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Intellectual Capital and Board Gender Diversity in Predicting Islamic Banks' Financial Performance: Evidence from Indonesia

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ABSTRACT

Indonesia is a country with majority Muslims population. But, the total assets of Islamic banks are still under 10% of the total assets of the banking industry in Indonesia. Several previous studies have examined the effect of intellectual capital or board gender diversity on the financial performance of Islamic banks. However, it is still rare to find research that examines the influence of both on the future financial performance of Islamic banks. This study examines the ability of intellectual capital and board gender diversity in predicting the current and future financial performance of Islamic banks in Indonesia. This research is a descriptive quantitative study that uses panel data to analyse the hypothesis. A total of 462 data from 11 Islamic commercial banks registered with Otoritas Jasa Keuangan (OJK) during the 2017-2022 period were obtained and used in this study. The results of this study shows that intellectual capital can predict the current and future financial performance of Islamic banks. However, board gender diversity cannot predict the financial performance of Islamic banks, both in the present and the future. The results of this study can be a consideration for Islamic banking as an industry player and Bank Indonesia as the regulator to consider the women quota in the company board of directors.

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1. INTRODUCTION

Indonesia is a country with majority Muslim population. This opens up great opportunities for the Islamic banking industry to develop in Indonesia (Wahyuni et al., 2023). Moreover, the implementation of the dual-banking system in Indonesia has been regulated by Law No.21 of 2008

which supports this potential. The total of 13 Islamic commercial banks (ICB) have been operating in Indonesia by the end of 2022. This is a rapid increase from only 3 Islamic commercial banks when the law was first introduced in 2008.

In the recent years, the Islamic banking business has experienced healthy expansion. This is demonstrated by the total assets of Islamic commercial banks in Indonesia in 2022, which reached IDR 531.86 trillion, representing a massive increase of 184.66% from 2017, according to Statistik Perbankan Syariah by Otoritas Jasa Keuangan (OJK). Despite this annual gains, the total assets of Sharia commercial banks remain less than 10% of the total assets of all Indonesian banks. The numbers are 3.75%, 3.78%, 3.93%. 4.15%, 4.19%, and 4.57%, respectively. This implies that Islamic commercial banks' potential is still not fully realised.

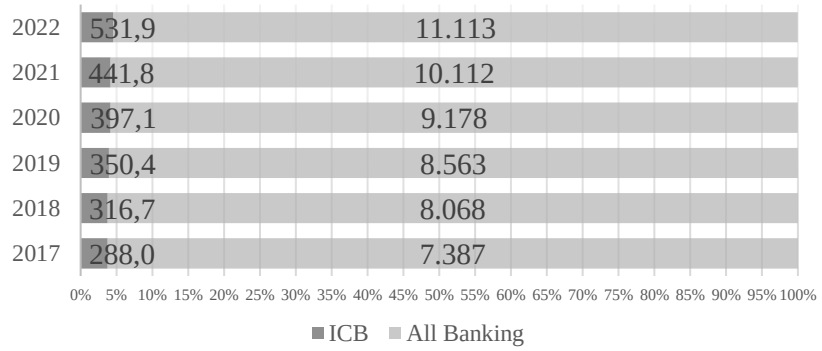

Figure 1: Comparison of total assets of Islamic commercial banks (ICB's) and all banks in Indonesia during the observation period

A company success can be reflexed by its financial performance. It is because financial performance is the information that can be used for investors in judging the prospect of a company in the future. Financial performance also often used as judgement by the management in making a new policy and evaluating the old ones (Wahyuni et al., 2023). Public trust towards company also depends on its financial performance (Novitasari et al., 2022). Therefore, it is important for every company to evaluate their financial performance, and Islamic banks is not an exception.

One of the popular indicators used in research to measure the financial performance of Islamic banking is the financial ratio of return on assets (ROA). This is because Islamic banking is a business which activities are oriented towards helping the people, and the majority of its assets also come from the people (Fitriana et al., 2022). The ROA of Islamic commercial banks increased regularly between 2017 and 2022, with the exception of 2020, when the world was hit by the COVID-19 pandemic. Despite steady increases, the ROA value of Islamic commercial banks is frequently below the usual ROA limit of 1.5% set by Bank Indonesia.

