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## **Determinants of Financial Performance in Influencing Inclusivity of Sharia Pension Fund Participants in Indonesia**

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**Muhammad Fatchullah El Islami<sup>1</sup>, Siti Eniyatul Uyun<sup>2</sup>, Nur Diana Khalida<sup>3</sup>**

<sup>1,2,3</sup> UIN Sunan Ampel Surabaya

E-mail: fatchul.islami12@gmail.com<sup>1</sup>, sitieniyatuluyun@gmail.com<sup>2</sup>, nurdianakhalida54@gmail.com<sup>3</sup>

### **ABSTRACT**

*Financial planning in old age is very important to do in order to prepare for the guarantee of life in old age. Sharia pension funds are a means that facilitate participants in meeting their needs in retirement. This study aims to provide empirical evidence related to the relationship between ROI, RITA, and Liability financial performance to the inclusion of Sharia pension fund participants in Indonesia. This type of research uses quantitative associative. The research data source uses secondary data from the publication of Sharia IKNB statistics on the Financial Services Authority website. The research sample was 17 quarterly data in the period 2019-2023. Research Object on Sharia Pension Fund companies in Indonesia. Data collection techniques through a literature study of journal articles and official websites indirectly supporting research literature. Data analysis using multiple linear regression. The results showed partially that Return on Investment (ROI) did not have a negative effect on Sharia Pension Fund Inclusion, Investment to Asset Ratio (RITA) had a positive effect on Sharia Pension Fund Inclusion, and Liabilities had a positive effect on Sharia Pension Fund Inclusion. Meanwhile, simultaneously independent variables (ROI, RITA, and Liability) significantly affect the positive effect of Sharia Pension Fund Inclusion in Indonesia.*

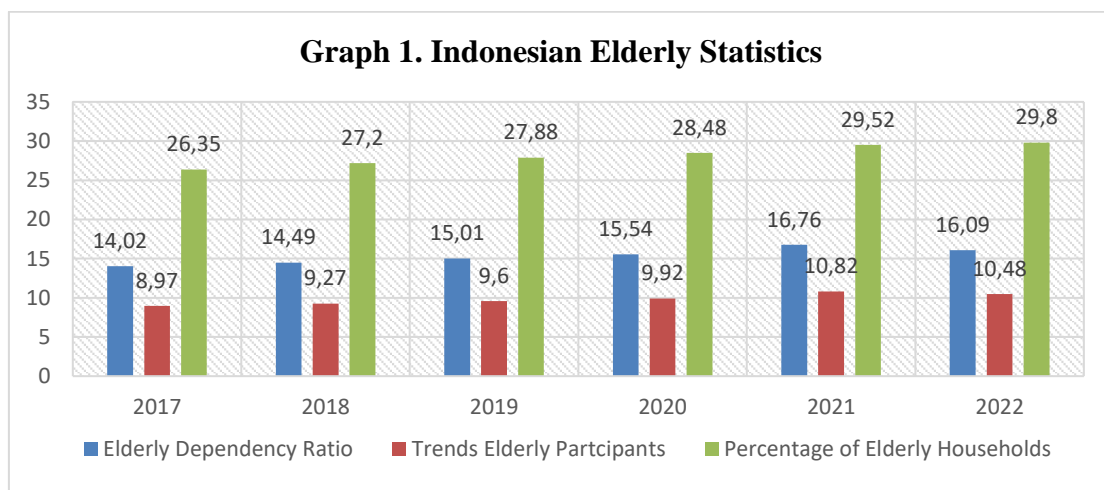
*Keywords: Liability, ROI, RITA, Sharia Pension Fund*

## INTRODUCTION

Physical and spiritual welfare in old age is one of the community's dreams. Long life and always given health are prayers individuals always offer in welcoming old age. Not only that, financial well-being is also very important and a concern when a person's productivity period begins to end. Every individual should look at the fruits of hard work in youth as a guarantee of money to live in old age. It becomes a person's aspiration to enjoy the fruits of his youth for survival in old age. The needs of one's life will continue when the productive period has ended. Welfare by leaving work and fulfilling the needs of life is a dream for someone when retirement has arrived.

Financial planning in retirement becomes very important in ensuring the quality of life. Every individual about to retire wants financial stability after being no longer productive. Many people ignore and underestimate financial planning during retirement as well as savings. People still use their savings to manage their pension funds. It is not to blame, but savings products such as savings can be reduced when the individual needs his funds at any time, unlike the pension fund. Where pension fund participants can take their funds when retirement has come, this makes the difference between retirement funds and savings.

The problem of weak public interest in using pension funds hampers the development of pension funds Synergy between the community, the government, and investors must certainly be strengthened. One of the ways to increase the number of participants, assets, and investments of pension funds is to provide important long-term financial resources for development, support financial inclusion, and ensure that poverty is ended by strong growth and income resilience in retirement through a broad-ranging pension system (Tumewang, 2018).



Source: Statistics BPS, 2022

Graph 1 shows that the dependency ratio of Indonesia's elderly population has increased every year during the 2017-2022 period, with the highest value of 16.76% in 2021 despite decreasing in 2022. This ratio illustrates the dependence of the Elderly aged 60 and over on the age of 15-59 years. The percentage of Indonesia's elderly population in 2022 is 10.48% or 29 million. At the same time, the percentage of elderly households continues to increase yearly, with a value of 29.8% of the total households (Badan Pusat Statistik, 2022). On the one hand, WHO projects that by 2030 the ratio of the world's elderly population will be 1 to 6. By 2050, the world's population over 60 will increase by 2.1 billion (World Health Organization, 2022).

