

# The Effect of Claim Ratio, Operational Ratio and Retention Ratio on Profitability Performance of Insurance Companies in Indonesia Stock Exchange

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## ABSTRACT

One of the non-bank financial institutions is an insurance company, which is a company engaged in financial services where insurance companies provide benefits to consumers in dealing with risks that will occur in the future. The good performance of insurance companies is generally reflected through the profitability generated from the company's financial statements. Based on previous research there are several factors that affect profitability. Claim ratio is considered as the ratio that most influences the level of profitability, the other ratio is reflected from the ratio of the company's expenses (operating expenses) where it is known how to manage costs at the company against the net premium income received by insurance companies, the next ratio is the retention ratio.

The study was conducted on insurance companies listed on the Indonesia Stock Exchange in the period 2011 - 2018. Samples of 9 companies with secondary data were obtained from the Indonesia Stock Exchange or the company's website. The study uses Panel Data Regression Method analysis techniques that are used to test hypotheses in research with the help of SPSS applications. Claim ratio and operating expense ratio have negative and significant effect on profitability while retention ratio has positive and not significant effect on profitability. Claim ratio, operational expense ratio and retention ratio together have a significant effect on company profitability.

**Keywords:** Insurance, Claim Ratio, Operating Ratio, Retention Ratio, ROA, SPSS, Panel Data Regression

## INTRODUCTION

The development of the current economic system, allows consumers exposed to various kinds of risks. These risks can be inherent in businesses that are carried out up to personal consumers. But with the increasing application of science, these risks can be managed by consumers, the aim of which is to minimize future losses resulting from these risks. The application of this knowledge then gave birth to new business opportunities in the field of financial services namely financial risk management, this then gave birth to insurance companies.

One non-bank financial institution is an insurance company, which is a company engaged in financial services where insurance companies provide benefits to consumers in dealing with risks that will occur in the future. Companies engaged in insurance have different characteristics when compared to other non-bank financial institution companies, the distinguishing characteristics include underwriting, claims and reinsurance activities. As a financial institution, insurance companies are required to have good financial health in accordance with applicable regulations (laws and government regulations) with the aim of consumers in this case the service user community is confident of the security of funds spent on insurance products, and is able to provide benefits in accordance with the product bought.

The need for risk management or insurance guarantees arises as a direct result of economic growth. The role of the national insurance industry is to provide protection / protection against the risks faced by the community so as to support the stability of development and as one of the institutions for raising public funds and providing funds for national economic development. The growing development of insurance companies in Indonesia will have an immediate economic impact on Indonesia.

Awareness of insurance in Indonesia is still considered low compared to other countries with only around 1.7% of the total population in 2018. Even insurance industry players must think of new strategies to increase interest and the number of insured is increasingly shrinking. This is inversely proportional to the potential of insurance companies in Indonesia. The gap indicates the magnitude of the possibility of a business that can be created. Indonesian society can play a dual role in this, namely as consumers or as investors in insurance companies.

In March 2019, the Financial Services Authority (OJK) as the regulator for insurance companies made a stop to the sale of savings plan products made by 3 (three) life insurance companies. The three life insurance companies are major insurance companies in Indonesia. OJK rate, the three companies are considered to have no capacity in terms of capital and in terms of risk management that is qualified in terms of marketing the product. Based on these problems, from the investor side good information is needed related to profitability, because the risk management mechanism by insurance companies will lead to increased profitability (Ardhienus, 2019).

The good performance of insurance companies is generally reflected through the profitability generated from the company's financial statements. Profitability is generally defined as the ability of a business to utilize assets to generate revenue in an

efficient manner. This is used to identify whether a company can be a valuable investment opportunity. Profitability is an important factor in financial management because one of the objectives of financial management is to maximize the welfare of shareholders. Profitability not only increases in the solvency conditions of insurance companies but also plays an important role in persuading policyholders and shareholders to supply funds to insurance companies. One measure of profitability for investors is return on assets (ROA) (Charumathi, 2012), this is in line with previous research opinions that indicate a key indicator of profitability for insurance companies is ROA (Mazviona, Dube, & Sakahuhwa, 2017).

