

The Effect of Contribution Income and Claim Expense on Underwriting Surplus/Deficit with Investment Results as a Moderating Variable in Sharia Life Insurance Companies Registered with the OJK for the 2018-2022 Period

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Abstract

The rapid development of the global economy, supported by massive technological advances, has led to an increase in the potential risks faced by humans in meeting their various life needs. As a result, the challenges in dealing with it are certainly becoming more complex, both in terms of direct and indirect impacts.

The purpose of this study is to find out whether or not there is an influence of the various variables studied, Contribution Income (X1), Claim Expense (X2), Underwriting Surplus/Deficit (Y) and Investment Result (Z).

This study uses a causal associative method using a quantitative approach.

The results of this study show that the variable of contribution income to surplus/underwriting deficit has an effect with a value of sig. $0.021 < 0.05$, the variable of claim expense to surplus/underwriting deficit has no effect with a value of sig. $0.105 > 0.05$, the variable of investment income to surplus/underwriting deficit has no influence with the GIS value. $0.170 > 0.05$, the variable income contribution to investment results has an effect on the value of sig. $0.040 < 0.05$, the variable of claim expense on investment results has no effect on the value of sig. $0.703 > 0.05$, the variable Income Contribution to Surplus/Underwriting Deficit through investment results as a moderating variable has no effect with a sig. value of $0.151 > 0.05$, the variable of claim expense to surplus/Underwriting Deficit through investment results as a moderating variable has no effect with a sig. value of $0.141 > 0.05$.

INTRODUCTION

The rapid development of the global economy, supported by massive technological advances, has led to an increase in the potential risks faced by humans in meeting their various life needs. As a result, the challenges in dealing with it are certainly becoming more complex, both in terms of direct and indirect impacts. To anticipate these unexpected risks, companies and individuals often shift responsibility for their assets, debts, and even lives. Basically, this agreement arises from the interaction between parties who are worried about possible losses and parties who are willing to bear the risk, resulting in the creation of an insurance agreement. This insurance agreement is basically a fair mutual agreement, where both parties have certain obligations: the insured is obliged to pay premiums according to the amount determined by the insurer, while the insurer is obliged to compensate the insured if he suffers losses in accordance with the agreement that has been made.

Uncertainty about future events is an integral part of human life. Risk is defined as the possibility of an event occurring whose cause, time, and place cannot be known with certainty. Prevention of these risks can be overcome by applying for coverage on insurance as an effort to obtain guarantees for the risks that occur. Arif (2012) said that risk prevention and in regulating

insurance financial management have a much-needed role for the Indonesian population. (Al Arif, 2012)

In social life, unexpected events can happen to anyone unpredictably. Therefore, humans are required to have readiness to face all possibilities that have the potential to cause losses. These efforts can be carried out individually or jointly through forms of cooperation, such as fellowship or insurance that allows for mutual burden sharing between the parties involved. From this came the idea of insurance, which was formed as a means to help and protect each other in the face of risks that cannot be borne by themselves. (Salim, 2007)

In economic and social activities, cooperation between individuals and institutions is often carried out as an effort to anticipate various risks that can cause losses. One form of cooperation is realized through insurance, where the guarantor is obliged to provide compensation to the insured party in the event of a loss. This form of compensation can be in the form of compensation for physical damage or loss of potential income that is the responsibility of the insured party. As a consequence, the insured party is obliged to pay a certain amount of premium to the guarantor in exchange for the protection provided. All of these provisions are designed to deal with unforeseeable events and are intended to provide a replacement when a risk occurs. Therefore, in essence, insurance is a form of official agreement between two or more parties that functions as a protection mechanism against possible losses. (Abdulkadir, 2015)

Life Insurance based on sharia principles is a form of protection against risks based on the spirit of mutual cooperation to reducing all types of risks, such as the risk of accidents, health, and death. Its implementation must be based on the teachings of Islam and free from elements of fraud, gambling, and usury. According to Puspitasari (2015) in the journal Nia Anggraini (2021), sharia-based financial management must prioritize the principle of justice and the separation of fund functions strictly so that there is no conflict of interest between the interests of participants and the company. (Zen & Manda, 2021)

The existence of sharia insurance institutions in Indonesia is a manifestation of the application of Islamic economic values sourced from the Qur'an, Hadith, and the thoughts of scholars. Sharia insurance was first established in 1994 with the birth of PT. Asuransi Takaful Indonesia, which was initiated by the Indonesian Muslim Scholars Association (ICMI) together with several institutions such as Bank Muamalat Indonesia, Yayasan Abdi Bangsa, and Muslim-based companies. The establishment is an initial milestone in the development of the sharia insurance industry in Indonesia. The legality of its operational activities was then strengthened by the Decree of the Minister of Finance of the Republic of Indonesia Number Kep-385/KMK.017/1994, which officially legalized the practice of sharia insurance as part of the national financial system. (Soemitra, 2010)