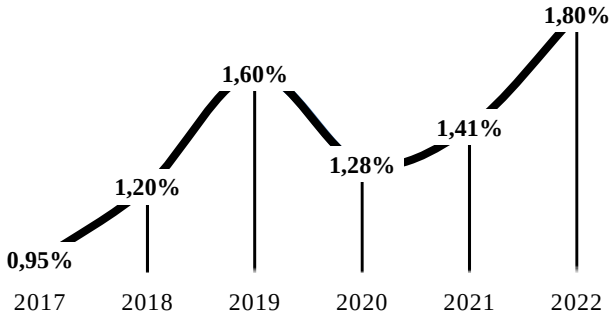

Figure 2: Return on assets (ROA) of Islamic commercial banks in Indonesia during the observation period

According to resource-based theory (RBT), a company financial performance is determined by how its resources are managed (Wernerfelt, 1984). The company ability to use its resources efficiently can create a competitive edge in terms of adding value over its competitors. According to Barney (1991), resources that can offer the company a competitive advantage are those that impossible to replicate without significant effort. He also stated that the company ability to maintain its resource to be unique, uncommon and irreplaceable will generate a sustainable competitive advantage for a company.

Essentially, resources are distinct, as the term "resources" refers to all of the tangible and intangible company assets, such as staff knowledge and expertise, organizational development procedures, and organizational features and culture. This hands the company the freedom to decide which resources to utilise in order to get a competitive advantage (Wahyuni et al., 2023). One of the intangible assets that can be used by companies to generate a competitive advantage is intellectual capital, which includes innovation, discovery, employee expertise, and attitude (Wahyuni et al., 2023).

Several prior research have found that intellectual capital improves company financial performance (Fitriana et al., 2022; Indrayani & Anwar, 2022; Novitasari et al., 2022; Wahyuni et al., 2023). However, a research by Putri & Gunawan (2019) has found no significant effect of intellectual capital on company financial performance.

According to RBT, internal variables have a greater influence on company success than industry variables (Wernerfelt, 1984). According to Barney (1991), competitive advantage can be generated from employed resources that valuable, rare, imperfectly imitable, and organisational (VRIO) (Barney, 1991). The “O” in VRIO stands for company capabilities, namely company routines and processes, which demands company to use and transform resources in order to reach a sustainable competitive advantage (Ismail, 2022). Thus, resources that are valuable, rare, and imperfectly imitable would not benefit company with the absence of skilled people in management.

The success of a company can be affected by the board of directors’ composition and characteristics, as they play an important role in nominating the managers to set the practical task of the company. It is proven in many research that the enhance in company performance can be influenced by the diversity in board selection, including gender diversity. Magoma & Ernest (2023) stated that women directors are associated with greater diversity and better company performance. They also

stated that having women directors may reduce the chance of financial fraud in effective way, as women considered more responsible and less likely to have attendance problems in board meetings.

Many countries have introduced and implemented measures to increase women quota on company board of directors, including Norway, Belgium, Denmark, France, Germance, Iceland, Italy, Netherlands, Spain, and Malaysia. The number of quota ranged around 30-40% (Sanyaolu, 2022). According to Women's World Bank, the number of women directors in Islamic banks in Indonesia is 21% in 2023. This low number suggests that women are not given equal opportunities to participate on board strategic issues that can add values to company (Sanyaolu et al., 2022). Additionally, the awareness of gender diversity issue is still at its infancy in Indonesia compared to countries in Europe.

Ismail et al. (2022) stated that gender stereotypes could be the answer to "why are women remain underrepresented?" question. The stereotype against women are strongly tied with local culture, where women traditionally linked with passive and submissive behaviour in the East. For example, in Malaysia, where Islam is the dominant religion, women's prime responsibility is to take care of their families and supporting men family members. Hence, Malaysian women are discriminated by ideology, laws and rulings that are usually gender-biased. Additionally, women also considered not really necessary in executive positions, as they tend to be service-oriented and not achievement-oriented (Ismail et al., 2022). The case in Indonesia is not very different than Malaysia.

Several prior research have revealed that board gender diversity can actually improve company financial performance (EmadEldeen et al., 2021; Jabari & Muhamad, 2020; Sarpong-Danquah et al., 2018). However, some research findings indicate that board gender diversity cannot improve company financial performance (Marquez-Cardenas et al., 2022; Salsabilla et al., 2023). Additionally, the research by Sanyaolu et al. (2022) found that board gender diversity worsens company financial performance.

This study is an extension of the research by Wahyuni et al. (2023), which evaluates the effect of intellectual capital in predicting the financial performance of Islamic banking in the present and for the next three years. Based on the phenomena and gaps described above, researchers are interested in adding board gender diversity variables that represent the company human resources and considered as company capabilities.

This study taking Islamic banks as the object, as their business are different from the conventional banks, fundamentally. The context of Islamic banks is expected to bring new evidence to the intellectual capital dan boarg gender diversity topics. Some previous studies only focused on current financial performance. However, the research that examine the future financial performance of Islamic banking in Indonesia is still rare. The purpose of this study is to analyze the effect of intellectual capital and board gender diversity on the current and future financial performance of Islamic banks in Indonesia.

