

BUKTI KELAS JURNAL DI SCIMAGO (SJR 2021)

The screenshot displays the Scimago Graphica interface for the journal 'Journal of Sustainable Finance and Investment'. The main dashboard includes several data visualization charts:

- Line Chart (Top Left):** Shows two data series from 2011 to 2021. The green line shows a significant upward trend, reaching approximately 200 by 2021. The red line shows a smaller, more stable trend, ending around 50.
- Line Chart (Top Middle):** Displays citation metrics over time. The legend indicates three series: 'Cites / Doc. (4 years)' (light blue), 'Cites / Doc. (3 years)' (medium blue), and 'Cites / Doc. (2 years)' (dark blue). All series show an overall increasing trend.
- Line Chart (Middle Left):** Titled '% International Collaboration', showing a fluctuating but generally increasing trend from about 15% in 2011 to nearly 40% in 2021.
- Stacked Area Chart (Middle Middle):** Titled 'Citable documents' (green) and 'Non-citable documents' (red). The total number of documents increases from 0 in 2011 to approximately 110 in 2021, with citable documents making up the vast majority.
- Stacked Area Chart (Middle Right):** Titled 'Cited documents' (green) and 'Uncited documents' (red). The total number of cited documents increases from 0 in 2011 to about 100 in 2021.

At the bottom left, there is a widget for the journal's SJR 2021 score:

Journal of Sustainable Finance and Investment

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Economics, Econometrics and Finance...
best quartile

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0.64

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The bottom right section features the 'SCImago Graphica' logo and a promotional message: 'Explore, visually communicate and make sense of data with our new free tool.' A blue 'Get it' button is provided for access.

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The Journal of Sustainable Finance & Investment - Manuscript ID 20-JSFI658-AN

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Journal of Sustainable Finance and Investment <onbehalf@manuscriptcentral.com> Rab, 2 Sep 2020 23.12 ☆ ↶ ⋮
kepada rifqimuhammad, rifqimuhammad ▾

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02-Sep-2020

Dear Dr. Muhammad:

Your manuscript entitled "The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks" has been successfully submitted online and is presently being given full consideration for publication in the The Journal of Sustainable Finance & Investment.

Your manuscript ID is 20-JSFI658-AN.

Please mention the above manuscript ID in all future correspondence or when calling the office for questions (jsfi@earthscan.co.uk). If there are any changes in your street address or e-mail address, please log in to the Journal's e-submission site at <https://mc.manuscriptcentral.com/jsfi> and edit your user information as appropriate.

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Thank you for submitting your manuscript to the The Journal of Sustainable Finance & Investment.

Kind regards,

Olaf Weber,

The Journal of Sustainable Finance & Investment Editorial Office
jsfi@earthscan.co.uk

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The Journal of Sustainable Finance & Investment - Decision on Manuscript ID 20-JSFI658-AN

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04-Jan-2021

Dear Dr. Muhammad:

Manuscript ID 20-JSFI658-AN titled "The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks" which you submitted to The Journal of Sustainable Finance & Investment, has been reviewed. The comments of the reviewers are included at the bottom of this letter.

The reviewers have suggested that you make substantial revisions to your manuscript before resubmitting for consideration. I invite you to respond to the reviewers' comments and revise your manuscript.

You will not be able to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Once the revised manuscript is prepared, you can upload it and submit it through your Author Centre. To upload your revised manuscript, log into <http://mc.manuscriptcentral.com/jsfi> and enter your Author Centre (or click here to enter the site without having to log in: *** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

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If you require assistance with your resubmission, please contact jsfi@earthscan.co.uk.

Sincerely,
Dr. Olaf Weber
Editor in Chief, The Journal of Sustainable Finance & Investment
oweber@uwaterloo.ca

04-Jan-2021

Dear Dr. Muhammad:

Manuscript ID 20-JSFI658-AN titled "The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks" which you submitted to The Journal of Sustainable Finance & Investment, has been reviewed. The comments of the reviewers are included at the bottom of this letter.

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Sincerely,
Dr. Olaf Weber
Editor in Chief, The Journal of Sustainable Finance & Investment
oweber@uwaterloo.ca

Reviewers' Comments to Author:

Reviewer: 1

Comments to the Author

The article quite interesting, however, there are lot of issues that need to be revised properly.

1. The introduction is too lengthy so it needs to be concise to the point. At the end of the introduction, authors need to put the rest of the paper structure.
2. The contribution of the paper is not clear yet.
3. Literature are not up to date. You may find lot of recent studies on PLS.
4. The time period is too short, authors should think of taking more years (can be taken from 2011 onwards and should consider the 2019 year data)
5. FEM or REM is very basic model, author should think of other models as well apart from REM, at least for the robustness test (e.g. GMM could be a possible model).
6. There is a possibility of having reverse causality (endogeneity) issue, so, authors should use some other method(s) to handle this issue properly.
7. Authors should provide pairwise correlation among the independent variables to see whether any multicollinearity exists.
8. Authors should also control Management quality. Though this study is a single country evidence, however, authors should control macroeconomic variables (like GDP, inflation etc).
9. Authors should also specify the policy recommendation.

All the best.

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Dear Dr. Muhammad:

Manuscript ID 20-JSFI658-AN.R1 titled "The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks" which you submitted to the The Journal of Sustainable Finance & Investment, has been reviewed. The comments of the reviewers are included at the bottom of this letter.

The reviewers have recommended publication, but also suggest some minor revisions to your manuscript. Therefore, I invite you to respond to the reviewers' comments and revise your manuscript.

You will not be able to make your revisions on the originally submitted version of the manuscript. Instead, please revise your manuscript using a word processing program and save it on your computer. Once your revised manuscript is prepared, you can upload it and submit it through your Author Centre. To upload your revised manuscript, log into <http://mc.manuscriptcentral.com/jsfi> and enter your Author Centre (or click on this link to enter the site without needing to log in: *** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

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Sincerely,
Dr. Olaf Weber
Editor in Chief, The Journal of Sustainable Finance & Investment
oweber@uwaterloo.ca

Reviewers' Comments to Author:

Reviewer: 1

Comments to the Author

Thank you very much for addressing my comments. I can see authors have used GMM in the revised version, however, the validity test of GMM is not there. For example, Authors did not mention whether they have used system or difference GMM, two step or one step and did not provide the AR(1), AR(2) and Hansen J test results which is vey much needed to validate the GMM method. GMM basically used to see the dynamic relationship between variables so lag variables have a significant impact on the overall model. I'll suggest to look into it and provide the validation of the GMM model. I wish you all the best.

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Rifqi Muhammad SE. <rifqimuhammad@uii.ac.id> kepada oweber
Kam, 12 Agu 2021 15.07

Dear Mr Olaf Weber,

Thanks for the opportunity to publish in your journal, we have received the notification regarding our Manuscript ID 20-JSFI658-AN.R3, entitled "The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks."
However, we need additional time to process the revision at least 1 month from now.
Thanks for your cooperation.

Regards,

Dr. Rifqi Muhammad

Olaf Weber <oweber@uwaterloo.ca> kepada Rifqi
Kam, 12 Agu 2021 19.44

Dear Dr Rifqi
Thanks for the message. When you are ready to submit, please send me an email and I can extend the due date.
Best
Olaf Weber

Rifqi Muhammad SE. <rifqimuhammad@uii.ac.id> kepada Olaf
Sel, 17 Agu 2021 14.04

Dear Mr Olaf Weber,

Thanks for the opportunity to publish in your journal, we have received the notification regarding our Manuscript ID 20-JSFI658-AN.R3, entitled "The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks."
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	EO: Weber, Olaf	20-JSFI658-AN.R4	The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks <i>Files Archived</i>	23-Aug-2021	07-Sep-2021
	<ul style="list-style-type: none"> Accept (07-Sep-2021) <p>Archiving completed on 09-Dec-2021</p> <p>view decision letter</p> <p>Contact Journal</p>				
a revision has been submitted (20-JSFI658-AN.R4)	EO: Weber, Olaf	20-JSFI658-AN.R3	The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks <i>Files Archived</i>	10-Jul-2021	26-Jul-2021
	<ul style="list-style-type: none"> Minor Revision (26-Jul-2021) a revision has been submitted <p>Archiving completed on 09-Dec-2021</p> <p>view decision letter</p> <p>Contact Journal</p>				
a revision has been submitted (20-	EO: Weber, Olaf	20-JSFI658-	The Effect of Internal Factors on the Mudharabah Financing of Indonesian	18-May-2021	21-Jun-2021

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a revision has been submitted (20-JSFI658-AN.R1)	EO: Weber, Olaf <ul style="list-style-type: none"> Major Revision (04-Jan-2021) a revision has been submitted Archiving completed on 09-Dec-2021 view decision letter Contact Journal	20-JSFI658-AN	The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks <i>Files Archived</i>	06-Sep-2020	04-Jan-2021

The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks

Purpose

This research aims to empirically examine the effect of financial performance on mudharabah financing in Indonesian Islamic banks. Mudharabah is a form of financing that supports the financial needs of the community based on the Islamic justice principle, while financial performance is a crucial indicator for organizations.

Design/methodology/approach

The independent variables in this study are financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and level of rate of return, with bank size and bank age as control variables. This study uses financial data for sharia commercial banks and sharia business units for the period 2014–2018 and analyzed using a panel multiple regression technique.

Findings

The study found that FDR, NPF and bank size have a positive effect, while CAR has a negative effect and level of rate of return and bank age have no effect on the mudharabah financing of Islamic banks in Indonesia.

Research implications

An understanding of the effects of the financial performance of Islamic banking financing should encourage the effective management of relevant activities so that the performance and health of Islamic banks can be maintained.

Originality/value

Profit Loss Sharing (PLS) scheme through mudharabah financing is one of the advantages of Islamic banking products because it allows management to improve financial performance with optimal profit sharing rates. Mudharabah financing is close to the activities of the real economic sector which can have a positive impact on the sustainability of economic development and also increase the resilience of Islamic banks.

Keywords: *Financial performance, Islamic banks, Mudharabah financing*

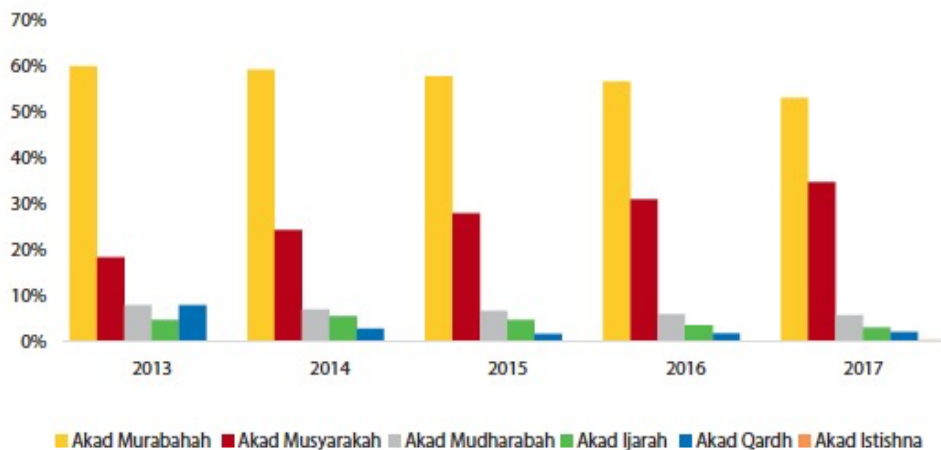
1. Introduction

Financing through the raising of funds is one of the two main functions of Islamic banks, the other being the offering of products and services. Financing not based on the paying and

receiving of interest is one of the unique characteristics of Islamic banks and is divided into three types: financing through buying and selling, financing via leasing, and financing based on profit-and-loss-sharing (PLS) principles (Isaev and Masih 2017). Mudharabah financing as a form of PLS financing is a main characteristic of Islamic banks.

However, the amount of mudharabah financing is lower than other types because its associated risk level is higher (Destiana 2016). Based on data from the Financial Services Authority (FSA) of Indonesia in 2018, the financing of Islamic banks in 2017 was dominated by murabahah (53.23%) and musharakah (34.87%) contracts, while mudharabah and ijarah contracts only accounted for 5.87% and 3.15%, respectively and were lower than the previous year (2016) of 6.07% and 3.60%, respectively. Figure 1 shows the comparative percentage of mudharabah financing as of December 2017.

Figure 1. Islamic banking financing based on contract



(Source: FSA, 2018b)

Because it can only be used for productive ventures, Mudharabah financing is expected to drive real production (Pramono 2013). However, data from the FSA shows a falling level of mudharabah financing compared to previous years, and it is therefore important to understand the factors that can influence the level of mudharabah financing volume in Islamic banks.

The volume of PLS financing (mudharabah and musharakah) is influenced by external and internal factors. Although some external factors may also influence financing in Islamic banks, Radner (1992, cited in Muhammad, 2014) states that the management features of organizations play an important role in the distribution of financing in Islamic banks. Among others, internal factors that can influence PLS financing are bank characteristics, level of risk and the financial condition of the bank. Adnan and Purwoko (2013) state that risk, high NPF and uncertainty are factors that influence low mudharabah financing in rural Islamic banks, driven by the desire of the banks to obtain sources of income that can meet operational needs and institutional development (Ernawati 2016). The better the financial condition of

the bank, the more flexibility there is to distribute financing, including financing featuring higher risk such as mudharabah.

Some previous studies that have examined the effects of financial performance on Islamic bank financing, including mudharabah financing, have found contrasting results. Destiana (2016) and Rimadhani and Erza (2011) found that NPF has a positive effect on the financing of Islamic banks, while Annisa and Yaya (2015) found that NPF had a negative effect on the volume of PLS financing at Islamic commercial banks in Indonesia. Widiastuty (2017) did not find a relationship between NPF and PLS financing. Ali and Miftahurrohman (2016) and Giannini (2013) obtained similar results indicating that NPF had no effect on mudharabah financing.

In terms of FDR, Rimadhani and Erza (2011) found that this ratio had no effect on murabahah financing at Bank Syariah Mandiri, while Giannini (2013) found that FDR had a negative effect on mudharabah financing at Islamic commercial banks. Ali and Miftahurrohman (2016) and Giannini (2013) also found that CAR had a positive effect on mudharabah financing at Islamic commercial banks. For rate of return, Rimadhani and Erza (2011) showed that profit margin had no effect on mudharabah financing at Bank Syariah Mandiri, while Giannini (2013) and Annisa and Yaya (2015) found that rate of return had a positive effect on mudharabah financing at Islamic commercial banks in Indonesia.

There are many possible reasons why these previous studies produced differing results. First, different types of financing were being tested, some of them using PLS financing consisting of both mudharabah and musharakah (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017), others only mudharabah financing (Ali and Miftahurrohman 2015; Giannini 2013) or murabahah financing (Rimadhani and Erza 2011). Second, some used monthly data (Annisa and Yaya 2015; Ali and Miftahurrohman 2015) while others referred to annual data (Destiana 2016; Widiastuty 2017; Giannini 2013). Third, the majority only looked at Islamic commercial banks with only Destiana (2016) looking at both Islamic commercial banks and Islamic business units.

This study aims to examine the effect of financial performance on mudharabah financing in Indonesian Islamic banks. Financial performance is chosen because it is a crucial factor for any organization, and good financial performance can strengthen a company's position in the market. In addition, shareholders will choose companies whose managers can successfully generate assets and profits to ensure the company's long-term survival (Mukhibad, Kiswanto, and Jayanto 2017). Financial performance information shows the results of the operations of Islamic banks over a certain period. Furthermore, this study focuses solely on mudharabah financing because it remains at a low level compared to other PLS financing contracts such as musharakah. Khan and Ahmed (2001) state that mudharabah financing is a characteristic of Islamic banks as one of the 'fundamental pillars of Islamic banks' and should be protected as a unit of such banks.

In this study, financial performance is measured in terms of financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and rate of return. Previous studies show that these variables have influence on the financing of Islamic banks in

Indonesia (Giannini, 2013; Rimadhani and Erza, 2011; Ali and Miftahurrohman, 2015; Annisa and Yaya, 2015; Destiana, 2016; Widiastuty, 2017). Furthermore, the Central Bank of Indonesia uses these aspects of financial performance to measure the health of the country's banks.

The urgency of research into factors that influence mudharabah financing can be explained as follows: first, the characteristics of PLS financing highlight the social function of Islamic banks in improving people's welfare (Husa and Trinarningsih 2015). Second, Islamic banks as profit-oriented financial institutions should take into account the risk of each financing channel. However, Islamic banks must give priority to distributing PLS financing compared to non-PLS financing (Hadi 2011). Third, the low level of mudharabah financing is a global phenomenon that occurs in almost all Islamic banks throughout the world (Destiana 2016). Therefore, identification of factors which affect the financing of Islamic banks could be used more generally as a strategy for Islamic banks to encourage the growth of their financing. Islamic banks must constantly review the implementation of the mudharabah financing which is a characteristic of their operations. An understanding of the effects of financial performance will initiate strategies that can be implemented by Islamic banks to boost this type of financing.

2. Literature Review

2.1. Agency theory

Jensen and Meckling (1976) put forward the principle of 'agency theory', which states that a company is an agreement between the principal (shareholders) and the agent (manager). The basic assumption of this theory is that principals and agents are rational parties and behave opportunistically to maximize their own interests at the expense of others (Kayed 2012).

In Islamic banks, agency theory not only looks at the role of shareholders and managers, but also at conformity with sharia principles and contract characteristics. This is especially the case for mudharabah and musharakah contracts which exhibit problems in agency theory related to cash flow and control rights (Safieddine 2009). The risk of loss from financing can arise for several reasons, including ineffective PLS financing models, entrepreneurs' ethics, and business inefficiency (Muhammad 2014b). In terms of Islamic banks, the distribution of mudharabah financing is proof that Islamic banks have carried out their role in improving the real sector of the economy.

