

THE ROLE OF DEPOSIT INSURANCE IN SUPPORTING ISLAMIC MICROFINANCE INSTITUTIONS: INSIGHTS FROM INDONESIA

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ABSTRACT

This study assesses the necessity of a Deposit Insurance System (DIS) for Islamic Microfinance Institutions (IMFIs). It first identifies key factors influencing knowledge of DIS among stakeholders and then proceeds to evaluate the social impact of IMFIs and examine the urgency for a DIS and respondents' willingness to pay deposit insurance premiums. Conducting survey using purposive sampling, we obtain required data for the analysis from 405 respondents. Applying the logistic regressions, we find reveal that education, work experience, and financial behaviors influence DIS awareness. The findings underscore the urgency of implementing DIS to bolster stakeholder trust and financial system stability, with respondents expressing willingness to contribute premiums. These insights contribute to designing a Shariah-compliant DIS that aligns with the unique operational characteristics of IMFIs, supports sustainable industrialization, and advances SDG-9 goals. The study highlights actionable pathways for policymakers, regulatory bodies, and IMFI managers to foster a resilient and inclusive financial ecosystem.

Keywords: Islamic microfinance, Deposit insurance, Economic growth, SDG-9, Indonesia.

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I. INTRODUCTION

Deposit insurance is vital for fostering financial stability and promoting economic growth, particularly in the context of Islamic Microfinance Institutions (IMFIs) in Indonesia. By protecting depositors against potential losses during bank failures, deposit insurance helps maintain confidence in the institutions, which is essential for sustainable economic development. A stable financial environment mitigates the risks of panic and bank runs, thus ensuring a robust economic framework.

While existing literature emphasizes the importance of deposit insurance for traditional banking systems, there is a significant research gap regarding its specific implications for IMFIs in Indonesia. IMFIs in Indonesia face distinct challenges that underscore the urgency for a tailored Deposit Insurance System (DIS). Unlike traditional financial institutions, IMFIs primarily serve underserved and economically vulnerable populations, often operating in areas with limited access to financial services. These institutions manage both commercial activities and Islamic social funds such as zakat and waqf, positioning them uniquely as economic and social drivers. However, the lack of a DIS framework tailored to their operational and Shariah-compliant principles exacerbates their exposure to liquidity risks and undermines depositor confidence. Studies highlight that without a robust DIS, IMFIs are less capable of withstanding financial shocks, which may impede their ability to support infrastructure development and inclusive industrialization as outlined in SDG-9 (Fianto, et al., 2019; Mawardi et al., 2020).

Moreover, existing literature predominantly focuses on the impact of DIS in conventional financial systems, with limited studies addressing its role in IMFIs. For instance, Demirgüç-Kunt & Huizinga (2004) explore the stabilizing effects of DIS but do not account for the ethical and operational complexities of Islamic finance. Similarly, Kusairi et al. (2018) examine deposit insurance in ASEAN countries but highlight the absence of specific mechanisms for IMFIs, particularly in Indonesia. These gaps indicate an urgent need for research that integrates Shariah-compliant deposit insurance frameworks into the broader financial ecosystem, ensuring resilience and inclusivity for IMFIs. This study aims to address this gap by exploring how a tailored deposit insurance system could enhance the operational resilience of IMFIs and contribute to broader economic objectives, particularly in achieving Sustainable Development Goal 9 (SDG 9), which emphasizes sustainable industrialization, infrastructure development, and innovation.

IMFIs, including institutions like Baitul Maal Wa Tamwil (BMT), play a critical role in poverty alleviation and financial inclusion. However, many potential members remain hesitant to engage with these institutions due to the absence of a deposit guarantee system. This lack of confidence often hampers their ability to mobilize funds and limits their outreach to underserved communities. The absence of a deposit insurance scheme may also inhibit investment in infrastructure projects and increase vulnerability to financial crises.

Research indicates that Islamic finance can offer more stability than conventional finance, primarily due to its risk-sharing principles and ethical investment practices (Boukhatem & Ben Moussa, 2018; Masrizal & Trianto, 2022). However, the unique challenges faced by IMFIs, including heightened risk levels

and the potential for bank runs, necessitate a regulatory framework that includes deposit protection measures. Studies show that prospective members frequently inquire about deposit insurance, indicating a clear demand for such systems to enhance trust and encourage savings (Amin, 2013; Kusairi et al., 2018; Noor & Haron, 2018).

Despite previous research highlighting the importance of deposit insurance in maintaining financial stability (Cerrone, 2018; Chiaramonte et al., 2020; Fecht et al., 2019; Fendi, 2020; Kusairi et al., 2018), the specific dynamics of IMFIs in Indonesia have not been thoroughly examined. This study seeks to fill this gap by investigating the necessity of deposit insurance for IMFIs by analyzing factors influencing knowledge of deposit insurance, assessing the social impact of IMFIs, and evaluating the urgency for deposit insurance and stakeholders' willingness to pay premiums.

A purposive sample of 405 respondents was surveyed, including IMFI employees, members, individuals aware of IMFIs, and those unaware of them. This diverse sample aims to capture varying perceptions of deposit insurance and its perceived value.

This study is significant for several reasons: it highlights the critical need for a deposit insurance system tailored to the unique risks faced by IMFIs, which are often more vulnerable than traditional banks. Additionally, it explores the knowledge and attitudes of IMFI customers and managers regarding deposit insurance, an area that has been relatively underexplored. The findings are expected to provide valuable insights for academics, researchers, and regulatory authorities aiming to promote deposit insurance within the Islamic microfinance sector, ultimately contributing to enhanced financial stability and inclusive economic growth in Indonesia.

The paper is structured as follows. The next section provides literature review. Then, section III details the methodology followed by results and analysis in section IV. Section V discusses the managerial implications of our findings and finally section V concludes.

II. LITERATURE REVIEW

2.1. Theoretical Foundation

The Theory of Reasoned Action (Ajzen & Fishbein, 1975) and the Theory of Planned Behavior (Ajzen, 1991) have been instrumental in examining the impact of Islamic banking services and instruments. Notably, the Theory of Planned Behavior and its extended variants have been applied more consistently than other theoretical frameworks. For instance, Ali et al. (2018), Amin et al. (2014), Ibrahim et al. (2017) utilize extensions of the Theory of Planned Behavior to explore behaviors among Muslim consumers. Amin et al. (2018) investigate the acceptability of Tawarruq within Malaysia, while Zauro et al. (2016) analyze the dynamics of Qardhul Hassan in Nigeria. Additionally, Maulana et al. (2018) apply the theory to identify factors influencing participation in Islamic microfinance. This body of research indicates that the Theory of Planned Behavior is particularly suitable for assessing the acceptability of products and services in Islamic banking contexts.

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), provides a robust framework for understanding behavior driven by attitudes, subjective norms, and perceived behavioral control. This theory is particularly relevant for analyzing the acceptability and adoption of new financial mechanisms, such as a DIS, within the unique context of IMFIs. In this study, TPB is applied to assess how stakeholders' attitudes towards DIS, their perceptions of societal expectations (subjective norms), and their confidence in the ability to support or implement such systems (perceived behavioral control) influence their willingness to adopt and pay for DIS in IMFIs. For instance, the study identifies how education and work experience shape attitudes, while religious and community norms impact subjective norms in the adoption of Shariah-compliant DIS.

The Indonesian context adds depth to this theoretical application. IMFIs in Indonesia cater primarily underserved populations, such as micro and small enterprises (MSEs), operating in an environment marked by limited financial literacy and informal economic structures (Fianto, et al., 2019; Mawardi et al., 2020). The absence of a tailored DIS hinders their capacity to build trust and enhance financial stability. TPB, therefore, serves as a lens to analyze how socio-cultural and economic factors in Indonesia influence stakeholders' behavioral intentions towards DIS adoption.

Despite its relevance, previous studies often focus on TPB in conventional financial contexts (Amin et al., 2014; Zauro et al., 2016). Limited attention has been paid to its application in IMFIs or its integration with Shariah-compliant financial mechanisms. This research bridges this gap by adapting TPB to the unique operational realities of IMFIs in Indonesia, focusing on variables such as perceived usefulness, behavioral intention, and the role of Islamic values in shaping attitudes towards DIS. By aligning the theoretical framework with the socio-economic and cultural dimensions of IMFIs in Indonesia, this study offers a nuanced perspective on how TPB can inform the development of effective and inclusive financial policies.

