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Is The Pls Financing Scheme Better Than Non-Pls for Profitability Islamic Bank? Indonesian Case

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Abstract

The expanding presence and assets of Islamic banking within the national banking industry necessitate an analysis of Islamic banking's performance. This study examines the effects of various PLS and non-PLS financing schemes on the profitability of Islamic banks in Indonesia using the ARDL method and monthly data from 2009 to 2021. Results indicate that using the PLS financing scheme considerably positively impacts Islamic banking's profitability. Meanwhile, the non-PLS financing scheme has a significant negative impact on Islamic bank profitability. Intriguingly, the contribution of PLS financing to Islamic bank profitability is superior to that of non-PLS financing. In light of this crucial contribution, regulators need incentives and regulations to maximize PLS-based financing. Therefore, Islamic banks must implement concrete measures and initiatives to increase Islamic financing under PLS arrangements if Islamic finance is to grow significantly.

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1. Introduction

Islamic finance is the most advantageous form of financial intermediation for businesses, as fund providers share in the profit and loss of a project (Mohd. Yusof & Bahlous, 2013). This is consistent with both theoretical and empirical research. Theoretically, Chapra (1988), Hasan, and Dridi (2011) assert that the incorporation of the Islamic legal framework (Sharia) in finance and banking has increased economic output. Naqvi, Rizvi, Uqaili, and Chaudhry (2018) empirically examined whether Islamic institutions can contribute to global financial reintermediation. Using data from 486 conventional banks and 154 Islamic banks from 21 countries, it is determined that Islamic banks have a higher intermediation ratio than conventional banks over the entire sample period, and among CAMELS variables, bank asset and loan growth, loan-to-deposit ratio, and loans as a proportion of total assets are productive. Current Islamic financing principles can be divided into two categories: profit and loss sharing (PLS)-based financing (using mudharabah and musyarakah contracts) and non-PLS financing (using murabaha contracts, salam istishna, etc.). The introduction of Islamic banking replaced interest-based financing with PLS-based financing (Qureshi, (1946); Ahmad, (1952); Siddiqi, (1983); Khan, (1983); Aggarwal & Yousef, (1996); Ahmed, (2002); Zubir (2000); El-Hawary, Grais, & Iqbal, (2007) proposed the principles of mudharabah and musyarakah for Islamic banking. According to scholars, Islamic banking operations must be founded on profit sharing (PLS) (Chowdhury, Akbar, & Shoyeb, 2018).

However, non-PLS-based financing generally dominates Islamic financing principles (Chowdhury et al., 2018; Farihana & Rahman, 2021). Islamic banking theory is contradicted by the predominance of non-PLS-based financing over Islamic financing. By preventing new enterprises from investing in new ventures, it undermines its ability to generate substantial economic development impacts (Chowdhury et al., 2018). Popular financing mechanisms in financial institutions, including Islamic MFIs, continue to use non-PLS financing mechanisms, particularly for debt-type schemes such as murabaha and ijarah, according to Dasuki and Abdullah (2006). This method is popular because it is straightforward and practical for institutions. Non-PLS mechanisms are also less dangerous than PLS mechanisms. According to (Hatta, Dien, & Mohamad, 2014), there is a debate among Islamic scholars regarding the non-PLS financing methods offered by Islamic banking, which resemble conventional banking practices and will result in socio-economic failures.

The theoretical and practical concepts of PLS financing need to be separated by an obvious gap. Numerous attempts have been made to determine the relationship between these two categories of financing, such as comparing the two types of financing in the real sector (Masrizal & Trianto, 2022; Chowdhury et al., 2018; 2016). Few studies have examined the connection between the nature of Islamic bank financing and Islamic bank performance, such as credit risk (Abusharbeh, 2014; Akram & Rahman, 2018; Warninda et al., 2019; Farihana & Rahman, 2021; Mutamimah & Saputri, 2021). Moreover, existing research has been conducted in numerous nations and is explicitly predicated on risk sharing, which brings activities closer to the real economy. There is considerable uncertainty regarding the impact of Islamic banking on development. In light of the fact that Islamic institutions are



significantly more pervasive when viewed at the local level, it is prudent to conduct additional research.

As a country with a predominantly Muslim population (85%), Indonesia has the potential to become a hub for the development of the Islamic finance industry. According to Lebdaoui & Wild (2016), the proportion of the Muslim population in certain nations has a positive and statistically significant effect on the contribution of Islamic banking to the financial sector. In light of this, this paper investigates the impact of PLS and non-PLS financing on Islamic bank profitability using Indonesia as a case study. In recent years, Islamic finance in Indonesia has grown in popularity, as PLS financing has significantly increased. According to the Ooritas Financial Services report, the PLS financing scheme attained 47.3% in 2019. This ratio exceeds that of other nations with Islamic and conventional banks (Masrizal & Trianto, 2022). This remarkable accomplishment makes Indonesia an intriguing case study that will not only contribute to the limitations of the existing literature but also serve as a lesson for other nations moving in the same direction.

2. Literature Review

Agency theory explains the relationship between the principal (funder) and the agent (fund manager). According to Abdul-Rahman et al. (2014) this form of contract between the principal and the agent will give rise to conflicts or complex agency problems, including (1) the problem of non-financial benefits which will most likely be enjoyed by the agent exceeding the benefits which will be obtained by the principal (2) problems such as arising from the use of debt financing within the limited responsibility of shareholders, considering that there are incentives for this (3) information asymmetry problems, where the principal cannot observe the agent's actions. This problem requires the role of Islamic banks as financial intermediaries in distributing funds. A lack of transparency will trigger sensitive relationships that encourage principals to protect their investments (Haddad et al. 2020). Setyaningrum et al. (2022) state that agency conflicts occur because the principal wants to obtain large profits while the interested agent also wants to obtain financial compensation, so agents often make decisions that are not in the interests of the principal. In the case of PLS financing, the capital provider is a Sharia bank while the agent is the borrower or entrepreneur. Previous research explains several agency problems in PLS financing contracts such as information asymmetry where agents do not provide sufficient information regarding investments, high monitoring costs, or moral hazard when agents do not use funds appropriately (Shamsuddin and Ismail 2013). Agents will commit fraud due to a lack of control from the principal regarding ethics and ineffective profit sharing (Muhammad 2018). Therefore, Islamic banks must build mechanisms to reduce risk because of the tendency of parties to maximize their utility.

