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The Impact of the Independent Board of Commissioners' Supervisory Mechanism on the Relationship Between Intellectual Capital and Banking Performance

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ABSTRACT

This research delves into the role of Indonesia's Independent Board of Commissioners (IBC) in strengthening corporate governance systems and how it affects the relationship between intellectual capital and the efficiency of the country's banks. In recent years, intellectual capital has emerged as a critical differentiator in the banking sector, especially in a financial services environment that heavily relies on knowledge and technology, including digitalization. The utilization of intellectual capital, supported by an effective IBC supervisory mechanism, can optimize banking performance. From 2019 through 2023, 124 banks meeting the requirements are used to analyze the banking industry. The findings of this study show that the impact of Indonesia's IBC on the correlation between intellectual capital and bank performance is substantial. This study underscores the vital role of Indonesia's IBC in enhancing corporate governance, optimizing intellectual capital utilization, and improving banking efficiency. Strengthening IBC oversight can maximize performance, emphasizing the need for governance reforms and regulatory support to enhance competitiveness in the evolving financial sector.

Keywords: Banking Performance; Corporate Governance; Emerging Markets; Independent Board of Commissioners; Intellectual Capital; Supervisory Mechanism

INTRODUCTION

Financial institutions, particularly those in developing countries, rely heavily on intellectual capital to gain a competitive edge and boost their overall performance. When it comes to emerging countries' banking sectors, intellectual capital is key since it drives financial success and competitive advantage. When it comes to enhancing operational efficiency and service delivery, banks, particularly in emerging nations with limited traditional resources, rely heavily on intellectual capital, which includes human, structural, and relational components. Human capital is an important part of intellectual capital, which has a major impact on how well banks do, according to research.

Human capital, encompassing the skills, expertise, and experience of employees, is especially crucial in the banking sector (Murniati et a., 2023; Sumiati et al., 2022). Kamukama et al. (2010) demonstrate that enhancements in intellectual capital components, particularly human capital, correspond positively with financial performance. This observation is supported by Haris et al. (2019), who argue that the advancement of intellectual capital is essential for the profitability and growth of banks, particularly in dynamic and competitive environments. In developing countries, where the banking sector is often knowledge-intensive, investing in human capital can lead to enhanced service delivery and customer satisfaction, ultimately driving financial performance.

Further findings, Lipunga (2014) emphasizes the necessity of focusing on human capital in the banking sector of Malawi, asserting that the management of banks must prioritize their human resources to enhance value creation. This sentiment is echoed by Alhassan and Asare (2022), who highlight that banks recognized as intellectual capital-intensive sectors benefit from effectively managing their human resources to achieve competitive advantages. The role of human capital is further supported by Aisyah and Pratikto (2022), who argue that the efficient utilization of intellectual capital, particularly human resources, is essential for providing high-quality services in the banking industry.

In addition to human capital, structural capital, which includes the systems and processes that facilitate banking operations, is equally important. Structural capital, which encompasses the systems, processes, and organizational culture that support banking operations, also significantly impacts financial performance. Tiwari and Vidyarthi (2018) highlight that effective management of intellectual capital, including structural capital, can lead to improved corporate performance in Indian banks. This is particularly relevant in developing countries where banks must navigate regulatory challenges and market volatility. By optimizing their internal processes and leveraging technology, banks can enhance their operational efficiency and responsiveness to market demands.

Another study illustrates that the governance structures within banks, particularly those defined by the Corporate Governance Directive in Ghana, directly impact the overall intellectual capital performance, thereby influencing efficiency and effectiveness in banking operations (Duho, 2020). Similarly, the findings of Mataveli et al. (2022). indicate that the relationship between intellectual capital and service agility is crucial for enhancing banking service provision, particularly in emerging markets like Brazil. This relationship underscores the necessity for banks to develop robust internal processes and systems that leverage their intellectual assets. Furthermore, relational capital, which refers to the relationships banks maintain with customers, stakeholders, and the community, is another critical component of intellectual capital. Ali et al. (2021) emphasize that relational capital can enhance a bank's performance by fostering customer loyalty and trust, which are vital in competitive banking environments. Another research by Kariuki and Kiambati (2017) shows that organizations with higher intellectual capital outperform those with lower levels, suggesting that strong relational capital can lead to improved performance metrics. This is particularly relevant in developing countries where customer relationships can significantly influence market positioning and profitability. In developing countries, where customer relationships can significantly influence market positioning, banks that effectively manage their relational capital are likely to see improved financial outcomes.

Moreover, the integration of dynamic capabilities with intellectual capital can further enhance banking performance. Ali et al. (2021) suggest that dynamic capabilities enable banks to renew and integrate their intellectual capital, thereby sustaining competitive advantages and achieving high performance. This is particularly important in developing economies, where rapid changes in technology and consumer preferences require banks to be agile and innovative. Empirical studies support the assertion that intellectual capital significantly influences financial performance. For instance, Tran and Vo (2020) found that banks in emerging markets that accumulate higher levels of intellectual capital tend to perform better financially. Similarly, the research conducted by Inyada (2018) highlights that effective management of intellectual capital leads to stronger competitive advantages and improved financial performance in Nigerian banks.

