Determining Bank Performance in Indonesia: Do Board Diversity, Corporate Governance, and Intellectual Capital Matters?

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Abstract. This study aimed to assess the impact of board diversity, corporate governance (specifically public ownership and institutional ownership), and intellectual capital on firm performance. Data for the study were sourced from annual reports of banking firms in Indonesia spanning from 2017 to 2021. The sampling method employed was purposive sampling, yielding data from 42 companies or 167 observations over the specified timeframe. Findings revealed that both board gender diversity and intellectual capital positively influence firm performance, aligning with agency theory and resource theory. However, the study also found that neither public ownership nor institutional ownership significantly affects firm performance.

Keywords: Board Diversity, Ownership, Intellectual Capital, Bank Performance

1 Introduction

In the second quarter of 2021, Indonesia witnessed a notable surge in economic growth, reaching as high as 7.07%. This increase shows that Indonesia has succeeded in recovering from the COVID-19 pandemic [1]. It can be said that Indonesia is a country with a large economy, which will lead Indonesia to enter the G20 (Group of Twenty) and at the same time assume the presidency of the G20 in 2022. The G20 is a collaborative platform involving 19 primary nations alongside the European Union (EU). The main goal of the G20 is to realize strong and sustainable global economic growth. Therefore, a country needs to maintain the stability of its economic growth. In this case, banking has a role to play in maintaining this stability.

Bank is a vital financial institution that plays a significant role in fostering and stabilizing a country's economy. Because of the important role of banks, the existence and continuity of banking must be closely guarded and supervised [2]. One aspect of maintaining the survival of a bank is to ensure that the performance of the bank is good. Firm performance is the firm's ability to achieve its goals and improve the welfare of its shareholders [3]. Multiple elements have the potential to impact firm performance.

UHICEB 2023, December 18-19, Jakarta, Indonesia

DOI 10.4108/eai.18-12-2023.2350412

The first factor that affects firm performance is gender diversity of directors. Gender diversity in the board of directors is a combination of various characteristics, traits, skills, mindsets, and points of view that each director has to complement each other to improve firm performance [4]. According to [5] female leaders have a more cautious or conservative nature so they tend to choose lower risks. This is supported by research conducted by [6], [7], [8], [9], dan [10] shows that gender diversity of directors has a positive effect on firm performance. Apart from that, research conducted by [11], [12], [13], and [14] shows that Gender diversity of directors has no effect on firm performance.

The second factor that affects firm performance is public ownership. Public ownership is shared ownership in companies owned by the wider community or the public [15]. The higher public ownership in a firm, the higher the firm's transparency will be. This is because the level of firm supervision and control will become tighter and the possibility of opportunistic actions, namely the actions of managers who take advantage of themselves, can be avoided [16]. This is supported by previous research conducted by [17], [18], and [19] which shows that public ownership influences a positive impact on firm performance. However, research conducted by and [20] shows that public ownership has no effect on firm performance.

Institutional ownership constitutes the third-factor influencing firm performance. Institutional ownership refers to the ownership of shares in a company held by entities such as banks, insurance companies, pension funds, and other institutional entities [21]. Agency theory supports that institutional ownership is able to affect management to carry out higher asset turnover. The higher the level of institutional ownership, the tighter the level of supervision and monitoring of the firm. A strict level of supervision will decrease information asymmetry and agency problems so that firm performance can increase. This is supported by research conducted by [22], [23], and [24] which shows that institutional ownership has a positive effect on firm performance. Apart from that, research conducted by [25] shows that institutional ownership has no effect on firm performance.

In general, intellectual capital is divided into several elements, namely human capital, structural capital, and customer capital. All the main elements of intellectual capital, if managed and built well, can improve firm performance [26]. By Resource Based Theory, a firm can win the competition by utilizing intangible assets to create added value for the firm. Firms that have added value can create competitive advantages so that firm performance can increase [27].

Literature Review

Agency Theory

Agency theory as described by [28] reveals that the agency relationship is a contractual relationship that exists between the shareholder (principal) and the manager (agent), where the shareholders give authority to the manager to run the firm and provide power to make decisions and carry out his duties. A manager sometimes wants to increase his profits and welfare which should be able to maximize profits and prosperity for shareholders. These differences in interests create conflicts or problems between managers and shareholders. The conflict between an agent and principle due to agency is called agency conflict. Based on agency theory, the existence of diverse directors, public ownership, and institutional ownership can minimize agency problems so that shareholders' interests can be aligned with firm goals which can improve firm performance.

Resource Based Theory

Resources-based theory is a theory that discusses the firm's ability to manage and utilize its resources. Firm resources are classified into three distinct categories, specifically these categories encompass physical capital resources, human capital resources, and organizational capital resources. The firm's resources must be valuable, rare, difficult to imitate, and irreplaceable. If all these components can be owned by the firm, it will be a source of advantage in competing with competitors so that the firm's performance can be better and increase [29].