Current Islamic financing principles can be broadly classified into two categories: PLS-based financing (mudharabah and musyarakah) and non-PLS financing (murabaha, salam istishna, ijarah, etc.). The principle of profit sharing (PLS) is a defining characteristic and fundamental tenet of Islamic banking (Antonio, 2001). Previous scholars including (Qureshi, 1946.), (Ahmad, 1952), (Siddiqi, 1983), (Khan 1983), (Aggarwal & Yousef, 1996), (Ahmed 2002), (Zubir, 2000), and (El-Hawary et al., 2007) have discussed this contract for Islamic Finance



intermediation. These academics acknowledge that Islamic banking must be predicated on PLS. They contend that under the PLS system, Islamic banks' assets and liabilities are integrated in the sense that creditors share profits and losses with the bank, which in turn shares profits and losses with depositors (Chowdhury, Shoyeb, Akbar, & Islam, 2016). The fundamental Shariah principles governing Islamic finance advocate a profit-and-loss sharing structure as the optimal method of financing for achieving equity and socioeconomic objectives. In accordance with the financing model, capital providers (i.e., financiers) and business owners (i.e., borrowers) must be on an equal footing and share business risk through profits and losses. As intermediaries between depositors, investors, and business owners, these funds can finance working capital for industry, agriculture, and other legitimate investments and services without charging interest but by sharing profits. Moreover, sharing profits and losses can result in a more efficient and optimal resource allocation than an interest-based system. In addition, it is anticipated that this framework will substantially reduce income and wealth inequality and moderately control inflation (Zamil, 2014).

According to mudharabah principle, Islamic banks will function as partners with both depositors and entrepreneurs receiving funds. With depositors, the bank acts as mudharib, or manager, while savers act as sahiul mal, or funders. A mudharabah agreement was reached between the parties, which outlined the distribution of profits for each party (Antonio, 2001). In musyarakah, investors pool their funds to operate a business. Profits are divided among all investors in accordance with a predetermined ratio, whereas losses are divided rigorously in proportion to each partner's capital contribution (Chowdhury et al., 2018). The PLS mechanism can be the most effective means of empowering individuals enduring poverty and converting potential capital into profits. As a result of PLS mechanisms such as mudharabah and musyarakah, each client (entrepreneur) will not be burdened at the beginning of the project. Regarding the profit-sharing ratio, both parties will have input, and profit and loss will be based on business results (Fianto, 2017). The PLS paradigm distinguishes Islamic banking from conventional banking, thereby distinguishing Islamic finance from conventional banking (Mohd Nor & Ismail, 2020).

In the 1970s and 1980s, there was a significant increase in the development of alternative customer-service principles. These are known as non-PLS-based financing principles (Chowdhury et al., 2018). In Islamic finance, non-PLS contracts such as murabaha, salam, ijarah, and card al-hasan can be utilized. In the same way that murabaha can be used to purchase and resell goods in rural areas, ijara can be used to rent equipment or fields in rural areas; bai salam is also appropriate for farmers and merchants in agricultural areas. In addition, the card is suitable for new business owners who are just starting out (Fianto, 2017). Non-PLS-based financing is permitted as an interim measure. In practice, however, non-PLS-based principles are more prevalent than PLS-based financing. Among the aforementioned principles, murabaha is the foundation of Islamic finance and has gained immense popularity among Islamic institutions (Chowdhury et al., 2018).

The requirement for qualified personnel within the Islamic banking and finance system and Islamic principles is a major reason why PLS-based financing is uncommon in Islamic finance. A pool of knowledgeable personnel must appraise, monitor, evaluate, and audit the



proposed project in order to provide PLS financing effectively (Ahmed, 2008). Islamic finance, according to Farooq (2007), dislikes PLS scheme financing due to its risk-sharing nature. Nevertheless, (Febianto & Kasri, 2007) suggests that Islamic finance must have a well-verified blend of assets, such as short-term assets (trade financing with murabahah and salam contracts), medium-term assets (ijarah and Krishna), and long-term assets (real estate) (PLS partnerships). There are more short-term assets and less risk in Islamic finance (Aggarwal & Yousef, 2000; Febianto & Kasri, 2007). Despite the robust theoretical foundation of PLS-based financing, numerous academic and scientific studies have examined Islamic banks' reluctance to use PLS-based financing and their refuge in non-PLS schemes (Chowdhury et al., 2016). Nonetheless, more research on PLS and non-PLS schemes affecting the profitability of Islamic banks is required. Therefore, it is necessary to cover this gap in the literature, which serves as the primary motivation for this study.

The accelerated growth of Islamic banking has prompted much discussion. Meanwhile, considering that Islamic banking is still far from its ideal form, it is necessary to encourage further PLS financing; the second aspect centers on the relative contribution of PLS and non-PLS financing to the profitability of Islamic banks. The available literature related to the purpose of this study is considered to bridge the distance. This relationship between PLS and non-PLS financing has been explored in a macro context. Chowdhury et al. (2018) looked at PLS and non-PLS financing on Bangladesh's economic growth from 1984-2014 using the ARDL and Wavelet approaches, showing that PLS financing instruments had a positive relationship with economic growth. However, in contrast to the findings of Bougatef et al. (2021), examining the relationship between PLS and non-PLS financing schemes for the real sector in Malaysia using the ARDL approach found that PLS financing schemes are not significant for the real sector, while non-PLS have a significant effect on Malaysia's real sector.

Masrizal and Trianto (2022) tested PLS and non-PLS schemes for the Indonesian real sector from 2009-2018 using the ARDL approach. They discovered that PLS financing schemes made a more significant and significantly positive contribution to the real sector. Therefore, for Islamic finance to have a more significant growth impact, concrete steps, and initiatives must be implemented to increase Islamic finance under PLS arrangements. Islamic banks apply the concept of Sharia financing in their operations as Shariah compliance, where interest is prohibited in their financing activities. That is because interest rates are not permitted in Islam. Contemporary Islamic finance theory begins with the paper by Siddiqi (1983). He suggested that banking activities be based on profit sharing and interest avoidance. In general, the primary goal of any business is to maximize profits. Therefore, Islamic banks provide financing to attain income. However, profit returns depend on the use of Islamic financing and the degree of risk one may be exposed to.