While society as a whole may expect Islamic banks to increase mudharabah financing, shareholders still expect Islamic banks to maintain their profits. Agency theory using this perspective suggests that managements should consider the needs of various parties. In choosing mudharabah financing, the high risk inherent in this type of financing may be a challenge for Islamic banks in optimizing results. The study of (Frag, Mallin, and Ow-yong 2018) which examined the relationship between agencies in 90 Islamic banks in 13 countries

found that unrestricted mudharabah contracts are one of the sources of agency problems in Islamic banks.

2.2. Mudharabah financing

The definition of financing according to Indonesian Law No. 21 of 2008 is the provision of funds from profit-sharing transactions in the form of mudharabah and musharakah contracts. FSA (2018) explains several features of mudharabah financing, as follows: (1) the purpose of mudharabah financing is to provide working capital and investment, (2) financing period can be short, medium or long term, (3) customers can be individuals or business entities, (4) profit-sharing ratio is mutually agreed upon, and (5) loss will be borne by the bank as the owner of the fund if loss occurs that is not due to negligence of the customer as fund manager; conversely, the loss will be borne by the customer if caused by negligence of the customer as fund manager.

The income derived from the activity of distributing funds to customers who use PLS financing comes from the sharing of profit if the customer in the contract makes a profit. The main product of an Islamic financial institution comprises products based on profit sharing, and Islamic banks are encouraged to increase the level of mudharabah financing portfolios to achieve this (Muhammad 2014a). Nevertheless, according to (Abdul-rahman and Nor 2016), who examined the issues facing Islamic banks in Malaysia in distributing profit-sharing financing, four challenges are revealed: high risk, difficulties in selecting financing partners, customer-dominated financing requests with low financial feasibility, and weak capital adequacy.

Karim (2003, cited in Hadi, 2011), states that the advantages of profit-sharing financing include minimizing the occurrence of financial crises. This reflects the basing of this type of financing on real assets rather than the 'paper-based' financial assets typical of conventional banks. Such real assets can also create jobs and encourage new business opportunities and open up opportunities for people who want to be economically independent but do not have sufficient financial capital. According to Kayed (2012), profit-sharing financing is an alternative to interest-based debt and an opportunity for entrepreneurs to share risks in establishing new businesses or developing existing businesses.

Nevertheless, the FSA report (2018) shows that mudharabah financing formed only 5.07% of sharia financing in 2017 and reveals the limited distribution of mudharabah financing in Islamic banks. In their research at sharia rural banks (SRBs), Adnan and Purwoko (2013) reveal that the factors causing low mudharabah financing were high levels of risk (caused by poor customer morality and weak customer transparency), high NPF levels, limited knowledge of consumers about mudharabah and the assumption that mudharabah financing is less practical and effective than other options. According to Amelia and Fauziah (2017), bank financing is influenced by internal factors such as third party funding, capital adequacy and profit-sharing levels. The availability of adequate funds will encourage the expansion of distribution of financing.

2.3. Hypotheses Development

2.3.1. The effect of financing to deposit ratio (FDR) on mudharabah financing

FDR measures the ability of the financing channels used by a bank and represents the liquidity aspect. Liquidity is important for the continuity of bank operations and requires effective management as a preventative action to avoid problems developing in the future. Lack of liquidity has a negative impact on the banking system (Ichsan 2014).

A high FDR indicates that a high level of financing that has been distributed by an Islamic bank (Supriani and Sudarsono 2018), including distribution of mudharabah financing. This is possible if the bank is able to encourage the growth of third-party funds as a source of finance distribution. In terms of agency theory, as well as the separation between the owners of the flow of cash funds (account holders) and the shareholders, in terms of financing, both the account holders and the shareholders are the owners of the fund and will receive shares in profit achieved as well as bearing losses suffered (Zainuldin, Lui, and Yii 2018). Husaeni (2017) finds that FDR had a positive effect on the distribution of financing in SRBs in the period 2014–2016. Based on the description above, the following hypothesis is proposed:

H1: FDR has a positive effect on mudharabah financing

2.3.2. The effect of non-performing financing (NPF) on mudharabah financing.

NPF indicates the amount of uncollected financing. A high level of NPF indicates the inability of banks to manage their financing. In such situations, banks may adopt policies to tighten financing in order to reduce the NPF level. However, this policy can affect the demand level for financing by the public thus reducing the level of financing distribution, including mudharabah financing. Islamic banks need to carefully manage their NPF because of their important role in managing public funds (Setiawan and Bagaskara 2016).

According to Supriani and Sudarsono (2018), increasing in financing is usually in line with the increase in deposit funds in Islamic banks resulting from high levels of public confidence. However, when the NPF level is high, banks will increase allowances for doubtful accounts and this will result in lower levels of distributed financing. Muhammad (2014a) argues that fund owners and fund managers (agents) need to understand mudharabah contracts so that agency problems can be minimized. The study by Annisa and Yaya (2015) states that NPF has a negative effect on PLS financing in Islamic banks. Based on the description above, the second hypothesis can be derived as follows:

H2: NPF has a negative effect on mudharabah financing

2.3.3. The effect of capital adequacy ratio (CAR) on mudharabah financing

CAR is an indicator of a bank's capital adequacy and will influence the ability of banks to distribute funds (Darmawi, 2012, cited in Amelia and Fauziah, 2017). Improved capital

adequacy will increase the volume of financing distribution. A higher CAR indicates that a large amount of financial resources can be used for banking operations while at the same time anticipating the potential losses that can be caused by financing distribution (Supriani and Sudarsono, 2018). Because of its potentially high level of risk, capital adequacy is a consideration in offering profit-sharing financing (Abdul-rahman and Nor 2016). The agency issue between the capital owners (mudharabah depositors and shareholders) and the agents (management) should be considered. The capital owners want their investments to have good prospects while the bank must maintain both the security of the funds deposited and the ability to generate profits to maintain the bank's performance. Giannini (2013) states that CAR has a positive and significant impact on PLS financing in Islamic banks. Higher CAR influences higher distributed PLS financing by Islamic banks and therefore, the third hypothesis of this study is as follows:

H3: CAR has a positive effect on the mudharabah financing

2.3.4. The effect of rate of return on mudharabah financing

Profit-sharing financing has a higher risk than other types of financing due to the uncertain returns obtained by banks. Banks tend to distribute mudharabah financing if the rate of return is higher than the risk taken. According to Abdul-rahman and Nor (2016), bank employees selecting PLS financing channels must have effective skills not only in understanding customers' financial statements but also in assessing financing risks, while at the same time considering the sharia compliance of the businesses chosen.

A greater rate of return received will encourage the increase of mudharabah financing. Rate of return received by the bank is determined by the level of profitability of mudharabah financing. Therefore the rate of return received by banks greatly affects the amount of mudharabah financing, and the higher the rate of return the higher the level of mudharabah financing. Ernawati (2016) states that mudharabah financing tends to have a more fluctuating rate of return than musharakah financing.

Previous research found that the profit-sharing rate had a positive effect on PLS financing (Annisa and Yaya, 2015) and mudharabah financing (Giannini, 2013) in Islamic commercial banks. Based on the description above, a further hypothesis can be derived as follows:

H4: Rate of return has a positive effect on mudharabah financing

2.3.5. The effect of bank size on mudharabah financing

Bank size is measured in terms of total assets owned. The greater the assets owned by Islamic banks, the more flexibility they have to carry out the function of financing distribution. Systems and infrastructure can be more freely built by larger banks to encourage PLS financing (Hadi, 2011), including the distribution of mudharabah financing. According to Supriani and Sudarsono (2018), the failure of customers to meet their

obligations is one of the risks faced by Islamic banks. Banks can anticipate this risk by having large assets to absorb the losses incurred. Based on the explanation above, this study derives the following hypothesis:

H5 : Bank size has a positive effect on mudharabah financing

2.3.6. The effect of bank age on mudharabah financing

The age of the bank represents the length of time a bank has operated and suggests the ability of the bank to compete in the finance sector (Lestari 2013). Islamic banks that have been operating for a long time will be more experienced in knowing the market and the characteristics of their customers. Preventative action on the risk of mudharabah financing can also be carried out by Islamic banks based on their experience in channelling financing (Hadi, 2011). According to Adnan and Purwoko (2013), one of the obstacles in mudharabah financing is the difficult selection process for financing proposals, which includes the evaluation of capital, equity participation and analysis of future projections for businesses. Therefore, the longer an Islamic bank has been operating, the higher the distribution of mudharabah financing is likely to be because the bank already has a well-developed strategy in this area of its operations. The following hypothesis is developed:

H6 : Bank age has a positive effect on mudharabah financing

3. Research Methodology

Islamic banking in Indonesia comprises commercial banks, business units and rural banks, with rural banks fulfilling a different role to commercial and business-based operations. Since the first establishment of Islamic banks in 1992, Indonesia now has 14 fully-fledged Islamic banks and 20 Islamic business unit. The increasing number of Islamic banks and business units in Indonesia providing a wide range of products and services is encouraging banks to be prudent in managing credit risk (Setiawan and Bagaskara 2016).

The objects of this study are Indonesian Islamic commercial banks and business units which published annual reports for the period 2014–2018 and for which the complete data needed for this study is available. This study uses purposive sampling and secondary data obtained from the official websites of Islamic banks.

The dependent variable in this study is mudharabah financing, the independent variables are financial performance measured by FDR, NPF, CAR and rate of return, and the two control variables used are bank size and bank age. Good financial performance is crucial for an organization and can strengthen its position in the market, and the Central Bank of Indonesia uses financial performance to measure the health of the country's banks.

Measurement of variables can be seen in the Table 1.

Table 1. Variables Measurements

Variables	Measurements
Mudharabah financing (Mudh)	Ln = amount of distributed mudharabah financing
Financing to deposit ratio (FDR)	$FDR = \frac{\text{amount of distributed financing} \times 100\%}{\text{total of third party funds}}$
Non-performing financing (NPF)	$NPF = \frac{\text{number of non-performing financing} \times 100\%}{\text{total of financing}}$
Capital adequacy ratio (CAR)	$CAR = \frac{\text{Total capital}}{\text{Risk Wighted Asset}} \times 100\%$
Rate of return (RR)	The level of rate of return from mudharabah financing (t-1)
Bank size (SZ)	Ln total assets
Bank age (AG)	The duration of the Islamic bank's operation since first established

The study examines the data using panel data regression. There are three panel data regression models: common effects model (CEM), fixed effects model (FEM) and random effects model (REM), and to be able to choose the most efficient model for this research, several tests were conducted, including the Chow test, the Lagrange multiplier test and the Hausman test. The Chow test is used to choose between the CEM and FEM. If the p-value is smaller than the alpha value of 0.05, the fixed effect is more appropriate for use in the regression equation. The Lagrange multiplier test is used to choose between CEM and REM. If the p-value is smaller than the alpha value of 0.05, the random effects model is more appropriate for use in the regression equation. The Hausman test is used to choose between REM and FEM. The fixed effect model is selected if p-value is smaller than alpha value of 0.05.

This study also examines data quality through analysis of descriptive statistics and coefficient of determination. An *F*-test is used to test the effect of the independent variables on the dependent variable simultaneously and a t-test is used to test the effect of each independent variable on the dependent variable. The regression equation in this study is as follows:

$$\text{Mudh} = \alpha + \beta_1 \text{FDR} + \beta_2 \text{NPF} + \beta_3 \text{CAR} + \beta_4 \text{RR} + \beta_5 \text{SZ} + \beta_6 \text{AG} + e$$

Explanation:

Mudh : mudharabah financing

α : constants

β : regression coefficient

FDR : FDR (financing to deposit ratio)

NPF : NPF (non-performing financing)

CAR : CAR (capital adequacy ratio)

RR : rate of return

SZ : bank size
 AG : bank age
 e : error

4. Results and Discussion

Currently, Indonesia has 14 fully-fledged Islamic banks and 20 Islamic banking units. Of these, this study includes the 10 Islamic banks and 18 Islamic banking units that have full data available, totalling 135 data items over four years. Descriptive statistical tests aimed to determine the means, minimums and maximums of the variables studied. The results of these descriptive statistics tests are presented in table 2.

Table 2. Descriptive statistics results

	MUDH	FDR	NPF	CAR	RR	SZ	AG
Mean	1.51E+12	104.581	4.302	22.387	19.612	1.15E+13	496.104
Median	3.41E+11	95.240	2.950	19.410	9.169	2.99E+12	660.000
Maximum	2.23E+13	289.200	43.990	163.070	91.259	9.83E+13	932.000
Minimum	0.000000	1.940	0.000	11.510	0.000	2.48E+11	50.000
Std. Dev.	3.46E+12	38.352	5.492	15.480	22.697	1.91E+13	283.764

The mudharabah financing variable has a mean value of IDR 1.511 trillion, maximum value of IDR 22.33 trillion (CIMB Niaga for 2018) and minimum value of IDR 0 (Bank Mega Syariah for the years 2016–2018; Maybank Syariah for 2018). The FDR variable has mean value of 104.581%, with a maximum value of 289.2% (Maybank Syariah for 2018) and a minimum value of 1.94% (BPD Jatim for 2017). The NPF variable has a mean value of 4.302%, with a maximum value of 43.99% (Maybank Syariah for 2016) and a minimum value of 0% (Maybank Syariah for 2017 and 2018). CAR has mean value of 22.387% with a maximum value of 163.07% (Maybank Syariah for 2018) and a minimum value of 11.51% (BPDS for 2017). Rate of return has mean value of 19.612% with a maximum value of 91.259% (Bank Danamon for 2016) and a minimum value of 0% (Bank Mega Syariah for 2014, 2017 and 2018).

The minimum and maximum values are for a variety of the Islamic banks studied, although several are often mentioned in the same categories but in different years. However, although such variation does not necessarily mean that a bank's financial performance is bad, it may suggest that the financial conditions of Islamic banks vary and thus might affect the amount of financing distribution.

This study uses panel data regression carried out using evIEWS 10 software and determines the best model for processing the data via Chow test, Hausman test and Lagrange multiplier (LM) test. The Chow test is used to reveal whether FEM or CEM is the better model for panel data regression. Table 3 shows the probability value of the Chow test is 0.0000 and is therefore smaller than alpha value of 0.05. Thus, FEM is better than CEM. The Hausman test is used to compare FEM and REM. The cross section random probability value of 0.3960 is greater than the alpha value of 0.05 and therefore REM is more suitable than FEM. The last

test is LM test used to compare CEM and REM. The LM test results in a cross-section value of the Breusch-Pagan section of 0.0000 which is greater than the alpha value of 0.05, meaning that REM is the most appropriate method for testing the data in this study.

Table 3. Comparison of Chow, Hausman and LM tests

	Chow test	Hausman test	LM test
Statistic	81.706	6.2480	
d.f	27	6	
Prob.	0.000	0.396	
Cross section			0.000

Table 4. Random effects model (REM)

Variable	Coefficient	Std. error	t-statistic	Prob.
C	-16.933	18.592	-0.911	0.364
FDR	0.037	0.016	2.362	0.019
NPF	0.182	0.093	1.969	0.051
CAR	-0.119	0.038	-3.184	0.002
RR	0.041	0.03	1.357	0.177
SZ	1.271	0.593	2.142	0.034
AG	0.005	0.003	1.589	0.114
R-squared	0.199	F-statistik		5.322
Adjusted R-Square	0.162	Prob. (F-statistik)		0.000

The REM test results can be seen in Table 4. The significance value of the F-statistic of 0.0000 being less than alpha value of 0.05 indicates that the independent variables in this study (FDR, NPF, rate of return and CAR) influence mudharabah financing simultaneously. The coefficient of determination shows the ability of the model to explain or predict the outcomes. Table 4 shows the value of the coefficient of determination (adjusted R-squared) was 0.162 (16.2%), which means that the variations in mudharabah financing is explained 16.2% by financial performance (FDR, NPF, CAR, level of rate of return, bank size and bank age), while the remaining 83.8 % is explained by other variables, which are not examined, such as third party funds, which are not financial performance variables, like those in studies by Destiana (2016) and Annisa and Yaya (2015).

Analysis of t-test is used to test the effect of each independent variable on the dependent variable. The results of data analysis presented in Table 4 show a positive effect of FDR on mudharabah financing at the 5% level of significance with an estimated value of 0.037. This finding indicates that an increase in FDR by 100% has caused the mudharabah financing to increase by 3.7%. Thus, our finding support H_1 that higher levels of FDR causes higher levels of mudharabah financing distribution. Mudharabah financing is a characteristic of Islamic banks which encourages economic activity and community trade, and this result supports the functions that have been carried out by Islamic banks so far. The result gives a strong signal that in the effort of Islamic banks to expand their financing, mudharabah is one of the

financing methods that should be encouraged and promoted. This result is in line with that of Nastiti and Kasri (2019), who examined the effect of FDR on financing at Islamic banks, and Husaeni (2017) who looked at the same effect on SRBs. However, the result differs from Rimadhani and Erza (2011), who found that FDR did not influence murabahah financing in Bank Syariah Mandiri, and Giannini (2013) who found a negative relationship between FDR and mudharabah financing in Islamic commercial banks.

For the second variable, our data analysis shows that NPF has a positive effect on - on mudharabah financing with an estimated value of 0.182 at the 10% level of significance. Thus, H₂ is supported: higher NPF will result in higher mudharabah financing distributed. This result does not support the results of the study by Annisa and Yaya (2015) which found that NPF negatively influenced PLS financing in Indonesian Islamic banks. Although the result of this study differs from the hypothesis, it supports the research of Alsyahrin, Atahau, and Robiyanto (2018) which states that NPF has a positive effect on financing in Islamic banks when the size of the bank is applied as a moderating variable. Destiana (2016) also found that NPF had a positive effect on mudharabah and musharakah financing in Islamic banks in Indonesia. The result is also in line with data for NPF and mudharabah financing provided by the FSA. NPF in Islamic banks in the four years 2015 to 2018 was 7%, 6.10%, 6% and 5.3%, respectively, while the number of mudharabah financing in those years compared to total financing was 6.96% (2015), 6.17% (2016), 5.98% (2017) and 5.3% (2018). The data show that NPF is high and at the same time mudharabah financing is also high. There are several possible explanations for the positive influence of NPF on mudharabah financing. First, the high level of NPF may not in fact derive from mudharabah financing. In general, mudharabah financing is a small percentage compared to other forms of financing such as murabahah and musharakah, so NPF may not arise from it alone. Second, mudharabah financing is the characteristic of Islamic banking that distinguishes it from conventional banks. Even though NPF level is high, mudharabah financing is still encouraged as a form of Islamic banking contribution to advancing community economic activities. Third, the average NPF value of the descriptive statistics is 4.3%, which means it is ranked 2 ($2\% \leq \text{NPF} < 5\%$) in the quality of financing rankings of the Central Bank of Indonesia regulation. Even though the results of the study show a positive effect, the NPF value is not deemed to be too high.