Financial statements play an important role in assessing the performance and accountability of insurance companies. Based on the Financial Accounting Standard Statement (PSAK), financial statements are prepared to provide relevant information for various parties in the economic decision-making process. The report not only serves as an internal evaluation tool, but also as a means of public transparency that can increase the trust of potential customers. In the context of this study, financial statements are the main basis for analyzing *Surplus* or *Underwriting deficit* Sharia Life Insurance Companies registered with the Financial Services Authority (OJK), which reflects financial conditions and risk management effectiveness. (Ulum, 2010)

The success of the management of insurance participants' funds is determined by the achievement of *Surplus* of risk assurance activities (*Underwriting*), which reflects the effectiveness of the company's financial management. *Surplus* This is the difference between the total contributions deposited by the participant into the fund *Scarlet Witch* with the amount of the company's expenses. The calculation includes the addition of reinsurance assets, minus claims expense and an increase in technical reserves in a given period. Therefore, the management of participant funds requires a *Underwriting* to determine the level of risk that can be tolerated and the amount of participant contribution required for funds to be optimally managed. (Soemitra, 2009)

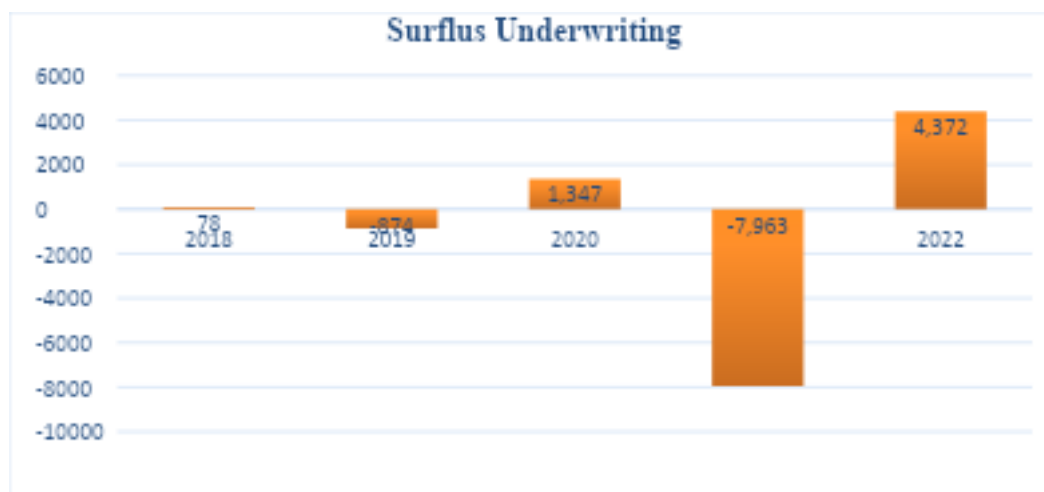
Surplus/Underwriting Deficit can be understood as the difference between the contribution income earned by the insurance company, after deducting claims expenses, commissions, and operating expenses, reflecting the level of efficiency and *financial* health of the main operational activities of the Sharia Life Insurance Company. *Underwriting surplus*, which shows healthy financial conditions, is an important indicator in assessing the company's ability to fulfill its obligations to insurance participants, while *underwriting deficit* signals an imbalance in participants' contributions to claim costs, so that it can jeopardize the company's operational sustainability.

Surplus/Underwriting Deficit is the main benchmark in assessing the performance of Sharia Life Insurance Companies. This measure is used to determine the extent to which the company is able to manage funds *Scarlet Witch* effectively and efficiently. According to Silviana (2022), the amount of insurance income obtained from participant contributions has a direct influence on results *Surplus/deficit* that happened. (Silviana & Devi, 2022) The same thing is also expressed by Rahayu (2022), where gross contribution and investment income are proven to have a major impact on the formation of surplus or shortfall in the fund pool *Scarlet Witch* in sharia life insurance institutions. (Rahayu, 2022) Based on these findings, the understanding of *Surplus/Underwriting deficit* It is very important as a basis for evaluating the effectiveness of risk management and resource optimization in maintaining business sustainability.