2. Method

Population and Sample

The population used in this study is banking firms listed on the Indonesia Stock Exchange during 2017 - 2021. The samples in this study were taken from all populations determined using the purposive sampling method. Based on the selected sample criteria, a research sample of 42 companies was obtained with 167 observations.

Variable Measurement

Dependent Variable

The dependent variable used in this study is firm performance. According to [30], firm performance measurement is calculated using ROA (Return On Assets):

$$ROA : \frac{Net\ Income}{Total\ Asset}$$

Independent Variable

Gender Diversity

Gender diversity refers to the proportion of female directors. The gender diversity measurement is calculated using a dummy variable, namely giving a value of 0 if the firm does not have female directors. A value of 1 is given if the firm has female directors.

Public Ownership

According to [31], the measurement of public ownership is calculated using the following formula:

$$Public\ Ownership : \frac{Share\ owned\ by\ public}{Total\ outstanding\ share}\ x\ 100\%$$

Institutional Ownership

The measurement of institutional ownership is calculated using the following formula:

$$institutional\ Ownership : \frac{Share\ owned\ by\ institution}{Total\ outstanding\ share}\ x\ 100\%$$

Intellectual Capital

According to [32], the calculation of intellectual capital uses added value measurement or Value Added Intellectual Coefficient (VAIC).

3. Results and Discussion

Result of Hypotheses Testing

The multiple linear regression analysis in this research aims to examine the influence of gender diversity, public ownership, institutional ownership, and intellectual capital on firm performance. The outcomes of the multiple regression analysis are showcased in the subsequent table:

Table. Result of Hypotheses Testing

Variable	*Unstandardized Coefficients*		*Standardized Coefficients*	t	Sig
	B	Std. Error	Beta		
(Constant)	-0,019	0,004		-5,081	0,000
Gender	0,003	0,001	0,140	3,059	0,003
Public	0,003	0,004	0,069	0,906	0,366
Institutional	0,001	0,004	0,025	0,331	0,741
IC	0,012	0,001	0,802	17,441	0,000

Based on the table above the results of the multiple regression test, the multiple regression equation model is as follows:

Performance = –0,019 + 0,003Gender + 0,003Public + 0,001Institutional + 0,012IC + e

Gender Diversity and Firm Performance

Based on Table 1, the variable of gender diversity positively influences firm performance. The result of this study indicates that the presence of gender diversity in the structural board of directors will provide different perspectives to increase the quality of decision-making. In addition, having gender diversity on the board of directors will help minimize the risks that arise because there is a female director who tends to be careful in decision-making so that she will make quality decisions. The results of this research are by agency theory which reveals that women will be more selective in decision-making so they can avoid agency problems which will increase firm performance.

Public ownership and firm performance

Based on Table 1, public ownership has no effect on firm performance. The result shows that public ownership does not have an impact on firm performance so the large or small proportion of public ownership in the firm does not affect the firm's performance because public ownership is an external party to the firm that does not directly manage the firm.

Institutional Ownership and Firm Performance

Based on Table 1, the institutional ownership variable has no effect on firm performance. This shows that institutional ownership has no impact on firm performance. This study's outcomes suggest that elevated institutional ownership incentivizes managers to engage in opportunistic behavior so that firm performance is not optimal.

Intellectual Capital and Firm Performance

Based on Table 1, intellectual capital has a positive effect on firm performance. The results of this study indicate that if a firm can manage intellectual capital effectively and efficiently, it will increase value-added so that firm performance will increase. The results of this study are in line with resource-based theory which reveals that value creation and a firm's competitive advantage can be carried out by utilizing valuable, rare, and irreplaceable.

4. Conclusion

Derived from the findings and subsequent discourse, the conclusions are as follows: 1) gender diversity has a positive effect on firm performance, 2) public ownership has no effect on firm performance, 3) institutional ownership has no effect on firm performance, 4) intellectual capital has an effect positive impact on firm performance. This study formulates several suggestions for further research. First, future research is suggested to use different sectors that have a larger sample of firms, so the result would be widely generalized. Second, firms in the banking sector should pay more attention to the presence of female directors because having female directors on the board of directors will improve the firm's performance. Besides that, firms have to pay more attention to managing the use of intellectual capital because it can improve firm performance.

Acknowledgements

The author would like to thank all related parties for their support and participation in this research activity entitled "Determining Bank Performance in Indonesia: Do Board Diversity, Corporate Governance, and Intellectual Capital Matters?". for the support and participation this research can run well

References

[1] R. L. Hasanah and P. Semestanti, "Pengaruh Kualitas Terhadap Kepuasan Pengguna Website OSS Kementerian Investasi Menggunakan Metode Webqual 4.0," *JUSIFOR J. Sist. Inf. dan Inform.*, vol. 3, no. 1, pp. 28–37, 2024, doi: 10.33379/jusifor.v3i1.3925.