The phenomenon of increasing elderly can have a positive or negative impact. The positive impact caused when the Elderly is still productive can contribute to the country's economy (Umar, 2021). Meanwhile, if it is unproductive, it will increase the burden and be classified as a vulnerable population. This pension fund is a policy created to guarantee one's life in old age. This policy is made to meet one's consumptive needs. On the one hand, pension participants use this pension fund, and family members are affected by the benefits. According to Nasution & Fuddin (2015), This pension fund improves employee welfare and productivity through other fields.

In its application, Pension Fund has two systems: sharia and conventional. However, these two systems are not much different. It is just that Islamic pension funds have limits according to Islamic principles. Sharia pension funds are intended to provide financial benefits based on Sharia principles and are legally recognized to participants entering retirement (Farid & Hidayat, 2022).

Sharia pension fund companies' market share and total assets in Indonesia from 2018 to 2022 have increased yearly. Although it has increased, this value is still very small compared to conventional pension funds, which dominate 97% of Indonesia's pension fund market share. In addition, the total assets of Islamic pension funds have also increased, although the value is still relatively small at 9.8 billion in 2022 (Otoritas Jasa Keuangan, 2022). The data shows that public interest in Islamic pension funds is still weak. The lack of literacy and innovation from managing institutions makes this Sharia pension fund unattractive to the public.

Based on the above phenomenon, it shows that this Sharia pension fund is still less reached by the people of Indonesia, despite the increase in market share, assets and number of participants. This study will provide novelty on what determinants affect the inclusion

of participants in sharia pension funds in Indonesia. The determinants tested in this study are ROI (Return on Investment), RITA (Investment to Asset Ratio), and Liabilities. This study aims to provide an empirical study of the factors that cause people to be reluctant to use Islamic pension funds. This research can also be an input for company managers and the government in making decisions and policies

## **LITERATURE REVIEW**

### **Pension Fund**

According to David L. Scott in the book "Financial Institution Management" by Veithzal Rivai defines, a Pension Fund is a financial institution that collects assets and distributes income benefits to people after entering retirement from work. While according to Fabozzi et al. (1994), as a fundraising institution established by employers, governments, or unions from pension benefit payments. According to Rose (1988), Institutions used to assist business owners and workers in preparing for retirement by accumulating and investing savings to pay for retirement income in the years ahead. While according to the dictionary, Accounting is defined as Resources accumulated to pay employees benefits at the time of their retirement, disability or death. The fund may be managed by the company that established the pension plan by the trustee or by an insurance company or other institution (Rivai, 2013).

From some of the above understandings, pension funds are defined as certain funds or money specifically collected to pay pension benefits on employee pensions, death, or disability due to work accidents. In addition, according to Nur (2012), Pension funds offer participants needs such as insurance coverage in case participants die or are disabled before retirement age can receive a guaranteed amount from the burden of the joint pension foundation, savings for participants, and pensions for participants. According to Article 4 of Law No. 11 of 1992, a pension fund is any party that manages and runs a program that promises to pay a certain amount of money upon reaching a certain age.

### **Sharia Pension Fund**

Sharia Pension Fund is a fund collection institution created to provide financial benefits in retirement legally and following Sharia principles (Tarmizi, 2019). In jurisprudence, there is no specific explanation of pension funds because it is a contemporary problem. On the one hand, this pension fund is mentioned in the Qur'an and the tradition of prophecy.

There is debate about the importance of preparing for future prosperity because no one knows what life will be like tomorrow (Munawaroh & Sahitya, 2021).

Sharia pension funds apply contracts in activities, such as when becoming a participant or paying contributions prioritizing Sharia principles, such as not containing *maisir*, *gharar*, or usury. The application of sharia pension funds consists of *wahib*, investee, *mauhub lah*, and pensioners or heirs. *Akad* applied employer transactions to participants in paying pension contributions using *bi syarth* grants and *muqayyadah* grants, as for power transfer transactions using *wakalah bil ujah* and *mudharabah* contracts. As for if the transaction is through third-party funds, it uses an *ijarah* contract. On the other hand, if there is a delay in paying contributions for three months, *ta'zir* is subject to a monetary fine for social (Aibak, 2017).

### **Inclusion of Sharia Pension Fund Participants**

Inclusion is access and facilities that can be easily reached to product services offered to consumers. According to Soetiono & Setiawan (2018), inclusion is an individual or group that uses the facilities of financial products and services. Meanwhile, in Sharia studies, inclusion is defined as an effort to increase the reach of Sharia finance to the public to use it following Sharia (Kusuma, 2020). The definition of a participant in Law No. 11 of 1992 concerning Pension Fund is any person/individual who has met the requirements and rules of the pension fund. This financial inclusion indicates how much participants can reach the access that financial institutions have facilitated.

The inclusion of Indonesian Sharia pension fund participants in 2021 reached 136,074. This value is very small compared to the conventional Pension Fund of 3.99 million participants. Although there is an increase yearly, Sharia pension funds are still not in demand by the public for various reasons such as low financial literacy, lack of maximizing financial technology, and ineffective strategies (Handani, 2023). This strategy includes picking up the ball, using online media, and making attractive offers on a product ('Ainulyaqin et al., 2021; Suhesti & Samad, 2023).

