

ANALYSIS OF HEALTH LEVEL, SHARIA MAQASHID INDEX AND POTENTIAL FINANCIAL DISTRESS AT BANK MUAMALAT INDONESIA FOR THE 2017-2020 PERIOD

Mohammad Khoiruzi Afiq^a
Ana Toni Roby Candra Yudha^b

^a Sharia Economics Department, Faculty of Islamic Economics and Business, Sunan Ampel Islamic State University

^b Sharia Economics Department, Faculty of Islamic Economics and Business, Sunan Ampel Islamic State University

Email: khoiruziafiq@gmail.com^a; anatoniroby@uinsby.ac.id^b;

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***Correspondence:**

Nama: Mohammad
Khoiruzi Afiq
Email: khoiruziafiq@gmail.com

ABSTRACT

This study aims to comprehensively measure the performance of Bank Muamalat Indonesia as Indonesia's oldest Islamic bank with experience dealing with the 1998 monetary crisis, which is very interesting as a research object. This research uses a comparative descriptive method with a quantitative approach. The data used is of the time series data type in the form of BMI's financial statements for the 2017-2020 period. The analytical techniques used in this study used several techniques and stages, namely RGEC method, Abu Zahrah's version of *sharia maqashid* index, quadrant analysis measurement (QAM), and Zmijewski (X-Score). The findings of this study indicate that using the RGEC and SMI methods at Bank Muamalat Indonesia can complement the benefits and drawbacks of each performance measurement instrument. Meanwhile, the results of analyzing probable financial distress using the Zmijewski approach (X-score) have provided confirmation and strengthened the RGEC and SMI performance results. This study recommends that Bank Muamalat Indonesia's management increase the amount of financing by prioritizing the principle of prudence, considering that a suitable risk profile and capital performance should be able to overcome subpar earnings performance. Furthermore, Bank Indonesia is advised to review Bank Indonesia's regulatory policy No.13/1/PBI/2011 related to the use of the RGEC method as an assessment of bank health levels wherein the performance assessment policy does not have a specific specialization for performance assessment of Islamic banks so it is recommended to include RGEC + S (adaption of *Sharia Maqasid* Index) to provide a more comprehensive assessment of Islamic banks' health.

INTRODUCTION

The growth of Islamic financial institutions in Indonesia shows rapid progress. The amount of public interest in Islamic finance is characterized by the quantity of Islamic financial institutions. Based on data from the Financial Services Authority (2021) shows that the development of Islamic banking in Indonesia in October 2021 has reached 15 Sharia Commercial Banks (BUS), 20 Sharia Business Units (UUS), and 165 Sharia People's Financing Banks (BPRS) consisting of 860 Operational Head Offices (KPO), 1,508 Sub-Branch Offices (KCP) and 573 Cash Offices (KK). In addition, the rapid growth of Islamic financial institutions is also spurred by the increasing awareness of the halal lifestyle, where the level of halal consumption reaches 2.1 trillion USD, which will continue to increase in line with the increasing number of the world's Muslim population of 1.84 billion people which is projected to reach 27.7% of the total world population by 2030 (Indonesian Ministry of National Development Planning, 2018).

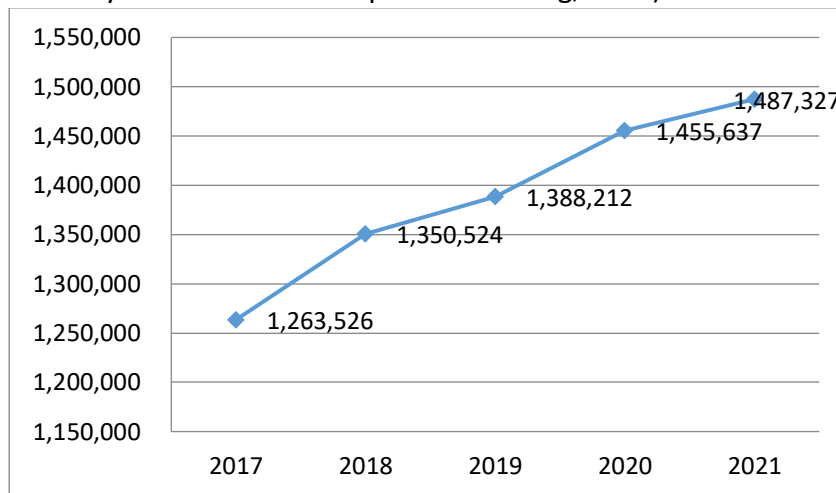


Figure 1 Average Per Capita Consumption a Month (in Rupiah)

Source: (Badan Pusat Statistik, 2021b)

Figure 1 shows that according to the Central Statistics Agency (BPS), the average level of per capita expenditure in Indonesia every year has increased. This can be interpreted as a means that Indonesia's consumptive level is still quite high, as evidenced by the costs incurred for the consumption of one family divided by the number of family members increased from 2017 to 2018 by 6.8%, in 2019 by 2.8%, in 2020 by 4.8% and in 2021 by 2.2%.

This phenomenon shows that Indonesia's consumptive pattern is still quite high even though the Covid-19 pandemic has caused a negative effect on the economy, as evidenced by a contraction in Indonesia's GDP in the second quarter of 2020 of 10.29% so that it touched a low of -5.32% with IDR 3,687.7 trillion and in the third quarter of 2021 Indonesia's GDP reached IDR 4,325.4 Trillion (Badan Pusat Statistik, 2021a). So it can be concluded that Indonesia is a large market share as well as an opportunity for the Islamic financial industry sector to see great potential for demand for goods, which, of course,

also opens up the potential for the emergence of MSMEs that need fresh funds to expand and dominate to meet these needs.

According to Law No. 10 of 1998, banking can be defined as an institution formed with the aim of improving the standard of living of the community and carrying out its function as an intermediation institution through the process of collecting funds from the community in the form of deposits and disbursement of funds in the form of financing or other forms. Therefore, Islamic banking has an essential role in the wheels of the economy as a catalyst for growing the economy through access to financing for the public and business people.

Its important role and function as an intermediation institution require banks to be able to pay attention to any risks caused by operational activities in managing funds that the public has entrusted. Therefore, periodic performance measurements are needed for the first step in risk mitigation and applying the precautionary principle in managing community funds (Saliba et al., 2023).

The issue of performance measurement is still a challenge in the development of Islamic banking because there are still many Islamic banks that still use common measuring instruments such as Data Envelopment Analysis (DEA), Return On Asset (ROA), and Return On Equity (ROE) as evaluation materials where the assessment is only based on the level of profit generated by the company so that it is not enough to assess the overall performance of Islamic banking, especially from the aspect of achievement. Performance on sharia values brought by Islamic banks (Nugraha et al., 2020). Meanwhile, in Indonesia, the performance assessment used as a reference is Bank Indonesia regulation No.13/1/PBI/2011, explaining that the performance assessment of the bank's health level, in general, can be used through the RGEC (Risk profile, Good corporate governance, Earnings, and Capital) method.

Success in maintaining bank health can also detect financial distress and preventive efforts so that bankruptcy does not occur in the company (Susanti et al., 2021). Financial distress is a condition where the company experiences financial difficulties so that it is close to bankruptcy of the company (Susanti et al., 2021). Several methods can be used to detect potential bankruptcies, including the Springrate model, Altman z-score, Zmijewski (X-Score), Grover, Fulmer, Olshon, and CA-score (Özparlak, 2022).

Performance assessment of Islamic banks, which is only based on financial ratios, is certainly not enough to represent the real performance of Islamic banks because Islamic banks have different goals and values compared to conventional banks, so if the measuring instruments used by Islamic banks are equated with conventional banks, the Islamic value carried by Islamic banks cannot be exposed (Rusydia & Sanrego, 2018). In addition, Islamic banks are banks that not only focus on the benefits of financial aspects but also pay attention to social, environmental, and spiritual aspects (Wahyuni et al., 2020). Therefore, different measurement methods are needed that are appropriate and

can represent the performance and sharia value of Islamic banks, namely by using the *sharia maqashid* index.