Profitability of general insurance companies is influenced by internal and external factors. Internal factors focus on the specific characteristics of insurance companies, external factors concerning industry variables and macroeconomic variables. Based on research related to factors that affect the level of profitability of insurance companies in Zimbabwe, it is known that the 3 (three) highest factors affect the level of profitability which are sequentially those factors are claim ratio, operational expense ratio and retention ratio, with ROA as a reflection of profitability (Mazviona, Dube, & Sakahuhwa, 2017).

Claim ratio is considered as the ratio that most influences the level of profitability (Mazviona, Dube, & Sakahuhwa, 2017), this is in line with the case experienced today where Jiwasraya and AJB Bumiputera are insurance companies that are in trouble now and begin with the inability of the two companies in managing and fulfilling customer claims. Increasing the claim ratio in addition to worsening financial performance, failure to manage it will cause negative sentiment from consumers and cause more waves of claims in the future. As an example of poor claims management, which occurred at AJB Bumiputera, the wave of claims began with too long a claim process where the process took up to 6

months to process the claim (Fauzie, 2018). This news caused the worse performance of AJB Bumiputera. When compared to AJB Bumiputera, the saving plan product which was terminated by the OJK by overriding 3 (three) insurance companies before, due to indications of the products issued by the company has a large risk due to an indication of the company's inability to meet customer claims due to inefficiencies in managing bebano perasional and manage underwriting (Ardhienus, 2019).

One of the causes of failure of AJB Bumiputera claims is due to internal problems related to the lack of systemic information systems in the company. This is actually reflected in the company's expences ratio (operating expenses) where it is known how the management of costs in the company against the net premium income received by insurance companies, and for the case of AJB Bumiputera it is known that the management of operational costs is not done properly where each branch of AJB Bumiputera has the authority to manage expenses its operations (Walfajri, 2019) and are not well reported to the center so that the arrangements and managerial related business operating expenses. Increased operating expenses or inefficient management of operating expenses will directly reduce company profits. Operational expenses are also expenses that can be controlled by management, so getting the target profit is the most considered.

The occurrence of premium management by the business branch of AJB Bumiputera and not known by the center (Walfajri, 2019), will cause errors in calculating how much the net premium actually obtained by the company. That is because managing premiums by conducting reinsurance activities will reduce the gross premium income received by the company. Errors in determining net premiums will directly affect total profits and affect the size of the insurance company's health ratio. One of the affected ratios is the retention ratio, where the retention ratio is a reflection

of the ability of insurance companies to manage their business risks. The importance of retention itself is also reflected by OJK regulation No. 19 /POJK.05/2019 regarding own retention, where the retention limit itself must be based on a risk and loss profile (risk and loss profile) made in an orderly, orderly, relevant, and accurate manner.

Based on the previous elaboration regarding AJB Bumiputera and Jiwasraya's operational errors, further analysis is needed related to the effect of the operating expense ratio, the ratio of claims and retention ratio to profitability for insurance companies in Indonesia. Profitability is reflected by the ROA ratio (Charumathi, 2012), research is carried out mainly for insurance companies that have been listed on the Indonesia Stock Exchange. The results of this analysis are expected to be used as material for the analysis of the Indonesian people both as investors or as consumers of insurance products. Previous research provides information for insurance companies using a measure of profitability with ROA (Charumathi, 2012). Related to the factors that influence it, previous research suggests that the factors that have the most influence are the claim ratio then the operating expense ratio and then the retention ratio (Mazviona, Dube, & Sakahuhwa, 2017).

Reaserch gap to previous studies related to claims ratios, studies that produce negative and significant claims ratios on profitability (Putra, 2015) (Yusuf Phd & Dansu, 2014) (Mazviona, Dube, & Sakahuhwa, 2017) (Marwansyah & Utami, 2017) (Fadlin RP & Fitriati, 2013) (Akotey, Sackey, & Amoah, 2012) (Abdeljawad & Dwaikat, 2019), other studies mention the ratio of positive and significant claims to profitability (Winarso, 2014), in contrast there are other studies that state the ratio of claims produce a negative and not significant effect on profitability (Sumartono & Harianto, 2018). Reaserch gaps against previous research related to operating expense ratios (expences), studies that produce operating expense ratios