The impact of intellectual capital on banking performance in developing nations constitutes a notable research gap, especially concerning the mechanisms behind this link. Although current research has demonstrated a favorable association between intellectual capital and financial performance, a thorough knowledge of the contextual elements and governance structures that moderate this relationship is still lacking. A critical topic necessitating greater investigation is the influence of corporate governance, particularly the Independent Board of Commissioners (IBC), on the enhancement of intellectual capital's effect on banking performance. Zulfikar et al. (2020) assert that robust corporate governance, marked by independent scrutiny, can enhance performance outcomes in the banking sector. Nevertheless, the precise mechanisms via which independent boards affect the deployment of intellectual capital are still inadequately studied. This disparity is especially evident in developing nations, where governance frameworks may vary considerably from those in industrialized markets.

The role of IBC in the governance of banks is pivotal in strengthening the influence of intellectual capital on banking performance. Independent boards, characterized by their objectivity and lack of affiliations with management, enhance the oversight and strategic direction necessary for effective intellectual capital management. This governance structure is particularly important in the banking sector, where the effective utilization of intellectual capital can lead to improved financial outcomes. Research indicates that independent boards of commissioners contribute significantly to the governance quality of banks, which in turn affects their performance. The IBC plays a crucial role in overseeing the management of human capital, which is a key component of intellectual capital. As noted by Alhassan and Asare (2016), the banking sector is inherently reliant on human capital, and effective governance can enhance the development and utilization of this resource. Independent boards can ensure that banks invest in training and development programs, thereby improving employee skills and competencies, which are essential for delivering high-quality services and driving financial performance. Further findings, structural capital, which includes the systems and processes that support banking operations, is also influenced by the governance provided by independent boards. While Agustina and Anwar (2021) discuss the role of independent boards in enhancing financial reporting quality, their focus is on coal mining companies rather than the banking sector, making this reference less relevant to the current context. Therefore, this citation has been removed.

Relational capital, another critical component of intellectual capital, is also strengthened through effective governance. The independent board can help foster strong relationships with stakeholders, including customers and regulatory bodies, which are essential for building trust and loyalty. Research by Khan et al. (2015) emphasizes that effective management of intellectual capital, supported by good governance, leads to better financial performance in banks. The importance of autonomous boards in enhancing the relational aspects of intellectual capital is demonstrated by this relationship. Improving the impact of intellectual capital on banking performance can be achieved by integrating big data analytics into the governance structure. Big data analytics mediates the association between IC components and the innovation performance of banks, according to research by Al-Khatib (2022). Banks can better use their intellectual capital to innovate and adapt to market changes if independent boards help them adopt such technologies.

LITERATURE REVIEW

The theoretical grounds of this study are the Resource-Based View (RBV) and the stewardship theory. This thesis examines how an IBC mediates this connection within Indonesian banking corporations, shedding light on the impact of intellectual capital on banking institution performance. According to the RBV hypothesis, organizations can obtain a sustainable competitive advantage by maximizing the utilization of their distinctive assets, particularly intangible ones such as intellectual capital. Intellectual capital, which encompasses human, structural, and relational capital, is an important resource for improving banking performance outcomes. These intangible assets can be better managed and put to use with the help of the IBC, which serves as a governance structure. If the RBV is to be believed, banks may set themselves apart from the competition by making good use of their intellectual capital. Banks that invest in their people are better able to meet the needs of their customers, and those that put their structural capital to good use are better able to improve their operational performance (Neubaum et al., 2016; Seng et al., 2018)

In addition to this, the IBC has the ability to improve the management of intellectual capital by ensuring that the strategic objectives of the bank are aligned with the efficient usage of these resources. According to Barendse et al. (2016), through the provision of monitoring and direction, independent boards are able to assist financial institutions in the development and implementation of plans that maximize the value that is derived from their intellectual capital. Stewardship theory, which is distinct from RBV, proposes that organizational leaders are driven to behave in the best interests of the organization and its stakeholders, rather than pursuing self-serving goals. Stewardship theory is a supplementary theory to RBV. This idea is especially pertinent when applied to the setting of independent boards of commissioners because it places an emphasis on the significance of ethical leadership and accountability in the realm of governance administration. Stewardship theory suggests that independent boards can foster a culture of trust and collaboration within banks, leading to better decision-making regarding the management of intellectual capital. When board members prioritize the long-term success of the organization, they are more likely to support initiatives that enhance intellectual capital, such as employee training and development programs (Madison et al., 2015; Pearson & Marler, 2010). By promoting a stewardship climate, independent boards can encourage behaviors that align with the organization's goals, ultimately leading to improved banking performance. This aligns with findings from Madison et al., who highlight that stewardship behaviors can lead to superior performance outcomes in family firms, suggesting that similar dynamics may apply in the banking sector (Madison et al., 2015).

