (Kumar and Zattoni, 2019). Corporate governance in other emerging and less developed economies was largely neglected until after 2010, when there was a substantial increase in studies on emerging markets and transition economies (Li, 2016) and legal as well as national-level institutions began to receive unprecedented attention (Kumar and Zattoni, 2019).

In this respect, it should be increasingly recognized that a country's corporate governance system does not exist independently of social traditions and other institutions including financial, tax, legal, and even political systems, and that changes in corporate governance systems depend on the evolution and support of other institutions. In other words, these macro-level institutional environments, which consist of property rights protection, government governance, market competition, credit system, a contract culture, and the rule of law, etc., implicitly influence the

smooth signing and performance of contracts, which in turn affect the efficiency of corporate governance (Li, 2016). Therefore, it has become increasingly urgent to study corporate governance issues in specific institutional environments, especially the country-level characteristics of emerging economies that have not been covered by empirical studies, such as the existence of institutional voids, weak market institutions, and specific cultural characteristics (Kumar and Zattoni, 2019).

As the second-largest economy in the world, China has achieved great economic success. At the same time, its unique cultural and institutional background provide a great opportunity for understanding corporate governance in emerging or transition economies. The concrete establishment of a modern corporate system based on a market economy in China began in the 1990s. By drawing on relatively mature existing corporate governance systems and aligning with international standards, Chinese companies spent 30 years rapidly completing the development of a western corporate system which took more than 100 years in other countries. However, the corporate governance of Chinese companies, which developed under a lengthy Confucian cultural tradition and a long-standing planned economy, is clearly different from that of developed western countries. First, the government has a significant influence on resource allocation and the state has a great deal of dominance over listed companies. Although governance practices are improving, there is no doubt that administrative and economic governance have long coexisted. Second, a high level of ownership concentration means the prevalence of large controlling shareholders, which has led to a horizontal conflict between controlling and minority shareholders, rather than a vertical one between managers and shareholders (Jiang and Kim, 2020). Third, the absence of laws during the transition period and the limitation of the market's error correction function led to a low level of investor protection and the omission of the stakeholders concerned. Therefore, we should not entirely copy western corporate governance theories, but should instead pay more attention to the effectiveness of transposing western theories to the Chinese context (Yang et al., 2015).

Since the 1990s, China has seen a surge of research on corporate governance, the focus of which is mainly on how to establish a modern enterprise system, manage managerial corruption in the reform of SOEs, control the moral hazard of controlling shareholders in listed companies, and understand the impact of political relations and government intervention on corporate outcomes (Li, 2016). Of course, family and private enterprise governance are also hot issues in Chinese corporate governance research (Pandey et al., 2022).

After years of hard work, some reviews on special issues in Chinese corporate

governance already exist, which consider corporate environmental reporting in China (Yang et al., 2015), SOEs (Lin et al., 2020), the unique corporate governance features and the institutional background in the country (Jiang and Kim, 2015), or accounting and finance reviews regarding the Chinese capital market (Han et al., 2018). Sabbaghi (2016) presented a review of the literature on corporate governance in China that considered five major themes, including the concentration of state ownership, the degree of independence among board directors, insider trading, the quality of financial disclosures and the maturity of capital markets. The latest survey on the academic literature published in top journals was by Jiang and Kim (2020), in which they discussed the unique horizontal agency conflict between controlling and minority shareholders deriving from the concentrated ownership structure and explored the importance of law and institutions in alleviating the agency problem. In addition, they provided a separate discussion of corporate governance in SOEs and corporate social responsibility (CSR) in China.

Although these studies have provided many insights into corporate governance in China, they are isolated and scattered, and some are even contradictory. To obtain a comprehensive grasp of corporate governance research in China, a systematic review of these findings is necessary. Moreover, the institutional and regulatory environment of corporate governance in China has been undergoing tremendous changes, so many facts and findings from earlier stages may no longer hold true (Jiang and Kim, 2020), meaning that a review of the most recent literature is required, especially in terms of topics related to the works published within the last decade.

This study therefore presents a systematic review of the literature based on the latest published journal papers from 2010 to 2022, to assess the current state of research and to identify valuable topics and directions through an in-depth content analysis of the theoretical foundations, drivers and resulting impacts of corporate governance. This chapter considers a sample of 357 articles published in the 107 most prestigious journals on business, management, ethics, and environmental sciences according to the journal citation reports created by the Institute for Scientific Information Web of Knowledge. We also quantify the various features of the latest articles by applying a bibliometric analysis and distinguish future research frontiers by using VOSviewer. With the help of scientific mapping software such as the Science Mapping Analysis Tool (SciMAT), strategic mapping as well as longitudinal and period analyses have been performed to reveal the evolution of scientific knowledge in this field.

This chapter is structured as follows: Section 2 offers Institutional context of the private sector in China, Section 3 explains the methodology used, Section 4 deals with the source analysis, Section 5 provides the bibliometric analysis undertaken with

SciMAT, Section 6 presents the systematic literature review, Section 7 deals with the research fronts determined by VOSviewer, and Section 8 offers the conclusions.

1.2 Theoretical Framework

1.2.1 The significance of studying corporate governance in China

Corporate governance plays a vital role in ensuring the efficient functioning of companies and maintaining investor confidence. In the past decades, China has experienced rapid economic growth and since 1980s the GDP growth in China has been leading the world despite of smaller gap in the last five years (seen in Figure 1). Now China has become one of the world's largest economies. As a result, understanding the corporate governance practices in China is crucial for investors, policymakers, and researchers who want to engage with Chinese companies or analyze the Chinese market.

Firstly, China has its unique corporate governance system, which is influenced by its political, legal, and cultural context. Understanding these factors is crucial for comprehending the challenges and opportunities that Chinese companies face. For instance, the presence of SOEs and the influence of the government in the corporate sector are distinctive features of China's corporate governance landscape.

Secondly, studying corporate governance in China allows us to examine the effectiveness of regulatory frameworks and identify areas for improvement. China has been making efforts to enhance its corporate governance practices, and studying these developments can provide valuable insights into the effectiveness of various reforms and policies.

Furthermore, it is never correct to say that all researches regarding corporate governance in China are generalisable (Lennox & Wu, 2022). However, studying corporate governance in China contributes to the broader academic and theoretical understanding of corporate governance. By comparing and contrasting the Chinese system with those of other countries, researchers can identify best practices and develop theories that can be applied in similar countries or economies globally.

In conclusion, studying corporate governance in China is crucial due to its economic significance, the need for transparency and accountability, the unique characteristics of the Chinese system, the evaluation of regulatory frameworks, and the advancement of academic knowledge.

TREND (-) COUNTRY PROFILE, KEY INDICATORS Developing economies — World — China — Advanced economies

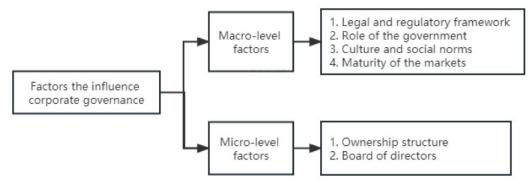
Figure 1 Real GDP growth (Annual percent change)

Source: International Monetary Fund

1.2.2 Factors that influence corporate governance in China

Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. It involves the relationships between various stakeholders, such as shareholders, management, employees, customers, suppliers, and the community. The primary objective of corporate governance is to ensure that the company operates in a transparent, accountable, and ethical manner, while maximizing shareholder value and protecting the interests of other stakeholders. There are several factors that influence corporate governance in China, which can be divided into macro-level and micro-level factors (Figure 2).

Figure 2 Factors that shape corporate governance



According to Wong (2016), macro-institutional factors at the national level have a constraining influence on corporate governance. In general, the macro-level factors mainly include legal and regulatory framework, role of the government, culture and social norms, maturity of the markets. Institutions in a country influence corporate governance to ensure stability, protect stakeholders, promote accountability and transparency, create fair and efficient markets, foster long-term sustainability, and enhance international competitiveness. By establishing and enforcing rules, regulations, and codes of conduct, institutions contribute to the overall governance framework that governs companies' behavior and decision-making and ensure that companies act in the best interests of their stakeholders, which fosters trust and encourages stakeholders to actively participate in corporate governance processes. Also, it prevents market manipulation, insider trading, and other fraudulent activities. These regulations create a level playing field for companies and investors, ensuring that governance practices are fair and transparent. Strong institutions provide stability and confidence in the business environment. When companies operate in a country with well-established institutions, investors and stakeholders have greater trust in the governance practices of those companies.

In fact, the governance structure of Chinese companies is modeled after the Western model. Firstly, China has borrowed the legal framework and institutional design of Western companies; in 1994, China promulgated the Company Law of the People's Republic of China, which is basically based on the principles and provisions of Western company law. This law establishes the basic principles of corporate status, protection of shareholders' rights and interests, and corporate governance structure, and provides the legal basis for corporate governance in China. Second, China actively introduced Western corporate governance practices and mechanisms. Listed companies in China began to adopt the Western system of boards of directors and set up institutions such as independent directors and supervisory boards to strengthen internal corporate supervision and management. In addition, China introduced an equity incentive system to encourage employee shareholding and equity incentives to improve corporate performance and competitiveness. These micro-level factors directly influence the corporate governance, which mainly include the ownership structure and board of directors.

1.2.2.1 Macro-level factors

Legal and regulatory framework

The legal and regulatory framework plays a crucial role in shaping corporate

governance practices. In China, the Company Law¹, Securities Law², and other regulations provide the foundation for corporate governance standards. The Chinese government uses a lot of rules and regulations to steer the economy (Lennox & Wu, 2022). Capital markets are regulated by authorities such as the China Securities Regulatory Commission (CSRC), which has implemented regulations requiring listed companies to disclose financial information, related-party transactions, and corporate governance structures. In section 2.3.2 we will introduce CSRC in detail.

Also, China has issued the Guidelines on Corporate Governance for Listed Companies and the Guidelines on Corporate Governance for SOEs providing recommendations and best practices for companies to enhance their governance structures, board composition, risk management, and internal controls. In order to strengthen shareholders' interests, the revised Company Law in 2013 introduced provisions to enhance shareholders' rights to participate in decision-making, access information, and receive dividends.

Generally speaking, China has made progress by strengthening shareholder protection laws and regulations, implementing regulations that require companies to disclose financial information, related-party transactions, and other relevant information to improve transparency. However, there are still concerns that we have to take seriously. Firstly, China's legal system faces challenges in enforcing shareholder rights, including corruption, inadequate resources, and a lack of independence in the judiciary. Minority shareholders in China often face limited legal remedies when their rights are violated. The legal framework lacks effective mechanisms to protect minority shareholders' interests, such as the ability to file lawsuits or seek compensation for damages. In China, there have been instances where minority shareholders' rights have been disregarded, particularly in cases involving SOEs. This includes issues such as unequal voting rights, limited access to information, and inadequate representation on boards of directors. According to Wong (2016), the judicial system in China is not dependent from the government and their judgement can be biased after SOEs are involved.

Secondly, there have been concerns about the quality and completeness of information disclosed by Chinese companies. Lack of transparency in financial reporting, related-party transactions, and corporate governance structures has been a significant issue,

¹ The Company Law of the People's Republic of China provides the basic legal framework for corporate governance in China. It sets out the rights and obligations of shareholders, directors, and supervisors, and establishes rules for corporate decision-making, financial reporting, and shareholder protection.

² China's securities regulations, including the Securities Law and the regulations of the China Securities Regulatory Commission (CSRC), govern the issuance, trading, and disclosure of securities.

making it difficult for shareholders to access relevant information about the company's operations, finance, and decision-making processes. Undoubtedly, the disclosure requirements and reporting standards in China may not be as stringent as in some other developed countries. Also, inconsistent enforcement, weak penalties for non-compliance, and the influence of political factors on regulatory decisions have made the transparency issue even more serious.

Role of the government

The Chinese government exerts a stronger influence on the economy than perhaps any other middle-income or high-income country in the world (Naughton, 2017). The political economy is a deciding feature of China. To start with, the Chinese government steer the economy through a series of policies, regulations, which sets guidelines and standards for corporate behavior, monitors compliance, and intervenes in cases of misconduct or financial instability. To be specific, the government establishes laws and regulations that govern corporate governance practices in China. These include the Company Law, Securities Law, and other regulations issued by regulatory bodies like the CSRC and the State-owned Assets Supervision and Administration Commission (SASAC). These laws and regulations set the standards for corporate governance practices and provide guidelines for companies to follow. Also, government regulatory bodies, such as the CSRC and SASAC, oversee and monitor corporate governance practices in China. They enforce compliance with laws and regulations, conduct inspections, and impose penalties for non-compliance. Through these oversight mechanisms, the government influences companies to adhere to prescribed corporate governance standards. We have to understand government is an invisible hand behind all these laws and regulations.

Moreover, the government still controls most of the important areas of the economy by maintaining significant ownership stakes in many companies, particularly in strategic sectors such as energy, telecommunications, and finance despite of various reforms. Through SOEs, the government exercises direct control over these companies, influencing their governance structures and decision-making processes. The government has a say in the appointment of executives and board members in both state-owned and private companies. For state-owned companies, the government typically appoints senior executives and board members, ensuring that its interests are represented. For the purpose of ensuring that the company's activities align with the party's objectives and policies, the Chinese Communist Party (CCP) has established party committees in many companies in both state-owned and private enterprises. Party committees can influence corporate governance by participating in key decisions and providing guidance to the company's management. Even in private

companies, the government may influence appointments indirectly through its relationships with key stakeholders or through regulatory approvals. This can lead to a blurring of boundaries between the state and corporate interests, potentially affecting transparency and accountability.

Culture and social norms

Cultures and social norms play a significant role in shaping corporate governance practices in China. Guanxi, the Chinese concept of building and maintaining relationships, is crucial in business interactions. In corporate governance, this can lead to the appointment of directors based on personal connections rather than merit. Board members may prioritize maintaining relationships with key stakeholders, such as government officials or business partners, over their fiduciary duties to shareholders. Also, Chinese society values collective goals and harmony over individual interests. This can influence corporate governance practices by prioritizing consensus-building and avoiding conflicts or confrontations. Board decisions may be made through consensus rather than vigorous debate, potentially limiting the diversity of perspectives and independent thinking. Moreover, Confucian values, deeply rooted in Chinese culture, emphasize respect for authority and hierarchical relationships. This hierarchical structure often translates into a top-down decision-making process within Chinese corporations, where power is concentrated at the top. This can impact the independence and effectiveness of boards of directors, as decision-making authority may be centralized.

Maturity of the markets

Capital markets and financial markets play a significant role in influencing corporate governance. While China's capital and financial markets have made great strides in recent years, they lag relatively behind in terms of size, sophistication, investment opportunities and openness to foreign investment. The U.S., for example, has a relatively mature capital and financial market with a sound financial regulatory system, accounting standards and investor protection laws. It also offers a wider range of investment opportunities and a wide variety of financial instruments, including stocks, bonds, options, futures and derivatives. By contrast, China's financial system is still evolving, with concerns in transparency, corporate governance and investor protection. At the same time, China's financial market is still dominated by stocks and bonds with less choices of financial instruments. Moreover, the U.S. has a perfect foreign investment regulatory system, whose capital and financial markets are more open to foreign investment, therefore foreign investors can freely invest in the U.S. financial market. By contrast, China's financial market is still very restrictive to

foreign investment.

Most importantly, government influence and intervention is omnipresent in China's capital and financial markets. It relies heavily on administrative norms from the CSRC to oversee IPOs (Initial Public Offerings) and subsequent stock offerings, with opaque accounting information and weak investor protection (Wong, 2016). At the same time, there is no mature market for managers. This is because the chairmen and CEOs of state-owned enterprises are not selected on the basis of merit in the professional managerial market, but based on a bureaucratic channel similar to the selection of officials. Most of these chairmen and CEOs are government officials or have political backgrounds, and their appraisal and promotion mechanisms are also based on political factors as well as internal loyalties and so on.

1.2.2.2 Micro-level factors

China has actively introduced Western corporate governance practices and mechanisms. Listed companies in China have begun to adopt the Western system of boards of directors, and have set up institutions such as independent directors and supervisory boards to strengthen internal corporate supervision and management. In addition, China has introduced an equity incentive system to encourage employee shareholding and equity incentives to improve corporate performance and competitiveness. These internal factors directly influence the corporate governance, which mainly include the ownership structure and board of directors. Firstly, the ownership structure of companies in China can significantly impact corporate governance. SOEs dominate several sectors, and their governance is influenced by government policies and objectives. On the other hand, privately-owned companies may have different governance structures and practices. Secondly, the composition and effectiveness of the board of directors are crucial for good corporate governance. In China, boards typically consist of representatives from different stakeholders, including shareholders, employees, and government officials. In section 2.4 we will introduce these two factors in detail.

1.2.3 Institutional context

This section introduces the important facts regarding institution background of corporate governance in China. Specifically, we describe the capital market in China and share split reform, and introduce securities regulator, SASAC, and the influence of political economy.

1.2.3.1 Capital market in China and share split reform

For quite a long time before 1978, China was under a planned economy, when almost all enterprises were completely owned and controlled by the government. After the reform and opening up, with the full launch of China's economic reform, the elements that would shape China's capital market began to emerge along with the development of the shareholding economy. The first joint stock company, Chengdu Industrial Exhibition and Sales Trust, emerged in 1980, Shanghai Feile Audio was the first to publicly issue A shares in 1984 and over-the-counter stock trading began in Shanghai two years later.

In 1990s when the Chinese government opened the stock market: the Shanghai Stock Exchange (1990) and the Shenzhen Stock Exchange (1991) came into existence, ending the absence of a formal stock exchange in China and marking that the Chinese stock market began to take shape. The Shanghai Stock Exchange has just a main board and a science and technology innovation board where most stocks are a series of state-owned central enterprises. By contrast, the Shenzhen Stock Exchange has three boards: a main board, a board for small and medium sized enterprises (founded in 2004), and a Growth Enterprise Market board (founded in 2009). The stocks listed on the Shenzhen Stock Exchange are mainly technology growth stocks, which are more volatile and have high growth potential.

Originally, A-share is common domestic share subscribed and traded in RMB, which was restricted to Chinese investors while B-share is subscribed and sold in foreign currency, U.S. dollars or Hong Kong dollars, which was limited to foreign investors, though B-shares have the same cash flow rights as A-shares. If the shares are crosslisted, they are called H-shares (listed in Hong Kong), N-shares (New York), S-shares (Singapore), and L-shares (London). In order to bring in foreign capital, the B-share market was created in early 1992. Shanghai Direct Air Electronic Devices Co., Ltd. issued a total of one million RMB special shares with a face value of RMB 100 to overseas investors and was listed on the Shenzhen Stock Exchange in 1992, which was the first B-share in the Chinese securities market. Qingdao Beer became the first state-owned enterprise to issue H shares in July 1993. From 1996 onwards, the pace of new share issues and listings began to accelerate and shares became the main channel for SOEs to raise funds. By the end of 2000, the number of listed companies in Shanghai and Shenzhen reached 1,097, ranking 1st in the world's stock markets in terms of the number of listed companies; the market value of stocks totalled US\$617 billion, ranking 10th in the world's stock markets. After 2001, local Chinese can own B-share and qualified foreign institutional investors (QFIIs) can own A-shares after 2003.

However, the lack of a legal basis and institutional foundation has led to the lack of a

regulatory system for the capital market, a chaotic market structure, low information transparency and chaotic trading. For instance, in August 1992, the "8-10 Incident" in Shenzhen caused chaos by a stock rush, revealing the shortcomings of the capital market's lack of a unified management system³.

Therefore, government regulation and institutional improvements are important. The main regulator of securities markets, CSRC was formed in 1992 which will be discussed in the following section. Company Law and the Securities Law came into force in 1994 and 1999 respectively, laying the legal foundation for the establishment of China's corporate governance framework. In 2002, Code of Corporate Governance of Listed Companies was jointly issued by CSRC (which will be discussed later) and the National Economic and Trade Commission for the purpose of improving the corporate governance of Chinese listed companies, which explained the basic principles of corporate governance and many other related issues. A reform aiming at institutional investors, represented by funds and brokerages, began with the regulation of fund companies in 2002, followed by a large-scale comprehensive regulation of brokerage firms in the second half of 2003. Also, the Regulations on Securities Firms were promulgated and implemented in 2002, which set out the principles of internal control and risk management of securities firms and allowed foreign institutions to set up Sino-foreign equity firms in China.

The share split reform in 2005 is a prominent stage in the privatization process in China⁴, when Chinese government decided to convert all non-tradable shares into tradable shares by offering compensation plans to tradable shareholders in exchange for the right to list their shares. Thus the share split reform rectified the long-standing division of interests between non-tradable and tradable shareholders, rationalized the market pricing mechanism, eliminated institutional differences in the transfer of shares in the market, and is of historical significance in restoring the functions of the capital market and thus promoting an all-round reform of the capital market.

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³ On 10 August 1992, Shenzhen has announced that 5 million new share subscription lottery forms with a total quota of 500 million yuan will be put up for sale to ensure maximum access to shares. From the 8th onwards, more than 1.2 million prospective shareholders from the city and across the country lined up in front of the city's 302 offering outlets. By the morning of 10 August, all the lottery forms were sold out, and as a result, only a very small number of investors who had queued all night were able to buy the lottery forms, which was later found to be fraudulent at many issuing outlets. In the evening of that day, thousands of shareholders who did not buy the lottery forms marched through Shenzhen's Shennan Road Central with slogans against corruption and demands for justice, and laid siege to the municipal government and the People's Bank.

⁴ Early in the 1990s the shares of Chinese companies were divided into tradable and non-tradable shares. To enable the government to have a final say in the company, two-thirds of the shares were non-tradable and the controlling shareholder held non-tradable shares (mainly national and legal persons). It resulted in big problem: non-tradable shareholders have no incentive to maximize the stock price because they can't benefit directly from stock appreciation (Firth, et al., 2010).

To sum up, over the past twenty years, China's capital market has undergone a process of development from exploration to gradual promotion, from start-up to rapid development, from immaturity to gradual improvement, enabling China to basically complete the transformation from a poor capital country to a large capital country.

1.2.3.2 Securities regulator

CSRC was formed in 1992 and legally established as China's main regulator of securities markets in 1998 Securities Act. After the establishment of CSRC, its scope of authority gradually expanded with the development of the market. In November 1993, the State Council decided to assign the implementation of the pilot futures market to the CSRC, and in March 1995, the State Council formally established the CSRC as a vice-ministerial-level institution directly under the State Council to supervise the securities and futures markets in accordance with the provisions of laws and regulations. In August 1997, the Shanghai and Shenzhen Stock Exchanges were unified under the supervision of the CSRC; in November, the Central Government decided to transfer the securities operators formerly supervised by the People's Bank of China to CSRC for unified supervision. In April 1998, the Securities Commission of the State Council merged with the CSRC, indicating a centralised and unified national securities regulatory system was basically formed.

The main responsibilities of CSRC are: (1) to formulate policies on the securities and futures markets; (2) to lead the national securities and futures regulators and exercising centralized and unified supervision of the securities and futures markets; (3) to regulate the issuance, listing, trading, and settlement of stocks, convertible bonds, and bonds of securities company; (4) to regulate the listing, trading and settlement of domestic futures contracts; to supervise domestic institutions engaging in offshore futures business; (5) to regulate various financial institutions, such as securities and futures operators, securities investment fund management companies, securities registration and settlement companies, futures settlement institutions, securities and futures investment advisory institutions, securities credit rating institutions, etc.; (6) to investigate and punish securities and futures violations in accordance with the law.

CSRC has no legislative power to make violators criminally punishable but has freedom to issue judgments and fines in securities-related litigation. It mainly focuses on five types of conduct, including market manipulation, illegal operations (securities services), violations (brokerage futures), illegal shareholding reduction and short-term trading.

1.2.3.3 State-owned Assets Supervision and Administration Commission

State-Owned Assets Supervision and Administration Commission (SASAC), established in 2003, is the agency that oversees SOEs as a shareholder of SOEs on behalf of the state and reports directly to the State Council. which can be divided into central SASAC and local SASAC where the central SASAC owns and supervises larger and more important SOEs in industries that are lifeline of the national economy and security, whereas local SASAC owns and supervises smaller and less important SOEs. According to the Interim Regulations on the Supervision and Administration of State-owned Assets of Enterprises, state-owned assets are owned by the State, and the central and local governments respectively perform the duties of capital contributors on behalf of the State, enjoy the rights and interests of owners, have unified rights, obligations and responsibilities, and manage assets, people and affairs.

The main responsibilities of SASAC include: (1) to perform the duties of capital contributor in accordance with the State Council's authorization and to supervise the state-owned assets of the enterprises under the Central Government (excluding financial enterprises) and to strengthen the management of state-owned assets; (2) to establish and improve the system of indicators for the preservation and appreciation of state-owned assets, formulates assessment standards; (3) to guide the reform and restructuring of SOEs, promote the construction of a modern enterprise system for SOEs, improve the corporate governance structure, and promote the strategic adjustment of the layout and structure of the state-owned economy; (4) to appoint and dismiss the heads of the enterprises under its supervision through statutory procedures, and improve the incentive and restraint system for operators; (5) to organise the submission of state-owned capital gains by the enterprises under their supervision, and be responsible for the preparation and execution of the state-owned capital management budget and other work; (6) to draft laws and regulations on the management of state-owned assets, and provide guidance and supervision on the management of local state-owned assets in accordance with the law.

1.2.4 Internal variables of corporate governance in China

Internal variables of corporate governance in China mainly include the board structure and ownership arrangements, which are going to be introduced in this section.