2.2. Previous Studies

2.2.1. The Impact of Deposit Insurance on Financial Stability

Deposit insurance plays a vital role in advancing Islamic finance within the framework of SDG 9 by promoting financial inclusion, enhancing stability, encouraging ethical investments, facilitating financing for small and medium-sized enterprises (SMEs) and microfinance, and fostering innovation. By aligning with Shariah principles and contributing to resilient financial infrastructure, deposit insurance supports sustainable industrialization, infrastructure development, and innovation.

The literature on deposit insurance predominantly highlights the mutual benefits for financial institutions and their customers (Demirgüç-Kunt et al., 2015; Kusairi et al., 2018; LeRoy & Singhania, 2020). Most studies underscore its importance for banking system stability (Cerrone, 2018; Chiaramonte et al., 2020; Kusairi et al., 2018). However, there is evidence that deposit insurance schemes (DIS) may malfunction in countries with weaker financial systems, leading to increased fragility and vulnerability (Anginer et al., 2014; Krimminger, 2008; Qi et

al., 2020). A poorly designed DIS can exacerbate crises and fragility due to moral hazard during stable periods (Chiaramonte et al., 2020).

Moreover, deposit insurance has spillover effects on non-banking financial institutions and financial systems in other countries (Donnelly, 2017; Ji et al., 2018; Qi et al., 2020), resulting in both positive outcomes, such as enhanced trust and stability, and negative consequences, such as financial crises. Research on capital adequacy shows that DIS can significantly influence the risk profiles of banks (Gómez-Fernández-Aguado et al., 2016; Jumreornvong et al., 2018; Muller, 2020). By altering risk dynamics, effective deposit insurance enables countries to compete for international capital inflows (Jumreornvong et al., 2018; Muller, 2018; Qi et al., 2020), as better-protected deposits attract international investors.

Despite the potential benefits, an implicit DIS may lead to excessive risk-taking (Jumreornvong et al., 2018; Ngilawa et al., 2016). The clarity of risks associated with explicit DIS remains ambiguous (Demirgüç-Kunt & Detragiache, 2002; Demirgüç-Kunt & Huizinga, 2004; Qi et al., 2020). Therefore, while the significance of a well-functioning DIS cannot be overstated, as it helps prevent bank runs and fosters financial stability (Chiaramonte et al., 2020; Dubois, 2021; Kusairi et al., 2018), there are concerns that deposit insurance can distort market dynamics. Calomiris & Jaremski (2019) argue that deposit insurance often increases systemic risk rather than mitigating it.

The contradictory conclusions regarding the stabilizing effect of DIS on banking systems highlight a significant research gap. While deposit insurance aims to protect depositors and reduce bank risk by preventing bank runs and financial panic (Gropp & Vesala, 2004), it may simultaneously undermine market discipline, resulting in moral hazards and increased risk-taking by banks. This duality leads to systemic crises, particularly when banks engage in correlated risk-taking (Acharya & Dreyfus, 1989; Demirgüç-Kunt & Huizinga, 2004; Ioannidou & Penas, 2010). This ongoing debate remains underexplored, especially regarding how different sources of systemic risk interact with deposit insurance.

IMFIs in Indonesia predominantly serve Micro and Small Enterprises (MSEs), which are more relevant than SMEs in this context. MSEs in Indonesia often operate informally, with limited access to capital and financial services, making them a primary target for IMFIs. According to data from Otoritas Jasa Keuangan (2021), approximately 64.5 million MSEs in Indonesia contribute significantly to GDP but remain underserved by traditional financial institutions. This underscores the critical role of IMFIs in bridging financial inclusion gaps for MSEs. Existing literature further supports the alignment of IMFIs with the needs of MSEs. Adnan & Ajija (2015) demonstrate that Islamic microfinance reduces poverty and enhances the economic capacity of micro-entrepreneurs. Mawardi et al. (2020) emphasize that IMFIs utilize Shariah-compliant mechanisms like *qardhul hasan* and *murabahah* to address the unique financial constraints of MSEs, including the lack of collateral and irregular cash flows. In contrast, SMEs, which often require larger capital investments and access to global markets, are more aligned with commercial banking institutions than IMFIs.

Thus, the relevance of MSEs to IMFIs lies in their shared focus on financial inclusion, ethical principles, and small-scale economic activities. This study emphasizes the importance of designing deposit insurance systems that account

for the operational realities of IMFIs and their target beneficiaries, particularly MSEs, ensuring alignment with financial stability and social objectives.

2.2.2. Deposit Insurance System in Indonesia

Since its establishment in 2005, Indonesia's DIS has functioned on a flat-rate basis and has endured various banking crises and financial shocks. Although the government has implemented measures to bolster public confidence in the financial system, these initiatives have also given rise to moral hazard issues (Erick et al., 2021; Kusairi et al., 2015; Trinugroho et al., 2020). According to Law No. 9 Year 2016 concerning the Prevention and Resolution of Financial System Crisis (UU PPKSK), the Indonesia Deposit Insurance Corporation collects fees for deposit insurance and may also gather other contributions from the banking sector once the Banking Restructuring Program is activated. The corporation relies on these fees and the bail-in scheme outlined in the UU PPKSK to address banks' financial challenges.

The flat-rate scheme, which levies a fee of 0.2% per year on the average deposits of participating banks, regardless of asset size or risk profile, has drawn criticism for being unfair. Larger banks, despite having superior risk management practices, pay the same premium as smaller banks that may pose greater risks. This creates a situation where smaller banks with higher default probabilities might pay less than they should, effectively subsidizing riskier behavior.

2.2.3. Islamic Microfinance Institutions and the Need for Deposit Insurance

IMFIs contribute significantly to economic development by providing Shariah-compliant financial services. Acting as intermediaries, IMFIs collect funds and distribute them through Shariah-compliant contracts. They also manage Islamic social funds, such as zakat and waqf, which enhances their role as social institutions in Indonesia (Fianto et al., 2018; Mawardi et al., 2020). IMFIs address the financial needs of marginalized communities and the Muslim population, emerging as vital resources for those facing difficulties in accessing capital.

Islamic finance operates on principles that prohibit interest (riba) and advocate for ethical investments consistent with Shariah law. Deposit insurance strengthens these principles by ensuring that deposits are utilized in alignment with ethical guidelines. This encourages Islamic financial institutions to engage in projects that support sustainability objectives outlined in SDG 9 while avoiding prohibited investments.

Furthermore, deposit insurance schemes can be structured in a manner that aligns with Shariah principles, steering clear of interest-based mechanisms and promoting ethical investment practices. Such structures foster depositor confidence, knowing that their funds will be used in accordance with Shariah law, thereby supporting sustainable development through social responsibility and environmental sustainability.

Despite the potential benefits of IMFIs, they face several barriers to providing financial access to marginalized entrepreneurs. These include a lack of collateral among small and micro-business actors, unreliable income sources for repayment,

and the administrative burden on banks due to small loan amounts. In contrast, conventional financial intermediaries often employ fixed-rate mechanisms, which can lead to uneven distributions of risk and return, disadvantaging borrowers (Abdullah & Ismail, 2014; Mawardi et al., 2020; Abdul Rahman & Dean, 2013).

The global success of the Islamic finance sector has prompted calls for a paradigm shift in its contributions to poverty alleviation. Researchers (e.g., Adnan & Ajija, 2015; Fianto et al., 2018; Haque & Yamao, 2011; Hassan, 2015; Hassan & Saleem, 2017; Mawardi et al., 2020; Zitouni & Ben Jedidia, 2022) recognize Shari'ah-compliant microfinance as a viable means of maximizing social benefits. However, despite its appeal, Islamic microfinance represents less than 1% of global microfinance outreach (Global Report on Islamic Finance, 2016). Rahim Abdul Rahman (2010) identifies several barriers to IMFIs' contributions to economic development, including limited funds, high transaction costs, and unfavorable regulations. The Indonesian Financial Services Authority (Otoritas Jasa Keuangan, 2021) notes that constraints in creating microfinance institutions stem from inadequate quality and quantity of administrators and managers, impacting governance standards.

A significant limitation hindering IMFIs' contributions to economic development is the absence of a deposit insurance system. The Otoritas Jasa Keuangan (2021) indicates several regulatory and industry barriers to establishing a deposit guarantee system for microfinance institutions. There is currently no statutory framework governing the establishment of deposit insurance for the microfinance sector. Additionally, limited human resources and infrastructure hinder effective government supervision, coordination, and guidance for microfinance institutions, compounded by minimal budget allocations for the sector's development. New or undercapitalized IMFIs often struggle to invest in comprehensive governance systems, which require substantial investments in IT and infrastructure.