Sharia maqashid index theory proposed by Abu Zahrah has three main objectives, including *Tahdzib Al-Fard* (educating individuals), *Iqamah Al-Adl* (Enforcement of justice), and *Jalb al-Maslahah* (welfare), which is used as a foundation in directing and encouraging business people to improve welfare (Antonio et al., 2020). This theory was then developed by Mohammed and Taib (2015) and transformed into 10 ratio elements which are used as reference material in measuring the performance of Islamic banks that will be accounted for by companies, the public, the state, investors, and the highest stakeholders namely Allah SWT. According to previous research conducted by Ikhwan and Riani (2022), 29 out of 30 banks in Indonesia experienced a decline in performance and efficiency in 2015-2020, as measured by the DEA method, where the decline was caused by the Covid-19 pandemic. Devi et al. (2020) found that the covid-19 pandemic reduced public companies' liquidity and profitability in various sectors, including property, real estate, finance, trade, services, and investment. The Covid-19 pandemic has had a multiplier effect on many sectors, including the banking sector as an intermediary institution. According to Hidayat (2021), the Covid-19 pandemic has significantly impacted the banking industry in Indonesia. However, the study discovered that Islamic banks are more resilient than conventional banks. This phenomenon has also had an impact on Bank Muamalat's financial performance, which has declined, as indicated by a considerable drop in net profit from 46 billion rupiahs in 2018 to 16 billion rupiahs in 2019 and 10 billion rupiahs in 2020, as recorded in the annual report.

Several previous studies conducted by Ascarya et al. (2016); Antonio et al. (2012); Ibrahim and Ismail (2020); and Tarique et al. (2021) explained that performance measurement using the *sharia maqashid* index could describe how the performance of Islamic banks in a comprehensive manner is based on the goals of *maqashid sharia* in line with the fundamentals of Islamic banks which carry the concept of Islam in all their activities. Meanwhile, research conducted by (Ramdhoni & Fauzi, 2020; Rusydiana & Sanrego, 2018) shows that the measurement of bank performance in general in Indonesia still uses the CAMELS or RGEC methods based on Bank Indonesia regulation No.13/1/PBI/2011. Antonio et al. (2012) explained that measurements based solely on financial ratios such as the CAMELS and RGEC methods as evaluation materials are still not enough because Islamic financial institutions have different foundations, goals, and values compared to conventional financial institutions where these measuring instruments still cannot represent the essence of actual performance, especially the achievement of *maqashid sharia (falah)*. Based on these research gaps, this study tries to make a comparison of these methods where the RGEC method focuses on financial aspects and the *Sharia Maqashid* Index method focuses on sharia aspects which are strengthened by financial distress analysis to provide input to regulators that the performance measurement of Islamic banks in Indonesia using the RGEC method which is based on Bank Indonesia regulation No.13/1/PBI/2011 is still unable to represent the performance of

Islamic banks comprehensively, especially in the aspect of achievement of Islamic *maqashid* which uses Bank Muamalat Indonesia as the oldest bank in Indonesia as a research object.

Bank Muamalat Indonesia (BMI) is the first Islamic bank established in Indonesia (Kasri et al., 2022). As the oldest bank in Indonesia that has experience in overcoming the economic crisis in 1998 and seeing the potential of the Indonesian market, BMI has great potential to become a market leader in achieving market dominance and must be a role model or role model for other Islamic financial institutions. Performance measurement of BMI is very interesting to be used as a research object considering the enormous potential possessed by BMI (Antonio et al., 2012; Kasri et al., 2022).

Based on the description of the explanation above, it is very interesting to conduct research with the title Health Level Analysis, *Sharia Maqashid* Index, and Potential Financial Distress at Bank Muamalat Indonesia for the 2017-2020 Period. Therefore, there are several formulations to answer these problems, including how the performance of Bank Muamalat Indonesia for the 2017-2020 period based on financial ratios? How is the performance of Bank Muamalat Indonesia for the 2017-2020 period based on the *sharia maqashid* index? How does the performance of Bank Muamalat Indonesia compare for the 2017-2020 period based on financial ratios and the *sharia maqashid* index? How is the analysis of potential financial distress at Bank Muamalat Indonesia for the 2017-2020 period?

Based on the background and formulation of these problems, this study aims to find out, study, measure, and analyze the performance of Bank Muamalat Indonesia comprehensively as the oldest Islamic bank in Indonesia, which has the potential to be a market leader and is expected to be a role model and have experience facing the 1998 monetary crisis is very interesting as a research object.

The paper consists of 5 parts. First, the introduction is explained in the previous paragraph above. Then followed by a literature review to explain basic theories and empirical studies on bank financial performance, *sharia maqashid*, and financial distress. Third continued with the research methods to explain the methods used in this study, namely the descriptive comparative method with a quantitative approach. Fourth, results and analysis to answer the research problem questions explained in the introduction. Finally, continue with a conclusion that explains the essence of the discussion of the entire study, the implications, and recommendations of this study.

LITERATURE REVIEW

Sharia Enterprise Theory

Sharia values contained in Islamic teachings, especially in the field of *muamalah*, do not only stop at normative theories, but the concept of *amar ma'ruf nahi munkar* has

entered the level of practice or action steps in the application of sharia values so as to minimize the harm caused by human policies (Murodi, 2007; Zakiyah et al., 2019). Executing *amar ma'ruf nahi munkar* in a perfect Muslim life, both in worship and *muamalah* (in business activities), can cause people to return to the essence of their nature, which is the path Allah SWT has outlined to attain the status of *Insan Kaamil* (Sauri et al., 2022; Zakiyah et al., 2019).

Sharia business that makes sharia values the main foundation in all activities and goals of the company must be able to provide not only the aspects of benefits but also provide more value in various aspects. Sharia enterprise theory or commonly abbreviated as SET is a concept where the most important orientation in any decision making based on the rules that have been set by Allah as the main owner of all nature, and man only serves as *khalifatul ardh* or representative to manage what has been mandated by Allah (Meutia, 2010; Wahyuni & Pujiharto, 2018).

Basically, sharia enterprise theory has the value of balance and accountability to wider stakeholders (Wahyuni & Pujiharto, 2018). This is also in line with Meutia, who explained that sharia enterprise theory is a perfection of the previous three business theories, namely agency theory, legitimacy theory, and stakeholder theory, whereas Ardi and Yulianto explain that agency theory only prioritizes the interests of the relationship between shareholders (principal) and management (agents), legitimacy theory which is based on normative and social values that apply in society, and stakeholder theory that prioritizes the interests of stakeholders ranging from investors, creditors, management, suppliers, customers, government, and other stakeholders but only limited to human interests, while sharia enterprise theory that becomes a stakeholder is Allah as the giver of the mandate (*hablum minallah*), man as the recipient of the mandate (*hablum minannas*), and nature (*hablum minal'alam*) (Ardi & Yulianto, 2020; Meutia, 2010).

In an effort to provide accountability by Islamic business entities, especially Islamic banks, sharia enterprise theory is divided into two dimensions, namely vertical accountability and horizontal accountability (Meutia, 2010). Vertical accountability aimed at Allah as the highest stakeholder through the company's level of compliance with the established rules is sourced from the Qur'an, hadith, and the opinions of scholars such as MUI fatwa. Meanwhile, horizontal accountability is aimed at humans who are divided into direct stakeholders (parties directly related to the company, such as shareholders, employees, and customers) and indirect stakeholders (parties that are not directly related to the company, such as the general public) and are aimed at nature as an important ecosystem in the sustainability of the company (Meutia, 2010; Wahyuni & Pujiharto, 2018). In addition, the assessment of Islamic business that uses this concept is not only on quantitative aspects (financial, social, and environmental accountability) but also based on qualitative aspects (halal, *thayib* and usury-free) (Antonio et al., 2020; Ascarya et al., 2016; Meutia, 2010).

Widiastuti, et al (2022) also explained that sharia values applied in a business, both Islamic commercial and Islamic philanthropy businesses, have a domino effect on the

progress of various sectors because in both concepts, it is instilled that every wealth is not only owned by individuals so that the concept of sharing is caring or distribution of assets that are channeled either through *zakat*, *infaq*, *waqf*, and *almmsgiving* will be able to maintain a healthy economic continuity and improve the standard of productive quality of life.

Bank Financial Performance

Performance is an illustration of the company's level of ability to manage all activities effectively and efficiently to achieve company goals within a certain period of time (Rashid et al., 2020). Performance measurement is important for companies to find out whether the company is healthy or not in meeting predetermined targets. The measurement of this ability can be seen from periodic reports that show the health of financial performance in a certain period. Rashid et al. (2020) explained that financial performance is a quantitative indicator that can be used as a benchmark to measure a company's effectiveness and efficiency in obtaining revenue, which can be used to characterize the company's financial health. In order to maintain the financial health of the banking industry, efficiency is a crucial component that must be taken into account in all operational activities. This is because efficient operations reduce unnecessary expenditures (Yudha et al., 2021).

