THE MODERATION ROLE OF GENDER ON THE FINANCIAL PERFORMANCE OF BAITUT TAMWIL MUHAMMADIYAH IN INDONESIA

Usamah Usamah

Islamic Economics Department, Faculty of Economics and Business, University of Airlangga
Email: izamu65.usamah@gmail.com

ABSTRACT

Analyzing the profitability performance of Baitut Tamwil Muhammadiyah (BTM) in Central Java, Indonesia, is the purpose of this study to obtain certainty about the effect of the independent variable on the dependent variable from the data coverage period 2015-2019 using multiple regression analysis. The result indicated that two independent variables, capital adequacy ratio (CAR) and operating expenses and operating income (BOPO), have relationships with profitability performance except for financial to deposit ratio (FDR) and non-performing finance (NPF). As for moderation variable genders, only the BOPO variable affects ROA significantly. Whereas the FDR, CAR, and NPF variables are insignificant to the ROA variable. The results of this study are valuable for academics, BTM, and other stakeholders. The results of this study imply that BTM should pay more attention to the role of female managers who benefit BTM in their operational activities. From these results, the authors fill in the limited literature on the role of female managers in BTM in Central Java which has been around for a long time but has not received adequate attention. Due to the limited portion of the role of BTM managers and information on their achievements. This study produces relatively significant implications for BTM to give more roles for women to become managers in BTM for BTM progress.

INTRODUCTION

Two Islamic microfinance institutions in Indonesia are BMT (Baitul Maal wat Tamwil) and BTM (Baitut Tamwil Muhammadiyah). These institutions have Islamic values and consistently implement Islamic principles, potentially being a solution for people who cannot access formal financial institutions (Ahmad & Rafique Ahmad, 2009). Both BMT and BTM institutions have different dimensions from conventional institutions (Utami et al., 2018). However, they are already registered in the Law of the Ministry of Cooperatives, Small and Medium Enterprises number 25 the Year 1992. BMT is known to have a mixed commercial and social orientation, while BTM has a more definite commercial orientation (Seibel, 2005). BTM is owned by the largest modern Muslim organization in Indonesia, Muhammadiyah.
The ability of Islamic Microfinance to face industry competition in Indonesia has become a concern. The most important issue is the performance and health of Islamic Microfinance in Indonesia. According to Gitman et al. (2012), BTM requires a profit margin for business continuity as a financial institution. Profitability is required for a competitive microfinance industry and the cheapest source of capital and partnerships. Microfinance profits are also an important source of equity; reinvested profits will drive economic growth.

BTM, whose history began in Pekalongan, was established on January 5, 1996, and was inaugurated by Muhammadiyah figure Lukman Harun, a Muhammadiyah leader and famed Islamic activist. The BTM network has spread throughout the country on Java, Sumatra, and Kalimantan islands. It has a strong microfinance architecture, starting from primary BTM (regional), BTM Center (region), and Parent BTM at the center. BTM Pekalongan is a mirror for other BTMs, both in the former residency of Pekalongan, in particular, and in Central Java in general.

BTM’s financial performance dynamics, especially return on assets (ROA), have declined in the last five years. The Central Statistics Agency or Badan Pusat Statistik (BPS) reports that, in August 2020, Indonesia’s economic growth in the second quarter was minus 5.32%, which in the first quarter grew by 2.97%, and significantly lower than the 5.02 percent growth in the same period of 2019. The effect is also left in Islamic microfinance institutions.

Secondary data on ROA performance in this study were obtained from the BTM institution before the COVID-19 pandemic. The highest BTM ROA value in Central Java was achieved by BTM Kaliwungu in 2015, which is 5.01. However, in 2016, it decreased to 4.92. In 2017, the ROA of BTM Kaliwungu rose to 5.85. Similarly, in 2018, it increased again to 6.14 but then decreased again in 2019 to 4.24.