The development of the financial performance of Sharia Life Insurance institutions in recent years has shown quite sharp fluctuations, especially in *the underwriting surplus/deficit statement*. This phenomenon can be clearly seen from the negative values in 2019 and 2021 which indicate the occurrence of losses, as well as positive values in 2020 and 2022 which reflect profits, so that it can be indicated that *underwriting management* has not been running optimally. These fluctuations also show that risk management and operational cost efficiency still need to be improved so that companies can maintain consistency in their financial performance. The inconsistency of *underwriting surplus/deficit* in the period 2018-2022 marks the existence of structural problems that need special attention in terms of risk management policies and the efficiency of *tabarru* fund management'. Thus, the stability of financial statements is the main indicator in determining the success of *underwriting management*. On the other hand, the impact of fluctuating financial statements also has the potential to reduce the level of public confidence in the performance of Islamic insurance institutions. If this trend continues, the level of development of the sharia insurance industry in Indonesia can be significantly hampered. Thus, the pattern of fluctuations in financial performance, especially in the underwriting aspect, is a substantial problem that needs to be analyzed further.

Below is the *underwriting surplus* data on sharia insurance companies for the 2018-2022 period which is presented in the following data:

Graph 1.1
Average Underwriting Data on Insurance Companies
Sharia Period 2018-2022



Source:
ojk.go.id

(Data processed, 2025)

As previous research has stated, various factors cause fluctuations *Surplus* or *Underwriting deficit* has been widely discussed by experts. Silviana (2022) in her research on Sharia Life Insurance Companies registered with the OJK in the 2015–2019 period found that the contribution of participants had a significant influence on *Surplus* and *Underwriting deficit* Funds *Scarlet Witch*, although the value tends to fluctuate every year. (Silviana & Devi, 2022) Rahayu (2022) also mentioned that gross contribution and investment returns have a big impact on the ups and downs *Surplus* at Sharia Life Insurance institutions in Indonesia. (Rahayu, 2022) In this case, Ramadhani (2022) also identified that variations in investment yields can amplify fluctuations *Surplus/Underwriting deficit*, so investment risk management is crucial in maintaining the financial stability of insurance companies. (Ramadhani & Alfitriyani, 2022) Based on these empirical findings, it is clear that the dynamics of *Surplus/Underwriting deficit* which continues to fluctuate from year to year is inseparable from the complexity of internal factors of the company, both related to contributions, claims expenses and investment returns, so that management strategies are improved *Underwriting* is the main urgency to stabilize financial performance.

In the context of sharia, funds *Scarlet Witch* is a voluntary donation from participants that aims to help fellow members in the event of a disaster. This fund is the main basis for the implementation of the principle of helping in sharia insurance. According to the provisions of POJK No. 72/POJK.05/2016, *surplus underwriting* calculated based on the difference between the total contribution of the participant minus claims, plus the proceeds of reinsurance assets, and then less technical reserve fees and other expenses in a given Period. If the end result is positive, then it is formed *surplus underwriting* which can be used to strengthen reserve funds or distributed to participants as agreed. On the other hand, if the result is negative, it means that it occurs *deficit* which indicates an imbalance between income and expenditure of funds *Scarlet Witch*. (Syakir Sula, 2004a)

Related to storage usage *Scarlet Witch*, stages *Underwriting* very important. *Underwriting* refers to the selection mechanism and the classification of risks that will be imposed on the participants. This stage is expected to optimize profits by determining the risk distribution that is expected to be able to generate profits. No mechanism *Underwriting* Good, Islamic insurance companies will have difficulty maintaining financial stability and facing the risk of bankruptcy in the future. Therefore, the company's success in achieving *surplus underwriting* inseparable from the important role of the process *Underwriting* that is measurable and professional. (Duncan, 2004)

Guarantee of funds *Scarlet Witch* is a crucial aspect that requires full attention from Islamic insurance companies, considering that this process serves as the main indicator in assessing the effectiveness of participant fund management. In general, high guarantee results reflect the quality of the guarantee process that has been optimally implemented, while a decrease in guarantee results indicates a decrease in guarantee performance over a certain period. (Fikri, Ali, 2009)

Surplus/Deficit Underwriting as the main *outcome* of internal budget management cannot be separated from the fundamental role of contribution income, claim expenses, and investment returns, considering that these three are central pillars in the company's financial architecture. Contribution Income, which is functionally analogous to premiums in conventional insurance, represents the main source of income used to meet the company's obligations to participants and streamline the achievement of *surplus* targets. Furthermore, claims expenses are the largest expense component that directly determines the company's liquidity stability and reliability in fulfilling promises to participants, which ultimately has great implications for the perception of business sustainability and the level of public trust in Islamic insurance institutions. Closely related to the previous two components, investment results act as an instrument to increase asset value and optimize *operational surplus*, especially in the midst of significant fluctuations in financial market dynamics during the 2018-2022 period. These three aspects, when studied simultaneously and comprehensively, form a systemic interaction that not only reflects the company's financial performance in the context of *underwriting*, but also indicates the effectiveness of risk management

and the company's adaptability to respond to changes in OJK regulations and other external challenges.