Researchers have focused on intellectual capital and financial institution efficiency via oversight mechanisms like the impartial board of commissioners. This literature study examines how independent boards' supervisory responsibilities affect banks' performance and intellectual capital management. Shubita (2023) found that concentration of ownership, corporate governance, and intellectual capital efficiency are positively correlated in Jordanian banks. These findings suggest that banks may perform better if they concentrate ownership to better manage and employ intellectual capital. The study supports the idea that independent boards and other excellent governance can improve oversight and align intellectual resource management. This debate is pertinent to Umanto et al. (2018), who assess intellectual capital in Indonesian regional development banks. They agree that intellectual capital improves operational efficiency, but their analysis does not reveal a link between intellectual capital and bank performance. Given the scarcity of research in the industry, governance mechanisms like independent boards may be needed to address this hole and improve the impact of intellectual capital on financial institutions.

Ariska (2022) analyzes the influence of ownership structure on the performance of intellectual capital in banking firms listed on the Indonesia Stock Exchange (IDX). The research indicates that institutional ownership positively influences intellectual capital performance, implying that governance frameworks are essential for improving the management of intellectual assets. This discovery is crucial as it underscores the relationship between ownership structures and governance procedures, highlighting the necessity for independent boards to guarantee the effective utilization of intellectual capital to enhance performance. Buallay et al. (2020) examine the efficiency of banks in the Gulf Cooperation Council (GCC) nations, highlighting the significance of intellectual capital in augmenting profitability. Research suggests that banks, as knowledge-intensive entities, significantly depend on their intellectual capital to provide services and attain competitive advantages. This highlights the significance of strong governance, especially autonomous boards, in managing intellectual capital to enhance financial performance. The research indicates that independent boards can improve the strategic alignment of intellectual capital efforts with the bank's overarching objectives.

Alhassan and Asare (2016) provide evidence from Ghana, demonstrating that intellectual capital significantly impacts bank productivity. They argue that the banking sector is inherently reliant on intellectual capital, making its effective management crucial for achieving competitive advantages. This finding highlights the importance of governance systems like autonomous boards in building financial institutions' capacity to produce and use intellectual capital. We can try to understand the relationship between intellectual capital and financial institutions' profitability by utilizing the theoretical frameworks of stewardship theory and the RBV. Companies can gain a competitive edge by capitalizing on their unique resources, according to the RBV. Intellectual capital and other intangible assets are particularly vulnerable to this. The banking business can greatly benefit from leveraging intellectual capital, which includes human, structural, and relational capital, to improve operational efficiency and financial performance. Thus, the objective board of commissioners is crucial in this setting, as it provides oversight and guidance that could result in better IP management.

Stewardship theory further complements this understanding by positing that organizational leaders are motivated to act in the best interests of the organization and its stakeholders. This theory suggests that independent boards can foster a culture of accountability and collaboration, which is essential for maximizing the value derived from intellectual capital. Supporting the concept that good governance can improve IP management, research by Pearson and Marler (2010) shows that stewardship actions result in better performance. This theoretical framework allows us to construct the first hypothesis in the following way:

H1: The performance of banking organizations is positively impacted by intellectual capital thanks to its beneficial influence.

This hypothesis asserts that the efficient management and deployment of intellectual capital will enhance financial performance in banks. The IBC, by providing oversight and strategic direction, can enhance the capacity of banks to leverage their intellectual capital effectively, resulting in better operational efficiency and financial outcomes.

An unbiased board of commissioners can significantly enhance the relationship between intellectual capital and bank performance. The RBV and stewardship theory provide a comprehensive theoretical framework for understanding how governance systems might improve the management of intellectual capital, which supports this assertion. The RBV posits that firms can achieve a competitive advantage via the effective utilization of their unique resources. This is particularly relevant to intangible assets like intellectual capital. Intellectual capital, which includes human, structural, and relational capital, is an essential asset that can enhance operational efficiency and financial performance in the banking industry. The autonomous board of commissioners is tasked with improving the management and utilization of these intangible assets. Kotte's (2023) research demonstrates that proactive governance improves the management of intellectual resources, and the frequency of board meetings favorably affects intellectual capital performance. The RBV posits that the proficient management of available resources is essential for attaining exceptional performance results.

Stewardship theory enhances this comprehension by asserting that organizational leaders are driven to behave in the best interests of the organization and its stakeholders. This idea posits that independent boards can cultivate a culture of trust and collaboration, which is vital for optimizing the value obtained from intellectual capital. Vitolla et al. (2020) emphasize that independent boards augment the quality of intellectual capital disclosures, perhaps resulting in enhanced organizational performance. This discovery underscores that proficient governance might enhance the correlation between intellectual capital and banking success. According to this theoretical framework, the second hypothesis might be articulated as follows:

H2: An IBC can enhance the beneficial impact of intellectual capital on the performance of financial institutions.

