DETERMINANT OF STOCK PRICE INSURANCE COMPANY IN INDONESIA

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ABSTRACT

Purpose — This research aims to analyze the effect of the Claim Expense Ratio and the Technical Reserve Ratio on the Stock Price with the Solvency Ratio as an intervening variable in insurance companies on the IDX.

Design/methodology/approach — The populations in this research were all 12 insurance companies in Indonesia. The sampling criteria are insurance companies listed on the Indonesia Stock Exchange and publish quarterly financial reports continuously during the 2017-2018 period. There are 8 companies that meet the purposive sampling criteria. Data processing and analysis techniques are carried out using Path Analysis.

Findings — The results show that the claim expense ratio has a significant positive effect on the solvency ratio, the technical reserve ratio has no effect on the solvency ratio, the claim expense ratio has a significant positive effect on stock prices, the technical reserve ratio has a significant negative effect on stock prices and the solvency ratio is not able to mediate the ratio of claim expense to stock prices and the solvency ratio is able to mediate the effect of the ratio of technical reserves to stock prices.

Practical implications — The higher the claim load ratio, the higher the solvency ratio. This research is in line with the research of Suwiralim (2014) and Permatasari Kuraesin & (2016) which states that the ratio of claim expenses has a positive effect on stock prices.

Originality/value — The solvency ratio is not able to mediate the ratio of claim expense to stock prices and the solvency ratio is able to mediate the effect of the ratio of technical reserves to stock prices.

Keywords — The Claim Expense Ratio, The Technical Reserve Ratio, The Solvency Ratio, Stock Prices.

paper type — Research paper
INTRODUCTION

Almost every day in the life, humans are always faced with various uncertainties that are continuous and prolonged. Often this uncertainty is referred to as a risk. Risk can be interpreted as the impact of uncertainty to achieve a goal. Risks can be in the form of opportunities that can provide financial benefits and threats that can provide financial losses (Prowanta, 2019). There is a risk in life so that someone needs the protection of their economic value by transferring the risk to the insurance company by buying insurance products.

Insurance is a way to collect funds from the public in the form of premiums and in return, each participant has the right to receive a payment or coverage for a certain amount of funds in the event of certain events or calamities. Coverage in insurance is something that has an interest for those who make an insurance agreement, for example, such as a person’s life, house, car, education, and health (Iskandar, 2011). The protection provided by insurance at this time to the insured is carried out by restoring the financial loss conditions that were experienced before the loss occurred.

The higher a person’s awareness of the importance of insurance, the higher the business of the insurance company in selling its products through various types of distribution flows. The distribution streams that are currently carried out by many insurance companies are agents, bancassurance, and telemarketing. The existence of many distribution channels for the sale of insurance products makes it easy for prospective customers to get information and buy insurance products.

Several research results are related to the share price of insurance companies, as research by Suwiralim (2014) and Permatasari & Kuraesin (2016), Mazviona et al. (2017), Abdeljawad & Dwaikat (2019), Akotey et al. (2012), Fadlin & Fitriati (2013), Marwansyah & Utami (2017), Yusuf & Dansu (2014), states that the claim expense ratio has a significant positive effect on stock prices. However, the results of this research are different from the results of research by Detiana (2012) and research by Sisdyanti et al. (2016) which states that the ratio of claim expenses has no effect on stock prices.

Susilo’s research (2007) states that the ratio of technical reserves has a significant negative effect on stock prices. However, the results of this research are different from Detiana’s (2012) research which states that technical reserves have a positive effect on stock prices.
Several research results related to the solvency ratio of insurance companies include: research by Putri (2013) states that the claim expense ratio has a significant effect on the solvency ratio. A study conducted by Sari (2017) states that the ratio of technical reserves has a significant positive influence on the solvency ratio. The results of research related to the solvency ratio to stock prices, as the results of research by Octaviani & Komalasari (2017) state that the solvency ratio has a positive effect on stock prices, so there is a research gap from the results of previous researchers.

