FINANCIAL EARLY WARNINGS SIGNAL ON STOCK PRICE CHANGES ON INSURANCE COMPANIES OF INDONESIAN STOCK EXCHANGE

Tita Deitiana

ABSTRACT

The purpose of this research is to test and analyze empirically the influence of incurred Loss ratio, liabilities to liquid asset ratio, ratio agents balance to surplus, prime growth ratio toward stock price on insurance companies of Indonesian stock exchange. The object of this research in insurance companies that listed in Indonesian Stock Exchange period 2013-2018. The purposive sampling is used as sampling technique, where 9 companies met the criteria that is already on the OJK list and published financial reports and were analyzed using eviews 13 panel data regression with fixed effect model to test hypothesis. The result of this research shows that are influenced ratio agent balance to surplus, prime growth ratio on financial at stock prices changes While The are not influence of incurred Loss ratio and liabilities to liquid asset ratio at stock prices change.

Keywords: incurred Loss ratio, liabilities to liquid asset ratio, ratio agent’s balance to surplus, prime growth ratio and stock price.

INTRODUCTION

When the world economy experienced a global crisis in 2008-2009, many economists called it the worst financial crisis and is often referred to as the mother of all crises, this has led to increasing awareness of early detection of potential factors that could lead to the crisis.

In this case, the interests of policy makers are increasingly focused on crisis prevention and systemic risk prediction. Although there is no universally recognized systemic risk definition, it is possible to call it a risk that some trigger event causes financial instability that is so widespread that it damages the functioning of the financial system as far as economic growth and human well-being.

In the recent academic literature, there is an outlined view of the causes of systemic, banking, insurance and stock market crises, which highlight the potential for mitigating regulatory interventions.

An insurance company is a non-bank financial institution that has a role that is not much different from a bank, which is engaged in providing services to the public in dealing with risks that will occur in the future. Lo Ducca (2013).

Insurance aims to provide protection or protection for financial losses / financial losses, caused by events that were not previously suspected / fortuitous event. Insurance companies raise substantial funds in which these funds are the basic financial management in a company. This is because these funds are used for all insurance company operations such as premium income, claims expenses, and offering of securities of the company in the capital market. In addition to operational activities, financial management is also one of the main factors in evaluating company performance. Whether or not the company's financial management is an indication of the assessment of the company.

Good or not the performance of a company, especially in insurance services companies can be known from the financial statements that have been made periodically or periodically, for example quarterly, quarterly, semester, or per year. The financial statements that are used as guidelines for evaluating a company's performance include a balance sheet or balance sheet as well as an income statement or report. In addition to the financial statements can also be used as input for users to take decisions. The company's financial performance becomes the financial description of the industry, because there are forecasting in the financial statements which include capital and liabilities, assets and business profits.

From the description that has been explained, it can be stated that controlling the insurance company is needed. This is due to financial factors (financial) being the most important factor in overseeing financial performance, especially in the insurance service industry which has certain conditions on performance appraisal so that EWS criteria or Early Warning System are needed, in other words an early sign system regarding insurance business finance in order to anticipating that obstacle.

To fill this gap, this study proposes an Early Warning System (EWS) model examining the causes of market distress in the insurance sector. Section 2 elaborates on the available studies on EWS in literature. Section 3 provides a description of the applied methodology and the employed dataset. On this basis, section 4 presents the obtained empirical results.

LITERATURE REVIEW

There are several factors that cause the insurance market share to decline, one of which is financial performance. Financial performance is important because insurance is a risk transfer mechanism whose funds are from the insured party and needs continuous improvement so that its financial performance is healthy, so the company can provide a sense of security and satisfaction for the community (Fitriani & Dorcas, 2009). Alessi and Deitken (2011) contribute to the financial crisis literature
testing the performance of real and financial variables as Early Warning indicators for costly aggregate asset price booms / bust cycles.

The financial performance of insurance is analyzed using special financial ratios for the insurance industry, namely the Early Warning System (EWS) ratio, which serves as a benchmark for calculating financial performance and assessing the level of health of insurance companies (Deitiana, 2012). EWS is a measure for financial performance created by The National Association of Insurance Commissioners (NAIC) located in the United States as an agency to oversee insurance activities in the territory of the United States. The aim is to make it easier for insurance supervisory institutions to identify important matters relating to the development and supervision of the insurance industry (Prasetyo, 2005).