1.2.4.1 Board structure in China

As can be seen from the Figure 3 below, China adopts a dual board system, which is comprised of the board and supervisory board. Different from German companies in which the board is under the control of the supervisory board, the supervisory board in Chinese firms is only a supervisory body not a decision-maker. The Supervisory Board, which will be discussed later, consists of at least three members, at least one of

whom represents the employees and one of whom represents the Party Committee.

Shareholder Meeting

Recruiting & Selecting

Supervisory

Board

Supervising

Recruiting & Selecting

Board

Independent

Directors

Shareholder

Supervisor

Shareholder

Supervisor

Supervisor

Supervisor

Figure 3 Corporate Internal Governance Framework of Listed Companies in China

Source: Internal Corporate Governance (Li, 2016)

Board

The board of directors is elected by the shareholders' meeting and is the main force in the internal governance of the company. It has been 29 years since 1994, when the Company Law was first promulgated and implemented, when Chinese companies were legally required to establish a board of directors. In Company Law, the main regulations about the board include the board size, board leadership structure, the responsibilities of the board, board independence (which will be discussed in the following section).

Article 45 of the Company Law provides that a limited liability company shall have a board of directors consisting of three to thirteen members; for limited liability companies established by two or more SOEs or two or more other state-owned investment entities, the board of directors shall include representatives of the employees of the company, and the board of directors of other limited liability companies may include representatives of the employees of the company. The staff representatives on the board of directors shall be democratically elected by the staff of the company through the staff congress or in other forms. The board of directors shall have a chairman and may have a vice-chairman. Article 109 promulgates that a company limited by shares shall have a board of directors consisting of five to nineteen members. The members of the board of directors may include representatives of the employees of the company. The staff representatives on the board of directors shall be democratically elected by the staff of the company through a staff congress, a staff meeting or in other forms. Article 46 provides that the term of office of the directors shall be prescribed by the Articles of Association, but each term shall not exceed three years. Directors shall be eligible for re-election at the end of their term of office.

The Board of Directors shall be responsible to the shareholders' meeting and shall exercise the following powers (Article 47): (1) to convene meetings of the shareholders' meeting and report to the shareholders' meeting; (2) to implement the resolutions of the shareholders' meeting; (3) to decide on the company's business plans and investment plans; (4) to formulate the company's annual financial budget plan and final accounts plan; (5) to formulate the company's profit distribution plan and plan to make up for losses; (6) to formulate the company's plan to increase or reduce its registered capital and to issue corporate bonds; (7) to designate the plan for the merger, division, dissolution or change of corporate form of the company; (8) to decide on the establishment of the internal management bodies of the company; (9) to decide on the appointment or dismissal of the manager of the company and his remuneration etc.

In the U.S., the board's main responsibilities include hiring, firing and evaluating the company's CEO, determining the remuneration of the company's executives, planning for succession at the top and ensuring that the company complies with relevant regulations. In addition, there is a consensus that the board's role is to monitor senior management but not to interfere with the day-to-day running of the company and its decisions. In China, however, the board has a more direct influence on management. It is not only responsible for hiring, firing and evaluating the company's management, but is also the decision maker on the company's operations and investment planning, the company's budget and the allocation of profits.

At the same time, there are a number of differences in the committees under the board of directors in the US and China. In the US, almost all companies have established three key committees, namely the audit committee, the compensation committee and the nomination committee. Most of the directors on these committees are outside directors. The audit committee has access to all financial information of the company and its main responsibilities are to advise on audit issues, improve financial disclosure procedures and ensure effective financial oversight. Similarly, in order to avoid conflicts of interest, management remuneration should be determined by external board members, hence the need for an independent remuneration committee. The nomination committee is essentially responsible for the nomination of new directors.

In China, according to the 2018 Revised Code on Governance of Listed Companies, the board of directors of listed companies should likewise establish an audit committee and may set up relevant specialised committees such as strategy, nomination, remuneration and evaluation as required. The special committees are

accountable to the board of directors and perform their duties in accordance with the articles of association and the authority of the board of directors, and the proposals of the special committees shall be submitted to the board of directors for consideration and decision. The members of the special committees are all directors, of which the audit committee, nomination committee and remuneration and appraisal committee should have a majority of independent directors and be the convenor, and the convenor of the audit committee should be an accounting professional. However, in practice, these three committees are still in many ways a mere formality. A study⁵ conducted on the basis of "self-examination reports and rectification plans" published by 1250 listed companies showed that: out of a sample of 1249 valid companies, 33.55% had not established a nomination committee, 25.54% had not established a strategy committee and 22.18% had not established a remuneration committee.

Independent directors

The introduction of the independent director system in China's joint stock companies began with companies listed on overseas stock exchanges. Since overseas stock exchanges such as the New York Stock Exchange require listed companies to establish an independent director system, overseas listed companies engaged independent directors in accordance with the relevant requirements in order to meet the listing standards of overseas stock exchanges. For example, in 1993, Tsingtao Brewery issued H shares and established two independent directors in accordance with the relevant requirements of the Hong Kong Stock Exchange, thus becoming the first H-share company to introduce independent directors. Since then, with the introduction of a series of rules and regulations such as the Guidelines on the Articles of Association of Listed Companies, the Opinions on Further Promoting the Standardised Operation and Deepening Reform of Overseas Listed Companies, the Guiding Opinions on the Establishment of an Independent Director System in Listed Companies and the Guidelines on the Governance of Listed Companies on the Shanghai Stock Exchange, the qualifications for appointment of independent directors and the proportion of independent directors on the board of directors of listed companies in China Clear regulations have been made.

On 16 December 1997, the CSRC issued the Guidelines on the Articles of Association of Listed Companies, which stipulates in Article 112 that a company may have independent directors as required. An independent director may not be a shareholder

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⁵ Source: Internal Corporate Governance (Li, 2016)

or an employee of a shareholder; an employee of the company (e.g. a manager or an employee of the company); or a person who has an interest in a related person or in the management of the company. This article specifically states that it is not mandatory and the company is free to choose. This is the first time that the system of independent directors is provided for in the relevant regulatory documents in China and is a preliminary attempt to introduce the system of independent directors in China. Although the Guidelines are not mandatory, they are a clear guide for listed companies to be in line with international standards.

On 29 March 1999, the former State Economic and Trade Commission (SETC) and the CSRC jointly issued the Opinions on Further Promoting Standardised Operation and Deepening Reform of Overseas Listed Companies, which clearly set out the requirements for overseas listed companies to gradually establish a sound system of outside directors and independent directors. Article 6 of the Opinions stipulates that companies should increase the proportion of outside directors; when the board of directors is renewed, outside directors should account for more than 1/2 of the board of directors and there should be more than 2 independent directors; outside directors should have sufficient time and the necessary knowledge and ability to perform their duties; when outside directors perform their duties, the company must provide the necessary information; the opinions expressed by independent directors should be set out in the resolutions of the board of directors; and the company's connected transactions should be set out in the resolutions of the board of directors. The company's connected transactions must be signed by the independent directors before they become effective; more than two independent directors may propose the convening of an extraordinary general meeting, and the independent directors may report directly to the general meeting, the CSRC and other relevant authorities. The rights of independent directors are further clarified in this provision, but it is only applicable to companies listed outside of China and is not mandatory for companies within China.

On 16 August 2001, the CSRC issued the "Guiding Opinions on the Establishment of an Independent Director System in Listed Companies", which required that every listed company in China should establish an independent director system and appoint appropriate persons as independent directors, including at least one accounting professional. By 30 June 2002, the board of directors should include at least two independent directors, and by 30 June 2003, the board of directors of listed companies should include at least 1/3 of independent directors. In addition, the Opinions also set out detailed provisions on the qualifications for appointment, selection procedures, remuneration and authority to act as an independent director. It is an important step in

strengthening the supervision and control mechanism of listed companies and marks the full implementation of the independent director system for listed companies in China.

On 7 January 2002, the CSRC formally issued the Code of Governance for Listed Companies, Chapter 3, Section 5 of which is the independent director system, stipulating that listed companies shall establish an independent director system in accordance with the relevant provisions. Independent directors shall be independent of the company they are employed by and its major shareholders; they shall have a duty of good faith and diligence to the company and all shareholders; and they shall perform their duties conscientiously in accordance with the requirements of relevant laws, regulations and the articles of association to safeguard the interests of the company as a whole, with particular attention to the legitimate rights and interests of small and medium shareholders from being compromised. The Code extends the scope of application of independent directors to all listed companies.

In order to further promote the implementation of the independent director system, the CSRC also promulgated the Notice on Further Regulating the Work Relating to Initial Public Offerings of Stocks in September 2003, stipulating that at least 1/3 of the members of the board of directors of a company shall be independent directors in its initial public offering, and that the provision of independent directors shall also become one of the main audit elements in the refinancing review. 27 October 2005 The new Company Law, which was adopted at the 18th Session of the 10th National People's Congress, has been formally implemented since 1 January 2006 and has become the new guideline for the operation of companies. Article 123 of the Law provides that listed companies shall establish independent directors and the specific measures shall be prescribed by the State Council]. In this way, the appointment of independent directors becomes a statutory obligation for listed companies.

Supervisory board

In 1993, the Company Law was promulgated to formally establish the legal status of the supervisory board in the company. The specific provisions of the Company Law on the supervisory board system show that the supervisory board system essentially inherits some of the functions of the trade unions and staff councils from the "old three councils", i.e. the "party committee, trade unions and staff councils", which have been in place in Chinese SOEs. This reflects not only the historical and international experience (e.g. the Japanese model of corporate governance and the German employee supervisory system), but also the fact that China is following the path of a socialist market economy in which all people are in charge of their own

affairs. At the same time, the supervisory board system also provides a transitional mechanism for participation in the party committees that are disappearing along with the deepening reform of SOEs.

In addition, in order to strengthen the supervision of large SOEs, on 7 May 1998, the State Council issued a programme for sending inspectors to key large SOEs. In view of the realistic results achieved by the inspector system, in September 1999, the Decision of the Central Committee of the CPC on Several Major Issues of Reform and Development of SOEs determined that the inspector system should be continued on a trial basis and that the supervisory committee system should be improved and standardised. The Interim Regulations on Supervisory Boards of SOEs of 15 March 2000 and the Code of Governance for Listed Companies jointly published by the CSRC and the State Economic and Trade Commission on 9 January 2002 further expanded the scope of supervision by supervisory boards and clarified the corresponding powers and responsibilities. On 27 October 2005, the newly revised Company Law divided the powers of the Supervisory Board, adding to the previous powers "the right to dismiss, the right to propose", "the right to convene and preside over shareholders' meetings", "the right to initiate proceedings" and "the right to initiate proceedings". These powers have been increased to further strengthen the duties of the Supervisory Board.

1.2.4.2 Ownership

The shareholding structure of China's listed companies can be divided into several types, such as state-owned shares, institutional shares, individual shares, employee-owned shares and foreign shares. Among them, state-owned shares account for a relatively large proportion, mainly because the state is the controlling shareholder of SOEs after they are listed to the capital market. At the same time, as China's current shareholding reform is still in progress, making the shareholding structure relatively concentrated, with a small number of shareholders often able to exercise control over the company.

State ownership

Unlike most countries in Europe and the United States, many of companies in China are SOEs after restructuring and equity reform. SOEs are extremely significant components in the Chinese economy. According to Xu (2004), China's largest shareholder owns 43% of the shares. After 2005, the number of SOEs in the FG500 experienced a rapid increase and a slow drop after 2015. Besides the 75 large SOEs in the FG500, China has more than 150,000 SOEs (Lin et al., 2020). Later study by

Jiang and Kim (2015) shows the largest shareholder in the listed firms takes up over one-third.

According to the report on the management of state-owned assets provided by the State Council to the National People's Congress in 2019, the total assets of state-controlled enterprises in the financial sector nationwide amounted to RMB 264.3 trillion in 2018, accounting for 82% of the total assets of RMB 321.8 trillion of legal entities in the financial sector nationwide. The total assets of non-financial enterprises (RMB 537.8 trillion) and financial enterprises (RMB 321.8 trillion) in the country were RMB 859.6 trillion, of which the total assets of state-controlled enterprises in the non-financial (RMB 219.8 trillion) and financial (264.3) categories were RMB 484.1 trillion, accounting for the total assets of non-financial and financial enterprises in the country 56.3% of the total amount of RMB859.6 trillion.

And in the past two years, the total growth in the assets of SOEs nationwide has been very large and very high, much higher than the growth rate of the assets of enterprises in other economic components. According to the State Council's report to the National People's Congress, between 2018 and 2020, the total assets of non-financial SOEs and financial enterprises nationwide grew from RMB 474.7 trillion to RMB 591.7 trillion, an increase of RMB 117 trillion or 24.6% in two years; of which equity assets grew from RMB 75.9 trillion to RMB 98.7 trillion, an increase of RMB 22.8 trillion or 30%. As a result, the share of SOE assets in the country's total corporate assets already exceeds 60% in 2020!

Though SOEs are often regarded to operate inefficiently, China's economy, heavily dependent on SOEs, has achieved great success. On the one hand, the advantages of SOEs are obvious: 1) SOEs can go beyond the goal of purely commercial interests and take on social objectives such as maintaining social stability, boosting employment and providing infrastructure development. Because the market economy often fails in non-competitive areas with externalities, it cannot provide sufficient public and quasi-public goods for economic and social development. Complete and sufficient public goods are the skeleton of the market, and the market itself cannot complete the construction of its skeleton, relying only on the state-owned economy and SOEs. In the early and middle or even late stages of any country's industrialisation, it was almost always SOEs that built the main skeleton of the market. Without the state providing various public goods and services, such as transport infrastructure, communications, water supply, etc., it would have been inconceivable for China's private enterprises to have achieved what they have done so far. 2) SOEs have multiple financing channels and low financing costs due to government endorsement and support. According to the CSMAR database, the average interest

rate on loans for SOEs is 6.2%, while the average interest rate on loans for private enterprises is 7.09%, a difference of 0.81%. If SOEs also paid the same interest rate on loans as private companies, their profits would fall by an average of 15.15%. In terms of both the size of the loan and the timing of the loan, SOEs have a significant advantage due to the government's support. As SOEs have more repayment credit, they are able to obtain large loans and generous repayment terms. Given the shared nature of state-owned property rights between state-listed companies and state-owned banks, banks are more willing to provide more long-term debt financing to state-listed companies for political purposes. 3) SOEs, whose main owners are governments, are not required to pay large dividends to private shareholders. Dividends are a large part of the Western economy, accounting for approximately 5% of the US GDP. Dividends that would be paid to private shareholders in the West can be invested through SOEs in China. Private shareholders in the West use part of their dividends for consumption. This is a key reason why China's level of investment is so much higher than that of the US. According to the latest available internationally comparable data, 45.9% of China's GDP was invested in fixed investment in 2013, compared to 18.9% in the US. SOEs, in turn, have raised the level of investment across the economy. As investment is the main driver of economic growth, this has boosted the performance of the Chinese economy. 4) the government, has a significant impact on the way the company operates and even has effective control of it. As the ultimate holding owner, the government can directly influence the management of SOEs by controlling highlevel appointments (Firth et al., 2007; Chen et al., 2013). As a result, the government maintain control over key elements of society or certain strategic industries, such as oil, gas, and other industries by appointing the top leaders in the SOEs.

On the other hand, SOEs have a number of disadvantages relative to private enterprises, some of the main ones include: 1) Poor market competitiveness: SOEs are usually funded by the government, so they usually have a higher budget than private enterprises, which gives them an advantage in the market. However, SOEs also lack market competitiveness due to their complex organisational structure, slow decision-making and unclear property rights. This makes it difficult for them to adapt to market demand and to adjust their strategies and business models quickly. 2) Insufficient profit motive: The main objective of SOEs is usually not to make a profit, but to serve the public or achieve government policy objectives. This means that they may not pursue profit and efficiency as aggressively as private enterprises, but may be more concerned with other aspects such as employee welfare, stability and social responsibility. 3) Inefficient management: SOEs have a hierarchical structure that prevents the efficient transfer of information: information comes from the production level and is used by executives or the agents who have the information will use it to

negotiate their interests, which result in serious agency cost. Due to their large organisational structures and complex decision-making processes, SOEs are often less flexible than private companies in responding to changing market demands. Their decisions may need to be approved at multiple levels, which can lead to slow response times and missed market opportunities. 4) Employee motivation issues: As SOEs usually offer relatively stable jobs and benefits to their employees, employees may feel a lack of motivation and creativity. This can lead to a lack of motivation and responsibility on the part of employees, which can affect the organisations overall efficiency and ability to innovate.

The agency problem in SOEs between controlling shareholders and minority shareholders has always been a concern since the controlling shareholder has full control of the company's board of directors and management team, making it difficult for the company's internal governance to function effectively (Jiang and Kim, 2020). The specific manifestations of extracting private benefits at the expense of minority shareholders include, but are not limited to: 1) controlling shareholders disregard the interests of minority shareholders and creditors by not paying dividends or paying less dividends and defaulting on a large number of debts; 2) controlling shareholders of the company take advantage of the relationship between the enterprises they directly or indirectly control to transfer the interests of the company for connected transactions; 3) controlling shareholders disclose information irregularly and fail to explain significant operating activities, accordingly hiding or concealing the operating losses of the business. The main reasons are poor liquidity of the controlling shareholder's share, pyramid ownership structures (where control of a firm is obtained through a chain of companies), and political Connections (Jiang and Kim, 2020).

Also, the agency problem in SOEs is also manifested in conflicts between managers and controlling shareholders. Inflation of on-the-job spending, misappropriation and diversion of assets by managers, and the short-termism of business decisions by managers etc. Normally this kind of agency problem is solved by an effective labor market which does not exist in China because personnel decisions in SOEs are made by the state or local government instead of the labour market, resulting in a mechanism to encourage managers to carry out political policy rather than profitability.

Institutional and foreign ownership

The share of institutional and foreign investor ownership is relatively small and limitations for them are gradually being liberalised. Institutional investors in China include financial firms, insurance firms, securities companies, trust companies,

supplementary pensions, QFIIs, social insurance funds and mutual funds (Jiang and Kim, 2015).

The presence of foreign shares will help increase the openness of China's listed companies to the capital market while also increasing the financial stability, market influence and competitiveness of the company. In addition, foreign shares will also have an impact on the management mindset, operational mechanism and standard requirements of domestic listed companies, which will require listed companies to have a global perspective and market dynamics.

In the 1990s onwards, the Chinese government introduced closed-end funds, open-end mutual funds, index funds and insurance companies are allowed to hold shares. On 5 November 2002, the People's Bank of China and the CSRC jointly issued the Interim Measures for the Administration of Domestic Securities Investment by Qualified Foreign Institutional Investors, which marked the official launch of the QFII system in China. In May 2003, all five QFIIs, including UBS, Nomura Securities, Citigroup Global and Morgan Stanley International, were approved for investment quotas, with the first batch totalling US\$775 million. With the QFI, foreign investors can invest in the domestic A-share market. From then on, QFIIs can not only hold B-shares but also A-shares⁶. In June 2007 the CSRC promulgated the Trial Measures for the Administration of Overseas Securities Investment by Qualified Domestic Institutional Investors, marking the beginning of domestic investment institutions' participation in overseas investment.

Managerial ownership in China

Managerial ownership in Chinese companies refers to the ownership stake held by the managers or executives of the company. It represents the percentage of shares or equity that the managers hold in the company they work for. In China, managerial ownership can vary depending on the type of company and its ownership structure. In SOEs, the managerial ownership is typically held by the government or government-appointed representatives. The managers are often government officials or individuals appointed by the government to oversee and manage the operations of the company. In these cases, the managers may not have a direct personal ownership stake in the company. In non-SOEs, such as privately-owned or publicly listed companies, managerial ownership can be more diverse. Managers may hold shares or equity in the company, either through direct ownership or through stock options or other

.

⁶ A-share is common share subscribed and traded in RMB. Before 2003, A-share was restricted to Chinese investors. B-share is subscribed and sold in foreign currency, US dollars or Hong Kong dollars. In the beginning, B-share was limited to foreign investors. Until 2001, local Chinese can own B-share.

incentive schemes. The level of managerial ownership can vary depending on the company's policies, corporate governance practices, and individual agreements.

In general, managerial ownership in China is small, as can be seen from the Table 1. The average percentage of managerial ownership in Non-SOEs only accounted for 0.08% in 1999 to 2003. The shares of managerial ownership in SOEs were even smaller than that in Non-SOEs, from only 0.07% in 1999 to 00.39% in 2012. It means the managerial shares never worked as a great incentive for the manager in SOEs, therefore it cannot be a effective mechanism to eliminate the agency problem in Chinese companies at the turn of 21 century, especially in SOEs. However, the share by managers in Non-SOEs went up fast, the highest of which came in 2012, claiming at 16.58%. It reflects the role of managers in corporate governance in Non-SOEs greatly improved.

1.2.5 Differences of institutional background between China and US

There are several key institutional differences between listed firms in China and listed firms in the U.S (Table 2). These differences can be categorized into various aspects, including law and regulatory frameworks, role of the government, ownership structures, management system of the CEOs and board members, social norms and culture, media and information control. Here are some of the main differences:

Law and Regulatory Frameworks

China and the U.S. have different law and regulatory frameworks governing their listed firms. In China, the regulatory environment is characterized by a more centralized and interventionist approach, with the government playing a significant role in the oversight and control of listed companies because China is a one-party socialist state, with the CPC holding significant control over the government and decision-making processes. The Chinese legal system is heavily influenced by the government, and the enforcement of laws and regulations can be inconsistent because the courts are often seen as an extension of the government. Therefore, it is doubtful that the courts can issue fair judgment when the SOEs are involved.

By contrast, the U.S. has a more market-oriented regulatory framework, with the Securities and Exchange Commission (SEC) overseeing the functioning of the capital markets since U.S. is a democratic republic where power is divided among the executive, legislative, and judicial branches. The courts are independent from the government, and the judiciary is meant to be a check on the power of the other branches. The government has little control over the courts and market self-discipline and investor protection are highly valued.

Table 1 Managerial ownership in Chinese companies		
	SOEs	Non-SOEs
Year	Mean	Mean
1999	0.0007	0.0008
2000	0.0005	0.0017
2001	0.0004	0.0034
2002	0.0008	0.0109
2003	0.0009	0.0252
2004	0.0017	0.0431
2005	0.0015	0.0391
2006	0.0016	0.0478
2007	0.0019	0.0802
2008	0.0026	0.1049
2009	0.0023	0.1050
2010	0.0035	0.1446
2011	0.0059	0.1657

0.1658

Source: Jiang and Kim (2015) from China Stock Market and Accounting Research database

2012

0.0039

Table 2 Differences of institutional background between China and US				
	China	U.S.		
Law and Regulatory Frameworks	China is a one-party socialist state, with the CPC holding significant control over the government and decision-making processes. The courts are often seen as an extension of the government. The government has a greater degree of control over the courts and the legal process. Jury trials and class action suits are relatively rare. The regulatory framework is centralized and interventionist, with the government playing a significant role in the oversight and control of listed companies.	U.S. is a democratic republic with a system of checks and balances, where power is divided among the executive, legislative, and judicial branches. The courts are independent from the government, and the judiciary is meant to be a check on the power of the other branches. The government has little control over the courts. Jury trials are a fundamental part of the legal system. Class action suits are common. The regulatory framework is market-oriented, where more attention is paid to market self-discipline and investor		
Role of the government	The government is an invisible hand behind all the laws and regulations on corporate	protection. The government is independent from the law and regulatory frameworks on corporate		

governance.

- The government still controls most of the important areas of the economy by taking large share in SOEs, particularly in strategic sectors such as energy, telecommunications, and finance.
- The government plays a significant role in allocating capital and controlling the flow of funds, which can impact the financing options available to listed firms.
- The ownership is highly concentrated. A large share of listed firms are owned by the government or state.
- The SOEs play a dominant role, and the government often retains a significant ownership stake.
- The government has a say in the appointment of CEOs and board members in the SOEs, therefore the main motivation of these managers is to gain bureaucratic promotion.
- The criteria of the appointing CEOs or board members in SOEs usually considers factors such as political factors, industry experience and government background.
- The CCP has established party committees in many companies. Party committees can influence corporate governance by participating in key decisions and providing guidance to the company's management.
- Building and maintaining strong personal relationships (guanxi) is crucial for successful business dealings.

Social norms • and culture •

Ownership

Structures

Management

system of the

board members

CEOs and

Contract is less valued than guanxi.
 Strong hierarchical structure is reflected in business relationships.
 Respect for authority and seniority is important, and decisions are often made by top-level executives.

Media and information control

The media is heavily controlled and censored by the government, with strict regulations on content and limited freedom of the press. governance.

- The government prefers to maintain relatively little intervention and allow market freedom and competition.
- In the United States, private enterprise dominates with relatively little government ownership and control of these enterprises.
- The ownership is highly dispersed.
- Listed firms are typically privately owned or publicly traded.
 - The selection of CEOs or board members of listed companies is usually more market-based and competitive, with the shareholders or board of directors of the company responsible for making decisions. The main motivation of these managers is to get maximal economical benefits.
- The criteria of the appointing CEOs or board members usually focus more on the professional competence, managerial experience and track record of candidates.
- Contracts are commonly used with law ensuring its implementation.
- the U.S. tends to have a more transactional approach, focusing on efficiency and results rather than personal relationships.
- There is a greater emphasis on individualism and meritocracy with a flatter organizational structure.
- The U.S. has a free and independent media landscape, with a variety of privately-owned media outlets that provide diverse viewpoints.