III. METHODOLOGY

3.1. Data

This study determines the extent of the community's need for the insurance system and the willingness to pay the premium associated with the DIS at IMFIs by gathering information from respondents who are Indonesian citizens older than 17 years. Respondents are selected using a purposive sampling method and categorized into the following four groups.

1. Group A: Employees or managers of IMFI
2. Group B: Members or users of IMFI products or services
3. Group C: Those who know IMFI and are not employees, managers, or users of IMFI products or services
4. Group D: Those who do not know IMFIs

No database of Islamic microfinance customers exists; therefore, convenience sampling is used following Fianto et al. (2019) and Quinlan (2011). Consequently, the survey results cannot be generalized beyond the sample population. The data collected from the survey are from 180 male and 225 female respondents (405 total) across 25 provinces and 96 cities in Indonesia, with the majority of 85.68% located

on Java Island and located in Surabaya City (13.24%), Sidoarjo District (10%) and Malang City (6.49%). A total of 74 respondents are representatives from Group A, and there are 106 from Group B, 123 from Group C, and 102 from Group D.

3.2. Method

This study aims to identify the factors that lead to awareness of IMFIs, their products, and the urgency of deposit insurance in such institutions. A discrete choice model (DCM) may be deemed the most suitable method to achieve the goal because DCM models offer a selection of mutually exclusive and comprehensively exhaustive events (Li et al., 2011; Umoh, 2006). DCM is based on utility maximization, wherein only the alternative with the highest utility is recommended. Consequently, following Li et al. (2011), let $U_n(A_n, B_n)$ be the utility functions of masses n , where A_n is a dichotomous variable and A_n is the model identifier for deposit insurance in the Islamic microfinance institution, their profile, or the urgency of DIS (1 if yes; 0 otherwise). Finally, B_n represents each model's components that aid our understanding (Li et al., 2011).

3.3. Proposed Model

This study employs three logistic regression models and a DCM to address the research objectives. Logistic regression is particularly suitable for modelling binary dependent variables, such as awareness of DIS or willingness to pay for deposit insurance premiums (Train, 2009). Similarly, the DCM framework aligns with the utility maximization behavior observed in financial decision-making processes, enabling the analysis of preferences among mutually exclusive options (Ben-Akiva & Lerman, 1985).

The use of these models is supported by prior studies in microfinance and financial inclusion. For instance, Li et al. (2011) demonstrate the effectiveness of DCM in analyzing access to microcredit in rural China, while Fianto, et al. (2019) validate logistic regression in exploring financing decisions within Indonesian IMFIs. The integration of these models allows for a comprehensive analysis of the factors influencing awareness, perceptions, and adoption of DIS within the context of IMFIs in Indonesia.

This study constructs three logistic regression models. The first model analyses the factors influencing knowledge of deposit insurance concerning IMFIs (1). The second model analyzes respondents' perceptions of IMFIs (2), and the third model attempts to determine the urgency for a DIS and the members' willingness to pay higher operating costs (insurance premiums) (3). The following equations are used for each model:

$$\begin{aligned}
 U_{1n,LIK N}(A_{n,LIK N} = 1, B_{n,LIK N}) \\
 &> U_{0n,LIK N}(A_{n,LIK N} \\
 &= 0, B_{n,LIK N}) [or U_{1n,LIK N}(a_{n,LIK N} = 1, B_{n,LIK N}) \\
 &- U_{0n,LIK N}(A_{n,LIK N} = 0, B_{n,LIK N}) > 0]
 \end{aligned} \tag{1}$$

$$\begin{aligned}
U_{1n,PSP}(A_{n,PSP} = 1, B_{n,PSP}) \\
> U_{0n,PSP}(A_{n,PSP} \\
= 0, B_{n,PSP}) [or U_{1n,PSP}(a_{n,PSP} = 1, B_{n,PSP}) \\
- U_{0n,PSP}(A_{n,PSP} = 0, B_{n,PSP}) > 0]
\end{aligned} \quad (2)$$

$$\begin{aligned}
U_{1n,IDI}(A_{n,IDI} = 1, B_{n,IDI}) \\
> U_{0n,IDI}(A_{n,IDI} \\
= 0, B_{n,IDI}) [or U_{1n,IDI}(a_{n,IDI} = 1, B_{n,IDI}) \\
- U_{0n,IDI}(A_{n,IDI} = 0, B_{n,IDI}) > 0]
\end{aligned} \quad (3)$$

Where:

LIKN = Literacy and knowledge of deposit insurance in IMFIs

PSP = Perception of the respondents about the social purpose of IMFIs and its role in SDG-9

IDI = Need to adopt Islamic deposit insurance

The binary choice model determines the knowledge of deposit insurance in IMFIs, respondents' perceptions regarding the social purpose of IMFIs, and the necessity of Islamic deposit insurance in IMFIs. Therefore, the logistic (logit) model is best suited for achieving the three research objectives. Three relevant logit models are:

$$\begin{aligned}
P_{n,LIKN}(A_{n,LIKN} = 1) &= \Pr(U_{1n,LIKN} > U_{0n,LIKN}) = \Pr(Z_{n,LIKN} > 0) \\
&= \frac{1}{1 + e^{-\beta B_{n,LIKN}}}
\end{aligned} \quad (4)$$

$$\begin{aligned}
P_{n,IFP}(A_{n,IFP} = 1) &= \Pr(U_{1n,IFP} > U_{0n,IFP}) = \Pr(Z_{n,IFP} > 0) \\
&= \frac{1}{1 + e^{-\beta B_{n,IFP}}}
\end{aligned} \quad (5)$$

$$P_{n,IDI}(A_{n,IDI} = 1) = \Pr(U_{1n,IDI} > U_{0n,IDI}) = \Pr(Z_{n,IDI} > 0) = \frac{1}{1 + e^{-\beta B_{n,IDI}}} \quad (6)$$

$A_{n,i}$ equals 1 if there is knowledge about deposit insurance in IMFIs and respondents believe that IMFIs have a social role and require an Islamic DIS; otherwise, the score is 0. Furthermore, $P_{n,i}$ is the probability of having such knowledge. The formulation of probability functions for the models indicates that they are similar to logit models; therefore, logit models are suggested (Train, 2009). Additionally, the logit model is advantageous when the probability is logically distributed (Ben-Akiva & Lerman, 1985; Li, 2010). As Fianto et al. (2019)

recommend for similar studies. Table 1 provides variable descriptions for all three models regarding knowledge of IMFIs, their products, social objectives, the urgency of Islamic deposit insurance and the willingness and ability of consumers to pay deposit insurance premium.

Table 1.
Description of Variables

Variable	Variable type	Description
Gender	Binary	Gender of the participant
Age	Continuous	Age of the participant
Marital Status	Binary	Marital status of the participant
Religion	Continuous	Religious beliefs a participant is following
Child	Continuous	Children of the participant
Education	Continuous	Level of education completed
Occupation	Continuous	Occupation adopted for earning source
Job Years	Continuous	Years of experience working
Family	Continuous	Number of family members in the family
Incperson	Continuous	Number of earning persons in the family
Income	Continuous	Income of the family
Expenses	Continuous	Expenses of the family
Job Status	Continuous	Currently employed or not
Health Expenses	Continuous	Average annual expenses on health

Source: Authors' compilations

The selection of variables in this study is grounded in both theoretical frameworks and prior empirical findings relevant to the context of Islamic Microfinance Institutions (IMFIs). Key independent variables such as education, work experience, marital status, and income are chosen based on their demonstrated impact on financial literacy, adoption of financial services, and attitudes toward risk-sharing mechanisms (Ajzen, 1991; Lusardi & Mitchell, 2013). For instance, education level has consistently been linked to financial literacy and awareness of financial products (Lusardi & Mitchell, 2013), while work experience often correlates with exposure to diverse financial instruments (Fianto, Maulida, et al., 2019).

The inclusion of health expenditure as a variable reflects its significance in household financial decision-making, particularly among IMFIs' target demographics in Indonesia, where economic shocks can influence savings and trust in financial institutions (Mawardi et al., 2020). Meanwhile, the variable for willingness to pay for deposit insurance premiums addresses behavioral intentions directly, aligning with the Theory of Planned Behavior (Ajzen, 1991).

