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Intellectual Capital Toward Market Performance: Profitability as a Mediating and Maqashid Sharia as a Moderating Variable

Widyantono Arif*, Amiruddin, Darmawati, and Muhammad Irdam Ferdiansah

Abstract

Research aims: This study aims to determine the effect of intellectual capital on market performance with profitability as a mediating variable and the Maqashid Sharia Index (MSI) as a moderating variable in an empirical study of Indonesian Islamic banks.

Design/Methodology/Approach: This research utilized descriptive quantitative and explanatory methods to explain the relationship between variables. The research population covered all Islamic commercial banks registered with Bank Indonesia (BI), totaling 14. Purposive sampling was applied to determine the research sample. This study employed both primary and secondary data sourced from the government’s published documents, comprising the annual reports and the financial statements of Islamic commercial banks from 2017 to 2019. Path analysis and Moderated Regression Analysis (MRA) were run to analyze the data.

Research findings: In conclusion, all variables had a positive and significant relationship. The mediating variable significantly impacted the dependent variable, and the moderating variable also influenced the relationship between intellectual capital and market performance.

Theoretical contribution/Originality: Well-managed intellectual capital could produce work efficiency, affecting the quality of individual performance and directly impacting company performance. Good profitability in the company could foster a high level of trust in investors, affecting the provision of capital and improving company performance. Maqashid sharia is crucial in making decisions, especially for Islamic banks; efficient decisions could improve company performance.

Keywords: Intellectual capital; Market performance; Profitability; Maqashid Sharia Index

Introduction

A company’s market is the percentage it controls of the total market for its products and services. Market share is an essential metric for businesses because it indicates a company’s success. It can signal dominance in an industry and how well a company’s revenue-generating efforts work to achieve business goals. A company’s market can affect operations, pricing of products and services, and, potentially, stock market performance. A growing company’s market corresponds to growing revenue, meaning a business can scale up its operations and
opportunities for more significant income. Gaining market share should be a severe business goal. Therefore, a company should enhance its market performance to maintain its productivity.

One aspect of enhancing market performance is intellectual capital. The concept of intellectual capital becomes an intangible resource playing an essential role in a company and provides added value to maintain its viability (Antoni, 2019). Intellectual capital aims to improve company performance (Bontis et al., 2018), which can be seen from the price paid by investors for their shares. Investors’ higher appreciation for a company is believed to be caused by its intellectual capital (Gigante, 2013). Accordingly, intellectual capital could maintain the company’s quality, leading to increased market performance (Block et al., 2019).

The mediating factors, one of which is profitability, should be identified to maximize the relationship between intellectual capital and company performance. Profitability affects investor confidence, leading to an increase in company performance. High company profitability can attract investors to invest, thereby increasing stock prices and stock returns. Lim and Herawaty (2020) discovered that profitability positively influenced market performance. It is supported by Lambey (2021) disclosing that profitability positively affected firm value.

In addition, the profitability ratio measures the overall management effectiveness, indicated by the size of the company’s profit concerning sales and investment (Raheman et al., 2010). This study utilizes Return on Assets (ROA) to measure company profitability. This ratio measures the company’s ability to generate profit to total assets under management. ROA measurement demonstrates that the company’s efficiency level can be determined by its ability to reduce operational costs over a certain period (Sujud & Hashem, 2017).

In addition to profitability, maqashid sharia is also predicted to be the aspect that can maximize the relationship between intellectual capital and market performance. It is proven by Sujud and Hashem (2017), who examined financial performance through the Maqashid Sharia Index (MSI) with simultaneous results affecting firm value. It indicates that companies must consider sharia objectives to attract investors and be oriented toward the future. Maqashid sharia is often called wisdom or the purpose of eliminating a law. In this study, the MSI measures company performance. MSI was developed based on three main factors: education, creating justice, and achieving prosperity (Amanchukwu et al., 2015). Therefore, maqashid sharia can influence the relationship between independent, dependent, and mediating variables. In its application, maqashid sharia is employed as the center of decision-making.

A company’s competitive advantage will be created if it can manage and utilize its resources effectively and efficiently. With this competitive advantage, the company is considered superior to competitors. Amanchukwu et al. (2015) revealed that intellectual capital strongly influenced company profitability. Furthermore, Friandi and Akbar (2018)
disclosed a positive influence between intellectual capital and the profitability of Islamic banking.