In sharia life insurance, funds *Scarlet Witch* It is divided into two types of funds, namely savings funds and social funds. Savings funds are managed for the benefit of individual participants, while Social Fund It is used as a mutual fund to bear the risks of other participants. The relationship between contributions and claims in financial statements reflects the effectiveness of a company's risk management.(Damayanti, 2019)

The gross contribution paid by the participant will be deducted by operational costs as well as reinsurance costs to obtain a net contribution. Proper contribution management and cost control will determine how efficient the company is in generating *surplus underwriting* and maintain their financial health.(Syakir Sula, 2004)

The COVID-19 pandemic had a major impact on the performance of the Islamic insurance industry, especially in 2020, where there was a significant decrease in premium income and a significant increase in claims. This phenomenon causes *surplus underwriting* drastically decreased.(Silviana & Devi, 2022) Febriani (2024) emphasized that gross contribution and claim expense have a direct influence on the amount of *Surplus/Underwriting deficit* during the global economic crisis.(Febriani & Dwi, 2024) Therefore, the dynamics of fluctuations in insurance companies' financial statements from year to year are closely related to macroeconomic factors, including health crises and national financial policies.

Below is the contribution data presented in the data as follows:

Graph 1.2

Average Contribution Data to Sharia Insurance Companies for the 2018-2022 Period

Source: ojk.go.id (Data processed, 2025)

The significant recovery and growth in the value of financial statements in 2022 shows the



adaptability and resilience of Sharia Life Insurance Companies in overcoming economic pressures due to the pandemic. The recovery is closely correlated with an increase in gross contribution, the effectiveness of claims expenses, and the optimization of investment returns that insurance companies have managed to achieve after passing through a critical phase in the previous period. Sri Rahayu (2022) in his research stated that gross contribution and investment returns are the main factors that determine the stability of funds *Scarlet Witch*.(Rahayu, 2022) Ramadhani (2022) also strengthens this finding by stating that good investment management and implementation *Risk-based capital* plays an important role in restoring and improving *surplus underwriting* during the economic recovery period. The highest value of financial statements in 2022 of 92,482 is an indicator that Sharia Life Insurance Companies are able to make effective post-pandemic strategic adjustments. This phenomenon confirms that, although the financial statements show fluctuations in value from year to year, the company can prove its recovery capacity and strong growth potential when entering the post-crisis phase, and this is an important indicator for the company's sustainability.

In the context of an insurance contract, contribution is defined as a participant's contribution to the company in order to have insurance. The insurance company will be responsible for managing the contributions that have been paid by the policyholder appropriately. In accordance with Islamic law, insurance businesses make investment efforts to optimize the management of funds owned by participants. Only Islamic financial institutions, including Islamic bonds and mutual funds, are allowed to accept investments from insurance companies. The investment results will generate revenue for the Islamic insurance business. The *tabarru' account* will receive the investment returns.

The growth of investment income in the Sharia Life Insurance industry is an important indicator that reflects the level of health and financial competitiveness of the company, but the growth rate is often colored by significant fluctuations from year to year. These fluctuations in investment income are not only triggered by the dynamics of global and domestic financial markets, but also indicate uncertainty in the management of investment assets of Sharia Insurance companies. The volatility in the value of such investment income, especially when the highest value was registered in 2019 at 11.565, hints that the peak achievement has the potential to be an anomaly compared to other years that tend to be lower. This phenomenon is closely related to the company's ability to place funds in investment instruments based on Islamic law and the effectiveness of the risk management applied. Silviana (2022) stated that investment income has a very important role because it has a significant effect on *Surplus/Underwriting deficit*, which in turn determines the level of stability of the financial performance of the Sharia Life Insurance Company. Optimal investment income indicates the company's effectiveness in managing assets and allocating funds in accordance with prudential and sharia principles. (Silviana & Devi, 2022) In line with this, Rahayu (2022) emphasized that both gross contribution and investment returns play a role as the main determining factor in creating a balance in funds *Scarlet Witch* managed by Sharia Life Insurance Company. When investment returns increase, the potential for the formation of *surplus underwriting* is also getting bigger, while the decline in investment income can weaken the fund's financial position *Scarlet Witch*. (Rahayu, 2022) Therefore, fluctuations in investment income growth are a fundamental aspect in assessing the level of financial resilience and resilience of Sharia Life Insurance Companies from year to year, as well as reflecting the company's ability to maintain financial stability in the midst of changing market dynamics.