produce a negative and significant effect on profitability (Mazviona, Dube, & Sakahuhwa, 2017), other studies which state the ratio of operating expenses produce a positive and significant effect on profitability (Akotey, Sackey, & Amoah, 2012), on the other hand there are other studies which state the ratio of operating expenses produce a positive and not significant effect on profitability (Abdeljawad & Dwaikat, 2019). Reaserch gap to previous studies related to retention ratios, previous studies related to retention ratios produce a negative and significant effect on profitability (Mazviona, Dube, & Sakahuhwa, 2017), other studies that state retention load ratios produce positive and significant effects on profitability (Tsfaye, 2016 ) (Akotey, Sackey, & Amoah, 2012), other studies describe the effect of positive and insignificant retention ratios on profitability (Rich, 2015) (Mwangi, PhD & Murigu, MSc Finance, 2015) (Sumartono & Harianto, 2018).

## LITERATURE REVIEW

### Claim Ratio

In Law No. 2 of 1992 states that a claim is an anti-loss claim from the insured against the guarantor (insurer) in the event of an accident on the object / object of coverage. Claims are compensation paid or liabilities to the insured namely the insurance company (ceding company) because there has been a loss. Claims can also be a process whereby the customer obtains rights under the coverage agreement to get the benefit of a loss.

### Operating Expense Ratio

According to the Financial Accounting Standards (1999: 12), expenses are decreases in economic benefits during an accounting period in the form of cash outflows or reduced assets or incurred liabilities resulting in a decrease in equity that does not involve distribution to investment. Operational expenses can mean the expenses that occur in the process of obtaining sales income. These expenses are

similar to operating expenses in service companies. Operating expenses can be interpreted as expenses that continue to be incurred by the entity, in addition to direct costs of merchandise and other costs directly related to sales. The largest operating expenses generally include salaries, wages, utilities, and equipment (Horrison et al, 2011).

### Retention Ratio

The retention ratio is the percentage of businesses covered by insurance companies that are not transferred to reinsurance. Insurance companies that are more efficient in underwriting decisions accompanied by higher retention must have higher profitability (Charumathi, 2012). Insurance companies insure a number of risks borne to reduce the risk of bankruptcy in the event of a large loss. Although reinsurance increases the stability of insurance companies through the spread of risk, achieving solvency requirements, balancing the risk profile, and guaranteeing capacity growth, involves certain costs.

### Profitability

Financial performance is a result of the financial position of a formal business that has been carried out by the company within a certain time. Financial performance is a measure of business income, profits, appreciation in value as evidenced by the increase in entity stock prices. Financial performance can be in the form of a description of a company's financial condition in a particular position which involves aspects of the collection and distribution of funds that are usually measured by indicators of capital adequacy, liquidity and profitability of the company (Jumingan, 2011). In insurance, financial performance is usually expressed in premium net income, profits from underwriting activities, annual turnover, return on investment and return on equity. These steps can be classified as measures of earnings performance and measures of investment performance.



## RESEARCH METHODS

This research is an associative descriptive study that seeks to explain the causal relationship between research variables through testing certain hypotheses, where there are independent variables, i.e. variables that affect the dependent variable, namely the affected variables.

The population in this study are companies engaged in the Non-Bank Financial Institution sector which were listed on the Indonesia Stock Exchange from 2011-2018. Based on the IDX's official website, [www.idx.co.id](http://www.idx.co.id) (2019) of the 16 insurance companies listed on the IDX, only 9 (nine) companies have financial data since the last 8 (eight) years (from 2011 to 2018), and are openly available source (not paid) by the company's website or other website. On the basis of data completeness, the sample studied was 9 (nine) insurance companies

Data collection techniques used were non-participant observation, namely by collecting, recording and reviewing secondary data in the form of financial statements of insurance companies and published by the Indonesia Stock Exchange (IDX) for the period 2011-2018. In this study the method of analysis used quantitative analysis which is done by processing data in the form of numbers using statistical methods to calculate and estimate quantitatively and several factors together against the company's earnings. Data analysis uses SPSS as a tool for multiple regression.

