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**BOARD STRUCTURE AND FIRM PERFORMANCE:  
EVIDENCE FROM POST-COVID 19 PANDEMIC**

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**MASTER OF SCIENCE  
(INTERNATIONAL ACCOUNTING)  
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**BOARD STRUCTURE AND FIRM PERFORMANCE:  
EVIDENCE FROM POST-COVID 19 PANDEMIC**

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**UUM**  
Universiti Utara Malaysia

**THESIS SUBMITTED TO  
TUNKU PUTERI INTAN SAFINAZ SCHOOL OF ACCOUNTANCY (TISSA)  
UNIVERSITI UTARA MALAYSIA  
IN FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF  
MASTER OF SCIENCE  
(INTERNATIONAL ACCOUNTING)**



**Kolej Perniagaan**  
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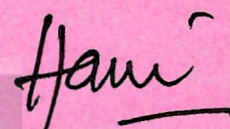
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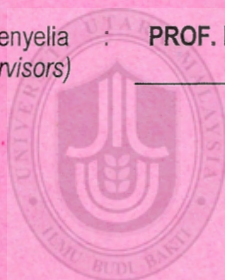
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## ABSTRACT

The purpose of this research is to examine the relationship between size of the board of directors, the proportion of independent directors, and firm performance by analyzing the financial data of 100 companies listed on the Shenzhen Stock Exchange for the years 2022 and 2023, in the context of the post-COVID-19 pandemic period. The annual data were obtained from the China Securities Market & Accounting Research (CSMAR) database and the Shenzhen Stock Exchange. To test the relationship between size of the board of directors, the proportion of independent directors, and firm performance, this research employed descriptive, Pearson correlation, and multiple linear regression analysis. The findings reveal that, after the COVID-19 pandemic, size of the board of directors has a significant positive relationship with firm performance, while the proportion of independent directors does not show a significant relationship with firm performance. Additionally, the control variables, firm size and industry classification, have no significant impact on firm performance, while financial leverage has a significant negative impact on firm performance. This research provides a reference for studies on the relationship between board structure and firm value in the post-COVID-19 pandemic context. However, the limitations of the sample and geographical differences may restrict the applicability of the findings. Future research could extend the study period and sample size to further refine the understanding of the relationship between board structure and firm performance.

**Keywords:** Firm performance, size of the board of directors, proportion of independent directors

## ABSTRAK

Tujuan penyelidikan ini adalah untuk mengkaji hubungan antara saiz lembaga pengarah, peratusan lembaga pengarah bebas, dan prestasi syarikat dengan menganalisis data kewangan 100 syarikat yang disenaraikan di Bursa Saham Shenzhen bagi tahun 2022 dan 2023, dari konteks pasca pandemik COVID-19. Laporan tahunan syarikat diperoleh daripada pangkalan data *China Securities Market & Accounting Research* (CSMAR) dan Bursa Saham Shenzhen. Untuk menguji hubungan antara saiz lembaga pengarah, peratusan lembaga pengarah bebas, dan prestasi syarikat, kajian ini menggunakan analisis deskriptif, analisis korelasi Pearson, dan analisis regresi linear berganda. Penemuan mendedahkan bahawa, bagi tempoh pasca pandemik COVID-19, saiz lembaga pengarah mempunyai hubungan positif yang signifikan dengan prestasi syarikat, manakala peratusan lembaga pengarah bebas tidak menunjukkan hubungan yang signifikan dengan prestasi syarikat. Selain itu, pembolehubah kawalan, saiz syarikat dan klasifikasi industri, tidak mempunyai kesan yang signifikan ke atas prestasi syarikat, manakala leveraj kewangan mempunyai kesan negatif yang signifikan terhadap prestasi syarikat. Penyelidikan ini menyediakan rujukan untuk kajian tentang hubungan antara struktur lembaga pengarah dan prestasi kewangan syarikat dalam konteks pasca pandemik COVID-19. Walau bagaimanapun, limitasi sampel kajian dan perbezaan geografi mungkin menghadkan kebolehgunaan penemuan kajian ini. Kajian masa depan boleh memanjangkan tempoh kajian dan meningkatkan saiz sampel untuk meningkatkan pemahaman tentang hubungan antara struktur lembaga pengarah dan prestasi syarikat.