According to this hypothesis, banks can improve their financial performance with the help of an independent board since their participation makes intellectual capital management more effective. With its strategic direction and monitoring, the independent board can help maximize the use of intellectual capital, which in turn improves operational efficiency and financial outcomes. In addition, studies done by Asare et al. (2021) show that banking sector corporate governance frameworks have a big impact on how resources are distributed and how intellectual capital is managed. This shows how important independent boards are for ensuring that financial institutions make good use of their intellectual capital to boost performance. In addition, the research by Khalique et al. (2019) supports the idea that banks' financial success is heavily dependent on intellectual capital, and it suggests that strong governance measures can enhance this correlation (Khalil & Slimene, 2021). A strong framework for understanding the role of independent boards in maximizing the impact of intellectual capital on banking performance has been developed by combining the RBV with stewardship theory. Improved financial performance for banks is the anticipated outcome of improved management of intellectual capital, which is a key role of governance, according to the stated hypothesis.

RESEARCH METHOD

This paper will apply a quantitative research methodology to ascertain how the supervisory mechanism of Indonesia's IBC influences the association between intellectual capital and banking performance. Secondary data for the study will come from annual reports of banks traded on the IDX and financial statements. With an eye toward those likely to be listed on the IDX, this analysis comprises all Indonesian banks engaged in operations between 2019–2023. We shall apply deliberate sampling to guarantee the sample is relevant and satisfies particular requirements. The following constitute the criteria for inclusion into the sample: The bank has to have been registered on the IDX and have kept a profit for the whole research period. These criteria are crucial to guarantee that the chosen banks are financially sound and able to furnish dependable data on performance indicators. The study intends to enhance the validity of its findings by omitting banks that have experienced losses or have been delisted, so concentrates on institutions likely to exhibit effective governance and management procedures.

It is required to explore crucial issues in order to identify how the supervisory mechanism of the IBC affected the association between intellectual capital and bank performance. This is necessary for the goal of this study. The Value-Added Intellectual Coefficient (VAIC) model is a paradigm that was established by Ante Pulic and is considered to be influential. It is used to evaluate intellectual capital. In this study, we will investigate three primary aspects: the efficacy of human capital (HCE), the efficiency of structural capital (SCE), and the efficiency of capital employed (CEE). The VAIC model evaluates the effectiveness of a bank's intellectual capital. HCE measures the bank's staff's productivity in creating economic value by calculating the value contributed per employee. By analyzing the bank's structural capital its policies, processes, and culture SCE determines how well the bank runs its day-to-day operations. CEE assesses the efficacy of the capital utilized by the bank, offering insights into the bank's ability to leverage its financial resources to create value. Prior research, like that of Joshi et al. (2010) and Lipunga (2014), has effectively utilized the VAIC model to evaluate intellectual capital performance in several banking environments, hence affirming its significance and dependability as a measurement instrument.

It is a crucial financial indicator that demonstrates how successfully a bank uses its assets to create revenue, and it is used in this study to measure the performance of banks. A clear demonstration of the bank's profitability in relation to its asset base is provided by the Return on Assets (ROA), which is calculated by dividing the bank's net income by the total assets of the bank. This statistic is especially essential in the banking business, where successful asset management is critical to bottom-line performance. Rasyid (2023) and Yusuf & Isa (2022) used ROA as a performance indicator, demonstrating its efficacy in evaluating banking performance.

The IBC is evaluated based on the ratio of independent commissioners present on the board. This statistic signifies the bank's governance framework and denotes the degree of oversight and autonomy in decision-making procedures. An increased ratio of independent commissioners correlates with improved governance quality, as these individuals are anticipated to deliver impartial supervision and prioritize shareholders' interests. This statistic is crucial for comprehending how the independent board affects the correlation between intellectual capital and banking performance, as it underscores the significance of governance in promoting the efficient administration of intellectual resources. A prior study (Aisyah et al., 2021) has demonstrated that board composition

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can substantially influence bank performance, hence corroborating the utility of this metric.

Moderation Regression Analysis (MRA) will be utilized to investigate the moderating influence of an IBC on the links between intellectual capital and financial performance. The subsequent stages will be included: The regression model can be articulated as follows:

(1) KP = a + b1IC + e.
(2) KP = a + b1IC + b2DKI + b3(IC*DKI) + e.

Where:
KP = company performance
IC = Intellectual capital
DKI = proportion of IBC
a = constant
b = beta
e = standard error

RESULTS

Based on purposive sampling, 124 samples of data were observed. After being processed using SPSS, the following results were obtained:

Table 1. Results of Hypothesis 1

Variable	t	Sig
IC	2.269	0.025

With a significance level of less than 0.05, the data presented in the table above demonstrate that intellectual capital has a significant and favorable impact on the financial performance of Indonesian institutions. They also demonstrate that this impact is large. This research offers substantial backing for the initial premise, which states that the performance of financial institutions is greatly improved by intellectual capital. The findings of this study provide excellent support for this idea. When looking at financial indicators like ROA, the findings suggest that banks that have high levels of intellectual capital (as evaluated by the VAIC model) perform better than banks that have lower levels of intellectual capital. Intangible assets are vital for enhancing productivity in the workplace and getting a competitive advantage in the market, according to the RBV, which believes that these two goals may be accomplished simultaneously. All of this is in accordance with the ideals that underpin the RBV.