IV. RESULTS AND ANALYSIS

4.1. Profile of the Respondents

Tables 2, 3, and 4 illustrate the profiles of respondents to the surveys related to Model 1, which assesses knowledge about Islamic Microfinance Institutions

(IMFIs). Table 2 reveals that a significant majority (303 out of 405) of respondents are aware of IMFIs. Notably, those without knowledge tend to be younger than 23 and mostly unmarried. Among respondents who are knowledgeable about IMFIs, 42.24% are adults without children, while a considerable portion are married parents over 23 years of age. Regardless of their familiarity with IMFIs and their relevance to Sustainable Development Goal 9 (SDG-9), most respondents possess education levels ranging from high school (SMA) to bachelor's degrees (S1). The knowledge base regarding IMFIs also reflects varying work experience: 33.66% of informed respondents have less than one year of experience, while 49.5% have over five years. Additionally, the annual health expenditures for most respondents are below 0.5 million Indonesian Rupiah (approximately 35 USD).

Table 2.
Profile of Surveyed Respondents for Model 1

Respondent Characteristic	No LIKN Knowledge		Knowledge about LIKN		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Age							
18–23 years	65	63.73%	100	33.00%	165	40.74%	$\chi^2 = 31.6964^{***}$
24–40 years	15	14.71%	112	36.96%	127	31.36%	
41–56 years	20	19.61%	83	27.39%	103	25.43%	
57–75 years	2	1.96%	8	2.64%	10	2.47%	
Others	0	0.00%	0	0.00%	0	0.00%	
Total	102	100%	303	100.00%	405	100%	
Marital Status							
Unmarried	73	71.57%	122	40.26%	195	48.15%	$\chi^2 = 29.9544^{***}$
Married	29	28.43%	181	59.74%	210	51.85%	
Total	102	100.00%	303	100.00%	405	100.00%	
Child							
Nothing	73	71.57%	128	42.24%	201	49.63%	$\chi^2 = 27.1721^{***}$
One	8	7.84%	35	11.55%	43	10.62%	
Two	11	10.78%	64	21.12%	75	18.52%	
Three	5	4.90%	45	14.85%	50	12.35%	
Four	4	3.92%	25	8.25%	29	7.16%	
More than four	1	0.98%	6	1.98%	7	1.73%	
Total	102	100%	303	100%	405	100%	
Education							
No School	0	0.00%	1	0.33%	1	0.25%	$\chi^2 = 30.0322^{***}$
SD	0	0.00%	20	6.60%	20	4.94%	
SMP	2	1.96%	7	2.31%	9	2.22%	
SMA	59	57.84%	99	32.67%	158	39.01%	
D1 & D3	9	8.82%	20	6.60%	29	7.16%	
S1	28	27.45%	108	35.64%	136	33.58%	
S2	4	3.92%	47	15.51%	51	12.59%	
Others	0	0.00%	1	0.33%	1	0.25%	
Total	102	100%	303	100%	405	100%	

Table 2.
Profile of Surveyed Respondents for Model 1 (Continued)

Respondent Characteristic	No LIKN Knowledge		Knowledge about LIKN		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Job Years							
less than 1 year	60	58.82%	102	33.66%	162	40.00%	$\chi^2 = 24.9628^{***}$
2 until 3 years	14	13.73%	33	10.89%	47	11.60%	
4 until 5 years	3	2.94%	18	5.94%	21	5.19%	
more than 5 years	25	24.51%	150	49.50%	175	43.21%	
Total	102	100%	303	100%	405	100%	
Health Expenses							
<IDR 0.5M	49	48.04%	210	69.31%	259	63.95%	$\chi^2 = 18.4051^{***}$
IRD 0.5M to 0.75M	23	22.55%	51	16.83%	74	18.27%	
IRD 0.75M to 1M	15	14.71%	23	7.59%	38	9.38%	
IRD 1M to 1.25M	7	6.86%	6	1.98%	13	3.21%	
>1.25M	8	7.84%	13	4.29%	21	5.19%	
Total	102	100%	303	100%	405	100%	

Note: *** 1% Level of Significance, LIKN; Literacy and Knowledge of DIS

Source: Authors' calculations based on the survey questionnaire

Table 3 presents the characteristics of respondents who answered questions regarding Model 2. Most participants are under 40 years of age. However, younger respondents (under 23) show greater familiarity with IMFI products and their contributions to SDG-9 than those older than 23, particularly among unmarried individuals. The findings align with prior research indicating that younger demographics are more open to new financial products (Khan et al., 2020). The results indicate that higher educational attainment and work experience correlate positively with knowledge of IMFI products, consistent with the literature suggesting that education enhances financial literacy (Lusardi & Mitchell, 2013).

Table 3.
Profile of Surveyed Respondents for Model 2

Respondent Characteristic	No PSP knowledge		Knowledge PSP		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Age							
18–23 year	24	22.64%	67	54.47%	91	39.74%	$\chi^2 = 25.8273^{***}$
24–40 year	55	51.89%	32	26.02%	87	37.99%	
41–56 year	25	23.58%	21	17.07%	46	20.09%	
57–75 year	2	1.89%	3	2.44%	5	2.18%	
Others	0	0.00%	0	0.00%	0	0.00%	
Total	106	100%	123	100%	229	100%	

Table 3.
Profile of Surveyed Respondents for Model 2 (Continued)

Respondent Characteristic	No PSP knowledge		Knowledge PSP		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Marital Status							
Unmarried	34	32.08%	74	60.16%	108	47.16%	$\chi^2 = 18.0240^{***}$
Married	72	67.92%	49	39.84%	121	52.84%	
Total	106	100%	123	100%	229	100%	
Child							
Nothing	34	32.08%	78	63.41%	112	48.91%	$\chi^2 = 24.4446^{***}$
One	20	18.87%	11	8.94%	31	13.54%	
Two	29	27.36%	17	13.82%	46	20.09%	
Three	15	14.15%	13	10.57%	28	12.23%	
Four	6	5.66%	4	3.25%	10	4.37%	
More than four	2	1.89%	0	0.00%	2	0.87%	
Total	106	100%	123	100%	229	100%	
Education							
No School	1	0.94%	0	0.00%	1	0.44%	$\chi^2 = 32.8945^{***}$
SD	19	17.92%	0	0.00%	19	8.30%	
SMP	5	4.72%	1	0.81%	6	2.62%	
SMA	36	33.96%	51	41.46%	87	37.99%	
D1 & D3	5	4.72%	4	3.25%	9	3.93%	
S1	25	23.58%	46	37.40%	71	31.00%	
S2	14	13.21%	21	17.07%	35	15.28%	
Others	1	0.94%	0	0.00%	1	0.44%	
Total	106	100%	123	100%	229	100%	
Job Years							
less than 1 year	24	22.64%	67	54.47%	91	39.74%	$\chi^2 = 28.5189^{***}$
2 until 3 years	13	12.26%	17	13.82%	30	13.10%	
4 until 5 years	9	8.49%	7	5.69%	16	6.99%	
more than 5 years	60	56.60%	32	26.02%	92	40.17%	
Total	106	100%	123	100%	229	100%	

Note: *** 1% Level of Significance, PSP: Perception of Social Purposes

Source: Authors' calculations based on the survey questionnaire

Table 4 presents the respondents' profile for Model 3, indicating that 161 out of 180 respondents are aware of Islamic deposit insurance (IDI). Among those knowledgeable about deposit insurance, 45% are product or service managers within Islamic financial services, while the remaining 55% are customers and users of IMFI products and services. This distribution mirrors findings by Ali & Hassan (2017), which highlight that industry professionals often possess greater knowledge of financial products compared to the public.

Table 4.
Profile of Surveyed Respondents for Model 3

Respondent Characteristic	No Knowledge about IDI		Knowledge about IDI		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Filter 2							
Product/Service Manager	2	10.53%	72	44.72%	74	41.11%	$\chi^2= 8.2076^{***}$
Product Service User	17	89.47%	89	55.28%	106	58.89%	
Total	19	100%	161	100%	180	100%	

Note: *** 1% Level of Significance, IDI: Need to adopt Islamic Deposit Insurance System

Source: Authors' calculations based on the survey questionnaire

The significant chi-square (χ^2) results across all three models demonstrate substantial differences between respondents with and without knowledge of IMFIs (Model 1), those knowledgeable or not about IMFI products (Model 2), and those aware or unaware of Islamic deposit insurance (Model 3). These findings echo the conclusions of Fianto, et al. (2019) that there are significant gaps in awareness levels between different demographic groups.