Warinda et al. (2019) tested Mudharabah and Musyarakah financing on Islamic bank credit risk using 63 Islamic banks in the Middle East, South Asia, and Southeast Asia. They discovered that Mudharabah is not more risk than Musyarakah. Musyarakah financing has an inverse (non-linear) effect on Islamic bank credit risk, whereas Mudharabah financing



does not. Farihana and Rahman (2021) evaluated the profit and loss sharing (PLS) financing instrument to reduce the credit risk of Islamic banks using panel data from forty Islamic banks in twelve countries and the generalized method of moments (GMM) approach. The PLS financing instrument was discovered to reduce credit risk. This means that when Islamic banks utilize the PLS financing scheme, the risk of default will be reduced. Furthermore, Mutamimah and Saputri (2022) utilized static panel data regression to examine the impact of financing type on credit risk in Indonesia. They discovered that murabahah financing schemes positively affect credit risk, mudharabah financing schemes negatively affect credit risk, and musyarakah financing schemes have no effect on financial risk.

Profit sharing financing (PLS) in the context of Islamic finance is divided into two types of equity financing; First, Mudharabah, in which one party provides all the capital for the business, called shahibul maal, while the entrepreneur or mudharib contributes his labor and time to the project; Each party takes the agreed percentage of profit, and if the Mudarabah business suffers a loss, the financier (bank) bears all the monetary losses, while the manager does not (Masrizal et al., 2022). Second, a Musyarakah contract is a partnership transaction in which profits are shared in accordance with an agreement and losses are shared in accordance with equity participation (Masrizal et al., 2022). According to Kuppusamy et al. (2010), the use of profit-sharing financing in Islamic institutions is anticipated to generate a high level of profitability. In a similar vein, Ratnasari and Ryandono (2012) observed that profit-sharing financing has a substantial impact on profitability.

In contrast, developing debt financing (non-PLS) utilizes murabaha contracts. The Murabahah contract is a short-term financing scheme. Under this system, the seller discloses the product's actual cost and profit to the purchaser. It is possible to negotiate profit margins, and installment payments are the norm (Masrizal et al., 2022). Ratansari and Rayando (2012) reached the conclusion that Islamic banks are more profitable than Murabaha based on the level of risk associated with their investment initiatives. Furthermore, according to Abusharbeh (2014), non-PLS contracts have a positive impact on the profitability of Islamic banks. This paper continues this line of inquiry by analyzing the relative contribution of PLS and non-PLS financing to the profitability of Islamic banks, a topic for which there is a paucity of literature. Analyzing the case of Indonesia, we state the following hypothesis:

H1: PLS financing programs have a positive and significant impact on the short and long-term profitability of Islamic banks.

H2: Non-PLS financing schemes have a positive and significant impact on the short and long-term profitability of Islamic institutions.

H3: The PLS financing scheme has a greater impact on the short and long-term profitability of Islamic institutions than the non-PLS financing scheme.

3. Research Methods

The type of data utilized in this study is quantitative. In contrast, this study relies on secondary data, or data obtained indirectly through intermediary media. This study utilizes monthly Islamic banking data for Indonesia from January 2009 to December 2021. This



study's secondary data came from monthly reports of Islamic banking in Indonesia found on the <u>web ojk.go.id</u>.

Table 1 below provides brief definition of the variables used and their data sources.

Variable	Description	Source of Data
ROA	ROA: Comparison between net profit to	OJK
	total assets	
PLS	PLS is profit and loss sharing, the	OJK
	accumalation of total musharakah and	
	mudhorabah financing	
Non-PLS	Non-PLs is total financing of	OJK
	murabahah, ijarah, salam, istisna' etc	
FDR	FDR: Comparison of total volumes	OJK
	financing to total	
	receipt of funds	
BOPO	BOPO: Comparison of costs operational	OJK
	to operating income	
NPF	NPF: the proportion of troubling	OJK
	expenses to the total	
IPI	IPI: Industrial Production Index,	International Financial
	represents the real economic sector.	Statistics (IFS)-IMF
INF	INF: price stability indicator in the	Bank Indonesia
	economy	
Kurs	Kurs: money supply in the economy and	Bank Indonesia
	currency stability	

Table 1. Variables Operational

Source: Research Data

As utilized by previous researchers, the ROA ratio is employed to determine the profitability of banks (Yanikkaya et al., 2018; Hidayat et al., 2021; Yunan, 2021). The independent variable for Islamic banking is the total financing utilized by Islamic banks, which reflects their capacity to finance the actual sector of the economy. This financing is based on PLS and non-PLS Sharia bank portfolios. PLS is the aggregate of musyarkah and mudharabah contracts as an indicator of Islamic banks' use of profit sharing to raise capital. The remainder of Islamic bank financing is utilized for non-PLS contracts (murabahah, ijarah, salam, Krishna, and others). This study employs the Financing to Deposit Ratio (FDR), Non-Performing Financing (NPF), and Operating Costs and Operating Income as bank-specific variables (BOPO).

The Industrial Production Index (IPI) is the dependent variable, while the macro variables represent the actual economic sector. This measurement was also utilized in Kassim's earlier studies (2016). The inflation variable is utilized as an indicator of price stability in the economy, which in turn influences decisions regarding consumption, saving, and investment.



Previous investigations, including Kassim (2016), Lebdaoui & Wild (2016), and Abd. Majid & H. Kassim, have also utilized this measurement (2015). The exchange rate variable is used to determine the money supply in the economy and the stability of the currency. Earlier studies also employ this variable (Haron & Azmi, 2008; Masrizal & Trianto, 2022). The Islamic Banking Statistical Report (SPS) published by the Indonesian Financial Services Authority (OJK) and other variable data obtained from the databases of Bank Indonesia (BI) and the Central Bureau of Statistics were used to collect data for the development of Islamic finance (BPS).