Role of the government

The role of the government is a key point to understand the unique characters of corporate governance in China. We must admit that the influence of government in China is pervasive, which is like an invisible hand behind all the laws and regulations on corporate governance. To a large extent, almost all factors regarding corporate governance, for instance, market behaviour, market order, shareholder protection, financial reporting standards accounting and transparency requirement, etc. are dependent on the legislation and regulation by the Chinese government. Also, the Chinese government owns SOEs in many key industries and sectors that play an important role in the national economy. Through SOEs, the government controls and manages important resources and industries in order to achieve the strategic goals of the country's economic development. The government influences market competition and resource allocation through the ownership and regulation of SOEs.

By contrast, the government prefers to maintain relatively little intervention and allow market freedom and competition in U.S.. The government is independent from the law and regulatory frameworks on corporate governance. In the U.S., capital markets are more developed and provide a wider range of financing options, including equity and debt markets, which is different from that in China the four main state-owned banks control the access to financing and debt for listed companies.

Ownership Structures

Another significant difference lies in the ownership structures of listed firms. In China, the ownership structure of listed companies is often characterized by a dominant presence of SOEs. The Chinese government maintains control over many key industries and sectors, and as a result, a significant portion of listed companies are either fully or partially owned by the state. These SOEs often have a complex ownership structure, with the government holding a majority stake and other shareholders, such as employees or institutional investors, holding minority stakes. However, the ownership structure of listed companies in the US is predominantly characterized by private ownership. Publicly traded companies in the US are typically owned by a diverse range of shareholders, including individual investors, institutional investors (such as mutual funds and pension funds), and company insiders (such as executives and employees). The ownership of these companies is determined by the buying and selling of shares on stock exchanges, and ownership stakes can be freely traded.

Management system of the CEOs and board members

In China, the selection of CEOs or board members of SOEs is usually subject to government intervention. The government may be more concerned with the candidates' understanding and support of national strategies and policies so as to appoint government officials or representatives as executives or board members to ensure that national interests and policy objectives are met. They usually considers factors such as political factors, industry experience and government background. Therefore the main motivation of these managers is to gain bureaucratic promotion instead of economic profits.

In the U.S., the selection of CEOs or board members of listed companies is usually more market-based and competitive, which usually focus more on the professional competence, managerial experience and track record of candidates, with the shareholders or board of directors of the company responsible for making decisions. The main motivation of these managers is to get maximal economical benefits.

Social norms and culture

Guanxi, the Chinese concept of building and maintaining relationships, is crucial in business interactions. In corporate governance, this can lead to the appointment of directors based on personal connections rather than merit. Board members may prioritize maintaining relationships with key stakeholders, such as government officials or business partners, over their fiduciary duties to shareholders. However, in U.S., the contracts are the foundation in the business and the law is often used as a mechanism for enforcing the commercial contracts.

Media and information control

In China, the media is heavily controlled and regulated by the state. The government exercises strict censorship and has the power to suppress or manipulate information that is deemed sensitive or against the state's interests. The media often serves as a tool for government propaganda and promoting the ruling party's agenda. News outlets are expected to align with the government's narrative and avoid reporting on sensitive topics. By contrast, the US has a tradition of press freedom, where media outlets operate independently and have the right to report and criticize on issues of public interest, including corporate wrongdoing without government interference.

1.2.6 Characters of corporate governance China

The most salient features of corporate governance in China are political economy and the great influence of state ownership. To truly understand corporate governance in China, it is important to understand the role of government, not only in the making of rules and the enforcement of laws, but also in the enormous influence of SOEs.

Political economy

China's political economy refers to the interplay between the political system and the economic system in the country, especially the significant role that the Chinese government plays in shaping and influencing commercial practices through various policies, regulations, and institutions, which is a deciding character in Chinese institution. The impact of China's political economy on Chinese corporate governance is a complex and multifaceted issue.

One of the key aspects of China's political economy is the dominance of the CCP and its influence on decision-making processes. The CCP's control over the government and its policies can have a direct impact on corporate governance practices. For example, the government's preference for SOEs and its support for certain industries can lead to a bias in corporate governance towards these entities. This can result in a lack of transparency, accountability, and independence in the governance of these companies.

Furthermore, China's political economy is characterized by a close relationship between the government and businesses. This relationship, often referred to as "guanxi," can have both positive and negative effects on corporate governance. On one hand, the government's involvement can provide support and resources to companies, especially SOEs, which can enhance their governance practices. On the other hand, the close ties between government officials and business leaders can lead to corruption, favoritism, and a lack of checks and balances in corporate governance.

Another important aspect of China's political economy is the role of the legal system. The Chinese legal system is heavily influenced by the government, and the enforcement of laws and regulations can be inconsistent. This can create challenges for corporate governance, as companies may face difficulties in protecting shareholder rights, resolving disputes, and ensuring compliance with regulations.

Additionally, China's political economy is characterized by a mix of market-oriented reforms and state intervention. This hybrid system can create tensions and conflicts in corporate governance practices. The conflicts between government intervention and market force have always been an important character in Chinese economic development (Lennox & Wu, 2022). For example, while market-oriented reforms have led to the emergence of private companies and the development of corporate governance mechanisms, state intervention can still exert significant influence over these entities.

Overall, the impact of China's political economy on Chinese corporate governance is a complex interplay of various factors. While government involvement can provide support and resources, it can also lead to biases, lack of transparency, and corruption. The relationship between the government and businesses, as well as the influence of the legal system, further shape corporate governance practices in China. Understanding and analyzing these dynamics is crucial for assessing the effectiveness and challenges of Chinese corporate governance.

State ownership

In China, SOEs play a dominant role, and the government often retains a significant ownership stake in many listed companies. At the same time, the government appoints top executives and board members of SOEs, which allows the government to have a direct say in the management and decision-making processes of these enterprises. Therefore, the management system in the SOEs is bureaucratic and political considerations often play a role in these appointments.

Through state ownership, the government can influence the strategic direction, decision-making, and operations of these enterprises. Also, the government sets policies and regulations that impact SOEs. These policies can include industrial plans, investment guidelines, and market access restrictions. By shaping the regulatory environment, the government can influence the behavior and performance of SOEs.

As SOEs, it can gain considerable benefits from the government. Firstly, financial support through various means, such as subsidies, loans, and capital injections, can help SOEs in times of financial difficulties or enable them to pursue strategic objectives aligned with government priorities. Moreover, market access and competition can be influenced by the government to favor SOEs, which can be done through preferential treatment, such as granting SOEs exclusive rights or providing them with subsidies that give them a competitive advantage over private enterprises. Also, the government provides strategic guidance to SOEs, particularly in key sectors deemed critical to national development, including directives on investment priorities, technology development, and international expansion.

1.3 Methodology: materials and methods

To investigate the whole picture regarding corporate governance in China, we conducted a bibliometric analysis, which utilized mathematical and statistical methods to quantify the literature and its various characteristics (Pritchard, 1969). Bibliometric analyses are increasingly used for systematic research on the history, current situation, trends, and content-related structure of specific topics. At the same time, a systematic

literature review approach was also employed to provide an in-depth investigation of topics and content from a qualitative perspective. These two complementary approaches were combined to map the evolution of scientific knowledge in this specific field from both a quantitative and a qualitative perspective (Caputo et al., 2018; Pizzi et al., 2020).

1.3.1 Data collection

The sample used for this analysis was composed of documents from the Science Citation Index Expanded (SCI) and Social Sciences Citation Index (SSCI) of the Thomson Reuters Web of Science database (WOS). In the first step, we searched for author keywords utilizing the terms "China and corporate governance"; or "China and board"; or "China and ownership". At this stage, an initial group of 616 articles were found. We then narrowed the scope to focus on articles in the English language, limited to publications from the years 2010–2022⁷ in five main categories (business and finance, business, ethics, management, and environmental science). After all these filters, the final group of 357 English articles was identified. This is the sample with which we conducted the source and SciMAT analyses. For the VOSviewer analysis, we further restricted the sample to the years 2018–2022 and obtained 169 papers for the keyword co-occurrence analysis. In a systematic literature review, we manually conducted a screening process of 357 articles to remove the articles not in line with our research criteria. The detailed research design can be seen in Figure 4.

Records from SCI-Expanded and the SSCI Databases through author keyword search Systematic literature review (n = 616)Manual Selection based on the following questions: Net results by limiting to articles and English RQ1. What is the theoretical framework of corporate (n = 606)governance in China? RQ2. What are the determinants of corporate governance in China? RQ3. What are the impacts of corporate governance in China? Net results by limiting to year 2010 - 2022 with five main categories (n = 357)Net results by further limiting to year 2018 - 2022 (n = 169)Source SciMAT Analysis Analysis VOSviewer Analysis

Figure 4 Flowchart of data selection

^{*}Author keywords: "China and corporate governance"; or "China and board"; or "China and ownership"

^{*}Categories: business and finance, business, ethics, management, environmental science

⁷ All data we used was collected from WOS on June 1st, 2022.

1.3.2 Bibliometrics analysis

Compared to qualitative research, bibliometrics can analyse the evolution of a field over a long period and identify the most influential articles, journals, authors, topics, and trends in a knowledge area. Therefore, bibliometric analysis has been viewed as a legitimate method of scientific review (Donthu et al., 2021) to help researchers understand the current situation and future trends of specific topics as well as the research at the forefront of science.

As one of the two main procedures in bibliometric analysis, science mapping is a process of visualizing how topic areas, literature, or authors are interconnected based on citation data (Small, 1999). Several scientific mapping software programs have been developed. We utilized SciMAT to perform the strategic diagram, as well as the longitudinal and period analyses, and VOSviewer to identify future research trends.

SciMAT is a new open-source scientific analysis tool that combines the advantages of the science mapping software available and depends less on third-party software (Cobo et al., 2012). Built on co-word bibliographic data, it not only provides science mapping but also performance analysis, enabling researchers to identify specific or general themes and visualize the thematic evolution. Therefore, the conceptual structure, including the prominent or declining themes, links or interrelations between those themes and the thematic evolution over time, are detected and presented. VOSviewer is a software tool primarily intended for analysing bibliometric networks by creating, visualizing and exploring such maps (Van Eck and Waltman, 2010). We employed VOSviewer to analyse the future research streams based on keyword co-occurrence.

1.3.3 Systematic literature review

The systematic literature review is a type of review that systematically collects and critically analyses a body of research studies or papers with the purpose of offering a thorough summary of the available literature relevant to a research question (Kitchenham, 2004). By analysing and summarizing multiple related publications, we can evaluate the quality of existent work to spot any possible inconsistencies or contradictions and understand the breadth and depth of the existing research (Paré et al., 2015).

In this regard, a systematic literature review concerning corporate governance in China was necessary, since we aimed to perform an in-depth content analysis in the field and identify the gaps or frontiers. The process started with the final sample of the 357 papers we obtained for the science mapping (as shown in Figure 4). We then

conducted a screening process to delete the articles that were not in line with our research criterion by reading the titles and abstracts. Our literature review protocol was set based on the three following questions:

- RQ1. What is the theoretical framework of corporate governance literature in China?
- RQ2. What are the determinants of corporate governance in China?
- RQ3. What impacts does corporate governance in China have on the company performance?

1.4 Source analysis

In the last decade, research on corporate governance in emerging markets and transition economies has evolved considerably, and several active scholars have emerged. Figure 5 presents all the publications throughout the whole period. The year 2021 topped the list in terms of documents, with a total of 62 articles, followed by 2020 and 2019 with 60 and 55 articles, respectively. In general, the number of publications rose from 2010 to 2022, despite a reduction in 2011, 2015, and 2017, which indicates the increasing academic focus on this field.

As shown in Table 3, the 357 documents included in the SCI and SSCI databases that we analysed are distributed throughout 107 journals. The Asia Pacific Journal of Management tops the list with a total of 20 articles, followed by Corporate Governance: An International Review and the Journal of Corporate Finance. The number of articles published in the top 12 journals (in the SCI and SSCI databases) accounts for 47.32% of the total number of published documents.

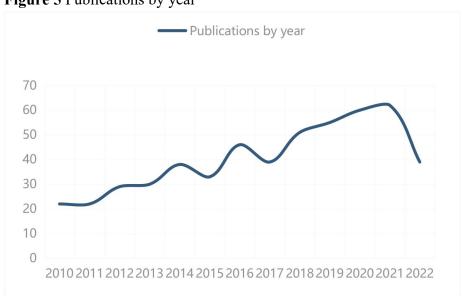


Figure 5 Publications by year

Table 4 presents a list of the most cited papers among all the articles relating to corporate governance in Chinese firms. "Ownership concentration, foreign

shareholding, audit quality, and stock price synchronicity: Evidence from China" by Gul et al. (2010) stands out with 435 citations. "The impact of internal integration and relationship commitment on external integration" by Zhao et al. (2011) is ranked second with 423 citations.

Table 3 Publications by journals and JCR information				
Quartile (2020) ⁸ Category	Journal	N. Art.	Perc.	5-year impact factor
Q2-Management	Asia Pacific Journal of Management	20	5.60%	6.721
Q1-Business ⁹	Corporate Governance - An International Review	17	4.76%	2.822
Q1-Business and Finance	Journal of Corporate Finance	16	4.48%	6.088
Q1-Business and Finance	Pacific-Basin Finance Journal	15	4.20%	3.082
Q2-Business and Finance	European Journal of Finance	15	4.20%	1.845
Q2-Environmental Studies	Sustainability	15	4.20%	3.473
Q1-Business	Journal of Business Ethics	14	3.92%	7.830
Q4-Business ¹⁰	Emerging Markets Finance and Trade	12	3.36%	2.004
Q1-Business and Finance	International Review of Financial Analysis	10	2.80%	4.616
Q3-Management	Chinese Management Studies	10	2.80%	1.759
Q1-Business and Finance	International Review of Economics and Finance	9	2.52%	2.900
Q3-Business	Asia Pacific Business Review	8	2.24%	1.771
Q1-Business	International Business Review	8	2.24%	6.753
Others		188	52.68 %	

Notes: N. Art.= Number of articles; Perc.=Percentage

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⁸ Rank by Journal Citation Indicator (JCI)

⁹ Since the data of 2010 onward is unavailable, the information on the rank and 5-year impact factor is from 2010.

¹⁰ Q4 in 2020 in category of business, Q2 in 2020 in category of economics

Table 4 The 10 most cited publications between 2010 and 2022 Article Reference Nº C Journal Ownership concentration, foreign shareholding, audit Journal of Gul et al. quality, and stock price synchronicity: Evidence from Financial (2010)China 435 **Economics** Journal of The impact of internal integration and relationship Zhao et al. **Operations** commitment on external integration (2011)423 Management Journal of Liu et al. Do women directors improve firm performance in Corporate China? (2014b)400 Finance Journal of China's outward foreign direct investment: Location Ramasamy World choice and firm ownership et al. (2012) 398 **Business** Ownership and firm innovation in a transition Choi et al. Research economy: Evidence from China (2011)257 Policy Journal of Corporate governance in China: A modern Jiang et al. Corporate perspective (2015)253 Finance Journal of Political incentives to suppress negative information: Piotroski Accounting Evidence from Chinese listed firms et al. (2015) 221 Research Journal of Corporate social responsibility in China: A corporate Lau et al. **Business** governance approach (2016)171 **Ethics** Resources, Green innovation and firm performance: Evidence Zhang et al. Conservation from listed companies in China (2019)150 and Recycling European Ownership and the value of political connections: Wu et al. Financial Evidence from China (2012a)142 Management

Notes: No C= Total number of Citations

Table 5 presents a list of the most prolific authors in terms of publications and citations. Among all the authors that carry out studies on corporate governance in Chinese firms, He Lerong, Hou Wenxuan, Jebran Khalil and Chen Shihua each have nine publications, but the numbers of citations vary greatly. The most influential author is Hou Wenxuan from the University of Edinburgh with 305 citations, followed by He Lerong from the State University of New York with 239 citations. Two other authors, Jebran Khalil and Chen Shihua from Dongbei University of Finance and Economics, each have 85 citations, as they are co-authors of their publications. Edward Lee, with six publications, has been cited 147 times.

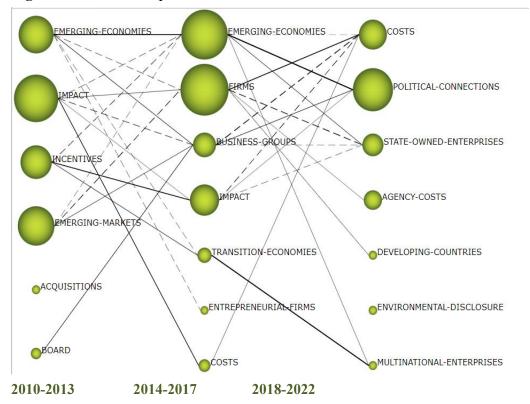
Table 5 Publications by authors			
Author	Publications	Citations	Organization
Hou, WX	9	305	University of Edinburgh
He, LR	9	239	State University of New York
Jebran, K	9	85	Dongbei University of Finance and Economics
Chen, SH	9	85	Dongbei University of Finance and Economics
Lee, E	6	147	The University of Manchester
Luo, JH	6	116	Xiamen University
Zhou, J	5	49	Southwestern University of Finance and Economics
Zhang, JR	5	46	Xi'an Jiaotong University

1.5 Bibliometric analysis with SciMAT

1.5.1 Longitudinal analysis

The most striking feature of SciMAT analysis is the production of a visual map that clearly indicates the links between the themes in different periods. As can be seen in Figure 6, three columns represent the periods 2010–2013, 2014–2017, and 2018–2022, respectively. Six clusters are identified in the first sub-period, while seven are found in the last two sub-periods, indicating that researchers started to focus on more aspects in the field from 2014 to 2022 with the emergence of more related clusters. Among these themes, three themes appeared twice: emerging economies and impact appeared in the first and second sub-periods while costs appeared in the second and third subperiods. In addition, we can ascertain the importance of the theme by comparing the size of the nodes, which means the bigger node corresponds to the theme with a greater weight. Therefore firms, emerging economies (markets), political connections, impact, costs, and incentives are worth our attention. After 2010, corporate governance in emerging and less developed economies showed substantial growth (Li, 2016). Specifically, corporate governance in the context of China has become one of the six most dynamic research themes between 2018 and 2020, according to a review by Pandey et al. (2023). The sample we analysed includes a range of articles that explore the costs, such as agency cost (Bradshaw et al., 2019) and the cost of debt (Shailer and Wang, 2015), debt of equity (Chen, 2017), and borrowing cost (Chen at al., 2014). The impact of corporate governance, including both economic impacts and non-economic impacts, will be discussed in Section 5.3.

Figure 6 Evolution map of the themes



The lines (solid or dashed) connecting two themes from different periods show the relationship between themes in different sub-periods: solid lines indicate that the two topics share primary keywords, while dashed ones demonstrate that they have a weaker connection. The thickness of the line corresponds to the strength of the connection. According to the interrelation of the lines, three main evolution routes regarding emerging economies, impact and costs can be identified, which are "emerging economies – emerging economies – political connections", "impact – costs/firms – costs", and "incentives – impact – costs".

It is worth highlighting that the theme in the last period, political connections, is not only located on the most solid line, "emerging economies – emerging economies – political connections", but also relates to almost all the important themes in the second period, and this route in turn connects all but one theme in the first period. Other clear evolution routes can be found, including "board/emerging markets – business groups – political connections" and "incentives – impact – political connections". In other words, almost all significant themes directly or indirectly relate to political connections. As Pandey et al. (2022) note, the political connections of companies inspire the most discussion regarding corporate governance in China. Unlike fully market-based economies, Chinese government intervention in the business sector is widespread. In the ongoing regulation and adjustment of corporate governance, the uncertainty created by policy changes will have a significant impact

on companies. The benefits that political connections can bring to businesses are obvious, including greater credibility, easier access to financial grants (Faccio et al., 2006), government subsidies (Wu et al., 2012a), tax benefits (Wu et al., 2012b), less financial constraint (Chan et al., 2012), a lower likelihood of participation in Securities and Exchange Commission (SEC) enforcement and lower penalties if prosecuted by the SEC (Correia, 2014). In addition, in some cases, companies can also benefit from connections to local and senior officials in terms of mitigating the risks of policy uncertainty (Liu et al., 2021), giving them a strong incentive to build political relationships as a result.

In addition, special attention should be paid to another evolution route concerning "incentives – transition economies – multinational enterprises", although the multinational enterprises cluster is not a salient one as it has small number of links to other topics.

1.5.2 Analysis by period

Undertaking an analysis by period with SciMAT was very useful in facilitating the interpretation of the results that we obtained within each time interval, which visually represents how the conceptual structure is constructed during each analysed subperiod in terms of centrality and density. Centrality measures the degree to which a topic interacts with others in the analysed period (Callon et al., 1991), while density measures the internal strength between topics. Based on the values of centrality and density (ranging from value 0 to 1), each topic will be found in one of the four quadrants of the graph.

According to the quadrants where the topic clusters are located, we can classify them into four types: (1) motor themes (in the top-right quadrant) with high centrality and density, (2) specialized themes (in the top-left quadrant) with low centrality and high density, (3) emerging themes (in the bottom-left quadrant) with low density and centrality, and (4) basic themes (in the bottom-right quadrant) with high centrality but low density. The results of the three stages in the period analysis are described below.

Stage I (2010–2013)

During the period 2010–2013, six thematic clusters are presented in total in Figure 7. Two prominent themes, incentives and acquisitions, are on an axis of density and centrality, respectively. In the bottom-left quadrant, the board and emerging markets are emerging themes with both low centrality and density.

The two most important motor themes identified are emerging economies with 504

publications and impact with 447 publications, which account for 69.65% of all the publications in this period. As impact will be discussed in Section 5.3, here we further analyse the composition of emerging economies. In Figure 8, emerging economies acts as the centre and links to the clusters composed of 11 related themes with numerous and dense connections. One prominent topic related to emerging economies is agency cost, which will be discussed in Section 5.1, as the basic theoretical framework of corporate governance research in China is the agency theory. Cai et al. (2012), Song et al. (2015) and Cho et al. (2014) analysed agency problems from the perspectives of ownership. Ain et al. (2022) revealed that a critical mass of female directors is more likely to reduce agency costs.

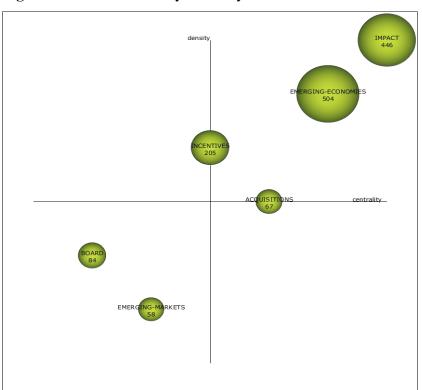


Figure 7 The network analysis of keywords from 2010 to 2013

One of the most associated paths is "emerging economies – shareholders – family firms". In emerging economies like China, there is a high level of share concentration and limited protection for minority shareholders, so the agency conflicts between controlling shareholders and minority shareholders are very serious. Increased cash flow rights can exacerbate controlling shareholders' expropriation of minority investors (Luo et al., 2012). In the event of a workplace accident, controlling shareholders deprive employees of their benefits (Liu et al., 2021). Better alignment between controlling and minority shareholder incentives has a significant impact on executive compensation (Chen et al., 2015). Increased minority shareholding concentration reduces the direct benefits received by small investors holding minority

stakes at the time of reform, but increases the chance of distribution of future firm value to all investors in the firm (Jia et al., 2020). Regarding family firms in China, they account for the vast majority of companies in the private economy, many of which are undergoing a transition from family management to professional management. In general, family managers have advantages over professional advantages. For instance, a family chief executive officer (CEO) positively influences company performance (Cai et al., 2012), and family managers perform better than professional ones (Zhou et al., 2013), so management in the hands of the family is usually complementary to investor protection (Zhou et al., 2015). But family firms are faced with the conflict between family and non-family shareholders. Zhou et al. (2013) pointed out family members' strengthening control is bad for business performance in founder-led businesses.

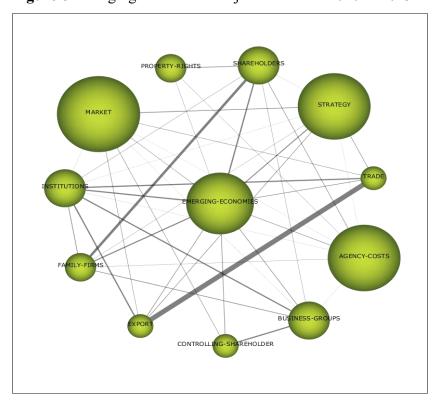


Figure 8 Emerging economies subject area from 2010 to 2013

Stage II (2014–2017)

As can be observed from Figure 9, seven clusters are generated from all the documents published during this period, among which two prominent clusters, namely, firms and business groups, are the motor themes. A total of 1000 articles contain aspects regarding these two topics, accounting for 61.65% of all the documents, indicating the scientific emphasis on firms and business groups. The other two clusters which were motor themes in previous period – emerging economies and

impact – are currently declining as basic themes with a lower density. Despite their decreasing density, they are still hot topics in the field considering the number of total publications. In this period, the theme of transient economies is a basic one with low centrality and density, while entrepreneurial firms and costs are specialized themes with low centrality and high density which have not aroused much academic attention.

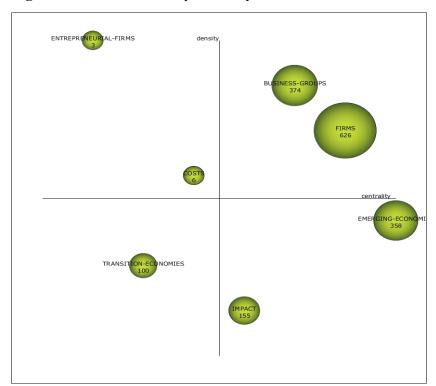


Figure 9 The network analysis of keywords from 2014 to 2017

Stage III (2018–2022)

As shown in Figure 10, the only motor theme, costs, has retained its importance. One specialized theme identified in this period is environmental disclosure, which will be discussed in Section 6. It is during this stage that the biggest shift in research direction occurs when political connections and SOEs are rising as basic themes. Illustrations of the decomposition of political connections and SOEs are provided in Figures 8 and 9.