The average ROA of BTM in Central Java in 2015 was 1.41 and decreased to 1.06 in 2016. In 2017 it decreased again so that the average only reached 0.94, then increased to 0.92 in 2018. In 2019 it fell again to 0.76 as a business institution. Many BTMs have tried to overcome the declines in their financial performance. Some of them appointed female managers in this regard. This effort is interesting to study.

On the other hand, the literature on measuring the performance of microfinance institutions is still limited (Muriu, 2011). This research also borrows heavily from the banking literature (Rivai et al., 2007). Hence, these facts urged the author to conduct this study.

The measuring devices used to assess the health of microfinance institutions are determined by the regulation of the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia, number 5.3/Per/M.KUKM/X/2007, regarding guidelines for financial health assessment of Islamic microfinance institutions (Fersi & Boujelbéne, 2016). According to Zein (2018), this policy monitors capital, quality of productive assets, management, efficiency, liquidity, independence
and growth, participation, and compliance with Islamic provisions from the fatwa institution of the Indonesian Ulama Council (MUI).

The types of performance in this study include capital adequacy ratio (CAR), non-performing finance (NPF), financial to deposit ratio (FDR), and operating expenses and operating income (BOPO) or operating expense to operating income (OEOI). In this research, ROA is the dependent variable, and the determinant factors with specific characteristics of the MFI are CAR, NPF, FDR, and BOPO. This study will take the data from 2016 to 2019. According to the BTM data center, during the Covid-19 outbreak, the ROA ratio of BTM had decreased. During Covid-19, it was not only BTM that experienced a decline but also almost all Islamic microfinance institutions in Indonesia. However, BTM is still able to survive (Pusat BTM Jawa Tengah, 2019).

LITERATURE REVIEW

The concept of successful MFI performance is characterized by good service quality, appropriate loan portfolio, and savings mobilization, reaching the bottom line of profitable communities and institutions (Chaves & Gonzalez-Vega, 1996). Adnan et al. (2003) further explained that the successful performance of microfinance is a complex conceptual framework and measured using diverse indicators growth, profitability, financial statement analysis, growth in total assets, number of depositors, or total outstanding projects being financed.

A study on the determinants of performance by Fersi and Boujelbène (2016) revealed that sustainability in Islamic MFIs is related to social performance. However, in conventional MFIs, financial performance is the factor that determines sustainability.

According to Rivai et al. (2007), BOPO, a comparison between OEOI, measures the efficiency and ability of banks to carry out their operations. A low OEOI occurs when the operating income is higher than operating costs, showing that the bank has better efficiency. The OEOI is a comparison between operating costs and operating income to measure the level of efficiency and the ability of a bank to carry out its operations. This ratio is an indicator of efficiency level and bank competency in running the firm's operations (Dendawijaya, 2005). If operating income is higher than operational cost, the OEOI value will be lower, showcasing a good bank mirror efficiency.

BTM uses the FDR to assess the quantity of third-party financing, fulfil deposit withdrawals, and repay borrowers when they fall due to an increase in their liquidity. The decision to determine between liquidity and profitability significantly affects the institution's financial performance (Van Horne & Wachowicz, 2008). Institutions that prioritize liquidity tend to have idle funds, thereby reducing the chances of obtaining income from investment. Financial Institutions that prioritize profitability tend to
avoid idle funds and then maximize asset utilization in the form of investment. Based on the theory of financial intermediation, the intermediate function illustrated by the high FDR indicates the high level of financing so they could increase the return. That statement is supported by the research of Almazari (2014).

The bank’s capital adequacy is based on a comparison between the capital owned by the bank and the risk-weighted total assets (Dendawijaya, 2005). Kasmir (2010) established that the capital adequacy ratio is the capital to risk-weighted total assets ratio that determines the bank’s financial position. Banks with high CAR values have a better efficiency level, implying that they can face unexpected credit risks.