Table 5 summarizes questionnaire statements showing statistically significant differences, as indicated by χ^2 in Model 2. The results highlight notable disparities in public perceptions regarding (1) social missions; (2) strategies for delivering products and services to the impoverished to achieve SDG-9; (3) support for education, health, sports, and culture to advance SDG-9; (4) capabilities to reach illiterate and disadvantaged populations; (5) development of innovative financial products; and (6) recommendations for depositing funds in IMFIs. These findings support the view that public perception significantly influences the effectiveness of financial institutions in achieving social objectives (Mair et al., 2015).

Table 5.
Results of Survey Questions Model 2

Respondent Characteristic	No IMFI social perception		IMFI social perception		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
In my opinion, IMFI's social mission is evident and perceptible for achieving SDG-9. Um02							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2= 24.5922^{***}$
2	1	0.94%	2	1.63%	3	1.31%	
3	5	4.72%	3	2.44%	8	3.49%	
4	13	12.26%	16	13.01%	29	12.66%	
5	11	10.38%	43	34.96%	54	23.58%	
6	31	29.25%	28	22.76%	59	25.76%	
7	45	42.45%	29	23.58%	74	32.31%	
Total	106	100%	123	100%	229	100%	

Table 5.
Results of Survey Questions Model 2 (Continued)

Respondent Characteristic	No IMFI social perception		IMFI social perception		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
In my opinion, the administrators, and managers of IMFI always ensure that the organization's social missions are fulfilled for achieving SDG-9. Um03							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2 = 25.6502^{***}$
2	0	0.00%	0	0.00%	0	0.00%	
3	3	2.83%	5	4.07%	8	3.49%	
4	13	12.26%	14	11.38%	27	11.79%	
5	11	10.38%	42	34.15%	53	23.14%	
6	32	30.19%	34	27.64%	66	28.82%	
7	47	44.34%	26	21.14%	73	31.88%	
Total	106	100%	123	100%	229	100%	
In my opinion, the IMFI's strategy for reaching the poor and needy has been successful for achieving SDG-9. Um04							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2 = 28.1371^{***}$
2	0	0.00%	0	0.00%	0	0.00%	
3	3	2.83%	5	4.07%	8	3.49%	
4	13	12.26%	14	11.38%	27	11.79%	
5	11	10.38%	42	34.15%	53	23.14%	
6	32	30.19%	34	27.64%	66	28.82%	
7	47	44.34%	26	21.14%	73	31.88%	
Total	106	100%	123	100%	229	100%	
In my opinion, IMFI helps develop the local communities/public, especially in the fields of education, health, sports, and culture that contribute for achieving SDG-9. Um06							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2 = 21.6645^{***}$
2	2	1.89%	1	0.81%	3	1.31%	
3	2	1.89%	0	0.00%	2	0.87%	
4	9	8.49%	20	16.26%	29	12.66%	
5	15	14.15%	32	26.02%	47	20.52%	
6	26	24.53%	38	30.89%	64	27.95%	
7	52	49.06%	30	24.39%	82	35.81%	
Total	106	100%	123	100%	229	100%	
In my opinion, IMFI operates in poor areas and areas that require attention for achieving SDG-9. Um07							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2 = 28.1371^{***}$
2	2	1.89%	1	0.81%	3	1.31%	
3	2	1.89%	6	4.88%	8	3.49%	
4	5	4.72%	16	13.01%	21	9.17%	
5	12	11.32%	31	25.20%	43	18.78%	
6	30	28.30%	37	30.08%	67	29.26%	
7	55	51.89%	30	24.39%	85	37.12%	
Total	106	100%	123	100%	229	100%	

Table 5.
Results of Survey Questions Model 2 (Continued)

Respondent Characteristic	No IMFI social perception		IMFI social perception		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
In my opinion, IMF reaches the illiterate underprivileged and needy people that help achieve SDG-9. Um08							
1	1	0.94%	3	2.44%	4	1.75%	$\chi^2 = 26.2517^{***}$
2	3	2.83%	3	2.44%	6	2.62%	
3	1	0.94%	10	8.13%	11	4.80%	
4	15	14.15%	25	20.33%	40	17.47%	
5	14	13.21%	35	28.46%	49	21.40%	
6	31	29.25%	27	21.95%	58	25.33%	
7	41	38.68%	20	16.26%	61	26.64%	
Total	106	100%	123	100%	229	100%	
IMFI provides innovative financial services that are accessible to the public for achieving SDG-9. UM10							
1	0	0.00%	1	0.81%	1	0.44%	$\chi^2 = 17.1288^{***}$
2	1	0.94%	2	1.63%	3	1.31%	
3	1	0.94%	4	3.25%	5	2.18%	
4	14	13.21%	23	18.70%	37	16.16%	
5	13	12.26%	28	22.76%	41	17.90%	
6	24	22.64%	34	27.64%	58	25.33%	
7	53	50.00%	31	25.20%	84	36.68%	
Total	106	100%	123	100%	229	100%	
I recommend keeping funds and savings at IMFIs. UM12							
1	0	0.00%	2	1.63%	2	0.87%	$\chi^2 = 28.1371^{***}$
2	0	0.00%	0	0.00%	0	0.00%	
3	1	0.94%	7	5.69%	8	3.49%	
4	8	7.55%	18	14.63%	26	11.35%	
5	15	14.15%	37	30.08%	52	22.71%	
6	24	22.64%	30	24.39%	54	23.58%	
7	58	54.72%	29	23.58%	87	37.99%	
Total	106	100%	123	100%	229	100%	

Note: *** 1% Level of Significance

Source: Authors' calculations based on the survey questionnaire

Table 6 outlines questionnaire statements where respondents' responses exhibit significant differences, indicated by χ^2 for Model 3. The findings suggest a notable gap between those who understand the distinction between insurance and deposit insurance and those who actively seek information about deposit guarantee schemes. Preferences for information dissemination reveal that 75% of Groups A and B prefer information through IMFI managers, while 66% favor direct communication with branch representatives. This underscores the responsibility of management to ensure comprehensive understanding of deposit insurance schemes among all staff, as emphasized by Hall & Rosenberg (2010).

Table 6.
Results of Survey Questions Model 3

Respondent Characteristic	No Knowledge about IDI		Knowledge about IDI		All respondents		Statistical Test
	N	% to N	N	% to N	N	% to N	Chi-Square
Do you know the difference between regular insurance and deposit insurance Ins01							
Yes	5	26.32%	108	67.08%	113	62.78%	$\chi^2 = 12.0857^{***}$
No	14	73.68%	53	32.92%	67	37.22%	
Total	19	100%	161	100%	180	100%	
Have you ever searched for information on insurance/insurance on deposits? Ins02							
Yes	4	21.05%	103	63.98%	107	59.44%	$\chi^2 = 12.9872^{***}$
No	15	78.95%	58	36.02%	73	40.56%	
Total	19	100%	161	100%	180	100%	

Note: *** 1% Level of Significance

Source: Authors’ calculations based on the survey questionnaire

4.2. Assessment of Knowledge of Deposit Insurance in IMFIs

Table 7 presents the results from the first logit regression model, identifying determinants of knowledge regarding IMFIs and deposit insurance. The likelihood ratio (LR) statistic is 57.05, significant at the 1% level, validating the appropriateness of the logit model for estimating respondents’ knowledge probabilities. The results indicate that five factors—age, marital status, education, work experience, and health expenditures—significantly influence knowledge of deposit insurance in IMFIs.

Table 7.
Determinants of DIS Literacy and knowledge

Variable	Coefficient	SE	Z	P > z
Gender (Male)	0.1479	0.2654	0.56	0.577
Age	-0.4964	0.2744	-1.81	0.070*
Marital Status (Married)	0.8496	0.5154	1.65	0.099*
Child	0.2725	0.1754	1.55	0.120
Education	0.2212	0.1092	2.02	0.043**
Occupation (Govt Employees)	0.2874	0.7253	0.40	0.692
Job Years	0.2364	0.1420	1.66	0.096*
Family	-0.0066	0.0910	-0.07	0.942
Incperson	0.2039	0.1548	1.32	0.188
Income	-0.1069	0.1564	-0.68	0.494
Expenses	-0.0104	0.1831	-0.06	0.955
Job Status (No)	0.2937	0.3210	0.92	0.360
Health Expenses	-0.3455	0.1216	-2.84	0.004***

Table 7.
Determinants of DIS Literacy and knowledge (Continued)

Variable	Coefficient	SE	Z	P > z
Log likelihood	-200.039			
Number of obs.	405			
LR chi2(34)	57.05			
Prob > chi2	0.0000***			
Pseudo R2	0.1248			

Note: *** 1% Level of Significance

Source: Authors' calculations based on the survey questionnaire

In this model, the variables influencing knowledge of the Deposit Insurance System (DIS) in IMFIs include education level, work experience, and monthly expenditures. Notably, 33.58% of respondents possess a bachelor's degree, while 12.59% have a postgraduate degree. Additionally, 43.21% have over five years of work experience. The majority of respondents (37.28%) report monthly expenditures between 2 and 4 million IDR. The data shows that 97% of managers and 84% of members support implementing a DIS in IMFIs. Moreover, 63.51% of managers (who are also members) express willingness to pay for deposit insurance premiums. This consensus is in line with research by Iqbal & Mirakhor (2011), which highlights the necessity of deposit insurance to enhance trust in financial institutions.

