FINANCIAL DISTRESS ANALYSIS OF THE SMINFRA18 INDEX SHARE RETURN ON INDONESIA STOCK EXCHANGE

Yuliandi Farliansyah¹
Dedi Budiman Hakim²
Hendro Sasongko³
¹Sekolah Bisnis, Institut Pertanian Bogor
Email : yuliandi.farliansyah@gmail.com
²Fakultas Ekonomi dan Manajemen, Institut Pertanian Bogor
Email : dbhakim@bina.ipb.ac.id
³Fakultas Ekonomi, Universitas Pakuan
Email : hendro.sasongko@unpak.ac.id

Diterima : 25 Maret 2021   Direvisi : 5 April 2021   Dipublikasikan : 30 Desember 2021

Abstrak

Indonesia's construction sector has a strategic contribution to the national economy. This can be seen clearly with the increase in the construction of office buildings, hotels, apartments and malls as well as road, toll road, flyover, and other construction projects, this will have an impact on improving Indonesia's infrastructure. Along with the increase in market capitalization on the SMinfra18 Index, it would be ironic if it is not accompanied by the fluctuating performance, volume and value of the SMinfra18 Index. Sampling technique using secondary data search. The method of analysis using panel data regression analysis. The purpose of this study is related to 1) The condition of the financial performance of companies listed in SMInfra18. 2) Factors affecting financial distress in SMInfra18 and 3) The relationship between financial distress and stock returns in SMInfra18. The analytical method used is panel data regression using Debt Service Coverage Ratio, Profitability Ratio (ROE), Liquidity Ratio (WC/TA), Activity Ratio (TATO), Efficiency Ratio (EBITDA/TA) and Leverage Ratio (DAR). The results of the study provide an illustration that there are differences and conditions of financial distress in each company and the grouping and conditions of financial distress and stock returns have not been able to have a unidirectional relationship from time to time.

Keywords: Debt Service Coverage, Financial Distress, Stock Return, SMInfra18

BACKGROUND

The construction sector in Indonesia has a strategic contribution to the national economy. This can be seen clearly by the increasing development of office buildings, hotels, apartments and malls as well as road construction projects, toll roads, flyovers, and so on, this will have an impact on improving Indonesia's infrastructure. In terms of infrastructure competitiveness in 2017, Indonesia is still lagging behind Malaysia, Singapore and Thailand. Indonesia's infrastructure competitiveness scores 4.5 and is ranked 52th out of 137 countries. Meanwhile, Malaysia's infrastructure competitiveness was highest in Southeast Asia with a score of 5.5, Singapore was second with a score of 5.4, and Thailand was in third place with a score of 4.7. Based on (World Economic Forum, 2018), There are many factors that become obstacles and make investors think repeatedly about investing in Indonesia. One of them is infrastructure, which is in fourth place with 8.8 points.

In carrying out its activities, the construction business category, especially those engaged in the infrastructure sector, receives financing from domestic banks, issuances of debt securities on the domestic market and withdrawals from foreign loans. At the end of 2017, financing from domestic banks tended to experience a slowdown, on the other hand, financing from the issuance of debt
securities and foreign loans increased (SEKI, 2018). Seeing the rapid development of the infrastructure sector in Indonesia and becoming very attractive on January 31, 2013, PT. The Indonesia Stock Exchange or better known as the IDX in collaboration with PT. Sarana Multi Infrastructur (Persero) or SMI launched the SMinfra18 index. With a vision to be a catalyst in accelerating Indonesia’s infrastructure development.

Based on IDX data (2020) in the SMinfra18 index fact sheet, the market capitalization of the SMinfra index against the JCI is 26.42%. The SMinfra18 index consists of several issuers from various sectors related to or contributing to infrastructure projects such as construction companies, cement companies, heavy equipment companies, energy companies, banking and infrastructure operator companies themselves. (Figure 1).

Along with the increase in market capitalization on the SMinfra18 Index, it becomes ironic when it is not accompanied by the performance, volume and value of the SMinfra18 Index which is still volatile. It is feared that this will lead to financial distress as a result of the Global Financial Crisis, so that many companies cannot fulfill their obligations to banks. Bank Indonesia recorded an increase in NPLs from 2.37% at the end of 2018 to 2.73% in October 2019. Based on the description above, it is important for the public to know indications of a company's financial distress.