**Kata kunci:** prestasi syarikat, saiz lembaga pengarah, peratusan lembaga pengarah bebas

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Amid the rapid growth of global economy, companies are faced with increasing challenges and opportunities. Several adjustments have been made to corporate governance frameworks and business structures, particularly amid the wake of the COVID-19 pandemic. The outbreak has brought uncertainty to the market, making investors and management more focused on increasing firm performance (Li & Tang, 2006). In this context, firm performance has become a key factor for investors to evaluate whether a company is worth investing in. How to maintain and enhance the firm performance in the complex market environment has become an increasingly concerning issue for company managers (Li & Xu, 2022).

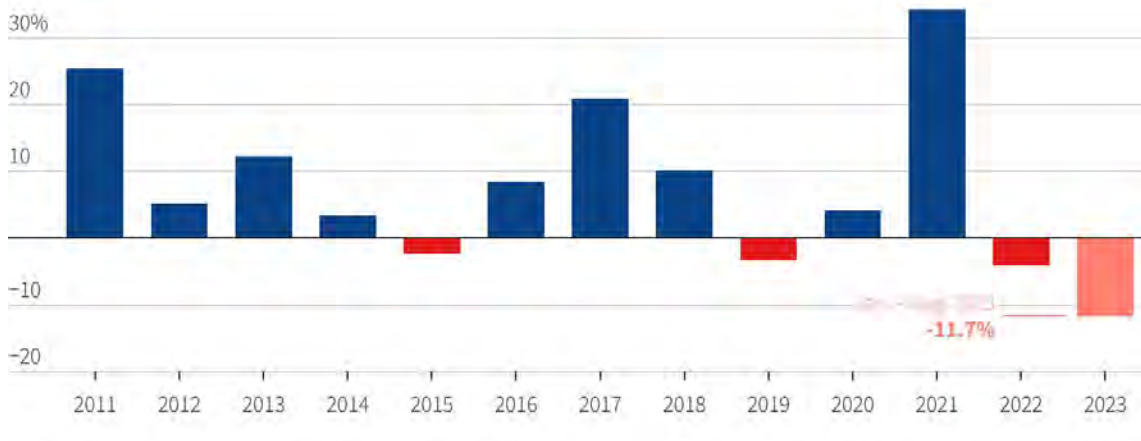


Figure 1.1  
*China's Industrial Profit Slumps*  
Source:LSEG Datastream, (2023).

The COVID-19 pandemic induced significant transformations and uncertainties in

## REFERENCES

- Al-Shaer, H., Kuzey, C., Uyar, A., & Karaman, A. S. (2023). Corporate strategy, board composition, and firm value. *International Journal of Finance & Economics*, 29(3), 3177-3200.
- Alfraih, M. M. (2016). The effectiveness of board of directors' characteristics in mandatory disclosure compliance. *Journal of Financial Regulation and Compliance*, 24(2), 154-176.
- Aluchna, M., Mahadeo, J. D., & Kamiński, B. (2020). The association between independent directors and company value: Confronting evidence from two emerging markets. *Journal of Corporate Governance: The International Journal of Business in Society*, 20(6), 987-999.
- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 602-611.
- Ammann, M., Oesch, D., & Schmid, M. (2011). Corporate governance and firm value: International evidence. *Journal of Empirical Finance*, 18(1), 36-55.
- Armstrong, C. S., Core, J. E., & Guay, W. R. (2014). Do independent directors cause improvements in firm transparency? *Journal of Financial Economics*, 113(3), 383-403.
- Arsal, M. (2021). Impact of earnings per share and dividend per share on firm value. *Jurnal Ilmiah Akuntansi*, 4(1), 11-18.
- Baker, H. K., & Anderson, R. (2010). *Corporate governance: A synthesis of theory*,

*research, and practice*. Robert W. Kolb Series. John Wiley & Sons.