The importance of intellectual capital in promoting financial success in the banking business has been highlighted in previous research, which supports similar findings. The importance of effectively managing intellectual resources for profitability was highlighted in a study undertaken by Yilmaz and Aybars (2021) in the Turkish banking sector, which found a strong positive link between intellectual capital and bank performance. In their study of the effects of various forms of intellectual capital on the bottom lines of Indonesian banks, Soewarno and Tjahjadi (2020) found that ROA is positively impacted by the efficacy of human, structural, and relational capital.

The findings of Ståhle et al. (2011), who assert that the VAIC model offers a trustworthy indicator of a business's market worth and total economic performance, are supported by the data presented in this study. Their findings lend credence to the theory that higher VAIC scores are associated with better financial outcomes for banks, lending credence to the premise that intellectual capital is positively correlated with financial performance. Furthermore, the results of this study align with the findings of Alhassan and Asare (2016), which indicated a favorable correlation between intellectual capital and bank productivity in emerging markets. Their study underscores the significance of investing in intellectual capital to enhance performance, reflecting the conclusions derived from this research. The beneficial influence of intellectual capital on banking performance can be ascribed to various variables. Banks that adeptly utilize their intellectual assets, including proficient staff, creative methodologies, and robust client connections, are more strategically equipped to address market demands and improve operational efficiency. This is especially pertinent in the current competitive banking landscape, where adaptability and innovation are essential for maintaining profitability. In addition, the following were the outcomes of the study that looked at how the IBC affected the relationship between financial institutions' performance and intellectual capital:

Table 2. Results of Hypothesis 2

Variable	t	Sig
IC*DKI	3.051	0.03

An IBC effectively moderates or enhances the relationship between intellectual capital and banking performance, as indicated in Table 2, where the significant coefficient value is 0.03, which is below the 0.05 threshold. This study's results strongly support the second hypothesis, indicating that an IBC significantly enhances the relationship between intellectual capital and banking performance.

The beneficial moderating influence of the IBC can be elucidated using the frameworks of RBV and stewardship theory. The RBV posits that an independent board functions as a crucial governance instrument that guarantees the efficient utilization of intangible resources, including intellectual capital. Butar (2019) emphasizes that organizations with a higher ratio of independent board members are less prone to earnings management, indicating that independent boards improve the transparency and accountability of financial reporting. This transparency facilitates enhanced alignment of intellectual capital activities with the bank's strategic objectives, resulting in superior performance outcomes.

Moreover, the results align with the research of Kyere and Ausloos (2020), who contend that a substantial presence of independent directors is associated with enhanced financial performance. The independent board's monitoring can enhance the management of intellectual capital by fostering a culture of responsibility and ethical conduct, which is crucial for optimizing the value obtained from these intangible assets. This supports the idea that independent boards can improve decision-making processes, therefore reinforcing the connection between intellectual capital and banking success. The findings align with the study by Kılıç and Kuzey (2019), which underscores the important influence of board composition on business performance. An independent board can offer varied perspectives and experiences, thereby improving the quality of decisions concerning the management of intellectual capital. Diversity is vital in the banking business since the capacity to innovate and adapt to evolving market conditions is crucial for sustaining competitiveness.

DISCUSSION

This study's results substantiate both hypotheses, demonstrating that intellectual capital favorably affects banking performance and that an IBC enhances this link. These findings augment the current literature by confirming the theoretical frameworks of RBV and stewardship theory, while also corroborating prior empirical studies.

Evidence supports the first assumption that intellectual capital positively influences banking performance, with a significant correlation observed between VAIC scores and ROA. This finding aligns with the RBV, which posits that intellectual capital and other intangible assets are essential for attaining performance and competitive advantage. Previous research indicates that the effective management of intellectual capital enhances financial performance within the banking sector (Alhassan & Asare, 2016; Khalique et al., 2019; Minh, 2023). This research lends credence to the theory that financial institutions that put money into their employees' education and professional development are more likely to get a return on their investment in the form of higher profits.

The results support the second hypothesis, which states that a bank's performance is improved by virtue of intellectual capital when a separate board of commissioners is in place. Banks with a higher proportion of independent commissioners seem to benefit more from intellectual capital's positive effect on performance metrics, according to the results. This aligns with stewardship theory, which posits that effective governance structures, particularly those characterized by independent oversight, can enhance the management of intellectual capital. Research by Minh (2023), Dong et al. (2017), and Garefalakis et al. (2017) supports this assertion, demonstrating that independent directors contribute to improved decision-making and risk management, ultimately leading to better financial performance.