In Figure 11, the theme of political connections interrelates with 11 clusters despite the relatively weak connection, which include the well-defined motor themes in previous periods, impact and firms, manifesting that the academic community are becoming increasingly concerned about political connections. In China, the government has led the establishment of a modern enterprise system based on a market economy and has absolute authority in formulating policies that affect corporate governance. Most importantly, the uncertainty caused by frequent policy

adjustments and the associated policy information asymmetry between government decision-making bodies and enterprises is very challenging for enterprises. Connections with governments or other organizations with power can help companies stay ahead of the competition and provide access to favourable resources or privileges, such as government procurement contracts (Goldman et al., 2013), fewer or no financing constraints (Chan et al., 2012), and the opportunity to pay less emissions costs, especially in more polluted areas (Wang et al., 2021), and even reduce the negative impact of policy uncertainty on business investment (Liu et al., 2021). In addition, there are some binding effects from political connections. Local SOEs with political ties have lower value and hire more surplus labour than those without (Wu et al., 2012a) and political connections reduce mergers and acquisitions (M&A) performance in non-family firms (Gao et al., 2019). In the transformation of the economy, some political resources that help entrepreneurs become political responsibilities (Sun et al., 2011). Thus, the effects of political connections are quite complex. According to Lebedev et al. (2021), board political relations show a Ushaped relationship with corporate internationalization.

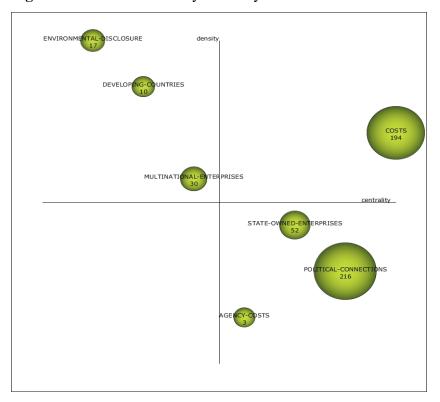


Figure 10 The network analysis of keywords from 2018 to 2022

In Figure 12, the theme of SOEs relates to eight clusters, including policy, social networks, institutional change, financial constraint, etc. SOEs are key components in the Chinese economy, with approximately one third of listed companies being SOEs. On the one hand, the retained state ownership in SOEs allows government

intervention to maximize resource mobility to create capital-intensive industries and drive economic development by providing infrastructure expansion. On the other hand, the government maintains social stability through SOEs employing excess labour, assuming the retirement benefits and retaining control over key elements of society (Lin et al., 2020). The tax avoidance in SOEs is significantly lower than in non-SOEs and higher SOE tax rates are associated with an increased promotion frequency for SOE managers (Bradshaw et al., 2019). However, the agency problem between controlling shareholders and minority shareholders, as well as information asymmetry and the cost of hierarchy in SOEs are issues of concern. The CEOs or executives of the SOEs are usually appointed by the government or are government officials themselves instead of real entrepreneurs, whose main goal is to gain promotion in the political system instead of working for the shareholders. Because of the privileges enjoyed by SOEs, fair competition cannot exist in a market dominated by SOEs (Zhang, 2018). Also the incidence of law enforcement action against fraud is negatively related to the state ownership (Hou and Moore, 2010).

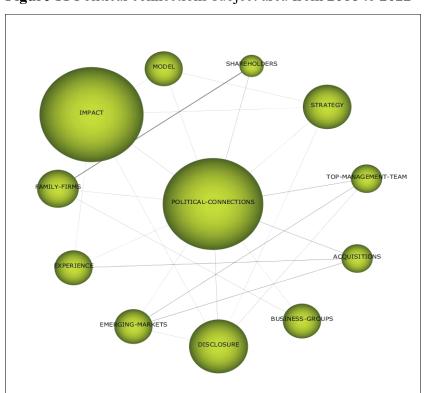


Figure 11 Political connections subject area from 2018 to 2022

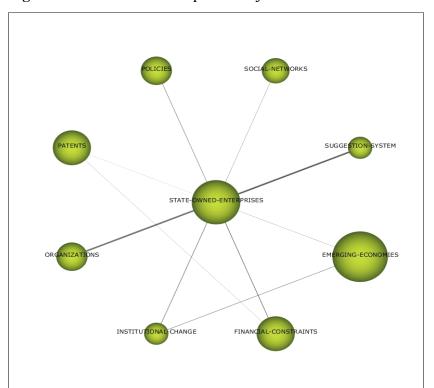


Figure 12 State-owned enterprises subject area from 2018 to 2022

1.6 Systematic literature review

As previously discussed, the following review performs an in-depth content analysis to enhance the understanding of the three most prominent themes. We provide an analysis of papers that deal with theoretical frameworks, factors, or the influence of corporate governance in China.

1.6.1 Theoretical frameworks

Although there has been a surge of studies on corporate governance in China since the 1990s, its theoretical basis has largely been drawn from the research available in the western countries, such as the agency, signalling, and stakeholder theories described in Table 6. Following the existing western theoretical foundation, works on corporate governance in China further explore the application of these theories and test their validity in the context of China. Another line of research, which is currently of great academic interest, is the unique governance regime, which provides an opportunity for a deeper understanding of corporate governance in China.

Table 6 Theo	retical frameworks of corporate governance	in China	
Themes	Sub themes	Example studies	
	Ownership		
	Family CEOs; family ownership; owner type of family firms and Research and development (R&D) investment	Cai et al. (2012); Zhou et al. (2013);	
	State ownership and market orientation	Song et al. (2015)	
	Foreign ownership mode	Cho et al. (2014)	
	Managerial ownership and the role of privatization	Wang and Judge (2012)	
	Ultimate ownership, risk-taking and firm	Su et al. (2017)	
	Agency costs		
Agency	Tax planning; Tax Enforcement	Bradshaw et al. (2019); Xu et al. (2011)	
theory	Female directors and agency costs	Ain et al. (2022)	
	Tunneling		
	Factors of tunneling in China	Hu et al. (2019)	
	Internal governance mechanisms	Shan (2013)	
	The impact of cash flow rights	Luo et al. (2012)	
	Other		
	Capital structure of Chinese listed SMEs	Huang et al. (2016)	
	Corporate governance failure and contingent political resources	Sun et al. (2011)	
	Confucianism culture and corporate cash holdings	Chen et al. (2020)	
	CSR spending	Fu et al. (2022)	
	Foreign vs. domestic listing	Ding et al. (2010)	
Signaling theory	Founder directors and IPO premium	Wang and Song (2016)	
theory	Residual state ownership and stock return volatility	Xie et al. (2019)	
	Managerial ownership	Vijayakumaran (2021)	
Stakeholder	Environmental responsibility, market valuation, and firm characteristics	Hu et al. (2018)	
theory	Ownership reduction in SOEs and CSR	Khan et al. (2019)	
	Independent directors and CSR	Jin et al. (2022)	
	Relation-based and rule-based Governance	Lau and Young (2013)	
Governance regime	Relational, administrative and foreign governance	Yiu et al. (2019)	
	Governance features unique to China	Jiang and Kim (2015); Zhang (2018)	

Agency theory

Corporate governance research in China mostly adopts the agency theory, which is consistent with the findings of Yang et al. (2015). In our sample, there are a large number of articles analysing agency problems from the perspective of ownership, involving family, state, foreign and managerial types. According to Cai et al. (2012), the family CEO is generally positively associated with company performance (as measured by market and accounting performance). Song et al. (2015) concluded that dual-principal state-controlled firms, which are owned by both the government and non-state shareholders, showed a lower market orientation than privately held listed companies, but the company's market orientation is relatively high if the company ownership is concentrated in the hands of non-state-owned shareholders. However, Cho et al. (2014) denied the financial incentives-based agency theory because a sampling survey of Taiwanese enterprises investing in Greater China showed that both economic and non-economic factors will affect the choice of foreign ownership mode.

In addition, some articles analysed agency costs from the perspective of tax. Bradshaw et al. (2019) pointed out that tax avoidance in SOEs is significantly lower than in non-SOEs and higher SOE tax rates are associated with a higher promotion frequency for SOE managers. Xu et al. (2011) noted that tax enforcement is an important corporate governance mechanism, because corporate agency costs between shareholders and managers, as well as major and minority shareholders, can be reduced through regional tax enforcement.

Regarding tunnelling, Hu and Sun (2019) studied how owner identity, management agency and sub-national institutional environment individually and jointly determine the severity of tunnelling and showed that local governments and private companies have poached more wealth from their respective listed subsidiaries in comparison to central government agencies. Furthermore, the strength of the tunnelling was negatively correlated with the institutional quality in the region of the listed company, especially for those controlled by private entities (Hu and Sun, 2019). Shan (2013) demonstrated that the agency theory does not explain the tunnelling in China well and suggested the institutional theory as an alternative. Some special perspectives have also been explored, such as political resources (Sun et al., 2011) and the Confucian culture (Chen et al., 2020), etc.

Signalling theory

Several papers discussed signalling theory in terms of CSR spending, the company's listing place, founder directors, residual state ownership and stock return volatility. Fu

et al. (2022) demonstrated the role of CSR spending as a signal in China because empirical results indicate a significant positive correlation between institutional cross-ownership and CSR performance. The decision to list on a particular stock exchange is also an entrepreneurial signal, as a trade-off between short-term financial considerations and the pursuit of long-term interests (Ding et al., 2010). Wang and Song (2016) revealed an inverted U-shaped relationship between the proportion of board founders and the initial public offering price premium when group consensus and decision substitution signals are considered.

Stakeholder theory

The main application of stakeholder theory is in the field of CSR or environmental responsibility, because the rise of CSR is related to the consideration of many stakeholders. Hu et al. (2018) found that corporate environmental responsibility has a significant positive impact on corporate performance, suggesting that increased environmental engagement may work as a useful tool to reduce the negative impact of agency costs and weak corporate governance on corporate valuations. Khan et al. (2019) identified a negative correlation between reductions in state ownership and CSR performance. Jin et al. (2022) examined the impact of two types of independent directors on the social responsibility gap between internal and external CSR in Chinese companies. Their results indicated that there is a larger gap between companies with independent directors and political connections on the board and those with foreign independent directors.

Governance regime

It should be also noted that, based on its unique background, China has developed some governance regimes that differ from western countries, such as relation-and rule-based governance, as explored by Lau and Young (2013), or the relational, administrative, and foreign types examined by Yiu et al. (2019). Lau and Young (2013) believed that China's relationship-based governance system is interconnected with Chinese culture: Chinese relations emphasize reciprocity and mutual obligations between individuals and groups. The hierarchy and paternalistic governance within Chinese companies are deeply influenced by Confucian culture. Therefore, China should not completely transit from a relationship-based governance system to a rule-based one, but should strengthen the construction of the moral ideal of relational governance.

In addition, some studies in our sample have focused on the uniqueness of China. In an overview, Jiang and Kim (2015) highlighted the unique characteristics and problems of corporate governance in China. Zhang (2018) discussed six

misconceptions about corporate governance in the Chinese context, especially concerning the relationships between ownership and governance, entrepreneurship and motivation, and regulation and reputation. He further pointed out that fair competition cannot exist in a market dominated by SOEs and the competitive behaviour of firms cannot be independent of the ownership structure. At the same time, SOEs cannot guarantee that control of the enterprises is in the hands of real entrepreneurs, because the powers and responsibilities of these politicians – the agents of SOEs – are asymmetric.

1.6.2 Determinants

Over the past decade, research on corporate governance has been on the rise and has taken on new research dynamics, as evidenced by a deeper exploration of governance characteristics in internal governance and a greater focus on the legal environment and political connections in the area of external governance. In this section, we will explore the internal and external determinants of corporate governance.

1.6.2.1 Internal determinants

The internal corporate governance mechanism is a set of institutional arrangements for the shareholders' meeting, the board of directors, the supervisory board, and the managerial level. As the soul of the governance mechanism, the board of directors has control over the entire company, which determines the direction and strategy of corporate development. In addition, the difference in ownership structure, to a large extent, influences the behaviour of shareholders and exerts an important influence on the corporate governance mechanism. As shown in Table 7, we analyse the internal determinants of corporate governance in China, mainly in terms of ownership and the board.

Ownership

Ownership is the most important internal determinant, given the fact that the state owns a large number of shares in Chinese listed companies. Hou and Moore (2010) examined the impact of state ownership in China's stock market on corporate governance and financial regulatory systems, finding that the state ownership retained in privatized enterprises increased the incidence of regulatory enforcement against fraud, while in SOEs the incidence of law enforcement action is negatively related to the state ownership. Moreover, empirical evidence by Hou et al. (2012) showed that after the split share structure reform in China when the stock trading restrictions based on state-owned shareholders were abolished, the share price informativeness among firms (i.e. the content and credibility of the information disclosed by companies)

increased, implying that this reform is conducive to the information environment and minority shareholders in the Chinese stock market. Mutlu et al. (2018) put forward a dynamic institution-based view: with the improvement of market system quality and financial market, the supervision mechanisms of the board and state ownership are increasingly related to company performance, while the incentive mechanisms lose their role.

Table 7 Internal determinants of corporate governance in China			
Themes	Sub themes	Example studies	
	State ownership	Hou and Moore (2010); Hou et al. (2012); Mutlu et al. (2018)	
	Institutional ownership	Lin and Fu (2017); Guo and Platikanov (2019)	
Ownership	Family ownership	Liang et al. (2014); Zhou et al. (2013)	
о ,, шег ышр	Managerial ownership	Wang and Judge (2012)	
	Foreign ownership	Gul et al. (2010); Jin et al. (2016)	
	Ownership concentration	Gul et al. (2010); Wang et al. (2012)	
	Board size	Chen and Al-Najjar (2012); Li and Lan (2021)	
Board	Independent directors	Li and Lan (2021); Mutlu et al. (2018)	
	Board informal hierarchy	Jebran et al. (2019)	
	Woman director	Liu et al. (2014b); Ain et al. (2022)	

In terms of institutional ownership, Lin and Fu (2017) showed that institutional ownership has a positive impact on firm performance by attracting more analysts and reducing insider ownership. For pressure-insensitive, foreign, and large institutional shareholders in particular, the positive impact is greater. By classifying institutional investors according to two dimensions: pressure-sensitive institutions versus pressure-insensitive (or independent) institutions, and state-owned versus privately owned institutions, Guo and Platikanov (2019) pointed out that institutional ownership was positively correlated with the company's Tobin Q value, mainly driven by independent institutional ownership. This positive correlation became stronger after 2005, when the external legal and corporate governance environment was strengthened, showing that this is crucial for reinforcing the supervisory role of independent agencies.

In terms of family ownership, Liang et al. (2014) discussed how family control affects the tendency for enterprise internationalization from the perspective of socioemotional wealth: family participation in management has an inverted-U-shaped relationship with internationalization, while family ownership has a U-shaped

relationship with it. Zhou et al. (2013) found that in founder-led businesses, family members tend to choose mechanisms to strengthen control, which is bad for business performance. Family managers generally perform better than professional managers, especially when the founder serves as chairman and CEO or continues as chairman with a relative as CEO.

Wang and Judge (2012) shed light on other governance mechanisms that can supplement or replace privatization to revitalize large and inefficient SOEs in transition economies: manager ownership has a more significant impact on company performance than privatization, indicating that internal incentives for managers in transition economies may be more effective than external market mechanisms. Jin et al. (2016) found that social trust affects the investment decisions of foreign institutional investors: with an increase in the social trust level, the proportion of foreign ownership rises accordingly. Wang et al. (2012) studied how the changed ownership model with the rise of SASAC affected the company's performance. Ownership concentration has a positive impact on company performance by helping to solve the free-rider problem.

Board of directors

A host of studies worldwide have proved that the board is a significant internal governance mechanism. Naturally, in the context of China, the board is still viewed as a vital internal determinant. Chen and Al-Najjar (2012) found that Chinese board size is driven by corporate complexity, board independence is motivated by regulatory circumstances, and the independence of the board of directors is negatively related to the size of the board of supervisors and state ownership. Li and Lan (2021) showed that the adaptation of the board was asymmetrically determined by monitoring- and advisory-driven adjustment. For SOEs, the shift in board independence was more directed by monitoring-driven adjustment and the change in board size was more directed by advisory-driven adjustment, while the opposite occurred in privately owned enterprises. Mutlu et al. (2018) conducted a meta-analysis of the corporate governance literature in China, in which substantial evidence suggested that board independence and management incentives were associated with better corporate performance. Jebran et al. (2019) pointed out that CEO status and board size are important factors affecting the informal hierarchy functioning of the board and suggested that improving the formal governance mechanism can enhance board interaction by regulating the role of the informal hierarchy.

Liu et al. (2014b) found that in legal person-controlled firms, female executive directors have a significantly greater influence on company performance than female

independent directors and the effect is significantly larger in a board with more than three female directors. However, such an impact is not significant in a state-owned company. Ain et al. (2022) empirically investigated whether gender diversity in the board has an important impact on corporate innovation, as measured by the total number of patent applications, and proved the important role CEO gender plays in producing higher levels of innovation output.

In general, board size as well as independent and female directors are issues of the greatest interest to scholars, for instance, in terms of what determines board size, size adjustment, and board independence, the impact of women directors on corporate governance and the critical mass theory of women directors. Most researchers believe that independent directors in China do not effectively supervise the managers and controlling shareholders, since they are mainly driven by government regulation. Although Mutlu et al. (2018) suggested that board independence is associated with better corporate performance, more empirical research is required to assess whether they supervise effectively.

1.6.2.2 External determinants

Corporate governance cannot exist in isolation from the external environment. Macrolevel institutional factors, for instance, government governance, social culture, law and the market play a crucial role in corporate governance. Exploring these external factors will reveal a unique aspect of corporate governance in China. In Table 8, we list the main external determinants of corporate governance in China.

Government

As the most prominent feature of China, the government plays a decisive role, whether in the initial stage of the establishment of the enterprise system, or in the continuous regulation and adjustment of corporate governance, which is chiefly reflected in the fact that many listed companies are mainly controlled by the government and state ownership still holds a great share. As in Table 8, one of the most notable sub-themes regarding government concerns political connections. Wu et al. (2012a) investigated the influence of political relations on ownership for Chinese companies between 1999 and 2006, finding that the political relations of private companies have a higher value and receive more government subsidies than those without political relations, whereas local SOEs with political ties have a lower value and hire more surplus labour than those without. Sun et al. (2011) investigated the dynamic relationship between politicians and entrepreneurs in China, exploring how some political resources that once helped entrepreneurs create competitive advantages

in the transformation of the economy become political responsibilities. Empirical results confirmed by Wang et al. (2021) showed that having a politician as a director can reduce the emissions costs. Lebedev et al. (2021) pointed out that, considering the coexistence of both the beneficial and binding effects of board political ties, only at a certain level will the benefits of political relationships outweigh the cost. The combined influence of these two effects on the ability and motivation of enterprise internationalization leads to a U-type relationship.

Table 8 Key inquiries on external determinants of corporate governance in China					
Themes	Sub themes	Example studies			
	Political connection	Wu et al. (2012a, b); Lebedev et al. (2021)			
C	Central and local government	Teng et al. (2018)			
Government	Corruption	Giannetti et al. (2021);			
	SASAC	Wang et al. (2012)			
	Guanxi	Liu et al. (2011); Lau and Young (2013);			
Social and cultural	Split Share Structure Reform	Hou and Lee (2014)			
environment	Corporate governance reform	Huang and Wang (2015)			
	Business culture and ideology	Zheng and Ho (2012)			
	Market	Mutlu et al. (2018); Duanmu (2011)			
	Minority shareholder protection	Ge et al. (2022)			
Law and market	Labor Protection	Xue et al. (2022)			
	Securities enforcement	Cao et al. (2021)			
	Disclosure	Pan and Zhao (2022)			
Other agencies	 Audit Foreign Bank Media coverage 	1. Gul et al. (2010); Hu et al. (2022) 2. Nolan (2010); Hasan and Xie (2013) 3. Borochin et al. (2018)			

In addition, there are some other concerns, such as central and local government (Teng et al., 2018), corruption (Giannetti et al., 2021), and SASAC (Wang et al., 2012). Teng et al. (2018) conducted an investigation on the impact of different types of state ownership (e.g. central and local government ownership) regarding corporate governance and discovered that different types of government ownership have varying impacts on ownership structure and executive shareholding: central government ownership has positive effects on ownership concentration, while the local type has a significantly positive effect on executive shareholding. Giannetti et al. (2021) indicated that as corruption decreases, corporate performance improves, particularly for small and young companies.

Social and cultural environment

The listed companies in China are rooted in a long tradition of Confucian culture and a planned economy. Due to the characteristics of this unique growth environment, Chinese companies have shown a strong "path dependence" in the equity structure and personnel arrangements, as well as related party transactions (Li, 2016). One subtheme that has always attracted extensive academic attention is guanxi, known as relationships or connections. Lau and Young (2013) believed that China's relationship-based governance system is interconnected with Chinese culture. As one of the important channels for accessing resources and support, guanxi can provide many benefits and have a great impact on corporate governance. Liu et al. (2011) proved that guanxi from state ownership and management affiliations with external auditors increases the chance of obtaining a clean audit opinion in China. Cho et al. (2014) showed guanxi will affect the choice of foreign ownership mode. It is also thought that the relative importance of guanxi may decline or guanxi will change from a dominant position in some organizations to a complementary position in all companies as the market transition advances (Zhang and Keh, 2010).

After the split share structure reform in 2005, the trading restrictions on the state-owned shareholders were abolished. Thus, the incentive alignment between the state-owned and private shareholders was strengthened so that the well-known foreign share discount after the reform decreased (Hou and Lee, 2014), and the share price informativeness among firms rose, which was conducive to the information environment of China's stock market and minority shareholders (Hou et al., 2012). Huang and Wang (2015) studied the systematic relationship between board size and corporate risk policy choices in the context of corporate governance reform in China: companies with smaller boards are more likely to pursue risky investment policies and engage in earnings management, but tend to be more conservative in using debt financing. Lu and Shi (2012) pointed out that the effect of corporate governance reform in China has varied among companies with different shareholding structures: for firms with more state-owned shares, it has had a weaker positive effect, which has been strengthened by product market competition.

Culture and ideology also have an influence on corporate governance. Zheng and Ho (2012) compared the evolution of corporate governance, management, and succession patterns in the banking industry in Hong Kong and showed that the business culture and ideology of the east and the west have led them to choose different ownership structures and succession patterns.

Law and market

Laws and markets define the basic framework for corporate activities. Sound laws and

good financial markets mean effective regulation and strict law enforcement. However, during the transition period, the imperfect Chinese laws and the limitation of the market error correction made the governance of Chinese listed companies show different characteristics.

Duanmu (2011) found market orientation has a general and powerful influence on the choice between a wholly owned subsidiary and a joint venture for multinational enterprises operating in China. Mutlu et al. (2018) believed that with the improvement of the market system quality and financial market, the supervision mechanisms of the board and state ownership become increasingly related to company performance, while the incentive mechanisms lose their role.

Ge et al. (2022) investigated the efficacy of the China Securities Investor Services Center (CSISC), a new minority shareholder protection mechanism, in restraining earnings management, finding that the CSISC shareholding reduces earnings management. Xue et al. (2022) revealed the positive effects of labour protection on firms' performance in the long term by providing empirical evidence from China. Cao et al. (2021) reported that securities enforcement in China has become increasingly effective in raising disclosure standards. Pan and Zhao (2022) noted the mandatory disclosure of CSR reports significantly decreased accounting conservatism among firms required to release CSR reports.

Other agencies

Generally speaking, agencies such as banks or media do not play an influential or effective monitoring role. Although the empirical results of Hasan and Xie (2013) showed that foreign strategic investors promote the improvement of bank performance by actively participating in bank management, transforming the corporate governance model of Chinese banks from a control-based model to a market-oriented one, most western participants believe that the main reason why Chinese banks seek cooperation with western institutions is to improve the legitimacy of Chinese banks in the global financial environment, instead of actively changing the existing governance mechanisms (Nolan, 2010). Qian and Yeung (2015) argued that banks in China do not exercise oversight. Regarding the role of media, Borochin and Cu (2018) noted that the media coverage in developing countries is more conducive to deals that meet the government's goals and involve powerful local companies.

Audit has been widely explored in the field of corporate governance. Fang et al. (2018) indicated that high-quality external auditors have a significant impact on corporate governance, as both a bonding and a control mechanism to alleviate the management

exploitation of company resources. Gul et al. (2010) found foreign ownership and auditor quality are negatively correlated with stock price synchronicity. Empirical results by Hu et al. (2022) showed that auditors might cater to the real controller's preferences of listed companies when they issue audit opinions and that the ownership structure of listed companies affects the "auditor opinion shopping" behaviour of listed companies.

1.6.3 Effects

Corporate governance is an important means of ensuring that the internal management of a company operates effectively and that long-term corporate goals are achieved. It can effectively protect shareholders' rights and interests, enhance corporate responsibility, promote corporate innovation and development, reduce risks, and respond to the changing external environment. In brief, good corporate governance will have a very strong impact on the financial and non-financial performance of the company.

