ANALYSIS OF THE EFFECT OF FINANCIAL RATIO AND GROWTH RATIO / GROWTH OPPORTUNITY AGAINST FINANCIAL DISTRESS (STUDY IN CURRENT AND LOGISTIC COMPANIES THAT HAS NOT BEEN LISTED IN THE IDX IN 2012-2017

Rico D. Candra[1]
Maranatha Christian University, Bandung, Indonesia

Sari Rahmawati[2]
Maranatha Christian University, Bandung, Indonesia

Firmansyah[3]
Maranatha Christian University, Bandung, Indonesia

Mathius Tandiontong, S.E., M.M., Ak., CA.
Maranatha Christian University, Bandung, Indonesia

Abstract

This study aims to find out and study the effect of simultaneous financial ratios and growth ratios on financial distress in Courier and Logistics Companies That Have Not Been Listed in 2012-2017. The companies that are the object of research are Logistics Sector Companies that have not been listed on the IDX in 2012-2017. The research method that will be used in this research is descriptive and verification method, because of the variables that will be examined the relationship and the purpose to present a structured, factual, and accurate description of the facts and the relationships between the variables studied. This type of research uses causal explanatory research. So what will be the population in this study are companies that have not gone public in the logistics sector that published their financial statements from 2012 to 2017, a number of 12 companies. In this study, the sampling technique used was the Nonprobability Sampling technique. Nonprobability Technique Sampling used in sampling in this research is Purposive Sampling technique. Based on the results of the study, it was found that Current Ratio, debt to equity ratio, Net profit margin, and growth ratio respectively had an influence on the Financial distress. Thus, Investors can make Current Ratio, debt to equity ratio, Net profit margin, and growth ratio as indicators to be able to assess the company's financial health.

Keywords : financial distress, current ratio, debt to equity ratio, net profit margin, growth ratio

I. Introduction

The rapid development of industry in Indonesia, and the existence of a large number of people, has led to rapid growth in the sector of the industrial support sector, namely the logistics sector (Maulana, 2017). The existence of a logistics company is very important if it is judged from the general functions of the logistics. Logistics service providers are the second component that connects business (factory) products to consumers or resellers. The existence of good logistics will make the distribution of products evenly distributed, which makes companies have to use or cooperate with logistics companies. This has become a second need for business people to develop their business.

The rapid development of logistics growth will be supported by the outsourcing of logistics handling from companies to third parties which are considered more operationally efficient. Compared to owning a network, companies can now entrust shipping services to third parties, which can improve company efficiency. This has led to greater interest in foreign investment in the logistics business, which has become increasingly heavy after the negative investment list (DNI) has been relaxed where foreign investors can now own up to 67% of shares. The development of e-commerce and infrastructure is also believed to be supporting the logistics business (Maulana, 2017). This is one of the things that drives logistical growth to be even greater in 2018.

Setijadi, Chairman of Supply Chain Indonesia revealed that other parameters of the general supply chain can be seen from the logistics aspect, namely time and cost efficiency. The efficiency of Indonesia's logistics costs is still low. For example, the average cost of transporting fish commodities from Ambon to Surabaya is Rp. 1,800 / kg, while from China to Surabaya, the average is only Rp. 700 / kg. The cost of sending beef to Jakarta from NTT is around Rp 3,000 / kg, while from Australia it is only around Rp 700 / kg (Lawi, 2017). This makes Indonesia's logistics competitiveness to be lower than other countries.

This resulted in many logistics companies that were supposed to reap profits from the potential of the logistics business which was on the verge of bankruptcy. This can be seen from the interview with Yukki Nugrahawan, the chairman of the Indonesian Logistics and Forwarder Association (ALFI), who revealed that logistics companies faced high logistical costs in Indonesia due to limited transportation infrastructure. The reason is that 15 percent of the 3,812 logistics service companies that are members of the association are in the category of suspended animation and have laid off many workers (Supriadi, 2015).

One example of a logistics company that has financial distress problems illustrates the importance of studying the Altmans Z indicator to indicate financial problems. PT. Pos Indonesia (Persero) is a company engaged in the field of freight forwarding. PT. Pos Indonesia (Persero) as one of the State-Owned Enterprises (BUMN) which has the duty to implement and support government program policies in the field of economics as well as development, in general providing postal services for all communities in Indonesia and outside the territory of Indonesia. PT. Pos Indonesia (Persero) also has a very important role in the delivery of goods or correspondence through shipping services.