Below is the investment result data presented in the following data:

Graph 1.3

Data on Average Investment Returns in Sharia Insurance Companies for the 2018-2022 Period

Source: ojk.go.id (Data processed, 2025)



The link between fluctuations in investment income and corporate financial growth has been the main focus of various previous studies. Ramadhani (2022) emphasized that inconsistent investment returns on a year-to-year basis have the potential to create uncertainty over *surplus underwriting*, and this increases the challenge of maintaining the stability of the fund *Scarlet Witch* in the middle *Volatility* market. (Ramadhani & Alfitriyani, 2022) The existence of the peak value of investment income in 2019 as registered is 11,565, in line with the findings of Febriani (2024) which reveals that significant differences in investment income are often in line with the ups and

downs of profitability and tendencies *Surplus/Deficit* in Sharia Life Insurance Company.(Febriani & Dwi, 2024) With the empirical data and literature review, it can be concluded that the dynamics of investment income that fluctuate significantly from year to year are the main indicators in assessing the growth and financial stability of Sharia Life Insurance Companies, as well as providing an important overview of the effectiveness of investment strategies and asset management implemented during the observation period.

Claim expense is an important component of the calculation *Surplus/Underwriting deficit*. Based on DSN-MUI Fatwa No. 21/DSN-MUI/X/2001, every participant who suffers losses is entitled to a claim from the fund *Scarlet Witch* collected collectively. Thus, effective management of claims costs is key in maintaining financial balance and operational sustainability of the company.(Iskandar, 2013)

Below is the claim burden data presented in the following data:

Graph 1.4
Average Claims Data at Sharia Insurance Companies
Period 2018-2022



Source:
ojk.go.id
(Data)

processed, 2025)

The increase in the number of claims experienced by companies in this period has been the concern of several researchers in previous studies. According to Febriani (2024), the trend of continuous increase in claims during the 2018–2022 period has a direct impact on the condition of *Surplus* or *Underwriting deficit* in Sharia Life Insurance Companies registered with the Indonesian Sharia Insurance Association (AASI). This increase indicates significant financial pressure on funds *Scarlet Witch*, which is the main source for participant claim burden.(Febriani & Dwi, 2024) A similar view is expressed by Silviana (2022), who asserts that an increase in the volume of claims has implications for a decline in *surplus underwriting* Funds *Scarlet Witch*, so that it has the potential to threaten the sustainability of assets and financial stability of Sharia Life Insurance Companies registered with the Service Authority Finance (OJK).(Silviana & Devi, 2022) Thus, the significant growth trend in claims, especially in 2021 and 2022, can be categorized as a central issue that must receive special attention in the managerial strategy of Sharia Life Insurance Companies so that its negative impact on asset decline can be effectively minimized.

In the Islamic life insurance industry, *underwriting surplus/deficit management* is a very crucial aspect in maintaining the company's financial stability. Not a few insurance companies for the 2018-2022 period experienced significant challenges in managing contributions, claims, and investment results optimally. The imbalance between contribution income and claims expense is often the main cause of the emergence of *underwriting deficits* that have a direct impact on the company's financial condition and operational continuity. This reality is further exacerbated by fluctuations in contribution income from year to year which make the company's income unstable. In addition, the high number of claims from customers also puts significant pressure on the

company's liquidity and assets, thereby encouraging a decrease in assets due to the allocation of funds that must be spent on the burden of claims. On the other hand, from 2020 to 2022, there was a decrease in investment income which contributed to the low accumulation of funds in *the tabarru'* fund, thereby worsening the company's financial position. This condition ultimately illustrates the real difficulties in financial management by companies that should be able to maintain *underwriting surpluses* and increase investment value for customers and policyholders. Thus, these actual challenges emphasize the importance of further analysis of the effect of Contribution Income and claim expense on *underwriting surplus/deficit* by considering investment returns as *moderating* variables.

METHODS

This study uses an associative causal method with a quantitative approach. Associative causal research itself aims to understand the influence between two or more variables. (Husein Umar, 2011) In this study, it will explain the cause-and-effect relationship of various variables to be studied. The use of a quantitative approach is because the data used to analyze the relationship between variables is in the form of numbers or numerical scales. (Kuncoro, 2003) Specifically, this study analyzes how contribution income and claims expense affect *Surplus/Underwriting deficit* with investment returns as variables *Moderating* Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) during the 2018-2022 Period.

RESULTS AND DISCUSSION

The Effect of Contribution Income on *Underwriting Surplus/Deficit*

Participant contributions can be considered an alternative term to premiums. This contribution refers to the payment made by the participant to the company to anticipate if a risk occurs, in accordance with the provisions that have been made. The insurance company will provide the contribution amount after assessing the conditions associated with the insured's potential claim. In addition, participants are required to pay this contribution based on a predetermined level of risk, taking into account their specific circumstances. (Faizan, 2018)

Contribution income has an important role in maintaining the sustainability of sharia insurance companies' operations. The amount of contributions collected will determine the extent to which *the tabarru'* funds can be used to pay the claims submitted by the participant. If the contribution receipts are sufficient and managed efficiently, the company will be able to cover claim obligations and operational costs, resulting in *an underwriting surplus*.