The CAR variable has a significance value of 0.002, which is below the alpha value of 0.05, and a coefficient value of -0.119. These results indicate that CAR has a negative effect on mudharabah financing and so H₃ is not supported: a smaller CAR value of an Islamic bank will lead to higher mudharabah financing. This result is in accordance with the research of Husaeni (2017) and Amelia and Fauziah (2017) who found that CAR had a negative influence on the distribution of financing in SRB. Fund raising and financing are the main activities of a bank so these activities are always maintained in an Islamic bank (Husaeni, 2017).

Therefore, even though the CAR value is small, financing in Islamic banks continues to be encouraged. The minimum CAR set by the Central Bank of Indonesia is 8%. Even when CAR is low, it still should not be below 8% and with this capital, Islamic banks can still distribute

financing. Otherwise, higher CAR can impact on lower mudharabah financing because of the different proportion of each type of financing. Islamic banks may prioritize financing with high profit and low risk (i.e. murabahah) over mudharabah financing which has the highest risk. According to Amelia and Fauziah (2017), Islamic banks tend to choose those activities that have lower risk.

Table 4 shows the rate of return variable has a significance value of 0.177 and a coefficient value of 0.041. The significance value of 0.177 is greater than alpha value of 0.05 and means that rate of return does not affect mudharabah financing and thus H4 is not supported. This result supports that of Amelia and Fauziah (2017), who found that rate of return had no effect on mudharabah financing at Islamic banks. Islamic banks can identify what types of financing will provide high rate of return and less risk and thus their financing can be maximized as prudently as possible. The fact that mudharabah financing is distributed less than other types of financing can also explain this finding. Data from the FSA shows that mudharabah financing is only 5.87% (second lowest financing after ijarah) of the total financing distributed by Islamic banks in Indonesia in 2018. Therefore, rate of return may not influence mudharabah financing because of the low level of this type of financing in Islamic banks.

The control variables in this study are bank size measured by total assets and bank age. Based on Table 4, total assets have a significance value of 0.034, greater than alpha value of 0.05, and coefficient value of 1.271. Thus, bank size measured by total assets has a positive effect on mudharabah financing and H5 is therefore supported. This means that greater size of a bank measured by total assets is related to higher mudharabah financing. Large total assets affect the ability of Islamic banks to distribute large amounts of financing, including mudharabah financing.

The bank age control variable (years of banking operations) has a significance value of 0.114, greater than alpha value of 0.05, and a coefficient value of 0.005, showing that bank age has no effect on mudharabah financing of Islamic banks in Indonesia and thus H6 is not supported: the success of distributing and managing mudharabah financing with high risk is not influenced by the duration of operations. It can be suggested that the experience of managers and effective internal control systems can minimize the risk of loss in mudharabah financing, even in Islamic banks that were recently established.

5. Conclusions

Mudharabah financing is a type of financing that supports the financial needs of the community based on the justice principle. From the results detailed above, this study finds that FDR, NPF and bank size have a positive effect on mudharabah financing and CAR has a negative effect. Meanwhile, the level of rate of return and bank age have no effect on the mudharabah financing of Islamic banks in Indonesia.

Some aspects of financial performance have an influence on mudharabah financing in Islamic banks. As a high-risk form of financing, mudharabah has a smaller percentage compared to other types of financing. Given this characteristic, financial ratios that can lead

to the increasing of mudharabah financing must be managed properly by considering both the risk and the return potential of each financing option. This is necessary because Islamic banks will be evaluated on their performance both in terms of their financial ratios and their ability to collect and distribute funds to the public, especially in relation to PLS financing as a contribution of Islamic banks to the encouragement of real economic activities in the community.

This study has several limitations. The sample of this study is fully-fledged Islamic banks and Islamic banking units within larger organizations. In future studies sharia rural banks (SRBs) that distribute mudharabah financing could also be included to provide a more comprehensive comparison. Second, this study uses several financial ratios as independent variables to test for their effects on mudharabah financing. Other internal factors such as management or corporate governance characteristics and external factors such as economic conditions are not included as proxies in this study. Third, some Islamic banks do not distribute mudharabah financing, as can be seen from the number of zero values for this financing. Some Islamic banks distribute another forms of profit-sharing financing such as musharakah.

Based on the above limitations, we offer some suggestions for future studies. First, a study of mudharabah financing in SRBs could be carried out as a comparison with the distribution of financing in fully-fledged Islamic banks and Islamic business units investigated here. Second, future studies could add other proxies as independent variables, such as other financial ratios (ROA, ROI, ROE) and/or management or corporate governance characteristics. Because of the small or zero percentages of mudharabah financing found in the sample, musharakah financing could also be included in the dependent variable as a form of PLS financing, enabling the influence of the independent variables on mudharabah and musharakah financing to be compared.

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The author(s) reported no potential conflict of interest

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The Effect of Financial Performance on the Mudharabah Financing of Indonesian Islamic Banks

Purpose

This research aims to empirically examine the effect of financial performance on mudharabah financing in Indonesian Islamic banks. Mudharabah is a form of financing that supports the financial needs of the community based on the Islamic justice principle, while financial performance is a crucial indicator for organizations.

Design/methodology/approach

The independent variables in this study are financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and level of rate of return, with bank size and bank age as control variables. This study uses financial data for sharia commercial banks and sharia business units for the period 2011–2019 and analyzed using a panel multiple regression technique.

Findings

The study found that FDR, NPF and bank size have a positive effect, while CAR has a negative effect and level of rate of return and bank age have no effect on the mudharabah financing of Islamic banks in Indonesia.

Research implications

An understanding of the effects of the financial performance of Islamic banking financing should encourage the effective management of relevant activities so that the performance and health of Islamic banks can be maintained.

Originality/value

Profit Loss Sharing (PLS) scheme through mudharabah financing is one of the advantages of Islamic banking products because it allows management to improve financial performance with optimal profit sharing rates. Mudharabah financing is close to the activities of the real economic sector which can have a positive impact on the sustainability of economic development and also increase the resilience of Islamic banks.

Keywords: *Financial performance, Islamic banks, Mudharabah financing*

1. Introduction

Financing through the raising of funds is one of the two main functions of Islamic banks, the other being the offering of products and services. Financing not based on the paying and receiving of interest is one of the unique characteristics of Islamic banks and is divided into three types: financing through buying and selling, financing via leasing, and financing based on profit-and-loss-sharing (PLS) principles (Isaev and Masih 2017). PLS financing have some advantages such as fairness transaction, ethical investment and giving benefit for both

parties (Winarsih and Asokawati 2018). Mudharabah financing as a form of PLS financing is a main characteristic of Islamic banks.

However, the amount of mudharabah financing is lower than other types because its associated risk level is higher (Destiana 2016). Based on data from the Financial Services Authority (FSA) of Indonesia in 2019, the growth of financing of Islamic banks in was dominated by murabahah (21.56%), qardh (36.77%), Istishna (31.63%), and musharakah (21.56%) contracts, while mudharabah and ijarah contracts decrease in the level of -12.63% and -0.13%. However, murabahah is still the highest financing in Indonesian Islamic banks. Figure 1 shows the comparative percentage of mudharabah financing as of December 2019.

Figure 1. Islamic banking financing based on contract for 2019

Contracts	Amount (in trillion)	Growth
Murabaha	168.11	3.94%
Musharaka	158.61	21.56%
Mudharaba	14.02	-12.63%
Qardh	10.75	36.77%
Ijarah	10.63	-0.13%
Istishna	2.16	31.63%
fee based service	0.84	-2.27%
Total	365.13	10.89%

(Source: FSA, 2020)

Data from the FSA above shows a falling level of mudharabah financing compared to previous years, and it is therefore important to understand the factors that can influence the level of mudharabah financing volume in Islamic banks. The volume of PLS financing (mudharabah and musharakah) is influenced by external and internal factors. From external factors, Risfandy et al. (2019) argue that competition will increase PLS financing in Islamic banks, while Sabrina and Majid (2020) state that low demand, moral hazard and limited knowledge about the products of Islamic banking impact on the low of PLS financing.

Although some external factors may also influence financing in Islamic banks, Radner (1992, cited in Muhammad, 2014) states that the management features of organizations play an important role in the distribution of financing in Islamic banks. Among others, internal factors that can influence PLS financing are bank characteristics, level of risk and the financial condition of the bank. Winarsih and Asokawati (2018) state that third party fund and financing to deposit ratio influence PLS financing in Indonesian Islamic banks.

Some previous studies that have examined the effects of financial performance on Indonesian Islamic bank financing, including mudharabah financing, have found contrasting results. There are many possible reasons why these previous studies produced differing results. First, different types of financing were being tested, some of them using PLS financing consisting of both mudharabah and musharakah (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017), others only mudharabah financing (Ali and Miftahurrohman 2015)

or murabahah financing (Rimadhani and Erza 2011). Second, some used monthly data (Annisa and Yaya 2015; Ali and Miftahurrohman 2015) while others referred to annual data (Destiana 2016; Widiastuty 2017). Third, the majority only looked at Islamic commercial banks with only Destiana (2016) looking at both Islamic commercial banks and Islamic business units.

This study aims to examine the effect of financial performance on mudharabah financing in Indonesian Islamic banks. Financial performance is chosen because it is a crucial factor for any organization, and good financial performance can strengthen a company's position in the market. In addition, shareholders will choose companies whose managers can successfully generate assets and profits to ensure the company's long-term survival (Mukhibad, Kiswanto, and Jayanto 2017). Financial performance information shows the results of the operations of Islamic banks over a certain period. Furthermore, this study focuses solely on mudharabah financing because it remains at a low level compared to other PLS financing contracts such as musharakah. Khan and Ahmed (2001) state that mudharabah financing is a characteristic of Islamic banks as one of the 'fundamental pillars of Islamic banks' and should be protected as a unit of such banks.

In this study, financial performance is measured in terms of financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and rate of return. Previous studies show that these variables have influence on the financing of Islamic banks in Indonesia (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017; Winarsih and Asokawati 2018). Furthermore, the Central Bank of Indonesia uses these aspects of financial performance to measure the health of the country's banks.

The urgency of research into factors that influence mudharabah financing can be explained as follows: first, the characteristics of PLS financing highlight the social function of Islamic banks in improving people's welfare (Husa and Trinarningsih 2015). However, the low level of mudharabah financing is a global phenomenon that occurs in almost all Islamic banks throughout the world (Destiana 2016). **The small even negative growth of mudharabah financing should be identified the causes and how to overcome them.** Islamic banks must constantly review the implementation of the mudharabah financing which is a characteristic of their operations. Second, Islamic banks as profit-oriented financial institutions should take into account the risk of each financing channel. However, Islamic banks must give priority **to distributing** PLS financing compared to non-PLS financing (Risfandy et al. 2019). **This study is expected to give contribution in some aspects, first, providing identification of factors which affect the financing of Islamic banks. Those factors can be used to arrange the strategies for Islamic banks to encourage the growth of their financing. Second, the empirical result of this study may help the regulator to provide solutions in solving the small growth of mudharabah financing. Third,** Indonesia is a country that has higher amount of LPS financing compared to other countries (Risfandy et al. 2019). Therefore, **the attention of mudharabah financing is necessary to increase the contribution of this financing to economic growth.**

This study is divided into several sections. Section two explains literature review and hypotheses development. Section three describes research methodology, and section four analysis the data and discusses the results. The last section is conclusion, implication and suggestion.

2. Literature Review

2.1. Agency theory

Jensen and Meckling (1976) put forward the principle of 'agency theory', which states that a company is an agreement between the principal (shareholders) and the agent (manager). The basic assumption of this theory is that principals and agents are rational parties and behave opportunistically to maximize their own interests at the expense of others (Kayed 2012).

In Islamic banks, agency theory not only looks at the role of shareholders and managers, but also at conformity with sharia principles and contract characteristics. This is especially the case for mudharabah and musharakah contracts which exhibit problems in agency theory related to cash flow and control rights (Safieddine 2009). The risk of loss from financing can arise for several reasons, including ineffective PLS financing models, entrepreneurs' ethics, and business inefficiency (Muhammad 2014b). In terms of Islamic banks, the distribution of mudharabah financing is proof that Islamic banks have carried out their role in improving the real sector of the economy.

While society as a whole may expect Islamic banks to increase mudharabah financing, shareholders still expect Islamic banks to maintain their profits. Good performance of Islamic banks is still primary expectation of the stakeholders (Muhammad, Suluki, and Nugraheni 2020). Agency theory using this perspective suggests that managements should consider the needs of various parties. In choosing mudharabah financing, the high risk inherent in this type of financing may be a challenge for Islamic banks in optimizing results. The study of (Farag, Mallin, and Ow-yong 2018) which examined the relationship between agencies in 90 Islamic banks in 13 countries found that unrestricted mudharabah contracts are one of the sources of agency problems in Islamic banks.

2.2. Mudharabah financing

The definition of financing according to Indonesian Law No. 21 of 2008 is the provision of funds from profit-sharing transactions in the form of mudharabah and musharakah contracts. FSA (2018) explains several features of mudharabah financing, as follows: (1) the purpose of mudharabah financing is to provide working capital and investment, (2) financing period can be short, medium or long term, (3) customers can be individuals or business entities, (4) profit-sharing ratio is mutually agreed upon, and (5) loss will be borne by the bank as the owner of the fund if loss occurs that is not due to negligence of the customer as fund manager; conversely, the loss will be borne by the customer if caused by negligence of the customer as fund manager.

The income derived from the activity of distributing funds to customers who use PLS financing comes from the sharing of profit if the customer in the contract makes a profit. The main product of an Islamic financial institution comprises products based on profit sharing, and Islamic banks are encouraged to increase the level of mudharabah financing portfolios to achieve this (Muhammad 2014a). Nevertheless, according to (Abdul-rahman and Nor 2016), who examined the issues facing Islamic banks in Malaysia in distributing profit-sharing financing, four challenges are revealed: high risk, difficulties in selecting financing partners, customer-dominated financing requests with low financial feasibility, and weak capital adequacy.

Karim (2003, cited in Hadi, 2011), states that the advantages of profit-sharing financing include minimizing the occurrence of financial crises. This reflects the basing of this type of financing on real assets rather than the 'paper-based' financial assets typical of conventional banks. Such real assets can also create jobs and encourage new business opportunities and open up opportunities for people who want to be economically independent but do not have sufficient financial capital. Other scholars argue that profit-sharing financing is an alternative to interest-based debt and an opportunity for entrepreneurs to share risks in establishing new businesses or developing existing businesses (Kayed 2012; Afzal and Hassan 2018), increasing collaboration spirit to improve the economy of Muslim (Abdul-rahman and Nor 2016), and promoting the value of justice, togetherness and brotherhood (Sabrina and Majid 2020).

Nevertheless, the report of FSA (2020) shows that mudharabah financing formed only 3.84% of sharia financing in 2019 and reveals the limited distribution of mudharabah financing in Islamic banks. Risfandy et al. (2019) state that PLS financing is not popular contract in Islamic banks because of some problems such as the risky financing and the complicated process (involving monitoring clients, volatility of business profitability of the client). In their research at sharia rural banks (SRBs), Sabrina and Majid (2020) reveal that the factors causing low mudharabah financing can be divided into three factors: internal, external and regulation factors. Internal factors include the high levels of risk (caused by uncertainty profit and possibility to capital or asset loss), limited knowledge of Islamic human resources of Islamic banks and asymmetric information. According to Amelia and Fauziah (2017), bank financing is influenced by internal factors such as third party funding, capital adequacy and profit-sharing levels. The availability of adequate funds will encourage the expansion of distribution of financing.

2.3. Hypotheses Development

2.3.1. The effect of financing to deposit ratio (FDR) on mudharabah financing

FDR measures the ability of the financing channels used by a bank and represents the liquidity aspect. Liquidity is important for the continuity of bank operations and requires effective management as a preventative action to avoid problems developing in the future. Lack of liquidity has a negative impact on the banking system (Ichsan 2014).

A high FDR indicates that a high level of financing that has been distributed by an Islamic bank (Supriani and Sudarsono 2018), including distribution of mudharabah financing. This is possible if the bank is able to encourage the growth of third-party funds as a source of finance distribution. In terms of agency theory, as well as the separation between the owners of the flow of cash funds (account holders) and the shareholders, in terms of financing, both the account holders and the shareholders are the owners of the fund and will receive shares in profit achieved as well as bearing losses suffered (Zainuldin, Lui, and Yii 2018). Husaeni (2017) finds that FDR had a positive effect on the distribution of financing in SRBs in the period 2014–2016. Based on the description above, the following hypothesis is proposed:

H1: FDR has a positive effect on mudharabah financing

2.3.2. The effect of non-performing financing (NPF) on mudharabah financing.

NPF indicates the amount of uncollected financing. A high level of NPF indicates the inability of banks to manage their financing. In such situations, banks may adopt policies to tighten financing in order to reduce the NPF level. However, this policy can affect the demand level for financing by the public thus reducing the level of financing distribution, including mudharabah financing. Islamic banks need to carefully manage their NPF because of their important role in managing public funds (Setiawan and Bagaskara 2016).

According to Supriani and Sudarsono (2018), increasing in financing is usually in line with the increase in deposit funds in Islamic banks resulting from high levels of public confidence.