PT. Pos Indonesia (Persero) is a company engaged in the field of freight forwarding. PT. Pos Indonesia (Persero) as one of the State-Owned Enterprises (BUMN) which has the duty to implement and support government program policies in the field of economics as well as development, in general providing postal services for all communities in Indonesia and outside the territory of Indonesia. PT. Pos Indonesia (Persero) also has a very important role in the delivery of goods or correspondence through shipping services.

The same problem is not only faced by PT. Indonesian post. Some companies also experience the same situation. Some companies even almost offered their first shares before they were canceled. Some companies that have faced a similar situation are PT TIKI Nugraha Ekakurir Line or JNE once targeted an initial public offering (IPO) in 2011 when Johari Zein served as managing director. At that time Johari targeted JNE to market on the exchange in 2015 by releasing 20% of its shares to the public. The target then retreated to 2016 (Rahman, 2017). That year, JNE even invited several strategic investors who were interested in buying JNE shares. However, until the top leadership changed to Mohamad Feriadi the plan did not materialize. JNE instead refocused on business expansion to islands outside Java such as Sumatra and Eastern Indonesia.

In addition to JNE, in 2013 PT Pandu Logistic had cooperated with foreign investors named the Soft Bank Islamic Fund (SBIF). SBIF lent a number of funds to Pandu Logistic. With these funds, Pandu Logistic will develop its business for approximately the next three years. At that time the Vice President of Area and Services of Pandu Logistic, Jimmi Kismiardhi said, the main target of the entry of these funds was to floor the bourse in 2015. But to this day the plan has never been realized (Rahman, in industri.bisnis.com, 2017).

Finally, the same case also happened to Post Logistics. The IPO plan for PT Pos Indonesia's subsidiary has emerged since 2012. However, the plan is often delayed because the subsidiary of PT Pos Indonesia must increase the company's capitalization. Until today the news has never been heard again. According to Zaroni, a senior consultant for Supply Chain Indonesia said that there was no logistics company, courier and postal IPO because they did not understand the procedures or procedures to obtain additional equity capital from the public (Rahman, in industri.bisnis.com, 2017). This was also supported by the still poor financial institutions owned by the company, which made the exchange regulator not allowing companies to conduct IPOs.

To assess the company's financial performance, it requires a relevant information related to the company's activities in a certain period of time to interested parties. Financial statements describe the financial condition and results of operations of a company at a certain time or period of time. The types of financial statements commonly known are: Balance Sheet or Profit / Loss Report, or business results, Cash Flow Reports, Changes in financial position reports or capital change reports.

Financial statements are prepared with the aim of providing information concerning financial position, performance and changes in the financial position of a company that is beneficial to a large number of users in economic decision making. In general, financial statements aim to provide financial information for a company, both at certain times and at certain periods. Financial statements can also be arranged suddenly according to the needs of the company and periodically. Clearly, financial statements are able to provide financial information to parties inside and outside the company that have an interest in the company.

Financial distress can be experienced by all companies, especially if the economic conditions in the country where the company operates experience an economic crisis. To overcome or minimize the occurrence of bankruptcy in the company, management must supervise the financial condition of the company by using financial statement analysis (Ramadhani and Lukviamman, 2009).

Based on the results of previous studies conducted, for example, the research entitled "The Effect of Multiple Financial Ratios on Predictions on the Condition of Financial Distress (Study on Textile and Garment Companies Listed on the Indonesia Stock Exchange Period 2008-2011) conducted by Atika, Darminto, and Siti Ragil Handayani, found that financial ratios that have an influence to predict financial distress conditions are Current ratios negatively affect financial distress with beta values of -8,939. Debt ratio has a positive effect on financial distress with a beta value of 5,305, while the current ratio has a negative effect on financial distress with a beta value of -8,389. The difference with this study, is that previous studies used logistic regression techniques.

