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## ISLAMIC MICROFINANCE INSTITUTIONS AND NON-PERFORMING FINANCING (NPF): CHALLENGES AND STRATEGIC RESPONSE USING ANALYTIC NETWORK PROCESS (ANP) APPROACH

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### Abstract

Non-Performing Financing (NPF) is financing that does not comply with the initial contract schedule, causing disruption to the cash flow of Islamic microfinance institutions. The average Non-Performing Financing (NPF) of Islamic Microfinance Institutions (MFIs) in 2023 reached 13.09%. The urgency of this study reveals that Islamic MFIs or popularly called as *Baitul Maal wa Taammil* (BMT) can be an alternative platform to enhance financial inclusion since they reach out even remote areas. However, NPF is often a problem faced by BMT. The purpose of this study is to analyse the issue of NPF in Islamic MFIs in Indonesia. The study also examines strategies to address issue of NPF in Islamic MFIs in Indonesia. To achieve the research objectives, the method used is through a qualitative approach with Analytic Network Process (ANP) used to be as analysis technique. Primary data sources were obtained through forum group discussions (FGDs) and pair-wise questionnaires and interviews with 10 respondents who are considered experts in related fields. The results of this study indicate that based on the ANP results internal management issue as main problem that causes NPF occur, followed by internal human resource issues, debtor/customer issues and regulatory issues. Main priority of the settlement strategy of NPF include strategy of improving internal management by improving internal human resources, then increasing sharia literacy, and government policy. The study suggests as the issues on internal management is in top rank, the Islamic MFIs should improve internal management elements including enhancing accountability and conducting professional administration.

### Abstrak

Pembiayaan macet (Non-Performing Financing - NPF) merupakan pembiayaan tidak lancar yang tidak sesuai jadwal kontrak awal, menyebabkan terganggunya arus kas lembaga keuangan mikro Syariah. NPF pada Lembaga Keuangan Mikro Syariah (LKMS) pada tahun 2023 mencapai 13,09%. Urgensi penelitian ini mengungkapkan bahwa BMT dapat sebagai solusi keuangan inklusif dengan penyebarannya hingga daerah terpencil, yang dapat berinteraksi langsung kepada masyarakat pelaku Usaha Mikro Kecil (UMK). Sehingga NPF kerap menjadi sebuah persoalan yang dihadapi BMT. Dengan demikian tujuan penelitian ini adalah untuk menganalisis isu permasalahan penyebab terjadinya NPF pada LKMS di Indonesia dan menganalisis strategi guna meminimalisir kembali terjadinya NPF pada LKMS di Indonesia. Untuk mencapai tujuan penelitian, pendekatan kualitatif dengan Analytical Network Process (ANP) sebagai teknik analisis digunakan dalam studi ini. Metode ini dapat membantu hasil pengambilan keputusan atau

sebuah kebijakan dalam mendapatkan alternatif terbaik diantara isu-isu dan strategi dihasilkan dengan menampilkan urutan prioritasnya. Sumber data primer didapatkan melalui forum group discussion (FGD), kuesioner pairwise comparison, dan interview dengan 10 responden yang dianggap pakar dalam bidang terkait, yang terbagi dari regulator, akademisi dan praktisi. Hasil penelitian ini prioritas utama isu permasalahan NPF pada BMT terjadi pada manajemen internal, diikuti isu SDM internal, isu debitur/nasabah dan isu regulasi. Sedangkan prioritas utama strategi penyelesaiannya adalah peningkatan manajemen internalnya, diikuti peningkatan SDM internal, lalu peningkatan literasi syariah, dan kebijakan pemerintah. Penelitian ini menunjukkan karena isu manajemen internal berada pada peringkat teratas, LKM Islam harus meningkatkan elemen manajemen internal termasuk meningkatkan akuntabilitas dan melakukan administrasi profesional

**Key words:** Net Performing Financing (NPF); Baitul Maal waa Tamwil (BMT); Analytical Networking Process (ANP)

## INTRODUCTION

The development of Islamic finance in Indonesia is increasing every year. As recorded in the National Committee for Sharia Economics and Finance (KNEKS) in June 2024, the total Islamic financial assets reached Rp. 2,756.45 trillion, or an increase around 12.48% when compared to the previous year.<sup>1</sup> With the increasing growth of Islamic finance, the problems will also increase. The problem of managerial strength in the organization, lack of human resources who really understand Islamic finance, lack of *Sharia* financial literacy, lack of legal substance are among the issues faced by Islamic financial institutions.<sup>2</sup> Even since 2022, the problem of Islamic financial products has been a polemic, such as the *murabahah* contract still dominating the journey of Islamic finance.<sup>3</sup> Another issues is increasing in risk in Islamic finance both in terms of collateral in fiduciary to risk mitigation and in terms of refinancing.<sup>4</sup> Additionally, Non-Performing Financing (NPF) or bad credit is the most issues which also became a concern for Islamic financial institutions to be carried out.

As presented in the Islamic banking statistics released by Financial Service Authority (or OJK-Otoritas Jasa Keuangan), NPF in Islamic financial institutions recorded about Rp. 3.8 trillion (2.01%) of total financing provided (Rp. 191.8 trillion) in 2023, or an increase of 2.52% from the end of the previous year (2022).<sup>5</sup> Consequently, NPF continues to be a significant issue that demands attention. Moreover, NPF of Islamic Microfinance Institutions (MFIs) including *Baitul Maal wa Tamwil* (BMT) at the end of December 2023 reached about Rp. 131,91 billion or 13.09% of total financing, indicating the high NPF.<sup>6</sup> Although it is lower than the existing Non-Performing Loan (NPL) in conventional MFIs of 21.40% of total loan, but still above the maximum limit of the NPF ratio (10%) set by OJK.

The occurrence of NPF in financial institutions will have moral and material consequences. In fact, according to OJK, NPF that occurs in Islamic MFIs including BMT are

<sup>1</sup> Arun Sahgal, "Pimpin Rapat Pleno KNEKS 2024, Wapres Paparkan Langkah Strategis Keberlanjutan Pengembangan Ekonomi Dan Keuangan Syariah" [wapresri.go.id](https://wapresri.go.id), 2024.

<sup>2</sup> Wiwi Widia Argita et al., "Problematisasi Dan Perkembangan Perbankan Syariah Di Indonesia Dalam Era Globalisasi," *SANTRI: Jurnal Ekonomi Dan Keuangan Islam* 1, no. 6 (2023): 251–59, <https://doi.org/10.61132/santri.v1i6.126>.