The financial performance of corporate governance in China

The financial performance indicators described in Table 9a, such as leverage (Huang et al., 2016), cost of borrowing (Chen et al., 2014; Haß et al., 2016), stock price (Jebran et al., 2019), Tobin's Q (Guo and Platikanov, 2019; Shao, 2019) and equity level (Chen, 2017), are greatly influenced by corporate governance. Huang et al. (2016) pointed out the financial leverage of the companies in the newly established Growth Enterprise Market is positively affected by executives' shareholding, the excess cash compensation, and tradable shares proportion, but negatively affected by ownership concentration. Haß et al. (2016) found that companies with better corporate governance show higher performance persistence, which can lower the borrowing costs. Another factor, foreign ownership, can also reduce the borrowing costs, especially in more developed provinces (Chen et al., 2014). Corporate governance and state control have a positive impact on equity level (Chen, 2017). Shao (2019) found that CEO duality and managerial ownership are negatively related to firm performance measured by Tobin's Q, whereas ownership concentration, state ownership and a supervisory board have positive influence on Tobin's Q. Guo and Platikanov (2019) further added institutional ownership has a positive impact on it.

Table 9a. Empirical results on financial performance of corporate governance in China

China		
Determinants	Effects	Authors
Executives' shareholding,		
The excess cash compensation,	Leverage (+)	Huang et al. (2016)
Tradable shares proportion		
Ownership concentration	Leverage (-)	Huang et al. (2016)
Corporate governance		
(board characteristics and	Performance persistence (+)	Haß et al. (2016)
shareholder structure)		
Performance persistence	Cost of borrowing (-)	Haß et al. (2016)
Foreign ownership	Cost of borrowing (-)	Chen et al. (2014)
Corporate governance, State control	Equity level (+)	Chen (2017)
CEO duality, Managerial ownership	Tobin's Q (-)	Shao (2019)
Ownership concentration, State ownership,	Tobin's Q (+)	Shao (2019)
A supervisory board Institutional ownership	Tobin's Q (+)	Guo and Platikanov (2019)
Internationalization	Growth (+)	Lu et al. (2015)
Internationalization	Profitability (-)	Lu et al. (2015)
Foreign ownership, Auditor quality	Stock price synchronicity (-)	Gul et al. (2010)
Informal hierarchy among directors	Stock price crash (+)	Jebran et al. (2019)
Board diversity	Stock price crash (-)	Jebran et al. (2020)
Separation of control and ownership	Response coefficient of stock return synchronicity to analyst coverage (+)	Feng et al. (2016)
State ownership and the number of board meetings	Type I tunneling (+)	Shan (2013)
Independent directors	Type I tunneling (-)	Shan (2013)
Independent-director rankings	Earnings management (-)	Zhu et al. (2016)
Ownership of domestic institutional investors and foreign corporations	Outward foreign direct investment (+)	Hu and Cui (2014)
Managerial ownership	Performance of SOEs (+)	Liu et al. (2012)
Large shareholders' ownership	Performance of SOEs (U-shaped)	Liu et al. (2012)
Managerial ownership	Investment decisions (+) Financial constraints (-)	Vijayakumaran (2021)
State control	Incremental managerial adjustment (-)	Chen (2017)
CEO pay	Accounting and stock market	Conyon and He (2012)

Lu et al. (2015) discovered that internationalization has a negative impact on profitability, which demonstrated the prediction that successfully implementing an internationalization strategy demands a proper organizational structure, which is often absent in family companies in China. Regarding stock price, Jebran et al. (2019) concluded that an informal hierarchy among directors is positively related to a stock price crash, while board diversity is negatively linked. Foreign ownership and auditor quality have been found to have a negative impact on stock price synchronicity (Gul and Qiu, 2010). Shan (2013) indicated that internal governance mechanisms, state ownership and the number of board meetings are positively correlated with the Type I tunnel (where the controlling shareholders transfer resources from the firm for their own good), while the number of independent directors shows a negative correlation. In addition, ownership is associated with investment decisions, for instance, the positive association between ownership by domestic institutional investors as well as foreign corporations and outward foreign direct investment (Hu and Cui, 2014), and the positive link between managerial ownership and investment decisions (Vijayakumaran, 2021).

The non-financial performance of corporate governance in China

In terms of the non-financial performance indicators outlined in in Table 9b, most studies are centred around CSR performance (Elmagrhi et al., 2019; Lau et al., 2016; Liao et al., 2018; Zhuang and Lee, 2018) and innovation or research and development (R&D) intensity (Chen et al., 2019; Choi et al., 2011; Dong and Gou, 2010). Regarding CSR performance, the overseas backgrounds of the board members or top management team have been proven to be positively related to CSR performance (Lau et al., 2016; Zhuang et al., 2018). Female directors are also empirically positive promoters of environmental performance (Elmagrhi et al., 2019; Liao et al., 2018), whereas ownership concentration has a negative influence on CSR performance (Lau et al., 2016).

State and institutional ownership (Choi et al., 2011) and independent outside directors (Dong and Gou, 2010) are positively related to innovation performance, whereas the managerial discretion of CEOs (Dong and Gou, 2010), leverage, and cash flow (Chen et al., 2019) are negatively linked to R&D intensity. Through an analysis of publicly listed sports firms on The New Third Board in China, Chen et al. (2019) found that the company's financial ability is an important determinant of R&D intensity and good governance mechanisms tend to increase positive effects and decrease the negative effects of financial capabilities on R&D intensity.

Other than these linear relations, inverted parabolic relations are identified between managerial ownership and R&D intensity (Dong and Gou, 2010). Liang et al. (2014) pointed out that family involvement in management and family ownership has a U-shaped relationship with internationalization.

Table 9b. Empirical results on non-financial performance of corporate governance in China

Determinants	Effects	Authors
Proportion and age of female directors	Environmental performance (+)	Elmagrhi et al. (2019)
Board size, Female directors, Separation of CEO and chairman	CSR assurance (+)	Liao et al. (2018)
Ownership concentration	CSR performance (-)	Lau et al. (2016)
State ownership, directors' experiences in foreign countries, education and working experiences of top management team in foreign countries	CSR performance (+)	Lau et al. (2016)
The political, academic experience, and overseas background of the board members	CSR performance (+)	Zhuang et al. (2018)
Institutional cross-ownership	CSR performance (+)	Fu et al. (2022)
State and institutional ownership	Innovation performance (+)	Choi et al. (2011)
Managerial discretion of CEOs	R&D intensity (-)	Dong and Gou (2010)
Independent outside directors	R&D intensity (+)	Dong and Gou (2010)
Managerial ownership	R&D intensity (inverted parabolic)	Dong and Gou (2010)
Return on equity, Accounts receivable turnover, Assets turnover, Profit growth rate	R&D intensity (+)	Chen et al. (2019)
Leverage and cash flow	R&D intensity (-)	Chen et al. (2019)
Family involvement in management, Family ownership	Internationalization (U-shaped)	Liang et al. (2014)

1.7 Analysis of research fronts by VOSviewer

By analysing keyword co-occurrence in VOSviewer, we identified three emerging research trends in the following areas: **Cluster 1**: negative and positive effects, political connections, firm performance, quality, positive relationships, and the state; **Cluster 2**: (independent) directors, board, and CSR; **Cluster 3**: corporate governance, Chinese listed firms, investors, shareholders, and markets, as shown in Figure 13.

Cluster 1: Political connections

The issue of political connections has undoubtedly become the hottest topic in the context of China, which is in line with the research by Pandey et al. (2023) and Han et al. (2018). Although corporate governance practices are improving, administrative and economic governance have long coexisted in China, where government has a significant influence on resource allocation and a great deal of power over listed companies. Companies therefore have a very strong incentive to establish and maintain political connections to reduce information asymmetries between companies and government policy adjustments, as well as to obtain corresponding concessions and support.

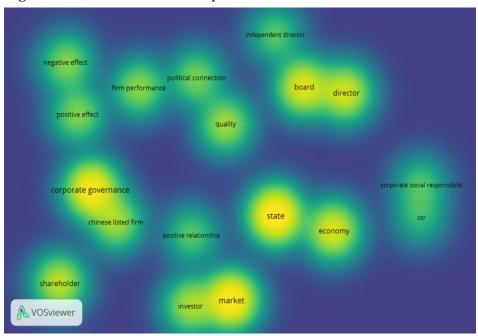


Figure 13 Clusters identified in period 2018-2022

According to the latest researchers, political connections positively moderate the relationship between CEO hubris and firm's pollution (Zhang et al., 2020), reduce M&A¹¹ performance in non-family firms and increase M&A performance in family firms (Gao et al., 2019), and ensure firms' access to reliable political information and mitigate the risks of policy uncertainty (Liu et al., 2021). Wang et al. (2021) pointed out that politician directors reduce the magnitude of discharge fees, especially in companies with a higher share of politically connected directors.

However, quite a small number of studies have attempted to identify the determinants. Wei and Muratova (2022) explored the determinants of political connections and concluded that executive power would be negatively related to the proportion of

¹¹ M&A stands for mergers and acquisitions.

politically connected independent directors. So far, the number of papers in this area is extremely sparse, and more research is needed in the future to explore the factors that may have an impact on political connections. At the same time, some other firm-level behaviours that we have not discussed on may be linked to political connections. Khan et al. (2021) stated that the ability for a company to participate in social activities mainly derives from political connections and significant government control over corporate decisions. The likelihood of philanthropic corporate contributions is positively correlated with political affiliation (Li et al., 2015).

Other aspects, for example, the different influences of central and local governments on corporate governance, government interference in CEO appointments in SOEs, the impact of the CEO's political status on the board and the company, and the lack of transparency of information or corruption resulting from political connections, etc., may deserve more attention if we want to understand the complexity of political connections.

Cluster 2: Corporate social responsibility

The academic research regarding sustainability concerns has also become a hot issue and is ranked as the second research front in recent years, which is in line with the research by Pandey et al. (2023), Han et al. (2018) and Sabbaghi (2016). The popularity of this research direction can be attributed to the following two reasons. On the one hand, it is closely related to the global trend towards sustainable living, investments, and production and consumption modes. The SDGs adopted by all United Nations Member States in 2015 greatly advocated the development and implementation of CSR in the field of corporate governance. On the other hand, it is also linked to the increasing emphasis on CSR by the Chinese government. After 2004, China implemented a series of initiatives to promote CSR development, including the publication of guidelines for CSR disclosure as well as for preparing CSR reports, etc., so an increasing number of companies now issue CSR reports to follow the regulation.

In the past few years, a wave of research on CSR has been launched from the perspective of the board as well as ownership. First, in terms of the board, Liao et al. (2018) pointed out firms with a large board, more female directors, and non-duality are more likely to be involved in CSR assurance. Zhuang et al. (2018) concluded that the board members' political, academic experience, and overseas background are positively related to the firm's CSR performance. In addition, Sial et al. (2018) explored the mediating impact of CSR performance on a firm's financial performance.

Second, the results regarding the relation between CSR and ownership are also very informative. Foreign ownership has a significant positive impact on CSR because of its supervisory power (Guo and Zheng, 2021). A negative relationship has been found between state ownership reductions and CSR performance (Khan et al., 2019), as well as between privatization and firms' social performance (Khan et al., 2021). Private companies can strengthen their economic and political status and thus improve their CSR practices through acquiring equity in SOEs (Li et al., 2022).

It can be predicted that the trend toward sustainable living, investment, production and consumption is irreversible, therefore the importance of CSR will increase in the long term. One interesting point worth noting is that some companies may approach CSR engagement as a way to curry favour with the officials to build up political connections, although there is very limited understanding from the literature available. Therefore, one possible future research direction could be to reveal the real reasons why firms publish CSR reports.

Cluster 3: Market protection mechanism

Compared to mature markets with hundreds of years of history, the Chinese market is still in its infancy. First, China does not have a sound set of laws and regulations to protect investors (Kato and Long, 2006), thus the interests of the majority of investors are not well protected. When the interests of investors are infringed, related regulations regarding litigation, compensation and other relevant provisions are not in place and seldom effectively implemented. Allen et al. (2005) concluded that the protection of creditors and shareholders in China is below average countries, as is the law enforcement. As a result, the interests of small shareholders are often infringed by large ones (Liu et al., 2021).

At the same time, the market suffers from strong and excessive government intervention. The market regulator, mainly from government, is not only dedicated to maintaining the market and correcting market failures, but is also trying to achieve some social value objectives. This means that Chinese regulators need to play the multiple roles of market facilitator and regulator at the same time, seeking an optimal balance between the reduction of administrative control over the market and the correction of market failure. However, due to the rigid constraints of resources and capacity, regulators are practically unable to take up these responsibilities, which leads to the absence, overstepping and misalignment of regulatory authorities in the market intervention. Yang et al. (2019) indicated that economic policy uncertainty under political opacity has a significantly negative predictive effect on firms' market value and Tobin's Q.

Third, the level of information disclosure, accounting standards, and auditing services is not high enough, and intermediaries such as banks, accounting firms, and the media do not play an influential and effective monitoring role. Qian and Yeung (2015) argued that banks in China do not exercise oversight and the banking system needs to become efficient to make the market develop. Auditors might cater to the real controller's preferences for listed companies when issuing audit opinions (Hu et al., 2022), and guanxi from state ownership and management affiliations with external auditors increase the chance of obtaining a clean audit opinion (Liu et al., 2011). Media coverage in developing countries, including China, is more conducive to deals that meet the government's goals and involve powerful local companies (Borochin and Cu, 2018).

Therefore, the improvement of market mechanisms will undoubtedly have a positive impact on corporate governance. Ge et al. (2022) found that CSISC shareholding, a new protection mechanism for minority shareholders, reduces earnings management in firms without strong corporate governance mechanisms and political connections. Xue et al. (2022) revealed the positive effects of labour protection on firms' performance in the long term by providing empirical evidence from China. Jia et al. (2020) found that when institutional constraints on rent-seeking fail, an increased minority concentration improves the opportunity for all investors to distribute the future value of the firm after the reform.

1.8 Conclusions

To provide a systematic literature review and mapping analysis on the topic of corporate governance in Chinese firms, we collected 357 studies from the SCI and SSCI of the Thomson Reuters WOS database published between 2010 and 2022 in the 107 most prestigious journals. Considering the in-depth content analysis that a systematic literature review can produce and the visual representation and longitudinal evolution of the interrelations between scientific themes provided by bibliometrics, we combined these two approaches to analyse and address the sample.

In the content analysis, we examined the literature mainly according to three aspects: the theoretical frameworks, determinants and impacts of corporate governance in China. The most adopted theoretical frame is agency theory, in line with the previous finding by Yang et al. (2015). Many articles have analysed agency problems from the perspective of ownership, agency costs, tunnelling, etc. In terms of stakeholder theory, the main focus is in the field of CSR or environmental responsibility. In addition, a few papers discussed signalling theory and some other studies focused on the uniqueness of China.

The determinants we discussed in our chapter are divided into internal and external types. The internal determinants chiefly involve ownership, board and managers, among which state ownership gains much attention. In this part, we explored the effectiveness of transplanting western theories and mature conclusions into the Chinese context. The external determinants mainly include culture, government, market and law, and other external monitoring mechanisms, through which we gained some insight into the difference of the corporate governance background between China and other developed countries and how these different external determinants interrelate with other factors and influence corporate governance.

Regarding the impact of corporate governance in China, we summarized the empirical evidence, including financial and non-financial performance. A significant linear or U-shaped relationship between corporate governance and leverage, the cost of borrowing, stock price, Tobin's Q and equity level has been presented. In terms of non-financial performance, most studies are centred around CSR performance, while some discuss innovation or R&D intensity.

Through the mapping analysis using SciMAT, we can observe the evolution of the entire conceptual structure over time. The most dynamic five motor themes are emerging economies, impact, firms, business groups, and costs, among which emerging economies, impact, and costs appeared in two sub-periods. Two themes worth noting are political connections and SOEs. Although they only appeared in the last period, they represent the latest concerns of the academic community. In China, where the government has a significant influence on resource allocation and a great deal of power over listed companies, firms have a very strong incentive to establish and maintain political connections to reduce information asymmetries between companies and government policy adjustments, as well as to obtain corresponding concessions and support. In SOEs, the retained state ownership allows government intervention to create capital-intensive industries by maximizing resource mobility, drive economic development by providing infrastructure development and retain control over key elements of society. As a key component in Chinese economy, SOEs assume extra social responsibility by employing excess labour and assuming retirement benefits. Of course, the agency problem between controlling shareholders and minority shareholders as well as information asymmetry and the cost of hierarchy in SOEs are issues of concern.

Finally, three future pathways were highlighted by analysing keyword co-occurrence in VOSviewer: (1) political connections, (2) CSR and (3) market mechanisms. We can conclude that any topic related to the unique characteristics of the Chinese market will be of academic interest, such as SOEs, which have previously attracted much

attention, in addition to political connections, which only recently arose as an important theme. Moreover, sustainable living, investment, production, and consumption are irreversible global trends, so more research on CSR will be needed.

So, in the next chapter, we will analyze what internal factors will promote the SDG report. Among the various factors influencing firms, corporate governance mechanisms, specifically the internal mechanisms associated with boards of directors, may play a crucial role in ensuring adherence to the SDGs. Meanwhile, ownership structure is also one of the important factors to explain firm's sustainability practices. We will test how board characteristics and ownership factors affect Chinese firms' report in SDGs and which set of these two drivers exerts a greater influence.

CHAPTER II

Unveiling the influence of corporate governance on Sustainability Development Goals reporting in Chinese Companies

2.1 Introduction

Amid persistent challenges in social, economic, and environmental spheres, the global adoption of the Sustainable Development Goals (SDGs) in 2015 by all UN member states aimed to cultivate an inclusive, sustainable society. Comprising 17 interconnected goals and 169 targets, the SDGs span diverse objectives, from poverty eradication to climate action and environmental preservation (Scheyvens et al., 2016).

The United Nations underscores the pivotal role of companies in achieving the SDGs, emphasizing the private sector's significance in driving sustainable development, estimating that around two-thirds of the resources, funds, and technologies essential for SDG attainment come from the private sector (PwC & UNDP, 2020). Companies are urged to integrate SDGs into their business activities, focusing on job creation, community support, environmental responsibility, and economic sustainability (PwC, 2019).

Despite notable commitments by certain firms such as Toyota, and Haier towards sustainability, the collective progress toward meeting the SDGs has faced setbacks, exacerbated by the impact of the COVID-19 pandemic (PwC and UNDP, 2020). Evidence indicates a relatively low percentage of companies actively reporting their commitment to SDGs, necessitating a deeper exploration into the motivating factors encouraging companies to engage with the SDGs.

Research highlights the significance of corporate governance mechanisms, particularly internal mechanisms linked to boards of directors, in ensuring adherence to the SDGs (Chan et al., 2014; Jain and Jamali, 2016; Martínez-Ferrero and García-Meca, 2020, Toukabri and Mohamed Youssef, 2023). Factors such as CEO non-duality, board independence, gender diversity, board size, and the presence of environmental committees have been recognized as influential in fostering SDG compliance. Additionally, ownership structure, particularly government or state ownership, has been associated with corporate sustainability practices (Garcia-Sanchez et al., 2022).

To address the limited understanding of the determinants of SDGs reporting, this study specifically focuses on the unique context of China, a leading developing country. The analysis aims to uncover the factors driving Chinese companies' engagement with the SDGs, given the nation's remarkable economic progress but uneven SDG involvement (Yu et al., 2020).

In the midst of China's dynamic macroeconomic landscape and constrained data

accessibility, this research specifically focuses on internal determinants of SDG reporting, notably the structures related to boards and ownership. Analyzing Chinese firm-year observations the study reveals a positive association between board independence, board size, and the existence of a CSR committee with a company's involvement in SDG reporting. Conversely, increased levels of foreign or institutional ownership were correlated with diminished SDG reporting. These results underscore the higher impact of factors at the board level in forecasting SDG reporting compared to ownership-related factors, underscoring the pivotal role of board characteristics in fostering the dissemination of SDG reports.

2.2 Background

China's economic landscape experienced a significant transformation from a planned economy to a market-oriented one. The transition began in the 1990s with the government's initiation of the stock market and the formulation of relevant laws, which laid the groundwork for the country's corporate governance framework. A pivotal moment occurred in 2002 when the Code of Corporate Governance of Listed Companies was introduced, outlining fundamental governance principles and addressing various related matters. Notably, the equity division reform in 2005 marked a crucial stage in China's privatization process, involving the conversion of non-tradeable shares into tradeable ones.

A distinctive feature of Chinese corporate governance lies in the prevalence of State-Owned Enterprises (SOEs) resulting from restructuring and equity reforms. Apart from the 75 major SOEs within the FG500, China hosts over 150,000 SOEs, where a significant shareholder, typically the government, wields substantial influence and often exercises effective control over these entities. As the predominant stakeholder, the government directly shapes management decisions, especially through high-level appointments (Chen et al., 2013). Meanwhile, institutional and foreign investor ownership in these entities is relatively limited, although there have been gradual relaxations in their constraints. Starting from the 1990s, the Chinese government introduced closed-end funds, open-end mutual funds, index funds, and permitted insurance companies to hold shares. Additionally, Qualified Foreign Institutional Investors (QFIIs) have been allowed to hold both B-shares and A-shares since 2003.

In terms of corporate structure, China has adopted a dual board system comprising a board and a supervisory board. In contrast to the German model where the board operates under the control of the supervisory board, Chinese firms feature a supervisory board that acts solely as an overseeing entity without decision-making powers. To meet the overseas stock exchanges' listing criteria, China introduced a

guideline mandating the inclusion of at least one-third independent directors on the boards of listed companies from 2003. Conversely, there are no obligatory regulations regarding the representation of female directors on the boards of Chinese firms.

The sustainability movement in China emerged relatively recently, spanning only two decades, as the nation historically prioritized economic development. Substantial challenges such as trade-offs, limited accountability, and rapid urbanization have impeded the progress of Sustainable Development Goals (SDGs) in China (Hamed, 2018). The Corporate Social Responsibility (CSR) movement in China gained momentum in 2004, coinciding with the release of CSR guidelines by the Shenzhen Stock Exchange in 2006 and the Shanghai Stock Exchange in 2008. In 2008, the State-owned Assets Supervision and Administration Commission (SASAC) issued the Guiding Opinions on the Performance of Social Responsibility of State-Owned Enterprises, the first normative document from state ministries and commissions. China further developed its CSR standards, exemplified by CASS-CSR 1.0 (2009) and CASS-CSR 4.0 (2017).

While China released the National Plan on Implementation of the 2030 Agenda for Sustainable Development in 2016, Chinese enterprises exhibit limited awareness regarding SDG achievement. According to PwC and UNDP (2020), 42% of enterprises lacked a clear understanding of assessing the SDGs, and 38% of companies did not disclose information concerning the SDGs. Given this scenario, investigating the drivers of SDGs adoption by Chinese firms becomes essential to encourage and compel companies to bolster their commitment to sustainability.

2.3. Hypotheses development

The inception of sustainability reporting, also known as Corporate Social Responsibility (CSR) or environmental, social, and governance (ESG) reporting, can be traced back to as early as the 1960s in Europe, initially serving as a means to foster trust and bolster reputation. Over time, its significance has expanded, increasingly recognized as a crucial element in fostering sustainable business practices and influencing enterprise actions and strategies. The establishment of the 17 Sustainable Development Goals (SDGs) by the UN in 2015 marked the commencement of SDG reporting. Serving as a policy framework guiding society towards long-term prosperity, the SDGs aim to amalgamate economic, social, and environmental concerns, fostering synergies to attain sustainable development across all dimensions.

The stakeholder theory postulates that any individual or group capable of impacting or being influenced by a company's objectives can be categorized as a stakeholder, whose interests necessitate consideration when maximizing corporate value (Freeman, 2010). SDG reporting stands as an optimal approach to meet the diverse requirements of stakeholders, given the interconnection of the SDGs across 17 different dimensions. Corporate efforts and strategies aligned with SDGs correspond to the demands of stakeholders across various domains.

Concurrently, in accordance with legitimacy theory (Suchman, 1995), an organization's conduct must be deemed appropriate within the framework of established social norms and values to garner recognition and backing from stakeholders and attain legitimacy. Information disclosure significantly influences stakeholders' perceptions of an organization's legitimacy, serving as an effective means for the company to validate its standing. In this context, SDG reporting enables companies to divulge information concerning their involvement in SDGs, facilitating communication with stakeholders about their business impact and influencing stakeholders' perception of organizational legitimacy.

Therefore, there is a pertinent need to encourage companies to take responsible actions and promptly disclose their SDG reporting to enhance their reputation, attract socially responsible investment (Khan et al., 2021), and cater to the diverse demands of stakeholders.

2.3.1. SDG reporting and board of directors

Numerous research endeavors have ventured into exploring the influence of the board on a company's participation in Corporate Social Responsibility (CSR) initiatives. Theoretically, the composition of the board, as a fundamental internal governance mechanism, intricately relates to corporate sustainability practices (Johnson et al., 2013). Board directors play a significant role in steering CSR engagement by formulating sustainability strategies, establishing a CSR agenda, and allocating resources for sustainable practices (Jizi, 2017). Moreover, these directors bear the responsibility of supervising managers to ensure that their actions align with stakeholders' interests, particularly concerning environmental and social outcomes. The interconnectedness of directors can serve as a valuable resource for establishing connections with pertinent stakeholders to create sustainable strategic advantages (Ortiz de Mandojana and Aragon-Correa, 2015). Empirical investigations have affirmed that specific board characteristics, such as board diversity, board independence, board size, and the presence of a CSR committee, exert a positive influence on CSR or other related sustainability performance.

Nevertheless, concerning the latest sustainability framework, Sustainable

Development Goals (SDG) reporting, it remains uncertain whether board factors have the same effect as in CSR practices. Hence, exploring the impact of board factors, including board size and the CSR committee, on companies' adoption of SDGs is highly significant.