Pesaran et al, (2001) ARDL method is used to examine the relationship between PLS and non-PLS financing and the profitability of Islamic banks in this study. The ARDL model approach is extensively utilized due to its numerous benefits. By disregarding the stationarity of each variable and obtaining estimates from the long-run equation, this method can be implemented. In other words, ARDL is applicable regardless of whether the variables are I(0), I(1), or conventionally coordinated (Pesaran et al., 2001). In addition, it discusses those variables associated with omission and autocorrelation and provides valid results (Narayan, 2005; Kassim, 2016). In this analysis, we predict the long-term ARDL model:

$$ROA_{t} = \beta_{0} + \sum_{i=1}^{p} \beta_{1}ROA_{t-i} + \sum_{i=0}^{p} \beta_{2}lnPLS_{t-i} + \sum_{i=0}^{p} \beta_{3}NONPLS_{t-i} + \sum_{i=0}^{p} \beta_{4}FDR_{t-i} + \sum_{i=0}^{p} \beta_{5}BOPO_{t-i} + \sum_{i=0}^{p} \beta_{6}NPF_{t-i} + \sum_{i=0}^{p} \beta_{7}LNIPI_{t-i} + \sum_{i=0}^{p} \beta_{8}INF_{t-i} + \sum_{i=0}^{p} \beta_{9}kurs_{t-i} + \mu t$$
(1)

Where:

- $\beta_0 \beta_8 =$ Regression Coeficient
- ROA = Return on Assets
- FDR = Financing to Deposit Ratio
- NPF = Non-Performing Financing
- BOPO = Operating Costs and Operating Income
- **IPI** = Industrial Production index
- INF = Inflation
- Kurs = Rupiah exchange rate against the Dollar

At the same time, the short-term coefficient is calculated by analyzing the resulting error correction model. The error correction paradigm makes it possible to distinguish between long-term and short-term Granger causality. The specific coefficients of the lagging term reflect the short-run dynamics, whereas the error-correction term reveals the long-run causality. If the coefficient of each lag-free variable is significant, it indicates a short-term cause, whereas a negative and statistically significant error correction term indicates a long-term cause (Kassim, 2016). Using the Akaike Information Criterion (AIC), the optimal length of the long-run coefficient was determined. Here is the ARDL model that we created to examine short-term relationships:



$$\Delta ROA_{t} = \beta_{0} + \sum_{i=1}^{p} \beta_{1} \Delta ROA_{t-i} + \sum_{i=0}^{p} \beta_{2} \Delta lnPLS_{t-i} + \sum_{i=0}^{p} \beta_{3} \Delta NONPLS_{t-i} + \sum_{i=0}^{p} \beta_{4} \Delta FDR_{t-i} + \sum_{i=0}^{p} \beta_{5} \Delta BOPO_{t-i} + \sum_{i=0}^{p} \beta_{6} \Delta NPF_{t-i} + \sum_{i=0}^{p} \beta_{7} \Delta LNIPI_{t-i} + \sum_{i=0}^{p} \beta_{8} \Delta INF_{t-i} + \sum_{i=0}^{p} \beta_{9} \Delta kurs_{t-i} + \mu t$$
(2)

4. Results

Before applying the ARDL method, the prerequisites for understanding the order of variable integration must be met. Although the ARDL method can be applied to integrated variables at levels I(0) and I(1), a stationarity test must be conducted to ensure that there are no integrated variables at level 2 or I(2) (2). Kassim (2016) observes that the presence of variable I(2) renders Pesaran et al. (2001)'s F-statistic invalid. This exam utilized the Augmented Dickey-Fuller (ADF) test for this reason. The test outcomes are shown in Table 1. The ROA, LNPLS, and LNNPLS variables have unit roots at the level, as shown in Table 1. This indicates that the variables are stable. So integrated in sequence (0). Other variables, however, including NPF, FDR, IPI, INF, and EXCHANGE, are not stationary at the level. Nevertheless, after taking the first difference, they become stationary, implying order I. (1). This combination of variables I(0) and I(1) justifies the selection of the ARDL cointegration method.

Variables	Level		First differe	ence	Order of Integration
	t statistik	p-value	t statistik	p-value	I(0)
ROA	-7.909218***	0.000			I(0)
LNPLS	-2.957613**	0.041			I(0)
LNNPLS	-6.617112***	0.000			I(0)
NPF	-1.897473	0.332	-4.046198***	0.001	I(1)
FDR	-2.222562	0.199	-12.68269***	0.000	I(1)
IPI	-1.418545	0.571	-11.98167***	0.000	I(1)
INF	-2.476389	0.123	-8.631027***	0.000	I(1)
KURS	-0.797737	0.816	-13.15216***	0.000	I(1)

Table 2. Result Of Unit Root Test.

*** *p*<.01, ** *p*<.05, **p*<.1

Source: Research Result

The ARDL bounds test was utilized to confirm the existence of a long-term relationship between profitability and the selected predictor variable, with the results summarized in Table 2. The F-statistic of 5.810642 was more significant for the model than the upper bound values of 2.96, 2.32, and 2.03 for 1%, 5%, and 10%, respectively. These findings suggest a



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long-term association between profitability (ROA), ROA, LNPLS, LNNPLS, NPF, FDR, IPI, INF, and KURS in Indonesia from January 2009 to December 2021. Following cointegration, the optimal model for estimating the long-run equilibrium relationship must be selected. The Akaike Information Criteria is depicted in Figure 1. (AIC). AIC selects the optimal model based on the following criteria: (5,0,0,2,6,0,0,0).s

Table 3. Cointegration Test				
F-Statistic Value	Number of	Level significant	I(0)	I(1)
	Variables	-		
5.810642	7	1%	2.96	4.26
		5%	2.32	3.5
		10%	2.03	3.13

Note: The critical values are based by Pesaran, Shin & Smith (2001), table 3 unrestricted intercept and no trend Source: Research Data

This research aims to examine the two types of financing utilized by Islamic banks and their impact on Islamic banks' profitability. This study can determine the elasticity of long-term and short-term variable coefficients by employing the ARDL limit test to demonstrate the existence of long-term cointegration between variables. The outcomes of long- and short-term dynamics are shown in Tables 3 and 4. The results of Table 3 indicate that PLS financing has a 5 percent long-term positive impact on the profitability of Islamic banks in Indonesia. Thus, an increase in PLS financing will result in a 1.4% increase in Islamic bank profitability. Interestingly, Islamic bank financing with non-PLS contracts has a substantial negative impact of 1 percent on the long-term profitability of Islamic banks in Indonesia. This means that an increase in financing with non-PLS contracts will result in a -2.2% decrease in Islamic bank financing in Indonesia.