<sup>3</sup> Otoritas Jasa Keuangan, "Peraturan Otoritas Jasa Keuangan Nomor 19 Tahun 2021 Tentang Penyelenggaraan Usaha Lembaga Keuangan Mikro," *Ojk*, 2021, <https://www.ojk.go.id/id/kanal/iknb/regulasi/Pages/POJK-Nomor-19-POJK.05-2021.aspx>.

<sup>4</sup> Efendi Sugianto, "Inflation Control through the National Zakat Amil Agency (BAZNAS) Bangka Belitung," *Muslim Heritage* 9, no. 2 (2024).

<sup>5</sup> Farid Faletchan, "Laporan Perkembangan Keuangan Syariah Indonesia," *Otoritas Jasa Keuangan*, 2023, 1–23.

<sup>6</sup> Otoritas Jasa Keuangan, "Roadmap Pengembangan Dan Penguatan Lembaga Keuangan Mikro (LKM) 2024-2028," *Otoritas Jasa Keuangan*, 2024.

one of the factors that hinder the vision in the development of Islamic MFIs in Indonesia. This can have impact on the development of Islamic MFIs, because high NPF will result in financial health which can cause financial losses. Meanwhile, external factors occur due to moral hazard of creditor, lack of legal foundation and weak government control.<sup>7</sup> To minimize the occurrence of NPF, preventive measures which include the implementation of Good Corporate Governance (GCG) and financing supervision at MSMEs have been taken. Fithria et al., Aspiranti et al., Jan et al., Elwardah, Vasudevan et al., Alam et al., Subchi et al., dan Aribi et al. indicated that aspects of organizational structure, transparency, responsibility and accountability are among steps to minimize the increasing of NPF. Aspects of strengthening *Sharia* principles, *Sharia* financial literacy training, and increasing the competence of *Sharia* supervisors are also some preventive measures to minimize the occurrence of NPF.

Other than preventive measures, curative measures also can be used to minimize NPF. The measure includes controlling and monitoring distribution financing and enhancing harmonization of positive and sharia law. Meanwhile, according to OJK, high NPF of BMT in 2023 due to several factors. Firstly, debtors in the microcredit market are generally un-bankable who have no credit history in banks and some others do not have assets that can be collateralized. Secondly, the limited human resources (HR) in Islamic MFIs which make the assessment of prospective debtors and monitoring of their loans less optimal, resulting the lack of NPF risk mitigation is relatively high.<sup>8</sup> To overcome the NPF problem in Islamic banks, Financial Services Authority (OJK) provides preventive and repressive measures. Preventive measures include supervision of financing from the beginning to ending of financing, while repressive measures involve handling financing that has problems. The preventive strategy on NPF also asserted in OJK regulation no. 19/POJK.05/2021.<sup>9</sup> Even though several strategies in minimizing NPF but the number of NPF is still persistent high. As result, it will affect performance of BMT. Hence, it is needed to identify what is cause of occurrence of NPF and how it is addressed with classifying some priorities of NPF issue & its strategies.

Although there are several studies that discuss the issues and strategies for resolving NPF, there are still few that focusing on BMTs. Mutawali et al. for example, analyzed the causes of non-performing financing dan effectiveness of strategies to prevent and resolve non-performing financing at Islamic Commercial Banks. By using the ANP method, the results of this study showed that the effectiveness of prevention carried out by Islamic banks currently consists of improving legal aspects, forming quality human resources.<sup>10</sup> Cahyani et al. identified the causes and solutions of default financing and formulate strategies for preventing default financing of BPRS in Kabupaten Bogor. With Analytic Network Process (ANP), the study showed that external cause is the most influential factor towards the occurrence of default financing. The most influential external cause is customer's bad intention. External solution is the priority

<sup>7</sup> Nur Khatik, Fatmasari Sukesti, and Ida Kristiana, "Financial Performance before and during the Covid-19 Pandemic on Islamic Microfinance Institutions (Case Study Btm Kaliwungu)," *Universal Journal of Accounting and Finance* 10, no. 2 (2022): 559–65, <https://doi.org/10.13189/ujaf.2022.100220>.

<sup>8</sup> Otoritas Jasa Keuangan, "Roadmap Pengembangan Dan Penguatan Lembaga Keuangan Mikro (LKM) 2024-2028."

<sup>9</sup> Otoritas Jasa Keuangan, "Peraturan Otoritas Jasa Keuangan Nomor 19 Tahun 2021 Tentang Penyelenggaraan Usaha Lembaga Keuangan Mikro."

<sup>10</sup> M. Mutawali, Ahmad Rodoni, and Muhammad bin Said, "Prevention Effectiveness of Non-Performing Financing in the Indonesian Islamic Bank," *Etikonomi* 18, no. 2 (2019): 259–74, <https://doi.org/10.15408/etk.v18i2.11262>.

solution that need special attention.<sup>11</sup> Rahayuni and Dalimunte examined how the bank's strategy in overcoming NPF at Bank Sumatera Utara Karya Sub-Branch. To achieve the research objectives, they used a descriptive qualitative approach method with interviews used as a data collection technique. This study indicates that there are several strategies in resolving NPFs, including collection, both by telephone and come to bank directly to the customer, restructuring and voluntary sale.<sup>12</sup> Meanwhile, Wahyudin in his research investigated the strategy of handling NPF in Sharia Rural Banks (BPRS). By using qualitative approach with interviewing 3 different sources (leaders and managers), the findings showed that some cases of non-performing financing were caused by the current economic situation and irrelevant customer selection process. The strategy that can be applied by BPRS is by analyzing data and customer history and steps to reduce the NPF rate, namely with preventive and curative steps.<sup>13</sup>

Although using ANP applied in the previous studies, however, they were focusing on banking and Islamic microfinance provided by Sharia Rural Bank (BPRS – Bank Perkreditan Rakyat Syariah). This study is focusing on *Baitul Maal wa Taammil* (BMT – another Islamic microfinance under mostly Ministry of Cooperative and MSMEs) as object of the study. The study focusses on BMT because it is the largest Islamic microfinance in Indonesia, spread around 4,500 units.<sup>14</sup> In addition, the urgency of this study reveals that BMT can be a solution of inclusive finance with its spread to small areas including interacting directly with the community on super micro level by supporting their business activities. Other than that, using Analytical Network Process (ANP) as an analytical tool in previous studies on NPF and Islamic MFIs are still limited. Thus, this study attempts to examine issues and strategies of NPF settlement in BMT by using Analytical Network Process (ANP) as an analytical tool.