The assessment of the level of health of a bank can be measured through the results of an analysis of the company's financial statements (Andriyani et al., 2018). Financial statements are reports that are published as a form of responsibility for the mandate that has been given to the company that shows the good condition or not of the company's financial performance in a certain period. The financial statements themselves are divided into several components that can be used as an assessment of the bank's financial health, including balance sheet statements, income statements, equity change statements, cash flow statements, and notes to financial statements (Kasmir, 2019).

According to Fakhri and Darmawan (2021), a bank can be said to be healthy if the company is able to carry out operational activities stably, carry out its functions properly as an intermediation institution and be able to fulfill all obligations that must be fulfilled when due. The results of the banking health assessment can be used as an effort to mitigate the risk of bankruptcy and as a basis for policy-making to improve the company's performance in the coming period (Albulescu, 2015; Candra & Jayanto, 2017).

The urgency of assessing the level of health is very important, especially for financial institutions with high-risk levels in their operational management activities, both deposits and financing (Kasmir, 2019). Therefore, Bank Indonesia issues policies related to the obligation to periodically self-assess in a certain period (article 3 paragraph 1) and the renewal of methods in assessing the level of bank health independently as a form of risk mitigation that originally used the CAMELS method (capital, assets, management, earnings liquidity, and sensitivity to market risk) became RGEN (risk profile, good corporate

governance, earnings, and capital) as stipulated in Bank Indonesia Regulation (PBI) No. 13/1/PBI/2011 concerning the assessment of the health level of commercial banks.

The risk profile is the entire potential risk attached to the banking industry as a result of all operational activities carried out by banks (Lisa & Hermanto, 2020; Saliba et al., 2023). Based on Bank Indonesia Regulation (PBI) No. 13/1/PBI/2011, it is explained that the risk profile is divided into 8 risk components, including credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputational risk (Bank Indonesia, 2011).

In the application of the RGEC method, risk profile assessment is measured through 2 indicators that can represent the overall, namely credit risk and liquidity risk (Lisa & Hermanto, 2020). Credit risk is a risk that arises due to the debtor's inability to fulfill his obligations to creditors when they are due so that bankruptcy (default) occurs, which causes losses. Credit risk is a critical factor in banking, as the inability to manage credit risk can make banks susceptible to insolvency liabilities and assets (Saliba et al., 2023). This risk can be measured through the calculation of the NPF (Non-Performing Finance) ratio (Andriyani et al., 2018). Liquidity risk is a risk caused by the condition of the company's inability to meet the current liabilities of current assets owned by the company when they mature, thus impacting the company's operational instability (Lisa & Hermanto, 2020). This risk can be measured using the FDR (Financing to Deposit Ratio) ratio.

Good corporate governance (GCG) is a governance system used by companies in order to supervise efforts to improve performance so that company targets can be achieved properly (Lisa & Hermanto, 2020). The implementation of Good corporate governance in order to achieve good governance standards is important and fundamental for the company. Good corporate governance has a close relationship with the trust of various parties, be it customers, business actors, the environment, and the business investment climate in a country, so the implementation of GCG can be a driver in creating a healthy business competition climate and sustainable economic growth (Widiastuti et al., 2022). The implementation of GCG is characterized by the instillation of five strong principles, namely fairness, accountability, responsibility, transparency, and independence, in the company to prevent the occurrence of conflicts of interest that can enable stakeholders to make policies with implications for corporate sustainability performance (Tjahjadi et al., 2021).

Earnings (rentability) is a method used by companies to measuring efficiency to generate a level of profit (profitability) from operational activities and wealth owned in a certain period (Li et al., 2020). This assessment can be useful to show the health of the bank, whether the company is in a state of loss or profit, by using several indicators as a benchmark, including Return On Asset (ROA), Return On Equity (ROE), Net Reward (NI), and BOPO (Operating Costs to Operating Income) (Lisa & Hermanto, 2020).

Capital can be interpreted as capital owned by a bank to carry out all operational activities. This capital assessment is important, especially for financial institutions that, in fact, have high risks, so the assessment of capital adequacy and capital quality will be a

benchmark for bank health (Septiani et al., 2021). In assessing the level of capital quality of a bank, Bank Indonesia stipulates that there is a minimum capital provision obligation (KMMM) standard that must be met to minimize risks. The indicator used to determine the quality of bank capital using the Capital Adequacy Ratio (CAR) (Andriyani et al., 2018).

Maqashid Sharia

Maqashid sharia, if interpreted in terms of language, consists of 2 words, namely *Maqashid* (plural form of *Maqshud*), which means goal, and *al-sharia* which means the way to water or, in other words, the way to the source of life, namely the law and decrees of Allah, so it can be said that *maqashid sharia* is a path that has been regulated based on the laws and decrees of Allah that can lead people to benefit (Antonio et al., 2020; Ht & Rama, 2018). In the book *al-Muwafaqat fii Ushul al-Ahkam juz II*, Imam As-Syatibi explained that, in essence, the sharia that has been established by Allah is for the benefit of his servant (*mashalih al-ibad*), not only for the life of the world but also for the life of the hereafter (Ht & Rama, 2018). So, in other words, the essence of *maqashid sharia* is the purpose of the experience of one of the Islamic principles, namely *amar ma'ruf nahi munkar*.

Imam As-Syatibi explained that the values of the purpose of *Shari'a* in obtaining the benefit of Allah's servants who apply *maqashid sharia* have 5 main aspects called *al-kulliyat al-khamsah*, which consist of *hifdu din* (guarding religion), *hifzun nafs* (guarding life), *hifzul 'aql* (guarding reason), *hifzul maal* (guarding property), and *hifzun nasl* (guarding offspring) (Ascarya et al., 2016; Ramadhita et al., 2022).

In an effort to fulfill these 5 aspects of the goal, *maqashid sharia* is divided into 3 levels, namely the need for *dharuriyat* (primary) where this need includes these 5 aspects that must be met because it is the main need for the benefit of human life, the need for *hajjiyat* (secondary) where this need is not aimed at these 5 main aspects but is aimed at eliminating difficulties and *ihitiyat* (be careful) towards these 5 main aspects, and *tahsiniyat* (tertiary) needs where these needs are complementary which if not met then do not threaten the 5 main aspects (Idris et al., 2012). Ascarya et al. (2016) explained that *Syaikhul Maqashid* also added that there is another sharia objective in the application of *sharia maqashid*, namely *maqashid al-mukallaf* (human objective), in which its application is geared toward human behavior and actions within the sharia corridor.

Maqashid sharia is a human need as a foundation to carry out life activities. Therefore business entities that carry sharia values also need indicators to determine the achievement of sharia *maqashid* in the business. Referring to Tarique et al. (2021), accomplishments in the implementation of sharia *maqashid* in the activities of sharia business entities can result in the contentment of both Muslim and non-Muslim consumers. Abu Zahrah explained that *maqashid sharia* is divided into 3 main objectives to be achieved, namely *ta'dib al fard* (individual education), *iqamah al-adl* (justice enforcement), and *jalb al-maslahah* (social welfare), which then from the three main

objectives was developed by Mohammed and Taib (2015) into 10 ratios (ratio of education grants, training, publicity, research, fair returns, functional distribution, interest-free product, profitability, personal income, and investment in real sector) as an indicator of the level of achievement of *sharia maqashid* which is referred to as the *Sharia Maqashid Index (SMI)* (Antonio et al., 2020; Ascarya et al., 2016).