Meanwhile, in a study conducted by Ruslinawati, Hilda Ayu Devi (2017) Effect of financial ratios on financial distress in manufacturing companies listed on the IDX 2011-2015, it was found that the test results were partial (t test), only the Current Ratio variable which had a positive effect and significant to Financial distress because if the greater the ratio of current assets to current liabilities, the higher the company's ability to cover short-term liabilities. Cash Ratio, Debt to Equity Ratio (DER) and Sales Growth have no effect on Financial Distress. Because there are some companies that are unable to pay short-term liabilities and cannot sell company products on a large scale, causing companies to suffer losses. While based on simultaneous test results (F test), the four independent variables namely Current Ratio, Debt to Equity Ratio, Cash Ratio, and Sales Growth together have a significant effect on the dependent variable, Financial Distress. The difference with this study is the difference in the company used and the financial distress ratio used.

Various facts obtained by this, make researchers have an interest in making research with the title **"Analysis of the Effect of Financial Ratio and Growth Ratio / Growth Opportunity to Financial Distress (Study on Courier and Logistics Companies That Have Not Been Listed in 2012-2017"**

II. Research Methodology

This type of research uses causal explanatory research. Causal is a variable affecting other variables (Cooper & Schindler, 2011). According to Suliyanto (2009) causal research is research that aims to determine the influence between variables. While explanatory research is research that tries to explain the existing phenomena (Hartono, 2013).

Then this causal explanatory study aims to explain the relationship between variables and testing hypotheses that have been formulated previously and aims to explain various events and phenomena of research, then analyze variables and see relationships between variables.

The object of research is the object that is researched and analyzed. In this study, the scope of the research object determined by the author in accordance with the problems to be examined is the solvency ratio, profitability ratio, and market ratio to stock returns. The companies that are the object of research are Logistics Sector Companies that have not been listed on the IDX in 2012-2017.

Population is the whole elements that have one or more of the same characteristics or characteristics. Now (2006: 121) adds that population refers to the whole group of people, events, or things of interest that the researcher wants to investigate. In accordance with the research that will be examined, namely the influence of financial ratios, namely Solvency, Profitability, and Market, and Growth Ratio on financial distress as measured by Altman's Z. So what will be the population in this study are companies that have not gone public in logistics who published their financial statements from 2012 to 2017, a total of 12 companies.

In this study, the sampling technique used was the Nonprobability Sampling technique. Nonprobability Sampling technique used in sampling in this study is Purposive Sampling technique. The reason for selecting samples using purposive sampling is because not all samples have criteria according to what the author has determined, therefore the authors chose purposive sampling technique. Sampling is done by setting certain considerations or criteria that must be met by the samples used in this study.

The criteria used to select samples are as follows:

a. Logistics companies that have not been listed on the Indonesia Stock Exchange for five consecutive years from 2012 to 2017.
b. Logistics companies that issue annual financial reports for the period 2012 to 2017 respectively.
c. Having financial report data and information related and needed in this study.
d. Currency values presented in financial statements in units of rupiah.

Based on these criteria, researchers found a number of 9 companies that met all the criteria as follows:

1. PT Tiki Jalur Nugraha Ekakurir (JNE)
2. PT Pos Indonesia
3. SAP Express
4. Samudera Indonesia Tangguh
5. ASSA RENT
6. PT Adi Sarana Armada
7. PT. KALOG (Kereta Api Logistic)
8. Pos Logistic
9. Pandu Logistic

From the company, researchers tried to collect data for a number of 6 years, namely financial statements from 2012-2017.

III. Research Result

Testing Hypotheses are carried out individually or partially to see each of the causal variables for the resulting variable. The criteria for acceptance or rejection of the null hypothesis (Ho) used are as follows:

- With the level of significance used at 0.05. If the p-value is smaller than 0.05 then Ha is accepted and Ho is rejected,
- conversely if p-value is greater than 0.05 then Ha is rejected and Ho is accepted.

If Ho is accepted, then this means that the influence of the independent variables partially on the dependent variable is considered not significant and vice versa if Ho is rejected, then this means that the influence of partially independent variables on the dependent variable is significantly affected.