Long-term, bank control variables such as NPF have a 1 percent negative impact on the profitability of Islamic institutions in Indonesia. This indicates that an increase in the NPF ratio will result in a -0.45% decrease in the profitability of Islamic banks in Indonesia. Long-term effects of the FDR variable on the profitability of Islamic institutions in Indonesia are 1% positive and significant. When the FDR increases by 1%, the profitability of Islamic institutions in Indonesia will increase by 0.08%. Lastly, macro variables such as inflation have a substantial negative impact of 10% on the long-term profitability of Islamic banks in Indonesia, where a 1% increase in inflation reduces Islamic bank profitability by -0.07%.

Table 4's error correction term (ECM) model is used to assess the dynamics of short-term Islamic bank profitability as the final stage in the ARDL testing procedure. The coefficient of ECT is negative and statistically significant at the 1% level, while the error coefficient is -0.816. This demonstrates that the profitability of Islamic institutions adjusts to restore long-term equilibrium storage. In particular, 81.6% of the deviation was corrected during the subsequent period. The significance of ECT also demonstrates the Granger causality of the two categories of Islamic financing and other variables on Islamic bank profitability over the long term.



Regressors	Coefficients	t-Statistik	
LNPLS	1.378**	2.1063	
LNNPLS	-2.242***	-5.7059	
NPF	-0.449***	-4.553	
FDR	0.0833***	5.2886	
INF	-0.073*	-1.671	
IPI	0.011	1.5861	
KURS	0.69	0.53	
Intercept	22.289210***	53.932322	
Diagnostic test statistics			
		1.350454	
Serial Correlation		-0.2628	
Heteroscedasticity		1.0 11214(0.4539)	
D-W		1.889361	
*** <i>p</i> <.01, ** <i>p</i> <.05, * <i>p</i> <.1 Source: Research Data			

Table 4. ARDL Model (Estimation of Long-Term Relationships)

Table 5. Short Term Estimation

	Model FN (Model I)		
Regressors			
	Coefficients	t-Statistik	
DLNPLS	1.123*	1.8577	
DLNNPLS	-1.831***	-4.0019	
DNPF	-0.367***	-4.3784	
DFDR	0.068***	3.7326	
DINF	-0.059	-1.6369	
DIPI	0.009*	1.6672	
DKURS	0.5637	0.5392	
ECM (-1)	-0.816***	-7.0005	

*** *p*<.01, ** *p*<.05, * *p*<.1

Source: Research Data

This study includes numerous diagnostic tests to evaluate the model's dependability and stability. As shown in Table 3, the results of all diagnostic tests for the ARDL model lack serial correlation, non-normality, and heteroscedasticity. In addition, as stated by Pesaran and



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Pesaran (1997), CUSUM is conducted to evaluate the structure's stability. As depicted in figures 1 and 2, the CUSUM test demonstrates that the short-run coefficients fall within the plot's critical limits. This indicates that the test model is within the 5% significance level over time, validating the stability of the ARDL model.

According to agency theory, banks need to take preventive action to minimize credit risk from disbursed PLS financing so companies need to make efforts such as checks and balances, financial reporting standards, and development by credit regulations (Nugraheni and Alimin 2022). On the other hand, Islamic banks must also emphasize credit risk identification and monitoring and control processes to manage risk (Noman et al. 2015). However, Islamic banks still have to pay attention to financing selection standards so that the financing distributed is according to the bank's needs. Current Islamic financing principles fall into two main categories: PLS-based financing (mudharabah and musyarakah) and non-PLS financing (murabaha, salam istishna, ijarah, etc.). The principle of profit sharing (PLS) is a defining feature and fundamental tenet of the operation of Islamic institutions (Antonio, 2001). This study examines the effect of Islamic bank financing form on Islamic bank profitability. On both the short and long term, the PLS financing instrument had a considerable positive impact on the profitability of Islamic banks in Indonesia. The PLS mechanism can provide the optimal solution for empowering individuals experiencing poverty and maximizing their potential capital. As a result of PLS mechanisms such as mudharabah and musyarakah, each client (entrepreneur) will not be burdened at the beginning of the project. Regarding the profit-sharing ratio, both parties will have input, and profit and loss will be based on business results (Fianto, 2017).

PLS is only utilized at the MSME and corporate levels due to its profit-sharing nature. Only consumers with a high rating/eligibility are granted access. In the PLS financing mechanism, such as the mudharabah-based principle, Islamic banks will function as partners with both depositors and fund-receiving entrepreneurs. With depositors, the bank acts as mudharib, or manager, while savers act as sahiul mal, or funders. A mudharabah agreement was reached between the parties, which outlined the distribution of profits for each party (Antonio, 2001). In musyarakah, investors pool their funds to operate a business. Profits are divided among all investors in accordance with a predetermined ratio, whereas losses are divided rigorously in proportion to each partner's capital contribution (Chowdhury et al., 2018). The partnership between the Islamic bank and the client enables the Islamic bank to monitor and supervise the business activities of the customer. Involving Islamic institutions in the monitoring of a company's business activities can also reduce asymmetric information, adverse selection, and moral hazard. Our findings are also consistent with the findings of Mutamimah and Saputri (2022), who found that PLS scheme financing, such as mudharabah, increases credit risk. As a result, when financing using PLS is increased, credit risks, such as default, will be reduced, thereby enhancing the profitability of Islamic banks. Islamic banking is distinguished from conventional banking by the PLS model (Mohd Nor & Ismail, 2020). According to Masrizal and Trianto (2022), financing with a PLS scheme has a greater impact on the real sector in Indonesia than non-PLS financing.

In contrast, our analysis revealed that the Non-PLS financing mechanism has a substantial negative impact on the short- and long-term profitability of Islamic banks. It is



not surprising that the Non-PLS financing mechanism generates asymmetric information, that the selection of creditors is detrimental, that debtors are unable to repay their obligations, and that there are even defaults that increase financing risk, thereby decreasing the profitability of Islamic institutions. In addition, Islamic banks have no authority over customer activities in non-pls contracts, such as murabahah financing, which is founded on sale and purchase agreements. Thus, asymmetric information encourages borrowers to engage in irregularities and opportunistic behavior, which can increase financing risk. This result is consistent with Mutamiah and Saputri's (2012) assertion that non-pls mechanisms, such as murabaha, have a substantial effect on financing risk. In other terms, increasing the non-pls financing mechanism will increase financing risk and decrease Islamic bank profitability.