Table 1 Summary of SMinfra18 index trading on the IDX for the 2015-2019 period

| Stock Trading Summary | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------|------|------|------|------|------|
| Market Capitalization (billion rupiah) | 805,143 | 859,810 | 1,976,829 | 1,773,520 | 1,919,502 |
| Volume (million) | 448 | 356 | 561 | 599 | 532 |
| Value (billion rupiah) | 805 | 1,206 | 2,569 | 2,204 | 1,726 |

Source: IDX (2020)

Formulation Problem

Financial distress Basically, it becomes interesting things that need to be known by business stakeholders, especially management and investors. For management to be able to manage and maintain business performance, while for investors as an indicator of investment activities. Companies that are included in the SMinfra18 index are known to have differences in performance each time, which can have an impact on the security of the company in the future. Identification of financial distress can be seen from the trend of the total profitability and solvency ratios. Moch et.al. (2019) explained that the decreasing company’s revenue accompanied by an increase in corporate debt is an early indication of financial difficulties, this is because the company has an increased risk of inability to pay obligations.

Table 2 Identification of the SMinfra18 Index Ratio Performance

| Year | Profitability | Liquidity | Leverage |
|------|---------------|-----------|----------|
| 2014 | 0.21          | 0.20      | 0.52     |
| 2015 | 0.13          | 0.15      | 0.53     |
| 2016 | 0.15          | 0.20      | 0.49     |
| 2017 | 0.14          | 0.17      | 0.52     |
| 2018 | 0.09          | 0.15      | 0.69     |
| 2019 | 0.09          | 0.14      | 0.57     |

Source: Data Processed
Based on this description, the formulation of this research problem includes:

1. How is the financial condition of each issuer that is included in the SMInfra18 index?
2. What factors can influence the financial distress condition of each issuer in the SMInfra18 index?
3. Does the financial distress condition of each issuer in the SMInfra18 index affect stock returns?

The scope of research
The scope of this research is about financial conditions, financial distress, and stock returns. This study only discusses companies that are listed on the Indonesia Stock Exchange in the infrastructure and supporting sectors and are included in the SMInfra18 index. In the process, this study uses corporate financial distress analysis in an effort to answer research problems. The data period used is quarterly data starting from 2014 to 2019.

STUDY LITERATURE AND HYPOTHESIS DEVELOPMENT
Financial distress is basically a condition where the finances of a company are in an unhealthy condition or are experiencing a critical disorder (Platt and Platt 2002). Basically, the financial difficulties faced by the company are caused by many factors, such as liquidity difficulties where the company is unable to meet its financial obligations at one time or the company has obligations that are greater than the company’s assets.

A condition that makes the company unhealthy so that it is close to bankruptcy is an early symptom of financial distress (Altman 1993). This is corroborated by the statement of Schmuck (2013) which says that financial distress occurs when the company has debt that is greater than the size of the company and the company’s profits. According to Outecheva (2007), companies are said to be in financial distress when they experience a lack of liquidity and fail to meet their short-term obligations. A three-dimensional scheme consisting of the level of danger, financial state and time frame. The Corporate Financial Distress Cycle that he put forward explained that the initial period of the company experiencing unperformed to the lowest point then the recovery phase if the company can improve its performance. However, if the company experiences financial distress, the company is not in the same position but continues to move to the next stage.

RESEARCH METHODS
This research was conducted in the range of May to July 2020. This research used descriptive and quantitative analysis approaches through processed secondary data. This study analyzes descriptively the financial condition of companies in the infrastructure sector and its supports, and analyzes the financial distress conditions of each issuer in the SMInfra18 index which is described by the Debt Coverage Service Ratio.