Female directors are often characterized by their compassionate and interpersonally sensitive nature, making them particularly concerned about environmental politics and CSR practices (Nielsen and Huse, 2010). Moreover, female independent directors exhibit a stronger moral orientation and are more concerned about their reputation, leading them to take CSR more seriously (Hyun et al., 2016). The diverse perspectives from female directors are believed to help companies focus on long-term development directions and value (Lee et al., 2014).

Multiple research works have emphasized the favorable impact of female directors on a company's sustainability initiatives. However, the evidence surrounding the correlation between women directors and sustainability issues is not consistently positive. Some theories and empirical findings propose a potentially negative or inconclusive relationship between women directors and environmentally friendly endeavors (Ramón et al., 2021). This inconsistency may stem from their tendency toward risk aversion and reduced confidence when confronted with high-risk or uncertain decisions. Moreover, as the importance of female representation in corporate boards continues to gain recognition, other studies suggest that the influence of female directors may only become apparent when a larger number of women occupy board positions (García-Meca & Santana, 2022). According to this "token theory," the mere presence of a woman might not suffice to significantly impact decision-making processes, as she might be perceived as a token and easily dismissed.

Nonetheless, based on gender socialization theory, we predict that a board with female directors will have a positive impact on SDG reporting in Chinese companies, leading to the following hypothesis:

H1: There is a positive impact of board gender diversity on SDG reporting in Chinese firms.

Numerous studies have also extensively explored the role of independent directors in influencing sustainability within corporate environments. Independent directors are known to offer objective opinions as outsiders and effectively exercise a supervisory function (Jiang and Kim, 2015). Their strong inclination toward ethical behaviors consistent with legislation, awareness of various stakeholders' interests, and advocacy for improved CSR performance and disclosure have been established in prior research

(Hyun et al., 2016; Naciti, 2019). Notably, global studies have confirmed the positive correlation between board independence and SDG reporting (Martínez-Ferrero and García-Meca, 2020).

While independent directors in Chinese firms were predominantly a result of government regulations and were introduced in 2003, around the time when SDG reporting was a novel concept, there was little empirical evidence on the impact of independent directors on SDG reporting in Chinese companies. Research indicated that politically connected independent directors in Chinese firms could be beneficial to the companies (Jiang and Kim, 2015). Studies suggested that the effects of female independent directors on CSR were more pronounced when there was a higher proportion of politically connected independent directors (Jin et al., 2021).

From these discussions, it is plausible to assume that independent directors can positively promote SDG reporting in China. Hence, the following hypothesis is proposed:

H2: There is a positive impact of board independence positively on SDG engagement in Chinese firms.

Establishing vital connections with external organizations is crucial for companies to thrive. The size of the board can serve as an indicator of the organization's capacity to build these essential links and acquire necessary resources (Yoon and Suh, 2019). A larger board can bring in diverse and valuable resources and facilitate connections with the external environment. The resource dependence theory suggests that a larger board, with its wealth of experience, knowledge, and a wider range of perspectives, can offer more solutions and higher decision-making standards. Thus, the collective decisions made by a larger board can compensate for individual directors' lack of business skills, enhance decision-making efficiency and quality, and address global challenges more effectively. Previous studies have shown that a larger board enables more effective formulation of CSR agendas and the disclosure of CSR information (Jizi, 2017).

In China, listed companies are required to have boards ranging from 5 to 19 directors according to the Code of Corporate Governance. Research findings have varied, indicating that Chinese listed firms had an average of 9 board members (Jiang and Kim, 2015) and even smaller board sizes, around 5.99 members (Chen, 2015). Given China's status as a transitional economy with diverse interests from various groups in its operational environment, companies require multiple directors with qualified experience to form a resourceful alliance to tackle any reform challenges.

Drawing from this analysis of board size and corporate development, we suggest that board will positively impact SDG reporting in China. Hence, the following hypothesis is proposed:

H3: There is a positive impact of board size on SDG engagement in Chinese firms.

The creation of a CSR committee often aligns with a strong commitment to CSR, with its primary responsibility being to formulate CSR policies and recommend social responsibility activities and related expenditures. As a dedicated commission, the CSR committee is tasked with reviewing all CSR activities, monitoring and evaluating the social impact of daily business operations, and ensuring the alignment of the company's actions with stakeholders' interests.

The inception of CSR committees in China was relatively recent, with the Bank of Communications being the first to establish one in 2007. By 2012, most enterprises controlled by the Central Government had set up CSR committees. Given its relatively recent introduction, theoretical research on CSR committees in China has been lacking. Nonetheless, global evidence suggests a positive correlation between the presence of a CSR committee and various aspects of environmental sustainability disclosure, ecological transparency, greenhouse gas emissions disclosure, CSR integration in strategic directions, obligations to stakeholders, and sustainable environmental and social performance.

Consequently, it is reasonable to expect that CSR committees will assist Chinese companies in addressing sustainability issues and conducting SDG reporting. Thus, the following hypothesis is proposed:

H4: There is a positive impact of a CSR committee positively on SDG engagement in Chinese firms.

2.3.2 SDG reporting and ownership structure

Numerous studies have highlighted ownership structure as a pivotal factor explaining CSR disclosure in companies (Zaid et al., 2020). The level of CSR engagement has been found to be closely tied to shares held by various shareholders, given the differences in preferences concerning sustainability participation among diverse owners (Oh et al., 2011).

Chinese firms demonstrate an unusual ownership structure with a predominant state ownership and a smaller proportion of foreign and institutional ownership. While research on this relationship is scarce, it is reasonable to infer that distinct ownership structures can influence SDG reporting in Chinese companies. State-owned enterprises (SOEs) are more inclined to focus on CSR and SDGs due to their inherent political and social responsibilities, while foreign and institutional ownership tends to prioritize short-term interests over engaging in SDG activities beneficial for long-term outcomes. Empirical evidence exploring the impact of state, foreign, and institutional ownership on SDG reporting in Chinese companies will be pivotal.

A defining characteristic of Chinese listed companies is state ownership. In these SOEs, the state is the primary controlling shareholder, wielding significant influence over corporate decisions, including strong support for CSR engagement (Fan and Hou, 2022). SOEs generally prioritize political and social considerations, such as employment needs, public services, social stability, and economic and environmental harmony, consequently increasing CSR disclosure beyond mere profit-making objectives.

While the impact of state ownership on sustainability engagement is not universally agreed upon due to China's unique institutional background, several studies have shown that state ownership positively influences a company's sustainability involvement (Lau et al., 2016). Moreover, state ownership has been linked to enhanced CSR disclosure (Li et al., 2013) due to differing goals of state owners compared to private shareholders, increased possibilities for governmental support, and the role of managers in SOEs being evaluated by the government based on their non-financial performance.

Yet, challenges related to the institutional framework in China and the intricacies within the governance framework of SOEs suggest difficulties in establishing a robust accounting information environment, posing obstacles in obtaining precise and dependable data for SDG reporting (Lang et al., 2013; Lennox and Wu, 2022).

Given the association between CSR disclosure and SDG reporting, it is anticipated that state ownership may influence SDG reporting positively. Therefore, the following hypothesis is proposed:

H5: There is a positive impact of state ownership on SDG engagement in Chinese firms.

Earlier studies have shown that foreign ownership plays a pivotal role in supervising corporate insiders, encouraging long-term investments, strengthening internal governance, reducing unethical corporate practices, emphasizing Corporate Social Responsibility (CSR) issues, and promoting engagement in Sustainable Development Goals (SDG) reporting.

However, in the context of China, where the share of foreign ownership is limited and fragmented, foreign investors may primarily focus on seeking short-term profits rather than emphasizing factors conducive to long-term development, such as CSR (Gulzar et al., 2019). This is due to their restricted influence over managers, stemming from their minimal shares that do not constitute primary voting shares. Additionally, foreign investors may lack the motivation to enhance CSR due to intense political forces in Chinese listed companies, thereby directing their attention toward short-term profits, which can have a detrimental impact on SDG performance instead of actively supervising corporate governance and fostering a company's sustainability practices.

Thus, the following hypothesis is proposed:

H6: There is a negative impact of foreign ownership on SDG engagement in Chinese firms.

Finally, institutional investors encompass financial entities, insurance firms, trusts, security organizations, supplementary pension funds, mutual funds, and others. While they represent a common ownership structure in developed countries, they have had limited development in developing nations. In China, restrictions on institutional investors were gradually eased only from the 1990s onwards. The ownership stake of institutional investors in Chinese firms remains notably small, averaging 1.054% in 2003, 0.807% in 2007, and 0.444% in 2011.

Studies suggest that institutional owners with limited ownership tend to show little interest in a company's engagement in Corporate Social Responsibility (CSR) (Xiang et al., 2021) and have minimal influence on managerial decisions related to Environmental, Social, and Governance (ESG) issues (Martínez-Ferrero and Lozano, 2021). The Chinese stock market's instability, coupled with significant policy uncertainties, has resulted in extremely high turnover rates among institutional investors, at times reaching up to 1000% (Jiang and Kim, 2015). These institutional investors, often behaving as speculators, tend to prioritize short-term gains over long-term social responsibility activities.

Given the characteristics of institutional ownership in Chinese firms, it is projected that these opportunistic institutional investors, with their high turnover rates, may incline owners toward short-term investments rather than addressing agency problems and concentrating on SDG issues. Hence, the following hypothesis is suggested:

H7: There is a negative impact of institutional ownership on SDG engagement in Chinese firms.

2.4. Methodology and research models

The sample selection procedure involved several steps. Initially, we gathered economic and financial data for publicly listed companies in China from Thomson Reuters Refinitiv. This database serves as a specialized resource containing global economic, financial, and listed company information, offering a comprehensive platform for market monitoring and in-depth research. Additionally, we augmented this dataset with information related to sustainability reporting obtained from the GRI database, a widely used source in prior academic research for evaluating sustainability reporting and assurance. Many previous studies have relied on the GRI database for such purposes, underscoring its extensive coverage, with approximately 56,891 reports reviewed in 2018.

Furthermore, we manually collected information on SDGs and ownership data, focusing on two main types of company reports: Annual Reports and Social Responsibility Reports. Our data collection process involved examining corporate websites, the China Stock Market, the Accounting Research database, and various other reference materials. Specifically, we scrutinized each company's reporting of SDGs and identified the nature of each goal during the analyzed period.

Upon merging the data from Thomson Reuters Refinitiv and the GRI database, we eliminated entries that either had missing variables in both datasets or lacked data concerning corporate governance and SDGs. Ultimately, we retained a final sample of 455 firm-year observations, covering the years 2016 to 2018, across 11 industry sectors in China (communication services, consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, real estate, and utilities).

With respect to the methodology, the study proposes regression models to examine the impact of board and ownership-level factors on SDG reporting in Chinese companies using panel data. Panel data offers better consistency and explanatory power than standalone datasets, enhancing the accuracy of econometric estimates (Petersen, 2009). As the dependent variables in the regression models are binary, reflecting whether SDGs are reported (coded as 0 or 1), logit regression is employed as it is well-suited for binary probability models in sustainability research (Rosati and Faria, 2019a; Martínez and García-Meca, 2020).

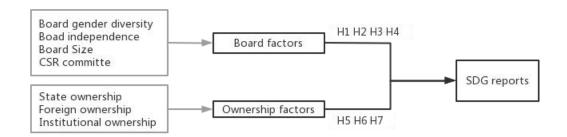
The objective of the chapter is to explore how board and ownership factors influence SDG reporting in Chinese firms, as shown in Figure 1. Two regression models are proposed. Model [1] is formulated to test Hypotheses 1-4, while Model [2] assesses

Hypotheses 5-7. These models regress SDG reporting on board variables (Model [1]) and ownership variables (Model [2]), along with several control variables:

$$\begin{split} Prob(SDG)_{it} &= \gamma_1 BGDiversity_{it} + \gamma_2 BIndep_{it} + \gamma_3 BSize_{it} + \gamma_4 CSRcom_{it} + \gamma_5 Industry_i + \\ & \gamma_6 Year_t + \sigma_i + \mu_{it} \end{split} \tag{1} \\ Prob(SDG)_{it} &= \gamma_1 State-Own_{it} + \gamma_2 Foreign-Own_{it} + \gamma_3 In-Own_{it} + \gamma_4 Industry_i + \\ & \gamma_5 Year_t + \sigma_i + \mu_{it} \end{aligned} \tag{2} \end{split}$$

Where, SDG represents the reporting of SDGs in CSR, annual, or integrated reports (coded as 1 for 'yes' and 0 for 'no'). BGDiversity, BIndep, and BSize denote board diversity, independence, and size, respectively. CSRcom is a dummy variable for the existence of a CSR committee. State-Own, Foreign-Own, and In-Own represent the shares owned by the state, foreign, and institutional entities. Sigma (σ) accounts for unobservable heterogeneity, while mu (μ) represents the error term. Year and industry effects are controlled by binary variables for each year and sector, respectively.

Figure 1 Research objective



To determine which set of drivers (board or ownership factors) more significantly impacts SDG reporting, the chapter employs a two-stage logit model proposed by Francis et al. (2011) and introduces Model [3]. This process involves regressing Model [1] and Model [2] to obtain predicted values for board and ownership factors influencing SDG reporting by Chinese firms. These predicted values are utilized in the second logit model [3]:

$$\begin{split} & \text{Prob}(\text{SDG})_{it} = \beta_1 \text{Board-Score}_{it} + \beta_2 \text{Ownership-Score}_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{Leverage}_{it} \\ & + \beta_5 \text{Tobinq}_{it} + \beta_6 \text{Physical-Res}_{it} + \beta_7 \text{ESGreporting}_{it} + \beta_8 \text{Industry}_i + \beta_9 \text{Year}_t + \sigma_i + \mu_{it} \\ & (3) \end{split}$$

Here, Board-Score and Ownership-Score are the predicted values obtained from Model [1] and Model [2], respectively. The indices range between 0 and 1, representing the probability of their influence on SDG reporting. Additional variables like firm size (Size), leverage, Tobin's Q ratio (Tobinq), physical resources, and ESG reporting are included in this model. More information on variable measurements is detailed in ANNEX II.

Certainly, the research models considered in the study must confront potential endogeneity issues due to non-random SDG reporting. This issue may occur when factors like board size or state ownership not only impact SDG reporting but are also influenced by it. To address this self-selection bias as an endogeneity problem, the study employs Heckman's two-stage model, a well-recognized approach used to handle potential endogeneity.

Moreover, the study corroborates the results by employing a difference-in-difference approach. This estimator gauges the average treatment effect on the treated group using observational data, measuring the change induced by a specific event or treatment. It compares changes pre and post-treatment within the treatment and control groups. While this method has strengths, it may be subject to biases like mean reversion.

This analytical approach aims to mitigate issues arising from self-selection bias, offering robust results and bolstering the study's findings through various techniques.

2.5 Discussion of Results

2.5.1 Descriptive results

The sample distribution by year and industry reveals that 2018 had the most substantial number of observations (270), followed by 2017 (124) and 2016 (61). Concerning industry distribution, Industrials had the highest representation at 20.44%, followed by Financials, representing 17.8% of the total observations.

In terms of SDG reporting, the percentage of companies reporting on SDGs stood at 13.63% in total. The breakdown by year demonstrated that 2018 saw the highest percentage of SDG reporting at 20.47%, followed by 2017 with 14.09%, and 2016 with the lowest percentage at 4.44%. Regarding industries, the Energy sector reported the highest percentage of SDGs (37.5%), followed by Information Technology (28.13%) and Financials (22.22%).

Analyzing the descriptive statistics of variables, the data indicated that state

ownership had the highest average proportion. In terms of board characteristics, the average number of directors was 10.466, with female and independent directors constituting 9.859% and 38.410% of the boards, respectively. Surprisingly, only 30.3% of companies had CSR committees, signifying a considerable gap compared to the international average of 64%.

Regarding the bivariate correlations between variables, no high values (above 0.5) were observed. This suggests that multicollinearity, which might impede the regression analysis, is not a significant issue among the variables.

Table 1 Sample description						
Panel A: Sample description by Year						
	Freq.	Percent				
2016	135	29.67				
2017	149	32.75				
2018	171	37.58				
Total	455	100.00				
Panel B: Sample description by	Industries					
	Freq.	Percent				
Communication Services	10	2.20				
Consumer Discretionary	43	9.45				
Consumer Staples	21	4.62				
Energy	24	5.27				
Financials	81	17.80				
Health Care	35	7.69				
Industrials	93	20.44				
Information Technology	32	7.03				
Materials	47	10.33				
Real Estate	48	10.55				
Utilities	21	4.62				
Total	455	100.00				
Sample:455 firm-year observations in 2016-2018						

Table 2 SDG reporting description							
Panel A: Sample description by SDGs							
Year	SDGs	Non-SDGs					
2016	6 (4.44%)	129 (95.56%)					
2017	21 (14.09%)	128 (85.91%)					
2018	35 (20.47%)	136 (79.53%)					
Total	62 (13.63%)	393 (86.37%)					
Panel B: Sample descrip	otion by Industries reporting SI	OGs					
	SDGs	Non-SDGs					
Communication Services	2 (20.00%)	8 (80.00%)					
Consumer Discretionary	2 (4.65%)	41 (95.35%)					
Consumer Staples	0 (0.00%)	21 (100.00%)					
Energy	9 (37.50%)	15 (62.50%)					
Financials	18 (22.22%)	63 (77.78%)					
Health Care	1 (2.86%)	34 (97.14%)					
Industrials	8 (8.60%)	85 (91.40%)					
Information Technology	9 (28.13%)	23 (71.87%)					
Materials	4 (8.51%)	43 (91.49%)					
Real Estate	6 (12.50%)	42 (87.50%)					
Utilities	3 (14.29%)	18 (85.71%)					

	Mean	Std. Dev.
xplanatory variables		
State-Own	32.717	29.075
Foreign-Own	7.736	9.701
In-Own	0.387	0.260
BGdiversity	9.859	10.082
BIndep	38.410	8.810
BSize	10.466	3.211
CSRcom	0.303	0.460
Control variables		
Size	23.768	1.837
Leverage	0.598	0.762
Tobinq	4.185	6.078
Physical-res	0.486	0.245
ESGreporting	94.405	19.555

Table 4 Bivariat	Table 4 Bivariate correlations												
	1	2	3	4	5	6	7	8	9	10	11	12	13
SDG State-Own	1.000 0.173***	1.000											
Foreign-Own In-Own BGdiversity	-0.042 -0.066 -0.007	-0.131*** -0.384*** -0.087*	1.000 -0.046 -0.079	1.000 0.010	1.000								
BIndep BSize	0.077 0.124**	-0.128*** 0.212***	-0.036 -0.007	0.056 -0.199**	0.069	1.000 -0.423***	1.000						
CSRcom Size	0.226*** 0.247	0.102** 0.497	0.120** -0.091***	-0.148* -0.202	-0.074 -0.025	0.080* -0.079	0.049 0.421***	1.000 0.212***	1.000				
Leverage Tobinq Physical-res	0.035 -0.115**	0.020 -0.048	-0.127** 0.031	0.122 0.009	-0.009 0.141***	-0.147*** 0.036	0.173*** -0.077	-0.077 -0.085	0.298*** 0.011	1.000 0.107**	1.000		
ESGreporting	0.131*** -0.048	0.205*** -0.106*	0.071 0.048	-0.111 -0.042	-0.014 -0.034	-0.016 0.080	-0.025 -0.220***	0.178*** -0.083	-0.037 -0.316***	0.088* 0.051	0.001 0.027	1.000 0.051	1.000

Sample:455 firm-year observations in 2016-2018 Note: *, ** and ***: 90, 95 and 99, respectively.

2.5.2 Empirical results

The outcomes of the regression analysis, outlined in Table 5, shed light on how different board and ownership factors influence the SDG reporting practices in Chinese firms.

*Concerning Board Characteristics:

The results demonstrate a positive and statistically significant effect of board independence, board size, and the presence of a CSR committee on SDG reporting. Notably, the coefficients for board independence, board size, and the CSR committee suggest that these factors contribute positively to a company's involvement in SDG reporting. This observation supports Hypotheses 2-4 in the context of Chinese firms.

Conversely, the coefficient for board gender diversity did not demonstrate statistical significance (p > 0.1), leading to the rejection of Hypothesis 1. This suggests that the presence of female directors in board roles might not significantly impact SDG reporting in Chinese firms based on this analysis.

*Regarding the Impact of Ownership:

The analysis reveals a noteworthy negative impact of foreign ownership and institutional ownership on SDG reporting. These findings support Hypotheses 6 and 7, implying that foreign and institutional ownership have an adverse influence on a company's commitment to SDG reporting.

On the other hand, the data does not show statistical significance for state ownership, leading to the rejection of Hypothesis 5. The results suggest that state ownership might not have a substantial influence on SDG reporting in Chinese firms based on the studied data.

These findings offer valuable insights into the specific impacts of different board and ownership factors on the integration of SDG reporting in Chinese companies.

Table 5 Regression results: the impact of board and ownership-level factors on SDG reporting

Research		Coef.	Std. Err	Z	P> z
Hypothes	-		Std. EII	L	1 > Z
is	Model 1: Board	1			
H1	BGDiversity	0.002	0.022	0.100	0.919
H2	BIndep	0.048	0.026	1.880	0.061
Н3	BSize	0.143	0.069	2.080	0.038
H4	CSRcom	1.506	0.471	3.190	0.001
	sigma_u	1.733	0.414	1.085	2.766
	rho	0.477	0.119	0.264	0.699
	Model 2: Owne	ership			
Н5	State-Own	-0.001	0.006	-0.250	0.801
Н6	Foreign- Own	-0.045	0.026	-1.730	0.084
H7	In-Own	-2.132	0.564	-3.780	0.000
	sigma_u	0.006	0.727	1.733	0.414
	rho	0.000	0.002	0.477	0.119

Sample: 455 firm-year observations in 2016-2018. Results are controlled by year and industry effects.

Our examination reveals a clear trend. Elements like board independence, board size, and the presence of a CSR committee appear to positively impact a company's inclination toward engaging in SDG reporting. Conversely, higher levels of foreign or institutional ownership show a negative connection with a company's SDG reporting efforts. While board diversity and state ownership don't display significant effects on SDG reporting, the evidence strongly indicates that the adoption of SDG reporting is closely associated with diverse board and ownership factors. This underscores the crucial role of internal governance systems in propelling businesses towards achieving Sustainable Development Goals (SDGs). In conclusion, promoting and addressing SDGs within companies necessitates a comprehensive consideration of corporate governance frameworks.

Table 6 displays the results of a two-stage logit model investigating the comparative impact of board and ownership factors on the decision to report Sustainable Development Goals (SDGs). The outcomes highlight significant influences of both board and ownership factors on the inclination to disclose SDG information in sustainability reports. Notably, board-level factors exhibit a substantial

impact on SDG reporting, whereas ownership-level factors do not appear to significantly elucidate the trend of SDG reporting. The differences between coefficients suggest that ownership factors hold relatively less weight in explaining decisions about SDG reporting compared to board features. Consequently, our findings indicate that board-level factors play a more crucial role in predicting SDG reporting compared to ownership factors.

Table 6 The relative importance of board and ownership-level factors on explaining the SDG reporting decision

the SDG reporting decision							
	Coef.	Std. Err	Z	P> z			
Board-Score	0.771	0.316	2.440	0.015			
Ownership-							
Score	0.145	0.409	0.350	0.723			
Size	-0.084	0.144	-0.590	0.557			
Leverage	0.600	0.341	1.760	0.079			
Tobinq	-0.297	0.194	-1.540	0.125			
Physical-res	1.497	1.240	1.210	0.227			
ESGreporting	0.026	0.034	0.770	0.442			
sigma_u	0.006	0.727	1.733	0.414			
Rho	0.000	0.002	0.477	0.119			
Wald statistic B	Wald statistic Board-Score = Ownership-Score $Prob > chi2 = 0.0001$						

Sample: 455 firm-year observations in 2016-2018. Results are controlled by year and industry effects.

2.6 Conclusions

In an examination involving the Chinese context, we observed a relatively low number of firms adopting SDG reporting compared to those in developed countries. This count, however, displayed an increasing trend over the years, suggesting a growing need to bolster SDG reporting from both a theoretical and practical standpoint.

The study identified two primary firm-level factors encompassing seven key elements that potentially drive firms' involvement in Sustainable Development Goals (SDG) reporting. After a thorough examination, our analysis confirmed a significant relationship between specific identified factors and firms' adoption of SDG reporting.

Notably, firms engaging in SDG reporting tended to have larger boards, a higher count of independent directors, and an established CSR committee. Chinese listed firms typically maintain smaller board sizes. Thus, an expansion in board size could

offer more resources, enabling a more effective response to SDG reporting, in line with the resource dependence theory's principle. Larger boards possess increased experience and resources, aiding in addressing global challenges and participating in sustainability reporting.

The presence of independent directors and CSR committees likely propels companies towards engaging in SDG reporting, given their inclination towards ethical behaviors and consideration of various stakeholders' interests. The role of the CSR committee in environmental disclosure mirrors the function of the audit committee in financial accounting disclosures. However, our analysis did not find a significant correlation between the presence of female directors and SDG reporting, consistent with the critical mass theory. The proportion of female directors in Chinese companies remains notably below the suggested 30% threshold for a positive impact on CSR disclosure. Thus, the limited visibility and recognition of female directors might explain their lack of positive influence on SDG reporting in Chinese firms. Moreover, companies exhibiting higher levels of foreign or institutional ownership displayed a reduced likelihood of embracing SDG reporting. This outcome is unsurprising given the substantial influence of political forces and market instability in China's stock market. Foreign and institutional investors, with limited shares and involvement in mitigating agency problems, tend to prioritize short-term profits over long-term development, resulting in a negative impact on CSR or SDG performance.