In addition, the non-pls financing mechanism can inhibit the expansion of the real estate industry by discouraging entrepreneurs from investing in new projects. It is believed that non-pls-based financing is comparable to conventional banking practices. Islamic scholars are divided on the idea that this type of financing can stimulate socioeconomic failures, particularly those that contribute to inflationary pressures and diminish the purchasing power of people, particularly those living in poverty (Chowdhury et al. 2018). According to Chowdhury et al. (2018), non-PLS financing has a negative impact on economic development. When the economy is stable, the efficiency of the Islamic banking sector will decrease Islamic banks' profitability.

5. Conclusion and Suggestion

This paper investigates the influence of PLS and non-PLS financing instruments on Islamic bank profitability. This study determined, using the ARDL method, that the PLS financing instrument has a considerable positive impact on the short- and long-term profitability of Islamic banks. Meanwhile, non-PLS financing instruments have a negative impact on the short- and long-term profitability of Islamic institutions. PLS financing is the most conducive to economic development by involving actual sector activities through investment in productive initiatives with efficient use of funds and increasing the efficiency of resource allocation, thereby increasing Islamic banks' profitability. For the long-term benefit and sustainability of Islamic banking, Islamic banks must undergo a paradigm shift from the function of financial intermediaries to entrepreneurship with profit-sharing contracts (PLS). The PLS mechanism can be the most effective means of empowering individuals enduring poverty and converting potential capital into profits. As a result of PLS mechanisms such as mudharabah and musyarakah, each client (entrepreneur) will not be burdened at the outset of the project. Regarding the profit-sharing ratio, both parties will have a say, and profit and loss will be determined by the performance of the business. In addition, the profit-sharing principle utilized by Islamic banking is an indicator of an economy's increased output. Profit sharing will increase both investment and production activity.

Therefore, decision-makers, regulators, and the Islamic banking sector must increase the proportion of PLS-based financing. Non-PLS-based financing should be one of many financing models for Islamic banks, so that PLS financing can progressively replace non-



PLS portfolios. In addition, Islamic banks provide training to their employees in order to increase the quality and quantity of their human resources and ensure that they have adequate knowledge of PLS-based financing. For regulators to utilize the PLS financing scheme to its fullest extent, there must be incentives and regulations in place. Thus, a breakthrough is required to increase PLS financing for the Islamic finance industry and banking, particularly in order to attain Islamic economic objectives.

References

- 1. Abd. Majid, M. S., & H. Kassim, S. (2015). Assessing the contribution of Islamic finance to economic growth: Empirical evidence from Malaysia. Journal of Islamic Accounting and Business Research, 6(2), 292–310. https://doi.org/10.1108/JIABR-07-2012-0050
- 2. Abduh, M., & Azmi Omar, M. (2012). Islamic banking and economic growth: the Indonesian experience. International Journal of Islamic and Middle Eastern Finance and Management, 5(1), 35–47. https://doi.org/10.1108/17538391211216811
- 3. Abduh, M., & Chowdhury, N. (2012). Does Islamic banking matter for economic growth in Bangladesh? Journal of Islamic Economics, Banking and Finance, 8(3), 104–113.
- 4. Abdul-Rahman, Aisyah et al. 2014. "Failure and Potential of Profit-Loss Sharing Contracts: A Perspective of New Institutional, Economic (NIE) Theory." Pacific Basin Finance Journal 28: 136–51
- 5. Aggarwal, R. K., & Yousef, T. (1996). Islamic Banks and Investment Financing. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.845
- 6. Aggarwal, R. K., & Yousef, T. (2000). Islamic Banks and Investment Financing. Journal of Money, Credit and Banking, 32(1), 93. https://doi.org/10.2307/2601094
- 7. Ahmad, S.M. (1952), Economics of Islam, Institute of Islamic Culture, Lahore
- 8. Ahmed, H. (2002), "A microeconomic model of an Islamic bank", No. 54, The Islamic Research and Teaching Institute (IRTI), Jeddah.
- 9. Ansari, S. (2013). The Role of Islamic Banking Industry in the Economic Growth of Pakistan. Available at SSRN 1312382
- 10. Archer. S., Karim, R.A.A., and Sundararajan, V. (2010). Supervisory, Regulatory and Capital Adequacy Implications of Profit-Sharing Investment Account in Islamic Finance. Journal of Islamic Accounting and Business Research. Vol.1, No.1., pp.10-31.
- Asma'Rashidah Idris, F.F.A., Asari, H., Taufik, N.A.A., Salim, N.J., Mustaffa, R. and Jusoff, K. (2011), "Determinant of Islamic banking institutions' profitability in Malaysia", World Applied Sciences Journal, Vol. 12, pp. 1-7.
- 12. Asutay, M. and Izhar, H. (2007), "Estimating the profitability of Islamic banking: evidence from bank Muamalat Indonesia", Review of Islamic Economics, Vol. 1 No. 2, pp. 17-29.
- Berger, A.N. and Udell, G.F. (2002), "Small business credit availability and relationship lending: the importance of bank organizational structure", The Economic Journal, Vol. 112 No. 477, pp. 32-53
- 14. BI. (2009). Laporan Perekonomian Indonesia Tahun 2008. Avalaibel at : https://www.bi.go.id/id/publikasi/laporantahunan/perekonomian/Pages/LPI_2008.aspx.