Companies that are the object of research are non-bank companies in the infrastructure and supporting sectors that have been incorporated in the SMINFRA18 index and listed on the IDX for the 2014-2019 financial reporting period. Researchers excluded banking issuers in the SMInfra18 index because in the presentation of financial statements between banks and other companies (non-banks) there are differences in principle, one of which is the Bank as a collector of funds from the public in the form of deposits. Bank issuers when compared to non-bank companies will be incompatible to be researched together. Research variables are useful for answering research problems. Therefore, the researcher was made to clarify the description of the events in the study. The variables and models used were as follows:

\[ DSCR_{it} = \alpha + \beta_1ROE_{it} + \beta_2WC/TA_{it} + \beta_3TATO_{it} + \beta_4EBITDA/TA_{it} + \beta_5DAR_{it} + \varepsilon_{it} \]

Table 3 Research Variables

| Dependent variable                          | Independent Variable               |
|---------------------------------------------|-----------------------------------|
| Debt Service Coverage Ratio                 | Profitability Ratio (ROE)         |
|                                             | Liquidity Ratio (WC / TA)         |
|                                             | Activity ratio (TATO)             |
|                                             | Efficiency ratio (EBITDA / TA)    |
|                                             | Leverage ratio (DAR).             |

Fakultas Ekonomi, Universitas Muhammadiyah Cirebon
Panel data is used to describe data that has many dimensions (cross section) as well as in a time series or time series. This study uses the quarterly financial statements of each issuer of SMinfra18 in the period 2014 to 2019. The method used for this research is panel data regression. This method was chosen because of the variety of data and the type of time series. Which requires choosing the best type of model with the panel data regression method, there are three types, namely Pooled Ordinary Least Square (PLS), Fixed Effect Model (FEM) and Random Effect Model (REM).

RESULTS AND DISCUSSION

Analysis of the Company's Financial Performance in the SMinfra18 Index.

Financial performance analysis is an important part needed to determine the exact condition of the achievements of each company in the form of partial analysis to determine the conditions at that time. SMinfra is a stock index consisting of 18 companies listed in the infrastructure sector and its support. The purpose of the SMinfra18 Index is to become a reference for investors who want to invest in infrastructure projects and encourage infrastructure companies to become public companies. SMinfra18 has several objectives, namely 1) To become a reference for investors to invest in infrastructure stocks with high liquidity and large capitalization. 2) To become the foundation for the development of investment products such as Exchange-Traded Funds (ETFs), mutual funds, and other derivative products. 3) Increase investor confidence which will indirectly improve the performance of listed infrastructure companies and their capacity to access wider and cheaper funding. and 4) Encouraging infrastructure companies to become public companies.

The analysis of the financial performance of the SMinfra18 index companies is divided into two groups, namely groups based on sector and groups based on business ownership. This grouping is intended to facilitate identification and to become a reference for company performance and to find out other conditions inherent in the company. Descriptions of financial performance from SMinfra18 such as the following:

Financial distress is identified by calculating the debt service coverage ratio. Pranowo (2010) explains that debt service coverage is a form of description of a company's financial difficulties, where if the ratio value is 1.2, the company is in a difficult condition. Table 4 provides a description that all except mining are in the safe category and the basic chemical industry sector has the highest score compared to other sectors. The mining sector is known to be experiencing financial difficulties, with scores from 2014 to 2019 experiencing bad or bad conditions. These findings illustrate that companies that enter the mining sector need to improve their performance so that they get out of trouble or other problems. The performance information is depicted in Table 4.

| Year | SPI | IUT | PPKB | IDK | PERTB |
|------|-----|-----|------|-----|-------|
| 2014 | 3.86 | 1.77 | 1.01 | 5.18 | 0.45  |
| 2015 | 3.90 | 1.35 | 1.50 | 10.64| -1.07 |
| 2016 | 3.84 | 4.08 | 1.22 | 13.45| 0.77  |
| 2017 | 5.92 | 1.70 | 1.92 | 5.04 | 0.81  |
| 2018 | 1.71 | 2.46 | 1.89 | 5.11 | -0.17 |
| 2019 | 1.30 | 11.87| 1.27 | 1.24 | 0.23  |
| Average | 3.42 | 3.87 | 1.47 | 6.78 | 0.17  |

