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Tabarru' underwriting funds: Assessing the influence of investment income and insurance premiums on sharia insurance performance in Indonesia

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Abstract
This study analyzes the impact of investment and premium income on the Tabarru underwriting funds of Islamic insurance in Indonesia from 2015 to 2018. It employs a quantitative approach, utilizing descriptive statistical methods with Eviews software. The research focuses on Sharia insurance companies registered with the Financial Services Authority (OJK) during this period. The study analyzed data from 19 Islamic insurance companies, focusing on the impact of investment and premium income on Tabarru underwriting funds. The main findings are as follows: First, investment income significantly positively affects the Tabarru funds. Secondly, premium income does not have a significant impact, indicating that premiums align with the level of risk.

Public interest statement
The findings indicate that Islamic insurance companies in Indonesia should prioritize optimizing their investment strategies to increase their Tabarru underwriting funds. By enhancing investment returns, these companies can reinforce their financial stability and offer improved services to their customers.

Keywords: Tabarru Fund Underwriting, Investment Income, Premium Income, Sharia Insurance.

Paper type: Case study

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Abstrak

Studi ini menganalisis dampak investasi dan pendapatan premi terhadap dana penjaminan Tabarru asuransi Islam di Indonesia dari tahun 2015 hingga 2018. Pendekatan yang digunakan adalah kuantitatif, dengan menggunakan metode statistik deskriptif dengan perangkat lunak Eviews. Penelitian ini berfokus pada perusahaan asuransi Syariah yang terdaftar di Otoritas Jasa Keuangan (OJK) selama periode tersebut. Studi ini menganalisis data dari 19 perusahaan asuransi Islam, dengan fokus pada dampak investasi dan pendapatan premi terhadap dana penjaminan Tabarru. Temuan utama adalah sebagai berikut: Pertama, pendapatan investasi secara signifikan berdampak positif terhadap dana Tabarru. Kedua, pendapatan premi tidak memiliki dampak yang signifikan, yang menunjukkan bahwa premi sejalan dengan tingkat risiko.

Pernyataan kepentingan publik

Temuan menunjukkan bahwa perusahaan asuransi Islam di Indonesia harus memprioritaskan pengoptimalan strategi investasi mereka untuk meningkatkan dana penjaminan Tabarru mereka. Dengan meningkatkan hasil investasi, perusahaan-perusahaan ini dapat memperkuat stabilitas keuangan mereka dan menawarkan layanan yang lebih baik kepada nasabah mereka.

Kata kunci: *Tabarru Fund Underwriting, Investment Income, Premium Income, Sharia Insurance*.

Introduction

Sharia insurance in Indonesia, commonly known as takaful, is based on mutual sharing and cooperation principles. It involves a collective effort where individuals or parties come together to provide protection and support each other through investments in assets and/or *Tabarru'* (charitable donations) to mitigate specific risks. The concept of tabarru' in family takaful involves participants donating a portion of their contributions to a shared pool. This pool supports those in need, thereby eliminating uncertainty in the contract. This system differs from conventional insurance, where premiums are paid in exchange for guaranteed benefits (Ismail, 2014). This arrangement operates under agreements that comply with Islamic law (sharia). In this system, participants' contributions are regarded as donations with particular stipulations. Importantly, these funds are considered collective property owned by the participants rather than income generated by the managing entity. The foundational principles of Islamic insurance—ta'awuni (mutual help) and takaful (mutual support)—emphasize solidarity and cooperation among participants.

In the meantime, as stated in the National Sharia Council Fatwa No. 21 / DSN-MUI / X / 2001, Islamic insurance (Ta'min, Takaful, or Tadhamun) is an initiative to provide protection and mutual assistance among a group of individuals or entities through investments in assets and tabarru', which establishes a framework for receiving returns to manage specific risks through a contract that complies with sharia principles. According to Fatwa DSN-MUI No. 53 / DSN-MUI / III / 2006, the tabarru' contract in sharia insurance is a requisite component of all insurance offerings. Therefore, the tabarru' contract encompasses all types of agreements made between participants or policyholders, executed as a donation aimed at goodwill and support among participants, rather than for profit-making purposes.

Underwriting is a selection process that involves assessing and classifying the risks associated with potential participants to determine the premium or contribution to be paid. A team of underwriters performs this process. The funds collected are partially or wholly allocated to the Tabarru fund reserves, per the agreed terms.