Table 1
Abu Zahrah's *Sharia Maqashid* Index Ratio Formula

Concept (Objectives)	Ratio	Formula
1. <i>Tahdzibul Fard</i>	Education Grant Ratio (R1)	$\frac{\text{Education Grants}}{\text{Total Expenses}}$
	Research Ratio (R2)	$\frac{\text{Research Expense}}{\text{Total Expenses}}$
	Training Ratio (R3)	$\frac{\text{Training Expense}}{\text{Total Cost}}$
	Publicity Ratio (R4)	$\frac{\text{Publicity Expense}}{\text{Total Expenses}}$
2. <i>Iqamah Al-Adalah</i>	Fair Returns Ratio (R5)	$\frac{\text{Profit Equalization Reverses (PER)}}{\text{Net or Investment Income}}$
	Functional Distribution Ratio (R6)	$\frac{\text{Mudharabah and Musyarakah modes}}{\text{Total Investment Mode}}$
	Interest-free Product Ratio (R7)	$\frac{\text{Interest Free Income}}{\text{Total Income}}$
3. <i>Jalb Al-Maslahah</i>	Profitability Ratio (R8)	$\frac{\text{Net Income}}{\text{Total Assets}}$
	Personal Income Ratio (R9)	$\frac{\text{Zakah}}{\text{Net Assets}}$
	Investment in Real Sector Ratio (R10)	$\frac{\text{Investment in Real Economic Sector}}{\text{Total Investment}}$

Source: (Mohammed & Taib, 2015)

Financial Distress

Rusmita (2023) explained that the long-term objective of implementing sound governance is to minimize the occurrence of financial performance issues that have an impact on the company's viability. The early detection of bankruptcy symptoms, which can be avoided through the implementation of financial distress predictions on a regular basis, is one of the measures taken to prevent problems in financial performance. Kordestani, Bakhtiari, and Biglari have identified several conditions that can indicate that the company is experiencing financial distress, including the abolition of the dividend payment policy, the occurrence of many terminations of labor, insufficient cash inflow needs, negative net profit, the company's profit decreases (loss) in 3 consecutive periods until the company is no longer able to pay short-term obligations when it matures (Kordestani et al., 2011).

Bukhori, Kusumawati, and Meilani (2022) Explained that conditions of financial distress existed before the company's bankruptcy, as indicated by a decline in financial

performance such as the elimination or reduction of dividends, the inability of the company's operating cash flow to meet short-term obligations when they were due, resulting in greater liabilities owned by the company experiencing default, and the worst condition being bankruptcy and liquidation process. In addition, the condition of companies experiencing financial difficulties generally becomes evident in their poor cash flows, which may have an effect on investors' investment sensitivity (Li et al., 2020). Therefore, the company is obliged to make risk mitigation efforts through regular self-assessment of financial condition in order to be able to detect the potential for financial distress so that the company is able to take appropriate policies to reduce risk.

There are several methods that can be used in an effort to mitigate risks to detect the occurrence of potential financial distress (financial difficulties), including the Altman Z-score, Springrate, Zmijewski X-score, Olshon, Fulmer, Canada, and Grover methods. The Zmijewski X-score method is one of the models used in predicting bankruptcy using the probit method as an alternative regression that uses cumulative normal probability distribution through the ratio of financial performance, leverage, and liquidity (Singh & Mishra, 2016). According to Ozparlak's (2022) findings, the Zmijewski method is the most accurate in predicting bankruptcy when a company does not go bankrupt 1 year and 3 years before it goes bankrupt, based on a variety of prediction models, including Altman, Springrate, Olshon, Fulmer, Zmijewski, Canada, and Grover.)

Zmijewski (1984) explained that in his research findings, the Zmijewski x-score method used to predict financial distress was based on his research which tried to estimate the model through empirical experiments by comparing two estimation techniques, namely weighted exogenous sample maximum likelihood (WESML) and unweighted probit through six-choice based estimation. The findings show that unweighted probit is more consistent than WESML, and from the results of the six model estimates, the number of samples of companies that are not bankrupt is 40, 200, 400, 600, and 800. As a result, bankrupt firm frequency rates are 0.500 (biggest bias), 0.167, 0.091, 0.063, and 0.048 (smallest bias) with a significance level of 0.01 so that the sixth model is chosen for the prediction model with a constant value of -4.3, ROA (return on assets) coefficient is -4.5, FINL (financial leverage) coefficient is 5.7, and the LIQ (liquidity) coefficient is 0.004. In this study, we will use the Zmijewski X-score method as a measure of potential financial distress, and the formula can be obtained as below:

$$Z = -4,3 - 4,5 X_1 + 5,7 X_2 + 0,004X_3 \dots\dots\dots (1)$$

Where, X_1 = Profit After Tax/Total Assets

X_2 = Total Debt/Total Assets

X_3 = Current Assets/Current Liabilities

RESEARCH METHODS

This research uses comparative descriptive method with quantitative approach. Quantitative descriptive methods are taken because in this study the data used are closely

related to figures (financial statements) so that the results of the analysis can be described and have meaning (Candra & Jayanto, 2017). This study does not employ hypotheses, but rather preposition studies, with the goal of revealing a phenomenon, particularly in terms of measuring Islamic banking performance using various literature that supports the research (Avan & White, 2001). In addition, this study is also comparative because it compares 2 test tools, namely the *sharia maqashid* index and RGEC, which will be strengthened using the Zmijewski method to compare the two methods.

The type of data used in this study is time series secondary data in the form of Bank Muamalat Indonesia's financial statements for the 2017-2020 period, which have been officially published. Documentation techniques and literature studies are used for the process of collecting data both from BMI's financial statements for the 2017-2020 period and various literature such as books, journals, company reports, and the like so as to strengthen research results (Creswell, 2017; Sugiyono, 2019). The 2017-2020 period was chosen to demonstrate how the implementation of *sharia maqashid* and bank health, which was strengthened by financial distress analysis, enabled Bank Muamalat Indonesia as the oldest bank in Indonesia, to face the Covid-19 pandemic crisis, the peak of which occurred in 2020, when many companies were affected, as evidenced by the Indonesia Composite Index (ICI), which hit its lowest level at 3,977 contained in the Indonesia Stock Exchange. The analytical technique used in this study has several stages, including measuring the health level of BMI using the RGEC (Risk-based Bank Rating) method, then measuring the achievement of *sharia maqashid* through the Abu Zahrah version of the *Sharia Maqashid* Index, then a comparison of the performance results of the two methods using Quadrant Analysis Measurement (QAM) was carried out, and measurement of the analysis of potential financial distress through the Zmijewski method was carried out. (X-score) to strengthen and validate research results. The details of the reference in the use of some of these measuring instruments can be seen as follows:

1. Measuring the health level of Bank Muamalat Indonesia for the 2017-2020 period through the RGEC method using the risk-based bank rating technique from the results of all ratio calculations (NPF, FDR, ROA, ROE, NI, BOPO, and CAR).

$$NPF = \frac{\text{Problem financing}}{\text{Total credit}} \times 100\% \dots\dots\dots(2)$$

$$FDR = \frac{\text{Total financing}}{\text{Total third-party funding}} \times 100\% \dots\dots\dots(3)$$

$$GCG = \frac{\text{Difference between Assets and Foreign Exchange Liabilities}}{\text{Total capital}} \times 100\% \dots\dots\dots(4)$$

$$ROA = \frac{\text{Profit before tax}}{\text{Total assets}} \times 100\% \dots\dots\dots(5)$$

$$ROE = \frac{\text{Profit after tax}}{\text{Total equity}} \times 100\% \dots\dots\dots(6)$$

$$NI = \frac{\text{Rewards income}}{\text{Productive assets}} \times 100\% \dots\dots\dots(7)$$

$$BOPO = \frac{\text{Operating costs}}{\text{Operating income}} \times 100\% \dots\dots\dots(8)$$

$$CAR = \frac{\text{Capital}}{\text{Risk-weighted assets}} \times 100\% \dots\dots\dots(9)$$

Table 2
Risk-based Bank Rating

Category	Rank	Score	Weight	Condition
PK-1	1	5	86-100	Very Healthy
PK-2	2	4	71-85	Healthy
PK-3	3	3	61-70	Healthy Enough
PK-4	4	2	41-60	Less Healthy
PK-5	5	1	≤ 40	Unhealthy

Source: (Bank Indonesia, 2011)

- Measuring the performance of Bank Muamalat Indonesia's *sharia maqashid* index for the 2017-2020 period using the sample additive weighting (SAW) technique from the calculation results of 10 ratios as a performance indicator.