- Bathala, C. T., & Rao, R. P. (1995). The determinants of board composition: An agency theory perspective. *Journal of Financial and Quantitative Analysis*, 16(1), 59-69.
- Belkhir, M. (2009). Board of directors' size and performance in the banking industry. *International Journal of Managerial Finance*, 5(1), 201-221.
- Berger, P. G., & Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics*, 37(1), 39-65.
- Bergh, D. D., Ketchen, D. J., & Boyd, B. K. (2019). Information asymmetry in management research: Past accomplishments and future opportunities. *Academy of Management Perspectives*, 45(1).
- Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: An integrated agency-institutional perspective. *Academy of Management Journal*, 52(1), 103-126.
- Bi, F., & Yu, Z. H. (2016). A study on the relationship between accounting information transparency and firm value: Evidence from listed companies in Liaoning Province. *Journal of Liaoning Petrochemical University*, 36(3), 71-75.
- Black, B., & Kim, W. (2012). The effect of board structure on firm value: A multiple identification strategies approach using Korean data. *Journal of Financial Economics*, 104(2), 203-226.
- Bonazzi, L., & Islam, S. M. N. (2007). Agency theory and corporate governance: A study of the effectiveness of board in their monitoring of the CEO. *Journal of*

*Modelling in Management*, 2(1), 7-23.

Boone, A. L., Field, L. C., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, 85(1), 66-101.

Bowman, C., & Ambrosini, V. (2007). Firm value creation and levels of strategy. *Management Decision*, 45(3), 360-371.

Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. *Journal of Accounting and Public Policy*, 25(4), 409-434.

Chakrabarti, R., Subramanian, K., & Tung, F. (2010). Independent directors and firm value: Evidence from an emerging market. *SSRN Electronic Journal*.

Cheng, M.-C., & Tzeng, Z.-C. (2011). The effect of leverage on firm value and how the firm financial quality influences on this effect. *World Journal of Management*, 3(2), 30-53.

Chen, X., & Xu, X. (2001). Ownership structure, firm performance, and investor protection. *Economic Research*, 11.

Clarke, D. C. (2006). The independent director in Chinese corporate governance. *Delaware Journal of Corporate Law*, 31(1), 125-228.

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, 87(2), 329-356.

Crespí-Cladera, R., & Pascual-Fuster, B. (2014). Does the independence of independent directors matter? *Journal of Corporate Finance*, 28, 116-134.

Cuadrado-Ballesteros, B., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2015). The

- role of independent directors at family firms in relation to corporate social responsibility disclosures. *International Business Review*, 24, 890-901.
- Darko, J., Aribi, Z. A., & Uzonwanne, G. C. (2016). Corporate governance: The impact of director and board structure, ownership structure, and corporate control on the performance of listed companies on the Ghana Stock Exchange. *Corporate Governance*, 16(2), 259-277.
- Dehaene, A., De Vuyst, V., & Ooghe, H. (2001). Corporate performance and board structure in Belgian companies. *Long Range Planning*, 34(4), 383-398.
- Del Brio, E., De Miguel, A., & Pindado, J. (2003). Investment and firm value: An analysis using panel data. *Applied Financial Economics*, 13(12), 913–923.
- Del Brio, E., Maia-Ramires, E. B., & Perote, J. (2006). Corporate governance mechanisms and their impact on firm value. *Corporate Ownership and Control*, 4(1), 25-36.
- Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Financial Economics*, 46(5), 1143-1181.
- Dobrowolski, Z. (2020). After COVID-19. Reorientation of crisis management in crisis. *Entrepreneurship and Sustainability Issues*, 8(2), 799-810.
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284–289.
- Elad, F. L., Wong, M. N., & Bongbee, N. S. (2018). The role of board characteristics in effective corporate governance: The case of Airbus Group. *International Journal of Social Sciences Perspectives*, 2(1), 87-95.