## NON PERFORMING FINANCING (NPF) IN INDONESIA

According to the Circular Letter issued by Bank Indonesia number 9/24/DPbS in 2007, NPF is one of the default risks arising from a financing.<sup>15</sup> In other words, it is a risk when the recipient of funds is unable or delayed in making payments of its obligations that have been imposed.<sup>16</sup> In another sense, it is explained that NPzakatF is the ratio of total non-performing financing to total

<sup>11</sup> Aulia Nur Cahyani, Neneng Hasanah, and Mohammad Iqbal Irfany, "Strategi Pencegahan Pembiayaan Bermasalah Pada BPRS Di Kabupaten Bogor," *Al-Muzara'Ah* 8, no. 1 (2020): 73–93, <https://doi.org/10.29244/jam.8.1.73-93>.

<sup>12</sup> Sri Rahayuni Mrp and Ahmad Amin Dalimunte, "Strategi Bank Dalam Mengatasi Non Performing Financing (Npf) Pada Masa Pandemi Covid 19 (Studi Kasus Bank Sumut Capem Karya)," *Al Khanaj* 3, no. 1 (2021): 6.

<sup>13</sup> M. Wanri Wahyudin, "Strategi Penanganan Non Performing Financing (Npf) Pada Bank Pembiayaan Rakyat Syariah," *Ad Divan* 2, no. 1 (2022): 1–11, <https://doi.org/10.51192/ad.v2i1.389>.

<sup>14</sup> Dede Khoirunnisa, Heni Noviarita, and Evi Eka Elvia, "Revitalisasi Baitul Maal Wat Tamwil Sebagai Pilar Dalam Meningkatkan Perekonomian Masyarakat," *Media of Law and Sharia* 4, no. 4 (2023): 361–71, <https://doi.org/10.18196/mls.v4i4.27>.

<sup>15</sup> Bank Indonesia, "Surat Edaran Sistem Penilaian Tingkat Kesehatan Bank Umum Berdasarkan Prinsip Syariah," *Surat Edaran* 12y, no. 235 (2007): 245, [http://digilib.unila.ac.id/4949/15/BAB II.pdf](http://digilib.unila.ac.id/4949/15/BAB%20II.pdf).

<sup>16</sup> Aye Sudarto, "Penyelesaian Pembiayaan Bermasalah Pada Lembaga Keuangan Syariah: Studi BMT AL Hasanah Lampung Timur," *Islamic Banking : Jurnal Pemikiran Dan Pengembangan Perbankan Syariah* 5, no. Mei 2017 (2020): 99–116.

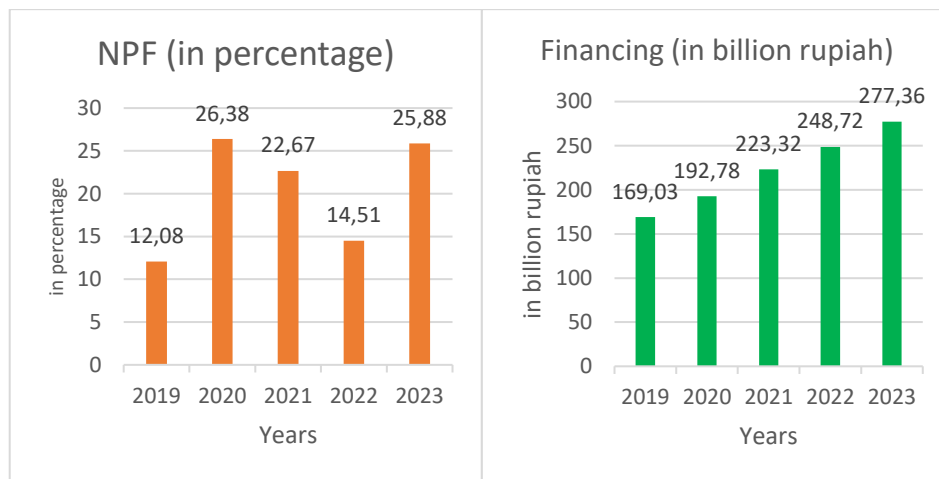
financing disbursed.<sup>17</sup> As mentioned in SEOJK number 10/SEOJK.03/2014 which is formulated as follows:<sup>18</sup>

$$\text{NPF} = \frac{\text{Pembiayaan Bermasalah}}{\text{Total Pembiayaan}} \times 100 \%$$

Source: SEOJK no. 10/SEOJK.03/2014.

**Figure 1.** NPF ratio calculation formula.

The higher the percentage of the NPF ratio, the more it indicates the poor quality of the financing channeled by the financial institution.<sup>19</sup> In the world of Islamic banking in Indonesia, NPF has a fluctuating position. As published in the Islamic banking statistics through the OJK official website, in the last 10 years the NPF incline to decrease from 2014-2023.<sup>20</sup> Ability of internal management of financing institutions, customer/debtors' skills and abilities, and well-established regulations carried out by the government have a strong contribution in participating in reducing this NPF ratio.<sup>21</sup> Figure 1 depicts the last 5 years of NPF and financing data of Islamic MFIs.



Source: OJK (2023)

**Figure 2.** NPF and Financing Data of Islamic MFIs.

<sup>17</sup> Yulya Aryani, Lukytawati Anggraeni, and Ranti Wiliasih, "Faktor-Faktor Yang Memengaruhi Non Performing Financing Pada Bank Umum Syariah Indonesia Periode 2010-2014," *Al-Muḥṣarā'ah* 4, no. 1 (2016): 44–60, <https://doi.org/10.29244/jam.4.1.44-60>.

<sup>18</sup> Otoritas Jasa Keuangan (OJK), "Surat Edaran Otoritas Jasa Keuangan Nomor 10/SEOJK.03/2014 Tentang Penilaian Kesehatan Bank Umum Syariah Dan Unit Usaha Syariah," *SEOJK No. 10/SEOJK.03/2014* 110, no. 9 (2014): 13.

<sup>19</sup> B D Angraeni, S Widodo, and ..., "Analisis Pengaruh Non Performing Financing (NPF), Financing to Deposit Ratio (FDR), Biaya Operasional Terhadap Pendapatan Operasional (BOPO) Dan Debt to ...," *Masharif Al-Syariah* ... 7, no. 30 (2022): 128–55, <https://journal.um-surabaya.ac.id/index.php/Mas/article/view/10032%0Ahttps://journal.um-surabaya.ac.id/index.php/Mas/article/download/10032/4981>.