Based on the existing research gap, it is possible to propose the following research objectives:

1. To test and analyze the influence of claim expenses on solvency
2. To test and analyze the influence of technical reserves on solvency
3. To test and analyze the influence of claim expenses on stock prices
4. To test and analyze the influence of technical reserves on stock prices
5. To test and analyze the influence of solvency on stock prices
6. To test and analyze the ability of solvency to mediate the influence of claim expense on stock prices
7. To test and analyze the ability of solvency to mediate the influence of technical reserves on stock prices

2. Literature Review and Hypothesis Development

2.1. Claims Expense Ratio

Claims Expense Ratio is a ratio that reflects the experience of claims that have occurred and the quality of the closing business (Gulsun & Umit, 2010). Gulsun & Umit (2010) stated that the claim expense ratio shows the company’s ability to pay claim expenses through premium income. Claim expense describes the experience of claims that have occurred as well as the quality of their closings.

The claim expense ratio greatly affects the company’s ability to generate profits from the insurance business and maintain company liquidity. The lower the claim expense ratio, the better the solvency of the insurance company (Jhongpita, 2011). The logical relationship between the claim expense ratio and the solvency ratio is the claim expense ratio
showing the company's ability to pay claim expenses through premium income, this indicates that the smaller the claim expense compared to premium income will reduce the expense so that it can increase the company's solvency.

2.2. Technical Reserve Ratio
The ratio of technical reserves is a ratio that calculates the adequacy of reserves consisting of premium reserves and reserves for claims required in facing obligations arising from risk closure. The higher the technical reserves ratio, the healthier the company's financial condition.

2.3. Solvency Ratio
According to Kasmir (2016), the solvency ratio is a ratio used to measure the extent to which a company's assets are financed with debt. This means how much debt burden the company bears compared to its assets. In a broad sense, the solvency ratio is used to measure the company's ability to pay all of its obligations. The lower the level of solvency, the more unhealthy the company will be because it is unable to pay all of its obligations.

2.4. Stock price
The stock price is an indicator of company management. Investor satisfaction is created because of success in obtaining rational profits. A high company stock price can create good company value and capital gain (Novasari, 2013).

2.5. Hypothesis Development
2.5.1. The Influence of Claims Expense Ratio to Solvency Ratio in insurance companies
Gulsun & Umit (2010) in their research stated that the claim expense ratio is a ratio that reflects the experience of claims that have occurred and the quality of the closing business. Gulsun & Umit (2010) also stated that the claim expense ratio shows the company's ability to pay claim expenses through premium income. The relationship between the claim expense ratio and the solvency ratio is that the higher the claim expense, the higher the solvency ratio because of the higher customer and investor confidence in the company. As the results of a study conducted by Jawad
(2019) state that claim expenses have a significant influence on the solvency ratio of insurance companies in Palestine.

H1: The claim expense ratio has a positive influence on the solvency ratio.

2.5.2. The Influence of the Ratio of Technical Reserves on the Solvency Ratio in insurance companies

Technical reserves are the estimated amount of money provided by the insurer in the face of the obligation that is predicted to arise from the closure of the risk. Through the sale of policies, insurance companies collect public funds (pool of common funds). The funds that have been collected must then be mostly set aside in the form of technical reserves (Sari, 2017).

Relatively high technical reserves tend to indicate that the business portfolio is not evenly distributed throughout the year, so that reserves for premiums that are not yet income are relatively high. This means that high technical reserves do not provide benefits for the company because the company determines its technical obligations are greater than investing, and this affects the solvency level of a company. The higher the technical reserves, the lower the solvency level of the company. Based on the description above, a hypothesis can be formulated:

H2: The ratio of technical reserves has a negative influence on the solvency ratio.

2.5.3 The Influence of Claims Expense Ratio on Stock Prices in insurance companies

The high level of ability to pay claims shows that the company's ability to pay its obligations is getting higher, thus proving that the risk faced by the company is getting lower. The relationship between claim expense and stock price ratio is that the higher the claim expense ratio, the higher the share price. This is in accordance with the results of research by Hasibuan et al. (2020) which states that the claim expense ratio has a significant effect on stock prices. Likewise, the research results of Santoso et al. (2020) state that the claim expense ratio has a significant effect on stock prices.

H3: Claim expense ratio has a positive influence on stock prices.
2.5.4 The Influence of the Ratio of Technical Reserves on Stock Prices in insurance companies.

The ratio of technical reserves is an obligation in an insurance company that represents an amount of money, which the insurance company will need to pay its obligations. This ratio measures the adequacy of premium reserves and claims required in facing liabilities.