The CAR shows the ability of BTM to provide funds to overcome the possibility of loss risk. This ratio is important because keeping CAR at a minimum limit of 8% means protecting customers and maintaining overall financial system stability. The higher the CAR value reflects the ability of BTM, the better in dealing with the possibility of risk of loss. The BTM’s capital adequacy is based on a comparison between the capital owned by the BTM and the risk-weighted total assets.

Hasbi (2015) suggested that capital structure has a strong relationship and positive impact on profitability and has a great contribution (43.3%) to profitability. Compared to the 5% alpha, the conclusion is that profitability is significantly influenced by capital structure. The result of Didin and Diknawati’s (2014); Rahmatika’s (2017) research showed that profitability was significantly affected by the CAR. On the other hand, Fitriyah and Sholikhin (2019); Wulandari and Shofawati (2017) found that CAR does not significantly influence ROA.

Measurement of financing risk to financial investment is measured by NPF. An increase in credit risk is normally associated with decreased bank profitability. Hence, banks improve profitability by minimizing the credit risk level by improving their appropriate lending policies (Al-Smadi & Al-Wabel, 2011). NPF is a ratio that shows the risk of financing. The higher the NPF indicates that the financing carried out by financial institution cannot be returned. If the financing cannot be returned, it can be said that the turnover of financing assets is not going well. Therefore, it has an impact on declining ROA.

Rahmatika’s (2017) study also showed that NPF does not significantly influence ROA. However, Diknawati (2014); Fitriyah and Sholikhin (2019); Wardana and Widyarti (2015); Wulandari and Shofawati (2017) stated that ROA is not significantly affected by NPF.

The ROA is a ratio that measures the ability of banks to produce a profit by comparing net income with resources or total assets owned. The function is to see how effectively banks use their assets to generate revenue. The higher the ROA value, the better banks' ability to generate profits. ROA percentage shows company assets' profitability in generating the income. This ratio is a more comprehensive measure of profitability and is also widely used in the literature, allowing comparison with a previous study by Ibrahim et al. (2016).
The results of research by Wardana and Widyarti (2015); Wulandari and Shofawati (2017) showed that ROA is significantly affected by the financing deposit ratio (FDR). Diknawati (2014); Fitriyah and Sholikhin (2019) showed that ROA was significantly affected by FDR.

Gender refers to the social roles of women and men and is not confused with the biologically determined sexes of males and females. Gender is a relational concept that analyses women's social roles in relation to the roles of men and vice versa (Murray & Boros, 2011).

Muslim women entrepreneurs should differ from other entrepreneurs in their motives and goals. Muslim women entrepreneurs who can manage a business successfully must also have a good performance in terms of faith and belief in Allah the Almighty (Anggadwita et al., 2015).

More and more women lead Islamic microfinance institutions. A higher proportion of female managers and female loan officers improve financial performance in microfinance, while a higher proportion of female board members do not. A major contributor to the financial sustainability of microfinance institutions is having a higher rate of women in vital decision-making roles, especially lower-level management positions (Gudjonsson et al., 2020).

The increasing number of women leading Islamic microfinance institutions has also occurred in the financial business charity of Muhammadiyah, namely Baitut Tamwil Muhammadiyah. There are about 37% female managers in the Baitut Tamwil center of Muhammadiyah, Central Java, Indonesia. This study aims to analyze the potential factors affecting profitability performance (ROA) and gender as moderating.

RESEARCH METHODS

The target population for this study is 21 members of the Central Java BTM (Islamic microfinance institution) from 2015 to 2019. The sample of this research is 14 BTM members of Central Java. BTM Wiradesa: BTM Doro; BTM Kalibening: BTM Batang; BTM Wuled; BTM Talun; BTM Kedungwuni; BTM Kesen; BTM Punggelan; BTM Bligo; BTM Bojong; BTM Kota Pekalongan; BTM Kaliwungu dan BTM Wonopringgo. Those samples are chosen based on data available at the Central Java BTM office in Pekalongan. Data are sourced from the financial statement issued by five-year data ranges obtained within a year from 2015 to 2019. According to the BTM data center, during the Covid-19 outbreak, the ROA ratio of BTM had decreased. Therefore, this study uses financial data until 2019 to avoid statistical bias.