### **Financial Statements**

According to Kasmir (2018), Financial statements are several data that interpret the state of a company. The substance of financial statements is very diverse. The company's condition is described clearly in the balance sheet, profit and loss, and other related reports. Financial statements are used for the company's internal needs or external communities.

This study will take three financial statements such as ROI, RITA, and Liabilities. Here is the explanation:

ROI (On Investment Ratio) is a ratio classified as a company's profitability by measuring the ratio of profit or loss on investment with the amount of funds invested. This ratio shows that the return on total assets invested can be controlled. The higher the value, the better the company is at streamlining the invested funds. One way to invest efficiency is by reducing the company's costs and debt, increasing capital and operating profit (Avis, 2020). The ROI calculation formula is as follows:

$$ROI = \frac{\text{Total Sales} - \text{Investment}}{\text{Investment}} \times 100\%$$

The mechanism for developing Sharia pension funds apart from employer or participant contributions also comes from developing investment funds. The ratio RITA (Investment to Asset Ratio) measures how much investment is borne through the company's net assets. This RITA ratio is applied in pension funds, while it is called FDR in Islamic banks. According to Zhang et al. (2023), The investor must have qualified financial knowledge because financial education is crucial in influencing investment returns. Mastering investment literacy can increase profits and risk tolerance. Knowledge in reading global conditions is very important in forecasting investment decisions. According to Al-Theebbeh et al. (2022), Good asset management significantly impacts asset efficiency on investment. It is very much in line with the conditions of global uncertainty in minimizing financial leverage by increasing investment returns. The RITA calculation formula is as follows:

$$RITA = \frac{\text{Investment}}{\text{Total Net Assets}} \times 100\%$$

Liability is the company's ability to bear funds needed to fulfil obligations to customers and related parties. Liabilities or debts are used to redeem obligations to other parties. Increasing corporate debt can have both positive and negative impacts. If the company has much debt but is accompanied by large profits, then the debt benefits the company. Meanwhile, if the company has much debt with poor performance, it describes its unhealthy condition (L. Zhang et al., 2022). Generally, small companies bear a small cost of what is transacted and vice versa. The problem of operational costs from debt needs to be managed potentially in order to achieve financial efficiency (Lefebvre, 2022).

### **Framework of Thought and Hypothesis**

Research references supporting the relationship of independent variables to dependents are very limited. The author uses assumptions that can be built according to (Hijriah et al., 2017). A positive relationship exists between the number of customers and the company's profits. When the number of customers increases, it will increase customer profits. The relationship between ROI variables and the inclusion of Islamic pension fund participants is projected through several previous studies. In research conducted by Astonugroho & Rosa (2023), ROI variables positively influence the company's financial performance. The higher the ROI, the better the company's financial performance. In contrast, the research conducted by Hidayatullah (2021) states that the ROI variable does not influence the company's profitability level.

RITA's Relationship to the Inclusion of Sharia Pension Fund Participants is projected with previous research by Sofiani & Siregar (2022) shows a positive relationship between ROA and Company Value ratio. Other research by Simarta (2020) also explained the positive relationship between return on investment and company performance. There is a profit on the return on net assets to increase the company's value. At the same time, other research by Agustinus (2021) shows a negative relationship between ROA and company profit growth. This research is not in line with Dzulhijar et al. (2021). The existence of a return on assets ratio does not affect the company's financial performance. On the one hand, there are limited references to previous studies that discuss RITA with participant inclusion, so this study is associated with company performance and growth.

The Relationship of Liabilities to the Inclusion of Islamic Pension Fund Participants is illustrated in research by Maharjan (2022), which concluded that the company's liability management positively affects profitability. Another research by Askiah et al. (2022) shows that Linking liabilities with profitability is a positive relationship. This result is also done by Hatunga (2020) in a positive relationship between the components of liabilities and profits of the company. At the same time, the research conducted by Rafania et al. (2023) shows the absence of influence between liabilities and company profits.

Based on the relationship between the variables above, the hypothesis in this study is formulated as follows:

H1 = Return on Investment (ROI) has a significant effect on the Inclusion of Sharia Pension Fund Participants in Indonesia

H0 = Return on Investment ROI does not significantly affect the Inclusion of Sharia Pension Fund Providers in Indonesia.

H2 = Investment to Asset Ratio (RITA) significantly affects the Inclusion of Sharia Pension Fund Participants in Indonesia.