Literature Review

Resource-Based Theory (RBT)

Wernerfelt (1984) pioneered resource-based theory (RBT), which explains competitive advantage and company success. According to Wernerfelt (1984), internal variables or resources have a greater influence on a company success than industry variables. The company ability to efficiently manage and utilize its resources can create a competitive edge in terms of adding value (Wernerfelt, 1984). The increased value can then boost the company financial performance. Furthermore, Wernerfelt

(1984) stated that heterogeneous and unique resources can demonstrate the company ability to achieve a competitive edge in the capital market.

Barney (1991) stated that competitive advantage can be obtained by companies through resources and capabilities that are valuable, rare, imperfectly imitable, and organisational (VRIO). If the company can maintain these resources valuable, rare, and imperfectly imitable, it will earn a long-term competitive advantage. The "organisational" presents company capabilities, namely company routines and processes that demand organisations to use and manage resources to achieve sustainable competitive advantage. Therefore, if valuable, rare, and imperfectly imitable resources are managed by unskilled people, it will not benefit the company (Ismail et al., 2022).

Intellectual Capital

Intellectual capital is an intangible asset which can used by a company to achieve competitive advantage and add value to it's performance. Wahyuni et al. (2023) defined the intellectual capital as three components: physical capital employed (CE), human capital (HC), and structural capital (SC). Research by Ulum (2013) have stated that intellectual capital performance of Islamic banks can be measured using Islamic banking value added intellecutal capital (IB-VAIC) indicator. IB-VAIC assesses the relationship between Islamic banking value added (IB-VA) and the three intellectual capital components mentioned above: CE, HC, and SC (Wahyuni et al., 2023).

IB-VA is calculating the Islamic banks' ability to create an added value. IB-VACA measures the contribution of physical capital on Islamic bank's value added. IB-VAHU measures the employees' competence in producing goods and services, including education, skills, work experience, and attitudes. IB-STVA measures all of the infrastuctures that were used by a company to meet the market needs, namely tech systems, operational systems, patents, trademarks, and training courses (Ulum, 2013). Furthermore, the output of IB-VAIC can then be ranked as follows (Ulum, 2013):

1. Top performances – IB-VAIC score of 3.00 or more
2. Good performances – IB-VAIC score of 2.00 to 2.99
3. Common performances – IB-VAIC score of 1.5 to 1.99
4. Bad performances – IB-VAIC score of below 1.5

Board Gender Diversity

Board gender diversity is the presence of women in the board of directors. Board gender diversity is one of the board diverse characteristics that considered as human capital form of company. Ismail et al. (2022) stated that company performance involves a dynamic requiring judgement and interpretation, including the person involved in the company performance assessment that might have different point of view in understanding the company performance. It is confirmed by Magoma & Ernest (2023) that stated that having women on boardrooms can bring a more diverse point of view that can make the board to be more independent and may leads to a better performance.

According to Endraswati (2018), women directors may influence the board governance through three things: providing different perspective on board discussions, decreasing the avoidance towards the discussions, and creating more open and collaborative discussions. A more gender-diverse board could also benefits company in identifying the more diverse market needs, as the majority of companies prefers to have diverse customer bases (Magoma & Ernest, 2023). Furthermore, Magoma

& Ernest (2023) added that women directors also considered more responsible and less likely to have attendance problems than men directors.

Hypotheses Development

RBT assumed that the company ability to maximize the use of its resources will provide a competitive advantage over its competitors in creating an added value. The added value will then improve a company financial performance (Wahyuni et al., 2023). Based on that hypothesis, managing the rate of growth of capital (ROGIC) can bring a competitive advantage in creating an added value for company, which then will increase company current financial performance.

Several research have also founded a positive effect of intellectual capital on current financial performance (Innayah et al., 2021; Novitasari et al., 2022; Pratama et al., 2019; Wahyuni et al., 2023).
H1: Intellectual capital has a positive influence and effect on the company current financial performance.

According to Barney (1991), companies can obtain competitive advantage through valuable, rare, imperfectly imitable, and organization (VRIO) resources and capabilities. If the company is able to keep its resources unique, rare, and difficult to imitate, it can give the company a sustainable competitive advantage (Innayah et al., 2021). This will improve the company financial performance consistently in the future. So, companies that are able to consistently manage and develop ROGIC will improve their financial performance in the future (Wahyuni et al., 2023).

Research by Rochmadhona et al. (2018) has found a positive effect of intellectual capital on the company future financial performance.
H2: Intellectual capital has a positive influence and effect on the company future financial performance.

RBT assumed that it is important for companies to acquire heterogeneous and unique resources to gain a competitive advantage in the capital market (Wernerfelt, 1984). The resources that are valuable, rare, and imperfectly imitable resources cannot be maximized with the absence of skilled people in management (Ismail et al., 2022). A more gender-diverse board could benefits the company in identifying the more diverse needs of the markets, as they oftenly prefer to have diverse customer bases. Having women on boardrooms also can bring a more diverse point of view that can make the board to be more independent, and may leads to a better performance (Magoma & Ernest, 2023). According to the theory and description above, board gender diversity can boost the company current financial performance.