However, when the NPF level is high, banks will increase allowances for doubtful accounts and this will result in lower levels of distributed financing. Muhammad (2014a) argues that fund owners and fund managers (agents) need to understand mudharabah contracts so that agency problems can be minimized. The study by Annisa and Yaya (2015) states that NPF has a negative effect on PLS financing in Islamic banks. Based on the description above, the second hypothesis can be derived as follows:

H2: NPF has a negative effect on mudharabah financing

2.3.3. The effect of capital adequacy ratio (CAR) on mudharabah financing

CAR is an indicator of a bank's capital adequacy and will influence the ability of banks to distribute funds (Darmawi, 2012, cited in Amelia and Fauziah, 2017). Improved capital adequacy will increase the volume of financing distribution. A higher CAR indicates that a large amount of financial resources can be used for banking operations while at the same time anticipating the potential losses that can be caused by financing distribution (Supriani and Sudarsono, 2018). Because of its potentially high level of risk, capital adequacy is a consideration in offering profit-sharing financing (Abdul-rahman and Nor 2016). The agency issue between the capital owners (mudharabah depositors and shareholders) and the agents (management) should be considered. The capital owners want their investments to

have good prospects while the bank must maintain both the security of the funds deposited and the ability to generate profits to maintain the bank's performance. Higher CAR influences higher distributed PLS financing by Islamic banks and therefore, the third hypothesis of this study is as follows:

H3: CAR has a positive effect on the mudharabah financing

2.3.4. The effect of rate of return on mudharabah financing

Profit-sharing financing has a higher risk than other types of financing due to the uncertain returns obtained by banks. Banks tend to distribute mudharabah financing if the rate of return is higher than the risk taken. According to Abdul-rahman and Nor (2016), bank employees selecting PLS financing channels must have effective skills not only in understanding customers' financial statements but also in assessing financing risks, while at the same time considering the sharia compliance of the businesses chosen.

A greater rate of return received will encourage the increase of mudharabah financing. Rate of return received by the bank is determined by the level of profitability of mudharabah financing. Therefore the rate of return received by banks greatly affects the amount of mudharabah financing, and the higher the rate of return the higher the level of mudharabah financing. Ernawati (2016) states that mudharabah financing tends to have a more fluctuating rate of return than musharakah financing.

Previous research found that the profit-sharing rate had a positive effect on PLS financing (Annisa and Yaya, 2015). Based on the description above, a further hypothesis can be derived as follows:

H4: Rate of return has a positive effect on mudharabah financing

2.3.5. The effect of bank size on mudharabah financing

Bank size is measured in terms of total assets owned. The greater the assets owned by Islamic banks, the more flexibility they have to carry out the function of financing distribution. Systems and infrastructure can be more freely built by larger banks to encourage PLS financing (Hadi, 2011), including the distribution of mudharabah financing. According to Supriani and Sudarsono (2018), the failure of customers to meet their obligations is one of the risks faced by Islamic banks. Banks can anticipate this risk by having large assets to absorb the losses incurred. Based on the explanation above, this study derives the following hypothesis:

H5 : Bank size has a positive effect on mudharabah financing

2.3.6. The effect of bank age on mudharabah financing

The age of the bank represents the length of time a bank has operated and suggests the ability of the bank to compete in the finance sector (Lestari 2013). Islamic banks that have been operating for a long time will be more experienced in knowing the market and the characteristics of their customers. Preventative action on the risk of mudharabah financing can also be carried out by Islamic banks based on their experience in channelling financing (Hadi, 2011). According to Adnan and Purwoko (2013), one of the obstacles in mudharabah financing is the difficult selection process for financing proposals, which includes the evaluation of capital, equity participation and analysis of future projections for businesses. Therefore, the longer an Islamic bank has been operating, the higher the distribution of mudharabah financing is likely to be because the bank already has a well-developed strategy in this area of its operations. The following hypothesis is developed:

H6 : Bank age has a positive effect on mudharabah financing

3. Research Methodology

Islamic banking in Indonesia comprises commercial banks, business units and rural banks, with rural banks fulfilling a different role to commercial and business-based operations. Since the first establishment of Islamic banks in 1992, Indonesia now has 14 fully-fledged Islamic banks and 20 Islamic business unit. The increasing number of Islamic banks and business units in Indonesia providing a wide range of products and services is encouraging banks to be prudent in managing credit risk (Setiawan and Bagaskara 2016).

The objects of this study are Indonesian Islamic commercial banks and business units which published annual reports for the period 2011–2019 and for which the complete data needed for this study is available. This study uses purposive sampling and secondary data obtained from the official websites of Islamic banks.

The dependent variable in this study is mudharabah financing, the independent variables are financial performance measured by FDR, NPF, CAR and rate of return, and the two control variables used are bank size and bank age. Good financial performance is crucial for an organization and can strengthen its position in the market, and the Central Bank of Indonesia uses financial performance to measure the health of the country's banks. Measurement of variables can be seen in the Table 1.

Table 1. Variables Measurements

Variables	Measurements
Mudharabah financing (Mudh)	$Ln = \text{amount of distributed mudharabah financing}$
Financing to deposit ratio (FDR)	$FDR = \frac{\text{amount of distributed financing}}{\text{total of third party funds}} \times 100\%$
Non-performing financing (NPF)	$NPF = \frac{\text{number of non-performing financing}}{\text{total of financing}} \times 100\%$

	total of financing
Capital adequacy ratio (CAR)	$\text{CAR} = \frac{\text{Total capital}}{\text{Risk Wighted Asset}} \times 100\%$
Rate of return (RR)	The level of rate of return from mudharabah financing (t-1)
Bank size (SZ)	Ln total assets
Bank age (AG)	The duration of the Islamic bank's operation since first established
Inflation (INF)	Average of inflation rate in that year
BI Rate (BI)	Level of the rate of Indonesian central bank

The study examines the data using panel data regression. There are three panel data regression models: common effects model (CEM), fixed effects model (FEM) and random effects model (REM), and to be able to choose the most efficient model for this research, several tests were conducted, including the Chow test, the Lagrange multiplier test and the Hausman test. The Chow test is used to choose between the CEM and FEM. If the p-value is smaller than the alpha value of 0.05, the fixed effect is more appropriate for use in the regression equation. The Lagrange multiplier test is used to choose between CEM and REM. If the p-value is smaller than the alpha value of 0.05, the random effects model is more appropriate for use in the regression equation. The Hausman test is used to choose between REM and FEM. The fixed effect model is selected if p-value is smaller than alpha value of 0.05.

This study also examines data quality through analysis of descriptive statistics and coefficient of determination. An *F*-test is used to test the effect of the independent variables on the dependent variable simultaneously and a t-test is used to test the effect of each independent variable on the dependent variable. The regression equation in this study is as follows:

$$\text{Mudh} = \alpha + \beta_1\text{FDR} + \beta_2\text{NPF} + \beta_3\text{CAR} + \beta_4\text{RR} + \beta_5\text{SZ} + \beta_6\text{AG} + \beta_7\text{INF} + \beta_8\text{BI} + e$$

Explanation:

Mudh : mudharabah financing

α : constants

β : regression coefficient

FDR : FDR (financing to deposit ratio)

NPF : NPF (non-performing financing)

CAR : CAR (capital adequacy ratio)

RR : rate of return

SZ : bank size

AG : bank age

INF : inflation

BI : BI rate

e : error

4. Results and Discussion

Currently, Indonesia has 14 fully-fledged Islamic banks and 20 Islamic banking units. Of these, this study includes the 10 Islamic banks and 18 Islamic banking units that have full data available, totalling 135 data items over four years. Descriptive statistical tests aimed to determine the means, minimums and maximums of the variables studied. The results of these descriptive statistics tests are presented in table 2.

Table 2. Descriptive statistics results

	MUDH	FDR	NPF	CAR	RR	SZ	AG	INF	BI
Mean	25.10942	103.5035	1.204290	20.22552	2.401535	28.87292	9.008299	4.768465	6.048755
Median	26.13000	94.49000	0.037000	18.74000	0.370000	29.00000	9.000000	4.280000	6.000000
Maximum	31.00000	338.5200	12.52000	81.75000	32.15000	32.35000	27.00000	6.970000	7.750000
Minimum	0.000000	10.07000	0.000000	9.570000	0.000000	25.52419	1.000000	3.030000	4.250000
Std. Dev.	5.639972	35.12055	2.126905	7.770408	4.857355	1.477753	4.661895	1.446698	1.214692

The mudharabah financing (Ln) variable has a mean value of 25.11, maximum value of 31 and minimum value of 0. The FDR variable has mean value of 103.50%, with a maximum value of 338.52% and a minimum value of 10.07%. The NPF variable has a mean value of 1.204%, with a maximum value of 12.52% and a minimum value of 0%. CAR has mean value of 20.23% with a maximum value of 81.75% and a minimum value of 9.57%. Rate of return has mean value of 2.40% with a maximum value of 32.15% and a minimum value of 0%. The minimum and maximum values are for a variety of the Islamic banks studied, although several are often mentioned in the same categories but in different years. However, although such variation does not necessarily mean that a bank's financial performance is bad, it may suggest that the financial conditions of Islamic banks vary and thus might affect the amount of financing distribution.

This study uses panel data regression carried out using eviews 10 software and determines the best model for processing the data via Chow test, Hausman test and Lagrange multiplier (LM) test. The Chow test is used to reveal whether FEM or CEM is the better model for panel data regression. Table 3 shows the probability value of the Chow test is 0.0000 and is therefore smaller than alpha value of 0.05. Thus, FEM is better than CEM. The next test is Housman test to compare FEM and REM. The cross section random probability value of 0.0317 is lower than the alpha value of 0.05 and therefore FEM is more suitable than REM.

Table 3. Comparison of Chow and Hausman tests

	Chow test	Hausman test
Statistic	153.880	16.8553
d.f	26	6

Prob. 0.000 0.0317

Table 4. Fixed effects model (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	42.7574	20.5442	2.0812	0.0386
FDR	0.0121	0.0100	1.2118	0.2270
NPF	0.1002	0.2577	0.3888	0.6978
CAR	-0.1161	0.0441	-2.6327	0.0091
RR	0.4194	0.1365	3.0715	0.0024
SZ	-0.9516	0.7486	-1.2712	0.2051
AG	0.9372	0.2121	4.4180	0.0000
INF	0.0278	0.4658	0.0598	0.9524
BI	0.2013	0.4678	0.4304	0.6674
R-squared	0.547735	F-statistik	7.3378	
Adjusted R-Square	0.473089	Prob. (F-statistik)	0.000	

The FEM test results can be seen in Table 4. The significance value of the F-statistic of 0.0000 being less than alpha value of 0.05 indicates that the independent variables in this study influence mudharabah financing simultaneously. The coefficient of determination shows the ability of the model to explain or predict the outcomes. Table 4 shows the value of the coefficient of determination (adjusted R-squared) was 0.473089 (47.31%), which means that the variations in mudharabah financing is explained 47.31% by financial performance (FDR, NPF, CAR, level of rate of return, bank size, bank age, inflation and BI rate), while the remaining 52.69% is explained by other variables, which are not examined, such as third party funds, which are not financial performance variables, like those in studies by Destiana (2016) and Annisa and Yaya (2015).

Analysis of t-test is used to test the effect of each independent variable on the dependent variable. The results of data analysis presented in table 4 shows that FDR does not influence mudharabah financing. Thus, the finding does not support H_1 . Mudharabah financing is a characteristic of Islamic banks which encourages economic activity and community trade. However, the financing is dominated by murabaha financing although there is an increase of the portion of mudharabah financing. The growth of mudharabah financing gives a strong signal that Islamic banks do effort to expand their financing. This result in line with that of Rimadhani and Erza (2011), who found that FDR did not influence murabahah financing in Bank Syariah Mandiri. However, the result differs from Nastiti and Kasri (2019), who examined the effect of FDR on financing at Islamic banks, and Husaeni (2017) who looked at the same effect on SRBs.

For the second variable, data analysis shows that NPF does not influence mudharabah financing with the probability value of $0.6978 > 0.005$. Thus, H_2 is not supported. This result does not support the results of the study by Annisa and Yaya (2015) which found that NPF negatively influenced PLS financing in Indonesian Islamic banks. Although the result of this study differs from the hypothesis, there is possible explanations for this result. **First, the**

level of NPF may not in fact derive from mudharabah financing. In general, mudharabah financing is a small percentage compared to other forms of financing such as murabahah and musharakah, so NPF may not arise from it alone. It can be explained from the data of financing contracts from FSA (2020). The growth of financing in the year is dominated by Musharakah and qard financing, while the total amount of financing is dominated by murabahah and musharakah. It shows the possibility that NPF arises from dominant financing. Meanwhile, mudharabah experienced a decrease in financing so it is possible that NPF is affected by financing outside of mudharabah. This result supports the study by Winarsih and Asokawati (2018) who find that NPF has no influence on the PLS financing. The CAR variable has a significance value of 0.0091, which is below the alpha value of 0.05, and a coefficient value of -0.116. These results indicate that CAR has a negative effect on mudharabah financing and so H3 is not supported: a smaller CAR value of an Islamic bank will lead to higher mudharabah financing. This result is in accordance with the research of Husaeni (2017) and Amelia and Fauziah (2017) who found that CAR had a negative influence on the distribution of financing in SRB. Fund raising and financing are the main activities of a bank so these activities are always maintained in an Islamic bank (Husaeni, 2017). Therefore, even though the CAR value is small, financing in Islamic banks continues to be encouraged. The minimum CAR set by the Central Bank of Indonesia is 8%. Even when CAR is low, it still should not be below 8% and with this capital, Islamic banks can still distribute financing. Otherwise, higher CAR can impact on lower mudharabah financing because of the different proportion of each type of financing. Islamic banks may prioritize financing with high profit and low risk (i.e. murabahah) over mudharabah financing which has the highest risk. According to Amelia and Fauziah (2017), Islamic banks tend to choose those activities that have lower risk.

Table 4 shows the rate of return variable has a significance value of 0.0024 and a coefficient value of 0.4193. The significance value of 0.0024 is lower than alpha value of 0.05 and means that rate of return affects mudharabah financing positively and thus H4 is supported. This result supports that of Annisa and Yaya (2015), who found that rate of return influence positively PLS financing at Islamic banks. Islamic banks can identify what kind of business financed by mudharabah financing that have good prospect to produce high rate of return, and thus their financing can be maximized as prudently as possible.

The control variables in this study are bank size measured by total assets, bank age, inflation and BI rate. Based on Table 4, total assets have a significance value of 0.2051, greater than alpha value of 0.05. Thus, bank size measured by total assets does not affect on mudharabah financing. The bank age control variable (years of banking operations) has a significance value of 0.000, lower than alpha value of 0.05, and a coefficient value of 0.937181, showing that bank age has effect on mudharabah financing of Islamic banks in Indonesia. The success of distributing and managing mudharabah financing with high risk is influenced by the duration of operations. It can be suggested that the experience of managers and effective internal control systems can minimize the risk of loss in mudharabah financing, inline with the long establishment of Islamic banks. While inflation

and BI rate do not affect mudharabah financing with the probability value of 0.9524 and 0.6674 that higher than alpha value of 0.005.

5. Conclusions

Mudharabah financing is a type of financing that supports the financial needs of the community based on the justice principle. From the results detailed above, this study finds that rate of return and bank age have a positive effect and CAR has a negative effect on mudharabah financing. Meanwhile, FDR, NPF and bank size have no effect on the mudharabah financing of Islamic banks in Indonesia.

Some aspects of financial performance have an influence on mudharabah financing in Islamic banks. As a high-risk form of financing, mudharabah has a smaller percentage compared to other types of financing.

The result may have some implications. First, given this characteristic, financial ratios that can lead to the increasing of mudharabah financing must be managed properly by considering both the risk and the return potential of each financing option. This is necessary because Islamic banks will be evaluated on their performance both in terms of their financial ratios and their ability to collect and distribute funds to the public, especially in relation to PLS financing as a contribution of Islamic banks to the encouragement of real economic activities in the community. An understanding of the effects of financial performance will initiate strategies that can be implemented by Islamic banks to boost this type of financing.

Second, it cannot be denied that the purpose of Islamic banks is also to generate profits. Therefore, balancing the portion of mudharabah or PLS financing with other types of financing is also very important.

This study has several limitations. The sample of this study is fully-fledged Islamic banks and Islamic banking units within larger organizations. In future studies sharia rural banks (SRBs) that distribute mudharabah financing could also be included to provide a more comprehensive comparison. Second, this study uses several financial ratios as independent variables to test for their effects on mudharabah financing.

Other internal factors such as management or corporate governance characteristics and external factors such as economic conditions are not included as proxies in this study. Third, some Islamic banks do not distribute mudharabah financing, as can be seen from the number of zero values for this financing. Some Islamic banks distribute another forms of profit-sharing financing such as musharakah.

Based on the above limitations, we offer some suggestions for future studies. First, a study of mudharabah financing in SRBs could be carried out as a comparison with the distribution of financing in fully-fledged Islamic banks and Islamic business units investigated here. Second, future studies could add other proxies as independent variables, such as other financial ratios (ROA, ROI, ROE) and/or management or corporate governance characteristics. Because of the small or zero percentages of mudharabah financing found in the sample, musharakah financing could also be included in the dependent variable as a form of PLS financing, enabling the influence of the independent variables on mudharabah and musharakah financing to be compared.

rate of return (+) MDA → potensi semakin baik mendorong funding. Mudharabah financing memiliki potensi memberikan return yang lebih tinggi dibandingkan model pembiayaan syariah yang lain walaupun memiliki tingkat risiko yang relatif lebih tinggi. Namun demikian, dengan adanya peningkatan strategi mitigasi risiko pembiayaan yang lebih baik dengan regulasi OJK yang lebih baik, maka tingkat risiko mudharabah financing bisa ditekan sehingga motivasi manajemen bank syariah untuk menyalurkan pembiayaan ini juga semakin meningkat, apalagi jika pemerintah memberikan tambahan insentif bagi bank syariah yang mampu mendorong pembiayaan ini semakin maju lagi. Insentif dapat berupa diskon tarif pajak sampai dengan diskon iuran tahunan kepada otoritas. Mudharabah financing memiliki nilai strategis bagi pengembangan sektor riil karena mendorong para pelaku usaha untuk dapat mengakses mudharabah financing secara lebih insentif. Apalagi jika persyaratan collateral dapat diturunkan rasionya sehingga pelaku usaha mendapatkan manfaat lebih dengan menggunakan mudharabah financing ini.