- Bougatef, K., Nakhli, M.S. and Mnari, O. (2020). The Nexus Between Islaminc Banking and Industrial Production, Empirical Evidence From Malaysia. ISRA International Journal of Islamic Finance, Vol.12, No.1, pp.103-114. https://doi.org/10.1108/IJIF-05-2018-0052
- 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. https://doi.org/10.1016/j.bir.2017.11.004
- 17. Bourke, Philip. 1989. "Concentration and Other Determinants of Bank Profitability in Europe, North America and Australia." Journal of Banking and Finance 13(1):65–79. doi: 10.1016/0378-4266(89)90020-4.
- Chowdhury, M. A. F., Akbar, C. S., & Shoyeb, M. (2018). Nexus between risk sharing vs non-risk sharing financing and economic growth of Bangladesh: ARDL bound testing and continuous wavelet transform (CWT) approach. Managerial Finance, 44(6), 739– 758. https://doi.org/10.1108/MF-12-2016-0371
- Chowdhury, M. A. F., Akbar, C. S., & Shoyeb, M. (2018). Nexus Between Risk Sharing vs Non-Risk Sharing Financing and Economic Growth of Bangladesh: ARDL Bound Testing and Continuous Wavelet Transform (CWT) Approach. Managerial Finance, 44(6), 739–758. https://doi.org/10.1108/MF-12-2016-0371
- Chowdhury, Mohammad Ashraful Ferdous, and Mohamed Eskandar Shah Mohd Rasid. 2016. Determinants of Performance of Islamic Banks in GCC Countries: Dynamic GMM Approach.
- 21. Dusuki, W., & Abdullah, I. (2006). The ideal of Islamic banking: chasing a mirage Symposium conducted at the meeting of the INCEIF Islamic Banking and Finance Educational Colloquium, Kuala Lumpur, 3rd-5th April.
- 22. El-Hawary, D., Grais, W., & Iqbal, Z. (2006). Diversity in the regulation of Islamic Financial Institutions. Quarterly Review of Economics and Finance, 46(5), 778–800. https://doi.org/10.1016/j.qref.2006.08.010
- 23. Farahani, G. Yazdan, S. and Hossein, S.M. (2012). Analysis of Islamic Bank's Financing and Economic Growth : Case Study Iran dan Indonesia. Journal of Economic Cooperation and Development, 33(4), pp.1-14.
- 24. Farooq, M. O. (2007). Partnership, Equity-Financing and Islamic Finance: Whither Profit-Loss Sharing? International Association for Eslamic Economics, 11(Special Issue), 67–88.
- 25. Febianto, I., & Kasri, R. A. (2012). Why Do Islamic Banks Tend to Avoid Profit and Loss Sharing Arrangements? SSRN Electronic Journal, 2007, 0–14. https://doi.org/10.2139/ssrn.1672127
- 26. Fianto, B. A. (2017). An Empirical Analysis of Islamic Microfinance Institution s ' Performance in Indonesia, Dissertasion. 1–173.
- 27. Fianto, B. A. (2017). An Empirical Analysis of Islamic Microfinance Institution s ' Performance in Indonesia, 1–173.
- 28. Furqani, H., & Mulyany, R. (2009). Islamic banking and economic growth: Empirical evidence from Malaysia. Journal of Economic Cooperation and Development, 30(2), 59–74.
- 29. GIFR. (2019). Islamic Finance Country Index IFCI 2019. Available at : http://www.gifr.net/publications/gifr2019/ifci.pdf. Access Date : October 24th, 2020.



- Goaied, M. and Sassi, S. (2012). Financial Development, Islamic Banking and Economic Growth Evidence from MENA Region. International Journal of Business Science and Applied Management, 4(2): 105 – 128.
- Grassa, R., & Gazdar, K. (2014). Financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance. International Journal of Social Economics, 41(6), 493–514. https://doi.org/10.1108/IJSE-12-2012-0232
- 32. Hachicha, N., & Ben Amar, A. (2015). Does Islamic bank financing contribute to economic growth? The Malaysian case. International Journal of Islamic and Middle Eastern Finance and Management, 8(3), 349–368. https://doi.org/10.1108/IMEFM-07-2014-0063
- Hamadi, H., & Bassil, C. (2015). Financial Development and Economic Growth in the MENA Region. Comparative Economic Studies, 57(4), 598–622. https://doi.org/10.1057/ces.2015.21
- 34. Hatta, M. F. M., Dien, M. izzi, & Mohamad, S. (2014). Examining the Impact of Islamic Products on Debt Expansion and Inflationary Pressure. International Interdisciplinary Journal of Scientific Research, 1(2), 13–28.
- 35. Hussien, M.E., Alam, M.M., Murad, M.W., and Wahid, A.N.M. (2017). The Performance of Islamic Banks During the 2008 Global Financial Crisis : Evidence from the Gulf Cooperation Council Countries. Journal of Islamic Accounting and Business Research. https://doi.org/10.1108/JIABR-01-2017-0011
- 36. IFSB. (2019). Islamic Fiancial Sercives Industry Stability Report. Malaysia : Islamic Financial Service Boards
- 37. Imam, P., & Kpodar, K. (2016). Islamic banking: Good for growth? Economic Modelling, 59, 387–401. https://doi.org/10.1016/j.econmod.2016.08.004
- 38. Iqbal, Z. and Mirakhor, A. (2007). An Introduction to Islamic Finance, Theory and Practice. John Wiley & Son (Asia) Pte Ltd
- 39. Kahf, M. and Khan, T. (1992). Principles of Islamic Finance, A Survey. IRTI : Research Paper
- 40. Karim, B.A., Lee, W.S., Karim, Z.A., and Jais, M. (2012). The Impact of Subprime Mortgage Crisis on Islamic Banking and Islamic Stock Market. Procedia-Social and Behavioral Sciences 65, 668-673. Elsevier. https://doi.org/10.10160/j.sbspro.2012.11.182
- 41. Kassim, S. (2016). Islamic finance and economic growth: The Malaysian experience. Global Finance Journal, 30, 66–76. https://doi.org/10.1016/j.gfj.2015.11.007
- 42. Kassim, S. (2016). Islamic finance and economic growth: The Malaysian experience. Global Finance Journal, 30, 66–76. https://doi.org/10.1016/j.gfj.2015.11.007
- 43. Khan, F. (2010). How 'Islamic' is Islamic Banking?. Journal of Economic Behaviour & Organization, 76(3), 805 -820. https://doi.org/10.1016/j.jebo.2010.09.015.
- 44. Khan, M.A. (1983), Islamic Economics: Annotated Sources in English and Urdu, Vol. I, The Islamic Foundation, Leicester.
- 45. Lebdaoui, H., & Wild, J. (2016). Islamic banking presence and economic growth in Southeast Asia. International Journal of Islamic and Middle Eastern Finance and Management, 9(4), 551–569. https://doi.org/10.1108/IMEFM-03-2015-0037