<sup>20</sup> Keuangan Otoritas Jasa, "Statistik Perbankan Syariah Desember 2023," *Statistik Perbankan Syariah*, no. December (2023): 1–116.

<sup>21</sup> Bahtiar Effendi and Al Fiati Rubaa'tin, "Ancaman Resesi 2023 Terhadap NPF Perbankan Syariah," *JASIE - Journal of Aswaja and Islamic Economics* 2, no. 1 (2023): 25–30.



As presented in the figure, NPF experienced fluctuating number between 2019 and 2023. It increases significantly in 2020 with total number of NPF of 26.39% before it decreasing gradually in 2021 and 2022. However, the number of NPF rises again with 25.88% of total financing of Rp.277 billion.

## OVERVIEW OF ISLAMIC FINANCIAL INSTITUTIONS AND FINANCING PRODUCTS IN INDONESIA

Islamic Financial Institutions (IFIs) have been growing in Indonesia since their inception in 1980. The beginning of the existence of IFIs in Indonesia began with the initiative to establish an Islamic Bank in Indonesia through the establishment of *Bait at-Tamwil* Salman in Bandung and *Koperasi Ridho Gusti* in Jakarta. A working group was formed in the establishment of an Islamic Bank in Indonesia by MUI in 1990 and as a result, PT Bank Muamalat Indonesia introduced in 1991.<sup>22</sup>

Conceptually, IFIs stands on the Sharia principles. As revealed by Hakim, the Sharia that is meant to be the principle and foundation of the IFIs concept is based on three foundations, namely; *aqidah* (faith and belief), *akhlak* (morals and ethics), and *fiqh* (law).<sup>23</sup> Overtime, there have been 14 Sharia Commercial Banks (BUS) and 22 Sharia Business Units (UUS) established between 1991 and 2020.<sup>24</sup> Understanding the conceptual foundations of IFIs is essential to comprehend how Islamic financing products are structured and implemented.

A significant difference between Islamic financial institutions (IFIs) and conventional financial institutions today is in the aspect of financing products. Islamic financing product tries to avoid elements prohibited in Islam such as *riba* (usury), *maysir* (gambling), *gharar* (unnecessary risk), and *jahl* (ignorance).<sup>25</sup> As explained by Ibn Ashur in his book *Maqashid Ash-Shar'iyah Al-Islamiyah*, financing transactions in Islam are based on cooperation and profit sharing, either one party as the owner of the capital (*ra'sul-maal*) who finances the other party as the worker (*mudharib*), or also two parties who share capital (mutual financing) and share the work.<sup>26</sup> Generally, financing in Islam is broadly divided into three categories namely debt-based financing, lease-based financing, and equity-based financing (profit sharing).<sup>27</sup>

## ISLAMIC MICROFINANCE AND *BAITUL MAAL WA TAMWIL* (BMT)

Islamic microfinance institution (Islamic MFIs) is a small-scale financial institution based on Islamic principles. Islamic MFIs focus on providing access to financing, savings, and other financial services for low-income groups, particularly the micro and informal sectors that have no access to mainstream banking. Ascarya (2007) stated that Islamic microfinance not only plays a role as a provider of financing, but also as an instrument for economic empowerment of poor

<sup>22</sup> Abdul Qoyum et al., *Sejarah Pemikiran Ekonomi Islam* (Jakarta: DEKS, Bank Indonesia, 2021).

<sup>23</sup> Andi Lukman Hakim, "Application of Three Lines of Defense in Islamic Financial Institution," *International Journal Of Management and Applied Research* 4, no. 1 (2017): 44–57, <https://doi.org/10.18646/2056.41.17-005>.

<sup>24</sup> Hamdi Agustin and Armis, "Sejarah Praktek Perbankan Syariah," *Jurnal Tabarru': Islamic Banking and Finance* 5, no. 1 (2022): 230–44, [https://doi.org/10.25299/jtb.2022.vol5\(1\).9420](https://doi.org/10.25299/jtb.2022.vol5(1).9420).

<sup>25</sup> Burhan Uluyol, "Financial Derivative Instruments and Their Applications in Islamic Banking and Finance: Fundamentals, Structures and Pricing Mechanisms," *Borsa Istanbul Review* 24, no. S1 (2024): 29–37, <https://doi.org/10.1016/j.bir.2024.02.013>.

<sup>26</sup> Muhammad Maksum, M. Asrorun Niam Sholeh, and Yayuk Afyanah, "The Shift of Non-Profit Contract To Business Contract in the Islamic Financial Institution Business Activities," *Istinbath* 19, no. 2 (2021): 266–86, <https://doi.org/10.20414/ijhi.v19i2.269>.

<sup>27</sup> Nurnasrina and P.A. Putra, *Manajemen Pembiayaan Bank Syariah*, Pekanbaru: Cahaya Firdaus, 2018, <https://doi.org/10.1145/2505515.2507827>.

communities, reflecting it has both economic and social dimensions<sup>28</sup>. Islamic MFIs in Indonesia include Islamic rural bank (in Indonesian acronym called as Bank Perkreditan Rakyat Syariah), Bank Wakaf Mikro, Microfinancing division in Islamic bank and Islamic microfinance regulating under OJK.

Meanwhile, *Baitul maal wa tammil* (BMT) is Islamic MFIs that is mostly cooperative form providing small financing to their members. According to Ridwan, BMT consists of two phrases; namely, *Baitul Maal* and *Baitul Tamwiil*. Etymologically, *Baitul Maal* means fund house and *Baitul Tamwiil* means a business house.<sup>29</sup> Meaning that baitul maal, managing social funds such as *zakat*, *infaq*, *shadaqah*, and *waqf* (ZISWAF) used for social purposes: assistance to the poor, education, health, and community empowerment while *Baitul Tamwiil* is running productive businesses and investments based on sharia principles, providing financing through scheme of *mudharabah*, *musyarakah* and *murabahah*.<sup>30 31</sup> As recorded by Khoirunnisa et al., number of BMT has reached 4,500 registered units, of which around 3,200 BMTs have assets of Rp. 3.2 trillion and 60% are in the active category.<sup>32</sup>