Research has been conducted to determine whether profitability and maqashid sharia can increase the relationship between intellectual capital and market performance. To begin with, a study by Nurmalasari (2016) focused on the influence of intellectual capital on financial performance and the market value of the company. The findings unveiled that intellectual capital significantly affected financial performance and market value without mediating or moderating variables. In addition, research by (Basir et al., 2019) discovered that profitability could be employed as an intervention variable affecting the independent intellectual capital variable on the dependent variable or firm value. Moreover, Hanif (2018) studied the influence of Islamic intellectual capital on the performance of Islamic maqashid with corporate governance as a moderating variable.

Previous research placed maqashid sharia as the dependent variable. In contrast, this study utilized it as a moderating variable affecting the relationship between the independent and dependent variables. This research is intended to cover the gap regarding the influence of intellectual capital on the performance of companies using profitability as an mediating variable and maqashid sharia as a moderating variable. In previous studies, most intellectual capitals were often tested for their effect on firm value. Meanwhile, this study examined the company’s performance. In addition, this study examined profitability as an mediating variable, including maqashid sharia as a moderating variable affecting the relationship between variables.

Theoretically, this research is expected to solve issues regarding intellectual capital’s influence on market performance with profitability as an mediating variable and maqashid sharia as a moderating variable. In addition, this study can serve as a reference in conducting research and providing a new understanding of the development of science in Indonesia. In practical application, this research will make a valuable contribution to Islamic bank customers in deciding to entrust their funds by considering information provided by the company, the profitability offered, and considerations of Islamic maqashid. Finally, this research is expected to serve as evaluation material and input for companies using information for customer purposes.

Literature Review and Hypotheses Development

Stakeholder Theory

Stakeholders are all internal and external parties, such as shareholders, government, surrounding communities, and international institutions outside the company, both influencing and being directly or indirectly affected by the company (Hanif, 2018). As Fuadah and Kalsum (2021) asserted, corporate social disclosure is a success for companies in negotiating their relationships with their stakeholders; this stakeholder theory provides the basis for a benefit for its stakeholders. These benefits can be in the form of increasing company performance. The increased performance will lead to increased stakeholder
trust in the company. Management in the company should carry out activities as expected by the stakeholders and report these activities to them (Setiawanta & Purwanto, 2019). In other words, the stakeholders have full rights to all mandatory and voluntary information regarding financial and non-financial issues, explaining the accountability of the company’s activities to stakeholders.

The use of profitability as an mediating variable is supported by previous research Anugrah and Dianawati (2020), Baributsa and Njoroge (2020). Both studies utilized profitability because it is considered capable of influencing firm value. Profitability provides the company with a significant profit picture affecting the relationship between the independent and dependent variables (Nugroho & Arjowo, 2014). Meanwhile, the use of maqashid sharia as a moderating variable is empowered by previous research Khoiriyah and Salman (2020), Nugroho and Arjowo (2014). Maqashid sharia was determined as a moderating variable because it includes various aspects: education, profitability, investment, mudharabah, musharaka, zakat, development, and promotion. Improvements in each of these aspects can undoubtedly enhance the company’s performance.

**Intellectual Capital**

Intellectual capital is more than just intelligence owned by a company; it is an ideological process to achieve company goals. In its development, intellectual capital can be interpreted as an intangible resource owned by a business organization or company, utilized to generate added value and competitive advantage for the company.

Intellectual capital has become a precious asset in the modern business world. It challenges accountants to identify, measure, and disclose it in financial statements. The measurement of intellectual capital, the driver of company value and competitive advantage, is increasing. Intellectual capital is crucial in increasing company profitability. Based on resource-based theory, company resources’ economic and efficient use can minimize the costs incurred. Previous research by Khoiriyah and Salman (2020) uncovered that intellectual capital influenced the company’s added value and competitive advantage.

The company’s investment in intellectual capital in the financial statements results from an increase in the difference between market value and book value. Thus, if a market is efficient, investors will give high value to companies with more outstanding intellectual capital (Xiaoxia et al., 2021; Iankovyi, 2021; Nemtseva & Vorozhbickaya, 2021). The greater the value-added intellectual capital, the more efficient the use of company capital (Babajee et al., 2020). Intellectual capital is a unique resource; thus, not all companies can imitate it. It makes intellectual capital an essential resource for companies to create value-added and achieve their company’s competitive advantage. Companies with a competitive advantage will undoubtedly be able to compete and survive in the business environment.
Intellectual capital is growing and becoming a concern because traditional accounting measurements can no longer adequately determine the real value of the company. In addition, it is undeniable that intellectual capital plays an essential role in the company’s competitive advantage (Dymitrowski & Mielcarek, 2021). Therefore, the following hypotheses were drawn.