The negative correlation associated with age suggests that older respondents tend to be less knowledgeable about DIS in IMFIs. This finding contradicts prior research by Fianto et al. (2019), which indicates that older individuals have better access to IMFIs. In contrast, coefficients for marital status, education, employment duration, and health expenditures are positively correlated with higher knowledge levels about DIS in IMFIs, supporting the findings of Bhattacharyya & Jagadeesh (2018) regarding the importance of education in financial literacy.

The importance of quality education and financial literacy is reinforced by the (Islamic Corporation of Development, 2020), ranking Indonesia highly in educational metrics related to Islamic finance. Generational demographics show that Generation Z (27.94%) and Millennials (25.87%) dominate Indonesia's productive age group, with 67% indicating awareness of insurance products, aligning with research by Nabila et al. (2023) on generational trends in financial awareness.

4.3. Assessment of Factors Influencing Social Perception of IMFIs

Table 8 illustrates the results of Model 2, which evaluates the factors affecting knowledge of IMFIs' products and services relevant to achieving SDG-9. The LR ratio for the chi-square test statistics is 57.05, statistically significant at the 1% level, validating the use of the logit model for estimating knowledge probabilities. Key determinants identified include education, work experience, family size, health expenditures, perceptions regarding the social objectives of IMFIs, and community inclinations toward IMFI services.

Table 8.
Assessment of Social impacts of IMFIs for achieving SDG-9

Variable	Coefficient	SE	Z	P > z
Gender (Male)	-0.2601	0.3894	-0.67	0.504
Age	0.1709	0.3648	0.47	0.64
Marital Status (Married)	-0.5507	0.655	-0.84	0.401
Child	0.0099	0.2481	0.04	0.968
Education	0.3509	0.1466	2.39	0.017**
Occupation (Govt Employees)	0.2496	0.9149	0.27	0.785
Job Years	-0.5008	0.1968	-2.54	0.011**
Family	-0.1943	0.1165	-1.67	0.096*
Incperson	0.1055	0.2159	0.49	0.625
Income	0.0351	0.2306	0.15	0.879
Expenses	-0.1319	0.2795	-0.47	0.637
Job Status (No)	-0.2312	0.5157	-0.45	0.654
Health Expenses	0.3532	0.2121	1.66	0.096*
Um01	0.6206	0.2971	2.09	0.037**
Um05b	-0.7868	0.2898	-2.72	0.007***
Um05c	0.7509	0.3223	2.33	0.020***
Um12	-0.3969	0.2298	-1.73	0.084*
Log likelihood	-107.6048			
Number of obs.	229			
LR chi2(34)	57.05			
Prob > chi2	0.0000***			
Pseudo R2	0.3194			

Note: *** 1% Level of Significance

Source: Authors' calculations based on the survey questionnaire

The findings reveal that respondents perceive the social mission of IMFIs to be clear and impactful, recognizing their role in meeting community needs and fostering social capital for SDG-9. This perception is consistent with the argument by Warde (2010) that IMFIs serve both economic and social functions, aligning with their dual objectives.

Some factors, including work experience, family size, and perceptions of IMFIs' social objectives, exhibit negative correlations with knowledge of IMFI products. This suggests that respondents with less job stability and smaller families tend to have greater awareness of IMFI offerings. The positive coefficient for Um01 indicates that those familiar with IMFI products expect them to fulfill a social role. Conversely, the negative coefficient for Um12 highlights that individuals with limited product knowledge are less likely to recommend deposits in IMFIs, which aligns with the findings of Zaman & Iqbal (2018) on the relationship between knowledge and trust in financial institutions.

4.4. Assessment of Knowledge About IDI

Table 9 displays results from the third model, which assesses factors influencing knowledge of Islamic Deposit Insurance (IDI). The LR ratio indicates a chi-square statistic of 28.43, significant at the 1% level, confirming the model's validity. The findings reveal that product/service managers, search history regarding Islamic deposit insurance, and willingness to pay a premium for deposit insurance are critical factors influencing knowledge of IDI.

Table 9.
Need for DIS and Willingness to Pay the Premium

Variable	Coefficient	SE	z	P > z
Product/Service Manager (Filter 2)	1.5174	0.8011	1.89	0.058*
Ins 02	1.2625	0.6183	2.04	0.041**
Ins 03	1.833	0.7873	2.33	0.020**
Log likelihood	-46.4671			
Number of obs.	180			
LR chi2(34)	28.43			
Prob > chi2	0.0000***			
Pseudo R2	0.2324			

Note: *** 1% Level of Significance

Source: Authors' calculations based on the survey questionnaire

Results from Model 3 indicate that respondents recognize the necessity of a DIS and express willingness to pay higher premiums for its implementation. This expectation is consistent with the literature emphasizing that members' willingness to pay is crucial for the sustainability of deposit insurance systems. Furthermore, the presence of a DIS may help prevent bank runs and reinforce the resilience of the microfinance sector, urging IMFIs to adhere to stricter monitoring and reporting standards, a point highlighted by Laeven & Valencia (2013).

V. MANAGERIAL IMPLICATIONS

This study's findings have far-reaching implications for academics, researchers, IMFI management, and regulatory authorities aiming to promote deposit insurance in the Islamic microfinance industry. The following are some managerial implications that can be considered. The government should recognize the significance of DIS for the Islamic microfinance industry and establish supporting laws and regulations. In comprehending DIS for the microfinance industry, the government, in this case, the Ministry of Cooperatives and SMEs (KEMENKOP UKM) and the Financial Service Authority (OJK), must develop human resources' ability and credentials to carry out the stricter supervisory duty. The government should also offer a legal cover and a governance mechanism (IT-based). All the above implications will go a long way for achieving SDG-9.

For the management of IMFIs and other microfinance institutions, they should prepare for human resource development through training and coaching. This study defines customers interested in keeping their deposits in IMFIs and those

willing to pay higher costs to protect their deposits. In the short term, Islamic Microfinance Institutions must take serious steps to develop media and facilities that can be used when liquidity is scarce. This can be accomplished, among other things, by establishing secondary cooperatives. Secondary cooperatives can help fulfill liquidity in the short term, preventing IMFIs from collapsing during financial shocks and rushes. IMFI managers must encourage the government through political lobbying so that this deposit insurance scheme for the Islamic microfinance industry can be implemented. This will necessitate a lengthy period of government persistence in putting pressure on relevant stakeholders to pass laws that support establishing a deposit insurance system.

Academics should perform further research as a provision for decision-making for related stakeholders. Academics can also assist the government and other relevant stakeholders in initiating various deposit insurance system schemes by considering their benefits and drawbacks. These forms or schemes can take the following forms: the first, under the authority of the existing *Deposit Insurance Corporation (Lembaga Penjamin Simpanan/LPS)*; the second, establishing a new deposit insurance corporation specifically for Microfinance Institutions, the third, establishing a formal Secondary Cooperative; and the last, the deposit insurance system is under a Private Insurance Company.

Furthermore, academics can assist the government in developing a sophisticated tool (or measure) that can be used to determine which IMFIs are eligible to participate in this system of deposit insurance programs. Furthermore, a study must be conducted to determine the ideal premium for the deposit insurance system, which is expected to be higher than the general banking permit because IMFIs are generally exposed to greater risks than banks.