Source: Data Processed

Pranowo (2010) explains that debt service coverage is a form of description of a company's financial difficulties, where if the ratio value is 1.2, the company is in a difficult condition. Table 5 provides information that both BUMN and private groups are in safe condition because they have an average value above 1.2. Referring to the trend, it is known that private groups experienced two years "2018 and 2019" with unsafe conditions or experiencing distress. This finding is the low average value of each basic chemical industry sector and mining. The performance information is described in Table 5.
The chi square probability value is less than 0.05, so the fixed e to compare common effect models with fixed effects. The predetermined condition is that the value of accordance with the rules of panel data regression analysis. The initial stage in testing the panel data regression is the search for the best model in factor analysis. The initial stage in testing the panel data regression is the search for the best model in factor analysis. The search for the best model is intended to find out which model is appropriate and in the rules of panel data regression analysis. The first test uses the chow test approach to compare common effect models with fixed effects. The predetermined condition is that the value of the chi square probability value is less than 0.05, so the fixed effect model is better. Another test to find out the best model is the Hausman test. The test is intended to determine the fixed effect or random

### Table 5 Financial Distress Performance for Ownership Groups on the SMinfra Index18

| Year | BUMN | Private |
|------|------|---------|
| 2014 | 1.74 | 2.52    |
| 2015 | 1.97 | 5.30    |
| 2016 | 3.11 | 6.84    |
| 2017 | 1.91 | 4.07    |
| 2018 | 3.10 | 1.20    |
| 2019 | 7.16 | 1.03    |
| Average | 3.16 | 3.49 |

### SMInfra Financial Distress Factor Analysis 18

Factor analysis financial Distress is done by separating companies that have an indication for 5 years with quarterly data experiencing conditions more than or equal to 12 times or half of the research period experiencing financial problems with a debt service coverage ratio. Companies that have a distress condition below 12 times were excluded from the sample and all financial (banking) firms were excluded from the model. The companies used in the factor analysis model are presented in Table 6.

| Year | BUMN | Private |
|------|------|---------|
| 2014 | 1.74 | 2.52    |
| 2015 | 1.97 | 5.30    |
| 2016 | 3.11 | 6.84    |
| 2017 | 1.91 | 4.07    |
| 2018 | 3.10 | 1.20    |
| 2019 | 7.16 | 1.03    |
| Average | 3.16 | 3.49 |

### Table 6 Companies included in the SMInfra Financial Distress Model 18

| Stock | AKRA | EXCL | ISAT | JSMR | MEDC | PGAS | SMGR | TOWR | WSBP | WSKT |
|-------|------|------|------|------|------|------|------|------|------|------|
| 2014  | TW1  | -0.03| 0.01 | 0.16 | 0.36 | 0.15 | 1.11 | 1.61 | 1.13 | 1.35 |
|       | TW2  | 0.53 | 0.04 | 0.17 | 0.55 | 0.27 | 1.74 | 2.74 | 1.78 | 2.91 |
|       | TW3  | 0.64 | 0.09 | 0.24 | 0.63 | 0.08 | 1.57 | 3.50 | 1.51 | 3.55 |
|       | TW4  | 1.56 | 0.36 | 0.37 | 0.34 | -1.07| 0.23 | 3.55 | 2.35 | 1.08 |
| 2015  | TW1  | 0.30 | 0.11 | 4.39 | 0.52 | 0.53 | 1.36 | 0.76 | -0.05| 0.02 |
|       | TW2  | 0.57 | 0.12 | 5.00 | 0.70 | 0.24 | 1.51 | 1.72 | 1.08 | 0.24 |
|       | TW3  | 0.68 | 0.17 | 2.24 | 0.63 | -0.27| 0.84 | 2.19 | 1.40 | 0.29 |
|       | TW4  | 1.21 | 0.17 | 0.69 | 0.22 | 0.77 | 7.97 | 3.32 | 1.81 | 0.26 |
| 2016  | TW1  | 0.37 | 0.03 | 0.30 | 0.98 | 0.08 | 0.39 | 0.92 | 0.73 | 0.35 |
|       | TW2  | 0.77 | 0.03 | 0.63 | 1.10 | 0.64 | 0.07 | 1.06 | 1.09 | 5.09 |
|       | TW3  | 2.54 | 0.08 | 0.73 | 1.35 | 0.88 | 0.35 | 2.24 | 1.57 | 6.28 |
|       | TW4  | 5.50 | 0.13 | 0.5  | 0.64 | 0.81 | 1.89 | 0.99 | 1.79 | 0.72 |
| 2017  | TW1  | 1.12 | 0.04 | -0.20| 1.71 | 0.09 | 1.43 | 0.38 | 0.53 | 0.28 |
|       | TW2  | 1.35 | 0.07 | 0.27 | 1.81 | 0.22 | 1.31 | 0.67 | 0.66 | 0.31 |
|       | TW3  | 1.41 | 0.08 | -0.35| 0.39 | -0.24| 1.34 | 2.12 | 1.34 | 0.43 |
|       | TW4  | 1.84 | -0.17| -0.49| 2.91 | -0.17| 2.69 | 0.88 | 1.01 | 0.70 |
| 2018  | TW1  | 0.29 | 0.05 | 0.09 | 0.23 | 0.07 | 0.61 | 0.01 | 0.43 | 0.22 |
|       | TW2  | 0.40 | 0.07 | 0.27 | 8.98 | -0.11| 0.22 | 0.23 | 0.49 | 0.07 |
|       | TW3  | 0.43 | 0.08 | 0.16 | 6.02 | 0.31 | 0.37 | 0.39 | 0.83 | 0.24 |
|       | TW4  | 0.42 | 0.07 | 0.80 | 9.91 | 0.23 | 0.22 | 0.40 | 0.97 | 0.75 |