\( H_1 \): Intellectual capital affects profitability.

\( H_2 \): Intellectual capital affects market performance.

**Profitability**

Profitability is the ability to generate profits (Chandra et al., 2020). The company can profit from its operations. Profitability assessment determines how well business activities are carried out to achieve strategic goals, eliminate waste and provide timely information to implement continuous improvements (Karim & Arif-Uz-Zaman, 2013). Thus, long-term investors will be highly interested in this profitability analysis.

Profitability illustrates the success of a business entity in generating returns for its owners (Hassan & Harahap, 2010). The profitability ratio assesses the company’s ability to seek profit (Abdolvand & Kia, 2016) from its normal business activities (Koponêa, 2021). Profitability ratios can be measured in several ways, one of which is using ROA (Al Nimer et al., 2015). ROA depicts the results (return) of the total assets in the company (Esti, 2022). This ratio is calculated by dividing net income by total assets. The bigger the ratio, the better it is. The increased ROA also increased the company’s profitability, indicating a performance improvement. Its impact can provide reasonable returns for both owners and investors (bond and stockholders) in the overall assets owned.

Specifically, Endarwati and Sulastiningsih (2020) explained that high profitability indicates good company prospects; investors will respond positively to the signal, increasing the stock market price. The increased stock market price will lead to an increase in the stock return. Aliyi et al. (2021) and Kamasak (2017) discovered that profitability possessed a significant positive effect on stock returns, a proxy for market performance. Thus, stock returns will increase significantly if profitability increases, and vice versa. Therefore, the hypothesis can be drawn as follows.

\( H_3 \): Profitability affects market performance.

**Profitability as an Mediating Variable**

Good profitability benefits the company because the more profit it generates from its assets, the more the shareholders or investors will be interested. The company’s prospects of generating high profits will lead to a high return (Esti, 2022). Thus, this variable is considered capable of influencing the relationship between intellectual capital.
and market performance (Bertinetti et al., 2013). If a company has well-managed intellectual assets that generate high returns, it will trigger an increase in performance. It is what then underlies the taking of the fourth hypothesis.

H₄: Intellectual capital affects market performance through profitability.

Maqashid Sharia Index

MSI was developed based on three main factors: individual education, justice creation, and welfare achievement. These three factors follow the general objectives of maqashid sharia: achieving prosperity and avoiding evil. These three universal goals should be the objectives and operational basis of every entity with public accountability, not only Islamic banks but also conventional ones. They are related to the welfare of all stakeholders, not only shareholders or company owners.

Furthermore, Omar Mohammed and Md Taib (2015) proposed three objects determining whether an organization has implemented maqashid sharia properly: education (Tahdhib al-Fardh), justice (A’adl), and the interests of the people (Al-Maslahah).

Previous research placed maqashid sharia as the dependent variable, while this study utilized it as a moderating variable affecting the relationship between the independent and dependent variables. This research fills the gap regarding the influence of intellectuals on the performance of companies using maqashid sharia as a moderator. Therefore, the hypotheses are stated as follows.

H₅: Maqashid sharia affects market performance.

H₆: Maqashid sharia can moderate the relationship between intellectual capital and market performance.

![Conceptual Framework](image-url)

**Figure 1 Conceptual Framework**
Research Method

This study utilized an explanatory design belonging to descriptive quantitative research. The population in this study were all Islamic commercial banks registered with Bank Indonesia (BI), totaling 14. The sample was determined using purposive sampling. This study employed documentation to collect primary and secondary data published by the government, namely the annual reports and financial statements of Islamic commercial banks from 2017 to 2019. Path analysis and Moderated Regression Analysis (MRA) were applied to analyze the data.

This study involved four variables, with the measurement explained as follows (Table 1).