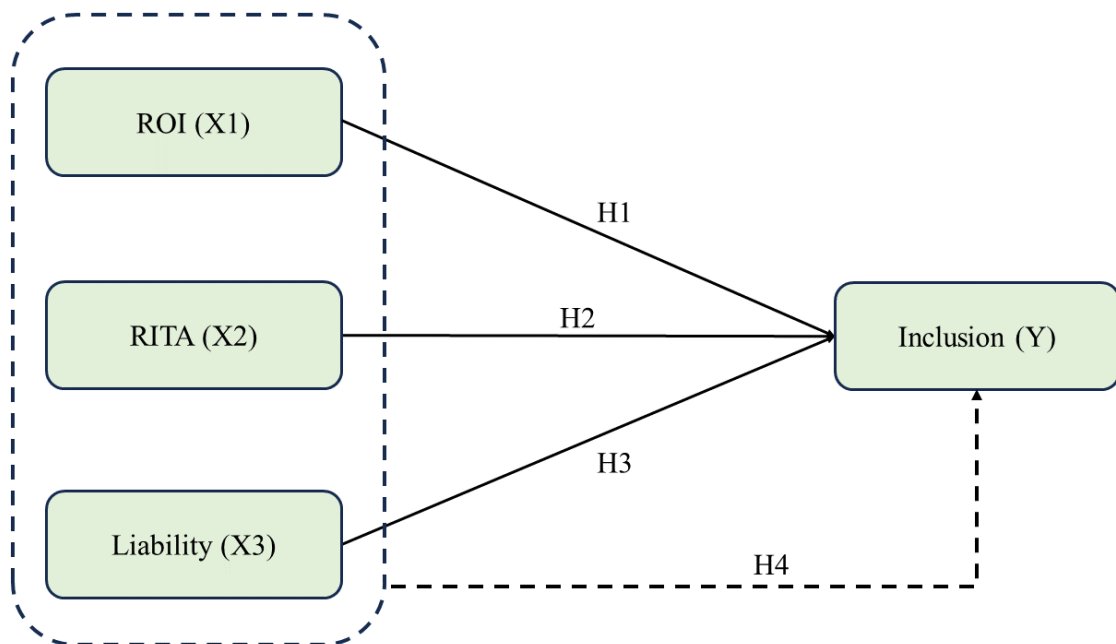
H0 = Investment to Asset Ratio (RITA) does not significantly affect the Inclusion of Sharia Pension Fund Funds in Indonesia.

H3 = Liabilities have a significant effect on the Inclusion of Sharia Pension Fund Funds in Indonesia

H0 = Liabilities do not have a significant effect on the Inclusion of Sharia Pension Fund Providers in Indonesia

H4 = ROI, RITA, Liabilities simultaneously affect the Inclusion of Sharia Pension Fund Providers in Indonesia

H0 = ROI, RITA, Liabilities do not simultaneously affect the Inclusion of Sharia Pension Fund Providers in Indonesia



Source: Data processed by researchers, 2023

**Figure 1 Research Framework**

## METHOD

This study uses an associative quantitative approach by testing objective theories in the relationship between variables (Creswell, 2009). This approach can make broader population generalizations based on findings from the sample. So that researchers use a quantitative approach in analyzing the relationship between the independent variable Return on Investment (ROI), Investment to Asset Ratio (RITA), and Liabilities to the



dependent variable of Inclusion of Sharia Pension Fund Participants. The object of research is Sharia Pension Funds in Indonesia, registered with OJK 2022. The study population on Islamic Pension Funds in Indonesia and the research sample used saturated samples where the entire population of Islamic Pension Fund companies in Indonesia was sampled. The source uses secondary data from the Financial Services Authority publications through Sharia IKNB Statistics and collection data techniques through literature studies that support research literature indirectly. The data type uses a Quarterly time series from 2019 to 2022. This study did not use panel data because it used aggregate data from Islamic Pension Funds in Indonesia.

This research analysis the data method by displaying descriptive analysis to obtain minimum, maximum, and standard deviation values. The research data must meet the classical assumptions of the Normality, Multicollinearity, Heteroskedasticity, and Autocorrelation tests. After passing the classical assumptions, the data was carried out with Multiple Linear Regression Analysis to test the relationship of more than one independent variable to the dependent variable. The final test is by analyzing and interpreting the research hypothesis. This study uses multiple linear regression equations as follows:

$$Ink = \alpha + \beta_1(ROI) + \beta_2(RITA) + \beta_3(LIAB) + C$$

Information:

Ink = Inclusion of Sharia Pension Fund Participants (dependent variable)

$\alpha$  = Constant

$\beta_1$  (ROI) = Regression coefficient for Return On Investment

$\beta_2$  (RITA) = Regression coefficient for Investment to Asset Ratio

$\beta_3$  (LIAB) = Regression coefficient for Liabilities

C = Standard Error.

## RESULTS AND DISCUSSION

### Description of Statistics

**Table 1. Description of Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ROI	17	1,17	7,26	3,6347	1,69079

RITA	17	92,99	97,32	95,7100	1,17476
Liability	17	7,16	63,00	31,0212	16,44567
Participation Inclusion	17	127737	188904	143195,18	21763,227

Source: Data processed by SPSS, 2023

Table 1 shows descriptive statistics of the study with a sample of 17 using 16 data for the quarter of 2019 and 1 data for the quarter of 2023. This study tested ROI, RITA, Liabilities, and Participant Inclusion. The interpretation of descriptive statistical data is as follows:

1. Return on Investment (ROI)

The statistical description of the ROI of Islamic pension funds, such as the minimum value ratio of 1.17% in Q1 2022. Meanwhile, the maximum value of the ROI ratio was 7.26% in Q4 2020. This data shows the fluctuation of ROI value for each period. Although it has never suffered a loss on investment, this data is not classified as large or small. On the scale of Islamic pension funds, it is good in investment management. The average value of ROI during the period 2019-2023 is 3.63%, and the standard deviation or distribution of data from a sample to the average is 1.69%.

2. Investment to Asset Ratio (RITA)

The statistical description of the Islamic pension fund RITA shows a minimum ratio value of 92.99% in Q2 2021. Meanwhile, the maximum value of the RITA ratio was 97.32% in Q2 2019. This data shows fluctuations in RITA values for each period. This data is normal because it is still in the 80% - 100% range. The lower the value, the lower the company's income obtained through investment due to the absence of financing products, as in other Islamic financial institutions. The average value of RITA during 2019-2023 is 95.71%, and the standard deviation or distribution of data from a sample to the average is 1.17%.