This study bridges a critical research gap by providing a comprehensive analysis of DIS tailored for IMFIs in Indonesia. Academically, it integrates the TPB with empirical insights on depositor behavior, enriching the discourse on financial inclusion and stability in Islamic finance. For regulators, such as the Financial Services Authority (OJK) and the Indonesia Deposit Insurance Corporation (LPS), the findings offer actionable strategies for designing Shariah-compliant DIS frameworks that address the unique operational challenges of IMFIs. Additionally, the study provides Bank Indonesia with valuable data on depositor preferences, supporting policies that enhance public trust, financial system resilience, and the broader social mission of IMFIs. Collaborative efforts among stakeholders are recommended to align regulatory initiatives with both financial stability goals and the ethical principles of Islamic finance.

VI. CONCLUSION AND RECOMMENDATION

This study provides a comprehensive analysis of the necessity for a tailored DIS for IMFIs in Indonesia. Using logistic regression and discrete choice models, the findings highlight key factors such as education, work experience, and social perceptions influencing awareness and willingness to adopt DIS. Importantly, the study underscores the pivotal role of IMFIs in advancing financial inclusion and achieving SDG-9 by addressing the needs of underserved populations and supporting sustainable economic development.

The unique contributions of this research lie in its integration of Shariah-compliant principles with practical DIS frameworks, offering actionable insights into designing resilient and inclusive financial systems. By emphasizing the role of trust, ethics, and stakeholder engagement, the study bridges a critical gap in the literature on Islamic finance and financial stability. These findings not only enrich the discourse on IMFIs but also provide a foundation for aligning financial policies with global sustainable development goals.

Age and marital status, which are significant factors in the perception of the social roles of IMFIs for achieving SDG-9, are not significant factors in the knowledge of their products; here, family, education, years of experiences, and health expenses are significant factors, indicating that young, educated, family-oriented professionals primarily perceive the social roles of IMFIs. This study also determines that the perception of IMFIs and their products must be disseminated more among those over 40. The model 2 results also indicate that IMFIs should play a social role that is cost-effective and beneficial to the poor and disadvantaged, which will help in achieving SDG-9. IMFIs has a recognizable social mission and is adaptable in providing services based on needs, especially for the underprivileged. Respondents believe that saving money at IMFIs is important and necessary. The model 3 results suggest that respondents willing to accept deposit insurance or guarantee are also willing to pay a premium. The existence of a DIS for IMFIs can increase public confidence and stabilize the financial system. In addition, this system encourages IMFIs to adhere to stricter monitoring and reporting requirements, creating a domino effect in which IMFIs must be enhanced for the better.

This study offers several actionable recommendations for policymakers, practitioners, and researchers to enhance the effectiveness and adoption of a DIS tailored for IMFIs. For policymakers, it is imperative to design a regulatory framework that supports the implementation of a Shariah-compliant DIS. This could involve initiating pilot programs under the Indonesia Deposit Insurance Corporation (LPS) to evaluate the feasibility and effectiveness of such systems. Policymakers should also strengthen the legislative foundation for IMFIs to ensure they are adequately integrated into the national financial stability agenda while maintaining their dual roles as financial and social institutions.

Practitioners, particularly IMFI managers, must prioritize capacity building through targeted training programs that enhance their understanding of DIS and its practical applications within Shariah-compliant frameworks. In addition, raising public awareness about the benefits of DIS is crucial to building trust and fostering participation among communities with limited financial literacy. This can be achieved through localized campaigns and stakeholder engagement activities, particularly in underserved regions.

For researchers, this study highlights the need for further exploration of Shariah-compliant DIS models that align with the unique operational challenges of IMFIs. Future research should also include cross-country comparisons to draw lessons from successful implementations in countries like Malaysia or Pakistan. Additionally, studies could expand on stakeholder analyses to explore demographic variations in perceptions of and engagement with DIS, ensuring that future systems are both inclusive and effective.

This study has several limitations. First, the findings may not be generalized as it employs a small sample of respondents, mostly on Java Island. Second, the questionnaire does not assess the respondents' comprehension of the distinction between Islamic and conventional microfinance institutions, which is an area that must be explored further to expand IMFIs. Finally, this research does not include any specific IMFI product or plan that can address the needs of prospective customers. Further research recommendations include studies to develop alternative schemes for the formation of a deposit guarantee system at IMFI, determine the criteria for institutions that are eligible to be DIS members, and determine the form of savings (principal or voluntary savings) and memberships guaranteed by DIS that are *Shariah* compliant.

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REFERENCES

- Abdul Rahman, R., & Dean, F. (2013). Challenges and solutions in Islamic microfinance. *Humanomics*, 29(4), 293-306.
- Abdullah, R., & Ismail, A. G. (2014). Al-Tawhid in relation to the economic order of microfinance institutions. *Humanomics*, 30(4), 325-348.
- Acharya, S., & Dreyfus, J. F. (1989). Optimal bank reorganization policies and the pricing of federal deposit insurance. *The Journal of Finance*, 44(5), 1313-1333.
- Adnan, M. A., & Ajija, S. R. (2015). The effectiveness of baitul maal wat tamwil in reducing poverty: The case of Indonesian Islamic microfinance institution. *Humanomics*, 31(2), 160-182.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological bulletin*, 82(2), 261-277.
- Ali, A., Ali, A., Xiaoling, G., Sherwani, M., & Hussain, S. (2018). Expanding the theory of planned behaviour to predict Chinese Muslims halal meat purchase intention. *British Food Journal*, 120(1), 2-17.
- Ali, S. A., & Hassan, A. (2017). Employees' attitude towards Islamic banking: An exploratory study in Malaysia. *International Journal of Research in Social Sciences*, 7(4), 114-138.
- Amin, H. (2013). Some viewpoints of Islamic banking retail deposit products in Malaysia. *Journal of Internet Banking and Commerce*, 18(2), 1-13.
- Amin, H., & Hamid, M. R. A. (2018). Patronage factors of tawarruq home financing in Malaysia. *International Journal of Business and Society*, 19(3), 660-677.
- Amin, H., Rahim Abdul Rahman, A., & Abdul Razak, D. (2014). Consumer acceptance of Islamic home financing. *International Journal of Housing Markets and Analysis*, 7(3), 307-332.

- Anginer, D., Demirguc-Kunt, A., & Zhu, M. (2014). How does deposit insurance affect bank risk? Evidence from the recent crisis. *Journal of Banking and Finance*, 48, 312–321.
- Ben-Akiva, M. E., & Lerman, S. R. (1985a). *Discrete choice analysis: Theory and application to travel demand* (Volume 9). MIT Press Business Office.
- Bhattacharyya, S. S., & Jagadeesh, K. (2018). Working capital management of micro & small enterprises. *Indian Journal of Industrial Relations*, 54(1), 177–192.
- Boukhatem, J., & Ben Moussa, F. (2018). The effect of Islamic banks on GDP growth: Some evidence from selected MENA countries. *Borsa Istanbul Review*, 18(3), 231–247.
- Calomiris, C. W., & Jaremski, M. (2019). Stealing deposits: Deposit insurance, risk-taking, and the removal of market discipline in early 20th-century banks. *The Journal of Finance*, 74(2), 711–754.
- Cerrone, R. (2018). Deposit guarantee reform in Europe: does European deposit insurance scheme increase banking stability? *Journal of Economic Policy Reform*, 21(3), 224–239.
- Chiamonte, L., Girardone, C., Migliavacca, M., & Poli, F. (2020). Deposit insurance schemes and bank stability in Europe: How much does design matter?. *The European Journal of Finance*, 26(7-8), 589–615.
- Demirgüç-Kunt, A., & Detragiache, E. (2002). Does deposit insurance increase banking system stability? An empirical investigation. *Journal of Monetary Economics*, 49(7), 1373–1406.
- Demirgüç-Kunt, A., & Huizinga, H. (2004). Market discipline and deposit insurance. *Journal of Monetary Economics*, 51(2), 375–399.
- Demirgüç-Kunt, A., Kane, E., & Laeven, L. (2015). Deposit insurance around the world: A comprehensive analysis and database. *Journal of Financial Stability*, 20, 155–183.
- Donnelly, S. (2017). Advocacy coalitions and the lack of deposit insurance in Banking Union. *Journal of Economic Policy Reform*, 21(3), 210–223.
- Dubois, C. (2021). Deposit insurance and financial integration in the Eurozone: A DSGE model. *Economics Letters*, 207, 110032.
- Erick, E., Salim, U., Indrawati, N. K., & Sumiati, S. (2021). Bankruptcy risk of shariah banks in Indonesia. *Academy of Strategic Management Journal*, 20(3), 1–7.
- Fecht, F., Thum, S., & Weber, P. (2019). Fear, deposit insurance schemes, and deposit reallocation in the German banking system. *Journal of Banking & Finance*, 105, 151–165.
- Fendi, U. A. (2020). Toward Islamic deposit insurance model. *Journal of Islamic Accounting and Business Research*, 11(1), 130–151.
- Fianto, B. A., Gan, C., & Hu, B. (2019). Financing from Islamic microfinance institutions: Evidence from Indonesia. *Agricultural Finance Review*, 79(5), 633–645.
- Fianto, B. A., Gan, C., Hu, B., & Roudaki, J. (2018). Equity financing and debt-based financing: Evidence from Islamic microfinance institutions in Indonesia. *Pacific-Basin Finance Journal*, 52, 163–172.
- Fianto, B. A., Maulida, H., & Laila, N. (2019). Determining factors of non-performing financing in Islamic microfinance institutions. *Heliyon*, 5(8), e02301.
- Global Report on Islamic Finance. (2016). *Global Report on Islamic Finance*.