Disisi lain, dengan semakin meningkatkan mudharabah financing ini akan secara otomatis meningkatkan profitabilitas bank syariah dan kemampuan memberikan bagi hasil lebih kompetitif kepada deposan sehingga meningkatkan daya saing bank syariah dengan bank konvensional. Secara jangka panjang, hal ini tentu akan meningkatkan sustainability dari bank syariah dalam menghadapi gejolak pasar yang dinamis.

bank age (+) MDA → bank semakin matang mengelola

Usia bank yang semakin matang dalam pengelolaan pembiayaan tentu akan mendorong bank syariah untuk memasuki sektor-sektor pembiayaan yang memiliki tingkat risiko yang lebih tinggi dengan konsekuensi rate of return yang lebih tinggi juga. Monitoring proses mudharabah financing ini memerlukan SDM yang memiliki kompetensi keuangan dan bisnis yang baik. Oleh karena itu, manajemen bank syariah perlu meningkatkan kompetensi SDM dalam hal analisis dan monitoring bisnis sektor riil. OJK selaku regulator perlu menyusun regulasi dan SOP terkait kualifikasi SDM yang mengawal mudharabah financing agar hasil usaha dapat lebih optimal dan meningkatkan keamanan dana nasabah.

Hal ini juga sejalan dengan peningkatan CAR yang secara bertahap dilakukan oleh bank syariah karena tuntutan regulasi sehingga manajemen lebih hati-hati dalam mengelola modal inti bank syariah. Khususnya pada saat kondisi FDR sudah melebihi 100%, maka otomatis financing akan menggunakan lebih banyak modal sehingga ketersediaan modal menjadi penting untuk menjamin financing yang sehat dengan tetap memperhatikan mitigasi risiko untuk masing-masing jenis pembiayaan. Tentu saja, manajemen akan selalu melakukan monitoring secara keta tatas tingkat NPF untuk meningkatkan kepercayaan nasabah kepada bank syariah. NPF merupakan salah satu indikator untuk menilai kemampuan manajemen dalam melakukan analisis calon nasabah serta penilaian atas potensi kelangsungan usaha nasabahnya. Jika manajemen bank syariah mampu mempertahankan indikator-indikator kinerja keuangan tersebut secara konsisten meningkatkan kualitas mudharabah financing, maka size akan lebih cepat tumbuh bersamaan dengan semakin menguatnya kepercayaan stakeholders terhadap bank syariah. Secara makro hal ini tentu akan membawa dampak positif bagi sektor riil yang menjadi penopang utama dalam perekonomian nasional. Oleh karena itu, regulator perlu terus mendorong peningkatan kinerja pembiayaan di sektor riil, seperti mudharabah financing, dengan menetapkan porsi minimal pembiayaan ke sektor riil (i.e. small and medium enterprises) yang perlu dialokasikan untuk menjamin komitmen Islamic banking management.

CAR (-) MDA → bank cenderung hati hati krn risiko modal yg hilang
FDR, NPF and bank size have no effect on the MDA →

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1. The introduction is too lengthy so it needs to be concise to the point. At the end of the introduction, authors need to put the rest of the paper structure.

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The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks

Purpose

This research aims to empirically examine the effect of internal factors on mudharabah financing in Indonesian Islamic banks. The internal factors consist of financial performance and company characteristics. Mudharabah is a form of financing that supports the financial needs of the community based on the Islamic justice principle, while financial performance is a crucial indicator for organizations.

Design/methodology/approach

The independent variables in this study are financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR), rate of return level, bank size and bank age.

This study uses financial data for Indonesian sharia commercial banks and sharia business units for year 2011–2019 and analyzes using a panel multiple regression technique.

Findings

The study found that level of rate of return and bank age have a positive effect, while CAR has a negative effect and FDR, NPF and bank size have no effect on the mudharabah financing of Islamic banks in Indonesia.

Research implications

An understanding of the effects of the internal factors such as financial performance of Islamic banking financing should encourage the effective management on the relevant activities so that the performance and health of Islamic banks can be maintained.

Originality/value

Mudharabah financing is one of the advantages of Islamic banking products because it allows management to improve financial performance with optimal profit sharing rates. Mudharabah financing is close to the activities of the real economic sector which can have a positive impact on the sustainability of economic development and also increase the resilience of Islamic banks.

Keywords: *Internal factors, Financial performance, Islamic banks, Mudharabah financing*

1. Introduction

Financing through the raising of funds is one of the two main functions of Islamic banks, the other being the offering of products and services. Financing not based on the paying and receiving of interest is one of the unique characteristics of Islamic banks and is divided into three types: financing through buying and selling, financing via leasing, and financing based on profit-and-loss-sharing (PLS) principles (Isaev and Masih 2017). PLS financing have some advantages such as fairness transaction, ethical investment and giving benefit for both

parties (Winarsih and Asokawati 2018). Mudharabah financing as a form of PLS financing is a main characteristic of Islamic banks.

However, the amount of mudharabah financing is lower than other types because its associated risk level is higher (Destiana 2016). Based on data from the Financial Services Authority (FSA) of Indonesia in 2019, the growth of financing of Islamic banks in was dominated by murabahah (21.56%), qardh (36.77%), Istishna (31.63%), and musharakah (21.56%) contracts, while mudharabah and ijarah contracts decrease in the level of -12.63% and -0.13%. However, murabahah is still the highest financing in Indonesian Islamic banks. Table 1 shows the comparative percentage of mudharabah financing as of December 2019.

Table 1. Islamic banking financing based on contract for 2019

Contracts	Amount (in trillion)	Growth
Murabaha	168.11	3.94%
Musharaka	158.61	21.56%
Mudharaba	14.02	-12.63%
Qardh	10.75	36.77%
Ijarah	10.63	-0.13%
Istishna	2.16	31.63%
fee based service	0.84	-2.27%
Total	365.13	10.89%

(Source: FSA, 2020)

Data from the FSA above shows a falling level of mudharabah financing compared to previous years, and it is therefore important to understand the factors that can influence the level of mudharabah financing volume in Islamic banks. The volume of PLS financing (mudharabah and musharakah) is influenced by external and internal factors. From external factors, Risfandy et al. (2019) argue that competition will increase PLS financing in Islamic banks, while Sabrina and Majid (2020) state that low demand, moral hazard and limited knowledge about the products of Islamic banking impact on the low of PLS financing.

Although some external factors may also influence financing in Islamic banks, Radner (1992, cited in Muhammad, 2014) states that the management features of organizations play an important role in the distribution of financing in Islamic banks. Among others, internal factors that can influence PLS financing are bank characteristics, level of risk and the financial condition of the bank. Winarsih and Asokawati (2018) state that third party fund and financing to deposit ratio influence PLS financing in Indonesian Islamic banks.

Some previous studies that have examined the effects of internal factors on the Indonesian Islamic bank financing, including mudharabah financing, have found contrasting results. There are many possible reasons why these previous studies produced differing results. First, different types of financing were being tested, some of them using PLS financing consisting of both mudharabah and musharakah (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017), others only mudharabah financing (Ali and Miftahurrohman 2015) or

murabahah financing (Rimadhani and Erza 2011). Second, some used monthly data (Annisa and Yaya 2015; Ali and Miftahurrohman 2015) while others referred to annual data (Destiana 2016; Widiastuty 2017). Third, the majority only looked at Islamic commercial banks with only Destiana (2016) looking at both Islamic commercial banks and Islamic business units.

This study aims to examine the effect of financial performance and characteristics of company on mudharabah financing in Indonesian Islamic banks. Financial performance is chosen because it is a crucial factor for any organization, and good financial performance can strengthen a company's position in the market. In addition, shareholders will choose companies whose managers can successfully generate assets and profits to ensure the company's long-term survival (Mukhibad, Kiswanto, and Jayanto 2017). Financial performance information shows the results of the operations of Islamic banks over a certain period. Furthermore, this study focuses solely on mudharabah financing because it remains at a low level compared to other PLS financing contracts such as musharakah. Khan and Ahmed (2001) state that mudharabah financing is a characteristic of Islamic banks as one of the 'fundamental pillars of Islamic banks' and should be protected as a unit of such banks. In this study, financial performance is measured in terms of financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and rate of return, while characteristics of company consist of bank size and bank age. Previous studies show that these variables have influence on the financing of Islamic banks in Indonesia (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017; Winarsih and Asokawati 2018). Furthermore, the Central Bank of Indonesia uses these aspects of financial performance to measure the health of the country's banks.

The urgency of research into factors that influence mudharabah financing can be explained as follows: first, the characteristics of PLS financing highlight the social function of Islamic banks in improving people's welfare (Husa and Trinarningsih 2015). However, the low level of mudharabah financing is a global phenomenon that occurs in almost all Islamic banks throughout the world (Destiana 2016). The small growth, even negative growth of mudharaba financing should be identified the causes and how to overcome them. Islamic banks must constantly review the implementation of the mudharabah financing which is a characteristic of their operations. Second, Islamic banks as profit-oriented financial institutions should take into account the risk of each financing channel. However, Islamic banks must give priority to distributing PLS financing compared to non-PLS financing (Risfandy et al. 2019). This study is expected to give contribution in some aspects, first, providing identification of factors which affect the financing of Islamic banks. Those factors can be used to arrange the strategies for Islamic banks to encourage the growth of their financing. Second, the empirical result of this study may help the regulator to provide solutions in solving the small growth of mudharabah financing. Third, Indonesia is a country that has higher amount of LPS financing compared to other countries (Risfandy et al. 2019). Therefore, the attention of mudharabah financing is necessary to increase the contribution of this financing to economic growth.

This study is divided into several sections. Section two explains literature review and hypotheses development. Section three describes research methodology, and section four analysis the data and discusses the results. The last section is conclusion, implication and suggestion.

2. Literature Review

2.1. Agency theory

Jensen and Meckling (1976) put forward the principle of 'agency theory', which states that a company is an agreement between the principal (shareholders) and the agent (manager). The basic assumption of this theory is that principals and agents are rational parties and behave opportunistically to maximize their own interests at the expense of others (Kayed 2012).

In Islamic banks, agency theory not only looks at the role of shareholders and managers, but also at conformity with sharia principles and contract characteristics. This is especially the case for mudharabah and musharakah contracts which exhibit problems in agency theory related to cash flow and control rights (Safieddine 2009). The risk of loss from financing can arise for several reasons, including ineffective PLS financing models, entrepreneurs' ethics, and business inefficiency (Muhammad 2014b). In terms of Islamic banks, the distribution of mudharabah financing is proof that Islamic banks have carried out their role in improving the real sector of the economy.

While society as a whole may expect Islamic banks to increase mudharabah financing, shareholders still expect Islamic banks to maintain their profits. Good performance of Islamic banks is still primary expectation of the stakeholders (Muhammad, Suluki, and Nugraheni 2020). Agency theory using this perspective suggests that managements should consider the needs of various parties. In choosing mudharabah financing, the high risk inherent in this type of financing may be a challenge for Islamic banks in optimizing results. The study of Farag, Mallin, and Ow-yong (2018) which examined the relationship between agencies in 90 Islamic banks in 13 countries found that unrestricted mudharabah contracts are one of the sources of agency problems in Islamic banks.

2.2. Mudharabah financing

The definition of financing according to Indonesian Law No. 21 of 2008 is the provision of funds from profit-sharing transactions in the form of mudharabah and musharakah contracts. FSA (2018) explains several features of mudharabah financing, as follows: (1) the purpose of mudharabah financing is to provide working capital and investment, (2) financing period can be short, medium or long term, (3) customers can be individuals or business entities, (4) profit-sharing ratio is mutually agreed upon, and (5) loss will be borne by the bank as the owner of the fund if loss occurs that is not due to negligence of the customer as fund manager; conversely, the loss will be borne by the customer if caused by negligence of the customer as fund manager.

The income derived from the activity of distributing funds to customers who use PLS financing comes from the sharing of profit if the customer makes a profit. The main product of an Islamic financial institution comprises products based on profit sharing, and Islamic banks are encouraged to increase the level of mudharabah financing portfolios to achieve this (Muhammad 2014a). Nevertheless, according to (Abdul-rahman and Nor 2016), who examined the issues facing Islamic banks in Malaysia in distributing profit-sharing financing, four challenges are revealed: high risk, difficulties in selecting financing partners, customer-dominated financing requests with low financial feasibility, and weak capital adequacy. Karim (2003, cited in Hadi, 2011), states that the advantages of profit-sharing financing include minimizing the occurrence of financial crises. This reflects the basic of this type of financing on real assets rather than the 'paper-based' financial assets typical of conventional banks. Such real assets can also create jobs and encourage new business opportunities and open up opportunities for people who want to be economically independent but do not have sufficient financial capital. Other scholars argue that profit-sharing financing is an alternative to interest-based debt and an opportunity for entrepreneurs to share risks in establishing new businesses or developing existing businesses (Kayed, 2012; Afzal and Hassan 2018), increasing collaboration spirit to improve the economy of Muslim (Abdul-rahman and Nor 2016), and promoting the value of justice, togetherness and brotherhood (Sabrina and Majid 2020).

Nevertheless, the report of FSA (2020) shows that mudharabah financing formed only 3.84% of sharia financing in 2019 and reveals the limited distribution of mudharabah financing in Islamic banks. Risfandy et al. (2019) state that PLS financing is not popular contract in Islamic banks because of some problems such as the risky financing and the complicated process (involving monitoring clients, volatility of business profitability of the client). In their research at sharia rural banks (SRBs), Sabrina and Majid (2020) reveal that the factors causing low mudharabah financing can be divided into three factors: internal, external and regulation factors. Internal factors include the high levels of risk (caused by uncertainty profit and possibility to capital or asset loss), limited knowledge of Islamic human resources of Islamic banks and asymmetric information. According to Amelia and Fauziah (2017), bank financing is influenced by internal factors such as third party funding, capital adequacy and profit-sharing levels. The availability of adequate funds will encourage the expansion of distribution of financing.

2.3. Hypotheses Development

2.3.1. The effect of financing to deposit ratio (FDR) on mudharabah financing

FDR measures the ability of the financing channels used by a bank and represents the liquidity aspect. Liquidity is important for the continuity of bank operations and requires effective management as a preventative action to avoid problems developing in the future. Lack of liquidity has a negative impact on the banking system (Ichsan 2014).

A high FDR indicates that a high level of financing that has been distributed by an Islamic bank (Supriani and Sudarsono 2018), including distribution of mudharabah financing. This is

possible if the bank is able to encourage the growth of third-party funds as a source of finance distribution. In terms of agency theory, as well as the separation between the owners of the flow of cash funds (account holders) and the shareholders, in terms of financing, both the account holders and the shareholders are the owners of the fund and will receive shares in profit achieved as well as bearing losses suffered (Zainuldin, Lui, and Yii 2018). Husaeni (2017) finds that FDR had a positive effect on the distribution of financing in SRBs in the period 2014–2016. Based on the description above, the following hypothesis is proposed:

H1: FDR has a positive effect on mudharabah financing

2.3.2. The effect of non-performing financing (NPF) on mudharabah financing.

NPF indicates the amount of uncollected financing. A high level of NPF indicates the inability of banks to manage their financing. In such situations, banks may adopt policies to tighten financing in order to reduce the NPF level. However, this policy can affect the demand level for financing by the public thus reducing the level of financing distribution, including mudharabah financing. Islamic banks need to carefully manage their NPF because of their important role in managing public funds (Setiawan and Bagaskara 2016).

According to Supriani and Sudarsono (2018), increasing in financing is usually in line with the increase in deposit funds in Islamic banks resulting from high levels of public confidence. However, when the NPF level is high, banks will increase allowances for doubtful accounts and this will result in lower levels of distributed financing. Muhammad (2014a) argues that fund owners and fund managers (agents) need to understand mudharabah contracts so that agency problems can be minimized. The study by Annisa and Yaya (2015) states that NPF has a negative effect on PLS financing in Islamic banks. Based on the description above, the second hypothesis can be derived as follows:

H2: NPF has a negative effect on mudharabah financing

2.3.3. The effect of capital adequacy ratio (CAR) on mudharabah financing

CAR is an indicator of a bank's capital adequacy and will influence the ability of banks to distribute funds (Darmawi, 2012, cited in Amelia and Fauziah, 2017). Improved capital adequacy will increase the volume of financing distribution. A higher CAR indicates that a large amount of financial resources can be used for banking operations while at the same time anticipating the potential losses that can be caused by financing distribution (Supriani and Sudarsono, 2018). Because of its potentially high level of risk, capital adequacy is a consideration in offering profit-sharing financing (Abdul-rahman and Nor 2016). The agency issue between the capital owners (mudharabah depositors and shareholders) and the agents (management) should be considered. The capital owners want their investments to have good prospects while the bank must maintain both the security of the funds deposited and the ability to generate profits to maintain the bank's performance. Higher CAR

influences higher distributed PLS financing by Islamic banks and therefore, the third hypothesis of this study is as follows:

H3: CAR has a positive effect on the mudharabah financing

2.3.4. The effect of rate of return on mudharabah financing

Profit-sharing financing has a higher risk than other types of financing due to the uncertain returns obtained by banks. Banks tend to distribute mudharabah financing if the rate of return is higher than the risk taken. According to Abdul-rahman and Nor (2016), bank employees selecting PLS financing channels must have effective skills not only in understanding customers' financial statements but also in assessing financing risks, while at the same time considering the sharia compliance of the businesses chosen.

A greater rate of return received will encourage the increase of mudharabah financing. Rate of return received by the bank is determined by the level of profitability of mudharabah financing. Therefore the rate of return received by banks greatly affects the amount of mudharabah financing, and the higher the rate of return the higher the level of mudharabah financing. Ernawati (2016) states that mudharabah financing tends to have a more fluctuating rate of return than musharakah financing.