This study specifically explores the role of investment and premium income on tabarru' underwriting funds. In contrast to other topics, studies related to tabarru' underwriting funds are still very limited. First, the key difference between investment income and premium income in tabarru' underwriting funds lies in the guarantee of returns and the basis for investment returns (Ismail, 2014). Handling these incomes can significantly impact underwriting performance, with implications for risk management and overall profitability. However, challenges associated with managing these incomes include the impact of premium growth on underwriting profitability and the need to adjust premium schemes to enhance product attractiveness. Second, companies that experience greater volatility in their underwriting incomes and cash flows in the insurance industry tend to adopt a more conservative approach to financial investment risk. On the other hand, their portfolios are less allocated to risky bonds and equities. Additionally, a study on the financial performance of the life insurance industry in Ghana found that gross written premiums were positively related to insurers' sales profitability but negatively related to investment income (Chen et al., 2020; Oscar Akotey et al., 2013).

Literature review

Tabarru's underwriting funds are a fundamental aspect of Sharia-compliant insurance systems, also known as Takaful. "tabarru'" refers to voluntary donations or contributions from participants into a collective pool. The primary purpose of Tabarru' is to promote social welfare and cooperation among participants, aligning with the principles of Islamic finance (Maali & Atmeh, 2015). This pool is utilized to support those participants who experience a loss or damage. The concept is grounded in mutual assistance (ta'āwun) and mutual protection (takāful). Unlike conventional insurance, which typically involves an individual's relationship with an insurance company, Sharia insurance operates on a collective risk-sharing model among all participants (Aziz & Uswatusolihah, 2022). The tabarru concept is essential in eliminating uncertainty (gharar) in contracts, as participants agree to contribute a portion of their funds without expecting a guaranteed return. The funds collected through tabarru' cover claims. At the same time, any surplus is usually returned to the participants or applied to lower future contributions. This approach ensures the system remains fair and equitable for all involved (Ismail, 2014).

In family Takaful, participants contribute to a fund designed to offer financial support in cases of death or disability. These contributions are regarded as donations, and the benefits are allocated according to the specific needs and circumstances of the participants. Some Islamic banks apply the principles of Takaful and tabarru' to safeguard deposits, ensuring that the funds are utilized for mutual benefit and risk-sharing rather than merely shifting risk (Ismail, 2014; Maali & Atmeh, 2015). Tabarru's underwriting in Islamic finance aims to remove uncertainty from the contract. In this model, participants agree to donate a portion of their contributions, unlike in conventional underwriting, where a premium is paid in exchange for a guaranteed insurance benefit (Ismail, 2014). Tabarru's underwriting aligns with the ethical principles of takaful, emphasizing mutual assistance and solidarity and removing prohibited elements such as interest, uncertainty, and gambling. It reflects the ethical and moral foundations of takaful by promoting fairness, cooperation, and the protection of participants by Islamic principles (Aziz & Uswatusolihah, 2022; Rahman et al., 2019)

Investment Income

In family takaful, the returns on contributed funds depend on actual investment performance rather than guaranteed returns. This means that the investment income can fluctuate based on market conditions and the performance of the investments made by the takaful operator (Ismail, 2014). Moreover, there is a common belief in the insurance industry that underwriting losses are often offset by investment income, contributing to overall profitability. This cross-subsidization is essential for maintaining the financial health of insurance operations (Bharathkumar & Gupta, 2020).

Premium Income

Premium income, especially gross written premiums, has a complicated relationship with profitability. While it can enhance sales profitability, it may also negatively impact investment income due to overtrading and price undercutting, which can lead to underwriting losses (Oscar Akotey et al., 2013). Importantly, premium growth alone does not necessarily indicate an increase in underwriting risk. A more reliable measure of underwriting risk is the growth in claim counts, suggesting that premium income needs to be managed carefully to prevent negative effects on underwriting profitability (Barth & Eckles, 2009). In the context of takaful, the tabarru fund is managed to ensure fair distribution of value among participants. This management involves setting appropriate rates and overseeing the fund to accommodate unexpected claims, thereby maintaining mutual cooperation and solidarity among all participants (Saputra et al., 2017, 2021).

Methods

Researc data

This study employs a descriptive analysis to examine empirical evidence concerning the impacts of independent variables on a dependent variable within Islamic insurance companies in Indonesia between 2015 and 2018. Utilizing a quantitative approach, the research will process the gathered data using Eviews software version 9 to test the hypotheses. The study focuses on two independent variables—investment income and premium income—and one dependent variable, the underwriting tabarru' funds.

The purposive sampling technique is employed to select samples based on specific criteria (Hendryadi et al., 2019). In this study, the criteria for sampling involved identifying Sharia insurance companies registered with the Financial Services Authority (OJK) from 2015 to 2018. Initially, there were 52 such companies; however, after further evaluation, 14 companies were excluded for consistently submitting incomplete annual financial reports during that period. Additionally, 19 companies were eliminated for not recording a tabarru fund underwriting surplus in the same timeframe. Ultimately, 19 Sharia insurance companies were selected as samples registered with OJK, leading to a total sample size of 76, calculated by multiplying the 19 companies by the four years of the study.