3. Liability

The statistical description of Islamic pension fund liabilities shows a minimum value of 7.16 billion in Q4 of 2022. Meanwhile, the maximum liability value was 63 billion in Q3 2019. When viewed from the 2019-2022 period, there was a significant decline, while entering the 1st quarter of 2023, there was an increase of 13.54 billion. This data shows the addition of liabilities at the beginning of 2023. This data is normal and still very small because it is still around the value of less

than 1% of total assets. The average value of liabilities from 2019-2023 is 31.02 billion, and the standard deviation or distribution of data from a sample to an average of 16.44 billion.

#### 4. Participant Inclusion

The statistical description of the inclusion of Islamic pension fund participants shows a minimum value of 127,737 participants in the 4th quarter of 2019. Meanwhile, the maximum participant inclusion value reached 188,904 in the 3rd quarter of 2019. The decline in the number of participants in Sharia pension funds occurred in Q4 2019, resulting in decreased public interest in Sharia pensions and pensions. External and internal factors significantly affect the decrease in participants during one period. The average value of participant inclusion during the 2019-2023 period was 143,195 participants, and the standard deviation or distribution of data from a sample to an average of 21,763 participants.

### **Classical Assumption Test**

This test is used to validate research data through reviews of test indicators such as normality, multicollinearity, heteroskedasticity, and autocorrelation tests. Here are each of the results of testing classical assumptions:

The Kolmogorov-Smirnov test is used to test the normality of the data. This test aims to determine the residual of normally distributed research data. The data is declared normally distributed if the significance value  $> 0.05$ . The results of Kolmogorov Smirnov's normality testing significance values of  $0.200 > 0.05$  so that the residual data in this study is normally distributed.

The Colinearity Statistics is a test indicator of the multicollinearity test. This test determines the strength of the relationship between independent variables. Good data do not contain symptoms of multicollinearity between independent variables. This test uses Tolerance and VIF values. Data do not occur symptoms of multicollinearity if the Tolerance value  $> 0.01$  and  $VIF < 10$ . The results of the multicollinearity test using the basis of Tolerance values at ROI  $0.999 > 0.01$ , RITA  $0.996 > 0.01$ , and Liability  $0.997 > 0.01$ . While the VIF value at ROI is  $1,001 < 10$ , RITA is  $1,004 < 10$ , and Liability is  $1,003 < 10$ . Based on the data above, the relationship between independent variables does not have symptoms of multicollinearity.

The Normal P-Plot is an indicator of data hetero-consistency assessment. This test aims to determine the inequality of residual variance distribution between one data and another in multiple linear regression models. This test is broken when the distribution of data follows an inclined axis. The test results show that the residual distribution between one data and another has no similarity. This result can be seen with the data point points following the direction of the tilted axis so that the data does not contain symptoms of heteroskedasticity.

The Runs test is an indicator of data autocorrelation test assessment. This test is needed when the data is periodic and whether there are autocorrelation errors. Basis of decision making if significance value  $> 0.05$ . Good data do not have symptoms of autocorrelation in variables. Table 5 shows that the data significance value is  $0.135 = 0.05$ . So this study did not have symptoms of autocorrelation.

The conclusions of the classical assumption test of this study have been fulfilled, such as residual normally distributed data, no symptoms of multicollinearity between independent variables, no symptoms of heteroskedasticity in the regression model, and no symptoms of autocorrelation in periodic data.

### **Coefficient of Determination Test**

This test aims to determine how much the independent variable influences the dependent variable. The greater the value of R Square, the higher the independent variable describes the dependent variable. Here are the results of R Square:

**Table 2. Model Summary**

Model	R	R Square	Adjusted R Square
1	,769 <sup>a</sup>	,591	,497

Source: Data processed SPSS, 2023

Table 2 Model Summary shows that the R-Square value is 0.591 or 59.12%. This result illustrates that the independent variables Return on Investment (ROI), Investment to Asset Ratio (RITA), and Liabilities explain the relationship of 59.12% to the Inclusion of Sharia Pension Fund Participants in Indonesia. At the same time, the remaining 40.88% was influenced by other variables outside the study.

### **Anova F Test**

**Table 3. Anova**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	4480955192,696	3	1493651730,899	6,269	,007 <sup>b</sup>

Source: Data processed SPSS, 2023

In research, to test the effect of the independent variable simultaneously on the dependent variable is to test ANOVA. The independent variable is expressed as having a simultaneous relationship if the significance value < 0.05. In Table 3, ANOVA obtained a significance value of 0.007 < 0.05. With this result, there is a relationship between the variables Return on Investment (ROI), Investment to Asset Ratio (RITA), and Liabilities simultaneously affecting the dependent variable Inclusion of Islamic pension fund participants. These results suggest that Hypothesis 4 of the study is accepted.

**T Test and Multiple Linear Regression Analysis**

Multiple linear regression analysis is a causality research model explaining the relationship between two or more independent variables and the dependent variable. This study uses three independent variables (Return on Investment (ROI), Investment to Asset Ratio (RITA), and Liabilities) and dependent variables, the Inclusion of Islamic pension fund participants in Indonesia. Here are the results of multiple linear regression equations:

$$\text{Ink} = -926.922,844 - 1857,189(\text{ROI}) + 11069,308(\text{RITA}) + 561,708(\text{LIAB}) + C$$

**Table 4. Coefficients**

Model	B	Sig.
ROI	-1857,189	,431
RITA	11069,308	,005
Liability	561,708	,033

Source: Data processed SPSS, 2023

Table 4 Coefficients are scoring indicators in the Partial T-test. This test aims to partially measure the influence of the independent variable on the dependent variable of the study. The independent variable is expressed to have a relationship influence on the dependent variable if the significance value < 0.05 and the direction of the relationship between the two variables is explained in the coefficient between positive and negative. Here are the results of the T-test:

1. Relationship ROI to Inclusion of Sharia Pension Fund Participants

Referring to table 8 is shown a significance value of  $0.431 > 0.05$  with a variable coefficient of -1857.189. This result shows no negative relationship between (ROI) and the Inclusion of Sharia Pension Fund Participants in Indonesia. Then hypothesis 1 is rejected.