Some previous studies have found the positive effect of board gender diversity on company current financial performance (EmadEldeen et al., 2021; Jabari & Muhamad, 2020; Sarpong-Danquah et al., 2018).
H3: Board gender diversity has a positive effect on the company current financial performance.

According to the RBT, the capabilities, namely routines and processes, demands organisations to use and transform resources to achieve sustainable competitive advantage (Ismail et al., 2022). Women directors may reduce the chance of financial fraud, as women directors considered more responsible and less likely to have attendance problems than men directors (Magoma & Ernest, 2023). Having

women directors may also be a powerful weapon for public relations, as it validates the existence of company by abiding the norms of equality (Rizvi et al., 2023).

Based on the theory and the descriptions above, board gender diversity considered as company routines and processes that may provide a sustainable competitive advantage. Therefore, the company financial performance will continue to increase in the future.

H4: Board gender diversity has a positive effect on the company future financial performance.

Conceptual Framework

This study is descriptive quantitative research that analyzes a hypothesis using numbers to prove the theory. The object studied in this research is Islamic banks in Indonesia. This study aims to examine the ability of intellectual capital and board gender diversity in predicting current and future financial performance in Islamic banks in Indonesia. Therefore, this study divides the analysis into two models as follows.

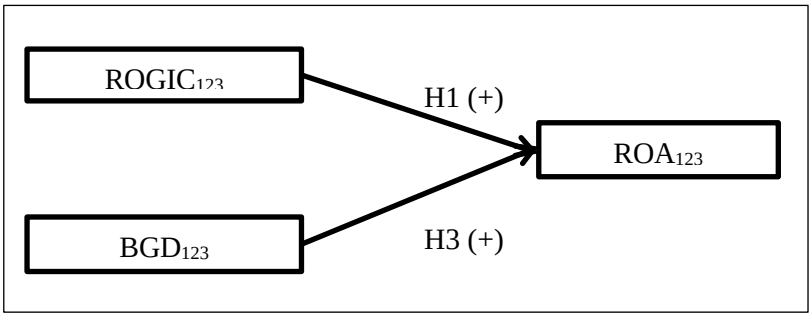

Figure 1: Schematic Diagram of the Model 1

Description:

ROA_{123} = 2017-2019 Islamic banks' financial performance, proxied by return on assets (ROA)

$ROGIC_{123}$ = 2017-2019 Islamic banks' intellectual capital, proxied by rate of growth of intellectual capital (ROGIC)

BGD_{123} = 2017-2019 Islamic banks' board gender diversity (BGD), proxied by the proportion of women directors

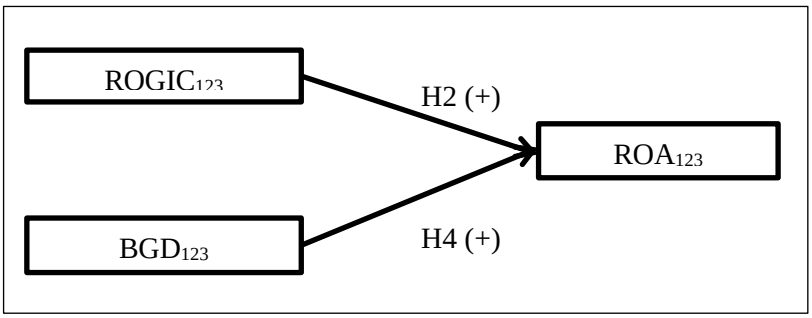

Figure 2: Schematic Diagram of the Model 2

Description:

ROA_{456} = 2020-2022 Islamic banks' financial performance, proxied by return on assets (ROA)

$ROGIC_{123}$ = 2017-2019 Islamic banks' intellectual capital, proxied by rate of growth of intellectual capital (ROGIC)

BGD_{123} = 2017-2019 Islamic banks' board gender diversity (BGD), proxied by the proportion of women directors

2. METHOD

Sample Selection and Data Sources

The population of this study are all Islamic commercial banks in Indonesia. The sample of the study was selected by using a purposive sampling technique with several spesific criteria as follows:

1. Islamic commercial banks registered with OJK in the 2017-2022 period
2. Islamic commercial banks that present annual reports on their official websites for the 2017-2022 period, in sequences
3. Islamic commercial banks that present data relating to the research variables.

From these criteria, 11 Sharia commercial banks were selected as research samples. A total of 462 data were used in this research.