## NPF ISSUES AND MFIs IN INDONESIA

In the end of 2024, the growth of financial institutions in Indonesia has been impressively developing.<sup>33</sup> Consequently, in line with this increase, there was also high growth in investment loans, consumer loans, and capital loans which amounted to 13.8%, 10.83%, and 10.75% respectively from the previous year, specifically MSMEs financing segment also increase by 4.42%.<sup>34</sup>

The impact of increased credit growth on financial institutions, of course, will also affect the increase in risk that arises from this financing.<sup>35</sup> In the financing institutions sector in Indonesia including MFIs, and other Financial Services Institutions financing receivables also grew by 10.18%.<sup>36</sup>

Overall, the NPF ratio in the financing sector was well controlled with a net NPF ratio of 0.83% and gross NPF of 2.66%.<sup>37</sup> However, from some of the sectors in Islamic MFIs, in general it still looks high. Only in the Micro Waqf Board (BWM) sector, the NPF ratio in 2023 was still quite low at 7.97%. Meanwhile, the aggregate NPF ratio of MFIs increased to 13.09% in the same year, although this figure is still lower than the high NPL of conventional MFIs at 21.40%.

According to OJK, the high NPF in Islamic MFIs occurs due to several factors. Among them are the debtors who are mostly “unbankable”, who do not have a history in the bank, or do

<sup>28</sup> Ascarya, “Akad Dan Produk Bank Syariah : Konsep Dan Praktek Di Beberapa Negara,” *PT Raja Grafindo Persada*, 2006, 256.

<sup>29</sup> Muhammad Ridwan, “Sistem Dan Prosedur Pendirian BMT” (Yogyakarta: Citra Media, 2006).

<sup>30</sup> Mufti Afif et al., “Bridging Waqf and Sukuk: Cross-Country Insights from Indonesia and Malaysia on Islamic Social Finance Innovation,” *Muslim Heritage* 10, no. 1 (2025): 91–105, <https://doi.org/10.21154/muslimheritage.v10i1.10510>.

<sup>31</sup> Sugianto, “Inflation Control through the National Zakat Amil Agency (BAZNAS) Bangka Belitung.”

<sup>32</sup> Khoirunnisa, Noviarita, and Elvia, “Revitalisasi Baitul Maal Wat Tamwil Sebagai Pilar Dalam Meningkatkan Perekonomian Masyarakat.”

<sup>33</sup> Otoritas Jasa Keuangan, “Roadmap Pengembangan Dan Penguatan Lembaga Keuangan Mikro (LKM) 2024-2028.”

<sup>34</sup> Otoritas Jasa Keuangan..murabah

<sup>35</sup> Maryani Maryani et al., “Examining the Effect of Third-Party Funding and Non-Performing Loan on Syariah Banking Financing: Moderating Role of Profitability,” *International Journal of Finance, Economics and Business* 3, no. 1 (2024): 1–9, <https://doi.org/10.56225/ijfeb.v3i1.197>.

<sup>36</sup> Otoritas Jasa Keuangan, “Roadmap Pengembangan Dan Penguatan Lembaga Keuangan Mikro (LKM) 2024-2028.”

<sup>37</sup> Otoritas Jasa Keuangan.

not have collateralized assets. In addition, the human resource factor in most MFIs also affects NPF due to the lack of optimal financing risk mitigation in terms of assessing prospective debtors to the lack of monitoring of the financing.<sup>38</sup>

Moreover, Yuniarti et.al. stated that the occurrence of NPF in financial institution is caused by two factors, namely internal factors and macro factors. Firstly, internal factors that occur because it is caused by the managerial itself, including the reserve for impairment losses and operating expenses to operating income (BOPO). Secondly, macro factors caused by the national economy which has an impact on the entire financial institution sector, including inflation and Gross Domestic Product (GDP).<sup>39, 40</sup> The same applies to MFIs in Indonesia, as revealed by Aspiranti et.al., who also revealed that the problems faced come from two factors; internal and external.<sup>41</sup>

### ANALYTICAL NETWORKING PROCESS (ANP)

Qualitative approach by using the Analytic Network Process (ANP) employed in this study. ANP is an advancement of the Analytic Hierarchy Process (AHP) introduced by Thomas Saaty in 1996.<sup>42</sup> It provides enhanced applicability to diverse qualitative studies, including decision-making, forecasting, mapping, and strategizing, evaluation, and resource allocation.<sup>43</sup> ANP used to identify the priority of causing NPF issue and how the priority of the strategies in addressing NPF applied by BMT. The advantage of using ANP as analytical tool is it is more suitable for complex and dynamic problems such as strategic planning, risk management and policy evaluation. Unlike AHP, which is only hierarchical in one direction, ANP can model the relationships between criteria and sub-criteria.<sup>44</sup> ANP is capable of analyzing non-linear and interdependent systems, conditions frequently met in the real world. It is suitable for decision-making involving multiple actors, criteria, and relationships between factors.<sup>45</sup>

Primary data obtained through interviews with academician and practitioners who have a deep understanding of the subject matter. Pair-wise comparison questionnaire is also administered during the second meeting with the respondents to enrich the data.<sup>46</sup> The study choses ten experts from three different groups, four practitioners, three regulators, and three academics, to validate the model and complete ANP pair-wise comparison questionnaire. Following table presents profile of the informants used in this study.

<sup>38</sup> Otoritas Jasa Keuangan.

<sup>39</sup> Nensi Yuniarti Zs, Budi Astuti, and Furqonti Ranidiah, "Faktor-Faktor Yang Mempengaruhi Non Performing Financing (NPF) Pada Bank Umum Syariah Yang Terdaftar Di Otoritas Jasa Keuangan (OJK) Periode 2015-2019," *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis* 10, no. 1 (2022): 384–96, <https://doi.org/10.37676/ekombis.v10i1.1531>.

<sup>40</sup> Ahmad Suminto et al., "Comparative Analysis of The Influence of Sharia and Conventional Monetary Instruments on The Real Sector: An Empirical Study of Indonesia's IPI," *Muslim Heritage* 9, no. 2 (2024): 241–62, <https://doi.org/10.21154/muslimheritage.v9i2.8892>.

<sup>41</sup> Tasya Aspiranti et al., "The Role of Government Policy in Boosting the Islamic Microfinance Institutions Performance in Indonesia," *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah* 5, no. 1 (2021): 136–54, <https://doi.org/10.29313/amwaluna.v5i1.6935>.