2. RITA's Relationship to the Inclusion of Sharia Pension Fund Participants

Referring to table 8 is shown a significance value of  $0.005 < 0.05$  with a variable coefficient of 11069.308. This result shows a significant positive relationship between RITA and the Inclusion of Sharia Pension Fund Participants in Indonesia. Then hypothesis 2 is accepted.

3. Liability Relationship to Inclusion of Sharia Pension Fund Participants

Referring to table 8 is shown a significance value of  $0.033 < 0.05$  with a variable coefficient of 561.708. This result shows a significant positive relationship between Liabilities to the Inclusion of Sharia Pension Fund Participants in Indonesia. Then hypothesis 3 is accepted.

## **DISCUSSION**

### **The Relationship of Return on Investment (ROI) to the Inclusion of Sharia Pension Fund Participants**

The results showed no negative relationship between ROI and the Inclusion of Sharia Pension Fund Participants in Indonesia. This result shows that changes in the ROI value do not affect the addition or reduction of Inclusion of Sharia Pension Fund Participants. The public does not look at the amount of ROI ratio to use Sharia Pension Fund products and services. This research aligns with Hidayatullah (2021), which concludes that ROI does not affect the company in absorbing customers at financial institutions. On the one hand, the low financial literacy of Islamic pension funds affects the view of the importance of post-retirement financial planning.

According to Sari (2022), The ROI ratio has disadvantages, one of which is that the longer the investment, the more processes in determining income, cost and forecasting macroeconomic conditions. On the other hand, ROI has not included other long-term factors, so it is still limited to calculating long-term investments. In addition, according to Astonugroho & Rosa (2023), people's assumptions on ROI analysis are usually still mixed with investment management costs. So this high ROI value does not necessarily reflect ROI

in a net way. This case is often disputed in society. So people are more confident in deposits that provide returns such as deposits and some even use government securities and sukuk. People who master knowledge in the investment field will not use pension funds. Because on a return basis it is more profitable to use stocks. In this case, the amount of ROI in sharia pension funds is less of a concern for the public to use sharia pension fund products and services.

### **The Relationship between Investment to Asset Ratio (RITA) to Inclusion of Sharia Pension Fund Participants**

The results showed a significant positive relationship between the Investment to Asset Ratio (RITA) and the Inclusion of Sharia Pension Fund Participants in Indonesia. This result shows that the increase in RITA affects increasing the Inclusion of Sharia Pension Fund Participants in Indonesia. Based on data for the 2019-2023 period, every increase in RITA is always followed by the addition of Sharia Pension Fund Participant Inclusion. This result shows that the more investment the company spends, it reflects the addition of Inclusion of Sharia Pension Fund Participants. The existence of investment package products offered by Sharia pension fund institutions can increase the inclusion of Sharia pension fund participants. With the interest in the investment package, participants are increasingly interested in these products and services.

This research is in line with Simarta (2020) states that the company's good financial performance will result in a high return on optimal use of the company's total net assets. The public is interested because if the company is in good condition, it will affect the return on the company's net assets. While this study is not in line with Agustinus (2021) and Dzulhijar et al. (2021), where each states that there is a negative relationship between the return on assets to the company's value and there is no relationship between the two. In this case, the inclusion of Sharia pension fund participants in Indonesia will increase if the RITA ratio increases.

### **Liability Relationship to Inclusion of Sharia Pension Fund Participants**

The results showed a significant positive relationship between Liabilities to the Inclusion of Sharia Pension Fund Participants in Indonesia. This result shows that increasing liabilities increase the inclusion of Sharia Pension Fund participants and vice versa. The additional liabilities of Islamic pension fund companies are allocated to pay ta'zir

debts, pension benefit debts and overdue benefits. In addition, the liabilities to be paid include operating expenses, other debts, and expenses outside the actuarial present value. The increase in the company's liabilities indicates an increase in maturing participants. The increasing inclusion of pension fund participants will increase the company's obligations because of the burden or costs that the company must bear to improve access and facilities.

This research is in line with Maharjan (2022) conclusion that the company's liability management positively affects profitability. Research by Askiah et al. (2022) Links liabilities with profitability in a positive relationship. This result is also done by Hatunga (2020) in a positive relationship between the components of liabilities and profits of the company. While other studies are not in line with Rafania et al. (2023), showing the absence of influence between liabilities and company profits. The increase in liabilities to the inclusion of Islamic pension fund participants is in line with the increase in profits and company value.

### **The Effect of ROI, RITA and Liabilities on the Inclusion of Sharia Pension Fund Participants**

The simultaneous F-test study results show the relationship of independent variables (ROI, RITA, and Liability) to the Inclusion of Sharia Pension Fund Participants in Indonesia. This result shows a relationship that affects the three independent variables in changes in the inclusion of Islamic Pension Fund participants. Paying attention to the three independent variables above can increase public interest in becoming participants of the Sharia Pension Fund. So paying attention to all independent variables is very important even though ROI does not partially affect the value of the Inclusion of Sharia Pension Fund Participants. With the collaboration of the three independent variables above, it can be a concern in increasing the Inclusion of Sharia Pension Fund Participants.