The use of EWS is effective in identifying the conditions of healthy and unhealthy loss insurance companies (Kurniawan, 2011). This study refers to previous research on the effect of the insurance company's EWS ratio on the company's value that is an indicator of the success of the company's performance, including RBC, Tobin's Q, share price and the healthy category of the company.

This research simultaneously supports the research of Kirmidzi (2012) and Fauzan, Nadirsyah, Arfan (2012). But partially there are several EWS ratios that are contrary to the research of Yuliana (2008), Acharya (2014) and there are some EWS ratios that partially support the research of Yuliana (2008), Deitiana (2009), and Fauzan et al. (2012). Based on the relationship between the theoretical basis, the framework of thought, the hypothesis or a temporary answer to the problem in this study is that the alleged Early Warning System financial ratios consisting of claims expense ratio, liquidity ratio, Agents Balance to surplus ratio and Premium Increment Ratio affect the stock price.

### Table 1.1 Research Gap

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Influence</th>
<th>No Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Incurred Loss Ratio</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Chen (2014) and Bushiere (2006)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Liability to Liquid Assets Ratio</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Deitiana (2012), Acharya (2014), Chen (2014), Ahmad &amp; Raza (2016), and Allozi &amp; Obeidat (2016)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Saragih (2018)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Agents Balance to surplus ratio</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Jo (2013), Hasby (2013), Fauzan (2014)</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Allosi (2011)</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>4.</td>
<td>Premium Growth Ratio</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Grasson (2012), Chambers et al.(2013)</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Kurniawan (2011), Allozi &amp; Obeidat (2016), and Satria (2012)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Sources: Jakarta Index

### Stock Price

Share prices are determined through the process of supply and demand in the secondary market. Prices are formed in accordance with auction prices, with the bargaining process based on price priority and time priority. (Husnan, 2006). The share price used in this study is the closing price of the year (Closing Price).

### Incurred Loss Ratio

This ratio reflects the experience of the loss ratio that occurred as well as the quality of the closing effort.

\[
\text{Incurred Loss Ratio} = \frac{\text{Claim Expense}}{\text{Premium Income}}
\]

The high ratio provides information about the poor underwriting process, and acceptance of risk closure.

Ha1: There is an influence of Incurred Loss Ratio to Stock Price

### Liability to Liquid Assets Ratio

This ratio reflects the company's ability to meet its obligations, whether the financial condition is solvent or not. This ratio reflects the company's ability to meet its obligations, whether the financial condition is solvent or not.
Total Liability

\[
\text{Liability to Liquid Assets Ratio} = \frac{\text{Total Allowable Wealth}}{\text{Total Liability}}
\]

This ratio shows that there is a liquidity problem and the company is most likely to be in an unsolved condition, so it is necessary to analyze the level of reserve adequacy (Reserve adequacy), as well as the stability and liquidity of permitted assets.

Ha2: There is an influence of liability to liquid assets ratio to Stock Price

**Agents Balance to surplus ratio**

This ratio measures the level of company solvency based on assets that often cannot be disbursed at the time of liquidation, i.e., direct premium bills.

\[
\text{Agents Balance to surplus ratio} = \frac{\text{Direct premium bill}}{\text{Total capital, special reserves, profit}}
\]

If this ratio is too high, it is necessary to investigate the age of the bill and analyze the cause of the unpaid direct premium. In the calculation of admitted assets, direct premium bills over 90 days are not counted.

Ha3: There is Agents Balance to surplus ratio on Stock prices

**Premium Growth Ratio**

A sharp increase or decrease in the net premium volume gives an indication of the lack of stability in the company's business activities.

\[
\text{Premium Growth Ratio} = \frac{\text{Increase / decrease in Net Premium}}{\text{Net premiums of the previous year}}
\]

The results of this ratio should be interpreted together with the company's terms and operations. In analyzing the ratio must also be considered the reasons put forward by companies that cause this ratio number is different / fluctuating. Besides that, it is also necessary to consider changes that occur in the insurance industry and the economy.

Ha4: There is a Premium Growth Ratio on Stock prices

**RESEARCH METHOD**

This type of research used in this study is causal research (causal) which aims to identify the cause and effect relationship between variables when the problem under study has been found (Zikmund, 2003). This study identified a causal relationship between the ratio of the early warning system (EWS) to the growth of income from insurance contributions in Indonesia in the period 2013-2018.