<sup>42</sup> H Maulana et al., "Determinants of Pentahelix Model in Developing the Halal Industry in Indonesia: Analytic Network Process (ANP) Approach," *Indonesian Journal of Halal Research* 7, no. 1 (2025): 47–61.

<sup>43</sup> Thomas L. Saaty, "Fundamentals of the Analytic Network Process," *Proceedings of the IS/AHP 1999*, 1999, 1–14.

<sup>44</sup> Saaty, T. L. (1996). *Decision Making with Dependence and Feedback: The Analytic Network Process*. Pittsburgh: RWS Publications.

<sup>45</sup> L. M. Meade and J. Sarkis, "Analyzing Organizational Project Alternatives for Agile Manufacturing Processes: An Analytical Network Approach," *International Journal of Production Research* 37, no. 2 (1999): 241–61, <https://doi.org/10.1080/002075499191751>.

<sup>46</sup> Ibid., p.51



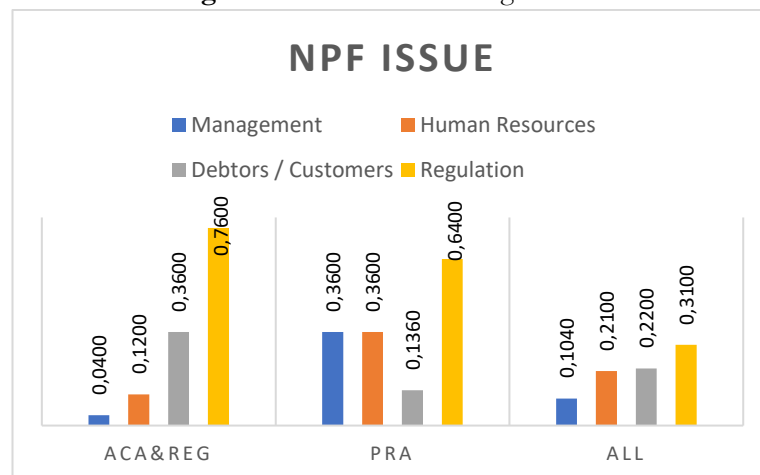
**Table 1.** Profile of the informants

No	Informants	Institutions
1	Informant 1	Regulator in Ponorogo District Cooperative Office
2	Informant 2	Regulator in Central Java Provincial Cooperative Office
3	Informant 3	Regulator in Financial Services Authority, Semarang
4	Informant 4	Academician, UNIDA Gontor
5	Informant 5	Academician, UNIDA Gontor
6	Informant 6	Academician, UIN Ponorogo
7	Informant 7	Practitioner, BMT Beringharjo
8	Informant 8	Practitioner, BMT Hasanah Lazismu
9	Informant 9	Practitioner, BMT Ngabar
10	Informant 10	Practitioner, BMT Surya Kencana

Following Saaty & Vargas, three phase used in decision making while using ANP modelling.<sup>47</sup> The initial phase focuses on constructing or decomposing the model by understanding and structuring complex problems through literature reviews, questionnaires, and expert interviews. The second phase involves model quantification, employing pairwise comparisons through designed questionnaires tested on experts. The final phase, synthesis and results analysis, utilizes the ANP software Super-Decisions for data processing, calculating the geometric mean, and assessing rater agreement.

### ***SYNTHESIS RESULT ANALYSIS OF THE ISSUES OF NPF IN ISLAMIC MFIs***

Based on the ANP output as presented in Figure 3, the results indicates that key of issues of NPF are ranked as follows: regulation issue (0.310), customers or debtors' issue (0.220), human resource issue (0.210) and management issue (0.104). All informants from two different groups have relatively varied opinions regarding the priority of NPF issues in Islamic MFIs. This is in line with research conducted by Aspiranti et.al. suggested that government regulation is the main factor causing NPF.<sup>48</sup>

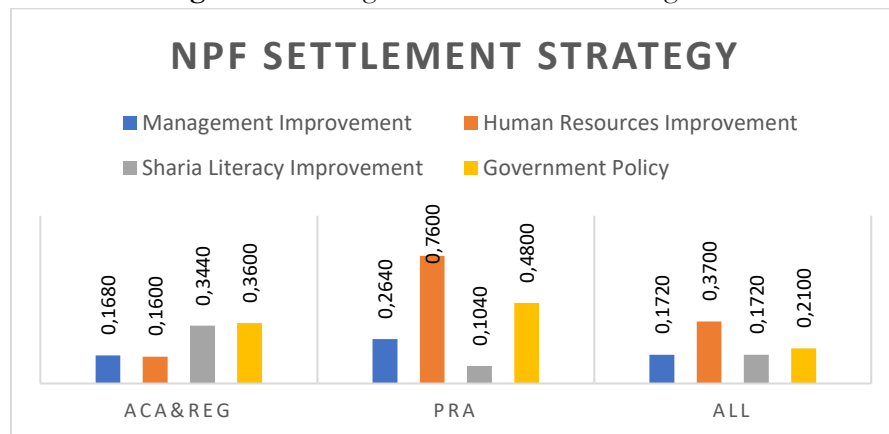
**Figure 3.** NPF issues ranking in BMT


<sup>47</sup> Thomas L. Saaty and Luis G. Vargas, *Decision Making with the Analytic Network Process* (Springer, 2013).

<sup>48</sup> Aspiranti et al., "The Role of Government Policy in Boosting the Islamic Microfinance Institutions Performance in Indonesia."

Meanwhile, with regard to some strategies in addressing NPF, Figure 4 shows that improving human resource (0.370) is the most rank among some strategies, followed by government policy strategy (0.210), Sharia literacy improvement (0.172) and improving management skills (0.172).

**Figure 4.** Ranking of NPF settlement strategies in BMT



Thus, according to all respondents, improving human resource strategy are the highest priority and the lowest is improving management skills obtained from the synthesis of respondents.