## RESULT AND DISCUSSION

### Effect of Claim Ratio Against ROA

Based on the results of the study note that the Effect of Claim Ratio is negative and significant to ROA. This is consistent with previous research conducted by (Putra, 2015) (Yusuf Phd & Dansu, 2014) (Mazviona, Dube, & Sakahuhwa, 2017) (Marwansyah & Utami, 2017) (Fadlin RP & Fitriati, 2013) (Akotey, Sackey, & Amoah, 2012) (Abdeljawad & Dwaikat, 2019). The results showed that the claim

expense ratio shows the company's ability to pay claims expenses through premium income and company policies including reinsurance mechanisms, this indicates that an increase in the claim expense ratio will increase the policyholder's confidence and have an impact on company earnings as seen from financial performance. with the theory re-examined by (Mazviona, Dube, & Sakahuhwa, 2017). The higher the claims paid will make the insurance company better performance by the customer.

When examined further on the data that affect the ratio of claims, the difference between gross premium income and net premium income compared to the previous year tends to affect the amount of profitability, especially net income. The amount of the premium income difference is due to one of which is the rewriting policy mechanism. Claim ratio can be interpreted as the company's experience in managing risks that have occurred as well as business quality in terms of closing claims. Relatively large high claims will threaten the company's financial condition and thus increase the risk for the company. Poor risk management such as underwriting risk determination, pricing, reinsurance selection and investment instrument selection can threaten a company's ability to generate profits.

The reduced ability of a company to generate profits will reduce investor interest in investing capital and also potentially will lead to bankruptcy of the company. Because the results above the claim ratio have a significant negative effect. This condition shows that the high claim expense ratio provides information about poor underwriting and acceptance of risk closure, so that to keep the company's finances healthy requires good risk management.

### Effect of Operating Expense Ratio Against ROA

Based on the results of the study note that the Effect of Operating Expense Ratio is negative and significant to ROA. This is consistent with previous research

conducted by (Mazviona, Dube, & Sakahuhwa, 2017). Expenditures for management operational costs statistically significantly affect profitability, an increase in management operating costs if not followed by an increase in net premium income will cause a tendency to decrease profitability. So in addition to the operational cost component where the management policy in managing its operating costs, the management policy in the process of managing risk and investment policy to obtain profit is a component that directly affects the operational expense ratio. Based on that, it is also known that operational ratio has the biggest significant partial effect on company profitability (ROA) which is reflected by the smallest sig value.

From the processed sample data, it is known that there is a tendency for increasing operational costs every year. The increase is due to the company's desire to implement a business plan that requires greater operational costs each year, and this is also reflected in the gross premium income which also increases every year. The operational costs incurred by the company directly impact the acquisition of the gross premiums of the business, so it can be concluded that management's efforts to obtain sales by increasing efforts are reflected in the increase in operating expenses and with the increase in gross premium income indicating the operational costs incurred have been successfully converted into sales. So that good managerial policies and optimal risk control are expected to increase net premium income which is directly related to the profitability of insurance companies.

### **Effect of Retention Load Ratio Against ROA**

Based on the results of the study note that the effect of the Retention Ratio is positive and influential but not significant to the financial performance of insurance companies in the Indonesia Stock Exchange 2011-2018 retention period and not

significantly to ROA. This is consistent with previous research conducted by (Rich, 2015) (Mwangi, PhD & Murigu, MSc in Finance, 2015) (Sumartono & Harianto, 2018). The retention ratio is influenced by the amount of net premium income to gross premium income, where the net premium income itself is part of the sum of the sum insured for each risk that is borne by itself without reinsurance support. The high value of retention ratio itself reflects that the company has the amount of funds retained by itself to manage the company's own needs, namely managing its own estimated risk. The amount of retention value indicates the value of net premium income does not have a very large gap with gross premium income, this will indirectly increase the chances of getting large profits, so it has the opportunity to produce high profitability.

### **Managerial Implications**

#### **1. Insurance Company**

Based on the results and analysis produced by the study there are a number of things that can be proposed that are expected to have a managerial impact on the management of insurance companies:

1. The ratio of claims, operating expense ratios and retention ratios together affect the profitability of insurance companies. The common thread of the three ratios is net premium income. Managerial governance of how to get net premium income, including risk management mechanisms, especially risk on claims. The managerial governance process will produce an effective amount of premium income, which is in accordance with the business plan that is how much profitability the company is targeting, otherwise the risk can be managed well.
2. To obtain a managerial formula related to the process of underwriting, reinsurance or effective risk management, management must first describe it through managerial governance planning, so that the process can be controlled properly.