Analysis of financial distress factors using panel data regression approach. The analysis uses 5 independent variables and 1 dependent variable. The processing is carried out using panel data which is processed with Eviews 9 software using quarterly data from companies listed in the SMInfra18 index. The initial stage in testing the panel data regression is the search for the best model in factor analysis. The search for the best model is intended to find out which model is appropriate and in accordance with the rules of panel data regression analysis. The first test uses the chow test approach to compare common effect models with fixed effects. The predetermined condition is that the value of the chi square probability value is less than 0.05, so the fixed effect model is better. Another test to find out the best model is the Hausman test. The test is intended to determine the fixed effect or random
effect as the best model. The chow test output has a probability value below 0.05, this finding indicates that the fixed effect model is considered better than the common effect model. Hausman test is conducted to determine the best fixed model with random effects, the results provide information on probability values below 0.05 which indicates that the fixed model is better than the random effect model. The testing was carried out followed by the least square regression model with the output as shown in Table 7.

Table 7 Output Analysis of Financial Distress Factors

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 1.283416    | 0.365773   | 17.89139    | 0.0000|
| PROF     | 0.523461    | 0.014824   | 2.606589    | 0.0313|
| EFF      | 0.414713    | 0.824367   | 1.677284    | 0.4201|
| LEV      | -0.423113   | 0.543247   | -2.248142   | 0.0131|
| LIQ      | 0.123642    | 0.072234   | 1.805424    | 0.0741|
| ACT      | 0.263274    | 0.043541   | 2.002261    | 0.0129|

Table 7 provides information that there are several variables that have a significant effect on debt service coverage. The R-Squared value is 0.834 or 83.41 percent. This finding shows that the five independent variables used provide a pretty good picture and the remaining 16.59 percent of the variables in the model. The relationship between variables and other variables is said to be significant when the probability value is below 0.10 or an alpha error of 10 percent. The description and discussion of variables that have a significant effect are as follows:

Profitability or profitability has a positive (0.5233) and significant (0.031) effect on the condition of the debt service coverage ratio. This indicates that the higher the ROE value of a company, the higher the debt service coverage, or it is said to be further away from the risk of failure. A company has a high ROE value, it provides the ability to fulfill obligations and has an impact on increasing the value of investor confidence in the company. Return on Equity provides a description related to good company growth and information to stakeholders that the company is able to maintain its survival and is able to develop (Wonsosudono and Chrissa 2013). A high ROE ratio value indicates a high company growth and the company is in a healthy state and is not in a state of pressure (financial distress). Desiyanti et al (2019) explain that return on equity has a positive and significant effect on financial distress ratios. This finding is due to the large role income plays a major role in the ability to meet obligations. Moch et al (2019) explain that the profitability ratio plays a role in the security of the company to meet its obligations and get out of financial difficulties.
Leverage has a negative influence (-0.423) and significant (0.01) to the condition of the debt service coverage ratio. This indicates that the higher the DAR value of a company, the smaller the debt service coverage or it is said to increase the risk of failure. Debt assets ratio provides information related to the size of the company’s debt which is used as a source of funds to finance assets. The high value of leverage can have an impact on the higher financial burden that must be met, which Papda ultimately has an impact on the increased risk of company failure (Rida and Khafid 2014). Restianti and Agustina (2018) add that when a company has a large debt value, it will increasingly give investors the view that the company is increasingly at high risk.