A company with a high technical reserve ratio is a company with high risk, so the relationship between the ratio of technical reserves and the stock price is that the higher the ratio of technical reserves, the lower the stock price.

H₄: Technical Reserve Ratio has a negative influence on Stock Prices.

2.5.5. The Influence of Solvency Ratio on Stock Prices in Insurance Companies

The solvency ratio shows how much the company can pay its obligations. the higher the solvency ratio of the insurance company, the higher the company's ability to pay its obligations. This creates a relationship that the increasing solvency ratio will increase the stock price.

Kusnandar & Sari (2020) research results state that the solvency ratio has a significant positive effect on stock prices of telecommunications companies in Indonesia. Likewise, Komala & Nugroho (2013) research also states that solvency has a significant effect on stock prices.

H₅: The solvency ratio has a significant positive influence on stock prices.

2.5.6 Solvency Ratio mediates the ratio of Claim Expense to Stock Price

Based on hypothesis 1 (one) and hypothesis 5 (five), testing the positive effect of the claim expense ratio on the solvency ratio and the positive effect of the solvency ratio on stock prices. The higher the claim expense ratio, the higher the stock price Indirectly.

H₆: The solvency ratio is able to mediate the effect of the claim expense ratio on the stock price.
2.5.7 Solvency Ratio Mediates the Ratio of Technical Reserves to Stock Prices

Based on hypothesis 2 (two) and hypothesis 5 (five), testing the negative effect of the ratio of technical reserves on the solvency ratio and the positive effect of the ratio of solvency on stock prices. The higher the claim expense ratio, the lower the share price will be indirectly.

H7: The solvency ratio is able to mediate the effect of the ratio of technical reserves on stock prices.

Based on this description, the following framework can be described:

**Figure 2.1.** Research concept

3. Methodology

This type of research is explanatory research, which explains the variables under study and their relationship to one variable with other variables. The research approach is carried out using the positivist paradigm because the research is carried out quantitatively on the measurement of the variables that make up the model and analyzing the influence between one variable and another (Sugiyono, 2018). Data processing and analysis techniques are carried out using Path Analysis.

The populations in this research were all 12 insurance companies in Indonesia. The sampling criteria are insurance companies listed on the Indonesia Stock Exchange in the study period (2018-2019) and insurance companies that publish quarterly financial reports continuously during the 2018-2019 period.

The data used in this research is secondary data, where data can be taken directly from the insurance company web which is the sample in this research. Research variables include independent variables consisting of the claim expense ratio and technical reserve ratio, and
solvency ratio as an intervening variable, and stock price as the dependent variable. The measurement of each variable can be seen in the table below:

**Table 1. Operational Definition**

| Variable                                      | Variable Concept                                      | Formula                                                                 | Scale |
|-----------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------|-------|
| Claims Expense Ratio (X₁)                     | Reflects historical data on claims that have occurred as well as the quality of business closures | Claim Ratio = \( \frac{\text{Claim Expense}}{\text{Premium Income}} \) | Ratio |
| Technical Reserves Ratio (X₂)                 | Reflects the reserves owned by the company in order to pay obligations from risk closure | Reserves Ratio = \( \frac{\text{Technical Reserves}}{\text{Netto Premium}} \) | Ratio |
| Solvency Ratio (Z)                            | The solvency ratio shows how much the company's financial ability to bear the risks that are covered. | Solvency Ratio = \( \frac{\text{Shareholders Fund}}{\text{Netto Premium}} \) | Ratio |
| Stock Prices (Y)                              | One of the indicators of company performance          | Amount of increase/decrease in share prices in insurance companies in 2 years on a quarterly basis. | Ratio |

4. Results and Discussion

4.1. Hypothesis test results

Based on the results of data processing, the following test results are obtained:

**Table 2. Uji-t (1)**

| Coefficientsa |  |
|----------------|---|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. | Collinearity Statistics |

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Table 4.1 explains that the significance value of the claim expense ratio is 0.000 <0.05, so it can be stated that the claim expense ratio has a significant positive effect on the solvency ratio. Thus the hypothesis proposed by the author is accepted. Furthermore, the significance value of the technical reserve ratio is 0.522 > 0.05, so it can be stated that the technical reserve ratio has no effect on the solvency ratio. Thus the hypothesis proposed by the author is rejected.