- Faccio, M., & Lasfer, M. (1999). *Managerial ownership, board structure and firm value: The UK evidence*. Cass Business School Research Paper.
- Fazlzadeh, A. (2011). The examination of the effect of ownership structure on firm performance in listed firms of Tehran Stock Exchange based on the type of the industry. *International Journal of Business and Management*, 6(3), 1-10.
- Garay, U., & Gonzalez, M. (2008). Corporate governance and firm value: The case of Venezuela. *Corporate Governance: An International Review*, 16(3), 194–209.
- Ghosh, A., & Jain, P. C. (2000). Financial leverage changes associated with corporate mergers. *Journal of Corporate Finance*, 6, 377-402.
- Giráldez, P., & Hurtado, J. M. (2014). Do independent directors protect shareholder value? *Journal of Business Finance & Accounting*, 23(1), 91-107.
- Guest, P. M. (2009). The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, 15(4), 385–404.
- Guo, J., Yang, L., & Sun, Z. (2020). Research on crisis management of sudden events in China based on the technological perspective and dual-cycle model: A case study of the novel coronavirus crisis. *Science & Technology Progress and Policy*, 37(14), 8-13.
- Hassan Che Haat, M., Abdul Rahman, R., & Mahenthiran, S. (2008). Corporate governance, transparency and performance of Malaysian companies. *Managerial Auditing Journal*, 23(8), 744-778.
- Homayoun, S. (2015). Agency theorjny and corporate governance. *International Business Management*, 9(5), 805-815.

- Huang, G., & Dong, F. (2010). Research on the influencing factors of corporate R&D investment: An empirical study based on managerial ability and board structure. *Science and Technology Progress and Policy*, 27(17), 103-106.
- Jackling, B., & Juhl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, 17(4), 492-509.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jensen, M. C., & Smith, C. W. (2000). Stockholder, manager, and creditor interests: Applications of agency theory. *Theory of the Firm*, 1(1).
- Jentsch, V. (2019). Board composition, ownership structure, and firm value: Empirical evidence from Switzerland. *European Business Organization Law Review*, 20(2), 203-254.
- Jenwittayaroje, N., & Jiraporn, P. (2019). Do independent directors improve firm value? Evidence from the Great Recession. *Journal of Contemporary Accounting & Economics*, 19(1), 207-222.
- Jin, S., Gao, Y., & Xiao, S. (2021). Corporate governance structure and performance in the tourism industry in the COVID-19 pandemic: An empirical study of Chinese listed companies in China. *Sustainability*, 13(21), 1-22.
- John, K., & Senbet, L. W. (1998). Corporate governance and board effectiveness. *Journal of Banking & Finance*, 22(4), 371-403.

- Juarez, F. (2018). The growth of companies as a function of total assets. *WSEAS Transactions on Business and Economics*, 15, 301-310.
- Khanchel, I. (2007). Corporate governance: Measurement and determinant analysis. *Managerial Auditing Journal*, 22(8), 740-760.
- Khatib, S. F. A., & Nour, A.-N. I. (2021). The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia. *Journal of Asian Finance, Economics and Business*, 8(2), 0943–0952.
- Khosa, A. (2017). Independent directors and firm value of group-affiliated firms. *International Journal of Accounting & Information Management*, 25(2), 217-236.
- Kiprono, K. S., Cheboi, C., Yegon, J., Kosgei, D., & Amos, C. K. (2023). Financial performance and firm value of listed companies: Financial performance measure ROA versus ROE. *Journal of Business, Economics and Management Research Studies*, 1(4).
- Koerniadi, H., & Tourani-Rad, A. (2012). Does board independence matter? Evidence from New Zealand. *Australasian Accounting, Business and Finance Journal*, 6(2), 3–18.
- Kumar, N., & Singh, J. P. (2013). Effect of board size and promoter ownership on firm value: Some empirical findings from India. *Corporate Governance: An International Review*, 13(1), 88-98.
- Larmou, S., & Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. *Journal of*

*Management and Governance*, 14(1), 61-85.

Lefort, F., & Urzúa, F. (2008). Board independence, firm performance, and ownership concentration: Evidence from Chile. *Journal of Business Research*, 61(6), 615–622.

Li, H., & Li, X. (2023). The impact of the COVID-19 pandemic on China's economy. *China Research Center*, 22(1).

Li, J. W. (2019). Explanation and reflection on the mandatory regulation model of board size. *Law Journal*, 10, 31-43.

Li, W., & Tang, Y. (2006). Corporate governance evaluation, governance index, and company performance: Evidence from Chinese listed companies in 2003. *China Industrial Economy*, 4(217), 98-107.