Liquidity or liquidity has a positive effect (0.123) and significant (0.07) on the debt equity coverage ratio. This indicates that the higher the liquidity value of a company, the higher the debt service coverage, or it is said to be further away from the risk of failure. When a company has current assets that are higher than current liabilities, it can have an impact on the ability to meet all the needs and requirements for activities. Viana and Rodrigues (2016) explain that working capital plays a major role in the ability to meet the operational cycle and debt policy, the findings show that companies that have a large current asset value will have the ease to develop activities. Setianto and Pratiwi (2017) explain that working capital plays a major role in the ease with which companies meet their obligations.

Activity or activities have a positive influence (0.26) and significant (0.01) on the condition of the debt service coverage ratio. This indicates that the higher the TATO value of a company, the higher the debt service coverage, or it is said to be further away from the risk of failure. Basically, total asset turnover is useful for knowing the company’s ability to manage assets (cash, accounts receivable, inventory), where the sooner indicates good activity. Brigham and Houston (2012) explain that when a company has a fast turnover, it has an impact on increasing the prospects for a better company. The higher the total asset turnover, the more likely the company will make a profit.

Financial Distress Relationship with Stock Returns

Financial distress conditions of companies that are included in the SMinfra18 index from 2014 - 2019 with quarterly data changing every time. Chotimah and Wulansari (2018) explain that in regression testing it shows that financial distress has a significant effect on stock returns, this condition occurs when a financial distress coefficient value decreases, the stock return will decrease. Information related to financial distress will then become a reference for investors in making investment decisions and management to improve their image in order to maintain market value.

In this research, it is reviewed in general terms from index SMinfra18 through financial distress and stock returns. The comparison between financial distress and stock returns is expected to provide information on the actual condition. Financial distress analysis with stock returns is followed by examining the average spot conditions of financial distress and stock returns of each company that is included in the SMinfra18 index. These conditions are described in Table 8.

Table 8 Percentage of companies in the SMinfra18 index related to the relationship between financial distress and stock returns

| Company | Financial Distress | Stock returns | Definition |
|---------|--------------------|---------------|------------|
| AKRA    | 54.2 | 45.8 | 70.8 | 29.2 | Unidirectional |
| EXCL    | 50.0 | 50.0 | 100.0 | 0.0 | Unidirectional |
| INTP    | 33.3 | 66.7 | 0.0 | 100.0 | Unidirectional |
| ISAT    | 45.8 | 54.2 | 83.3 | 16.7 | Not in the same direction |
| JSMR    | 41.7 | 58.3 | 70.8 | 29.2 | Not in the same direction |
| MEDC    | 50.0 | 50.0 | 95.8 | 4.2 | It can't be concluded |
| PGAS    | 54.2 | 45.8 | 58.3 | 41.7 | Unidirectional |
| PTPP    | 50.0 | 50.0 | 41.7 | 58.3 | It can't be concluded |
| SMGR    | 58.3 | 41.7 | 41.7 | 58.3 | Not in the same direction |
| TLKM    | 29.2 | 70.8 | 0.0 | 100.0 | Unidirectional |
| TOWR    | 41.7 | 58.3 | 62.5 | 37.5 | Not in the same direction |
| UNTR    | 45.8 | 54.2 | 0.0 | 100.0 | Unidirectional |
| WIKA    | 45.8 | 54.2 | 50.0 | 50.0 | It can't be concluded |
Table 8 provides a description of the financial distress conditions and stock returns of each company. The findings show that there are 3 groups, namely 1) unidirectional (financial distress is not yet able to connect stock returns), and 2) groups that cannot be concluded. The findings in group 1 "are not in line, namely EXCL, ISAT, JSMR AND TOWR (infrastructure, utilities and transportation), WSKT (property, housing and building construction), SMGR (basic chemical industry) and AKRA (trade and investment services). Group 2 "unidirectional", namely INTP and WSBP (basic chemical industry), PGAS and TLKM (infrastructure, utilities and transportation) and UNTR (trade and investment services). Group 3 "cannot be concluded" namely MEDC (mining) and PTPP and WIKA (Property).