Data Collection

This study used secondary data in the form of documentation by the annual reports, through the official website of each company which presents information to measure ROA, ROGIC, BGD, as well as control variables SizeBOD, SizeBank, CAR, and Lev. Data were obtained, recorded, and reviewed before being analyzed. Furthermore, the literature review in this study was obtained from previous research, books, and information sources.

Variable Measurement

Variable measurements in this study were carried out as follows:

Table 1. Variable measurement

Variable name	Abbreviation	Description	References
Financial performance	ROA	$\mathbf{ROA} = \frac{\textbf{Income before interest and tax}}{\textbf{Total assets}}$	(Innayah et al., 2021; Wahyuni et al., 2023)
Intellectual capital	ROGIC	$\mathbf{ROGIC = IB\text{-}VAIC_t - IB\text{-}VAIC_{t\text{-}1}}$ Information: $IB\text{-}VAIC_t$ = IB-VAIC of current year $IB\text{-}VAIC_{t-1}$ = IB-VAIC of previous year	(Ulum, 2013; Wahyuni et al., 2023)

		Where: $\textbf{IB-VAIC} = \textbf{IB-VACA} + \textbf{IB-VAHU} + \textbf{IB-STVA}$ Where: IB-VACA = IB-VA/CE IB-VAHU = IB-VA/HC IB-STVA = SC/IB-VA Information: IB-VA = Operating profit + Employee cost + Depreciation + Amortization CE = total equity HC = employee cost SC = IB-VA – HC	
Board gender diversity	BGD	$\textbf{BGD} = \frac{\textbf{Women on BOD}}{\textbf{Total of BOD members}}$	(Innayah et al., 2021; Salsabilla et al., 2023)
Size of board of directors	SizeBOD	$\textbf{SizeBOD} = \textbf{total of BOD members}$	(AlAbbad et al., 2019; Elnahass et al., 2023)
Size of bank	SizeBank	$\textbf{SizeBank} = \boldsymbol{log\ natural}\ \textbf{of total assets}$	(Elnahass et al., 2023; Sanyaolu et al., 2022)
Capital adequacy ratio	CAR	$\textbf{CAR} = \frac{\textbf{Total capital}}{\textbf{Risk weighted assets (RWA)}}$	(Farag & Mallin, 2016; Jabari & Muhamad, 2020)
Leverage	Lev	$\textbf{Lev} = \frac{\textbf{Total liability}}{\textbf{Total equity}}$	(Elnahass et al., 2023)

This study uses quantitative analysis method by using *EViews 13* software. The panel data regression was used to examine the effect of independent variables, namely intellectual capital and board gender diversity on the dependent variable, which is financial performance. The analysis including descriptive statistic test, model selection test, classical assumption test, and regression test. The regression equation used in this study is presented as follows:

$$ROA = \alpha + \beta_1 ROGIC + \beta_2 BGD + \beta_3 SIZEBOD + \beta_4 SIZEBANK + \beta_5 CAR + \beta_6 LEV + e$$

Information:

ROA	: Financial performance
α	: Constanta
β_1-β_6	: Coefficients of each variable
ROGIC	: Rate of growth of intellectual capital
BGD	: Board gender diversity
SIZEBOD	: Board of directors size
SIZEBANK	: Bank size
CAR	: Capital adequacy ratio
LEV	: Leverage
e	: Error

3. RESULTS AND DISCUSSION

Results

Descriptive Statistics

Table 2. Descriptive Statistics of Research Variables

	ROGIC	BGD	ROA
Mean	0.10105	0.1548	0.01640
Max.	6.34549	0.7500	0.12210
Min.	-4.27928	0.0000	-0.09702
Std. Dev.	1.337482	0.183458	0.038466
Observations	66	66	66

(Source: Eviews Output, 2024)

Rate of growth of intellectual capital (ROGIC) is the indicator used to measure the ability of a company to manage their intellectual capital ability. As the RBT stated, the higher the intellectual capital, the better the financial performance a company will get. Currently, there is no spesific criteria for certain ROGIC value. So, if the value of ROGIC is positive, it means the company has good intellectual capital ability, and vice versa. The calculation results show that the lowest ROGIC value is -4.27928, while the highest ROGIC value is 6.34549, and the average value of ROGIC is 0.10105. This shows that during the observation period, the intellectual capital management of Islamic banks in Indonesia is on a positive trend. This mean that Islamic banks in Indonesia are capable of managing resources in order to gain a competitive advantage.

Board gender diversity (BGD) is the presence of women in the board of directors of a company. As the RBT stated, having women directors benefits the boardrooms with diverse characteristics that provides different POV that can lead to a better financial performance for a company. So, the higher the BGD value, the more diverse the board of directors of a company, and the higher the company financial performance. The calculation results show that the lowest BGD value is 0, while the highest BGD value is 0.75, and the average value of BGD is 0.1548. It means that in the span of 6 years of observation period, there is only 15.48% of women directors in Islamic banks in Indonesia at average. This implies that women directors are still underrepresented in Islamic banks in Indonesia.