Table 3
Weight Measurement of *Maqashid Sharia* Index

Objectives	Objectives Weight (W) Average (Out of 100%)	Elements	Weight Ratio (E) Average (Out of 100%)	Ratio
O1. Individual Education (<i>Tahdzibul Fard</i>)	30	E1 Education Grant/Donation	24	R1
		E2 Research	27	R2
		E3 Training	26	R3
		E4 Publicity	23	R4
		Total	100	
O2. Enforcement of Justice (<i>Iqamah Al-Adl</i>)	41	E5 Fair Returns	30	R5
		E6 Functional Distribution	32	R6
		E7 Interest-free Product	38	R7
		Total	100	
O3. Welfare (<i>Jalb Al-Maslahah</i>)	29	E8 Profitability	33	R8
		E9 Personal Income	30	R9
		E10 Investment in real sector	37	R10
Total	100	Total	100	

Source: (Mohammed & Taib, 2015)

Mohammed and Taib (2015) explained that in the findings of his research, *sharia maqashid* consists of 3 objectives, namely individual education (O1) with 30% points (W1), Enforcement of Justice (O2) with 41% points (W2), Welfare (O3) with 39% points (W3) and 10 Elements and the ratio contained in table 3 so that when in total it produces a total of 100% points. The method used in mathematical calculations is the weighted ratio (WR) to determine performance indicators (PI) where the calculation of *sharia maqashid* index (SMI) is measured through a measurement formulation as follows (Ascarya et al., 2016; Mohammed & Taib, 2015):

$$SMI = PI1 + PI2 + PI3 \dots\dots\dots (10)$$

$$PI1 (O1) = W1 (E1 \times R1 + E2 \times R2 + E3 \times R3 + E4 \times R4) \dots\dots\dots (11)$$

$$PI2 (O2) = W2 (E5 \times R5 + E6 \times R6 + E7 \times R7) \dots\dots\dots (12)$$

$$PI3 (O3) = W3 (E8 \times R8 + E9 \times R9 + E10 \times R10) \dots\dots\dots (13)$$

- After knowing the results of the two performances, a performance comparison measurement was carried out between the RGEC and Abu Zahrah's version of the *Sharia Maqashid* Index to find out each performance position for each period of 2017-2020 Bank Muamalat Indonesia.

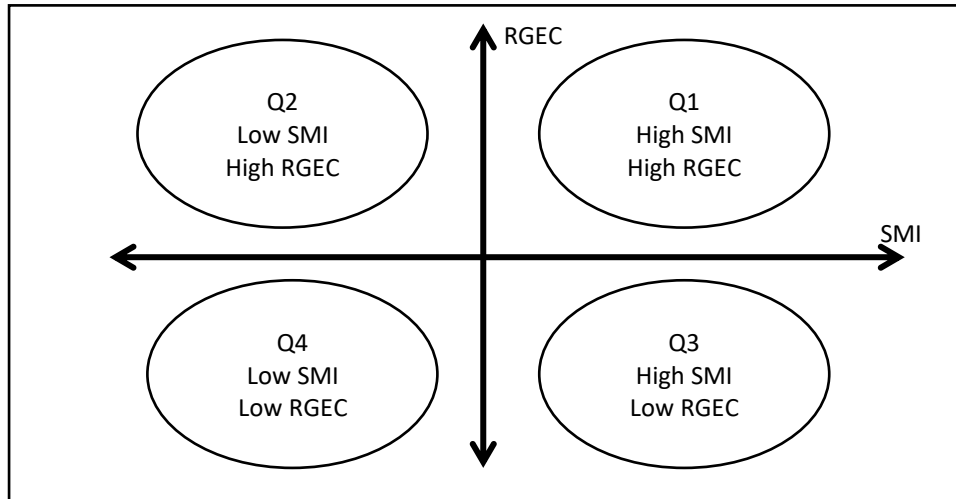


Figure 2 *Quadran Analysis Measurement (QAM) RGEC SMI*

Source : (Rusydiaana & Sanrego, 2018)

- Analysis of the potential financial distress of Bank Muamalat Indonesia for the 2017-2020 period to provide validation of previous performance measurements. $Z = -4,3 - 4,5 X1 + 5,7 X2 + 0,004 X3 \dots\dots\dots (14)$

Where, $X1 = \text{Profit After Tax/Total Assets}$

$X2 = \text{Total Debt/Total Assets}$

$X3 = \text{Current Assets/Current Liabilities Table 4}$

Indicator of the Zmijewski method

Z Value (X-Score)	Interpretation
$Z < 0$	Not Eperiencing financial distress
$Z > 0$	Eperiencing <i>financial distress</i>

Source : (Candra & Jayanto, 2017)

RESULT AND ANALYSIS

BMI Performance for the 2017-2020 Period Based on RGEC Methods

Financial performance is a financial condition that can describe the level of success and ability of the company to managing all operational activities to achieve targets that have been determined within a certain period by management effectively and efficiently (Rashid et al., 2020). Financial performance measurement is carried out as a reference for efforts in making important decisions whether the company is in a healthy state or not.

Good governance is necessary to create company sustainability performance by reducing the occurrence of conflicts of interest among stakeholders (agency issues) that can affect profitable decision-making, leading to improved financial performance and maintaining company sustainability (Rusmita et al., 2023; Tjahjadi et al., 2021)

Based on Bank Indonesia Regulation No. 13/1/PBI/2011, it is explained that commercial banks have an obligation to conduct an independent health level assessment (self-assessment) using the RGEC method. Performance measurement using this method can illustrate how the company's ability to manage all assets, capital quality, risk management, profitability levels, and the bank's ability to fulfill all its obligations are measured through 4 aspects (risk profile, good corporate governance, earnings, and capital) through several financial ratio indicators using the Risk-based Bank Rating technique. This study uses data from Bank Muamalat Indonesia's (BMI) annual report for 2017-2020. The RGEC method is then used to calculate a performance score based on Bank Indonesia Regulation No. 13/1/PBI/2011 to establish the health level of BMI.

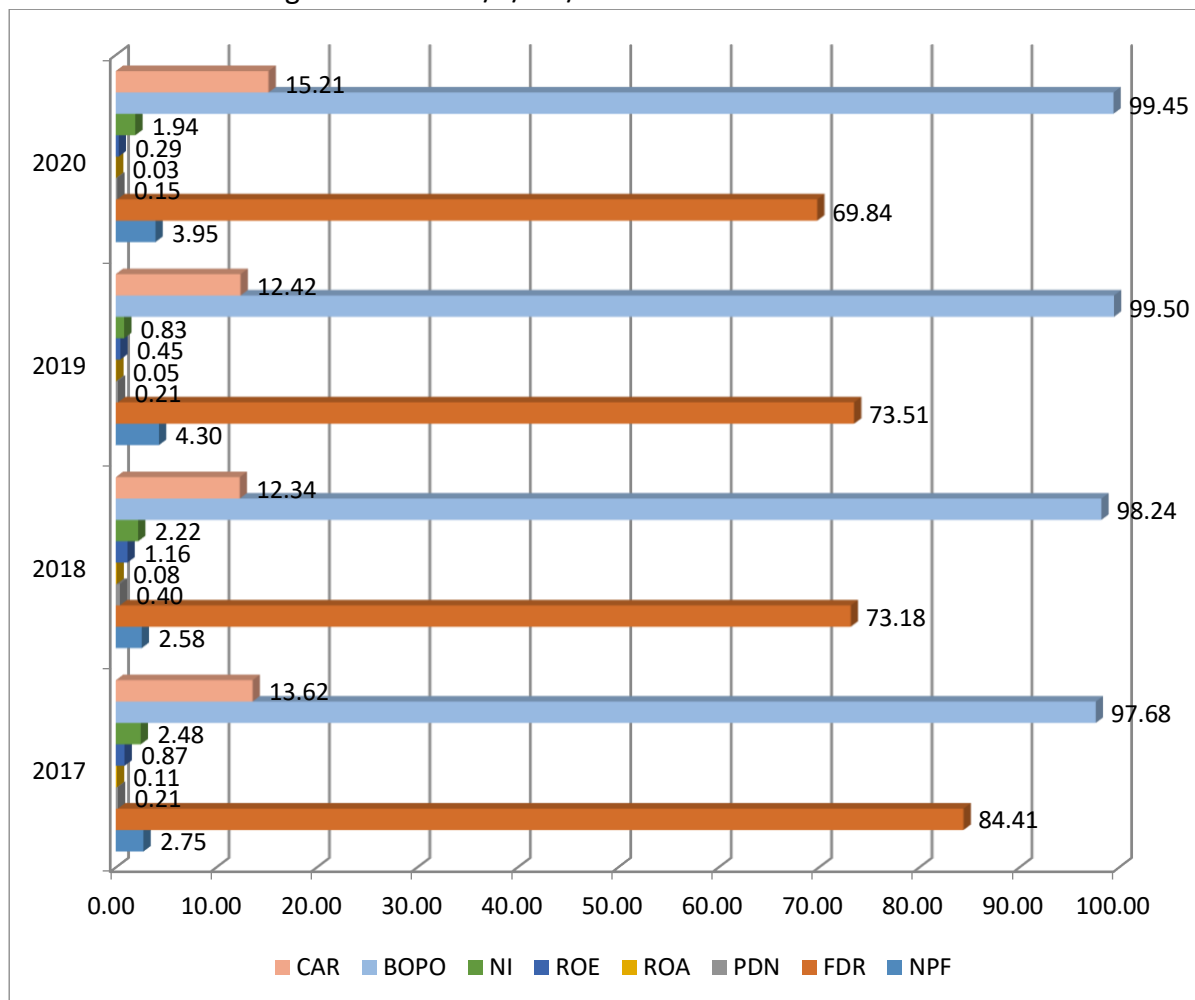


Figure 3 RGEC BMI Performance for the Period 2017-2020 (in percent)
 Source : (annual report)