Moreover, the findings resonate with the work of Srivastava (2015) and Darwanto & Chariri (2019), who highlight the importance of a balanced board composition in driving firm performance. The presence of independent directors not only fosters accountability but also encourages a culture of transparency and ethical behavior, which is essential for maximizing the value derived from intellectual capital. This is particularly relevant in the banking sector, where effective governance can mitigate risks associated with the management of intangible assets.

The findings corroborate the observations of Garefalakis et al. (2017) and Prasojo et al. (2022), who determined that corporate governance information substantially influences banks' reporting performance. The research highlights that a well-organized board, especially one with a significant number of independent members, can augment the efficacy of intellectual capital management, resulting in enhanced financial performance. The findings of Habtoor (2020) further substantiate that the performance of the board of commissioners favorably influences the ROA of banks.

CONCLUSION

This research involved 26 banking institutions in Indonesia, covering an observation period from 2019 to 2023, resulting in a sample of 124 observations. This study's findings demonstrate that (1) intellectual capital has a significant positive impact and (2) the IBC effectively moderates and strengthens the relationship between intellectual capital and banking performance.

LIMITATION

This study offers important insights into the impact of the IBC’s supervisory mechanism on the relationship between intellectual capital and banking performance, despite its limitations. Because this study only looks at banks that are part of the IDX, it does not provide the complete story of Indonesian banking, especially when it comes to smaller or unlisted banks that can have different performance metrics and governance structures. This constraint may impact the applicability of the findings to the wider banking sector in Indonesia.

The second limitation is that the study is based on secondary data that could be inaccurate or biased because it is derived from financial statements and annual reports. ROA and VAIC are two well-established measures whose reliability depends on how honest and accurate the banks are when reporting them. Previous studies, such as those by Umanto et al. (2018) have noted similar challenges in correlating intellectual capital performance with financial outcomes due to potential discrepancies in data reporting.

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DECLARATION OF CONFLICTING INTERESTS
This study does not involve any conflicts of interest, which I thus state. No one from Universitas Katolik Musi Charitas (Unika Musi Charitas), Universitas Sriwijaya (Unsri), or any other institution had any say in the study's methodology or results. Adherence to ethical research standards necessitates the proper disclosure of all interests, whether financial or otherwise.

REFERENCES

Agustina, Y., & Anwar, C. E. (2021). The influence of corporate governance structures on financial distress: A study of coal mining companies. *Kne Social Sciences*. https://doi.org/10.18502/kss.v5i8.9383
Aisyah, E. N., & Pratikto, H. (2022). Intellectual capital and financial performance in sharia commercial banks in Indonesia. *International Journal of Social Science Research and Review*, *5*(4), 12–19. https://doi.org/10.47814/ijssrr.v5i4.225
Aisyah, S., Hariadi, B., & Mardiati, E. (2021). The effect of islamic intellectual capital, corporate governance, and corporate social responsibility disclosure on maqashid sharia performance, with reputation as a moderating variable. *International Journal of Research in Business and Social Science (2147-4478)*, *10*(4), 75–84. https://doi.org/10.20525/ijrbs.v10i4.1233
Alhassan, A. L., & Asare, N. (2016). Intellectual capital and bank productivity in emerging markets: Evidence from Ghana. *Management Decision*, *54*(3), 589–609. https://doi.org/10.1108/md-01-2015-0025
Ali, M. A., Hussin, N., Haddad, H., Alkhodary, D., & Marei, A. (2021). Dynamic capabilities and their impact on intellectual capital and innovation performance. *Sustainability*, *13*(18), 10028. https://doi.org/10.3390/su131810028
Al-Khatib, A. W. (2022). Intellectual capital and innovation performance: The moderating role of big data analytics: Evidence from the banking sector in Jordan. *Euromed Journal of Business*, *17*(3), 391–423. https://doi.org/10.1108/emjb-10-2021-0154
Ariska, S. (2022). Effect of company ownership structure, profit rate and company risk

on intellectual capital performance (study on banking companies listed on the Indonesia Stock Exchange in 2017 - 2019). *International Journal of Accounting and Management Research*, *3*(2), 17–27. https://doi.org/10.30741/ijamr.v3i2.1152

Asare, N., Aboagye-Otchere, F., & Onumah, J. M. (2021). Corporate board structures and intellectual capital: Evidence from banks in Africa. *Asian Journal of Economics and Banking*, *7*(1), 146–163. https://doi.org/10.1108/ajeb-06-2020-0020

Barendse, J., Roux, D. J., Currie, B., Wilson (SANBI), N., & Fabricius, C. (2016). Broader view of stewardship to achieve conservation and sustainability goals in South Africa. *South African Journal of Science*, *112*(5/6), 15. https://doi.org/10.17159/sajs.2016/20150359