Return on assets (ROA) is an indicator that oftenly used in research to measure Islamic banks' financial performance. The minimum threshold of ROA for Islamic banks in Indonesia to be considered healthy is 1.5%. So, if the ROA value is < 1.5 %, Islamic banks' financial performance considered not very good, and vice versa. The calculation results show that the lowest ROA value is -0.09702, while the highest ROA is 0.12210, and the average value of ROA is 0.01640. It means that the average of ROA of Islamic banks in Indonesia during the observation period is 1.64 %, which is very good.

Model Selection Test

Table 3. Chow Test Result of Model 1

	Statistic	d.f.	Prob.
Cross-section F	6.593554	(10,16)	0.0005
Cross-section Chi-square	53.900354	10	0.0000

(Source: Eviews Output, 2024)

From the results above, a cross-section F prob. of 0.0005 < 0.05 was obtained. So, it can be recognized that the common effect model is declined and the fixed common effect is accepted. Then, the model estimation of model 1 is continued for Hausman test.

Table 4. Hausman Test Result of Model 1

	Chi-Square Statistic	Chi-square d.f.	Prob.
Cross-section random	26.048107	6	0.0002

(Source: Eviews Output, 2024)

From the results above, a cross-section random prob. of 0.0002 < 0.05 was obtained. So, it can be recognized that the random effect model is declined and the fixed common effect is accepted. Therefore, the model that suits the best for model 1 is fixed effect model.

Table 5. Chow Test Result of Model 2

	Statistic	d.f.	Prob.
Cross-section F	9.675564	(10,16)	0.0000
Cross-section Chi-square	64.43693	10	0.0000

(Source: Eviews Output, 2024)

From the results above, a cross-section F prob. of 0.0000 < 0.05 was obtained. So, it can be recognized that the common effect model is declined and the fixed common effect is accepted. Then, the model estimation of model 2 is continued for Hausman test.

Table 6. Hausman Test Result of Model 2

	Chi-Square Statistic	Chi-square d.f.	Prob.
Cross-section random	12.740262	6	0.0474

(Source: Eviews Output, 2024)

From the results above, a cross-section random prob. of 0.0474 < 0.05 was obtained. So, it can be recognized that the random effect model is declined and the fixed common effect is accepted. Therefore, the model that suits the best for model 2 is fixed effect model.

After the model selection test is complete, both models must go through a classical assumption test which includes multicollinearity test and heteroscedasticity test as a requirement for panel data regression test (Basuki & Yuliadi, 2015). The multicollinearity test is based on the correlation value of more than 0.8. Heteroscedasticity test is seen from the Glejser Test value with a significance value of > 0.05.

Classical Assumption Test

Table 7. Classical Assumption Test Results of Model 1

Assumption	Value	Decision
Multicollinearity	-0.1182, 0.1230, -0.0453, 0.0028, -0.0443, -0.3245, -0.5525, 0.3300, -0.6182, 0.4007, -0.6313, 0.7482, -0.6167	All values are < 0.8, means that Model 1 passed the multicollinearity test
Heteroskedasticity	ROGIC Prob. : 0.1278 BGD Prob. : 0.8671 SizeBOD Prob. : 0.8891 SizeBank Prob. : 0.4201 CAR Prob. : 0.2405 Lev Prob. : 0.1843	All values are > 0.05, means that Model 1 passed the heteroskedasticity test

(Source: Eviews Output, 2024)

Table 8. Classical Assumption Test Results of Model 2

Assumption	Value	Decision
Multicollinearity	-0.1182, 0.1230, -0.0453, 0.0028, -0.0443, -0.3245, -0.5525, 0.3300, -0.6182, 0.4007, -0.2517, 0.3084, -0.6313, 0.7482, -0.6167	All values are < 0.8, means that Model 2 passed the multicollinearity test
Heteroskedasticity	ROGIC Prob. : 0.6741 BGD Prob. : 0.1263 SizeBOD Prob. : 0.6301 SizeBank Prob. : 0.0808 CAR Prob. : 0.2012 Lev Prob. : 0.1727	All values are > 0.05, means that Model 2 passed the heteroskedasticity test

(Source: Eviews Output, 2024)

Both models have passed the classical assumption test and can be proceed to the regression test.