Table 3. Uji-t (2).

| Model                  | B    | Std. Error | Beta    | t        | Sig.    | Collinearity Statistics |
|------------------------|------|------------|---------|----------|---------|-------------------------|
| (Constant)             |      |            |         |          |         |                         |
| Claims Expense Ratio   | 3510.47 | 1009.477  | .445    | 3.478    | .001    | .687 1.033              |
| Technical Reserve Ratio| .046 | .071       | .070    | .644     | .522    | .968 1.033              |

a. Dependent Variable: Rasio Solvabilitas
Source: Processed Data
Technical Reserves | -287.757 | 143.371 | -.217 | -2.007 | .049 | .962 | 1.040
Solvency Ratio | 385.121 | 257.573 | .191 | 1.495 | .140 | .690 | 1.449

Table 4.2 explains that the significance value of the claim expense ratio is 0.001 < 0.05, so it can be stated that the claim expense ratio has a significant positive effect on stock prices. Thus the hypothesis proposed by the author is accepted. The significance value of the technical reserve ratio is 0.049 < 0.05, so it can be stated that the technical reserve ratio has a significant negative effect on stock prices. Thus the hypothesis proposed by the author is accepted. Furthermore, the significance value of the solvency ratio is 0.140 > 0.05, so it can be stated that the solvency ratio has no effect on stock prices. Thus the hypothesis proposed by the author is rejected.

4.2. Path Analysis
Path analysis is used to determine the effect of the independent variable on the dependent variable through the mediating variable. In this research, the researcher wanted to see whether the solvency ratio (Z) was able to mediate the effect of the claim expense ratio (X1) and the technical reserve ratio (X2) on the stock price (Y). The coefficient value of the path analysis can be seen in Figure 4.1. below this:

Figure 2. Path Analysis
The effect of the claim expense ratio \(X_1\) to the stock price \(Y\) through the solvency ratio \(Z\) can be calculated by multiplying the coefficient of the direct effect of the claim expense ratio \(X_1\) to the solvency ratio \(Z\) which is 0.540 with the coefficient of a direct effect of the solvency ratio \(Z\) to the stock price \(Y\) of 0.191. The result is 0.10314. Based on this test, it can be seen that the effect of the claim expense ratio \(X_1\) to the stock price \(Y\) is indirectly smaller than the effect of the claim expense ratio \(X_1\) to the stock price \(Y\) directly (0.10314 < 0.445). This proves that the solvency ratio \(Z\) is unable to mediate the ratio of claims expense to stock prices. Thus the hypothesis proposed by the author is rejected.

The effect of the ratio of technical reserves \(X_2\) to the stock price \(Y\) through the solvency ratio \(Z\) can be calculated by multiplying the coefficient of the direct effect of the ratio of technical reserves \(X_2\) to the solvency ratio \(Z\), which is 0.070 with the coefficient of the direct effect of the solvency ratio on price shares \(Y\) of 0.191. The result is 0.01337. Based on this test, it can be seen that the effect of the ratio of technical reserves \(X_2\) on stock prices \(Y\) is indirectly greater than the effect of the ratio of technical reserves \(X_2\) on stock prices \(Y\) directly (0.01337 > -0.270). This proves that the solvency ratio \(Z\) is able to mediate the effect of the ratio of technical reserves on stock prices. Thus the hypothesis proposed by the author is accepted.

4.3. Discussion

The results showed that the ratio of claim expense has a positive effect on the solvency ratio and stock prices. This result is in accordance with the existing theory that the higher the claim load ratio, the higher the solvency ratio. The results of this research are in line with the research of Suwiralim (2014) and Permatasari Kuraesin & (2016) which states that the ratio of claim expenses has a positive effect on stock prices.

The results showed that the technical reserve ratio had no effect on the solvency ratio. This result contradicts the existing theory, that the higher the technical reserves, the lower the company’s solvency level. It is suspected that this is because most of the loss insurance and reinsurance products are products with a period of one year and can be renewed (renewable) and can be reviewed so that they do not meet the requirements of the company’s obligation to make technical reserves.
based on the Circular of the Financial Services Authority Number 27/SEOJK.05/2017. The results of this research are in line with Putri (2013) which states that the ratio of technical reserves has no effect on the solvency ratio.