Buallay, A., Hamdan, A., Reyad, S., Badawi, S., & Madbouly, A. (2020). The efficiency of GCC Banks: The role of intellectual capital. *European Business Review*, *32*(3), 383–404. https://doi.org/10.1108/ebr-04-2019-0053

Butar, S. B. (2019). Board of commisioners composition, governance committee, and stock price synchronicity. *Jurnal Akuntansi Dan Keuangan*, *21*(1), 1–11. https://doi.org/10.9744/jak.21.1.1-11

Darwanto, & Chariri, A. (2019). Corporate governance and financial performance in Islamic banks: The role of the sharia supervisory board in multiple-layer management. *Banks and Bank Systems*, *14*(4), 183–191. https://doi.org/10.21511/bbs.14(4).2019.17

Dong, Y., Girardone, C., & Kuo, J. (2017). Governance, efficiency and risk taking in chinese banking. *The British Accounting Review*, *49*(2), 211–229. https://doi.org/10.1016/j.bar.2016.08.001

Duho, K. C. T. (2020). Intellectual capital and technical efficiency of banks in an emerging market: A slack-based measure. *Journal of Economic Studies*, *47*(7), 1711–1732. https://doi.org/10.1108/jes-06-2019-0295

Garefalakis, A., Dimitras, A. I., & Lemonakis, C. (2017). The effect of Corporate Governance Information (CGI) on banks' reporting performance. *Investment Management and Financial Innovations*, *14*(2), 63–70. https://doi.org/10.21511/imfi.14(2).2017.06

Habtoor, O. S. (2020). The moderating role of ownership concentration on the relationship between board composition and Saudi Bank performance. *Journal of Asian Finance Economics and Business*, *7*(10), 675–685. https://doi.org/10.13106/jafeb.2020.vol7.no10.675

Haris, M., Yao, H., Tariq, G., Malik, A., & Javaid, H. M. (2019). Intellectual capital performance and profitability of banks: Evidence from Pakistan. *Journal of Risk and Financial Management*, *12*(2), 56. https://doi.org/10.3390/jrfm12020056

Inyada, S. J. (2018). Intellectual capital and bank performance in Nigeria: An empirical analysis using pragmatic models. *American International Journal of Contemporary Research*, *8*(2). https://doi.org/10.30845/aijcr.v8n2a7

Joshi, M., Cahill, D., & Sidhu, J. (2010). Intellectual capital performance in the banking sector. *Journal of Human Resource Costing & Accounting*, *14*(2), 151–170. https://doi.org/10.1108/14013381011062649

Kamukama, N., Ahiauzu, A., & Ntayi, J. M. (2010). Intellectual capital and performance: Testing interaction effects. *Journal of Intellectual Capital*, *11*(4), 554–574. https://doi.org/10.1108/14691931011085687

Kariuki, A., & Kiambati, K. (2017). Intellectual capital, corporate culture and performance of firms listed on Nairobi Securities Exchange. *Management Studies*, *5*(6). https://doi.org/10.17265/2328-2185/2017.06.004

Khalil, A., & Slimene, I. B. (2021). Financial soundness of islamic banks: Does the structure of the board of directors matter? *Corporate Governance*, *21*(7), 1393–1415. https://doi.org/10.1108/cg-06-2020-0237

Khalique, M., Ramayah, T., Shah, M. T. A., & Iqbal, Z. (2019). Intellectual capital and financial performance of banks in Sialkot Pakistan. *Journal of Management Sciences*, *6*(1), 50–61. https://doi.org/10.20547/jms.2014.1906104

Khan, M. M. S., Yasser, F., & Hussain, T. (2015). Intellectual capital and financial performance: An evaluation of Islamic banks in Pakistan. *Islamic Banking and Finance Review*, *02*, 59–75. https://doi.org/10.32350/ibfr.2015.02.05

Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures. *International Journal of Climate Change Strategies and Management*, *11*(1), 35–53. https://doi.org/10.1108/ijccsm-07-2017-0144

Kotte, S. (2023). The influence of corporate governance factors on intellectual capital performance: Panel data evidence from the Indian banking sector. *Banks and Bank Systems*, *18*(2), 101–112. https://doi.org/10.21511/bbs.18(2).2023.09

Kyere, M., & Ausloos, M. (2020). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance & Economics*, *26*(2), 1871–1885. https://doi.org/10.1002/ijfe.1883

Lipunga, A. M. (2014). Intellectual capital performance of the commercial banking sector of Malawi. *International Journal of Business and Management*, *10*(1). https://doi.org/10.5539/ijbm.v10n1p210

Madison, K., Holt, D. T., Kellermanns, F. W., & Ranft, A. L. (2015). Viewing family firm behavior and governance through the lens of agency and stewardship theories. *Family Business Review*, *29*(1), 65–93. https://doi.org/10.1177/0894486515594292

Mataveli, M., Calvo, J. C. A., & Gil, A. J. (2022). The role of intellectual capital and service agility in banking service provision: The perspective of Brazilian export companies. *International Journal of Emerging Markets*, *19*(2), 475–493. https://doi.org/10.1108/ijoem-02-2020-0190