Regression Test

Table 9. Regression Test Results of Model 1

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.637109	1.038209	-1.576859	0.1344
ROGIC	0.014912	0.004061	3.672057	0.0021
BGD	0.024027	0.045393	0.529304	0.6039
SizeBOD	-0.013868	0.006011	-2.307129	0.0348
SizeBank	0.054531	0.034136	1.597457	0.1298
CAR	0.108655	0.039344	2.761659	0.0139
Lev	-0.027570	0.036160	0.762443	0.4569
R-squared	0.908970			
Adjusted R-squared	0.817941			
Prob(F-statistic)	0.000017			

From the results of the Model 1 regression test, the mathematical equation were obtained as follows:

ROA = –1.63711 + 0.01491 (ROGIC) + 0.02403 (BGD) – 0.01387 (SIZEBOD) + 0.05453 (SIZEBANK) + 0.10866 (CAR) – 0.02757 (LEV) + e

Information:

ROA = 2017-2019 ROA
ROGIC = 2017-2019 ROGIC
BGD = 2017-2019 Board Gender Diversity
SizeBOD = 2017-2019 Board of Directors Size
SizeBank = 2017-2019 Bank Size
CAR = 2017-2019 Capital Adequancy Ratio
Lev = 2017-2019 Leverage
e = Error

The Prob (F-statistic) value is 0.00 < 0.05 which reveals that Model 1 has met the *goodness of fit* requirements. So, the analysis of Model 1 can be continued.

The adjusted R-squared value was 0.8179 which means that ROGIC and BGD can explain 81.79% of ROA. The remaining 18.21% can be explained by other variables, which are not included in the study.

Table 10. Regression Test Results of Model 2

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.866145	0.598638	-3.117317	0.0066
ROGIC	0.004927	0.001717	2.869583	0.0111
BGD	0.028471	0.026267	1.083895	0.2945
SizeBOD	-0.003128	0.003581	-0.873599	0.3953
SizeBank	0.064033	0.019942	3.211011	0.0055

CAR	-0.038079	0.011035	-3.450590	0.0033
Lev	-0.000839	0.003227	-0.260081	0.7981
R-squared	0.951221			
Adjusted R-squared	0.902443			
Prob(F-statistic)	0.000000			

From the results of the Model 2 regression test, the mathematical equation were obtained as follows:

ROA = –1.86615 + 0.00493 (ROGIC) + 0.02847 (BGD) – 0.00313 (SIZEBOD) + 0.06403 (SIZEBANK) – 0.03808 (CAR) – 0.00084 (LEV) + e

Information:

ROA	= 2020-2022 ROA
ROGIC	= 2017-2019 ROGIC
BGD	= 2017-2019 Board Gender Diversity
SizeBOD	= 2017-2019 Board of Directors Size
SizeBank	= 2017-2019 Bank Size
CAR	= 2017-2019 Capital Adequancy Ratio
Lev	= 2017-2019 Leverage
e	= Error

The Prob (F-statistic) value is 0.00 < 0.05, which means that Model 2 meets the *goodness of fit* requirements. So, Model 2 analysis can be continued.

The adjusted R-squared value is 0.9024, which means ROGIC and BGD can explain 90.24% of ROA. The remaining 9.76% can be explained by other variables were not included into the study

Hypothesis Testing Results

Table 11. Hypothesis Testing Results of The Study

	Description	**Coefficient**	**Prob.**	**Desicion**
H1	Intellectual capital hsa a positive effect on Islamic banks' current financial performance	0. 01491	0.00	Accepted
H2	Intellectual capital has a positive effect on Islamic banks' future financial performance	0.00493	0.01	Accepted
H3	Board gender diversity has a positive effect on Islamic banks' current financial performance	0.02403	0.60	Declined
H4	Board gender diversity has a positive effect on Islamic banks' future financial performance	0.02847	0.29	Declined

Discussion

The Influence of Intellectual Capital on Islamic Banks' Current Financial Performance

RBT assumed that the company ability to manage its resources can provide a competitive advantage in creating value for the company (Wernerfelt, 1984). One of the resources that can be utilised to create that value is intellectual capital (Wahyuni et al., 2023). If company is able to manage the rate of growth of intellectual capital, there will be an increase in its performance (Wahyuni et al., 2023). So, a hypothesis is formed that intellectual capital has a positive effect on Islamic bank's current financial performance.

Based on the test results of hypothesis 1, it is concluded that intellectual capital has a positive influence on Islamic bank's current financial performance. This result is consistent with RBT which stated that the company's ability to manage its resources can provide a competitive advantage that can improve its financial performance. This result is also in line with the research by Innayah et al. (2021); Pratama et al. (2019); and Wahyuni et al. (2023) which also found a positive effect of intellectual capital on the company's current financial performance. However, this result contradicts the research by Putri & Gunawan (2019) which did not find a significant effect of intellectual capital on the company's current financial performance.