Group 1 shows that there are conditions that are not in the same direction that occurs in 7 companies. Devji and Suprabha (2016) explain that when a company experiences financial difficulties, there is a possibility that the stock price of the company will rise, this condition can be said to be a phenomenon. abnormal return. On the other hand, the conditions that occur in the seven companies indicate that there is a positive view from investors to maintain their shares.

Group 2 shows that there are conditions in the direction of the 5 companies. Widarwati and Sartika (2018) explain that a company is experiencing financial difficulties with a certain value This will be followed by a weakening in share prices and the attitude of investors to sell shares due to fears of a further decline in share prices. This condition negates that the decline in the company's performance, which is reflected in the financial difficulties of "liquidity", can give a signal to investors to sell shares, where in the secondary market when there is a stock release, the share price will decrease.

Group 3 shows that there are conditions that cannot be concluded, this is due to the absence of a definite description of the conditions of the two performance information. It is known that MEDC's share price in the first quarter of 2014 was recorded at Rp. 397 and in the fourth quarter of 2019 it was recorded at Rp. 386, where there was a decrease but not significant. The share price of PTPP in the first quarter of 2014 was recorded at Rp. 1,170 and in the fourth quarter of 2019 it was recorded at Rp. 585, where there was a significant decrease. WIKA's share price in the first quarter of 2014 was recorded at Rp. 830, where there was a significant decrease. Other information shows that PTPP and WIKA are companies with growth ratesales which was large due to government project support but still did not create favorable views from investors who were able to increase the share price.

Managerial Implications

In this study, several important research implications were obtained for various parties, including:

Investors

Investors who are interested in shares of companies that are included in the SMInfra18 index should look for and identify the performance of each company from all aspects (probability, activity, liquidity, solvency and efficiency). This is intended so that each investor knows exactly the condition of the company and avoids making decisions go astray. Investors also need to know the financial health condition based on the financial distress ratio "debt service coverage". This is intended to determine the level of security of the company. Company grouping can be used as additional information related to trends that occur based on sectoral factors in investing. The hope is that if all the information is used it will become a strong foundation in making accurate investment decisions.

Company

Companies that are included in the SMInfra18 index need to maintain their performance in a sustainable manner, this is intended to get good views from investors. Companies are required to be able to manage profitability ratios which are useful for proof of the success of all business activities carried out by the company. The management of activity ratios is an important thing that needs to be considered, where this is related to the effectiveness of activities in using and ownership of assets owned. The liquidity ratio needs to be maintained properly in a way that there are no mistakes in
borrowing short-term and long-term debt, so that the company is still able to cover it with its current assets. Companies can increase leverage as long as the increase is supported by sales and profit growth.

**Government**

The government needs to be aware that the SMinfra18 index becomes one of the indices that become a reference for infrastructure companies in Indonesia. The government needs to make a support by issuing regulations that make business and operational activities easier but still in responsible corridors (social and environmental ethics). This is expected to be a form of more advanced economic development in the future.

**Educational Institution**

Educational institutions can further explore the SMinfra18 index using different methods from this research, so that new literature can be produced that can be used by future researchers. In addition, educational institutions can use this research as a reference regarding financial distress in the infrastructure sector and its supports.

**CONCLUSIONS**

1. In this research, it is known that the SMinfra18 index can be grouped into two, namely based on sector and ownership. Sectoral grouping provides information including 1) the largest profitability ratio occurs in the basic chemical industry sector, 2) the highest liquidity ratio occurs in the basic chemical industry sector, 3) the highest activity ratio occurs in the basic chemical industry sector, 4) the highest efficiency ratio occurs in the financial sector, 5) the lowest leverage ratio occurs in the basic chemical industry sector. 6) the highest ratio of financial distress in the basic chemical industry sector. Ownership grouping provides information including 1) the largest profitability ratio occurs in BUMN, 2) the highest liquidity ratio occurs in BUMN companies, 3) the highest activity ratio occurs in private companies, 4) the highest efficiency ratio occurs in state-owned companies but does not have a significant difference with private companies, 5) the lowest leverage ratio occurs in private companies. 6) the highest financial distress ratio in private companies.