Risk profile is used as a reference to assess how reliable the company is in implementing risk management which can be seen through 2 NPF and FDR ratio indicators. The NPF level owned by Bank Muamalat for the period 2017 to 2020 received a healthy predicate with Composite Rating 2 (PK-2) even though there was an increase in NPF, which reached its highest point in 2019 with a value of 4.30% and the lowest point was in 2018 with a value of 2.58%, NPF is still relatively healthy because it does not exceed 5%. Bank Muamalat Indonesia's FDR level for the period 2017 to 2020 experienced efforts to improve performance as evidenced by the decline in FDR by 14.57%, so it was categorized as very healthy with Composite Rating 1 (PK-1). It can be concluded that the management of BMI's risk profile for the period 2017 to 2020 is getting better, as evidenced by BMI's consistency in maintaining NPF and FDR performance.

The second aspect assessed in the RGEC method is good corporate governance, where GCG measurement is needed to see how the performance of the structure and governance owned by BMI in the period 2017 to 2020. The level of GCG measured through PDN from 2017 to 2020 compulsively got a value of 0.24%, still classified as a fairly healthy predicate with Composite Rating 3 (PK-3). Although the highest point was in 2018 with a value of 0.40%, it can be said that Bank Muamalat Indonesia is still quite healthy and has even made efforts to improve performance, as evidenced by the decline in the value of PDN in 2019 and 2020.

The third aspect assessed in the next RGEC (Risk-based Bank Rating) method is earnings, where in this aspect, measurements are carried out with the aim of determining the level of efficiency and effectiveness of Bank Muamalat Indonesia in managing all assets owned to generate profits. In terms of accumulated earnings performance as measured using ROA, ROE, NI, and BOPO in 2017-2020, it received an unhealthy predicate with Composite Rating 4 (PK-4). Less healthy earnings performance of Bank Muamalat Indonesia in generating profits is caused by the lack of efficiency of operating expenses, and on the other hand, the financing aspect can be seen in the financial statements that the amount of financing every year has decreased due to the policies taken by BMI to maintain and improve the quality of existing financing so that these conditions affect the amount of profit generated by BMI.

The last aspect used as an assessment in the RGEC (Risk-based Bank Rating) method is capital, where in this aspect, measurements are made to find out how the quality of capital owned by BMI so that it is able to bear the risks posed by productive assets. The results showed that capital performance as measured through Bank Muamalat Indonesia's capital adequacy ratio for the period 2017 to 2020 received a very healthy predicate with a Composite Rating of 1 (PK-1). This condition can be interpreted that Bank Muamalat Indonesia has a good level of security in terms of risk management as evidenced by the performance of the risk profile (NPF and FDR), which received a healthy and very healthy predicate as well as excellent capital adequacy as seen from the very healthy capital adequacy ratio performance.

Essence of the results to be achieved in the use of RGEC method as performance measurement in accordance with its analytical technique is the Risk-based Bank Rating, where the use of the method is used to assess how reliable Bank Muamalat Indonesia is in managing the risks caused by its operational activities. The results of RGEC's performance in this study are strengthened by research by Ghenimi et al. (2017) , which explained that risk management, especially related to financing risks and liquidity of a bank, is an important factor in maintaining bank stability in order to survive.

In addition, the results of research conducted by Ghenimi (2017) also explained that most banks that experience bankruptcy are due to bank failures in managing risk, so risk management has a major factor in maintaining bank stability. Sobarsyah et al. (2020) also reinforced that Islamic banks with high capitalization tend to have higher financing risks which result in financial vulnerabilities when Islamic banks fail to manage these risks, so the emphasis on the behavior of providing financing with the principle of prudence and risk mitigation management is a priority that must be prioritized. Financing every year decreases due to the policies taken by BMI to maintain and improve the quality of existing financing so these conditions affect the amount of profit generated by BMI.

All of these aspects, if assessed on an accumulated basis, can be concluded that the performance of Bank Muamalat Indonesia for the period 2017 to 2020 received a value weight of 65% and Composite Rating 3 (PK-3) with a fairly healthy predicate. The accumulated performance obtained occurs because the resulting earnings performance has not been maximized. However, BMI has great potential to improve its performance to Composite Rating 1 (PK-1) with a very healthy predicate if BMI is able to take bold and careful policies by maximizing its capital and increasing the amount of financing properly so that earnings performance can be exciting again.

BMI Performance for the 2017-2020 Period Based on the Maqashid Sharia Index

Although the performance of Bank Muamalat Indonesia, which was measured using the RGEC method, received a fairly healthy predicate, the measurement was still not enough to represent the overall performance of Islamic banks. This is because the assessment only uses a ratio that displays effectiveness and efficiency to performance resulting from the financial aspect only. Meanwhile, the foundation, values, operations, and objectives brought by BMI are not only based on financial aspects but have more value, especially including the practice of Sharia values (*muamalah*) that bring benefits.

Referring to the concept of sharia enterprise theory, Islamic banks or business companies that claim to use sharia values as the main basis company must consequently be responsible for these claims through the implementation of sharia values in all its operational activities, which will later be accounted for to the highest stakeholders, namely Allah SWT. Therefore, in this study, a combination of performance measurement methods of Bank Muamalat Indonesia was carried out using Abu Zahrah's version of the *maqashid sharia* index developed by Mohammed and Taib (2015) to complement the

shortcomings of the RGEK method so that it can comprehensively describe the actual performance of Islamic banks. Performance assessment is carried out using the *sharia maqashid* index through the sample additive weighting (SAW) technique to determine the performance of Islamic banks on the achievement of banks in the implementation of *sharia maqashid*.

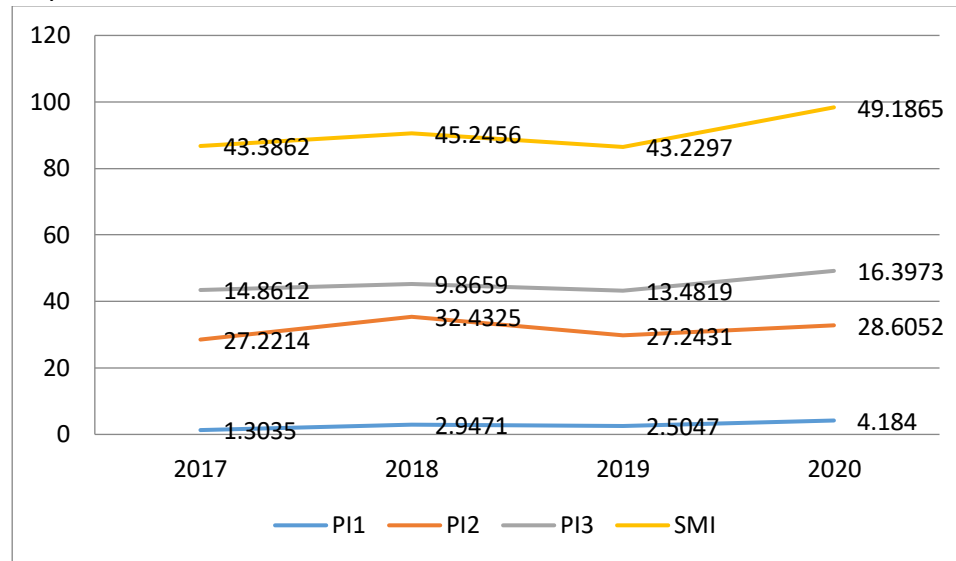


Figure 4 Performance Results of the Maqashid Sharia Index for BMI 2017-2020 period

Source: processed data

The results showed that the performance of *ta'dib al fard* (individual education) as measured through 4 SMI ratios at Bank Muamalat Indonesia reached its best performance in the 2020 period with a performance indicator value of 4.1840. This achievement was triggered by BMI's efforts to improve performance through increased costs used for educational grants, research, training, and publicity. Referring to Antonio et al. (2012), previous research indicates that the performance indicator (PI1) of individual education yielded a result of 0.00505, this shows that Bank Muamalat Indonesia has improved one of the *sharia maqashid* objectives, namely individual education.