Table 1 Measurement Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Capital</td>
<td>A term with various definitions in different economic theories. This study employed Value Added Intellectual Coefficient (VAIC)</td>
<td>Bellucci et al. (2020)</td>
</tr>
<tr>
<td>Market Performance</td>
<td>Measurement of the company’s performance on the resulting strategy performance with the overall expected performance of sales volume and profit. This study utilized the return of assets (ROA) using market performance.</td>
<td>Bouteska &amp; Regaieg (2020)</td>
</tr>
<tr>
<td>Profitability</td>
<td>The company’s ability to generate profits. This study measured profitability using ROA.</td>
<td>Hirdinis (2019)</td>
</tr>
<tr>
<td>Maqashid Sharia Index</td>
<td>A model for measuring Islamic banking performance under the objectives and characteristics of Islamic banking. This study measured MSI in terms of total education, justice creation, and welfare achievement. These three factors are universal.</td>
<td>Khoiriyah and Salman (2020)</td>
</tr>
</tbody>
</table>

Result and Discussion

Descriptive Statistical Analysis

Table 2 displays the amount of data for each valid variable (N), which is 42. The VAIC (X) sample data obtained a minimum value of 1.15, a maximum value of 9.36, a mean of 4.1436, and a standard deviation of 2.36437. It signifies that the mean is greater than the standard deviation. Low data deviation implies evenly distributed values.
Table 2 Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAIC Intellectual Capital</td>
<td>42</td>
<td>1.15</td>
<td>9.36</td>
<td>4.1436</td>
<td>2.36437</td>
</tr>
<tr>
<td>Profitability</td>
<td>42</td>
<td>-9.78</td>
<td>10.76</td>
<td>1.1892</td>
<td>3.20621</td>
</tr>
<tr>
<td>Market Performance</td>
<td>42</td>
<td>-13.45</td>
<td>44.40</td>
<td>14.4677</td>
<td>13.80580</td>
</tr>
<tr>
<td>Maqashid Sharia Index</td>
<td>42</td>
<td>0.37</td>
<td>3.06</td>
<td>2.2269</td>
<td>0.57477</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, the ROA (Z) sample data acquired a minimum value of -9.78, a maximum value of 10.76, a mean of 1.1892, and a standard deviation of 3.20621. In short, the mean is greater than the standard deviation. Low data deviation indicates even value distribution. The ROS (Y) sample data gained a minimum value of -13.45, a maximum value of 44.40, a mean of 14.4677, and a standard deviation of 13.80580. Again, the mean is greater than the standard deviation. The values are evenly distributed if the data deviation is low.

The Maqashid Sharia Index (M) sample data attained a minimum value of 0.37, a maximum value of 3.06, a mean of 2.2269, and a standard deviation of 0.57477. In other words, the mean is greater than the standard deviation. Low data deviation implies even value distribution.

Classic Assumption Test

In the classical assumption test, normality, multicollinearity, heteroscedasticity, and autocorrelation were identified to determine whether the data collected were appropriate for the hypothesis test. The following table and figure depict the classic assumption test results.

Table 3 Classic Assumption Test Results

<table>
<thead>
<tr>
<th>Classic Assumption Test</th>
<th>Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normality Test</td>
<td>0.200</td>
<td>Normal</td>
</tr>
<tr>
<td>Multicollinearity Test</td>
<td>1.091</td>
<td>No multicollinearity</td>
</tr>
<tr>
<td>Heteroscedasticity Test</td>
<td>n &lt; 0 &gt; n on the Y axis</td>
<td>No heteroscedasticity</td>
</tr>
<tr>
<td>Autocorrelation Test</td>
<td>2.4311</td>
<td>No autocorrelation</td>
</tr>
</tbody>
</table>

Table 3 exhibits that the Kolmogorov-Smirnov Z on the VAIC variable, on ROS mediated by ROA and moderated by the MSI, obtained 0.070, with a sig value of 0.200 greater than 0.05, indicating typically distributed data. Moreover, all VIF values on the VAIC, ROA, and MSI variables were 1, and the tolerance value was also 1. In other words, there was no multicollinearity between independent variables.
In addition, Figure 2 demonstrates no apparent pattern, with the data points spreading above and below 0 on the Y axis, indicating no heteroscedasticity data. Furthermore, its value was compared with that of the DW table with a significance of 5%. The total data (N) was 42, and the independent variables (K) numbered 4. Therefore, the du (upper limit) acquired 1.6589. The DW value of 1.972 is greater than the upper limit (du) of 1.6589 but less than (4 - du) of 2.4311, signifying no autocorrelation.

In short, almost all hypotheses (H2, H3, H4, and H5) were positively significant, with a significant value of <0.05 and a positive Beta value. It implies that each variable was affected positively. However, with a significant value of >0.05, H1 and H6 did not affect each other (Table 4).