Theory *pooling of risk* supports this, where the contributions collected from many participants allow for the collective spread of risk. The more participants and the greater the acceptance of contributions, the more stable and predictive risk management will be. (Rejda & Mc Namara, 2017) This is also in line with the principle of *Law of Large Numbers*, which explains that the higher the risk population bears, the more accurate the estimated loss. (Dorfman, 2008)

The test results on this hypothesis show that in the Acceptance variable, the t -value calculated $>$ t_{table} is $2.382 > 1.674$ with a significance value of $0.021 < 0.05$. This shows that the Contribution Receipt variable (X_1) has an influence on the *Surplus/Underwriting Deficit* in Sharia Life Insurance Companies listed in the OJK (2018-2022)

The results of this test are in line with the research conducted by Silviana (2022), according to him *Surplus* or *Underwriting deficit* is the main reference for assessing the performance of Sharia Life Insurance Companies, because it is directly influenced by the amount of insurance income collected in the fund *Scarlet Witch*. (Silviana & Devi, 2022) The same thing is also expressed by Rahayu (2022), where gross contribution and investment income are proven to have a significant influence on the creation of *Surplus* or the appearance of *deficit* on the fund *Scarlet Witch* in Sharia Life Insurance Company. (Rahayu, 2022)

1. The Effect of Claim Expense on *Underwriting Surplus/Deficit*

The cost of claims, often referred to as insurance costs, is one of the main elements that affect *Surplus/deficit Funds Scarlet Witch*, because there is a direct relationship between the two. According to the Fatwa of the MUI National Sharia Council Number 21/DSN-MUI/X/2001 concerning General Guidelines for Sharia Insurance, claims are the rights of members that must be fulfilled by insurance companies. The settlement of claims is carried out in accordance with the agreement that has been made. In the event of a claim, the sharia insurance company will be responsible for the member's losses by allocating deposits *Scarlet Witch* available. (Iskandar, 2013)

Theoretically, claims are one of the main components in the calculation *Underwriting*. The amount of claims paid directly affects the final outcome of the process *Underwriting*. According to risk management theory, the greater the level of claims paid, the higher the likelihood of occurrence *Underwriting deficit*, especially if it is not offset by the receipt of sufficient contributions. (Dorfman, 2008)

Rejda and McNamara (2017) explain that one of the main risks in the insurance business is the risk of unpredictably high claims or being massive. If the actual claim is larger than expected (*expected loss*), then the insurance company will experience pressure on the funds *Scarlet Witch*, which can ultimately result in *Underwriting deficit* i.e. a condition when the total claim burden exceeds the total contribution and income *Underwriting* others. (Rejda & Mc Namara, 2017)

The findings of the hypothesis test showed that the variable claim burden of the tcal value of the tcal value < the table was $-1.653 < 1.674$ with a significance value of $0.105 > 0.05$. This can be interpreted if the Claim Expense variable (X2) has no effect on the *Surplus/Underwriting Deficit* of Sharia Life Insurance Companies recorded in the OJK (2018-2022).

The findings in this hypothesis test are in line with research that has been conducted by Pratiwi Syasa Anbar (2024) where the results of the test show that there is no influence between the claim and the *surplus underwriting Funds Scarlet Witch* Because if a claim occurs, it will decrease *Underwriting Funds Scarlet Witch*, and vice versa. (Syasa Anbar, 2024)

2. The Effect of Investment Returns on *Underwriting Surplus/Deficit*

Investment results are fund placement activities with the intention of obtaining profit sharing between (customers) and managers (insurance institutions). Therefore, effective investment fund management will result in profits. (Soemitra, 2019)

In accordance with Islamic law, insurance businesses carry out investment activities to manage participant funds. Only Islamic financial institutions, including Islamic bonds and mutual funds, are allowed to accept investments from insurance companies. The investment results will generate revenue for the Islamic insurance business. The *tabarru' account* will receive the investment returns.

In theory, according to the theory of investment income (*Investment income theory*), insurance companies rely not only on the premiums or contributions of participants, but also on the ability to manage and optimize the funds available to obtain investment returns. The proceeds from these investments can be used to support fund stability, strengthen technical reserves, and help cover potential *deficit* on the fund *Underwriting*. (Rejda & Mc Namara, 2017)

The analysis findings in the hypothesis test showed that in the variable investment results, the t-calculated value was below the t-table value $-1.390 < 1.674$ as well as the significance value of $0.170 > 0.05$. So this can be interpreted if the variable Investment Yield (Z) does not have an influence on *the Surplus/Underwriting Deficit* of Sharia Life Insurance Companies listed in the OJK (2018-2022).