- Gómez-Fernández-Aguado, P., Partal-Ureña, A., & Trujillo-Ponce, A. (2016). A note on the adequacy of the EU scheme for bank recovery, resolution and deposit insurance in Spain. *Journal of Banking Regulation*, 17(4), 332-337.
- Gropp, R., & Vesala, J. (2004). Deposit insurance, moral hazard and market monitoring. *Review of Finance*, 8(4), 571-602.
- Hall, B. H., & Rosenberg, N. (2010). *Handbook of the economics of innovation* (Vol. 1). Elsevier.
- Haque, M. S., & Yamao, M. (2011). Prospects and challenges of Islamic microfinance programmes: A case study in Bangladesh. *International Journal of Economic Policy in Emerging Economies*, 4(1), 95-111.
- Hassan, A. (2015). Financial inclusion of the poor: From microcredit to Islamic microfinancial services. *Humanomics*, 31(3), 354-371.
- Hassan, A., & Saleem, S. (2017). An Islamic microfinance business model in Bangladesh: Its role in alleviation of poverty and socio-economic well-being of women. *Humanomics*, 33(1), 15-37.
- Ibrahim, M. A., Fisol, W. N. M., & Haji-Othman, Y. (2017). Customer intention on Islamic home financing products: An application of theory of planned behavior (TPB). *Mediterranean Journal of Social Sciences*, 8(2), 77-86.
- Ioannidou, V. P., & Penas, M. F. (2010). Deposit insurance and bank risk-taking: Evidence from internal loan ratings. *Journal of Financial Intermediation*, 19(1), 95-115.
- Iqbal, Z., & Mirakhor, A. (2011). *An introduction to islamic finance: Theory and practice*. Hoboken, NJ: John Wiley & Sons.
- Islamic Corporation of Development. (2020). *Islamic Finance Development Indicator Report 2020*.
- Ji, Y., Bian, W., & Huang, Y. (2018). Deposit insurance, bank exit, and spillover effects. *Journal of Banking & Finance*, 96, 268-276.
- Jumreornvong, S., Chakreyavanich, C., Treepongkaruna, S., & Jiraporn, P. (2018). Capital adequacy, deposit insurance, and the effect of their interaction on bank risk. *Journal of Risk and Financial Management*, 11(4), 79. <https://doi.org/10.3390/jrfm11040079>
- Khan, M. A., Siddique, A., & Sarwar, Z. (2020). Determinants of non-performing loans in the banking sector in developing state. *Asian Journal of Accounting Research*, 5(1), 135-145.
- Krimminger, M. H. (2008). The resolution of cross-border banks: Issues for deposit insurers and proposals for cooperation. *Journal of Financial Stability*, 4(4), 376-390.
- Kusairi, S., Sanusi, N. A., & Ismail, A. G. (2015). Impact of deposit insurance on banking industry of ASEAN countries: In quest of stability. *Banks and Bank Systems*, 10(4), 41-50.
- Kusairi, S., Sanusi, N. A., & Ismail, A. G. (2018). Dilemma of deposit insurance policy in ASEAN countries: Does it promote banking industry stability or moral hazard?. *Borsa Istanbul Review*, 18(1), 33-40.
- Laeven, L., & Valencia, F. (2013). Systemic banking crises database. *IMF Economic Review*, 61(2), 225-270.
- LeRoy, S. F., & Singhania, R. (2020). Deposit insurance and the coexistence of commercial and shadow banks. *Annals of Finance*, 16(2), 159-194.

- Li, X. (2010). *An empirical analysis of microcredit on China rural household*. Lincoln University.
- Li, X., Gan, C., & Hu, B. (2011). Accessibility to microcredit by Chinese rural households. *Journal of Asian Economics*, 22(3), 235-246.
- Lusardi, A., & Mitchell. (2013). The economic importance of financial literacy, teory and evidence. *Working Paper Series*, 18952.
- Mair, J., Mayer, J., & Lutz, E. (2015). Navigating institutional plurality: Organizational governance in hybrid organizations. *Organization Studies*, 36(6), 713-739.
- Masrizal, M., & Trianto, B. (2022). The role of PLS financing on economic growth: Indonesian case. *Journal of Islamic Monetary Economics and Finance*, 8(1), 49-64.
- Maulana, H., Razak, D. A., & Adeyemi, A. A. (2018). Factors influencing behaviour to participate in Islamic microfinance. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(1), 109-130.
- Mawardi, I., Widiastuti, T., Al Mustofa, M. U., & Prasetyo, A. (2020). Do Indonesian Islamic microfinance institutions need lender of the last resort?. *Al-Uqud: Journal of Islamic Economics*, 4(2), 235-249.
- Muller, G. E. (2018). An optimal investment strategy and multiperiod deposit insurance pricing Model for Commercial Banks. *Journal of Applied Mathematics*, 2018(1), 8942050.
- Muller, G. E. (2020). A multiperiod model for estimating the cost of deposit insurance under the Basel III minimum capital requirement. *Mathematical Methods in the Applied Sciences*, 43(8), 4995-5009.
- Nabila, F. S., Fakhri, M., Pradana, M., Kartawinata, B. R., & Silvianita, A. (2023). Measuring financial satisfaction of Indonesian young adults: A SEM-PLS analysis. *Journal of Innovation and Entrepreneurship*, 12(1), 16. <https://doi.org/10.1186/s13731-023-00281-4>
- Ngalawa, H., Tchana, F. T., & Viegi, N. (2016). Banking instability and deposit insurance: The role of moral hazard. *Journal of Applied Economics*, 19(2), 323-350.
- Noor, A. M., & Haron, M. N. (2018). A review of shariah principle applied for takaful benefits protection scheme and its application by malaysian deposit insurance cooperation (PIDM). *Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilisation (ISTAC)*, 135-147.
- Otoritas Jasa Keuangan. (2021). *Microfinance Institutions*.
- Qi, S., Kleimeier, S., & Sander, H. (2020). The travels of a bank deposit in turbulent times: The importance of deposit insurance design for cross-border deposits. *Economic Inquiry*, 58(2), 980-997.
- Quinlan, C. (2011). *Business research methods*. Cengage Learning EMEA.
- Rahim Abdul Rahman, A. (2010). Islamic microfinance: An ethical alternative to poverty alleviation. *Humanomics*, 26(4), 284-295.
- Train, K. E. (2009). *Discrete choice methods with simulation*. Cambridge: Cambridge University Press.
- Trinugroho, I., Pamungkas, P., Ariefianto, M. D., & Tarazi, A. (2020). Deposit structure, market discipline, and ownership type: Evidence from Indonesia. *Economic Systems*, 44(2), 100758.

- Umoh, G. S. (2006). Empirical investigation of access to micro-credit in an emerging economy: Evidence from Nigeria. *Journal of African Business*, 7(1-2), 89-117.
- Warde, I. (2010). *Islamic finance in the global economy*. Edinburgh University Press.
- Zaman, B., & Iqbal, J. (2018). Citizen journalism: An inquisitive analysis of the usage of mobile applications. *Putaj Humanities & Social Sciences*, 25(2), 61.
- Zauro, N. A., Saad, R. A. J., & Sawandi, N. (2016). The moderating effects of financial inclusion on Qardhul Hassan financing acceptance in Nigeria: A proposed framework. *International Journal of Economics and Financial Issues*, 6(7), 143-148.
- Zitouni, T., & Ben Jedidia, K. (2022). Does Islamic microfinance contribute to economic empowerment in Tunisia?: A case study of Zitouna Tamkeen. *Journal of Business and Socio-Economic Development*, 2(1), 67-81.

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