Li, W., Hao, C., Cui, G., Zheng, M., & Meng, Q. (2019). 40 years of corporate governance research: Context and prospects. *Foreign Economics & Management*, 41(12), 161–185.

Li, W., Xu, X., & Long, Z. (2020). Confucian culture and trade credit: Evidence from Chinese listed companies. *Research in International Business and Finance*, 53, 1-17.

Li, X., & Xu, T. (2022). Research progress on environment-social responsibility-corporate governance. *Economic Dynamics*, (8), 133-146.

Liu, H., Zhao, L., & Liu, F. (2013). Control rights and board structure adjustment choices: Based on the study of the China Securities Regulatory Commission's mandatory introduction of independent directors. *China Accounting and Finance*

*Research*, 15(3), 1-71.

Liu, X. M., & Zhao, Z. C. (2021). Research status, hot topics, and development trends of board governance: A scientometric analysis based on a comparison between China and abroad. *Journal of Qingdao University of Science and Technology (Social Science Edition)*, 37(4), 1-12.

Liu, Y., Wei, Z., & Xie, F. (2014). Do women directors improve firm performance in China? *Journal of Corporate Finance*, 28, 169–184.

Maka, Y.T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, 13(3), 301-318.

Mayur, M., & Saravanan, P. (2017). Performance implications of board size, composition and activity: Empirical evidence from the Indian banking sector. *Journal of Indian Business Research*, 17(3), 466-489.

Mehrotra, S., & Mehrotra, S. (2016). The nature of corporate board structure and its impact on the performance of USA listed firms. *The IUP Journal of Corporate Governance*, 15(1), 30-45.

Meyer, E., & De Wet, J. H. v. H. (2013). The impact of board structure on the financial performance of listed South African companies. *Corporate Board: Role, Duties & Composition*, 9(3), 19-31.

Mirza, S. S., Zhang, C., Jin, X., & Huang, C. (2024). Targeted poverty alleviation initiatives, corporate governance structures, and corporate value: Evidence from China. *Journal of the Knowledge Economy*, 15, 9339-9367.

- Mishra, R. K., & Kapil, S. (2018). Board characteristics and firm value for Indian companies. *Journal of Indian Business Research*, 10(1), 2-32.
- Nguyen, H., & Faff, R. (2006-2007). Impact of board size and board diversity on firm value: Australian evidence. *Corporate Ownership & Control*, 4(2), 24-32.
- Nguyen, P., Rahman, N., Tong, A., & Zhao, R. (2016). Board size and firm value: Evidence from Australia. *Journal of Management and Governance*, 20(4), 851-873.
- Petrovic, J. (2008). Unlocking the role of a board director: A review of the literature. *Management Decision*, 46(9), 1300-1313.
- Porcuna Enguix, L. (2021). The new EU remuneration policy as good but not desired corporate governance mechanism and the role of CSR disclosing. *Sustainability*, 13(10), 5476.
- Rahman, M. J., & Chen, X. (2023). CEO characteristics and firm performance: Evidence from private listed firms in China. *Corporate Governance*, 23(3), 458-477.
- Rath, S., Tripathy, A., & Tripathy, A. R. (2020). Prediction of new active cases of coronavirus disease (COVID-19) pandemic using multiple linear regression model. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 1467-1474.
- Roe, M. J. (2004). The institutions of corporate governance. In C. Ménard & M. M. Shirley (Eds.), *Handbook of new institutional economics* (pp. 1-32). Kluwer.
- Sakenov, N. A., Zhappasova, R. E., & Sarybaeva, I. E. (2020). Improvement of the