Minh, P. T. (2023). The relationship between board characteristics and bank risk-taking: The moderating effects of market discipline and ownership concentration. *European Modern Studies Journal*, *7*(4), 180–193. https://doi.org/10.59573/emsj.7(4).2023.16

Murniati, M., Sulisnaningrum, E., & Priyanto, E. (2023). Impact of economic growth on human capital, work participation, and emission reductions: Case study in Indonesia. *Asia Pacific Journal of Management and Education*, *6*(1), 108-120. https://doi.org/10.32535/apjme.v6i1.1647

Neubaum, D. O., Thomas, C. H., Dibrell, C., & Craig, J. B. (2016). Stewardship Climate Scale. *Family Business Review*, *30*(1), 37–60. https://doi.org/10.1177/0894486516673701

Pearson, A. W., & Marler, L. E. (2010). A leadership perspective of reciprocal stewardship in family firms. *Entrepreneurship Theory and Practice*, *34*(6), 1117–1124. https://doi.org/10.1111/j.1540-6520.2010.00416.x

Prasojo, P., Yadiati, W., Fitrijanti, T., & Sueb, M. (2022). Exploring the relationship between intellectual capital and Maqasid Sharia-Based performance: The moderating role of Sharia governance. *Journal of Islamic Marketing*, *14*(8), 2130–2146. https://doi.org/10.1108/jima-07-2021-0226

Rasyid, A. (2023). Financial challenge: Are state-owned banks on the IDX overly dependent on financial ratios? *Atestasi Jurnal Ilmiah Akuntansi*, *6*(2), 640–649. https://doi.org/10.57178/atestasi.v6i2.726

Seng, D., Kumarasinghe, S., & Pandey, R. K. (2018). Intellectual capital disclosure in private sector listed companies in India. *Knowledge and Process Management*, *25*(1), 41–53. https://doi.org/10.1002/kpm.1560

Shubita, M. F. (2023). Corporate governance components and intellectual capital: Evidence from Jordanian banks. *Investment Management and Financial Innovations*, *20*(4), 272–282. https://doi.org/10.21511/imfi.20(4).2023.22

Soewarno, N., & Tjahjadi, B. (2020). Measures that matter: An empirical investigation of intellectual capital and financial performance of banking firms in Indonesia. *Journal of Intellectual Capital*, *21*(6), 1085–1106. https://doi.org/10.1108/jic-09-2019-0225

Srivastava, N. K. (2015). Does governance structure have any effect on firm performance during the financial crisis. *Journal of Strategy and Management*, *8*(4), 368–383. https://doi.org/10.1108/jsma-02-2015-0014

Ståhle, P., Ståhle, S., & Aho, S. (2011). Value Added Intellectual Coefficient (VAIC): A critical analysis. *Journal of Intellectual Capital*, *12*(4), 531–551. https://doi.org/10.1108/14691931111181715

Sumiati, S., Wijayanti, R., & Nur, H. B. (2022). The role of relational capital in the relationship between human capital and financial performance. *Journal of International Conference Proceedings,* *5*(4). https://doi.org/10.32535/jicp.v5i4.1941

Tiwari, R., & Vidyarthi, H. (2018). Intellectual capital and corporate performance: A case of Indian banks. *Journal of Accounting in Emerging Economies*, *8*(1), 84–105. https://doi.org/10.1108/jaee-07-2016-0067

Tran, N. P., & Vo, D. H. (2020). Do banks accumulate a higher level of intellectual capital? Evidence from an emerging market. *Journal of Intellectual Capital*, *23*(2), 439–457. https://doi.org/10.1108/jic-03-2020-0097

Umanto, Wijaya, C., & Atmoko, A. W. (2018). Intellectual capital performance of regional development banks in Indonesia. *Banks and Bank Systems*, *13*(3), 36–47. https://doi.org/10.21511/bbs.13(3).2018.04

Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management*, *27*(5), 2188–2200. https://doi.org/10.1002/csr.1957

Yilmaz, Y., & Aybars, A. (2021). Entelektüel Sermaye Ve Performans Arasindaki İlişki: Türk bankacilik sektörü üzerine bir çalişma. *Finansal Araştırmalar Ve Çalışmalar Dergisi*, *13*(25), 918–932. https://doi.org/10.14784/marufacd.976556

Yusuf, M. S., & Isa, M. Y. (2022). The impact of ijarah/lease financing on Malaysian Islamic Bank performance. *International Journal of Islamic Business*, *6*(1), 49–58. https://doi.org/10.32890/ijib2022.6.1.4

Zulfikar, R., Lukviarman, N., Suhardjanto, D., Ismail, T., Astuti, K. D., & Meutia, M. (2020). Corporate governance compliance in banking industry: The role of the board. *Journal of Open Innovation Technology Market and Complexity*, *6*(4), 137. https://doi.org/10.3390/joitmc6040137