## **CONCLUSION**

Planning finances in old age is very important in an era of global uncertainty. Many people neglect pension planning and prefer other unstable storage instruments. Sharia pension funds are a breakthrough to provide clear and Sharia-compliant retirement savings services. The low inclusion of Sharia pension fund participants is a problem that needs attention for stakeholders. This research helps answer the factors that need to be considered in increasing the inclusion of Islamic pension fund participants. Through independent variables, Return



on Investment (ROI), Investment to Asset Ratio (RITA), and Liabilities are expected to help answer the inclusion problem. The results showed that the ROI ratio had no effect on Participant Inclusion, while the RITA and Liability variables each significantly positively affected Sharia Pension Fund Participant Inclusion. Meanwhile, the relationship between the three variables simultaneously affects the inclusion of Sharia Pension Fund Participants in Indonesia.

This research still needs to be completed again to find other factors that affect the Inclusion of Sharia Pension Fund Participants. Suggestions for further researchers to add empirical studies to Sharia pension funds in any aspect are reviewed from any aspect because there is still a lack of previous research discussing Sharia pension funds.

## REFERENCES

- 'Ainulyaqin, M. H., Edy, S., & Enjelita, E. (2021). Analisis Peranan Strategi Marketing Funding dalam Peningkatan Jumlah Nasabah dan Dana Pihak Ketiga : Studi pada PT BPRS Harta Insan Karimah Cikarang. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 3(1), 142–153. <https://doi.org/10.47467/alkharaj.v3i1.308>
- Agustinus, E. (2021). Pengaruh Return on Asset (ROA) Dan Debt To Equity Ratio (DER) Terhadap Pertumbuhan Laba Pada Perusahaan Sub Sektor Makanan Dan Minuman Yang Tercatat Di BEI Periode 2015-2019. *Jurnal Arastirma*, 1(2), 239–248. <https://doi.org/10.32493/arastirma.v1i2.12362>
- Aibak, K. (2017). *Kajian Fiqh Kontemporer* (1st ed.). KALIMEDIA.
- Al-Theebbeh, Z., Alkabbji, R., Alrazim, A., & Abu-Bakr, I. (2022). The Impact of Asset Management Efficiency on the Financial Leverage and Return on Investment in Small Production Enterprises in View of the Covid-19 Pandemic. Case Study: The Jordanian Ministry of Social Development - Zarqa Governorate. *International Conference on Business and Technology*, 1011–1019.
- Askiah, A., Musa, M. I., & Nurman, N. (2022). Pengaruh Liabilitas Ekuitas dan Ukuran Perusahaan terhadap Profitabilitas (Studi Pada. *Nautical: Jurnal Ilmiah Multidisiplin*, 1(7), 523–534.

- Astonugroho, R., & Rosa, T. (2023). Analisis Pengaruh Return of Investment (ROI) Terhadap Harga Saham dan Kinerja Keuangan Suatu Perusahaan. *Journal of Accounting, Management, Economics, and Business (ANALYSIS)*, 1(1), 52–60.
- Avis, M. (2020). Pengaruh Penjualan Dan Perputaran Kas Terhadap Return On Investment (ROI) Pada Perusahaan Farmasi Yang Terdaftar Pada Bursa Efek Indonesia (BEI). *Jurnal Profiet*, 4(1), 209–217. <http://ojs.stiepi.ac.id/index.php/profiet/article/view/88>
- Badan Pusat Statistik. (2022). *Statistik Penduduk Lanjut Usia 2022*.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications, Inc.
- Dzulhijar, W., Pratiwi, L. N., & Laksana, B. (2021). Pengaruh CR, DER, dan ROA terhadap Nilai Perusahaan pada PT Jasa Marga Tbk Tahun 2010-2019. *Indonesian Journal of Economics and Management*, 1(2), 401–409. <https://doi.org/10.35313/ijem.v1i2.2507>
- Fabozzi, F. J., Modigliani, F., & Ferri, M. G. (1994). *Foundation of Financial Market and and Institution*. Prentice Hall.
- Farid, M., & Hidayat, M. A. R. (2022). Sharia Pension Fund. *Muhasabatuna : Jurnal Akuntansi Syariah*, 1(1), 1–16. <https://doi.org/10.54471/muhasabatuna.v1i1.1698>
- Handani, S. R. (2023). Pengaruh Literasi Keuangan Syariah dan Financial Technology Terhadap Inklusi Keuangan Syariah pada STIQ ISY Karima Kabupaten Karanganyar. UNIVERSITAS ISLAM NEGERI RADEN MAS SAID SURAKARTA.
- Hatunga, N. (2020). The Effect of Asset- Liability Management on Profitability of Private Commercial Banks in Ethiopia [The University of Dodoma]. <https://doi.org/10.7176/rjfa/11-9-04>
- Hidayatullah, A. W. (2021). Pengaruh Operating Profit Margin (OPM), Earning Per Share (EPS), Dan Return On Investment (ROI) Terhadap Profitabilitas Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia (BEI). UNIVERSITAS TRIDINANTI PALEMBANG.