Previous research found that the profit-sharing rate had a positive effect on PLS financing (Annisa and Yaya, 2015). Based on the description above, a further hypothesis can be derived as follows:

H4: Rate of return has a positive effect on mudharabah financing

2.3.5. The effect of bank size on mudharabah financing

Bank size is measured in terms of total assets owned. The greater the assets owned by Islamic banks, the more flexibility they have to carry out the function of financing distribution. Systems and infrastructure can be more freely built by larger banks to encourage PLS financing (Hadi, 2011), including the distribution of mudharabah financing. According to Supriani and Sudarsono (2018), the failure of customers to meet their obligations is one of the risks faced by Islamic banks. Banks can anticipate this risk by having large assets to absorb the losses incurred. Based on the explanation above, this study derives the following hypothesis:

H5 : Bank size has a positive effect on mudharabah financing

2.3.6. The effect of bank age on mudharabah financing

The age of the bank represents the length of time a bank has operated and suggests the ability of the bank to compete in the finance sector (Lestari 2013). Islamic banks that have been operating for a long time will be more experienced in knowing the market and the characteristics of their customers. Preventative action on the risk of mudharabah financing can also be carried out by Islamic banks based on their experience in channelling financing (Hadi, 2011). According to Adnan and Purwoko (2013), one of the obstacles in mudharabah financing is the difficult selection process for financing proposals, which includes the evaluation of capital, equity participation and analysis of future projections for businesses. Therefore, the longer an Islamic bank has been operating, the higher the distribution of mudharabah financing is likely to be because the bank already has a well-developed strategy in this area of its operations. The following hypothesis is developed:

H6 : Bank age has a positive effect on mudharabah financing

3. Research Methodology

Islamic banking in Indonesia comprises commercial banks, business units and rural banks, with rural banks fulfilling a different role to commercial and business-based operations. Since the first establishment of Islamic banks in 1992, Indonesia now has 14 fully-fledged Islamic banks and 20 Islamic business unit. The increasing number of Islamic banks and business units in Indonesia providing a wide range of products and services is encouraging banks to be prudent in managing credit risk (Setiawan and Bagaskara 2016).

The objects of this study are Indonesian Islamic commercial banks and business units which published annual reports for the **period 2011–2019** and for which the complete data needed for this study is available. This study uses purposive sampling and secondary data obtained from the official websites of Islamic banks.

The dependent variable in this study is mudharabah financing, the independent variables are financial performance measured by FDR, NPF, CAR and rate of return, bank size, bank age and the two control variables used are inflation and BI rate (Indonesian central bank rate). Good financial performance is crucial for an organization and can strengthen its position in the market, and the Central Bank of Indonesia uses financial performance to measure the health of the country's banks. Measurement of variables can be seen in the Table 2.

Table 2. Variables Measurements

Variables	Measurements
Mudharabah financing (Mudh)	$Ln = \text{amount of distributed mudharabah financing}$
Financing to deposit ratio (FDR)	$FDR = \frac{\text{amount of distributed financing} \times 100\%}{\text{total of third party funds}}$
Non-performing financing (NPF)	$NPF = \frac{\text{number of non-performing financing} \times 100\%}{\text{total of financing}}$

Capital adequacy ratio (CAR)	$\text{CAR} = \frac{\text{Total capital}}{\text{Risk Wighted Asset}} \times 100\%$
Rate of return (RR)	The level of rate of return from mudharabah financing (t-1)
Bank size (SZ)	Ln total assets
Bank age (AG)	The duration of the Islamic bank's operation since first established
Inflation (INF)	Average of inflation rate in that year
BI Rate (BI)	Level of the rate of Indonesian central bank

The study examines the data using panel data regression. There are three panel data regression models: common effects model (CEM), fixed effects model (FEM) and random effects model (REM), and to be able to choose the most efficient model for this research, several tests were conducted, including the Chow test, the Lagrange multiplier test and the Hausman test. The Chow test is used to choose between the CEM and FEM. If the p-value is smaller than the alpha value of 0.05, the fixed effect is more appropriate for use in the regression equation. The Lagrange multiplier test is used to choose between CEM and REM. If the p-value is smaller than the alpha value of 0.05, the random effects model is more appropriate for use in the regression equation. The Hausman test is used to choose between REM and FEM. The fixed effect model is selected if p-value is smaller than alpha value of 0.05.

This study also examines data quality through analysis of descriptive statistics and coefficient of determination. An *F*-test is used to test the effect of the independent variables on the dependent variable simultaneously and a t-test is used to test the effect of each independent variable on the dependent variable. The regression equation in this study is as follows:

$$\text{Mudh} = \alpha + \beta_1 \text{FDR} + \beta_2 \text{NPF} + \beta_3 \text{CAR} + \beta_4 \text{RR} + \beta_5 \text{SZ} + \beta_6 \text{AG} + \beta_7 \text{INF} + \beta_8 \text{BI} + e$$

Explanation:

Mudh : mudharabah financing

α : constants

β : regression coefficient

FDR : FDR (financing to deposit ratio)

NPF : NPF (non-performing financing)

CAR : CAR (capital adequacy ratio)

RR : rate of return

SZ : bank size

AG : bank age

INF : inflation

BI : BI rate

e : error

4. Results and Discussion

Currently, Indonesia has 14 fully-fledged Islamic banks and 20 Islamic banking units. Of these, this study includes the 10 Islamic banks and 17 Islamic banking units that have full data available, totalling 241 data items over nine years. Descriptive statistical tests aimed to determine the means, minimums and maximums of the variables studied. The results of these descriptive statistics tests are presented in table 3.

Table 3. Descriptive statistics results

	MUDH	FDR	NPF	CAR	RR	SZ	AG	INF	BI
Mean	25.10942	103.5035	1.204290	20.22552	2.401535	28.87292	9.008299	4.768465	6.048755
Median	26.13000	94.49000	0.037000	18.74000	0.370000	29.00000	9.000000	4.280000	6.000000
Maximum	31.00000	338.5200	12.52000	81.75000	32.15000	32.35000	27.00000	6.970000	7.750000
Minimum	0.000000	10.07000	0.000000	9.570000	0.000000	25.52419	1.000000	3.030000	4.250000
Std. Dev.	5.639972	35.12055	2.126905	7.770408	4.857355	1.477753	4.661895	1.446698	1.214692

The mudharabah financing (Ln) variable has a mean value of 25.11, maximum value of 31 and minimum value of 0. The FDR variable has mean value of 103.50%, with a maximum value of 338.52% and a minimum value of 10.07%. The NPF variable has a mean value of 1.204%, with a maximum value of 12.52% and a minimum value of 0%. CAR has mean value of 20.23% with a maximum value of 81.75% and a minimum value of 9.57%. Rate of return has mean value of 2.40% with a maximum value of 32.15% and a minimum value of 0%. The minimum and maximum values are for a variety of the Islamic banks studied, although several are often mentioned in the same categories but in different years. However, although such variation does not necessarily mean that a bank's financial performance is bad, it may suggest that the financial conditions of Islamic banks vary and thus might affect the amount of financing distribution.

This study uses panel data regression carried out using eviews 10 software and determines the best model for processing the data via Chow test, Hausman test and Lagrange multiplier (LM) test. The Chow test is used to reveal whether FEM or CEM is the better model for panel data regression. Table 4 shows the probability value of the Chow test is 0.0000 and is therefore smaller than alpha value of 0.05. Thus, FEM is better than CEM. The next test is Housman test to compare FEM and REM. The cross section random probability value of 0.0317 is lower than the alpha value of 0.05 and therefore FEM is more suitable than REM.

Table 4. Comparison of Chow and Hausman tests

	Chow test	Hausman test
Statistic	153.880	16.8553
d.f	26	6
Prob.	0.000	0.0317

Table 5. Panel data regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	42.7574	20.5442	2.0812	0.0386
FDR	0.0121	0.0100	1.2118	0.2270
NPF	0.1002	0.2577	0.3888	0.6978
CAR	-0.1161	0.0441	-2.6327	0.0091
RR	0.4194	0.1365	3.0715	0.0024
SZ	-0.9516	0.7486	-1.2712	0.2051
AG	0.9372	0.2121	4.4180	0.0000
INF	0.0278	0.4658	0.0598	0.9524
BI	0.2013	0.4678	0.4304	0.6674
R-squared	0.547735	F-statistik	7.3378	
Adjusted R-Square	0.473089	Prob. (F-statistik)	0.000	

The FEM test results can be seen in table 5. The significance value of the F-statistic of 0.0000 being less than alpha value of 0.05 indicates that the independent variables in this study influence mudharabah financing simultaneously. The coefficient of determination shows the ability of the model to explain or predict the outcomes. Table 5 shows the value of the coefficient of determination (adjusted R-squared) was 0.473089 (47.31%), which means that the variations in mudharabah financing is explained 47.31% by financial performance (FDR, NPF, CAR, level of rate of return, bank size, bank age, inflation and BI rate), while the remaining 52.69% is explained by other variables, which are not examined, such as third party funds, which are not financial performance variables, like those in studies by Destiana (2016) and Annisa and Yaya (2015).

Analysis of t-test is used to test the effect of each independent variable on the dependent variable. The results of data analysis presented in table 5 shows that FDR does not influence mudharabah financing. Thus, the finding does not support H_1 . Mudharabah financing is a characteristic of Islamic banks which encourages economic activity and community trade. However, the financing is dominated by murabaha financing although there is an increase of the portion of mudharabah financing. The growth of mudharabah financing gives a strong signal that Islamic banks do effort to expand their financing. This result in line with that of Rimadhani and Erza (2011), who found that FDR did not influence murabahah financing in Bank Syariah Mandiri. However, the result differs from Nastiti and Kasri (2019), who examined the effect of FDR on financing at Islamic banks, and Husaeni (2017) who looked at the same effect on SRBs.

For the second variable, data analysis shows that NPF does not influence mudharabah financing with the probability value of $0.6978 > 0.005$. Thus, H_2 is not supported. This result does not support the results of the study by Annisa and Yaya (2015) which found that NPF negatively influenced PLS financing in Indonesian Islamic banks. Although the result of this study differs from the hypothesis, there is possible explanation for this result. First, the level

of NPF may not in fact derive from mudharabah financing. In general, mudharabah financing is a small percentage compared to other forms of financing such as murabahah and musharakah, so NPF may not arise from it alone. It can be explained from the data of financing contracts from FSA (2020). The growth of financing in the year is dominated by Musharakah and qard financing, while the total amount of financing is dominated by murabahah and musharakah. It shows the possibility that NPF arises from dominant financing. Meanwhile, mudharabah experienced a decrease in financing so it is possible that NPF is affected by financing outside of mudharabah. This result supports the study by Winarsih and Asokawati (2018) who find that NPF has no influence on the PLS financing. The CAR variable has a significance value of 0.0091, which is below the alpha value of 0.05, and a coefficient value of -0.116. These results indicate that CAR has a negative effect on mudharabah financing and so H3 is not supported: a smaller CAR value of an Islamic bank will lead to higher mudharabah financing. This result is in accordance with the research of Husaeni (2017) and Amelia and Fauziah (2017) who found that CAR had a negative influence on the distribution of financing in SRB. Fund raising and financing are the main activities of a bank so these activities are always maintained in an Islamic bank (Husaeni, 2017). Therefore, even though the CAR value is small, financing in Islamic banks continues to be encouraged. The minimum CAR set by the Central Bank of Indonesia is 8%. Even when CAR is low, it still should not be below 8% and with this capital, Islamic banks can still distribute financing. Otherwise, higher CAR can impact on lower mudharabah financing because of the different proportion of each type of financing. Islamic banks may prioritize financing with high profit and low risk (i.e. murabahah) over mudharabah financing which has the highest risk. According to Amelia and Fauziah (2017), Islamic banks tend to choose those activities that have lower risk.

Table 5 shows the rate of return variable has a significance value of 0.0024 and a coefficient value of 0.4193. The significance value of 0.0024 is lower than alpha value of 0.05 and means that rate of return affects mudharabah financing positively and thus H4 is supported. This result supports that of Annisa and Yaya (2015), who found that rate of return influence positively PLS financing at Islamic banks. Islamic banks can identify what kind of business financed by mudharabah financing that have good prospect to produce high rate of return, and thus their financing can be maximized as prudently as possible.

Total assets have a significance value of 0.2051, greater than alpha value of 0.05. Thus, bank size measured by total assets does not affect on mudharabah financing. The bank age variable (years of banking operations) has a significance value of 0.000, lower than alpha value of 0.05, and a coefficient value of 0.937181, showing that bank age has effect on mudharabah financing of Islamic banks in Indonesia. The success of distributing and managing mudharabah financing with high risk is influenced by the duration of operations. It can be suggested that the experience of managers and effective internal control systems can minimize the risk of loss in mudharabah financing, inline with the long establishment of Islamic banks. The control variables in this study, inflation and BI rate do not affect

mudharabah financing with the probability value of 0.9524 and 0.6674 that higher than alpha value of 0.005.

This study also examined the data using the first difference GMM two-step estimator for estimating dynamic panel regression. Regression of dynamic panel is a regression method which include the lagged dependent variable (MF-1) as an independent variable. Test specifications model used is Arellano-Bond test (consistency test) and Sargan test (instrument validity test). The result of dynamic panel regression can be shown in table 6 below.

Table 6. Dynamic panel regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MF(-1)	0.460078	0.001914	240.3372	0.0000
FDR	0.001499	0.001467	1.021988	0.3082
NPF	-0.032007	0.009518	-3.362828	0.0009
CAR	-0.066752	0.006144	-10.86396	0.0000
RR	0.226075	0.007706	29.33755	0.0000
SZ	-0.747391	0.123808	-14.11373	0.0000
AG	0.824937	0.030538	27.01333	0.0000
INF	0.102812	0.011084	9.275345	0.0000
BI	0.387784	0.021249	18.24932	0.0000
Statistic Value of Sargan Test				Prob.
J-statistic		25.18064	0.120021	
Statistic Value of Arellano -Bond Test				Prob.
AR(1)		-1.038317	0.2988	
AR(2)		-0.977592	0.3620	

The result of the Sargan test shows the probability value is greater than 0.05 and it means that there is no correlation between residual and over identifying restriction are valid. The Arelleno Bond (AR) tests show a probability value of 0.2988 and 0.3620 are greater than Alpha 0.05, so estimates can be said to be consistent and there is no autocorrelation of the second order error difference.

The result shows that lagged mudharabah financing (MF-1) has positive influence on the mudharabah financing. This was possible because the quality and results of the previous mudharabah financing made management more optimistic about channeling more mudharabah financing. The other results show that NPF, CAR and size have negative influence, while rate of return, age, inflation and BI rate have positive influence toward mudharabah financing. Only FDR has insignificant impact to the mudharabah financing. The results of FDR, CAR, rate of return and age are consistent with finding of FEM. Meanwhile, the influence of NPF and size has different result between FEM and GMM. Using GMM, this study found that NPF and size have negative influence toward mudharabah financing. The higher NPF will lead to the lower mudharabah financing. When facing a high NPF, Islamic banks will be more careful in channeling financing, including mudharabah. Mudharabah

financing has a higher risk than other financing, therefore, this financing may lead to high financing risk (Widarjono, Anto, & Fakhrunnas, 2020).

Meanwhile, the size variable also shows a negative effect, which means that the larger the bank size will impact on the smaller mudharabah financing. This result is in contrast to the expectations of the hypothesis above. However, there are some possibilities that can be analyzed. First, larger banks may be more selective in choosing the financing distribution. According to Muhammad, Suluki, & Nugraheni (2020), larger banks have the flexibility to choose financing that is estimated providing a more certain or higher profit. When there are other types of financing that are more profitable than mudharabah financing, Islamic banks may prefer to distribute non-mudharabah financing. Second, there is regulation for management structure at a larger bank scale to establish a compliance director who has task to control the financing distribution (FSA number 46 year 2017). This regulation will result in an increasingly stringent approval process for high-risk financing, which may reduce the volume of mudharabah financing.

5. Conclusions

Mudharabah financing is a type of financing that supports the financial needs of the community based on the justice principle. From the results detailed above, this study finds that rate of return and bank age have a positive effect and CAR has a negative effect on mudharabah financing. Meanwhile, FDR, NPF and bank size have no effect on the mudharabah financing of Islamic banks in Indonesia.

Some aspects of financial performance have an influence on mudharabah financing in Islamic banks. As a high-risk form of financing, mudharabah has a smaller percentage compared to other types of financing. The result may have some implications. First, given this characteristic, financial ratios that can lead to the increasing of mudharabah financing must be managed properly by considering both the risk and the return potential of each financing option. This is necessary because Islamic banks will be evaluated on their performance both in terms of their financial ratios and their ability to collect and distribute funds to the public, especially in relation to PLS financing as a contribution of Islamic banks to the encouragement of real economic activities in the community. An understanding of the effects of financial performance will initiate strategies that can be implemented by Islamic banks to boost this type of financing.

Second, it cannot be denied that the purpose of Islamic banks is also to generate profits. Based on the result above, mudharabah financing has the potential to provide a higher return even though it has a relatively higher level of risk. However, with the improvement of a better financing risk mitigation strategy, the risk level of mudharabah financing can be reduced so that the motivation of Islamic bank management to channel this financing also increases, especially if the government provides additional incentives for Islamic banks that able to push this financing even further. Incentives can range from discounted tax rates to discounts on annual fees to the authorities. Mudharabah financing has strategic value for the development of the real sector because it encourages business actors to be able to

access mudharabah financing in a more incentive manner. Especially if the collateral requirements can be lowered so that business actors get more benefits by using this mudharabah financing.

Monitoring mudharabah financing process and improving risk mitigation strategy require human resources who have good financial and business competence. Therefore, Islamic bank management needs to improve the competence of human resources in terms of analysis and monitoring of real sector business. Indonesian financial services authority (FSA) as the regulator needs to formulate regulations and SOPs related to the qualifications of human resources that oversee mudharabah financing so that business results can be more optimal and increase the security of customer funds.