Measurement

The dependent variable in this study is auditor switching, which refers to a company replacing the Public Accounting Firm and Public Accountant. This variable is measured using a dummy variable, where a value of 1 indicates a change in the Public Accounting Firm (KAP) by the company, and a value of 0 indicates no change in KAP. Investment income is the profit the company earns in managing tabarru' funds, after deducting the expenses related to managing the investment portfolio. In this study, premium income refers to the net premium income derived from the secondary data of the tabarru fund, specifically regarding the underwriting surplus (or deficit) in the Islamic insurance company. Underwriting involves assessing and classifying risks that will be covered and the process by which the Sharia insurance manager evaluates and decides whether to accept a compensation participation request from an applicant, along with determining the specific conditions. Tabarru' funds are a collection of funds generated from contributions by participants who experience a disaster or from other parties entitled to benefits according to the tabarru' contract that they agreed upon. This research employs descriptive statistics along with multiple regression models for data analysis. This method is appropriate as the study examines the relationships and influences among various factors, making multiple regression analysis a suitable tool. The collected data will be analyzed using the E-views 9 software.

Results and discussion

Descriptive statistics

Based on Table 1, the average value of the tabarru fund underwriting is Rp 51,450,000,000, with a standard deviation of Rp 161,443,116,7. The highest tabarru fund underwriting value, amounting to Rp 969,764,000,000, was recorded by PT Asuransi Sinarmas MSIG in 2016. Conversely, the lowest underwriting value, which was -Rp 1,063,000,000, belongs to PT MSIG Sinarmas Insurance in 2015. Regarding investment income, the average value is Rp 32,950,000,000, with a standard deviation of Rp 4,296,805,067. PT Asuransi Sinarmas MSIG again achieved the highest recorded investment income, Rp 880,292,000,000, in 2016, while PT Prudential Life Assurance reported the lowest investment income value, Rp 7,450,000,000, in 2018. For premium income, the average value is Rp 4,533,000,000, with a standard deviation of Rp 1,144,900,225. The highest premium income, recorded at Rp 6,355,515,000,000, was achieved by PT Asuransi Sinarmas MSIG in 2018, while the lowest premium income, amounting to Rp 2,433,000,000, belongs to PT Wahana Tata Insurance in the same year.

Table 1.

Descriptive data

	UDT	*PI*	*PP*
Mean	*51,450,000,000*	*32,950,000,000*	*302,533,000,000*
Maximum	*969,764,000,000*	*880,292,000,000*	*6,355,515,000,000*
Minimum	*- 110,063,000,000*	*- 7,450,000,000*	*- 2,433,000,000*
Std. Dev	*1,614,431,167*	*4,296,805,067*	*1,144,900,225*
Observations	*76*	*76*	*76*

Hypothesis test

The analysis is based on the regression estimation methods used for the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Additionally, the regression estimation model was selected using the Chow test, Hausman test, and Lagrange multiplier test. The appropriate model for estimating panel data regression equations is determined to be the Fixed Effect Model (FEM).

Table 2.
Regression analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.09E + 14	7.06E + 14	0.721328	0.4738
PI	1.202719	0.103658	11.60278	0.0000
PP	0.026570	0.014712	1.805991	0.0764
F = 30.42				
R Square = *0.88*				

Based on the results from the panel data regression analysis, the panel data linear regression equation can be formulated as follows: UDT = 5,090,000,000 + 1,202,719 (PI) + 0.026570 (PP), or equivalently Y = 5,090,000,000 + 1,202,719 (PI) + 0.026570 (PP).

In this equation, the constant value is 5,090,000,000, which indicates that if the independent variables—investment income (PI) and premium income (PP)—are held constant at zero, the tabarru fund underwriting will increase to 5,090,000,000. The coefficient for investment income is 1,202,719, suggesting that for every one-unit increase in investment income, with other variables held constant, the tabarru fund underwriting will increase by 1,202,719. Similarly, the coefficient for premium income is 0.026570, indicating that every one-unit increase in premium income, while keeping other variables constant, results in an increase of 0.026570 in the tabarru fund underwriting.