The findings of this analysis are not in line with the results of the study that has been carried out by Silviana (2022), where investment income has a significant impact on *Surplus* or *Underwriting deficit*, which ultimately has a direct impact on the financial performance of financial institutions of sharia-based life insurance companies. (Silviana & Devi, 2022) In addition, Rahayu (2022) also stated that gross contribution and investment income also determine the condition *Surplus* or *deficit* on storage *Scarlet Witch* in sharia-based life insurance entities. (Rahayu, 2022) Thus,

the dynamics of investment income growth is a central aspect in identifying the extent of the financial resilience and resilience of sharia-based life insurance entities from time to time.

If the conclusion in this research shows that the investment results do not have an impact on the *underwriting surplus*, of course this will indicate that the Sharia Life Insurance entity has not been able to manage its investment results optimally. In fact, investment has an important role in the management of *participants' tabarru'* funds, especially when there are no claims. In these conditions, the available funds should not be left idle, but used through productive investment activities to obtain profits.

3. The Effect of Contribution Income on Investment Results

Contribution refers to a cooperation mechanism in which participants deposit funds to an insurance company to be properly managed, which gives them the right to receive compensation when facing a disaster at any time, with the compensation based on the premium paid as a form of contribution.

According to the theory of investment fund management (*Fund Accumulation Theory*), the larger the funds collected in a financial institution, the greater the potential returns that can be obtained from investment activities, especially if the funds are managed professionally and efficiently. (Reilly & Brown, 2012) In the context of sharia insurance, funds sourced from participants' contributions are then placed in halal investment instruments such as sukuk, sharia shares, or deposits *Mudharabah*.

Based on the hypothesis test, it can be seen that the variable Acceptance contribution of the t-calculated value exceeds the t-table value ($1.748 > 1.674$) with a significance value of $0.040 < 0.05$. This shows that the variable Contribution Receipt (X_1) can have an influence on the Investment Results of Sharia Life Insurance Companies listed in the OJK (2018-2022).

The funds that the company receives from the participant's contribution are allocated to the participant who suffers losses, and are kept in a special account called an account *Scarlet Witch*. If the funds *Scarlet Witch* from this contribution resulted in *Surplus* which is no longer required for a claim, *Surplus* It will be managed as an investment instrument by the insurance company with the aim of generating profits in the future. The proceeds of this investment are then distributed by both parties based on the terms of the contract. (Lestari & Diana, 2020)

This situation shows a direct relationship between investment returns and *underwriting surpluses*, considering that investing is essentially the cultivation of assets to generate long-term profits. Therefore, increasing investment based on *tabarru'* funds by sharia insurance companies can encourage an increase in *the underwriting surplus* of *tabarru' funds*.

This study is also in line with the findings of Rosyda Alifianingrum and Noven Suprayogi (2018), who stated that contribution has a positive and significant effect on *surplus underwriting Funds Scarlet Witch*. This means that the increase in contributions received by insurance companies will increase the company's chances of channeling these contributions for investment. (Alifianingrum & Suprayogi, 2017)

4. The Effect of Claim Expenses on Investment Results

A claim is defined as a request for the rights of the participant to the insurance company, in order to obtain compensation for the risks incurred based on the terms of the agreement or contract agreed. Filing a claim creates a financial burden for the insurer. Therefore, as a burden, claims can affect investment performance and hinder asset growth in insurance companies.

Based on research by Aulia Firzqa Yanis and Yulianto (2024) in a journal entitled "The Effect of Claims Burden, Return on Investment, and *Underwriting* Return on Asset Growth," the high number of claims submitted by participants certainly has an influence on the company in bearing greater costs. This condition indicates that the costs that must be incurred by the company are swelling, this can limit the company's ability to invest funds in the form of assets and in turn suppress the growth rate of assets. (Yanis & Yulianto, 2024)

Based on the hypothesis test, it can be seen that the variable claim burden of the tcal value of the ttable $<$ is $0.383 < 1.674$ with a significance value of $0.703 > 0.05$. Thus, it can be

concluded that the Claim Expense variable (X2) has no influence on the Investment Results of Sharia Life Insurance Companies listed in the OJK (2018-2022).

This finding is not the same as the results of research conducted by Jazuli (2022) in his journal, namely the Effect of Contribution Income, Claims and Investment Returns on the Company's Asset Growth of PT Asuransi Allianz Life Unit Syariah which shows that claim expenses have a significant impact on increasing assets. (July, 2022)

This is reinforced by the theory of liquidity and investment (*Liquidity-investment trade-off theory*), there is a close relationship between short-term liquidity needs and long-term investment decisions. When there is a surge in claims burden, insurers must provide large amounts of cash funds, so they may have to cash out part of their investment portfolio, even at unfavorable times. (Reilly & Brown, 2012) This can lower optimal investment returns and disrupt the company's long-term investment strategy.