[2] W. Mahrani, "Peranan Perbankan Dalam Meningkatkan Perekonomian Indonesia," *J. Al Wadiah*, vol. 1, no. 2, pp. 164–177, 2023, doi: 10.62214/jaw.v1i2.138.

[3] I. D. R. Putri, F. M. Waharini, A. H. Purwantini, Silmi, A. Tanno, and Firdaus, "Efek Moderasi Religiusitas Intrinsik , Gender Dan Usia," *ACE│Accounting Res. J.*, vol. 1, no. 1, pp. 383–400, 2021, [Online]. Available: https://journal.feb.unipa.ac.id/index.php/ace

[4] I. N. Fayakun, "Analisis Pengaruh Kinerja Keuangan dan Corporate Governance Terhadap Kinerja Lingkungan (Studi Empiris pada Perusahaan Tambang dan Manufaktur Peserta …," 2017, [Online]. Available: https://digilib.uns.ac.id/dokumen/detail/65202/

[5] I. Ivone and I. Lee, "Implementation Of Accounting System Based On Microsoft Access In Pt. Batam Flooring System," *ConCEPt - Conf. Community Engagem. Proj.*, vol. 2, no. 1, pp. 11–19, 2022, [Online]. Available: https://journal.uib.ac.id/index.php/concept/article/view/6361

[6] S. Eliya and Y. Suprapto, "Pengaruh Keberagaman Gender terhadap Kinerja Keuangan pada Perusahaan Manufaktur Barang Konsumsi Publik di Indonesia," *J. Manag. Bus.*, vol. 5, no. 2, pp. 2022–2045, 2022, [Online]. Available: https://doi.org/10.37531/sejaman.v5i1.2024

[7] P. Partono, H. N. Wardhani, N. I. Setyowati, A. Tsalitsa, and S. N. Putri, "Strategi Meningkatkan Kompetensi 4C (Critical Thinking, Creativity, Communication, & Collaborative)," *J. Penelit. Ilmu Pendidik.*, vol. 14, no. 1, pp. 41–52, 2021, doi: 10.21831/jpipfip.v14i1.35810.

[8] K. Saadah, D. Setiawan, A. N. Probohudono, and E. Gantyowati, "The role of women in top management in carbon emission disclosure – Evidence from banking entities in ASEAN," *J. Open Innov. Technol. Mark. Complex.*, vol. 10, no. 3, p. 100330, 2024, doi: 10.1016/j.joitmc.2024.100330.

[9] L. M. Felinda, A. Mahadwartha, E. Manajemen, F. Bisnis, and D. Ekonomika, "Pengaruh Board Gender Diversity & GCG Terhadap Firm Performance Pada Perusahaan Sektor Barang Konsumsi Yang Terdaftar Di BEI Periode 2012-2016," *J. Ilm. Mhs. Univ. Surabaya* , vol. 7, no. 2, pp. 3110–3127, 2019.

[10] B. C. P. Maulida Nurul Innayah, Muhammad Fuad, "Intellectual Capital and Firm Performance the Role of Women Directors," *Pharmacogn. Mag.*, vol. 75, no. 17, pp. 399–405, 2021.

[11] *et al.*, "Gender Stereotypes in Indonesian Public Companies' Performance," *J. Apl. Manaj.*, vol. 17, no. 1, pp. 1–7, 2019, doi: 10.21776/ub.jam.2019.017.01.01.

[12] V. D. Maghfiroh and D. C. Utomo, "Pengaruh Diversitas Gender Pada Struktur Dewan Terhadap Kinerja Keuangan Perusahaan (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2015-2017)," *Diponogoro J. Account.*, vol. 8, no. 3, pp. 1–9, 2019, [Online]. Available: https://ejournal3.undip.ac.id/index.php/accounting/article/view/25564/22702

[13] I. A. Hidayat and B. N. Asiyah, "Pengaruh Gender, Kecerdasan Spiritual, dan Status Sosial Ekonomi Orang Tua terhadap Manajemen Keuangan Pribadi Mahasiswa Non Febi UIN Satu Tulungagung Angkatan 2018," *Yume J. Manag.*, vol. 5, no. 2, pp. 463–478, 2022, doi: 10.2568/yum.v5i2.2657.