However, management still always monitor closely the NPF level to increase customer confidence in Islamic banks. NPF is an indicator to assess management's ability to analyze potential customers and assess potential business continuity of its customers. If the management of Islamic banks is able to maintain these financial performance indicators to consistently improve the quality of mudharabah financing, the size will grow faster along with the strengthening of stakeholder confidence in Islamic banks. From a macro perspective, this will certainly have a positive impact on the real sector, which is the main support for the national economy. Therefore, regulators need to encourage the growth of financing performance in the real sector, such as mudharabah financing, by setting a minimum portion of financing to the real sector (i.e. small and medium enterprises) which need to be allocated to ensure the commitment of Islamic banking management. The maturing age of banks in financing management will certainly encourage Islamic banks to enter financing sectors that have a higher level of risk with the consequence of a higher rate of return as well.

This study has several limitations. The sample of this study is fully-fledged Islamic banks and Islamic banking units within larger organizations. In future studies sharia rural banks (SRBs) that distribute mudharabah financing could also be included to provide a more comprehensive comparison. Second, this study uses several financial ratios as independent variables to test for their effects on mudharabah financing. Other internal factors such as management or corporate governance characteristics and external factors such as economic conditions are not included as proxies in this study. Third, some Islamic banks do not distribute mudharabah financing, as can be seen from the number of zero values for this financing. Some Islamic banks distribute another forms of profit-sharing financing such as musharakah.

Based on the above limitations, we offer some suggestions for future studies. First, a study of mudharabah financing in SRBs could be carried out as a comparison with the distribution of financing in fully-fledged Islamic banks and Islamic business units investigated here. Second, future studies could add other proxies as independent variables, such as other financial ratios (ROA, ROI, ROE) and/or management or corporate governance characteristics. Because of the small or zero percentages of mudharabah financing found in the sample, musharakah financing could also be included in the dependent variable as a

form of PLS financing, enabling the influence of the independent variables on mudharabah and musharakah financing to be compared.

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The Effect of Internal Factors on the Mudharabah Financing of Indonesian Islamic Banks

Purpose

This research aims to empirically examine the effect of internal factors on mudharabah financing in Indonesian Islamic banks. The internal factors consist of financial performance and company characteristics. Mudharabah is a form of financing that supports the financial needs of the community based on the Islamic justice principle, while financial performance is a crucial indicator for organizations.

Design/methodology/approach

The independent variables in this study are financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR), rate of return level, bank size and bank age. This study uses financial data for Indonesian sharia commercial banks and sharia business units for year 2011–2019 and analyzes using a panel multiple regression technique.

Findings

The study found that level of rate of return and bank age have a positive effect, while CAR has a negative effect and FDR, NPF and bank size have no effect on the mudharabah financing of Islamic banks in Indonesia.

Research implications

An understanding of the effects of the internal factors such as financial performance of Islamic banking financing should encourage the effective management on the relevant activities so that the performance and health of Islamic banks can be maintained.

Originality/value

Mudharabah financing is one of the advantages of Islamic banking products because it allows management to improve financial performance with optimal profit sharing rates. Mudharabah financing is close to the activities of the real economic sector which can have a positive impact on the sustainability of economic development and also increase the resilience of Islamic banks.

Keywords: *Internal factors, Financial performance, Islamic banks, Mudharabah financing*

1. Introduction

Financing through the raising of funds is one of the two main functions of Islamic banks, the other being the offering of products and services. Financing not based on the paying and receiving of interest is one of the unique characteristics of Islamic banks and is divided into three types: financing through buying and selling, financing via leasing, and financing based on profit-and-loss-sharing (PLS) principles (Isaev and Masih 2017). PLS financing have some advantages such as fairness transaction, ethical investment and giving benefit for both

parties (Winarsih and Asokawati 2018). Mudharabah financing as a form of PLS financing is a main characteristic of Islamic banks.

However, the amount of mudharabah financing is lower than other types because its associated risk level is higher (Destiana 2016). Based on data from the Financial Services Authority (FSA) of Indonesia in 2019, the growth of financing of Islamic banks in was dominated by murabahah (21.56%), qardh (36.77%), Istishna (31.63%), and musharakah (21.56%) contracts, while mudharabah and ijarah contracts decrease in the level of -12.63% and -0.13%. However, murabahah is still the highest financing in Indonesian Islamic banks. Table 1 shows the comparative percentage of mudharabah financing as of December 2019.

Table 1. Islamic banking financing based on contract for 2019

Contracts	Amount (in trillion)	Growth
Murabaha	168.11	3.94%
Musharaka	158.61	21.56%
Mudharaba	14.02	-12.63%
Qardh	10.75	36.77%
Ijarah	10.63	-0.13%
Istishna	2.16	31.63%
fee based service	0.84	-2.27%
Total	365.13	10.89%

(Source: FSA, 2020)

Data from the FSA above shows a falling level of mudharabah financing compared to previous years, and it is therefore important to understand the factors that can influence the level of mudharabah financing volume in Islamic banks. The volume of PLS financing (mudharabah and musharakah) is influenced by external and internal factors. From external factors, Risfandy et al. (2019) argue that competition will increase PLS financing in Islamic banks, while Sabrina and Majid (2020) state that low demand, moral hazard and limited knowledge about the products of Islamic banking impact on the low of PLS financing. Although some external factors may also influence financing in Islamic banks, Radner (1992, cited in Muhammad, 2014) states that the management features of organizations play an important role in the distribution of financing in Islamic banks. Among others, internal factors that can influence PLS financing are bank characteristics, level of risk and the financial condition of the bank. Winarsih and Asokawati (2018) state that third party fund and financing to deposit ratio influence PLS financing in Indonesian Islamic banks. Some previous studies that have examined the effects of internal factors on the Indonesian Islamic bank financing, including mudharabah financing, have found contrasting results. There are many possible reasons why these previous studies produced differing results. First, different types of financing were being tested, some of them using PLS financing consisting of both mudharabah and musharakah (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017), others only mudharabah financing (Ali and Miftahurrohman 2015) or

murabahah financing (Rimadhani and Erza 2011). Second, some used monthly data (Annisa and Yaya 2015; Ali and Miftahurrohman 2015) while others referred to annual data (Destiana 2016; Widiastuty 2017). Third, the majority only looked at Islamic commercial banks with only Destiana (2016) looking at both Islamic commercial banks and Islamic business units.

This study aims to examine the effect of financial performance and characteristics of company on mudharabah financing in Indonesian Islamic banks. Financial performance is chosen because it is a crucial factor for any organization, and good financial performance can strengthen a company's position in the market. In addition, shareholders will choose companies whose managers can successfully generate assets and profits to ensure the company's long-term survival (Mukhibad, Kiswanto, and Jayanto 2017). Financial performance information shows the results of the operations of Islamic banks over a certain period. Furthermore, this study focuses solely on mudharabah financing because it remains at a low level compared to other PLS financing contracts such as musharakah. Khan and Ahmed (2001) state that mudharabah financing is a characteristic of Islamic banks as one of the 'fundamental pillars of Islamic banks' and should be protected as a unit of such banks. In this study, financial performance is measured in terms of financing to deposit ratio (FDR), non-performing financing (NPF), capital adequacy ratio (CAR) and rate of return, while characteristics of company consist of bank size and bank age. Previous studies show that these variables have influence on the financing of Islamic banks in Indonesia (Destiana 2016; Annisa and Yaya 2015; Widiastuty 2017; Winarsih and Asokawati 2018). Furthermore, the Central Bank of Indonesia uses these aspects of financial performance to measure the health of the country's banks.

The urgency of research into factors that influence mudharabah financing can be explained as follows: first, the characteristics of PLS financing highlight the social function of Islamic banks in improving people's welfare (Husa and Trinarningsih 2015). However, the low level of mudharabah financing is a global phenomenon that occurs in almost all Islamic banks throughout the world (Destiana 2016). The small growth, even negative growth of mudharabah financing should be identified the causes and how to overcome them. Islamic banks must constantly review the implementation of the mudharabah financing which is a characteristic of their operations. Second, Islamic banks as profit-oriented financial institutions should take into account the risk of each financing channel. However, Islamic banks must give priority to distributing PLS financing compared to non-PLS financing (Risfandy et al. 2019). This study is expected to give contribution in some aspects, first, providing identification of factors which affect the financing of Islamic banks. Those factors can be used to arrange the strategies for Islamic banks to encourage the growth of their financing. Second, the empirical result of this study may help the regulator to provide solutions in solving the small growth of mudharabah financing. Third, Indonesia is a country that has higher amount of PLS financing compared to other countries (Risfandy et al. 2019). Therefore, the attention of mudharabah financing is necessary to increase the contribution of this financing to economic growth.

This study is divided into several sections. Section two explains literature review and hypotheses development. Section three describes research methodology, and section four analysis the data and discusses the results. The last section is conclusion, implication and suggestion.

2. Literature Review

2.1. Agency theory

Jensen and Meckling (1976) put forward the principle of 'agency theory', which states that a company is an agreement between the principal (shareholders) and the agent (manager). The basic assumption of this theory is that principals and agents are rational parties and behave opportunistically to maximize their own interests at the expense of others (Kayed 2012).

In Islamic banks, agency theory not only looks at the role of shareholders and managers, but also at conformity with sharia principles and contract characteristics. This is especially the case for mudharabah and musharakah contracts which exhibit problems in agency theory related to cash flow and control rights (Safieddine 2009). The risk of loss from financing can arise for several reasons, including ineffective PLS financing models, entrepreneurs' ethics, and business inefficiency (Muhammad 2014b). In terms of Islamic banks, the distribution of mudharabah financing is proof that Islamic banks have carried out their role in improving the real sector of the economy.

While society as a whole may expect Islamic banks to increase mudharabah financing, shareholders still expect Islamic banks to maintain their profits. Good performance of Islamic banks is still primary expectation of the stakeholders (Muhammad, Suluki, and Nugraheni 2020). Agency theory using this perspective suggests that managements should consider the needs of various parties. In choosing mudharabah financing, the high risk inherent in this type of financing may be a challenge for Islamic banks in optimizing results. The study of Farag, Mallin, and Ow-yong (2018) which examined the relationship between agencies in 90 Islamic banks in 13 countries found that unrestricted mudharabah contracts are one of the sources of agency problems in Islamic banks.

2.2. Mudharabah financing

The definition of financing according to Indonesian Law No. 21 of 2008 is the provision of funds from profit-sharing transactions in the form of mudharabah and musharakah contracts. FSA (2018) explains several features of mudharabah financing, as follows: (1) the purpose of mudharabah financing is to provide working capital and investment, (2) financing period can be short, medium or long term, (3) customers can be individuals or business entities, (4) profit-sharing ratio is mutually agreed upon, and (5) loss will be borne by the bank as the owner of the fund if loss occurs that is not due to negligence of the customer as fund manager; conversely, the loss will be borne by the customer if caused by negligence of the customer as fund manager.

The income derived from the activity of distributing funds to customers who use PLS financing comes from the sharing of profit if the customer makes a profit. The main product of an Islamic financial institution comprises products based on profit sharing, and Islamic banks are encouraged to increase the level of mudharabah financing portfolios to achieve this (Muhammad 2014). Nevertheless, according to (Abdul-rahman and Nor 2016), who examined the issues facing Islamic banks in Malaysia in distributing profit-sharing financing, four challenges are revealed: high risk, difficulties in selecting financing partners, customer-dominated financing requests with low financial feasibility, and weak capital adequacy. Karim (2003, cited in Hadi, 2011), states that the advantages of profit-sharing financing include minimizing the occurrence of financial crises. This reflects the basic of this type of financing on real assets rather than the 'paper-based' financial assets typical of conventional banks. Such real assets can also create jobs and encourage new business opportunities and open up opportunities for people who want to be economically independent but do not have sufficient financial capital. Other scholars argue that profit-sharing financing is an alternative to interest-based debt and an opportunity for entrepreneurs to share risks in establishing new businesses or developing existing businesses (Kayed, 2012; Afzal and Hassan 2018), increasing collaboration spirit to improve the economy of Muslim (Abdul-rahman and Nor 2016), and promoting the value of justice, togetherness and brotherhood (Sabrina and Majid 2020).

Nevertheless, the report of FSA (2020) shows that mudharabah financing formed only 3.84% of sharia financing in 2019 and reveals the limited distribution of mudharabah financing in Islamic banks. Risfandy et al. (2019) state that PLS financing is not popular contract in Islamic banks because of some problems such as the risky financing and the complicated process (involving monitoring clients, volatility of business profitability of the client). In their research at sharia rural banks (SRBs), Sabrina and Majid (2020) reveal that the factors causing low mudharabah financing can be divided into three factors: internal, external and regulation factors. Internal factors include the high levels of risk (caused by uncertainty profit and possibility to capital or asset loss), limited knowledge of Islamic human resources of Islamic banks and asymmetric information. According to Amelia and Fauziah (2017), bank financing is influenced by internal factors such as third party funding, capital adequacy and profit-sharing levels. The availability of adequate funds will encourage the expansion of distribution of financing.

2.3. Hypotheses Development

2.3.1. The effect of financing to deposit ratio (FDR) on mudharabah financing

FDR measures the ability of the financing channels used by a bank and represents the liquidity aspect. Liquidity is important for the continuity of bank operations and requires effective management as a preventative action to avoid problems developing in the future. Lack of liquidity has a negative impact on the banking system (Ichsan 2014).

A high FDR indicates that a high level of financing that has been distributed by an Islamic bank (Supriani and Sudarsono 2018), including distribution of mudharabah financing. This is

possible if the bank is able to encourage the growth of third-party funds as a source of finance distribution. In terms of agency theory, as well as the separation between the owners of the flow of cash funds (account holders) and the shareholders, in terms of financing, both the account holders and the shareholders are the owners of the fund and will receive shares in profit achieved as well as bearing losses suffered (Zainuldin, Lui, and Yii 2018). Husaeni (2017) finds that FDR had a positive effect on the distribution of financing in SRBs in the period 2014–2016. Based on the description above, the following hypothesis is proposed:

H1: FDR has a positive effect on mudharabah financing

2.3.2. The effect of non-performing financing (NPF) on mudharabah financing.

NPF indicates the amount of uncollected financing. A high level of NPF indicates the inability of banks to manage their financing. In such situations, banks may adopt policies to tighten financing in order to reduce the NPF level. However, this policy can affect the demand level for financing by the public thus reducing the level of financing distribution, including mudharabah financing. Islamic banks need to carefully manage their NPF because of their important role in managing public funds (Setiawan and Bagaskara 2016).

According to Supriani and Sudarsono (2018), increasing in financing is usually in line with the increase in deposit funds in Islamic banks resulting from high levels of public confidence. However, when the NPF level is high, banks will increase allowances for doubtful accounts and this will result in lower levels of distributed financing. Muhammad (2014a) argues that fund owners and fund managers (agents) need to understand mudharabah contracts so that agency problems can be minimized. The study by Annisa and Yaya (2015) states that NPF has a negative effect on PLS financing in Islamic banks. Based on the description above, the second hypothesis can be derived as follows:

H2: NPF has a negative effect on mudharabah financing

2.3.3. The effect of capital adequacy ratio (CAR) on mudharabah financing

CAR is an indicator of a bank's capital adequacy and will influence the ability of banks to distribute funds (Darmawi, 2012, cited in Amelia and Fauziah, 2017). Improved capital adequacy will increase the volume of financing distribution. A higher CAR indicates that a large amount of financial resources can be used for banking operations while at the same time anticipating the potential losses that can be caused by financing distribution (Supriani and Sudarsono, 2018). Because of its potentially high level of risk, capital adequacy is a consideration in offering profit-sharing financing (Abdul-rahman and Nor 2016). The agency issue between the capital owners (mudharabah depositors and shareholders) and the agents (management) should be considered. The capital owners want their investments to have good prospects while the bank must maintain both the security of the funds deposited and the ability to generate profits to maintain the bank's performance. Higher CAR

influences higher distributed PLS financing by Islamic banks and therefore, the third hypothesis of this study is as follows:

H3: CAR has a positive effect on the mudharabah financing

2.3.4. The effect of rate of return on mudharabah financing

Profit-sharing financing has a higher risk than other types of financing due to the uncertain returns obtained by banks. Banks tend to distribute mudharabah financing if the rate of return is higher than the risk taken. According to Abdul-rahman and Nor (2016), bank employees selecting PLS financing channels must have effective skills not only in understanding customers' financial statements but also in assessing financing risks, while at the same time considering the sharia compliance of the businesses chosen.

A greater rate of return received will encourage the increase of mudharabah financing. Rate of return received by the bank is determined by the level of profitability of mudharabah financing. Therefore the rate of return received by banks greatly affects the amount of mudharabah financing, and the higher the rate of return the higher the level of mudharabah financing. Ernawati (2016) states that mudharabah financing tends to have a more fluctuating rate of return than musharakah financing.

Previous research found that the profit-sharing rate had a positive effect on PLS financing (Annisa and Yaya, 2015). Based on the description above, a further hypothesis can be derived as follows:

H4: Rate of return has a positive effect on mudharabah financing

2.3.5. The effect of bank size on mudharabah financing

Bank size is measured in terms of total assets owned. The greater the assets owned by Islamic banks, the more flexibility they have to carry out the function of financing distribution. Systems and infrastructure can be more freely built by larger banks to encourage PLS financing (Hadi, 2011), including the distribution of mudharabah financing. According to Supriani and Sudarsono (2018), the failure of customers to meet their obligations is one of the risks faced by Islamic banks. Banks can anticipate this risk by having large assets to absorb the losses incurred. Based on the explanation above, this study derives the following hypothesis:

H5 : Bank size has a positive effect on mudharabah financing

2.3.6. The effect of bank age on mudharabah financing

The age of the bank represents the length of time a bank has operated and suggests the ability of the bank to compete in the finance sector (Lestari 2013). Islamic banks that have been operating for a long time will be more experienced in knowing the market and the characteristics of their customers. Preventative action on the risk of mudharabah financing can also be carried out by Islamic banks based on their experience in channelling financing (Hadi, 2011). According to Adnan & Purwoko (2013), one of the obstacles in mudharabah financing is the difficult selection process for financing proposals, which includes the evaluation of capital, equity participation and analysis of future projections for businesses. Therefore, the longer an Islamic bank has been operating, the higher the distribution of mudharabah financing is likely to be because the bank already has a well-developed strategy in this area of its operations. The following hypothesis is developed:

H6 : Bank age has a positive effect on mudharabah financing

3. Research Methodology

Islamic banking in Indonesia comprises commercial banks, business units and rural banks, with rural banks fulfilling a different role to commercial and business-based operations. Since the first establishment of Islamic banks in 1992, Indonesia now has 14 fully-fledged Islamic banks and 20 Islamic business unit. The increasing number of Islamic banks and business units in Indonesia providing a wide range of products and services is encouraging banks to be prudent in managing credit risk (Setiawan and Bagaskara 2016).