The results showed that the claim expense ratio had a significant positive effect on stock prices. This is in accordance with the existing theory, that the higher the claim expense ratio, the higher the share price. This result is in line with Putri’s (2013) research which states that the claim expense ratio has a significant positive effect on stock prices.

The results showed that the ratio of technical reserves had a significant negative effect on stock prices. This is in accordance with the existing theory, namely if the ratio of technical reserves increases, the share price decreases. If the company has a high technical reserve ratio, the resulting investment return will decrease and investor interest in investing in the company will decrease and the share price will decline. The results of this research are in line with research by Detiana (2012) which states that technical reserves have a significant positive effect on stock prices.

The results showed that the solvency ratio had an influence on stock prices. The results of this research are in line with Ramadana’s research (2018) which states that the solvency ratio has no effect on stock prices.

The results showed that the solvency ratio (Z) was not able to mediate the ratio of claims expense to stock prices. This shows that to test the effect of the claim expense ratio on stock prices, it is not necessary to go through the solvency ratio. Furthermore, the results show that the solvency ratio (Z) is able to mediate the effect of the ratio of technical reserves on stock prices. Thus it can be said that with the increase in technical reserves it will be able to increase the solvency ratio which in turn can increase the stock price.

5. Conclusions

The results of this research conclude that the increase in the ratio of claim expenses will increase policyholder confidence and have an impact on company earnings which in turn can affect the share price of insurance companies. If there is an increase in the ratio of technical reserves, it will decrease the company’s profit and may decrease the company’s performance.

Thus it can be stated that, if the ratio of technical reserves increases, the stock price decreases. If the company has a high technical reserve ratio, the resulting investment return will decrease so that investor
interest in investing in the company will decrease and the stock price will decline. The results of this research also state that the solvency ratio is not able to mediate the ratio of claim expense to stock prices and the solvency ratio is able to mediate the effect of the ratio of technical reserves to stock prices.

REFERENCES

Abdeljawad, I., & Dwaikat, L. M. (2019). The Determinants of Profitability of Insurance Companies in Palestine. repository najah edu, 1-12.

Akotey, J. O., Sackey, G. F., & Amoah, L. (2012). The Financial Performance Of Life Insurance Companies in Ghana. Editorial express, 1-24.

Detiana, T. (2012). Pengaruh Financial Early Warning Signal Terhadap Perubahan Harga Saham Pada Perusahaan Asuransi Yang Terdaftar Di Bursa Efek Indonesia. Jurnal Bisnis Dan Akuntansi, 14(3), 239–245.

Fadlin R.P, A., & Fitriati, R. (2013). Analisis Pengaruh Risk Based Capital, Penerimaan Premi, Underwriting dan Beban Klaim terhadap Profitabilitas. www.lib.ui.ac.id, 1-20.

Gulsun, I., & Gucenme, U. (2010). Early warning model with statistical analysis procedures in Turkish insurance companies. African Journal of Business Management, 4(5), 623–630

Hasibuan, A. F. P., Sadalia, I., & Muda, I. (2020). The Effect of Claim Ratio, Operational Ratio and Retention Ratio on Profitability Performance of Insurance Companies in Indonesia Stock Exchange. International Journal of Research and Review, 7(3), 223–231. http://journal.febi.uinib.ac.id/index.php/almasraf/article/view/57

Iskandar, Kasir. 2011. Dasar – dasar Asuransi Jiwa dan Kesehatan. Jakarta: Asosiasi Ahli Manajemen Asuransi Indonesia (AAMAI).

Jawad, Y. A. L. A., & Ayyash, I. (2019). Determinants of the solvency of insurance companies in palestine. International Journal of
Jhongpita, P., Sinthupinyo, S., & Chaiyawat, T. (2012). *Using Decision Tree Learner to Classify Solvency Position for Thai Non-life Insurance Companies*. May 2014. http://arxiv.org/abs/1203.3031

Kasmir. (2014). *Bank dan Lembaga Keuangan Lainnya*. Edisi Revisi, Cetakan keempat belas, PT. Raja Grafindo Persada, Jakarta.