### ***SYNTHESIS RESULT ANALYSIS OF THE NPF ISSUES & STRATEGIES SUB-CLUSTER***

As presented in the previous sections, among of NPF issues, regulation issue is the most ranked, followed by debtors, human resource and management issues. Sub cluster of NPF issues for management issue as presented in Table 2 indicates that management strategy issue is the highest rank, followed by administration, accountability and management structure issues. Meaning that inappropriate strategic management can affect increasing of NPF. However, good management strategies such as curative handling, appropriate restructuring, in-depth customer analysis, the 5Cs of prudence, and a comprehensive risk approach have a direct positive impact on

maintaining low and stable NPF in BMTs. This is in line with Rohman and Ansori's research that mentioned that the lack of coordination on the financing committee may causes NPF.<sup>49</sup>

**Table 2.** Geomean Results of NPF issues & Settlement Strategy

Cluster of NPF Issue	Element	Academician & Regulator	Practitioner	Total	Priority/ Ranking
	Management	0.0400	0.3600	0.1040	4
	Human Resource	0.1200	0.3600	0.2100	3
	Debtors/Customers	0.3600	0,1360	0.2200	2
	Regulation	0.7600	0,6400	0.3100	1
Cluster of NPF Settlement Strategy	Element	Academician & Regulator	Practitioner	Total	Priority/ Ranking
	Management improvement	0.1680	0.2640	0.1720	4
	Human Resource improvement	0.1600	0.7600	0.3700	1
	Sharia literacy improvement	0.3440	0.1040	0.1720	3
	Government policy	0.3600	0.4800	0.2100	2
Sub-cluster of NPF Issue		Academician & Regulator	Practitioner	Total	Priority/ Ranking
<b>Management</b>	Accountability	0.0409	0.0254	0.0230	3
	Administration	0.0466	0.0364	0.0234	2
	Organization Structure	0.0224	0.0158	0.0114	4
	Strategy Management	0.0399	0.0226	0.0323	1
<b>Human Resources</b>	HR Competencies	0.0532	0.0572	0.0357	1
	HR Spirituality	0.0148	0.0240	0.0136	2
	Lack of Sharia financial understanding	0.0321	0.0151	0.0127	3
<b>Debtors / Customers</b>	Asymmetric information	0.0099	0.0292	0.0090	3
	Lack of fund management skill	0.0113	0.0301	0.0092	1
	Lack of Sharia financial literacy	0.0094	0.0132	0.0042	4
	Moral hazard	0.0156	0.0373	0.0091	2
<b>Government Policy</b>	Lack of government control	0.0107	0.0126	0.0051	2
	Weak BMT accountability regulations	0.0152	0.0065	0.0066	1
	Weak legal foundation	0.0116	0.0079	0.0047	3
Sub-cluster NPF settlement strategy		Academician & Regulator	Practitioner	Total	Priority/ Ranking
<b>Management improvement</b>	Administrative improvement	0.0511	0.0336	0.0298	1
	Improving in accountability	0.0450	0.0312	0.0237	3
	Organizational	0.0184	0.0178	0.0105	4

<sup>49</sup> Otoritas Jasa Keuangan, "Peraturan Otoritas Jasa Keuangan Nomor 19 Tahun 2021 Tentang Penyelenggaraan Usaha Lembaga Keuangan Mikro."

	restructuring Fast response on market	0.0353	0.0175	0.0256	2
<b>Human resources improvement</b>	Improving in the competency of Sharia supervisors	0.0535	0.0572	0.0350	1
	Sharia financial literacy training	0.0155	0.0240	0.0120	3
	Strengthening on Sharia principles	0.0309	0.0151	0.0158	2
<b>Sharia literacy improvement</b>	Controlling and monitoring	0.0158	0.0377	0.0117	1
	Enhancing financing risk mitigation	0.0116	0.0320	0.0095	2
	Sharia compliance training	0.0082	0.0149	0.0044	3
<b>Government policy</b>	BMT legal contracts	0.0152	0.0119	0.0049	2
	BMT legal substance	0.0120	0.0075	0.0060	1
	Harmonizing Sharia and Positive Law	0.0102	0.0076	0.0048	3

The second rank of sub-element of NPF issue on internal management is administration issue. Administration issues in BMT can be a significant aspect contributing to the increase in NPF. While apparently technical, poor administration leads to weak control, documentation, and accountability in managing financing. Moreover, many BMTs use manual administration like manual recording systems, making it difficult to monitor maturity date of financing, indicating NPF may increase.

Accountability issue is another sub-cluster of NPF issue on management which is in the third rank based on ANP output as presented in Table 2. Accountability issue includes inappropriate in implementing good Islamic financial report and product is not Islamic compliance. However, strong accountability through standardized reporting, Sharia transparency, and good governance is a crucial substance for maintaining financing quality and mitigating the risk of NPF. Last rank is organization structure issue. The structure plays an important role in affecting internal management. Organization structure in BMT may affect an increase or decrease of NPF. Inadequate organization structure may cause overlapping financing monitoring and analysis tasks, slow decision-making for restructuring or collection. As a result, issue financing is not handled quickly causing NPF increases.

Another NPF issue faced by BMT is debtors/customer issue which is ranked in the second main cluster of NPF issue. Customer factors like economic conditions, demographic characteristics, location, and behavior have a significant impact on the increase in non-performing loans (NPF).<sup>50</sup> This indicates that weak economic condition and declining income, location in remote area, customer's misbehavior are the main triggers for non-performing loans.

As shown in Table 2, ANP output shows that lack of business managing skills (0.0092) is the most ranked of debtor/customers as sub-cluster of NPF issue. Second rank occupied by moral hazard (0.0091), followed by asymmetric information (0.0090) and lack of financial literacy (0.0040). Many BMT members are actors of MSMEs. However, lack of business management

<sup>50</sup> Bayu Arie Fianto, Hayu Maulida, and Nisful Laila, "Determining Factors of Non-Performing Financing in Islamic Microfinance Institutions," *Heliyon* 5, no. 8 (2019), <https://doi.org/10.1016/j.heliyon.2019.e02301>.

skills and poor financial record-keeping inclines them to fail in paying their debts timely. Moreover, some debtors have no intention to pay their debts, causing increase NPF in BMT. Additionally, many debtors of BMT do not understand the Sharia principles in financing contracts, so they are difficult to carry out their obligations optimally. Finally, asymmetric information occurs when one party in a transaction has more accurate information than the other party. In the context of BMT, they have difficulty to identify between truly eligible borrowers and those at high risk of default. As a result, BMT may channel financing to tricky borrowers who hide their business risks or income. Similar to this finding, Elwardah revealed that the inability of customers to manage their financing funds is the main cause of NPF.<sup>51</sup>

As depicted in Table 2, HR competencies (0.0357) are the most ranked of sub cluster of NPF issue on internal human resource, followed by HR spirituality (0.0136) and lack of Islamic financial literacy (0,0127). Lack of financing analysis capabilities, weak risk management and lack of understanding legal aspect and dispute resolution are among sub-cluster of NPF issue that may affect increasing of NPF in BMT. According to Karim (2021), weak risk management makes it difficult to avoid problematic financing, especially in the micro-finance sector, which is prone to default.<sup>52</sup> Additionally, many human resources of BMTs do not understand dispute resolution mechanisms according to Islamic law or positive law, resulting in slow resolution of NPF.