The objects of this study are Indonesian Islamic commercial banks and business units which published annual reports for the period 2011–2019 and for which the complete data needed for this study is available. This study uses purposive sampling and secondary data obtained from the official websites of Islamic banks.

The dependent variable in this study is mudharabah financing, the independent variables are financial performance measured by FDR, NPF, CAR and rate of return, bank size, bank age and the two control variables used are inflation and BI rate (Indonesian central bank rate). Good financial performance is crucial for an organization and can strengthen its position in the market, and the Central Bank of Indonesia uses financial performance to measure the health of the country's banks. Measurement of variables can be seen in the Table 2.

Table 2. Variables Measurements

Variables	Measurements
Mudharabah financing (Mudh)	$Ln = \text{amount of distributed mudharabah financing}$
Financing to deposit ratio (FDR)	$FDR = \frac{\text{amount of distributed financing} \times 100\%}{\text{total of third party funds}}$
Non-performing financing (NPF)	$NPF = \frac{\text{number of non-performing financing} \times 100\%}{\text{total of financing}}$

Capital adequacy ratio (CAR)	$\text{CAR} = \frac{\text{Total capital}}{\text{Risk Wighted Asset}} \times 100\%$
Rate of return (RR)	The level of rate of return from mudharabah financing (t-1)
Bank size (SZ)	Ln total assets
Bank age (AG)	The duration of the Islamic bank's operation since first established
Inflation (INF)	Average of inflation rate in that year
BI Rate (BI)	Level of the rate of Indonesian central bank

The study examines the data using panel data regression. There are three panel data regression models: common effects model (CEM), fixed effects model (FEM) and random effects model (REM), and to be able to choose the most efficient model for this research, several tests were conducted, including the Chow test, the Lagrange multiplier test and the Hausman test. The Chow test is used to choose between the CEM and FEM. If the p-value is smaller than the alpha value of 0.05, the fixed effect is more appropriate for use in the regression equation. The Lagrange multiplier test is used to choose between CEM and REM. If the p-value is smaller than the alpha value of 0.05, the random effects model is more appropriate for use in the regression equation. The Hausman test is used to choose between REM and FEM. The fixed effect model is selected if p-value is smaller than alpha value of 0.05.

This study also examines data quality through analysis of descriptive statistics and coefficient of determination. An *F*-test is used to test the effect of the independent variables on the dependent variable simultaneously and a *t*-test is used to test the effect of each independent variable on the dependent variable. The regression equation in this study is as follows:

$$\text{Mudh} = \alpha + \beta_1 \text{FDR} + \beta_2 \text{NPF} + \beta_3 \text{CAR} + \beta_4 \text{RR} + \beta_5 \text{SZ} + \beta_6 \text{AG} + \beta_7 \text{INF} + \beta_8 \text{BI} + e$$

Explanation:

Mudh : mudharabah financing

α : constants

β : regression coefficient

FDR : FDR (financing to deposit ratio)

NPF : NPF (non-performing financing)

CAR : CAR (capital adequacy ratio)

RR : rate of return

SZ : bank size

AG : bank age

INF : inflation
 BI : BI rate
 e : error

4. Results and Discussion

Currently, Indonesia has 14 fully-fledged Islamic banks and 20 Islamic banking units. Of these, this study includes the 10 Islamic banks and 17 Islamic banking units that have full data available, totalling 241 data items over nine years. Descriptive statistical tests aimed to determine the means, minimums and maximums of the variables studied. The results of these descriptive statistics tests are presented in table 3.

Table 3. Descriptive statistics results

	MUDH	FDR	NPF	CAR	RR	SZ	AG	INF	BI
Mean	25.10942	103.5035	1.204290	20.22552	2.401535	28.87292	9.008299	4.768465	6.048755
Median	26.13000	94.49000	0.037000	18.74000	0.370000	29.00000	9.000000	4.280000	6.000000
Maximum	31.00000	338.5200	12.52000	81.75000	32.15000	32.35000	27.00000	6.970000	7.750000
Minimum	0.000000	10.07000	0.000000	9.570000	0.000000	25.52419	1.000000	3.030000	4.250000
Std. Dev.	5.639972	35.12055	2.126905	7.770408	4.857355	1.477753	4.661895	1.446698	1.214692

The mudharabah financing (Ln) variable has a mean value of 25.11, maximum value of 31 and minimum value of 0. The FDR variable has mean value of 103.50%, with a maximum value of 338.52% and a minimum value of 10.07%. The NPF variable has a mean value of 1.204%, with a maximum value of 12.52% and a minimum value of 0%. CAR has mean value of 20.23% with a maximum value of 81.75% and a minimum value of 9.57%. Rate of return has mean value of 2.40% with a maximum value of 32.15% and a minimum value of 0%. The minimum and maximum values are for a variety of the Islamic banks studied, although several are often mentioned in the same categories but in different years. However, although such variation does not necessarily mean that a bank's financial performance is bad, it may suggest that the financial conditions of Islamic banks vary and thus might affect the amount of financing distribution.

This study uses panel data regression and determines the best model for processing the data via Chow test, Hausman test and Lagrange multiplier (LM) test. The Chow test is used to reveal whether FEM or CEM is the better model for panel data regression. Table 4 shows the probability value of the Chow test is 0.0000 and is therefore smaller than alpha value of 0.05. Thus, FEM is better than CEM. The next test is Hausman test to compare FEM and REM. The cross section random probability value of 0.0317 is lower than the alpha value of 0.05 and therefore FEM is more suitable than REM.

Table 4. Comparison of Chow and Hausman tests

	Chow test	Hausman test
Statistic	153.880	16.8553
d.f	26	6
Prob.	0.000	0.0317

Table 5. Panel data regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	42.7574	20.5442	2.0812	0.0386
FDR	0.0121	0.0100	1.2118	0.2270
NPF	0.1002	0.2577	0.3888	0.6978
CAR	-0.1161	0.0441	-2.6327	0.0091
RR	0.4194	0.1365	3.0715	0.0024
SZ	-0.9516	0.7486	-1.2712	0.2051
AG	0.9372	0.2121	4.4180	0.0000
INF	0.0278	0.4658	0.0598	0.9524
BI	0.2013	0.4678	0.4304	0.6674
R-squared	0.547735	F-statistik		7.3378
Adjusted R-Square	0.473089	Prob. (F-statistik)		0.000

The FEM test results can be seen in table 5. The significance value of the F-statistic of 0.0000 being less than alpha value of 0.05 indicates that the independent variables in this study influence mudharabah financing simultaneously. The coefficient of determination shows the ability of the model to explain or predict the outcomes. Table 5 shows the value of the coefficient of determination (adjusted R-squared) was 0.473089 (47.31%), which means that the variations in mudharabah financing is explained 47.31% by financial performance (FDR, NPF, CAR, level of rate of return, bank size, bank age, inflation and BI rate), while the remaining 52.69% is explained by other variables, which are not examined, such as third party funds, which are not financial performance variables, like those in studies by Destiana (2016) and Annisa and Yaya (2015).

Analysis of t-test is used to test the effect of each independent variable on the dependent variable. The results of data analysis presented in table 5 shows that FDR does not influence mudharabah financing. Thus, the finding does not support H_1 . Mudharabah financing is a characteristic of Islamic banks which encourages economic activity and community trade. However, the financing is dominated by murabaha financing although there is an increase of the portion of mudharabah financing. The growth of mudharabah financing gives a strong signal that Islamic banks do effort to expand their financing. This result in line with that of Rimadhani and Erza (2011), who found that FDR did not influence murabahah financing in Bank Syariah Mandiri. However, the result differs from Nastiti and Kasri (2019), who examined the effect of FDR on financing at Islamic banks, and Husaeni (2017) who looked at the same effect on SRBs.

For the second variable, data analysis shows that NPF does not influence mudharabah financing with the probability value of $0.6978 > 0.005$. Thus, H_2 is not supported. This result does not support the results of the study by Annisa and Yaya (2015) which found that NPF negatively influenced PLS financing in Indonesian Islamic banks. Although the result of this study differs from the hypothesis, there is possible explanation for this result. First, the level

of NPF may not in fact derive from mudharabah financing. In general, mudharabah financing is a small percentage compared to other forms of financing such as murabahah and musharakah, so NPF may not arise from it alone. It can be explained from the data of financing contracts from FSA (2020). The growth of financing in the year is dominated by Musharakah and qard financing, while the total amount of financing is dominated by murabahah and musharakah. It shows the possibility that NPF arises from dominant financing. Meanwhile, mudharabah experienced a decrease in financing so it is possible that NPF is affected by financing outside of mudharabah. This result supports the study by Winarsih and Asokawati (2018) who find that NPF has no influence on the PLS financing. The CAR variable has a significance value of 0.0091, which is below the alpha value of 0.05, and a coefficient value of -0.116. These results indicate that CAR has a negative effect on mudharabah financing and so H3 is not supported: a smaller CAR value of an Islamic bank will lead to higher mudharabah financing. This result is in accordance with the research of Husaeni (2017) and Amelia and Fauziah (2017) who found that CAR had a negative influence on the distribution of financing in SRB. Fund raising and financing are the main activities of a bank so these activities are always maintained in an Islamic bank (Husaeni, 2017). Therefore, even though the CAR value is small, financing in Islamic banks continues to be encouraged. The minimum CAR set by the Central Bank of Indonesia is 8%. Even when CAR is low, it still should not be below 8% and with this capital, Islamic banks can still distribute financing. Otherwise, higher CAR can impact on lower mudharabah financing because of the different proportion of each type of financing. Islamic banks may prioritize financing with high profit and low risk (i.e. murabahah) over mudharabah financing which has the highest risk. According to Amelia and Fauziah (2017), Islamic banks tend to choose those activities that have lower risk.

Table 5 shows the rate of return variable has a significance value of 0.0024 and a coefficient value of 0.4193. The significance value of 0.0024 is lower than alpha value of 0.05 and means that rate of return affects mudharabah financing positively and thus H4 is supported. This result supports that of Annisa and Yaya (2015), who found that rate of return influence positively PLS financing at Islamic banks. Islamic banks can identify what kind of business financed by mudharabah financing that have good prospect to produce high rate of return, and thus their financing can be maximized as prudently as possible.

Total assets have a significance value of 0.2051, greater than alpha value of 0.05. Thus, bank size measured by total assets does not affect on mudharabah financing. The bank age variable (years of banking operations) has a significance value of 0.000, lower than alpha value of 0.05, and a coefficient value of 0.937181, showing that bank age has effect on mudharabah financing of Islamic banks in Indonesia. The success of distributing and managing mudharabah financing with high risk is influenced by the duration of operations. It can be suggested that the experience of managers and effective internal control systems can minimize the risk of loss in mudharabah financing, inline with the long establishment of Islamic banks. The control variables in this study, inflation and BI rate do not affect

mudharabah financing with the probability value of 0.9524 and 0.6674 that higher than alpha value of 0.005.

This study also examined the data using the first difference GMM two-step estimator for estimating dynamic panel regression. Regression of dynamic panel is a regression method which include the lagged dependent variable (MF-1) as an independent variable. Test specifications model used is Arellano-Bond test (consistency test) and Hansen test (instrument validity test). The result of dynamic panel regression can be shown in table 6 below.

Table 6. Dynamic panel regression

Variable	Coefficient	Prob.
MF(-1)	0.7045523	0.000
FDR	0.0018526	0.470
NPF	0.0460182	0.740
CAR	-0.0058249	0.786
RR	0.0462683	0.727
SZ	0.4183079	0.737
AG	0.0257443	0.916
INF	-0.0836118	0.503
BI	0.2029949	0.153
Statistic Value of Hansen Test		0.111
Statistic Value of Arellano -Bond Test		
	AR(1)	0.088
	AR(2)	0.304
Number of observations		185
Number of groups		27
Number of instruments		13

The result of the Hansen test shows the probability value is greater than 0.05 and it means that there is no correlation between residual and over identifying restriction are valid. The test assessing the feasibility of the model can be seen from the results of the p-values of AR (1) and AR (2) for the first and second order autocorrelated disturbances. The p-values show a probability value of 0.088 (AR(1)) and 0.304 (AR(2)) that are greater than Alpha 0.05 and indicate that there are no autocorrelation.

Table 6 shows that lagged mudharabah financing (MF-1) has positive influence on the mudharabah financing. This is possible because the quality and results of the previous mudharabah financing make management more optimistic about channeling more mudharabah financing. The other results show that all variables, FDR, NPF, CAR, rate of return, size, age, inflation and BI rate do not influence mudharabah financing. The results of FDR, NPF, size, inflation and BI rate are consistent with finding of FEM. Meanwhile, the

variables of CAR, rate of return and age have different result between FEM and GMM. Using GMM, this study finds that those variables do not influence mudharabah financing. There are some possibilities that can be analyzed. First, this study finds that there are some Islamic banks that do not have mudharabah financing. This may be because no one has applied for mudharabah financing to Islamic banks, or no applicant has fulfilled the required analysis process by the bank. Banks usually have a procedure for analyzing the feasibility of a proposed financing. Therefore, the approval of the financing will depend on the results of the screening process from the bank. If it is not feasible, Islamic banks may not approve the financing. According to Nugraheni & Alimin (2020), the screening process of financing can affect the proposed PLS financing. Second, generally, Indonesian government encourage the banks to provide financing to the small and medium enterprises (SME) sector by allocating a certain percentage to be distributed to SME sector. It will push Islamic banks, when SME financing uses a mudharabah contract, to distribute the financing by providing different standard in the screening process. Distribution of PLS financing shows the social justice practice of Islamic banks (Nugraheni 2018). Therefore, Islamic banks will continue to distribute mudharabah financing as a form of compliance with government appeal.

5. Conclusions

Mudharabah financing is a type of financing that supports the financial needs of the community based on the justice principle. From the results detailed above, this study finds that rate of return and bank age have a positive effect and CAR has a negative effect on mudharabah financing. Meanwhile, FDR, NPF and bank size have no effect on the mudharabah financing of Islamic banks in Indonesia.

Some aspects of financial performance have an influence on mudharabah financing in Islamic banks. As a high-risk form of financing, mudharabah has a smaller percentage compared to other types of financing. The result may have some implications. First, given this characteristic, financial ratios that can lead to the increasing of mudharabah financing must be managed properly by considering both the risk and the return potential of each financing option. This is necessary because Islamic banks will be evaluated on their performance both in terms of their financial ratios and their ability to collect and distribute funds to the public, especially in relation to PLS financing as a contribution of Islamic banks to the encouragement of real economic activities in the community. An understanding of the effects of financial performance will initiate strategies that can be implemented by Islamic banks to boost this type of financing.

Second, it cannot be denied that the purpose of Islamic banks is also to generate profits. Based on the result above, mudharabah financing has the potential to provide a higher return even though it has a relatively higher level of risk. However, with the improvement of a better financing risk mitigation strategy, the risk level of mudharabah financing can be reduced so that the motivation of Islamic bank management to channel this financing also increases, especially if the government provides additional incentives for Islamic banks that

able to push this financing even further. Incentives can range from discounted tax rates to discounts on annual fees to the authorities. Mudharabah financing has strategic value for the development of the real sector because it encourages business actors to be able to access mudharabah financing in a more incentive manner. Especially if the collateral requirements can be lowered so that business actors get more benefits by using this mudharabah financing.

Monitoring mudharabah financing process and improving risk mitigation strategy require human resources who have good financial and business competence. Therefore, Islamic bank management needs to improve the competence of human resources in terms of analysis and monitoring of real sector business. Indonesian financial services authority (FSA) as the regulator needs to formulate regulations and SOPs related to the qualifications of human resources that oversee mudharabah financing so that business results can be more optimal and increase the security of customer funds.

However, management still always monitor closely the NPF level to increase customer confidence in Islamic banks. NPF is an indicator to assess management's ability to analyze potential customers and assess potential business continuity of its customers. If the management of Islamic banks is able to maintain these financial performance indicators to consistently improve the quality of mudharabah financing, the size will grow faster along with the strengthening of stakeholder confidence in Islamic banks. From a macro perspective, this will certainly have a positive impact on the real sector, which is the main support for the national economy. Therefore, regulators need to encourage the growth of financing performance in the real sector, such as mudharabah financing, by setting a minimum portion of financing to the real sector (i.e. small and medium enterprises) which need to be allocated to ensure the commitment of Islamic banking management. The maturing age of banks in financing management will certainly encourage Islamic banks to enter financing sectors that have a higher level of risk with the consequence of a higher rate of return as well.

This study has several limitations. The sample of this study is fully-fledged Islamic banks and Islamic banking units within larger organizations. In future studies sharia rural banks (SRBs) that distribute mudharabah financing could also be included to provide a more comprehensive comparison. Second, this study uses several financial ratios as independent variables to test for their effects on mudharabah financing. Other internal factors such as management or corporate governance characteristics and external factors such as economic conditions are not included as proxies in this study. Third, some Islamic banks do not distribute mudharabah financing, as can be seen from the number of zero values for this financing. Some Islamic banks distribute other forms of profit-sharing financing such as musharakah.

Based on the above limitations, this study offers some suggestions for future studies. First, a study of mudharabah financing in SRBs could be carried out as a comparison with the distribution of financing in fully-fledged Islamic banks and Islamic business units investigated here. Second, future studies could add other proxies as independent variables, such as other

financial ratios (ROA, ROI, ROE) and/or management or corporate governance characteristics. Because of the small or zero percentages of mudharabah financing found in the sample, musharakah financing could also be included in the dependent variable as a form of PLS financing, enabling the influence of the independent variables on mudharabah and musharakah financing to be compared.

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