Kusnandar, K., & Sari, M. (2020). The Effects Of Liquidity, Solvency, And Profitability On Stock Price (A Study In Pt Telekomunikasi Indonesia Tbk. Period Of 2004-2018). *Journal of Accounting and Finance Management*, 1(2), 262-274. https://doi.org/10.38035/jafm.v1i2.30

Komala, L. A. P., & Nugroho, P. I. (2013). The effects of profitability ratio, liquidity, and debt towards investment return. *Journal of Business and Economics*, 4(11), 1176-1186.

Mazviona, B. W., Dube, M., & Sakahuhwa, T. (2017). An Analysis of Factors Affecting the Performance of Insurance Companies in Zimbabwe. *Journal of Finance and Investment Analysis*, ISSN: 2241-0998

Marwansyah, S., & Utami, A. N. (2017). Analisis Hasil Investasi, Pendapatan Premi, dan Beban Klaim Terhadap Laba Perusahaan Perasuransian di Indonesia. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis* Vol. 5, No. 2, 213-221.

Novasari, E. (2013). Pengaruh Per, EPS, ROA Dan DER Terhadap Harga Saham Perusahaan Sub-Sektor Industri Textile Yang Go Public Di Bursa Efek Indonesia (BEI) Tahun 2009-2011. In *Development*, 134(4).

Octaviani, S., & Komalasarai, D. (2017). Pengaruh Likuiditas, Profitabilitas, Dan Solvabilitas Terhadap Harga Saham (Studi Kasus pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia). *Jurnal Akuntansi*, 3(2), 77–89.

Permatasari, R, & Kuraesin Aneu. (2016). Prosiding SENTIA 2016: *Pengaruh Rasio Keuangan Early Warning System Terhadap Harga*
Saham Pada Perusahaan Asuransi Yang Terdaftar pada Bursa Efek Indonesia (BEI) Tahun 2010-2014. Bandung.

Putri, Meilitarani, dkk. 2013. Studi Tentang Solvabilitas Dengan Pendekatan Rasio-Rasio Early Warning System. Universitas Diponegoro.

Prowanta, Embun. 2019. Manajemen Risiko Pasar Modal (ISO 31000:2018). Bogor: In Media.

Republik Indonesia, Peraturan Otoritas Jasa Keuangan Nomor 69/POJK.05/2017. Tentang Penyelenggaraan Usaha Perusahaan Asuransi, Perusahaan Asuransi Syariah, Perusahaan Reasuransi, Dan Perusahaan Reasuransi Syariah.

Santoso, S., Astuti, H., & Sayekti, L. (2020). The Effect of Claim Expense, Liquidity, Risk-Based Capital, Company Size, Debt to Equity, and Debt To Asset on Profitability In Indonesia Islamic Insurance Companies. https://doi.org/10.4108/eai.5-8-2020.2301216.

Sari, Irna Novita. (2017). Analisis Pengaruh Rasio Klaim, Profitabilitas, Underwriting, Ukuran Perusahaan Dan Cadangan Teknis Terhadap Tingkat Solvabilitas Perusahaan Asuransi (Studi Pada Perusahaan Asuransi Umum Yang Terdaftar di Direktori Perasuransian Indonesia Tahun 2011-2015). Universitas Islam Negeri Sultan Syarif Kasim.

Sisdyanti, Amalia, Wiwiek Rabiatul Adawiyah dan Tohir. (2016). Pengaruh Analisis Rasio Keuangan Early Warning System (EWS) dan Price to Book Value (PBV) Terhadap Harga Saham Perusahaan Asuransi yang terdaftar di Bursa Efek Indonesia. Fakultas Ekonomi Universitas Jendral Soedirman. Performance – Vol.23 No.1 Maret 2016.

Sugiyono. 2018. Metodologi Penelitian Bisnis. Bandung: Alfabeta.

Susilo, Fathurachman Agung. (2007). Analisis Pengaruh Rasio Early Warning System terhadap Harga Saham Perusahaan Asuransi Go Public yang terdaftar Pada tahun 2003-2005 di Bursa Efek Jakarta. Universitas Airlangga.

Suwiralim, Pramono Putro. (2014). Pengaruh Analisis Rasio – Rasio Early Warning System (EWS) Terhadap Harga Saham Pada Perusahaan
Yusuf, T. O., & Dansu, (2014). Effect Of Claim Cost on Insurers’ Profitability in Nigeria. International Journal of Business and Commerce Vol. 3, No.10, 20, 01-20. doi:www.ijbcnet.com.