[14] N. Kendrila, Z. Azmi, and S. Samsiah, “Pengaruh Karakteristik Komposisi Manajemen Puncak Terhadap Kinerja Keuangan,” *SINTAMA J. Sist. Informasi, Akunt. dan Manaj.*, vol. 2, no. 1, pp. 30–43, 2022, [Online]. Available: www.idx.co.id

[15] C. L. Hutriyah, D. D. Astuti, and N. K. Sari, “Faktor-Faktor Yang Memengaruhi Financial Performance Pada Perusahaan Property Dan Real Estate,” *Riemba - J. Ris. Ekon. Manajemen, Bisnis Dan Akunt.*, vol. 1, no. 1, pp. 58–74, 2023, doi: 10.31967/riemba.v1i1.936.

[16] N. B. Rahmawati and R. S. Handayani, “Analisis Pengaruh Karakteristik Corporate Governance terhadap Kinerja Perusahaan (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia periode 2010-2014),” *Diponegoro J. Account.*, vol. 6, no. 3, pp. 1–12, 2017.

[17] T. Rahmadhani and F. Isnaini, “Sistem Informasi Akuntansi Pendapatan Perusahaan (Studi Kasus: Pt Mutiara Ferindo Internusa),” *J. Akunt.*, vol. 2, no. 4, pp. 16–21, 2021.

[18] A. M. T. Utama, “Pengaruh Kinerja Lingkungan, Kepemilikan Saham Publik, Publikasi CSR, Ukuran Perusahaan Terhadap Kinerja Keuangan,” vol. 9, no. 1, pp. 356–363, 2022.

[19] A. S. Gunawan and A. Cahayani, “Do demographic variables make a difference in entrepreneurial leadership style? Case study amongst micro and small in creative economy entrepreneurs in Jakarta, Indonesia,” *Int. J. Asian Bus. Inf. Manag.*, vol. 13, no. 2, pp. 1–6, 2022, doi: 10.4018/IJABIM.20220701.oa10.

[20] B. J. Collier, “14. ‘Even Stronger Yet!’: Gender and Embodiment in Balinese Youth Arja,” *Sound. Out State Indones. Music*, pp. 253–275, 2022, doi: 10.1515/9781501765230-017.

[21] K. H. Chung and H. Zhang, “Corporate governance and institutional ownership,” *J. Financ. Quant. Anal.*, vol. 46, no. 1, pp. 247–273, 2011, doi: 10.1017/S0022109010000682.

[22] Y. Avelia and J. Tarigan, “Pengaruh Institutional Ownership Terhadap Financial Performance Melalui Intellectual Capital Sebagai Variabel Intervening pada Perusahaan Retail dan Jasa di Indonesia,” *Bus. Account. Rev.*, vol. 5, no. 2, pp. 589–600, 2017.

[23] M. Mahrani and N. Soewarno, “The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable,” *Asian J. Account. Res.*, vol. 3, no. 1, pp. 41–60, 2018, doi: 10.1108/AJAR-06-2018-0008.

[24] Mayasari and A. Ariani, “GCG dan Kinerja Perusahaan,” *JABISI J. Akunt. dan Bisnis Indones.*, vol. 2, no. 2, pp. 135–144, 2021.

[25] A. N. Krishnamurti and T. Dewayanto, “Pengaruh modal intelektual, kepemilikan manajerial, kepemilikan institusional, dan masa jabatan dewan komisaris terhadap kinerja keuangan perusahaan,” *J. Akunt.*, vol. 9, no. 4, pp. 1–13, 2020.

[26] N. P. Santiani, “Pengaruh Intellectual Capital Dan Struktur Modal Terhadap Nilai Perusahaan,” *J. Akunt.*, vol. 13, no. 2, pp. 69–78, 2019, doi: 10.37058/jak.v13i2.844.

[27] Innayah and Pratama, “Tantangan dan Kesempatan Wanita Dalam Lingkungan Kerja,”

J. Manaj., vol. 13, no. 2, pp. 1–8, 2019.

[28] É. Bertrand, “Theory of the firm,” *Handb. Hist. Econ. Anal.*, vol. 3, pp. 553–562, 2016, doi: 10.4337/9781839109621.00008.

[29] R. Murphy, “Return migration, entrepreneurship and local state corporatism in rural China: The experience of two counties in south Jiangxi,” 2000. doi: 10.1080/713675936.

[30] D. F. B. Jr, L. K. Jones, and F. Mentor, “, PhD, Committee Member,” no. August, 2019.

[31] I. P. Dhani and A. . G. S. Utama, “Pengaruh Pertumbuhan Perusahaan, Struktur Modal, Dan Profitabilitas Terhadap Nilai Perusahaan,” *J. Ris. Akunt. Dan Bisnis Airlangga*, vol. 2, no. 1, pp. 135–148, 2017, doi: 10.31093/jraba.v2i1.28.

[32] A. Pulic, “Intellectual capital – does it create or destroy value?,” *Meas. Bus. Excell.*, vol. 8, no. 1, pp. 62–68, Jan. 2004, doi: 10.1108/13683040410524757.