The population of this study is insurance companies listed on the Indonesia Stock Exchange. The purposive sampling method resulted in 9 companies being sampled as follows: Artha Bina Dana Insurance Company, Pratama Harta Aman Insurance Company, Multi Artha Guna Insurance Company, Bintang Insurance Company, Mitra Insurance Company, Ramayana Insurance Company, Lippo General Insurance, Masakapai Reinsurance, and Panin Insurance.

Based on the relationship between the theoretical basis, the framework of thought, the hypothesis or the temporary answer to the problem in this study is that it is thought to effect of the EWS ratio which includes the claim expense ratio, liquidity ratio, agent's balance to surplus ratio, premium growth ratio on stock prices. The following is a breakdown of each variable. This study uses secondary data sourced from financial statements for a period of six years (2013-2018), and also uses statistical eviews 9 tools.

**RESULTS AND DISCUSSIONS**

<table>
<thead>
<tr>
<th>Table 1 Normality Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
</tr>
<tr>
<td>Kurtosis</td>
</tr>
<tr>
<td>Jarque-Bera</td>
</tr>
<tr>
<td>Probability</td>
</tr>
</tbody>
</table>

Source: Eviews 9 Processing Output
Based on the table 1 above, the Skewness and Kurtosis value are 0.654633 and 3.635942, close to normal distribution characteristic which are the skewness coefficient is approach 0 and kurtosis value nearby 3. Then the value of Jarque – Bera is 4.766853 lower than value of Chi-Square (df) 5,991, also its probability (p-value) 0.092234 greater than Alpha (0.05). So that can be conclude the null hypothesis (Ho) it’s not rejected, means data normally distributed.

Table 2 Correlation Coefficient and Coefficient of Determination Test Result

<table>
<thead>
<tr>
<th>R</th>
<th>0.681476</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.464410</td>
</tr>
<tr>
<td>Adjusted R-Squared</td>
<td>0.339855</td>
</tr>
</tbody>
</table>

Source: Eviews 9 Processing Output

Based on table 2, it shows that the correlation (r) is 0.681476 which means the correlation between Incurred Lost ratio, Liquidity, Solvability and Premium Growth with Stock price is a direct or a strong positive linear relationship between the variables.

Coefficient of Determination Test (Adjusted R²)

The Adjusted R-Squared on table above is 0.339855. Which means the ability of independen variables explaining the variance of dependen variable is 33.99% and the remaining 0.660145 or 66.01% is explained by other variance variable which exclude of this regression model.

Result of Regression Coefficient Analysis

Table 3 Result of Regression Coefficient Analysis

<table>
<thead>
<tr>
<th>Variabel</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>237.795</td>
<td>1,566</td>
<td>1.622</td>
<td>0.104</td>
</tr>
<tr>
<td>Incurred Lost</td>
<td>61.880</td>
<td>0.617</td>
<td>0.490</td>
<td>0.604</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-50.087</td>
<td>0.035</td>
<td>-0.462</td>
<td>0.117</td>
</tr>
<tr>
<td>Solvability</td>
<td>454.249</td>
<td>0.046</td>
<td>3.390</td>
<td>0.000</td>
</tr>
<tr>
<td>Premium Growth</td>
<td>9.310</td>
<td>0.085</td>
<td>0.0639</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Source: Eviews 9 Processing Output


According to table 3, a significant number of 0.604 is more than 0.05 then Ha1 is not accepted, meaning that there is no effect of the Insurance Loss Ratio to the Stock Price. Judging from table 3, a significant number of 0.117 is more than 0.05, then Ha2 is not accepted, meaning that there is no effect of the Liquidity ratio on stock prices, for Ha3 is accepted because a significant number of 0.000 is less than 0.05, then solvability affects the stock price, a significant number of 0.001 is less than 0.05, so Ha4 is accepted meaning that there is an influence of premium Growth ratio on stock prices.

Based on data analysis and discussion, it can be concluded that the insurance loss ratio, liability to liquid assets ratio has no effect on stock prices. While Agents’s Balance to Surplus Ratio, Premium growth affects stock prices.

Based on the analysis described above, there are a number of suggestions that the author can convey, first, the internal condition of the company needs to be considered as a benchmark for the company's business prospects while taking into account macroeconomic conditions so that investments made can be more profitable because proven internal and external factors affect changes in stock prices. Second, the policy holder, as an external factor, is expected to make the right rules or policies in order to develop the insurance business in a conducive condition because the potential possessed is still large and will continue to grow. For further research it is necessary to consider a clear division of insurance company sizes.

REFERENCES


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