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_VAIC → Z_ROA</td>
<td>0.238</td>
<td>0.395</td>
</tr>
<tr>
<td>X_VAIC → Y_ROS</td>
<td>0.540</td>
<td>4.057</td>
</tr>
<tr>
<td>Z_ROA → Y_ROS</td>
<td>0.588</td>
<td>6.080</td>
</tr>
<tr>
<td>X_VAIC → Z_ROA → Y_ROS</td>
<td>0.140</td>
<td>0.680</td>
</tr>
<tr>
<td>M_Maqashid_Sharia_Index</td>
<td>1.096</td>
<td>0.277</td>
</tr>
<tr>
<td>X_M</td>
<td>0.529</td>
<td>0.461</td>
</tr>
</tbody>
</table>

The novelty of this research is that intellectual capital significantly positively affected market performance through profitability, where profitability could mediate the relationship between variables. The analysis revealed that profitability could mediate the relationship between intellectual capital and market performance. These findings align with (Basir et al., 2019), discovering that profitability mediated intellectual capital on company performance.
A company must apply intelligent management to provide training and improve facilities regarding work comfort. Employees must ensure the fulfilment of their needs at work. Moreover, the level of profitability also increases investor confidence in investing their capital. The level of achievement of the company in meeting these interests creates a good view for the company, both for employees and for stakeholders, thereby increasing the value of the company. Improved employee performance is depicted through the efficiency of the work completed. The greater the added value of intellectual capital, the more efficient the use of company capital (Pilvere-Javorska et al., 2020).

In addition, Islamic banks have a partnership between funders (shohibul maal) and fund managers (mudharib). Hence, intellectual capital is one of the essential factors that can increase their ability to generate profits. However, Islamic banks, especially in Indonesia, have relatively low profitability as a resource to create value (Habib & Hasan, 2019). Following this research, Islamic banks should increase their intellectual capital. This improvement could be made through coaching, assessment, and planning programs. The guidance could be focused on the company’s rules and soups. If it is maintained, it can provide a good view for investors. To maintain this relationship, profitability could be applied.

Profitability can help increase the company’s performance through positive reporting. Effective reporting can only be performed through qualified intellectual capital. Therefore, profitability is considered capable of mediating the two variables. Profitability depicts the success of a business entity in generating returns for its owners (Indriyani & Mudjijah, 2022). Dura (2018) explained that high profitability indicates good company prospects. Thus, when profitability mediates the intellectual capital and market performance of Islamic banks, the quality of these banks will increase. The Islamic management of the efficiently managed intellectual property will increase the market appreciation of the company’s market value. The effective and efficient use of intellectual capital will significantly contribute to achieving competitive advantage, resulting in good market performance. In addition, good market performance and intellectual capital reporting will help Islamic banks to have good performance.

Other than that, market performance is an indicator used by internal and external parties to measure the level of development of the company. When companies increase their market performance, they tend to have a more comprehensive network of customers. It enables individuals involved in marketing performance management to ensure that improvements are made to future marketing strategies to capitalize on prior success. It also allows the marketers in charge of implementing those strategies to discover the modifications to guarantee that marketing operations are more successful (Sombultawee & Boon-itt, 2018). It also occurs in Islamic banks, which need to increase intellectual capital to increase their market performance. This relationship should be maintained and maximized by increasing other factors, such as maqashid sharia.

However, following the results of this research, maqashid sharia was unable to maintain the relationship between intellectual capital and market performance. The company value of Islamic commercial banks in this study was measured using Economic Value...
Added (EVA). This value can occur if the company earns a profit above the cost of capital. Meanwhile, profit was only calculated at 9% of the total MSI. Thus, as a non-financial factor, the MSI did not significantly impact intellectual capital on market performance.

This result is in line with research conducted by Dewi (2018), disclosing that maqashid sharia could not moderate the relationship between intellectual capital and market performance. Non-financial factors are not the main factors that investors pay attention to when investing in a company. Investors tend to pay attention to financial factors. The purpose of maqashid sharia is everything Allah and His Messenger determine to benefit humanity: maintaining existence, developing quality and quantity, and material and spiritual (Hanson et al., 2017). Therefore, the existence of maqashid sharia for Islamic banks is to measure the performance of the banks and also the workers in order for the banks to have good quality and quantity. However, as this research uncovered, the MSI could not moderate the relationship between intellectual capital and market performance.

Conclusion

In conclusion, intellectual capital significantly and positively affected market performance through profitability. However, maqashid sharia could not increase the relationship between intellectual capital and market performance. Non-financial factors have not been the investors’ concern when investing in a company. The limitation of this study lies in the sample being too universal. Hence, future research is expected to provide a sample with more specific criteria.

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