2. Factors that are considered to have a significant influence on the company's financial distress included in the SMinfra18 index include profitability "ROE", liquidity "working capital / total assets," sales / total assets "activity and leverage" total liabilities / total assets.

3. The relationship between financial distress and stock returns from companies that are included in the SMinfra18 index based on time view has a unidirectional correlation, where when there is financial distress in a company it is not followed by a decline in stock prices. The relationship between financial distress and stock returns when assessed based on the company, there are 3 groups, namely unidirectional, unidirectional and inconclusive.

**SUGGESTIONS**

1. Financial distress calculations are important things that companies and investors need to do. This becomes information about the health condition of the company, which later can be an alarm for the two stakeholders regarding any decisions taken in the future.

2. Companies still need to spread issues both to the public and investors in order to create a good image for the company, so that they hope to maintain the market value of the company and not be eroded even during difficult conditions.

3. Research can be continued by comparing financial distress conditions using other approaches (altman, springate, zmijewski) to determine a more comprehensive condition. In addition, studies related to stock returns can see the abnormal return.

**REFERENSI**

Altman, Edward I. 1993. Corporate Financial Distress and Bankruptcy. 2nd edition, New York: John Wiley & Sons. Antonia Garcia Berna

Brigham EF, Houston JF. 2012. Dasar-Dasar Manajemen Keuangan. Jakarta (ID) : Salemba Empat

Chotimah C. Wulansari. 2018. Determinants of stock return: a comparison of financial distress and non financial distress firms in manufacturing company listed of indonesia stock exchange. Media riset bisnis dan manajemen.18(2) : 52-63
Desiyanti O, Soedarmono W, Chandra K, Kusnadi. 2019. The Effect of Financial Ratios to Financial Distress Using Altman Z-Score Method in Real Estate Companies Listed in Indonesia Stock Exchange Period 2014 – 2018. Business and entrepreneurial review. 19(2): 119-136
Devji S, Suprabha KR. 2016. Corporate Financial Distress and Stock Return: Evidence from Indian Stock Market. Nitte management review. 10(1): 34-45
Moch R, Prihatni R, Buchdadi AD. 2019. The effect of liquidity, profitability and solvability to the financial distress of manucatured companies listed on the indonesia stock exchange (idx) period of year 2015-2017. Academy of Accounting and Financial Studies Journal. 23(6): 1-16
Outecheva, Natalia. 2007. Corporate Financial Distress: An Empirical Analysis of Distress Risk. University of St.Gallen Graduate School of Business Administration, Economics, Law and Social Sciences (HSG) to obtain the title of Doctor Oeconomiae
Platt HD, Platt MB. 2002. Predicting corporate financial distress: reflecting on choice-based sample bias. Journal of Economic and Finance. 26(2): 184-199
Pranowo K, Achsani NA, Manurung AH. Nuryanto N. 2010. Determinant of corporate financial distress in an emerging market economy : empirical evidence from the Indonesian Stock Exchange 2004-2008. International research Journal of Finance and Economics 1(52): 81-90
Restianti T, Agustina L. 2018. The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company. Accounting analysis journal. 7(1) : 25-33
Rida A, Khafid M. 2014. Analisis Pengaruh Leverage, Ukuran Perusahaan, Dan Voluntary Disclosure Terhadap Manipulasi Aktiva Riil. Accounting analysis journal 3(3): 273–281
Schmuck M. 2013. Financial Distress and Corporate Turnaround. Munchen (GEM): Springer
Setianto RH, Pratiwi A. 2017. Working Capital Management in Indonesia: An Analysis on Over-investment and Under-investment Firms. International journal of business. 21(1) : 21-33
Viana P, Rodrigues L. 2016. The determinants of Investment in Working Capital: The moderator effect of the probability of financial distress. Conference journal. 1(1) : 1-37
Widarwati E, Sartika D. 2018. Cost of financial distress and firm performance. Indonesian capital market review. 10(2018) : 105-114
Wongsosudono, Chrissa. 2013. Analisis rasio keuangan untuk memprediksi financial distress pada perusahaan sektor keuangan yang terdaftar di bei. Bina akuntansi – ibbi. 19(2) : 1-11