Table 2 shows main cluster of NPF issue notably government policy/regulation which is the first rank of NPF issue faced by BMT. Based on the ANP output, the first rank of sub-cluster of NPF issue on government policy is weak legal foundation. The second and third rank are weak accountability regulation and lack of government control, respectively. A weak legal foundation issue for NPF in BMT is indeed one of the key challenges in the Islamic microfinance industry in Indonesia. Most BMTs are legally incorporated as cooperatives. As legally considered as cooperatives, BMTs are not directly supervised by the Financial Services Authority (OJK) like Islamic banks or BPRS, but rather by the Ministry of Cooperatives and SMEs. Consequently, financing issue (NPF) has no legal force like banking sector. Besides that, the issue of weak accountability regulations can also be an important factor causing an increase in NPF in BMT. It due to weak control, transparency, and regulatory enforcement mechanisms. No deposit guarantor like LPS in banking and limited supervision like no strict sanction for customers who default is among issues that can increase NPF in BMT. Supporting this, Aspiranti et.al. suggested that government regulation is the main factor causing NPF.<sup>53</sup>

In terms of BMT strategies in addressing NPF as explained earlier in this section, it found that improving human resource skill is the most rank among some strategies, followed by government policy, Sharia financial literacy and improving management internal. As presented in Table 2, sub cluster of strategies in addressing NPF on improving internal management cluster comprising of improving administration (0.029), rapid market response (0.025), improving accountability (0.028) and organization restructuring (0.010). Weekly monitoring as early detection of adverse selection, rapid response and flexible restructuring are some rapid market response strategies to reduce NPF in BMT. Meanwhile, the key to administrative improvement to reduce NPF can be found in digitalization, strict SOPs, valid data, structured monitoring, and

<sup>51</sup> Khairiah Elwardah, "Optimalisasi Penyelesaian Pembiayaan Bermasalah Pada BMT Kota Mandiri Bengkulu," *Al-Intaj: Jurnal Ekonomi Dan Perbankan Syariah* 6, no. 2 (2020): 59, <https://doi.org/10.29300/aij.v6i2.3351>.

<sup>52</sup> Abdul Aziz, *Manajemen Risiko Pembiayaan Pada Lembaga Keuangan Syariah* (Depok: Depok: Rajawali Pers, 2021), <http://repository.syekhnurjati.ac.id/9091/%0Ahttp://repository.syekhnurjati.ac.id/9091/1/00> BOOK MANAJEMEN RISIKO PEMBIAYAAN\_compressed.pdf.

<sup>53</sup> Aspiranti et al., "The Role of Government Policy in Boosting the Islamic Microfinance Institutions Performance in Indonesia."



continuous audits. With the synergy between strong accountability and a more efficient organizational structure, BMT will be able to significantly reduce NPF.

Besides, sub-cluster of strategies in addressing NPF on Islamic financial literacy improvement cluster as depicted in above table includes controlling & monitoring (0.011), enhancing financing risk mitigation (0.009), providing training on Islamic financing product (0.004). This indicates that improving the managerial and sharia competency of BMT staff, fostering customer awareness and responsibility in fulfilling their obligations, and enabling BMTs to detect and address potential risks more quickly some strategies carried out in this study. By consistently implementing this strategy, BMTs can improve the quality of their financing portfolios, maintain business sustainability, and significantly reduce their NPF levels.

Meanwhile, sub cluster of strategies in addressing NPF on the government policy strategy cluster as shown in Table 2 covers enhancing BMT legal substance (0.006), enhancing BMT legal contracts (0.004) and harmonizing of Islamic microfinance law & positive law (0.004). This shows strong legal substance, harmonization of Islamic microfinance law with positive law, and improvement of legal contracts in BMTs are important strategies to reduce NPF. Obvious regulations provide legal certainty, harmonization prevents overlapping regulations, and transparent contracts prevent moral hazard and disputes. Thus, BMTs can maintain financing sustainability, increase member trust, and significantly reduce NPF.

Additionally, according to Table 2, sub-cluster of strategies in addressing NPF on human resource management strategy cluster entails improving in the Sharia supervisor competency (0.035), strengthening on Sharia principles (0.015) and Sharia financial literacy training (0.012). Capable supervisors ensure compliance with contracts, consistent implementation of Sharia principles, strengthens fairness and transparency, and sharia literacy raises members' awareness of their obligations. Good collaboration of these three strategies will create decreasing of NPF in BMT

## CONCLUSION

This study examines cause of NPF issue and the strategies in addressing NPF based on ranking priority by using ANP model. Qualitative approach with distributing pairwise questionnaire comparison conducted while ANP used as analytical technique. The study found that the top priority of NPF issues caused by regulation, followed by customers or debtors, human resources and management internal issues. The study also indicates that management strategy is the highest rank of internal management issue cluster while the lowest is organizational structure. In terms of customer or debtor issue cluster, issue of lack of fund management skills is the priority, and the lack of Sharia financial literacy cluster is the last priority. It is also found that cluster of regulation issue consisting of weak BMT accountability regulations is the most priority issue, and the issue of legal foundation is the last priority. With regard to strategies in addressing NPF issue, this study indicates that the strategy of improving in human resources is the most priority strategy, followed by enhancing of government policy strategy, enhancing of Sharia financial literacy and improving of management internal.

Theoretically, this study has a significant impact in explaining the theory in the form of strategies for dealing with NPF problems. Practically, this study suggests that BMTs should focus on improving issues within their human resource which is a top priority issues that need to be addressed to decrease NPF problem.

Since this study only prioritizes ANP results strategies without verifying BMT performance, future studies expected to test the influence between priority factors on NPF and the financial performance by using combination analytical tools e.g. ANP and SEM PLS. Current study has only 10 expert respondents, indicating generalizability of the results may be low, thus, next studies may involve more stakeholders such as BMT managers, DPS supervisors, regulators, and financing customers in order to enhance the number of respondents, implicating increase generalizability of the results. Since most customers who are “inaccessible to banks” pose a challenge for Islamic microfinance institutions (MFIs), BMTs need to demonstrate creativity in understanding market needs in order to improve financial inclusion. This could be a topic for further research and a reference for future researchers

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