3. Based on the research, it is known that the increase in operational costs incurred by insurance companies is directly proportional to the increase in gross premium income, which is considered good. To get optimal results for operational governance, companies can design a plan for how much operational cost targets can be managed and how much income the motorists can produce by managing these operational costs.
4. Like managing operational costs, controlling retention ratios indicates the need for balance in managing both gross premium income and net premium income. For example, excessive attention on marketing to grow gross premium income should also consider allocating resources that are proportional to the investment portfolio management, so that net premium income can be managed properly. These activities must be managed together in a complementary manner. Especially for the guarantee / actuary department they must demand the validation of all policies to prevent lower prices and overtrading by insurance marketing agents. Companies also need to reuse properly so they can run big business, especially in the emerging oil and gas sector without compromising their solvency.
5. Managerial insurance companies need to implement an EWS (early warning system), using the ratio indicators that have been studied, where the greater the ratio of claims and operating cost ratios will cause the probability of decreasing profitability is greater, and the greater the retention ratio will cause the probability of increasing profitability big.

## 2. Investors

By using the research results, it is expected that investors can take managerial actions by using the results of the study as material for consideration. Here are some managerial implications used by investors:

1. Similar to managerial implications, the ratio indicators that have been investigated, where the greater the ratio of claims and operating cost ratios will cause the probability of decreasing profitability is greater, and the greater the retention ratio will cause the greater the probability of increasing profitability. The probability of increasing a company's profitability will cause the probability of getting dividends and capital gains greater.
2. Claim ratios can be used to view insurance company managerial governance and risk management policies. The effectiveness and managerial efficiency in managing an insurance company can be seen from the way the company manages its claims.

## 3. Insurance Services Users

For insurance service users, the main factors that are considered based on the results of the study are the ratio of claims, and governance of claims that arise. Good management of claims will increase customer confidence to use the insurance products offered. To get insurance products with the best prices, profitability ratios in this case ROA can be a benchmark, companies with good ROA will have a greater chance for consumers to get discounts

## CONCLUSION AND SUGGESTION

### Conclusion

Based on the results of research and discussion that has been done in this study, the researchers draw the following conclusions:

1. The ratio of claims has a negative and significant effect on profitability, so an increase in the ratio of claims will increase the probability of decreasing company profitability. These results are consistent with previous research conducted by (Putra, 2015) (Yusuf Phd & Dansu, 2014) (Mazviona, Dube, & Sakahuhwa, 2017) (Marwansyah & Utami, 2017) (Fadlin RP & Fitriati,

- 2013) (Akotey, Sackey, & Amoah, 2012) (Abdeljawad & Dwaikat, 2019).
2. The ratio of operating expenses has a negative and significant effect on the company's profitability, so an increase in the ratio of operating expenses will increase the probability of decreasing company profitability. These results are in accordance with previous studies conducted by (Mazviona, Dube, & Sakahuhwa, 2017).
  3. The retention ratio has a positive and not significant effect on company profitability. These results are consistent with previous research conducted by (Rich, 2015) (Mwangi, PhD & Murigu, MSc in Finance, 2015) (Sumartono & Harianto, 2018).
  4. Claim ratio, operational expense ratio and retention ratio together have a significant effect on company profitability.
  5. Based on the results of the study, it is known that the risk management of insurance companies can be reflected in the ratios studied, but this is still an indication, because further analysis is needed, especially how much net premium income is obtained, and further how net claims are obtained, whether in part managed by reinsurance or fully managed by premium income.

### Suggestion

Based on the results and discussion, there are a number of suggestions that can be made delivered:

1. Managerial Insurance Company Implement EWS (Early Warning System), using indicators of claim ratio, operational expenses and retention. Implement governance with a balance in managing both gross premium income and net premium income, where consideration of getting premium income by providing stimuli to customers to use insurance products is also supported by proportional management policies to manage policies such as preventing lower prices and overtrading by marketing agents insurance or. It can also

take into account the allocation of resources in proportion to the management of investment portfolios and insurance marketing.

### 2. Investors

Make certain indicators using the ratio used in the study, namely the ratio of claims, operating expenses and retention as an indicator of determining the level of good profitability of insurance companies.

### 3. Next Researcher

Use other ratios such as underwriting ratios, company size and so on as other factors that can affect company profitability. Enlarge the amount of data by increasing the research time span.

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