According to Munawir (2001), ROA describes the number of results the company has obtained because it has invested its financial resources. This ratio is to determine the profit (SHU) that can be obtained by the company in a measurable manner which will later be distributed to company shareholders or to obtain information on how much the company or cooperative can provide a return on total
assets in each rupiah. Based on the Ministry of Cooperative and Micro Small Medium Enterprise (2007), The ROA formulation is presented as follows:

\[
\text{ROA} = \frac{\text{SHU after Tax}}{\text{Total Assets}} \times 100\% \tag{1}
\]

The ratio to measure the capital adequacy of Islamic banks is by using the Capital Adequacy Ratio (Muhammad, 2005). Based on the provisions of the Minister of Cooperatives and SMEs, a healthy BTM KSPPS must have a CAR of at least 8%. The Ministry of Cooperative and Micro Small Medium Enterprises (2007) stated that the formula below could calculate the CAR of a bank:

\[
\text{CAR} = \frac{\text{Weighted Capital}}{\text{Risk-Weighted Assets}} \tag{2}
\]

The quality of financing (NPF) is also the focus of all stakeholders of Islamic financial institutions because NPF is one of the main financial indicators that can determine the sustainability of Islamic financial institutions (Nugroho et al., 2021). The health of Islamic microfinance reflects their performance, and the NPF is a ratio known as a financial measure that can show the financing risk faced by Islamic financial institutions. The formula of NPF is shown below (Ministry of Cooperative and Micro Small Medium Enterprises, 2007):

\[
\text{NPF} = \frac{\text{Total Non-Performing Financing}}{\text{Total Financing}} \times 100\% \tag{3}
\]

The financing to deposit ratio (FDR) compares the financing provided by banks and third parties successfully mobilized by the bank (Rivai et al., 2007). Dendawijaya (2005) stated that the provision of credit to customers could offset the bank's obligation to immediately fulfil the request of depositors who want to withdraw money that the bank has used to extend credit. Based on the Ministry of Cooperative and Micro Small Medium Enterprise (2007), FDR is calculated with:

\[
\text{FDR} = \frac{\text{Total Financing}}{\text{Total Third Party Funds}} \tag{4}
\]

The level of efficiency and capability of a bank can be reflected in carrying out its operational activities through the use of this ratio. Indicators of banks’ level of efficiency and competence in carrying out company operations also take advantage of this BOPO ratio (Dendawijaya, 2005). The BOPO ratio illustrates the comparison of operating costs with operating income (Ministry of Cooperative and Micro Small Medium Enterprise, 2008).
BOPO = \frac{\text{Total Expenses}}{\text{Total Revenue}} \quad \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots 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regression data. From the heteroscedasticity test, variables significantly and positively affected each other with values > 0.05 (5%). Therefore, it can be concluded that there is no heteroscedasticity problem, and this regression model is feasible to use to predict ROA based on the independent variable.

**t-Statistic Test**

<table>
<thead>
<tr>
<th>Indonesian Islamic Bank</th>
<th>B</th>
<th>Beta</th>
<th>t-Statistics</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>7.815</td>
<td>0.043</td>
<td>0.285</td>
<td>0.778</td>
</tr>
<tr>
<td>FDR</td>
<td>0.126</td>
<td>-0.356</td>
<td>-1.939</td>
<td>0.063</td>
</tr>
<tr>
<td>BOPO/OEOI</td>
<td>-1.105</td>
<td>0.365</td>
<td>-0.941</td>
<td>0.350</td>
</tr>
<tr>
<td>CAR</td>
<td>0.653</td>
<td>0.747</td>
<td>5.952</td>
<td>0.000</td>
</tr>
<tr>
<td>NPF</td>
<td>0.189</td>
<td>-0.232</td>
<td>1.420</td>
<td>0.167</td>
</tr>
</tbody>
</table>