- Hijriah, S., Sari, N., & Jalaluddin, J. (2017). Analisis Jumlah Nasabah, Pendapatan Sewa Modal dan Tingkat Inflasi Terhadap Penyaluran Pembiayaan Rahn di PT Pegadaian (Persero) Indonesia Tahun 2003-2016. *Ekobis: Jurnal Ekonomi Dan Bisnis Syariah*, 1(1), 10–20. <https://doi.org/10.22373/ekobis.v1i1.9989>
- Kasmir. (2018). Analisis Laporan Keuangan (1st ed.). PT RAJAGRAFINDO PERSADA.
- Kusuma, I. N. (2020). Pengaruh Literasi Keuangan terhadap Inklusi Keuangan melalui Financial Technology pada UMKM di Bandar Lampung. *JURNAL MANAJEMEN BISNIS DAN KEWIRAUSAHAAN*, 4(5).
- Lefebvre, V. (2022). Performance, working capital management, and the Liability of smallness: A question of opportunity costs? *Journal of Small Business Management*, 60(3), 1–30. <https://doi.org/10.1080/00472778.2020.1735252>
- Maharjan, S. (2022). Assets and liability management and its effect on commercial banks profitability. Tribhuvan University.
- Munawaroh, H., & Sahitya, D. Q. (2021). The Analysis of Sharia Pension Fund Management According To Fiqih Muamalat (Case Study on Muhammadiyah Sharia Pension Fund). *Al-Mu'amalat: Journal of Islamic Economic Law*, 4(1), 1–20. <https://ejournal.unida.gontor.ac.id/index.php/muamalat/article/view/8201%0Ahttps://ejournal.unida.gontor.ac.id/index.php/muamalat/article/download/8201/9916>
- Nasution, L. Z., & Fuddin, muhammad K. (2015). Dana Pensiun Pendorong Kesejahteraan Pekerja Dan Penjaga Eksistensi Umkm Dalam Menghadapi Masyarakat Ekonomi Asia. *Jurnal Ekonomi Pembangunan*, 13(2), 179–197.
- Nur, M. R. A. A. (2012). Lembaga Keuangan Syariah: Suatu Kajian Teoretis Praktis. (Cet 1). Pustaka Setia.
- Otoritas Jasa Keuangan. (2022). Laporan Perkembangan Keuangan Syariah Indonesia 2022.
- Rafania, T. A., Anggraeny, N., Putri, K. D., Verdi, A., & M, S. S. (2023). Analisis Liabilitas dan Ekuitas terhadap Laba Operasional pada PT AlloBank Indonesia, Tbk. *Jurnal Penelitian Ekonomi Akuntansi (JENSI)*, 7(1), 15–24.
- Rivai, V. (2013). *Financial Institution Management : Manajemen Kelembagaan Keuangan*. Rajawali Press.

- Rose, P. S. (1988). *Financial Institution: Understanding & Managing Services*. Business Publication.
- Sari, A. N. (2022). ROI vs IRR: Dua Ukuran Profitabilitas yang Membantu Investor Membuat Keputusan. *Djkn Kemenkeu*. <https://www.djkn.kemenkeu.go.id/kanwil-suluttenggomallut/baca-artikel/15254/ROI-vs-IRR-Dua-Ukuran-Profitabilitas-yang-Membantu-Investor-Membuat-Keputusan.html>
- Simarta, O. H. (2020). *Pengaruh Kinerja Keuangan dan Ukuran Perusahaan Terhadap Nilai Perusahaan PT. Indofood Sukses Makmur, Tbk*. UNIVERSITAS MEDAN AREA.
- Soetiono, K. S., & Setiawan, C. (2018). *Literasi dan Inklusi Keuangan Indonesia*. PT. RajaGrafindo Persada.
- Sofiani, L., & Siregar, E. M. (2022). Analisis Pengaruh ROA, CR dan DAR Terhadap Nilai Perusahaan Sektor Makanan dan Minuman. *Jurnal Ilmiah Akuntansi Kesatuan*, 10(1), 9–16. <https://doi.org/10.37641/jiakes.v10i1.1183>
- Suhesti, S., & Samad, A. (2023). Strategi Pemasaran Produk Tabungan Emas dalam Meningkatkan Jumlah Nasabah. 3(2), 182–203.
- Tarmizi, E. (2019). *Harta Haram Muamalat Kontemporer (19th ed.)*. PT Berkat Mulia Insani.
- Tumewang, Y. K. (2018). Can Yale Endowment Model Be Applied for Islamic Pension Fund? *Journal of Islamic Monetary Economics and Finance*, 3, 99–124. <https://doi.org/10.21098/jimf.v3i0.787>
- Umar, B. (2021). Potentials of an Islamic pension fund administration scheme in Nigeria. *Journal of Global Economics and Business*, 2(6), 89–102. <https://doi.org/10.31039/jgeb.v2i6.60>
- World Health Organization. (2022). Ageing and Health. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health#:~:text=By 2050%2C the world's population,2050 to reach 426 million>
- Zhang, L., Fakieh, B., & Shang, L. (2022). Financial Management Of Asset-Liability Ratio Of Small-And Medium-Sized Enterprises In Dynamic Nonlinear System. *Fractals*, 30(2), 1–10. <https://doi.org/10.1142/S0218348X22400643>

Zhang, Y., Lu, X., & Xiao, J. J. (2023). Does financial education help to improve the return on stock investment? Evidence from China. *Pacific-Basin Finance Journal*, 78(April). <https://doi.org/10.1016/j.pacfin.2023.101940>.



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