According to Septiani et al. (2021), efforts by companies to increase knowledge through individual education (*ta'dib al fard*) provided to their employees can have a positive impact on improving performance and efficiency, as well as producing employees with capabilities that will have an indirect impact on customer comfort and satisfaction. The purpose of measuring *ta'dib al fard* (individual education) has a weight of 30% of the total index value, where the measurement represents an assessment of the implementation of the values of *hifdzul aql* (nurturing reason) and *hifdzun nasl* (nurturing offspring). This is because the research, publication, and training funds are aimed at maintaining the human resources capabilities of Islamic banks and educating the public about sharia products and educational grants distributed by BMI through corporate social responsibility (CSR) activities to students and students is a form of appreciation in protecting the heirs of the Indonesian generation from ignorance.

Iqamah al adl (justice enforcement) objectives as measured through 3 SMI ratios at Bank Muamalat Indonesia, experienced fluctuations where the highest performance produced by BMI occurred in 2018 with a performance indicator value of 32.4325. Meanwhile, the other 3 periods, namely 2017, 2019, and 2020, were quite low due to a decrease in nominal financing and policies related to improving risk profile performance through maintaining the quality of NPF and FDR, resulting in a decrease in the level of BMI profitability which affected the three fair return ratios, distribution functions, and interest-free income. Meanwhile, according to previous studies by Antonio et al. (2012), the results of the performance indicator of justice enforcement of 0.06326 indicate that BMI continues to improve the implementation of *Iqamah al adl* to improve performance.

The performance measurement has a weight of 41% of the total index value, where the measurement represents the implementation of the practice value of *hifdzul amal* (nurturing property), *hifdzun nafs* (nourishing the soul), and *hifzu ad-din* (maintaining religion). This is because these three ratios have the aim of improving the economy, which can be seen from the components of operating profit, *mudharabah*, and *musyarakah* financing, as well as interest-free income where the goal is not only limited to maintaining property but has a deep meaning related to keeping a person from consuming from halal sources of income so as to avoid violations of *muamalah* which brings health, especially destruction when later on the day of retribution. The application of *Iqamah al adl* has an orientation where sharia-based business entities must conduct transactions fairly and not harm one party, for example, implementing profit-risk sharing transactions and staying away from prohibited things such as *maysir*, *gharar*, and *usury* (Ascarya et al., 2016; Septiani et al., 2021).

The performance of the *jalb al-maslahah* (social welfare) objectives as measured through the last three SMI ratios at Bank Muamalat Indonesia experienced fluctuations where the highest performance results were achieved in the 2020 period with a value of 16.3973. This achievement was most influenced by real sector investment, net profit on overall assets, and zakat expenditure by BMI. When viewed in the composition of financial statements, real sector investment issued by BMI and zakat distribution contributed quite high in measuring the ratio. The measurement of this goal has a weight of 29% of the total value of the *maqashid sharia* performance indicator, wherein the performance measurement, the ratio component used is representative of the implementation of *hifdzul amal* (maintaining assets) for the ratio of profitability and investment of the real sector and *hifzu ad-din* (maintaining religion) for the ratio of personal income. According to Antonio et al. (2012), the score obtained in achieving performance indicators (PI) from the implementation of social welfare (*Jalb al-maslahah*) amounted to 0.11008 and was the highest achievement in that period because, in achieving this goal, BMI actively improved performance through social activities such as economic empowerment and other social activities managed by BMM (Baitul Maal Muamalat).

The essence of measuring the performance of the *sharia maqashid* index at Bank Muamalat Indonesia is to measure how much BMI is committed to fulfilling the practice of sharia values that can bring benefits to these three objectives. Several ratios such as education grants, fair returns, research, training, publicity, distribution functions, interest-free product, real sector investment, and personal income have great benefits in terms of corporate social enterprises embedded in the implementation of corporate social responsibility (CSR) and improving the people's economy so as to bring benefits to all parties. Referring toward Ruiz and García (2021) stated that policies and proactive actions to social humanity through CSR have a positive impact on bank reputation where the integrity and branding of the bank will be better. This is reinforced by research conducted by Ramzan et al.(2021) explaining that CSR and financial performance have a positive relationship where banks that have a high social focus will form strong relationships with clients so that financial inclusion will increase, banks will be more stable and reduce the risk of financial distress.

Overall, the highest achievement of *sharia maqashid* index performance was achieved in the 2020 period with an index value of 49.1865. At the same time, the lowest performance occurred in 2019, with an index value of 43.2297. Based on these measurements, it can be concluded that the performance of the sharia maqashid index is still quite good and still has the potential for better performance improvement. This is due to the lack of maximum results in achieving the performance of the *sharia maqashid* index through several ratio components which use elements of profitability calculations. Where in those 4 periods, profitability performance still cannot be maximized, but in other aspects, the performance of the *sharia maqashid* index has been classified as good.

Comparison of BMI Performance for the 2017-2020 Period Based on RGEC Methods and The Sharia Maqashid Index

Performance results measured through aspects of financial ratios are not necessarily directly proportional to performance results measured through the *sharia maqashid* index because t period measured using both RGEC and SMI on Islamic banks, it can be said that in good or bad conditions, not only determined by nominal profitability figures but also includes performance results on aspects of Islamic value and benefits. Therefore, in this study, after knowing the performance results measured through each method, a comparison of the combination of the performance results of the two methods was carried out to determine the performance position of Bank Muamalat Indonesia for the period 2017 to 2020 using the Quadrant Analysis Measurement (QAM) technique.

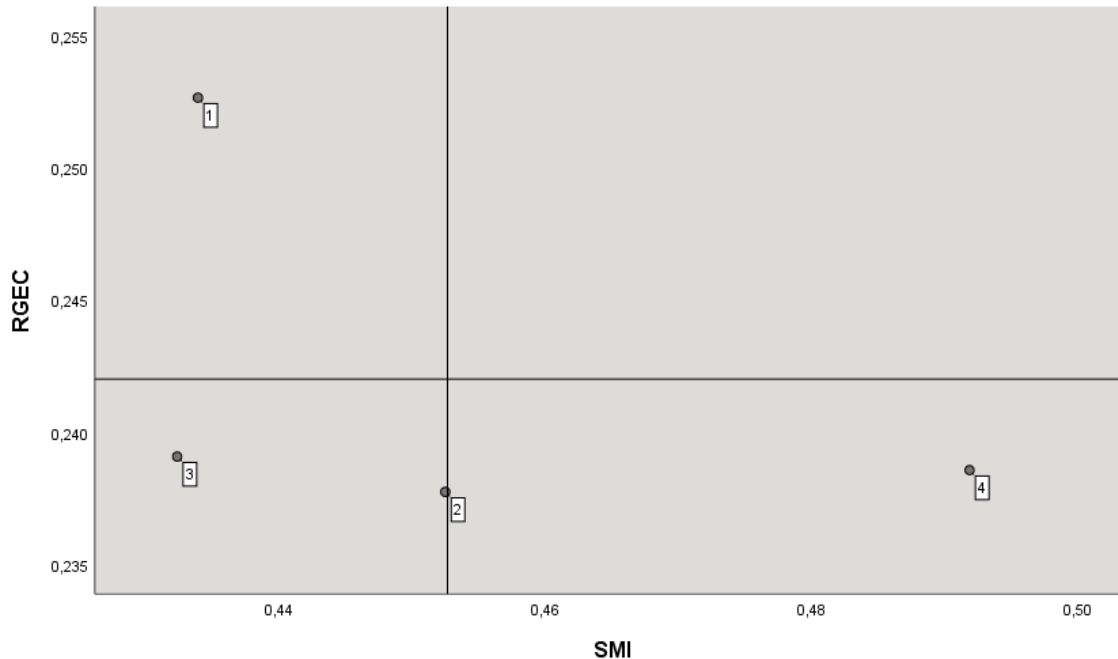


Figure 5 RGECE and SMI BMI Performance Comparison for the 2017-2020 Period

Source : processed data

The 2017 period showed the results of performance comparison using two methods, namely RGECE and SMI at Bank Muamalat Indonesia in quadrant II position. The performance results of RGECE in 2017 got a value of 25,266, which in this period when compared to the other 3 periods, ranked first with a fairly healthy condition. Meanwhile, in the same year, SMI's performance received a score of 43,386, which, when compared to the other 3 periods, occupied the lowest position in the fourth quarter. This can be interpreted based on quadrant analysis measurement (QAM) that in the period 2017, RGECE performance was high, but the performance of SMI was low.