Source: Data Processed

The t-statistic test is conducted to test whether FDR, BOPO, CAR, and NPF influence the ROA of BTM in Central Java. The results showed that the coefficient value for the model of FDR is 0.126 and t 0.285 with a significance level of 0.778, which means the FDR variable does not affect ROA significantly. BOPO variable regression coefficient is -1.105 and t -1.939 with a significance level of 0.63, meaning BOPO has a negative influence on ROA. The CAR coefficient scored 0.653 with a t-value of 5.952 and a significance level of 0.00 which means that the CAR variable is positively significant to the ROA variable. Similarly, the coefficient of the NPF variable is 0.189 with a t-value of 1.420 and a significance level of 0.167. The results show that the NPF variable positively and significantly affects ROA.

Regression equations that can be compiled are as follows:

\[
\text{ROA} = 7.815 + 0.126 \text{FDR} - 1.105 \text{BOPO} + 0.653 \text{CAR} + 0.189 \text{NPF} + e
\]
ROA = -36.908 – 0.679 FDR_GENDER + 5.769 BOPO_GENDER – 0.122 CAR_GENDER + 0.018 NPF_GENDER

FDR_GENDER variable, which moderates gender obtained -0.679, t-value of -0.789 and significance of 0.263, is not affecting ROA. The BOPO_GENDER with a coefficient and t value of 5.769 and -1.129, sequentially, and a significance of 0.012 positively correlates with ROA. Furthermore, the CAR_GENDER with a coefficient of -0.122 with the value of t 0.887 and the significance level of 0.379 means that the CAR variable is insignificant to the ROA variable. In contrast, for the coefficient NPF_GENDER variable 0.018 with the t-value of 0.152 and the significance level of 0.880, the variable NPF does not have a significant effect on ROA.

**F-Statistic Test**

The F test showed that CAR, NPF, and BOPO positively affected the performance of BTM, as illustrated below:

<table>
<thead>
<tr>
<th>Model</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTM in Central Java</td>
<td>21.672</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Data Processed

Table 3 above shows the value of F 21.672 at significance level 0.000, which this study uses a predetermined significance level of 5%. It can be concluded that the variables FDR, BOPO, CAR, NPF, FDR_GENDER, BOPO_GENDER, CAR_GENDER, and NPF_GENDER simultaneously affect ROA.

**Coefficient Determination Test**

This test aimed to investigate FDR’s, BOPO’s, CAR’s, and NPF’s impacts on ROA. The results are presented in Table 4.

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted R-Square</th>
<th>Std Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTM in Central Java</td>
<td>0.706</td>
<td>0.47308</td>
</tr>
</tbody>
</table>

Source: Data Processed

Table 4 shows the coefficient determination for each equation. The value of the determinant coefficient (adjusted R²) of BTM in Central Java is 0.706, which means the variation of four independent variables can explain 70.6% of ROA variation: FDR, BOPO, CAR, and NPF, FDR_GENDER, BOPO_GENDER, CAR_GENDER, and NPF_GENDER. Other reasons beyond the model explain the rest value of 29.3%.
Discussion

The coefficient value of FDR is 0.126 and t 0.285 with a significance level of 0.778, which means that the FDR variable does not significantly affect ROA's BTM in Central Java. The higher FDR of BTM in Central Java indicates the higher financing that BTM distributes in Central Java. A significant financing can increase the income by profit sharing or margin obtained by BTM in Central Java. The FDR variable does not affect ROA and shows the average value of FDR BTM as shown by the sample after experiencing a decline in 2016 and an increase in 2017, 2018, and 2019. In contrast to FDR, most ROA performance on BTM in Central Java decreased recorded from 2017 to 2019. So it can be concluded that BTM has not carried out the intermediation function properly because it has not been able to manage the financing effectively. The results of this research support Jatmiko and Agustin's (2018); Yohana's (2017) research, which showed that FDR did not significantly influence ROA.