- regulatory legal framework of ensuring economic security. *News of the National Academy of Sciences of the Republic of Kazakhstan: Series of Social and Human Sciences*, 1(329), 24-31.
- Salameh, R. S., Al-Nsour, O. J., Lutfi, K. M., Alnabulsi, Z. H., & Hyasat, E. A. (2023). The effect of board composition and ownership structure on firm value: Evidence from Jordan. *Journal of Asian Finance, Economics and Business*, 10(2), 163-174.
- Salem, W. F., Metawe, S. A., Youssef, A. A., & Mohamed, M. B. (2019). Boards of directors' characteristics and firm value: A comparative study between Egypt and USA. *Open Access Library Journal*, 6(4), 1-33.
- Shabbir, M. F., Aslam, H. D., Oon, E. Y. N., & Amin, A. (2024). Optimizing corporate governance: Unraveling the interplay of board structure and firm efficiency. *Cogent Economics & Finance*, 12(1), 2396034.
- Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). The impact of the COVID-19 pandemic on firm performance. *Emerging Markets Finance and Trade*, 56(10), 2213-2230.
- Shi, G., Liu, G., & Liang, Y. (2008). Research on the evaluation of market value management of listed companies in China. *Chinese Journal of Management*, 5(1), 1-10.
- Shi, Y., Tian, Y., & He, D. (2024). Overseas education background of independent directors and corporate ESG performance. *Research on Economic Issues*, (2), 76-89.

- Song, F. M., Yuan, P., & Gao, F. (2007). *Does the state-owned major shareholder affect corporate board governance in China?* (Doctoral dissertation, Tsinghua University).
- Syed Fuzi, S. F., Abdul Halim, S. A., & M.K., J. (2016). Board independence and firm performance. *Procedia Economics and Finance*, 37, 460–465.
- Thomsen, S. (2004). Corporate values and corporate governance. *Corporate Governance*, 4(4), 29-46.
- Tian, G., & Li, S. (2020). Economic policy uncertainty and bank liquidity creation: Empirical evidence from China. *Economic Research Journal*, (11), 19-35.
- Tu, Y. C., Lai, W. H., & Chou, H. C. (2007). Analysis of board structure, corporate value, and financial policy. *Journal of Marine Science and Technology*, 15(4), 295-306.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152–1163.
- Wan, Z. (2019). *Ownership structure and firm value: Evidence from the growth enterprise market (GEM) of Shenzhen Stock Exchange* (Master's thesis). Universiti Utara Malaysia.
- Wang, C., Xie, F., & Zhu, M. (2015). Industry expertise of independent directors and

- board monitoring. *Journal of Financial and Quantitative Analysis*, 50(5), 929-962.
- Wang, Y., et al. (2006). Does board independence affect firm performance? *Economic Research Journal*, 5, 62-73.
- Weir, C., Laing, D., & McKnight, P. J. (2002). Internal and external governance mechanisms: Their impact on the performance of large UK public companies. *Journal of Business Finance & Accounting*, 29(5-6), 579-611.
- Williams, B., Bingham, S., & Shimeld, S. (2015). Corporate governance, the GFC and independent directors. *Managerial Auditing Journal*, 30(4/5), 324-346.
- Wu, S. N. (1999). An empirical study on the relationship between systemic risk and accounting variables in Chinese listed companies. *Accounting Research*, 12, 29-33.
- Wu, W., Wu, C., & Liu, X. (2008). The government background of executives in privately listed companies in China and firm value. *Economic Research Journal*, 7, 130-141.
- Wu, X. (2019). Some discussions on statistical significance and economic significance. *Economic Dynamics*, (1), 145-158.
- Xu, A. (2011). Corporate governance: Internal control of accounting information quality. *Commercial Research*, 3, 21-24.
- Xu, X., & Li, W. (2019). Confucian tradition and corporate innovation: The power of culture. *Financial Research*, 471(9), 112-130.
- Yamneesri, J., & Herath, S. K. (2010). Board characteristics and corporate value:

- Evidence from Thailand. *Corporate Governance*, 10(3), 279-292.
- Yan, Z., & Xue, Y. (2015). The impact of board social capital and corporate leadership structure on R&D investment level. *Chinese Journal of Management*, 12(4), 509-525.
- Yang, Y. (2013). An empirical study on the relationship between cash holdings and profitability. *Journal of Central South University (Social Science Edition)*, 19(3), 22-39.
- Yasser, Q. R., Al Mamun, A., & Rodrigs, M. (2017). Impact of board structure on firm performance: Evidence from an emerging economy. *Journal of Asia Business Studies*, 11(2), 210-228.
- Yermack, D. (2006). Board members and company value. *Financial Markets and Portfolio Management*, 20(1), 33-47.
- Yin, J., & Shao, Y. (2017). The impact of alliance portfolio partner diversity on innovation performance under the moderating roles of innovation search and routines. *Journal of Management*, 14(4), 545-553.
- Yu, D., & Chi, G. (2002). Board size, stability, and firm performance: Theory and empirical analysis. *Economic Research Journal*, 4, 70-79.
- Zaman, R., Bahadar, S., Kayani, U. N., & Arslan, M. (2018). Role of media and independent directors in corporate transparency and disclosure: Evidence from an emerging economy. *Corporate Governance*, 18(5), 858-885.
- Zhang, C., Zhang, Y., & Chen, Y. (2021). ESG performance, investor confidence, and the performance of listed companies. *Environmental Economics Research*, 4,

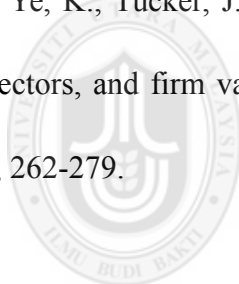
22-39.

Zhao, X. D. (2021). The dilemmas and solutions of China's corporate governance system. *Modern Law Review*, 43(2), 1-12.

Zhao, Y. (2024). The impact of corporate governance dimensions on financial performance of listed companies: Evidence from retail industry listed companies. *Operations Research and Fuzzy Systems*, 14(5), 432-442.

Zhong, T., Jia, L., & Du, S. (2005). The correlation between the proportion of independent directors and the voluntary disclosure level of listed companies. *Journal of Northeastern University (Natural Science)*, 26(8), 809-812.

Zhu, J., Ye, K., Tucker, J. W., & Chan, K. C. (2016). Board hierarchy, independent directors, and firm value: Evidence from China. *Journal of Corporate Finance*, 41, 262-279.



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## APPENDICES

### Appendix : Selected companies and industry classification

COMPANY NAME	INDUSTRY
Ping An Bank Co., Ltd.	1
China Vanke Co., Ltd.	2
Shenzhen GuoHua Network Security Technology Co., Ltd.	3
Shenzhen Zhenye (Group) Co., Ltd.	2
Shenzhen Quanxinhao Co., Ltd.	2
China High Speed Railway Technology Co., Ltd.	4
China Baoan Group Co., Ltd.	5
Shenzhen Ecobeauty Co., Ltd.	6
Shenzhen Properties and Resources Development (Group) Co., Ltd.	2
CSG Holding Co., Ltd.	4
Shahe Industrial Co., Ltd.	2
Konka Group Co., Ltd.	4
Shenzhen China Bicycle Company (Holdings) Co., Ltd.	4
Shenzhen Cereals Holdings Co., Ltd.	7
Shenzhen Zhongheng Huafa Co., Ltd.	4
Shenzhen Kaifa Technology Co., Ltd.	4
Shenzhen Universe (Group) Co., Ltd.	4
Shenzhen Tellus Holding Co., Ltd.	7
FIYTA Precision Technology Co., Ltd.	7

Shenzhen Energy Group Co., Ltd.	8
China National Accord Medicines Corporation Ltd.	7
Shenzhen Special Economic Zone Real Estate and Properties (Group) Co., Ltd.	2
FAWER Automotive Parts Limited Company	4
Grandjoy Holdings Group Co., Ltd.	2
Shenzhen SED Industry Co., Ltd.	6
Digital China Group Co., Ltd.	7
China Tianying Inc.	9
China Union Holdings Ltd.	2
Shenzhen Nanshan Power Co., Ltd.	8
China International Marine Containers (Group) Co., Ltd.	4
Shenzhen Centralcon Investment Holding Co., Ltd.	2
Shenzhen Textile (Holdings) Co., Ltd.	4
Shenzhen Kingkey Smart Agriculture Times Co., Ltd.	4
Shenzhen Desay Battery Technology Co., Ltd.	4
Tianma Microelectronics Co., Ltd.	4
China Fangda Group Co., Ltd.	4
Shenzhen Wongtee International Enterprise Co., Ltd.	10
Shenzhen SEG Co., Ltd.	10
North Huajin Chemical Industries Co., Ltd.	4
Shenzhen Zhongjin Lingnan Nonfemet Company Limited	4