In the context of Islamic insurance, *tabarru'* deposits applied to pay claims are usually also part of the invested funds. Therefore, the higher the frequency and value of claims, the greater the funds withdrawn from the investment to meet the liability of the claim burden. This reduces the base of funds under investment management, which can ultimately reduce the level of investment returns obtained.

5. Income Contribution to *Underwriting Surplus/Deficit* through Investment Results as a *Moderation Variable*

The results of the hypothesis test show that the variable of Contribution Receipt to *Surplus/Underwriting Deficit* through Investment Results as a *Moderation* variable has a statistical result of t (t-calculus) 1.457 below the t table of 1.674 or a sig. value of 0.151 exceeding 0.05. Thus it does not show a significant relationship between Contribution to *Surplus/Underwriting Deficit* through Investment Result as a *Moderation variable*.

The results of this test are different from the theory *Fund Accumulation* (Reilly & Brown, 2012), the larger the funds collected from participants' contributions, the higher the chance of obtaining optimal investment returns, as long as the funds are managed with a fund placement strategy that is in line with Islamic principles and has measurable risks. (Reilly & Brown, 2012)

Investment returns in this context are a *moderating* variable that bridges the influence of contribution receipts on *underwriting surplus or deficit*. This is because the investment results obtained from the contribution fund will strengthen the *tabarru'* fund or the company's income, which can then be used to increase risk reserves (*technical reserves*), help close the gap if there is a *deficit* from *underwriting* activities, and increase the company's revenue, especially in the *wakalah bil ujab scheme*.

Thus, participants' contributions not only have a direct impact on *the underwriting surplus* through the funds available to cover claims, but also have an indirect effect through an increase in investment returns that can strengthen *the financial condition of the underwriting*.

According to Rejda and McNamara (2017), the results of investment in the insurance industry serve as "*Financial Cushion*" or an important financial buffer, especially when claims expenses are high or yields *Underwriting* less than optimal. Therefore, investments sourced from participants' contributions are decisive in maintaining the company's financial stability and creating *surplus underwriting* on an ongoing basis. (Rejda & Mc Namara, 2017)

6. Claim Burden on *Underwriting Surplus/Deficit* through Investment Results as a *Moderating Variable*

The results of the hypothesis test show that the variable of Claim Expense to *Surplus/Underwriting Deficit* through Investment Results as a *Moderation* variable has a statistical result of t (t-calculus) -1.493 below the t table of 1.674 or a sig. value of 0.141 exceeding 0.05. Thus it does not show a significant relationship between Claim Expense to *Surplus/Underwriting Deficit* through Investment Yield as a *Moderation variable*.

This result shows that investment results are not able to mediate the relationship between claim expense and *underwriting surplus*. This means that even if the insurance company makes an

investment, *the return* on the investment is insufficient or does not have a significant relationship in covering or improving the financial condition affected by the claim burden.

This is in line with the statement of Rejda and McNamara (2017) in their book *Principles of Risk Management and Insurance*, that risk management in insurance companies should be carried out separately but coordinated between risks *Underwriting* and investment risk. If the investment results are not able to offset the burden of claims paid, then *surplus underwriting* will still be disturbed. (Rejda & Mc Namara, 2017)

This study corresponds to the results of a study from Elsa and Dina Fitriasia (2020) which emphasized that investment has sometimes not been able to have a significant impact on other financial indicators in the insurance industry including profit and *Surplus Underwriting*. (Anggraini & Septiarini, n.d.)

Based on this, it can be formulated that insurance companies have not been able to fully rely on investment results as a risk reducer against *underwriting surplus/deficit* caused by the large claim burden. An effective claims management strategy, along with careful *underwriting* risk management, remains a key factor in maintaining the financial health of insurance companies

CONCLUSION

From the results of the research and discussion in the previous chapters, the author can draw the following conclusions:

The Contribution Income variable (X1) has an influence on the *Surplus/Underwriting Deficit* in Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) throughout the 2018-2022 Period.

The Claim Expense variable (X2) has no effect on the *Surplus/Underwriting Deficit* in Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) during the 2018-2022 Period.

The Investment Result variable (Z) has no effect on the *Surplus/Underwriting Deficit* in Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) during the 2018-2022 Period.

The Contribution Income variable (X1) has an influence on the Investment Results in Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) throughout the 2018-2022 period.

The Claim Expense variable (X2) has no effect on the Investment Result in Sharia Life Insurance Companies registered with the Financial Services Authority (OJK) during the 2018-2022 Period.

There is no significant effect of Contribution Income on *Underwriting Surplus/Deficit* through Investment Yield as a *Moderation variable*.

There is no significant effect of Claim Expense on *Underwriting Surplus/Deficit* through Investment Yield as a *Moderation variable*.

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