The first hypothesis in this study posits that the size of a Public Accounting Firm (KAP) affects auditor switching. The results presented in Table 4.10 indicate that the calculated t-value is greater than the critical value from the t-distribution table (t count > t table), specifically that -3.989252 > 1.97393. Additionally, the probability value is less than the significance level (prob < 0.05), with a probability of 0.0001, significantly smaller than 0.05. The acceptance of hypothesis H1 indicates that stakeholders may view larger Key Audit Partners (KAPs) as providing higher audit quality. This perception can affect how organizations allocate their budgets for audit services, leading firms to justify higher auditing costs based on the service's anticipated quality and reliability. Based on the research findings, several practical implications emerge:

First, organizations should consider the size and reputation of their auditing firms when deciding whether to maintain or change their auditors. Larger firms may offer more comprehensive services and greater assurance of regulatory compliance, which could be crucial for organizations contemplating a switch. Second, the findings underscore an important aspect of market dynamics in auditing. As companies increasingly seek larger firms for their audit needs, this trend may bolster the competitive advantage held by larger KAPs, possibly resulting in further consolidation within the accounting industry. Third, smaller KAPs may need to reevaluate their service offerings and value propositions to remain competitive. The results suggest they should consider focusing on niche markets or developing specialized services to retain clients who might be tempted to switch to larger firms.

The significant relationship between KAP size and auditor switching opens avenues for future research. Future studies could investigate the characteristics that make larger firms more appealing or examine how the perceived quality of audit services differs among firms of varying sizes. Regulatory bodies may also find these findings relevant when assessing the structure and distribution of auditing firms in the market. Given the noticeable trend favoring larger firms, regulators could evaluate whether this concentration impacts competition and transparency within the auditing landscape.

The second hypothesis of this study suggests that premium income affects tabarru underwriting funds. The findings presented in Table 4:13 indicate that the calculated t value is less than the critical value from the t distribution table (t count < t table), with the specific values being (1.805991 < 1.99346). Additionally, the probability value exceeds the significance level (0.0764 > 0.05). These results lead to the conclusion that premium income does not significantly affect tabarru underwriting funds. As a result, H2, which asserts that premium income influences tabarru fund underwriting, is rejected. This implies that changes in premium income do not significantly impact the allocation to the tabarru fund, suggesting that other factors may be involved in determining underwriting funds in this context.

The rejection of the hypothesis (H2) posited that premium income influences tabarru underwriting funds indicates insufficient evidence to support a direct relationship between these two variables. Organizations managing tabarru funds should reconsider their strategies that rely heavily on premium income as a primary source for underwriting funds. Since changes in premium income do not significantly drive fund allocations, alternative funding sources or factors must be assessed to understand how underwriting funds can be optimized.

The findings suggest that other significant factors may affect tabarru fund allocations. This could include investment income, regulatory influences, operational strategies, or external environmental factors. Further investigation into these areas may provide a more comprehensive understanding of what drives underwriting fund decisions. Insurers and financial institutions should focus on diversifying their revenue streams beyond premium income. Since premium income alone does not significantly affect underwriting funds, organizations may benefit from exploring investments, other financial instruments, and innovative fundraising approaches to ensure robust funding for tabarru. This outcome opens new avenues for research into the dynamics of tabarru funding. Future studies could investigate specific alternative factors influencing underwriting funds and whether the challenges are unique to specific markets or apply more broadly.

Conclusion

Based on the data analysis, the following conclusions can be drawn: First, investment income positively and significantly affects tabarru' underwriting funds. This is because investment returns serve as a vital source of income for the company. Therefore, the greater the investment earned, the higher the tabarru funds' underwriting value. Secondly, premium income does not have an effect on tabarru' underwriting funds. This is because premium income consists of funds paid by the insured to the insurer to cover potential losses, damages, or loss of expected profits resulting from a risk transfer agreement. Consequently, the insured party pays a premium corresponding to the risk level associated with each situation.

Limitations

This research focused on the period from 2015 to 2018. As a result, the findings may not accurately represent trends or changes since 2018. Future studies should consider extending the timeframe to include more recent developments, which would provide a more comprehensive analysis of the impact of premium income on tabarru underwriting funds. The study examined data from only 19 companies that disclosed the necessary information out of 52 companies in the sector. This limited sample size may restrict the generalizability of the findings. Future research could benefit from a larger sample size or the inclusion of more companies to enhance the robustness of the results and ensure a more representative analysis of the industry. Additionally, the reliance on publicly available data means the findings may be influenced by the completeness and accuracy of the information provided by the participating companies. Future research could explore using more comprehensive datasets or incorporate qualitative methods to gain deeper insights into the factors affecting tabarru underwriting funds. This study primarily focused on the relationship between premium income and tabarru underwriting funds without considering other contextual factors that may influence this relationship. Future studies could examine additional variables, such as market conditions, regulatory changes, and company-specific strategies, which might interact with premium income to impact fund allocations.

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