Shenzhen Agricultural Products Group Co., Ltd.	10
Shenzhen Huaqiang Industry Co., Ltd.	7
ZTE Corporation	4
Norinco International Cooperation Ltd.	6
China Greatwall Technology Group Co., Ltd.	4
Shenzhen Huakong SEG Co., Ltd.	11
Shenzhen Overseas Chinese Town Co., Ltd.	2
Shenzhen SDG Information Co., Ltd.	4
Shenzhen Neptunus Bioengineering Co., Ltd.	7
Shenzhen Yan Tian Port Holdings Co., Ltd.	12
Shenzhen Airport Co., Ltd.	12
Shenzhen Tagen Group Co., Ltd.	6
Shenzhen Guangju Energy Co., Ltd.	7
CITIC Offshore Helicopter Co., Ltd.	12
TCL Technology Group Corporation	4
China National Complete Plant Import and Export Corporation Limited	7
Anhui Fengyuan Pharmaceutical Co., Ltd.	4
Sichuan New Energy Power Company Limited	8
Wasu Media Holding Co., Ltd.	13
Zoomlion Heavy Industry Science and Technology Co., Ltd.	4
Shijiazhuang Changshan Beiming Technology Co., Ltd.	3

Xinjiang International Industry Co., Ltd.	7
Shenwan Hongyuan Group Co., Ltd.	1
Jiangsu Eastern Shenghong Co., Ltd.	4
Midea Group Co., Ltd.	4
Weichai Power Co., Ltd.	4
XJ Electric Co., Ltd.	4
Tangshan Jidong Cement Co., Ltd.	4
Financial Street Holdings Co., Ltd.	2
Pacific Shuanglin Bio-pharmacy Co., Ltd.	4
Changhong Huayi Compressor Co., Ltd.	4
Shandong Shengli Co., Ltd.	8
Zangge Mining Company Limited	4
Yunding Technology Co., Ltd.	3
Shenyang Machine Tool Co., Ltd.	4
Zhejiang Int'l Group Co., Ltd.	7
Bohai Leasing Co., Ltd.	10
Minsheng Holdings Co., Ltd.	1
Hefei Department Store Group Co., Ltd.	7
Changsha Tongcheng Holdings Co., Ltd.	7
Jilin Chemical Fibre Stock Co., Ltd.	4
Nanjing Public Utilities Development Co., Ltd.	8

Hubei Yihua Chemical Industry Co., Ltd.	4
Dong-E-E-Jiao Co., Ltd.	4
XCMG Construction Machinery Co., Ltd.	4
Inner Mongolia Xingye Silver and Tin Mining Co., Ltd.	14
Huatian Hotel Group Co., Ltd.	15
Guangdong Provincial Expressway Development Co., Ltd.	12
Zhang Jia Jie Tourism Group Co., Ltd.	9
Shandong Chenming Paper Holdings Limited	4
Shandong Hi-Speed Road and Bridge Group Co., Ltd.	6
Wushang Group Co., Ltd.	7
China Reform Health Management and Services Group Co., Ltd.	3
Landfar Bio-medicine Co., Ltd.	11
Hainan Jingliang Holdings Co., Ltd.	4
Zhongrun Resources Investment Corporation	14
Zhuhai Port Co., Ltd.	12
Huasu Holdings Co., Ltd.	16
Sichuan Xinjinlu Group Co., Ltd.	4
Livzon Pharmaceutical Group Inc.	4

Notes: 1 is the monetary finance industry, 2 is the real estate industry, 3 is the internet industry, 4 is the manufacturing industry, 5 is the comprehensive industry, 6 is the construction industry, 7 is the wholesale industry, 8 is the electricity and gas supply industry, 9 is the environmental protection and management industry, 10 is the business service industry, 11 is the professional and technical service industry, 12 is the transportation industry, 13 is the film industry, 14 is the non-ferrous metal mining industry. 15 is the accommodation industry and 16 is the health industry.