The value of BOPO or OEOI variable regression coefficient is -0.001, and the t-value is -2.967 with a significance level of 0.004, which means BOPO has an influence negative significance on ROA. OEOI is also an indicator of efficiency level and BTM competency in running the institution's operations. If the firm cannot control the operational costs, then the number of expenses will increase and cause an adverse impact on firm performance. BOPO or OEOI have a significant effect on ROA. Some BOPO or OEOI BTM in Central Java experienced an increase when their ROA decreased. The results of this research support the research of Rahmawati (2015), showcasing that the BOPO variable significantly affects ROA. At the same time, Wardana and Widyarti (2015) also concluded that BOPO or OEOI significantly affects ROA.

The value of the coefficient for CAR shows 0.001 with a t-value of 3.563 and a significance level of 0.001. The statement means that the CAR variable is significant to the ROA variable. The higher the CAR value reflects the ability of BTM, the better in dealing with the possibility of risk of loss. CAR has a significant influence on ROA; the CAR of BTM in Central Java has decreased when its ROA has increased. The results of this research support Diknawati's (2017); Rahmawati's (2015) studies which showed that CAR positively and significantly influences profitability.

While the significance level of NPF is 0.350, the variable NPF has no significant effect on ROA. Non-performing financing has no significant effect on BTM's ROA because some of BTM's NPF in Central Java has increased. In the same period, BTM's ROA has increased to several BOPO BTM in Central Java. Meanwhile, ROA in BTM has decreased. Wardana and Widyarti (2015) concluded that NPF had no significant positive effect on profitability. Likewise, the research of Wulandari and Shofawati (2017) concluded that NPF does not have a significant positive effect on ROA.
The significance level of BOPO_GENDER is 0.000, which means the BOPO_GENDER variable affects ROA significantly. BOPO performance of BTM led by female managers has affected BTM's ROA. The value of BOPO BTM, as the samples showed after, increased from 2015 until 2019. At the same time, most of BTM's ROA in Central Java experienced a decrease until 2019 (Jatmiko & Agustin, 2018).

The results of BOPO_GENDER are different from other moderating variables, namely, FDR_GENDER, CAR_GENDER, and NPF_GENDER, the three of which have no effect on ROA BTM. The coefficient value of each FDR_GENDER variable shows a coefficient value of -0.679 with a t-value of -1.129 and a significance level of 0.263. The CAR_GENDER variable shows a coefficient value of -0.122 with a t-value of 0.887 and a significance level of 0.379. In contrast, the NPF_GENDER variable has a coefficient value of 0.018 with a t-value of 0.152 and a significance level of 0.880, which means that the three moderating variables cannot significantly influence ROA. When the three moderating variables experienced an increase, some of the ROA of BTM in Central Java decreased.

CONCLUSION

The BOPO and CAR as independent variables have a significant effect on ROA. FDR and NPF variables have no significant effect on ROA. As a moderating variable, the efficiency and gender significantly affects the profitability variable. However, variables financing and gender, CAR and gender, NPF and GENDER have no significant effect on the ROA variable. The results of this study contribute to increase the intention of the government, policymakers, Muhammadiyah associations as business owners, and other stakeholders to consider women as manager in BTM. It is because women could manage the BTM more efficient, so that it increases profitability performance.

Suggestion for future research is to add the other variable of research on central BTM in Central Java, such as net operating margin (NOM), BTM age, and BTM ownership so that the adjusted R-square becomes more extensive than the current research. Moreover, this study is limited to BTM in Central Java from 2015 to 2019, not showcasing the entire BTM condition in Indonesia. Therefore, future research may expand their population and year.

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REFERENCES


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