The 2018 period showed that the results of performance comparisons using the RGECE and SMI methods on BMI were in the fourth quarter position. RGECE's performance results in 2018 received a value of 23,775, which in this period when compared to the other 3 periods ranked fourth. Meanwhile, in the same period, SMI's performance received a score of 45,246, ranking second out of the other 3 periods. This can be interpreted based on QAM that in the period 2018, the performance produced by RGECE was relatively low and the performance of IMS was also low. However, if look deeper actually in the 2018 period, the performance of SMI can still be said to be quite high, considering the position of the SMI close to the boundary line of the X axis.

The comparison of performance in the 2019 period between the RGECE and SMI methods at Bank Muamalat Indonesia still occupies the fourth quadrant position. RGECE's performance results at BMI received a score of 23,909, which in this period ranked second out of the entire period. Meanwhile, in the same year, the performance results obtained

using the SMI method got a value of 43,229, which in this period ranked third. It can be interpreted that in the period 2018, the performance produced by RGEC was low and SMI also resulted in low performance.

The results of the performance comparison in the 2020 period between the two methods on BMI got a position in quadrant III. RGEC's performance results in the 2020 period rank third with a value of 25,093. Meanwhile, in the same period, SMI's performance was actually in the highest position, occupying the first place with a value of 49,187. It can be interpreted that based on quadrant analysis measurement, the resulting RGEC performance is low, and the resulting SMI performance is relatively high.

This condition can be interpreted that each of these measuring instruments has advantages and disadvantages, whereas the RGEC method has advantages in measuring financial aspect ratios but has weaknesses in measuring the achievement of *sharia maqashid*. On the contrary, the SMI method has advantages in measuring aspects of the achievement of *sharia maqashid*, but it has weaknesses in the completeness of financial ratio measurement indicators and the absence of rating standardization officially authorized by the authorized institution so that the assessment is only based on accumulated ratios. So that the two methods, if further developed until they reach the rating standardization stage, will be able to complement each other and become a more comprehensive measurement of the performance of Islamic banks.

Analysis of BMI's Potential Financial Distress for the 2017-2020 Period

After knowing the position of the performance comparison based on the RGEC and SMI methods at Bank Muamalat Indonesia for 2017 to 2020, an assessment of the potential for financial distress is needed to strengthen the performance assessment of the two methods. Financial distress is a condition where the company is in a threatening position towards bankruptcy which is indicated by the bank's inability to fulfill its current obligations in accordance with predetermined deadlines (Kordestani et al., 2011).

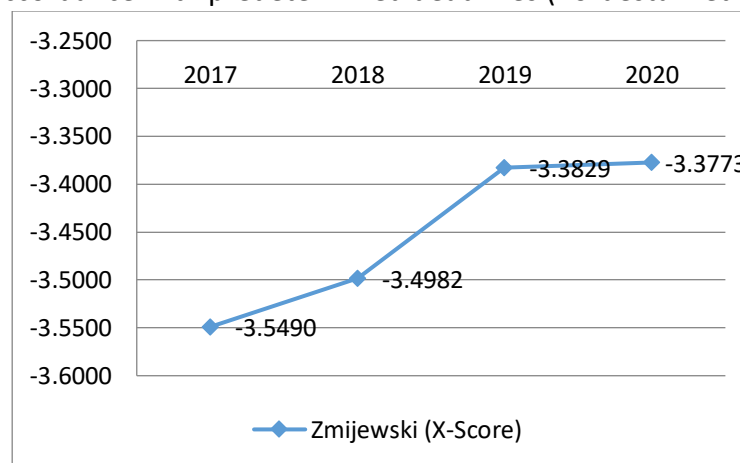


Figure 6 Z Value Financial Distress BMI for the 2017-2020 Period

Source: processed data

Analysis of potential financial distress through the Zmijewski method (X-score) at BMI 2017 to 2020 has fluctuated. The fact that the fluctuating value of Z (X-Core) from

2017 to 2020 was -3.5490, -3.4982, -3.829, and -3.773, where $Z < 0$, indicates that Bank Muamalat Indonesia is not experiencing financial distress. This demonstrates that Bank Muamalat Indonesia, as the oldest Islamic bank in Indonesia and a survivor of the financial crisis of 1998, is once again capable of confronting unstable economic turmoil in a pandemic-affected economy. It can be interpreted that in the period from 2017 to 2020, Bank Muamalat Indonesia was categorized as stable and did not have the potential to experience bankruptcy. Referring to research conducted by Li et al. (2020), the condition of the company's success in maintaining the company's sustainability performance, characterized by the absence of symptoms of financial distress, can positively impact investor confidence.

These results are in line with the results of the analysis of the RGEC method in the period 2017 to 2020, which showed a performance with a fairly healthy predicate. While on the other hand, the performance is shown by SMI also showed good performance. Although the performance results of RGEC and SMI are still not optimal due to low profitability and decreased financing, which affects the performance of earnings on RGEC and several ratios such as interest-free income ratio (R7), fair return ratio (R5), and profitability (R8) in SMI, the results of the analysis of potential financial distress have proven that Bank Muamalat Indonesia can still survive in the face of economic turmoil caused by the pandemic.

In addition, this result is in line with research by Rusydiana and Sanrego (2018), which explained that the use of financial ratios and *sharia maqashid* indexes could be used as a test tool to measure efficiency and sharia maqashid as material for performance evaluation through the *maslahah* efficiency quadrant (MEQ). Antonio et al (2020) also reinforce that the use of *sharia maqashid* indexes performance as a performance measurement tool is necessary because Islamic banks do not only pay attention to financial aspects but also pay attention to aspects of the implementation of sharia value achievement that can be used as a reference by investors in securing their funds.

CONCLUSION

This study has examined a comparison of measuring instruments for comprehensive measurement of Islamic bank performance in the 2017-2020 period. The findings of this study concluded that the use of the RGEC and SMI methods at Bank Muamalat Indonesia was able to complement the advantages and disadvantages of each performance measuring instrument. Meanwhile, the performance results of the analysis of potential financial distress through the Zmijewski method (X-score) have provided validation and strengthened the performance results of the RGEC and SMI so that the combination of these methods can be a reconsideration for Bank Indonesia in reviewing policies related to the standardization of the RGEC method which is used as reference material for health assessments, especially for Islamic banks.

The results of this study recommend that the management of Bank Muamalat Indonesia maximize earnings performance considering the abnormality obtained from both RGEC and SMI due to insufficient profitability triggered by a decrease in the amount of financing. On the other hand, capital performance and risk profile show good performance, meaning that BMI should be able to further maximize performance through increasing the amount of financing considering the level of adequacy of capital quality owned is very good but also accompanied by providing financing with prudential principles so as to maximize BMI's performance. In addition, the author also advises Bank Indonesia to review the policy, namely Bank Indonesia regulation No.13/1/PBI/2011, related to the use of the RGEC method as an assessment of the level of bank health where in the policy performance assessment, there is no specialization for the performance assessment of Islamic banks. Meanwhile, Islamic banks and conventional banks cannot be confused because they have differences in terms of foundation, value, operations, and objectives. Therefore, a review of the RGEC method is needed because if the method is used to assess the performance of Islamic banks, the results of the assessment cannot represent the actual performance of Islamic banks because the method is only based on financial aspects, which does not include aspects of sharia value implementation, so the author suggests adding RGEC + S where S is a measurement used to measure achievement *maqashid sharia* financial institutions through the *sharia maqashid* index. More deeply, it is hoped that the sharia maqashid index can be further developed so that it obtains an appropriate formulation and has reached the standardization phase of performance ratings so that the combination of methods (RGEC + S) can be used as a reference in measuring the performance of Islamic banks.

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