However, our analysis did not unveil a substantial association between state ownership and SDG reporting due to the conflicting effects exerted by state ownership. State-owned enterprises (SOEs) are required to consider national interests and social responsibilities, making it more likely to integrate SDGs into their business strategies. However, the limited incentives and regulatory constraints may also limit the freedom of SOEs to implement SDGs, potentially affecting corporate transparency regarding sustainability issues.

Furthermore, the two-stage logit regression analysis revealed that, compared to ownership factors, board-level factors demonstrate a stronger explanatory capacity in predicting SDG reporting. This highlights the pivotal role of board characteristics in propelling SDG reporting initiatives. Our study sheds light on future research prospects, signaling the need for additional studies to explore the impact of board-level factors on SDG engagement.

CONCLUDING REMARKS

CONCLUSIONS

In the past decades, China has experienced rapid economic growth and has become one of the world's largest economies. As a result, understanding the corporate governance practices in China is crucial for investors, policymakers, and researchers who want to engage with Chinese companies or analyze the Chinese market.

Firstly, China has its unique corporate governance system, which is influenced by its political, legal, and cultural context. Understanding these factors is crucial for comprehending the challenges and opportunities that Chinese companies face. For instance, the presence of SOEs and the influence of the government in the corporate sector are distinctive features of China's corporate governance landscape. Secondly, studying corporate governance in China allows us to examine the effectiveness of regulatory frameworks and identify areas for improvement. China has been making efforts to enhance its corporate governance practices, and studying these developments can provide valuable insights into the effectiveness of various reforms and policies. Furthermore, it is never correct to say that all research regarding corporate governance in China are generalisable (Lennox & Wu, 2022). Studying corporate governance in China contributes to the broader academic and theoretical understanding of corporate governance. By comparing the Chinese system with those of other countries, researchers can identify best practices and develop theories that can be applied in similar countries or economies globally.

Since the 1990s, China has seen a surge of research on corporate governance. After years of hard work, some reviews on special issues in Chinese corporate governance already exist, which consider corporate environmental reporting in China (Yang et al., 2015), SOEs (Lin et al., 2020; Sabbaghi, 2016), the unique corporate governance features and the institutional background in the country (Jiang and Kim, 2015), or accounting and finance reviews regarding the Chinese capital market (Han et al., 2018). The latest survey by Jiang and Kim (2020) discussed the unique horizontal agency conflict between controlling and minority shareholders deriving from the concentrated ownership structure and explored the importance of law and institutions in alleviating the agency problem.

Although these studies have provided many insights into corporate governance in China, they are isolated and scattered, and some are even contradictory. Moreover, the institutional and regulatory environment of corporate governance in China has been undergoing tremendous changes, so many facts and findings from earlier stages may no longer hold true (Jiang and Kim, 2020). Therefore, we aim to present a systematic

literature review and mapping analysis on the topic of corporate governance in Chinese firms, by combining the in-depth content analysis that a systematic literature review can produce and the visual representation and longitudinal evolution of the interrelations between scientific themes provided by bibliometrics.

We collected 357 studies from the SCI and SSCI of the Thomson Reuters WOS database published between 2010 and 2022 in the 107 most prestigious journals. In the content analysis, we examined the literature mainly according to three aspects: the theoretical frameworks, determinants and impacts of corporate governance in China. We find out the most adopted theoretical frame is agency theory, in line with the previous finding by Yang et al. (2015). The main focus of stakeholder theory is in the field of CSR or environmental responsibility.

We discussed internal and external determinants, which provide valuable insights into the similarities and differences of the focus in corporate governance between China and other developed countries. The internal determinants chiefly involve ownership, board and managers, among which state ownership gains much attention. The external determinants mainly include culture, government, market and law, and other external monitoring mechanisms, through which we gained deeper understanding of the different corporate governance background in China and how these different external determinants interrelate with other factors and influence corporate governance. Also, we summarized the empirical evidence to show the impact of corporate governance in China, including financial and non-financial performance, including the relationship between corporate governance and leverage, the cost of borrowing, stock price, Tobin's Q and equity level, CSR performance, R&D intensity.

Most importantly, we can observe the evolution of the entire conceptual structure over time with the most dynamic five motor themes being emerging economies, impact, firms, business groups, and costs. Two themes worth noting are political connections and SOEs. In China, where the government has a significant influence on resource allocation and a great deal of power over listed companies, firms have a very strong incentive to establish and maintain political connections to reduce information asymmetries between companies and government policy adjustments, as well as to obtain corresponding concessions and support. In SOEs, the retained state ownership allows government intervention to create capital-intensive industries by maximizing resource mobility, drive economic development by providing infrastructure development and retain control over key elements of society. As a key component in Chinese economy, SOEs assume extra social responsibility by employing excess labour and assuming retirement benefits. Of course, the agency problem between controlling shareholders and minority shareholders as well as information asymmetry

and the cost of hierarchy in SOEs are issues of concern.

Finally, we highlight three future pathways by analysing keyword co-occurrence in VOSviewer: (1) political connections, (2) CSR and (3) market mechanisms. Political connections or the political economy as the most important character is a a major entry point to understanding corporate governance in China, which to great extent predetermine the maturity of market mechanisms. Thus, deeper research is needed in future, especially the interrelation between it and other institutional factors and how the interrelation influences the corporate governance in company level.

Moreover, sustainable living, investment, production, and consumption are irreversible global trends, particularly when SDGs was adopted by all United Nations member states in 2015. To be specific, it means 17 SDGs and 169 targets, ranging from ending poverty, reducing inequality and promoting health and education to fighting climate change and environment deterioration. The 17 SDGs are a set of interrelated and comprehensive goals, which can provide the framework for greater synergy across all sectors. From the perspective of corporate governance, it is of significance to take initiatives to embrace SDGs. First of all, the innovation, responsiveness, and efficiency of the private sector in delivering specific skills and resources cannot be matched by other agents. It is estimated that two-thirds of the funds, resources and technologies needed to achieve SDGs come from the private sector (PwC & UNDP, 2020). Companies can help to achieve SDGs by creating quality jobs, providing fair pay and benefits, and supporting community development (Goals 8 and 11) as well as building partnerships, engaging in public policy, and acting together (Goals 17). Moreover, they can also reduce their negative impact on the environment by controlling their own operations and production processes, while promoting economic sustainability by producing with more environmentally friendly, renewable, and resource-efficient materials and energy (Goals 7 and 12).

Chapter 2 delves into an examination of the factors compelling companies to engage with Sustainable Development Goals (SDGs) in their reports. Utilizing China as a prominent representative among developing nations, our investigation evaluates:

- (i) The influence of board characteristics on the reporting of SDGs by Chinese firms.
- (ii) How ownership factors impact such reporting.
- (iii) Which of these drivers—board characteristics or ownership factors—exerts a greater influence.

Empirical findings reveal a positive correlation between board independence, board

size, and the existence of a CSR committee and the adoption of SDG reporting by firms in China. Notably, the presence of independent directors and the formation of CSR committees within Chinese corporate governance serve as supervisory mechanisms, promoting the adoption of SDG reporting. Independent directors display concern for ethical behaviors and regulatory standards associated with sustainability, while the CSR committee functions as an internal institution affecting the board's approach to sustainability issues, aligning with SDGs and demonstrating commitment to stakeholders from a long-term strategic standpoint.

The relatively small board size in Chinese companies, typically less than 10 members on average, implies that a larger board possesses more experience and resources to effectively respond to evolving sustainability reporting, notably SDG reporting. This aligns with the conclusions of Martínez-Ferrero and García-Meca (2020) regarding the enhancement of a firm's contribution to SDGs through internal corporate governance, where board independence significantly influences SDG disclosure. Similar support is found in the research of Buniamin et al. (2020) on Malaysian samples and Pizzi et al. (2021) on an international scale, confirming the positive relationship between a firm's SDG reporting scores and the presence of independent directors.

Anticipating positive results, we initially expect female directors to positively influence SDG reporting due to their heightened sensitivity to Corporate Social Responsibility (CSR) and sustainable development issues. However, our study does not yield statistically significant evidence regarding board diversity. This can be attributed to the low representation of women directors in Chinese company boards, where the critical mass theory emphasizes the need for a substantial number or proportion of female directors to significantly impact board discussions. While the proportion of female directors in China has seen a relative increase in recent years, the numbers remain below the threshold critical for their collective substantial influence on SDG achievements.

Concerning ownership's influence on a company's SDG reporting, our findings suggest a negative relationship between higher levels of foreign or institutional ownership and the adoption of SDG reporting. Unlike findings in developed countries, this trend in China could be explained by the relatively low share of institutional and foreign investors in Chinese companies, resulting in their limited decision-making power over the long-term development of the enterprise. The unstable nature of China's stock market and the high turnover ratio of institutional investors further disincentivize their long-term investments, steering their focus away from SDGs.

Regarding state ownership's impact, its effect on SDG implementation in Chinese enterprises is complex. State-owned enterprises (SOEs) in China, driven by national interests and social responsibilities, might integrate SDGs into their strategies. However, state ownership may also restrict companies' autonomy and transparency due to government intervention and complex governance structures. Although China has made efforts to promote SDGs, the absence of mandatory reporting regulations for all companies, including SOEs, might hinder progress in this domain. Thus, the impact of state ownership on corporate SDG reporting in China remains intricate, necessitating further investigation.

THEORETICAL AND PRACTICAL CONTRIBUTIONS

Our main contributions can be outlined as follows. Regarding the first chapter, we have reviewed and integrated the Chinese corporate governance literature from the past 12 years and presented an updated summary of this, refining the main themes of the theoretical and practical development of Chinese corporate governance and identifying trends in corporate governance research. The theoretical framework of corporate governance in China, as well as its main inputs and outputs are highlighted. Second, we have pioneered the use of SciMAT to study the thematic structure of corporate governance and to visualize its evolution, interrelationships, and dynamics in the form of clusters and networks. So far, corporate governance research in China has not been the subject of bibliometric analysis, but we have conducted a quantitative statistical analysis of the literature by applying mathematical and statistical methods, especially through SciMAT, to reveal the evolution of knowledge structures and using VOSviewer to explore promising future research directions. This analysis can offer researchers guidance on the structure of different thematic clusters and serves as an opportunity to identify future research. Third, a separate examination of the Chinese literature has helped to emphasize the distinctive features of Chinese corporate governance and provide a deeper understanding of its dynamic and complex nature, thus enabling a good way to distinguish and identify the validity of western theories in the Chinese context and report on new research findings to complement the knowledge of corporate governance in the context of emerging or transition economies.

Chapter 2 of our study contributes to enriching existing literature by investigating the determinants of Sustainable Development Goals (SDGs) in the private sector. The examination of SDGs in business remains an emerging and relatively underexplored

research area within academia, particularly in terms of SDG reporting in sustainability literature. Moreover, literature focusing on the factors driving improved SDG implementation in businesses within developing countries is even scarcer, and our study provides an initial exploration within the context of China. While previous studies by Martínez-Ferrero and García-Meca (2020) and Rosati and Faria (2019a) have examined the influence of corporate governance factors on SDG reporting within international samples, they do not address the impact of board size and the presence of a CSR committee. Simultaneously, no existing research has investigated the impact of ownership on SDG reporting among Chinese companies. Our study fills this crucial gap in research by investigating how to encourage businesses to engage in SDG reporting in China.

Second, as further contribution, this study examines how board and ownership-level factors are weighted in SDG reporting, concluding that compared to ownership factors, board-level factors have greater capacity to predict SDG reporting. Translated, board factors such as board independence, board size and the CSR committee exert a greater influence in incorporating SDGs in business than ownership factors. Although the influence of board factors in SDG reporting has previously been investigated, as have the effect of ownership factors in firms' sustainability practices, no study has been carried out to determine which set of drivers—related to board or ownership factors—exerts the greater influence on firms' SDG reporting. As the first attempt to compare the weighting of board and ownership factors in adopting SDG reporting, our study is enlightening for future research: more studies on the board-level factors, such as board diversity, board composition, CEO non-duality, etc., can be conducted to test their influence.

LIMITATIONS AND FUTURE RESEARCH

This research it is not free of limitations. To begin with limitations of Chapter 1, the data collection was restricted. We narrowed down our data collection by only focusing on English articles published in WOS from 2010 to 2022 in five main categories (business and finance, business, ethics, management, environmental science), without considering publications in other languages and other databases. Although English articles are the most recognized and WOS is widely viewed as the most influential database in scientific research, we may still have omitted some related articles in other languages or databases, especially articles in Chinese about corporate governance that may contribute to our understanding of this field. In addition, the SciMAT analysis was established according to our criteria, and the data pre-processing before the analysis was also performed manually, therefore different

criteria or debugging methods may produce different results and scientific visual maps. Finally, our sample only focused on Chinese listed companies, so future research could broaden the evaluation to incorporate several emerging economies and provide a comparative analysis of corporate governance in those countries, such as India, Brazil, etc.

Our study in Chapter 2 has certain limitations. Initially, our analysis focused solely on Chinese firms to explore the correlation between board and ownership factors and involvement in SDG reporting. Further studies could extend this analysis to encompass other developing countries. Additionally, due to the information available through the GRI database, our analysis was constrained to the years 2016 to 2018. Future studies could address this limitation by extending the analysis period and expanding the number of firms assessed, aiming to provide uniform representation across various industries within the total sample.

Moreover, our study is restricted by the lack of information and data, preventing robustness checks using alternative indicators for the primary variables. The proposed regression models may also have shortcomings due to the exclusion of certain control variables. Specifically, future investigations should consider assessing the impact of each explanatory variable on each of the seventeen SDGs individually, rather than examining SDG reporting in general.

Lastly, our study did not consider external factors influencing SDG reporting in businesses. Future research needs to delve into these external drivers, exploring factors like regional and country-level influences such as political and legal systems, cultural factors, and social norms to provide a more comprehensive understanding of SDG influences in diverse contexts.

REFERENCES

- Ain, Q. U., Yuan, X., & Javaid, H. M. (2022). The impact of board gender diversity and foreign institutional investors on firm innovation: evidence from China. European Journal of Innovation Management, 25(3), 813-837.
- Al-Gamrh, B., Al-Dhamari, R., Jalan, A., & Jahanshahi, A. A. (2020). The impact of board independence and foreign ownership on financial and social performance of firms: evidence from the UAE. Journal of Applied Accounting Research, 21(2), 201-229.
- Allen, F., Qian, J., & Qian, M. (2005). Law, finance, and economic growth in China. Journal of Financial Economics, 77(1), 57-116.
- Al-Shaer, H., Albitar, K., & Hussainey, K. (2022). Creating sustainability reports that matter: an investigation of factors behind the narratives. Journal of Applied Accounting Research, 23(3), 738-763.
- Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. Business Strategy and the environment, 23(4), 217-235.
- Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V.J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. Journal of Environmental Management, 86(1), 88–103.
- Bena, J., Ferreira, M. A., Matos, P., & Pires, P. (2017). Are foreign investors locusts? The long-term effects of foreign institutional ownership. Journal of Financial Economics, 126(1), 122-146.
- Borochin, P., & Cu, W. H. (2018). Alternative corporate governance: Domestic media coverage of mergers and acquisitions in China. Journal of Banking and Finance, 87, 1-25.
- Bradshaw, M., Liao, G., & Ma, M. S. (2019). Agency costs and tax planning when the government is a major shareholder. Journal of Accounting and Economics, 67(2-3), 255-277.
- Buniamin, S., Jaffar, R., Ahmad, N., & Johari, N. H. (2020). Exploring the Involvement of Malaysian Companies in Sustainable Development Goals (SDGs). Global Business & Management Research, 12(4).
- Cai, D., Luo, J. H., & Wan, D. F. (2012). Family CEOs: Do they benefit firm performance in China?. Asia Pacific Journal of Management, 29(4), 923-947.
- Callon, M., Courtial, J. P., & Laville, F. (1991). Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemsitry. Scientometrics, 22(1), 155-205.
- Cao, N., McGuinness, P. B., & Xi, C. (2021). Does securities enforcement improve

- disclosure quality? An examination of Chinese listed companies' restatement activities. Journal of Corporate Finance, 67, 101877.
- Caputo, A., Marzi, G., Pellegrini, M.M., & Rialti, R. (2018). Conflict management in family businesses: A bibliometric analysis and systematic literature review. International Journal of Conflict Management, 29 (4), 519-542.
- Chan, K. S., Dang, V. Q., & Yan, I. K. (2012). Chinese firms' political connection, ownership, and financing constraints. Economics Letters, 115(2), 164-167.
- Chen, T. (2015). Institutions, board structure, and corporate performance: Evidence from Chinese firms. Journal of Corporate Finance, 32, 217-237.
- Chen, X. (2017). Improved corporate governance and Chinese seasoned equity offering announcement effects. Accounting and Finance, 57(2), 401-428.
- Chen, C. H. & Al-Najjar, B. (2012). The determinants of board size and independence: Evidence from China. International Business Review, 21(5), 831-846.
- Chen, D., Ding, S., & Wu, Z. (2014). Effect of foreign ownership on cost of borrowing: Evidence from small and medium-sized enterprises in China. International Small Business Journal, 32(6), 693-715.
- Chen, Z., Guan, Y., & Ke, B. (2013). Are stock option grants to directors of state-controlled Chinese firms listed in Hong Kong genuine compensation?. The Accounting Review, 88(5), 1547-1574.
- Chen, S., Lin, B., Lu, R., & Zhang, T. (2015). Controlling shareholders' incentives and executive pay-for-performance sensitivity: Evidence from the split share structure reform in China. Journal of International Financial Markets, Institutions and Money, 34, 147-160.
- Chen, S., Ye, Y., Jebran, K., & Majeed, M. A. (2020). Confucianism culture and corporate cash holdings. International Journal of Emerging Markets, 15(6), 1127-1159.
- Chen, G., Zhang, J. J., & Pifer, N. D. (2019). Corporate governance structure, financial capability, and the R&D intensity in Chinese sports sector: Evidence from listed sports companies. Sustainability, 11(23), 6810.
- Cho, K. R., Huang, C. H., & Padmanabhan, P. (2014). Foreign ownership mode, executive compensation structure, and corporate governance: Has the literature missed an important link? Evidence from Taiwanese firms. International Business Review, 23(2), 371-380.
- Choi, S. B., Lee, S. H., & Williams, C. (2011). Ownership and firm innovation in a transition economy: Evidence from China. Research Policy, 40(3), 441-452.
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2012). SciMAT: A new science mapping analysis software tool. Journal of the American Society for Information Science and Technology, 63(8), 1609-1630.
- Conyon, M. J., & He, L. (2012). CEO Compensation and Corporate Governance in

- China. Corporate Governance: An International Review, 20(6), 575-592.
- Correia, M. M. (2014). Political connections and SEC enforcement. Journal of Accounting and Economics, 57(2-3), 241-262.
- Datta, S., & Goyal, S. (2022). Determinants of SDG Reporting by Businesses: A Literature Analysis and Conceptual Model. Vision, 09722629221096047.
- Ding, Y., Nowak, E., & Zhang, H. (2010). Foreign vs. domestic listing: An entrepreneurial decision. Journal of Business Venturing, 25(2), 175-191.
- Dixon, R., Guariglia, A., & Vijayakumaran, R. (2017). Managerial ownership, corporate governance and firms' exporting decisions: Evidence from Chinese listed companies. The European Journal of Finance, 23(7-9), 802-840.
- Dong, J., & Gou, Y. N. (2010). Corporate governance structure, managerial discretion, and the R&D investment in China. International Review of Economics and Finance, 19(2), 180-188.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133, 285-296.
- Duanmu, J. L. (2011). The effect of corruption distance and market orientation on the ownership choice of MNEs: Evidence from China. Journal of International Management, 17(2), 162-174.
- Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2019). A study of environmental policies and regulations, governance structures, and environmental performance: The role of female directors. Business Strategy and the Environment, 28(1), 206-220.
- Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. The Journal of Finance, 61(6), 2597-2635.
- Fan, P., & Hou, M. (2022). Is there a gap between saying and doing in CSR? Cases from Asian firms. Asia Pacific Business Review, 28(4), 606-615.
- Fang, J., He, L., & Shaw, T. S. (2018). The effect of external auditors on managerial slack. Accounting Horizons, 32(4), 85-115.
- Feng, X., Hu, N., & Johansson, A. C. (2016). Ownership, analyst coverage, and stock synchronicity in China. International Review of Financial Analysis, 45, 79-96.
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2012). Does board gender composition affect corporate social responsibility reporting. International Journal of Business and Social Science, 3(1), 31-38.
- Firth, M., Lin, C., & Zou, H. (2010). Friend or foe? The role of state and mutual fund ownership in the split share structure reform in China. Journal of Financial and Quantitative Analysis, 45(3), 685-706.
- Francis, J. R., Khurana, I. K., Martin, X., & Pereira, R. (2011). The relative importance of firm incentives versus country factors in the demand for

- assurance services by private entities. Contemporary Accounting Research, 28(2), 487 516.
- Freeman, R. E. (2010). Strategic management: A stakeholder approach. Cambridge university press.
- Fu, Y., Liu, C., Qin, Z., & Zhao, D. (2022). Institutional cross-ownership and firm social performance. Corporate Governance: An International Review, 30(6), 738-764.
- Gao, W., Huang, Z., & Yang, P. (2019). Political connections, corporate governance and M&A performance: Evidence from Chinese family firms. Research in International Business and Finance, 50, 38-53.
- García-Meca, E., & Santana-Martín, D. J. (2022). Board gender diversity and performance in family firms: exploring the faultline of family ties. Review of Managerial Science, 1-36.
- Garcia-Sanchez, I. M., Aibar Guzmán, B., Aibar Guzmán, C., & Somohano Rodríguez, F. M. (2022). The drivers of the integration of the sustainable development goals into the non financial information system: Individual and joint analysis of their influence. Sustainable Development, 30(4), 513-524.
- Garcia-Sanchez, I. M., Gomez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019). Board independence and GRI-IFC performance standards: The mediating effect of the CSR committee. Journal of Cleaner Production, 225, 554-562.
- Ge Wang, Saixing Zeng, Bo Xia, Guangdong Wu*, Dongtao Xia. (2021). Influence of financial conditions on the environmental information disclosure of construction firms [J]. Journal of Management in Engineering
- Ge, W., Ouyang, C., Shi, Z., & Chen, Z. (2022). Can a not-for-profit minority institutional shareholder make a big difference in corporate governance? A quasi-natural experiment. Journal of Corporate Finance, 72, 102125.
- Gerged, A. M., & Almontaser, T. (2021). Corporate adoption of SDG reporting in a non-enabling institutional environment: Insights from Libyan oil industries. Resources Policy, 74, 102240.
- Giannetti, M., Liao, G., You, J., & Yu, X. (2021). The externalities of corruption: Evidence from entrepreneurial firms in China. Review of Finance, 25(3), 629-667.
- Goldman, E., Rocholl, J., & So, J. (2013). Politically connected boards of directors and the allocation of procurement contracts. Review of Finance, 17(5), 1617-1648.
- Gul, F. A., Kim, J. B., & Qiu, A. A. (2010). Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. Journal of Financial Economics, 95(3), 425-442.

- Gulzar, M. A., Cherian, J., Hwang, J., Jiang, Y., & Sial, M. S. (2019). The impact of board gender diversity and foreign institutional investors on the corporate social responsibility (CSR) engagement of Chinese listed companies. Sustainability, 11(2), 307.
- Guo, L., & Platikanov, S. (2019). Institutional ownership and corporate governance of public companies in China. Pacific-Basin Finance Journal, 57, 101180.
- Guo, M., & Zheng, C. (2021). Foreign ownership and corporate social responsibility: Evidence from China. Sustainability, 13(2), 508.
- Hamed H. (2018). Critical Evaluation of Key Challenges to the Sustainable Development: Case Study of Brazil and China. Arabian Journal of Business and Management Review, 8(3), 1-4.
- Han, J., He, J., Pan, Z., & Shi, J. (2018). Twenty years of accounting and finance research on the Chinese capital market. Abacus, 54(4), 576-599.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. Journal of accounting and public policy, 24(5), 391-430.
- Harford, J., Kecskés, A., & Mansi, S. (2018). Do long-term investors improve corporate decision making?. Journal of Corporate Finance, 50, 424-452.
- Hasan, I., & Xie, R. (2013). Foreign bank entry and bank corporate governance in China. Emerging Markets Finance and Trade, 49(2), 4-18.
- Haß, L. H., Johan, S., & Schweizer, D. (2016). Is corporate governance in China related to performance persistence?. Journal of Business Ethics, 134(4), 575-592.
- Helfaya, A., & Moussa, T. (2017). Do board's corporate social responsibility strategy and orientation influence environmental sustainability disclosure? UK evidence. Business Strategy and the Environment, 26(8), 1061-1077.
- Hou, W., & Lee, E. (2014). Split Share Structure Reform, corporate governance, and the foreign share discount puzzle in China. The European Journal of Finance, 20(7-9), 703-727.
- Hou, W., & Moore, G. (2010). Player and referee roles held jointly: The effect of state ownership on China's regulatory enforcement against fraud. Journal of Business Ethics, 95(2), 317-335.
- Hou, W., Kuo, J. M., & Lee, E. (2012). The impact of state ownership on share price informativeness: The case of the split share structure reform in China. The British Accounting Review, 44(4), 248-261.
- Hu, H. W., & Cui, L. (2014). Outward foreign direct investment of publicly listed firms from China: A corporate governance perspective. International Business Review, 23(4), 750-760.
- Hu, H. W., & Sun, P. (2019). What determines the severity of tunneling in China?.