The Effect of Intellectual Capital on Islamic Bank's Future Financial Performance

RBT assumed that the company's ability to keep its resources unique, rare, and irreplaceable can provide a sustainable competitive advantage (Barney, 1991). This would give a positive impact on the company's financial performance in the future. So, if the company is able to manage the rate of growth of its intellectual capital continuously, then its financial performance will increase in the future. So, a hypothesis is formed that intellectual capital has a positive effect on Islamic bank's future financial performance.

Based on the test results of hypothesis 2, it was found that there is a positive effect of intellectual capital on Islamic bank's future financial performance. This means that Islamic banks in Indonesia have been successful in managing the rate of growth of intellectual capital as a competitive weapon in competing with conventional banks. This result is in line with RBT which assumed that the deployment of resources and capabilities that are VRIO can provide sustainable competitive advantage. This result is also in line with research by Rochmadhona et al. (2018) which found that intellectual capital has a positive effect on the company's future financial performance. However, this result contradicts the research by Wahyuni et al. (2023) which found that intellectual capital has no significant effect on the company's future financial performance.

The Effect of Board Gender Diversity on Islamic Bank's Current Financial Performance

RBT assumed that the deployment of heterogeneous resources can provide a competitive advantage for the company (Wernerfelt, 1984). A more gender-diverse board is considered to identify more diverse target markets, it can also provide diverse perspectives, so that the board becomes more independent. This can lead to a better company performance (Magoma & Ernest, 2023). If the level of board gender diversity can be managed properly, the company's financial performance will improve. So, a hypothesis is formed that board gender diversity has a positive effect on Islamic bank's current financial performance.

Based on the test results of hypothesis 3, it can be concluded that the gender diversity of the board of directors has no significant effect on the company's current financial performance. The rejection of hypothesis 3 may occur due to the lack of representation of women on the board of directors in Islamic banks in Indonesia. During the observation period, the highest number of women directors was 10 out of 44 directors in 2022. This result is in line with the research by Salsabilla et al. (2023) who found no significant effect of gender diversity of directors on the company's current financial performance. However, this result contradicts the research by Jabari & Muhamad (2020) who found a positive effect of board gender diversity on the company's current financial performance. This result also contradicts the RBT which assumed that heterogeneous resources can provide a competitive advantage that can improve financial performance.

The Effect of Board Gender Diversity on Islamic Bank's Future Financial Performance

RBT assumed that capabilities are the company's routines and processes that lead the company to utilise and transform its resources in order to gain sustainable competitive advantage (Ismail et al., 2022). Women directors could reduce the risk of financial fraud and are less likely to be absent from board meetings than male directors (Magoma & Ernest, 2023). So, board gender diversity can be considered as a good company routine and process. Therefore, a hypothesis can be drawn that the gender diversity of directors has a positive effect on Islamic bank's future financial performance.

Based on the results of hypothesis 4 testing, it is found that board gender diversity has no significant effect on Islamic bank's future financial performance. The results of this study shows the lack of awareness of Islamic banks in Indonesia on the issue of gender diversity. That women are still not given equal opportunities with men in participating at the top management level of Islamic banks. This is shown by the absence of regulations related to women quota in Indonesia. This makes board gender diversity still not prioritised in Indonesia. The results of this study provide the first empirical evidence regarding the effect of board gender diversity on the company's future financial performance. This result contradicts the RBT which assumed that good capabilities can provide a sustainable competitive advantage that can improve future financial performance.

4. CONCLUSION

This study examined the effect of intellectual capital and board gender diversity on the current and future financial performance of Islamic banks in Indonesia. Based on the analysis results obtained, it can be concluded that: (1) intellectual capital can predict the current and future financial performance of Islamic banks, (2) gender diversity of directors cannot predict the current and future financial performance of Islamic banks.

The results of this study indicate the seriousness and ability of Islamic banks in improving their performance through the management of valuable resources. On the other hand, the results of this study also show the lack of awareness of Islamic banks and regulators on the issue of gender diversity which is also included in the UN Sustainability Development Goals agenda which is targeted to be achieved by 2030. Theoretically, the results of this study contribute to providing the latest empirical evidence related to intellectual capital and gender diversity of directors from the perspective of Islamic banks in Indonesia. Practically, the results of this study can be used as a basis by Bank Indonesia as a regulator to set a women quota at the board of directors level in Islamic banks in Indonesia.

The limitations of this study are as follows: (1) the object of research is only Islamic commercial banks, so it cannot be generalised to all Islamic banking in Indonesia, (2) the level of women directors in Islamic commercial banks is still minimal due to the absence of regulations related to women quota, this may affect the research hypothesis to be unsupported. Therefore, it is recommended for future researchers to add Islamic business units as research samples so that the results can be more generalised, or add Islamic commercial banks in Malaysia because there are already women quota regulations, so that the research hypothesis can be supported. In addition, it is also recommended for future researchers to add variables related to intellectual capital and human resources, such as the level of education of the board of directors.

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