- 46. Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. Journal of Economic Literature, 35(2), 688–726.
- 47. M. Kabir Hassan, Ph. D., and Ph. .. Abdel-Hameed M. Bashir. 2557. "Determinants of Islamic Banking Profitability." 4(1):88–100.
- 48. 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.
- 49. Miranda-Lopez, J. and Valdovinos-Hernandez, I. (2019). The Impact of Global Financial Crisis of 2008 onEarning Quality in Mexico. Journal of Accounting in Emerging Economies, Vol9, No.3, pp.407-421.https://doi.org/10.1108/JAEE-08-2016-0071
- 50. Mohd Nor, A., & Ismail, S. (2020). Profit and Loss Sharing (PLS) and Non-PLS Financing in Malaysia: Which One Should Be the One? KnE Social Sciences, 2020, 14–25.
- 51. Mohd. Nor, A., & Ismail, S. (2020). Profit and Loss Sharing (PLS) and Non-PLS Financing in Malaysia: Which One Should Be the One? KnE Social Sciences, 2020, 14–25. https://doi.org/10.18502/kss.v4i6.6585
- Mohd. Yusof, R., & Bahlous, M. (2013). Islamic banking and economic growth in GCC & East Asia countries: A panel cointegration analysis. Journal of Islamic Accounting and Business Research, 4(2), 151–172. https://doi.org/10.1108/JIABR-07-2012-0044
- 53. Mohd. Zamil, N.A. (2014). An Empirical Investigation Into the Problems and Challenges Facing Islamic Banking in Malaysia. Cardiff University : Ph.D Thesis.
- Mohsen, A. S., Chua, S. Y., & Sab, C. N. C. (2015). Determinants of industrial output in Syria. Journal of Economic Structures, 4(1). https://doi.org/10.1186/s40008-015-0030-7
- 55. Muda, M., Shaharuddin, A. and Embaya, A. (2013), "Comparative analysis of profitability determinants of domestic and foreign Islamic banks in Malaysia", International Journal of Economics and Financial Issues, Vol. 3 No. 3, pp. 559-569.
- 56. Mutamimah, M. and Saputri, P.L. (2023), "Corporate governance and financing risk in Islamic banks in Indonesia", Journal of Islamic Accounting and Business Research, Vol. 14 No. 3, pp. 436-450. https://doi.org/10.1108/JIABR-09-2021-0268
- Naqvi, B., Rizvi, S. K. A., Uqaili, H. A., & Chaudhry, S. M. (2018). What enables Islamic banks to contribute in global financial reintermediation? Pacific Basin Finance Journal, 52, 5–25. https://doi.org/10.1016/j.pacfin.2017.12.001
- Narayan, P. K. (2005). The saving and investment nexus for China: Evidence from cointegration tests. Applied Economics, 37(17), 1979–1990. https://doi.org/10.1080/00036840500278103
- 59. Naz, A.A. and Gulzar, S. (2020). Impact of Islamic Finance on Economic Growth : An Empirical Analysis of Muslim Contries. The Singapore Economic Review. https://doi.org/10.1142/S0217590819420062.
- 60. Nugraheni, Peni, and Istiqomah Nur Alimin. 2022. "Factors Influencing PLS Financing: The Perspective of Indonesian Islamic Banks Employees." PSU Research Review 6(2): 77–89.



- 61. OJK. (2020). Snapshot Perbankan Syariah Maret 2020. https://www.ojk.go.id/id/kanal/syariah/berita-dan-kegiatan/publikasi/Pages/Snapshot-Perbankan-Syariah-Indonesia-Maret-2020.aspx. Access Date : October 24, 2020.
- 62. Panda, Brahmadev, and N. M. Leepsa. 2017. "Agency Theory: Review of Theory and Evidence on Problems and Perspectives." Indian Journal of Corporate Governance 10(1): 74–95.
- 63. Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(3), 289–326. https://doi.org/10.1002/jae.616
- 64. Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(3), 289–326. https://doi.org/10.1002/jae.616
- 65. Price, G.N. and Elu, J.U. (2014). Does Regional Currency Integration Ameliorate Global Macroeconomic Shock in Sub-Saharan Africa ? : The Case of 2008-2009 Global Finacial Crisis. Journal of Economic Studies, Vol.41, No.5, pp.737-750.
- 66. Qureshi, A.I. (1946). Islam and Theory of Interest. Lahore : Syeikh M. Asyraf Publishing.
- 67. Riandi Chandra, Maryam Mangantar, Sem G. Oroh. 2016. "Analisis Kinerja Keuangan Pt Bank Syariah Mandiri Dan Pt Bank Mandiri Tbk Dengan Menggunakan Metode Camel." Jurnal Berkala Ilmiah Efisiensi 16(2):2010–16.
- 68. Rizvi, S. A. R., Narayan, P. K., Sakti, A., & Syarifuddin, F. (2020). Role of Islamic banks in Indonesian banking industry: an empirical exploration. Pacific-Basin Finance Journal, #pagerange#. https://doi.org/10.1016/j.pacfin.2019.02.002
- 69. Sarker, M.A.A.(1999). Islamic Banking in Bangladesh : Performance, Problems and Prospects. International Journal of Islamic Financial Services, 1(3), 15-36.
- 70. Setiawan, Putri Wulansari, and Rani Putri Kusuma Dewi. 2020. "Pengukuran Tingkat Kinerja Keuangan Dan Non Keuangan Pada Bank Syaiah Di Lima Negara Asia (Studi Kasus Pada Bank Syariah Dengan Aset Terttinggi)." Dinamika Akuntansi, Keuangan Dan Perbankan 9(1):69–78.
- 71. Setyaningrum, Nur Anisa et al. 2022. "Assessing Agency Theory and Solutions on the Financing of Revenue Sharing Systems in Islamic Banking." Ijtimā iyya Journal of Muslim Society Research 7(1): 16–27.
- 72. Siddiqi, M.N. (1983). Issue in Islamic Banking. Leichester : The Islamic Foundation.
- 73. Shamsuddin, Zelhuda, and Abdul Ghafar Ismail. 2013. "Agency Theory in Explaining Islamic Financial Contracts." Middle East Journal of Scientific Research 15(4): 530–45.
- 74. Yanikkaya, Halit, Nihat Gümüş, and Yaşar Uğur Pabuçcu. 2018. "How Profitability Differs between Conventional and Islamic Banks: A Dynamic Panel Data Approach." Pacific Basin Finance Journal 48(January):99–111. doi: 10.1016/j.pacfin.2018.01.006.
- 75. Zahra, S.F., Ascarya, A. and Huda, N. (2018). Stability Measurement of Dual Banking System in Indonesia : Markov Switching Approach. Journal of Islamic Economic, 10(1), 25-52.