- Asia Pacific Journal of Management, 36(1), 161-184.
- Hu, J., Wang, S., & Xie, F. (2018). Environmental responsibility, market valuation, and firm characteristics: Evidence from China. Corporate Social Responsibility and Environmental Management, 25(6), 1376-1387.
- Hu, M., Muhammad, A., & Yang, J. (2022). Ownership concentration, modified audit opinion, and auditor switch: New evidence and method. The North American Journal of Economics and Finance, 61, 101692.
- Huang, W., Boateng, A., & Newman, A. (2016). Capital structure of Chinese listed SMEs: an agency theory perspective. Small Business Economics, 47(2), 535-550.
- Huang, Y. S., & Wang, C. J. (2015). Corporate governance and risk-taking of Chinese firms: The role of board size. International Review of Economics and Finance, 37, 96-113.
- Hyun, E., Yang, D., Jung, H., & Hong, K. (2016). Women on boards and corporate social responsibility. Sustainability, 8(4), 300.
- Ibrahim, N., & Angelidis, J. (1995). The corporate social responsiveness orientation of board members: Are there differences between inside and outside directors. Journal of Business Ethics,14(5), 405 410.
- Jebran, K., Chen, S. & Zhu, D. H. (2019). Board informal hierarchy and stock price crash risk: Theory and evidence from China. Corporate Governance: An International Review, 27(5), 341-357.
- Jebran, K., Chen, S., & Zhang, R. (2020). Board diversity and stock price crash risk. Research in International Business and Finance, 51, 101122.
- Jensen, J. C., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach. Business Strategy and the Environment, 21(5), 299-316.
- Jensen, M. C., & Meckling, W. H. (1976). Agency Costs and the Theory of the Firm. Journal of financial economics, 3(4), 305-360.
- Jia, N., Shi, J., Wang, C., & Wang, Y. (2020). Parasites and paragons: Ownership reform and concentrated interest among minority shareholders. Journal of Management Studies, 57(1), 129-162.
- Jiang, F., & Kim, K. A. (2015). Corporate governance in China: A modern perspective. Journal of Corporate Finance, 32, 190-216.
- Jiang, F., & Kim, K. A. (2015). Corporate governance in China: A modern perspective. Journal of Corporate Finance, 32(3), 190-216.
- Jiang, F., & Kim, K. A. (2020). Corporate governance in China: A survey. Review of Finance, 24(4), 733-772.
- Jin, D., Wang, H., Wang, P., & Yin, D. (2016). Social trust and foreign ownership: Evidence from qualified foreign institutional investors in China. Journal of

- Financial Stability, 23, 1-14.
- Jin, R., Jiang, X., & Hu, H. W. (2021). Internal and external CSR in China: How do women independent directors matter?. Asia Pacific Journal of Management, 1-36.
- Jin, R., Jiang, X., & Shen, A. (2022). Mind the gap: independent directors and corporate social responsibility in China. Chinese Management Studies, 16(5), 1182-1204.
- Jizi, M. (2017). The influence of board composition on sustainable development disclosure. Business Strategy and the Environment, 26(5), 640-655.
- Johnson, S. G., Schnatterly, K., & Hill, A. D. (2013). Board composition beyond independence: Social capital, human capital, and demographics. Journal of management, 39(1), 232-262.
- Kato, T., & Long, C. (2006). CEO turnover, firm performance, and enterprise reform in China: Evidence from micro data. Journal of Comparative Economics, 34(4), 796-817.
- Kazemikhasragh, A., Francesca Cicchiello, A., & Cristina Pietronudo, M. (2021). Factors influencing the adoption of SDG reporting by large African and Asian companies. International Journal of technology management & sustainable development, 20(1), 43-60.
- Kent, P., & Monem, R. (2008). What drives TBL reporting: Good governance or threat to legitimacy? Australian Accounting Review, 18(4), 297–309.
- Khan, F. U., Zhang, J., Dong, N., Usman, M., Ullah, S., & Ali, S. (2021). Does privatization matter for corporate social responsibility? Evidence from China. Eurasian Business Review, 11(3), 497-515.
- Khan, F. U., Zhang, J., Usman, M., Badulescu, A., & Sial, M. S. (2019). Ownership reduction in state-owned enterprises and corporate social responsibility: Perspective from secondary privatization in China. Sustainability, 11(4), 1008.
- Khan, P. A., Johl, S. K., & Johl, S. K. (2021). Does adoption of ISO 56002-2019 and green innovation reporting enhance the firm sustainable development goal performance? An emerging paradigm. Business Strategy and the Environment, 30(7), 2922-2936.
- Kitchenham, B. (2004). Procedures for performing systematic reviews. Keele, UK, Keele University, 33(2004), 1-26.
- Kumar, K., Kumari, R., Poonia, A., & Kumar, R. (2023). Factors influencing corporate sustainability disclosure practices: empirical evidence from Indian National Stock Exchange. Journal of Financial Reporting and Accounting, 21(2), 300-321.
- Kumar, P., & Zattoni, A. (2019). Farewell editorial: Exiting editors' perspective on current and future challenges in corporate governance research. Corporate

- Governance: An International Review, 27(1), 2–11.
- Lan, Y., Wang, L., & Zhang, X. (2013). Determinants and features of voluntary disclosure in the Chinese stock market. China Journal of Accounting Research, 6(4), 265-285.
- Lau, C., Lu, Y., & Liang, Q. (2016). Corporate social responsibility in China: A corporate governance approach. Journal of Business Ethics, 136(1), 73-87.
- Lau, C., Lu, Y., & Liang, Q. (2016). Corporate social responsibility in China: A corporate governance approach. Journal of Business Ethics, 136(1), 73-87.
- Lau, K. L. A., & Young, A. (2013). Why China shall not completely transit from a relation based to a rule based governance regime: A Chinese perspective. Corporate Governance: An International Review, 21(6), 577-585.
- Lebedev, S., Sun, S. L., Markóczy, L., & Peng, M. W. (2021). Board political ties and firm internationalization. Journal of International Management, 27(3), 100860.
- Lee, J. S., Lan, L. L., & Rowley, C. (2014). Why might females say no to corporate board positions? The Asia Pacific in comparison. Asia Pacific Business Review, 20(4), 513-522.
- Lennox, C., & Wu, J. S. (2022). A review of China-related accounting research in the past 25 years. Journal of Accounting and Economics, 101539.
- Lennox, C., & Wu, J. S. (2022). A review of China-related accounting research in the past 25 years. Journal of Accounting and Economics, 101539.
- Li, B., Xu, L., McIver, R. P., Liu, X., & Pan, A. (2022). Mixed-ownership reform and private firms' corporate social responsibility practices: Evidence from China. Business & Society, 61(2), 389-418.
- Li, J., Vertinsky, I., & Zhang, H. (2013). The quality of domestic legal institutions and export performance: Theory and evidence from China. Management International Review, 53, 361-390.
- Li, M. H., Cui, L., & Lu, J. (2017). Marketized state ownership and foreign expansion of emerging market multinationals: Leveraging institutional competitive advantages. Asia Pacific Journal of Management, 34, 19-46.
- Li, Q., Luo, W., Wang, Y., & Wu, L. (2013). Firm performance, corporate ownership, and corporate social responsibility disclosure in China. Business Ethics: A European Review, 22(2), 159-173.
- Li, S., Song, X., & Wu, H. (2015). Political connection, ownership structure, and corporate philanthropy in China: A strategic-political perspective. Journal of Business Ethics, 129, 399-411.
- Li, W (2016), Corporate Governance (the Third Edition), Higher Education Press, p93.
- Li, Y., & Lan, F. (2021). The determinants of adjustment speed of board structure: evidence from Chinese listed companies. Review of Managerial Science, 15(3), 725-753.

- Liang, X., Wang, L., & Cui, Z. (2014). Chinese private firms and internationalization: Effects of family involvement in management and family ownership. Family Business Review, 27(2), 126-141.
- Liao, L., Lin, T. P., & Zhang, Y. (2018). Corporate board and corporate social responsibility assurance: Evidence from China. Journal of Business Ethics, 150(1), 211-225.
- Liao, L., Lin, T. P., & Zhang, Y. (2018). Corporate board and corporate social responsibility assurance: Evidence from China. Journal of Business Ethics, 150(1), 211-225.
- Lin, K. J., Lu, X., Zhang, J., & Zheng, Y. (2020). State-owned enterprises in China: A review of 40 years of research and practice. China Journal of Accounting Research, 13(1), 31-55.
- Lin, Y. R., & Fu, X. M. (2017). Does institutional ownership influence firm performance? Evidence from China. International Review of Economics and Finance, 49, 17-57.
- Liu, C., Uchida, K., & Yang, Y. (2012). Corporate governance and firm value during the global financial crisis: Evidence from China. International Review of Financial Analysis, 21, 70-80.
- Liu, G., Xin, G., & Li, J. (2021). Making political connections work better: Information asymmetry and the development of private firms in China. Corporate Governance: An International Review, 29(6), 593-611.
- Liu, J., Wang, Y., & Wu, L. (2011). The effect of guanxi on audit quality in China. Journal of Business Ethics, 103, 621-638.
- Liu, X., Lu, J., & Chizema, A. (2014a). Top executive compensation, regional institutions and Chinese OFDI. Journal of World Business, 49(1), 143-155.
- Liu, Y., Wei, Z., & Xie, F. (2014b). Do women directors improve firm performance in China?. Journal of Corporate Finance, 28, 169-184.
- Lopez, B. (2020). Connecting business and sustainable development goals in Spain. Marketing Intelligence & Planning, 38(5), 573-585.
- Lu, J. W., Liang, X., Shan, M., & Liang, X. (2015). Internationalization and performance of Chinese family firms: The moderating role of corporate governance. Management and Organization Review, 11(4), 645-678.
- Lu, Y., & Shi, X. (2012). Corporate governance reform and state ownership: Evidence from China. Asia-Pacific Journal of Financial Studies, 41(6), 665-685.
- Luo, J. H., Wan, D. F., & Cai, D. (2012). The private benefits of control in Chinese listed firms: Do cash flow rights always reduce controlling shareholders' tunneling?. Asia Pacific Journal of Management, 29(2), 499-518.
- Lv Y. (2019). Study on the Mechanism of the Impact of Female Directors on Corporate Social Responsibility (in Chinese), Ph.D. thesis. Northwest

- University.
- Lv Y., Wang Z., Yao H. (2021). Female Directors, Group Dynamics and Corporate Social Responsibility Gender Synergy or Group Synergy? (in Chinese). Collected Essays on Finance and Economics, 271(4).
- Martínez-Ferrero, J., & García-Meca, E. (2020). Internal corporate governance strength as a mechanism for achieving sustainable development goals. Sustainable Development, 28(5), 1189-1198.
- Martínez-Ferrero, J., & Lozano, M. B. (2021). The Nonlinear Relation between Institutional Ownership and Environmental, Social and Governance Performance in Emerging Countries. Sustainability, 13(3), 1586.
- Meutia, I., Mukhtaruddin, Saftiana, Y. and Faisal, M. (2017). CEO's experience, foreign ownership and corporate social responsibility: a case of manufacturing companies. Corporate Ownership and Control, 14 (3), 377-399.
- Monteiro, S., Lemos, K., & Ribeiro, V. (2022, November). The influence of board gender diversity on the sustainable development goals reporting: evidence from Portuguese companies. In European Conference on Management Leadership and Governance (Vol. 18, No. 1, pp. 329-339).
- Mutlu, C. C., Van Essen, M., Peng, M. W., Saleh, S. F., & Duran, P. (2018). Corporate governance in China: A meta-analysis. Journal of Management Studies, 55(6), 943-979.
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. Journal of Cleaner Production, 237, 117727.
- Naughton, B. (2017). Is China Socialist?. Journal of Economic Perspectives, 31(1), 3-24.
- Nielsen, S., & Huse, M. (2010). The contribution of women on boards of directors: Going beyond the surface. Corporate governance: An international review, 18(2), 136-148.
- Nolan, J. (2010). The influence of western banks on corporate governance in China. Asia Pacific Business Review, 16(3), 417-436.
- Oh, W. Y., Chang, Y. K., & Martynov, A. (2011). The effect of ownership structure on corporate social responsibility: Empirical evidence from Korea. Journal of business ethics, 104(2), 283-297.
- Ortiz-de-Mandojana, N., & Aragon-Correa, J. A. (2015). Boards and sustainability: The contingent influence of director interlocks on corporate environmental performance. Business Strategy and the Environment, 24(6), 499-517.
- Pan, Y., & Zhao, R. (2022). Does Mandatory Disclosure of CSR Reports Affect Accounting Conservatism? Evidence from China. Emerging Markets Finance and Trade, 58(7), 1975-1987.

- Pandey, N., Andres, C., & Kumar, S. (2023). Mapping the corporate governance scholarship: Current state and future directions. Corporate Governance: An International Review, 31(1), 127-160.
- Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. Information & Management, 52(2), 183-199.
- Peters, G. F., & Romi, A. M. (2014). Does the voluntary adoption of corporate governance mechanisms improve environmental risk disclosures? Evidence from greenhouse gas emission accounting. Journal of Business Ethics, 125(4), 637-666.
- Peters, G. F., & Romi, A. M. (2015). The association between sustainability governance characteristics and the assurance of corporate sustainability reports. Auditing: A Journal of Practice & Theory, 34(1), 163-198.
- Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. The Review of financial studies, 22(1), 435-480.
- Piotroski, J. D., Wong, T. J., & Zhang, T. (2015). Political incentives to suppress negative information: Evidence from Chinese listed firms. Journal of Accounting Research, 53(2), 405-459.
- Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review. Journal of cleaner production, 276, 124033.
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG Reporting Score. Business Strategy and the Environment, 30(1), 404-421.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics. Journal of Documentation, 25(4), 348–349.
- PwC & UNDP. (2020). Private Sector Awareness of the SDGs: A Survey Report on Business and Sustainability in China. https://www.pwccn.com/en/consulting/private-sector-awareness-of-the-sustainable-development-goals-jul2020.pdf. (Accessed Dec 1, 2022).
- PwC (2019). SDG Challenge 2019: Creating a strategy for a better world. https://www.pwc.com/gx/en/sustainability/SDG/sdg-2019.pdf. (Accessed July 5, 2021).
- Qian, M., & Yeung, B. Y. (2015). Bank financing and corporate governance. Journal of Corporate Finance, 32, 258-270.
- Radu, C., & Smaili, N. (2022). Alignment versus monitoring: An examination of the effect of the CSR committee and CSR-linked executive compensation on CSR performance. Journal of Business Ethics, 180, 145-163.
- Ramasamy, B., Yeung, M., & Laforet, S. (2012). China's outward foreign direct

- investment: Location choice and firm ownership. Journal of World Business, 47(1), 17-25.
- Ramón-Llorens, M. C., García-Meca, E., & Pucheta-Martínez, M. C. (2021). Female directors on boards. The impact of faultlines on CSR reporting. Sustainability Accounting, Management and Policy Journal, 12(1), 156-183.
- Rosati, F., & Faria, L. G. D. (2019a). Business contribution to the sustainable development agenda: Organizational factors related to early adoption of SDG reporting. Corporate Social Responsibility and Environmental Management, 26(3), 588-597.
- Rosati, F., & Faria, L. G. D. (2019b). Addressing the SDGs in sustainability reports: The relationship with institutional factors. Journal of Cleaner Production, 215, 1312-1326.
- Ruiz-Barbadillo, E., & Martínez-Ferrero, J. (2020). Empirical analysis of the effect of the joint provision of audit and sustainability assurance services on assurance quality. Journal of Cleaner Production, 266, 121943.
- Sabbaghi, O. (2016). Corporate governance in China: a review. Corporate Governance, 16(5), 866-882.
- Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need to move beyond 'business as usual'. Sustainable Development, 24(6), 371-382.
- Shabana, K. M., Buchholtz, A. K., & Carroll, A. B. (2016). The institutional-ization of corporate social responsibility reporting. Business & Society, 56(8), 1–29.
- Shailer, G., & Wang, K. (2015). Government ownership and the cost of debt for Chinese listed corporations. Emerging Markets Review, 22, 1-17.
- Shan, Y. G. (2013). Can internal governance mechanisms prevent asset appropriation? Examination of type I tunneling in China. Corporate Governance: An International Review, 21(3), 225-241.
- Shao, L. (2019). Dynamic study of corporate governance structure and firm performance in China: Evidence from 2001-2015. Chinese Management Studies, 13(2), 299-317.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The journal of finance, 52(2), 737-783.
- Sial, M. S., Zheng, C., Cherian, J., Gulzar, M. A., Thu, P. A., Khan, T., & Khuong, N. V. (2018). Does corporate social responsibility mediate the relation between boardroom gender diversity and firm performance of Chinese listed companies?. Sustainability, 10(10), 3591.
- Small, H. (1999). Visualizing science by citation mapping. Journal of the American society for Information Science, 50(9), 799-813.
- Song, J., Wang, R., & Cavusgil, S. T. (2015). State ownership and market orientation

- in China's public firms: An agency theory perspective. International Business Review, 24(4), 690-699.
- Su, K., Li, L., & Wan, R. (2017). Ultimate ownership, risk-taking and firm value: evidence from China. Asia Pacific Business Review, 23(1), 10-26.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. Academy of management review, 20(3), 571-610.
- Sun, P., Mellahi, K., & Liu, G. S. (2011). Corporate governance failure and contingent political resources in transition economies: A longitudinal case study. Asia Pacific Journal of Management, 28(4), 853-879.
- Teng, D., Fuller, D. B. & Li, C. (2018). Institutional change and corporate governance diversity in China's SOEs. Asia Pacific Business Review, 24(3), 273-293.
- Toukabri, M., & Mohamed Youssef, M. A. (2023). Climate change disclosure and sustainable development goals (SDGs) of the 2030 agenda: the moderating role of corporate governance. Journal of Information, Communication and Ethics in Society, 21(1), 30-62.
- Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and eco-nomic performance of U.S. firms. Academy of Management Review, 10(3), 540–557.
- Valls Martinez, M. D. C., Cruz Rambaud, S., & Parra Oller, I. M. (2019). Gender policies on board of directors and sustainable development. Corporate Social Responsibility and Environmental Management, 26(6), 1539-1553.
- Van Eck, N., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523-538.
- Vijayakumaran, R. (2021). Impact of managerial ownership on investment and liquidity constraints: Evidence from Chinese listed companies. Research in International Business and Finance, 55, 101321.
- Wagner, M. (2008). Empirical influence of environmental management oninnovation: Evidence from Europe. Ecological Economics, 66(2–3), 392–402.
- Wang, J., Guthrie, D., & Xiao, Z. (2012). The rise of SASAC: Asset management, ownership concentration, and firm performance in China's capital markets. Management and Organization Review, 8(2), 253-281.
- Wang, L. & Judge, W. Q. (2012) Managerial ownership and the role of privatization in transition economies: The case of China. Asia Pacific Journal of Management, 29(2), 479-498.
- Wang, L., Kang, S. & Wu, H. (2021). Do politically connected firms pay less toward environmental protection? Firm-level evidence from polluting industries in China. Abacus, 57(2), 362-405.
- Wang, T., & Song, M. (2016). Are founder directors detrimental to new ventures at initial public offering?. Journal of Management, 42(3), 644-670.

- Wei, W., & Muratova, Y. (2022). Executive power and politically connected independent directors: evidence from China. Asian Business & Management, 21(1), 1-24.
- Wong, T. J. (2016). Corporate governance research on listed firms in China: Institutions, governance and accountability. Foundations and Trends® in Accounting, 9(4), 259-326.
- Wu, W., Wu, C., & Rui, O. M. (2012a). Ownership and the value of political connections: Evidence from China. European Financial Management, 18(4), 695-729.
- Wu, W., Wu, C., Zhou, C., & Wu, J. (2012b). Political connections, tax benefits and firm performance: Evidence from China. Journal of Accounting and Public policy, 31(3), 277-300.
- Xiang, C., Chen, F., Jones, P., & Xia, S. (2021). The effect of institutional investors' distraction on firms' corporate social responsibility engagement: evidence from China. Review of Managerial Science, 15(6), 1645-1681.
- Xiao, S. S., & Park, B. I. (2018). Bring institutions into FDI spillover research: Exploring the impact of ownership restructuring and institutional development in emerging economies. International Business Review, 27(1), 289-308.
- Xie, F., Anderson, H. D., Chi, J., & Liao, J. (2019). Does residual state ownership increase stock return volatility? Evidence from China's secondary privatization. Journal of Banking and Finance, 100, 234-251.
- Xu, W., Zeng, Y., & Zhang, J. (2011). Tax enforcement as a corporate governance mechanism: empirical evidence from China. Corporate Governance: An International Review, 19(1), 25-40.
- Xue, M., Zhou, Y., & Liu, Z. (2022). The effect of labor protection on firms' operational efficiency: Evidence from China's labor contract law implementation. Sustainability, 14(9), 5538.
- Yang, H. H., Craig, R., & Farley, A. (2015). A review of Chinese and English language studies on corporate environmental reporting in China. Critical Perspectives on Accounting, 28, 30-48.
- Yang, Z., Yu, Y., Zhang, Y., & Zhou, S. (2019). Policy uncertainty exposure and market value: Evidence from China. Pacific-Basin Finance Journal, 57, 101178.
- Yiu, D. W., Wan, W. P., & Xu, Y. (2019). Alternative governance and corporate financial fraud in transition economies: Evidence from China. Journal of Management, 45(7), 2685-2720.
- Yoon, J., & Suh, M. G. (2019). Determinants of organizational performance: some implications for top executive leadership in Korean firms. Asia Pacific Business Review, 25(2), 251-272.
- Yu, S., Sial, M. S., Tran, D. K., Badulescu, A., Thu, P. A., & Sehleanu, M. (2020).

- Adoption and implementation of sustainable development goals (SDGs) in China–Agenda 2030. Sustainability, 12(15), 6288.
- Zaid, M. A., Abuhijleh, S. T., & Pucheta-Martínez, M. C. (2020). Ownership structure, stakeholder engagement, and corporate social responsibility policies: The moderating effect of board independence. Corporate Social Responsibility and Environmental Management, 27(3), 1344-1360.
- Zhang, D., Rong, Z., & Ji, Q. (2019). Green innovation and firm performance: Evidence from listed companies in China. Resources, Conservation and Recycling, 144, 48-55.
- Zhang, J., & Keh, H. T. (2010). Interorganizational exchanges in China: Organizational forms and governance mechanisms. Management and Organization Review, 6(1), 123-147.
- Zhang, L., Ren, S., Chen, X., Li, D., & Yin, D. (2020). CEO hubris and firm pollution: State and market contingencies in a transitional economy. Journal of Business Ethics, 161(2), 459-478.
- Zhang, W. (2018). Six understandings of corporate governance structure in the context of China. The European Journal of Finance, 24(16), 1375-1387.
- Zhao, X., Huo, B., Selen, W., & Yeung, J. H. Y. (2011). The impact of internal integration and relationship commitment on external integration. Journal of Operations Management, 29(1-2), 17-32.
- Zheng, V., & Ho, T. M. (2012). Contrasting the evolution of corporate governance models: A study of banking in Hong Kong. Asia Pacific Business Review, 18(3), 407-423.
- Zhou, J., Tam, O. K., & Lan, W. (2015). Are investor protection and ownership concentration substitutes in Chinese family firms?. Emerging Markets Finance and Trade, 51(2), 432-443.
- Zhou, J., Tam, O. K., & Yu, P. (2013). An investigation of the role of family ownership, control and management in listed Chinese family firms. Asian Business and Management, 12(2), 197-225.
- Zhu, J., Ye, K., Tucker, J. W., & Chan, K. J. C. (2016). Board hierarchy, independent directors, and firm value: Evidence from China. Journal of Corporate Finance, 41, 262-279.
- Zhuang, Y., Chang, X., & Lee, Y. (2018). Board composition and corporate social responsibility performance: Evidence from Chinese public firms. Sustainability, 10(8), 2752.

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ANNEX II. VARIABLES OF THE EMPIRICAL ANALYSES

Abbreviation	Definition
SDG	A dummy variable, coded as 1 if SDGs is reported in the CSR, annual report or integrated report, otherwise 0
BGDiversity	The total number of female board members divided by total number of board members
BIndep	The total number of independent board members divided by total number of board members
BSize	The total number of the board members
CSRcom	A dummy variable, coded as 1 if the firm has a CSR committee, otherwise 0
State-Own	The ratio of state-owned shares to total share
Foreign-Own	The ratio of foreign-owned shares to total shares
In-Own	The percent of institutional shares to total shares
Board-Score	Predicted value of reporting SDG information because of board-level factors
Ownership-Score	Predicted value of reporting SDG information because of ownership-level factors
Size	Natural logarithm of firm's total assets
Leverage	The ratio of total debt to total assets
Tobinq	The ratio between a physical asset's market value and its replacement value
Physical-Res	The ratio of non-current assets to total assets
ESGreporting	The percentage of the company's activities covered in its Environmental and Social reporting

LIST OF ABBREVIATIONS

CEO Chief Executive Officer
CPC Communist Party of China
CSR Corporate social responsibility
CSR Corporation Social Responsibility

CSRC China Securities Regulatory Commission ESG Environmental, social and governance

Guanxi The Chinese concept of building and maintaining relationships

IPOs Initial public offerings

QFIIs Qualified foreign institutional investors

R&D Research and development

SASAC State-owned Assets Supervision and Administration Commission

SciMAT Science Mapping Analysis Tool SDGs Sustainable Development Goals

SETC State Economic and Trade Commission

SOEs State Owned Enterprises