H1 Hypothesis Test: there is a negative influence between Current Ratio on Financial Distress
For the working hypothesis of the researcher, then with a confidence level of 95%, the researcher can reduce the statistical hypothesis as follows:

- H01: Current Ratio has no effect on Financial distress
- Ha1: Current Ratio has a negative influence on Financial distress

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.317	.130		17.783	.000
	Current Ratio	-.033	.015	-.290	-2.187	.033

a. Dependent Variable: *Financial distress*

Based on the table above, the p-value is 0.33, which means that the p-value is smaller than 0.05, Ha is accepted and Ho is rejected, which means that the Current Ratio has a negative influence on the Financial distress.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.290[a]	.084	.067	.81265

a. Predictors: (Constant), Current Ratio
b. Dependent Variable: *Financial distress*

Based on the table above, the contribution coefficient value is 0.084, which means that the effect of Current Ratio on Financial Distress is 8.4%, while the remaining 91.6% is influenced by other factors that are not measured.

<u>Hypothesis Test H2: There is a positive influence between the debt to equity ratio to Financial distress</u>
For the working hypothesis of the researcher, then with a confidence level of 95%, the researcher can reduce the statistical hypothesis as follows

• H01: debt to equity ratio has no effect on financial distress
• Ha1: debt to equity ratio has a negative influence on financial distress

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.859	.198		14.469	.000
	Debt to Equity Ratio	-.016	.004	-.492	-4.070	.000

a. Dependent Variable: *Financial distress*

Based on the table above, the p-value is 0.000, which means that the p-value is smaller than 0.05, Ha is accepted and Ho is rejected, which means that the debt to equity ratio has a negative influence on the Financial distress.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.492[a]	.242	.227	.73953

a. Predictors: (Constant), Debt to Equity Ratio
b. Dependent Variable: *Financial distress*

Based on the table above, the contribution coefficient value is 0.242, which means that the effect of Current Ratio on Financial Distress is 24.2%, while the remaining 75.8% is influenced by other factors not measured.

<u>H3 Hypothesis Test: there is a negative influence between net profit margin on Financial distress</u>

For the working hypothesis of the researcher, then with a confidence level of 95%, the researcher can reduce the statistical hypothesis as follows:

• H01: Net profit margin has no effect on Financial distress
• Ha1: Net profit margin has a negative influence on financial distress

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.834	.134		21.142	.000
	Net Profit Margin	-.019	.003	-.669	-6.486	.000

a. Dependent Variable: *Financial distress*

Based on the table above, the value of p-value is 0.000, which means that the p-value is smaller than 0.05, Ha is accepted and Ho is rejected, which means that Net profit margin has a negative influence on Financial distress.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.669[a]	.447	.437	.63140

a. Predictors: (Constant), Net Profit Margin
b. Dependent Variable: *Financial distress*

Based on the table above, the contribution coefficient value is 0.447, which means that the effect of Net profit margin on financial distress is 44.7%, while the remaining 55.3% is influenced by other factors that are not measured.

<u>H4 Hypothesis Test: there is a positive influence between growth ratio on Financial Distress</u>
For the working hypothesis of the researcher, then with a confidence level of 95%, the researcher can reduce the statistical hypothesis as follows:

• H01: growth ratio has no effect on Financial distress
• Ha1: growth ratio has a negative influence on financial distress

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.346	.232		14.424	.000
	Price to Earning Ratio	-.060	.011	-.609	-5.534	.000

a. Dependent Variable: *Financial distress*

Based on the table above, the p-value is 0.000, which means that the p-value is smaller than 0.05, Ha is accepted and Ho is rejected, which means that the growth ratio has a negative influence on the Financial distress.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609[a]	.371	.359	.67370

a. Predictors: (Constant), Price to Earning Ratio
b. Dependent Variable: *Financial distress*

Based on the table above, the contribution coefficient value is 0.371, which means that the effect of Growth Ratio on Financial Distress is 31.7%, while the remaining 68.3% is influenced by other factors that are not measured.

IV. Conclusions And Recommendations

Based on the processing of data included in the previous section, the researcher can draw conclusions as follows;

1. Ha is accepted and Ho is rejected, which means that Current Ratio has a negative influence on Financial distress, where the value of the coefficient of contribution is 0.084, which means that the influence of Current Ratio on Financial Distress is 8.4
2. Ha is accepted and Ho is rejected, which means that the debt to equity ratio has a negative influence on financial distress, where the value of the coefficient of contribution is 0.084, which means that the effect of Current Ratio on Financial distress is 24.2%.
3. Ha is accepted and Ho is rejected, which means that Net profit margin has a negative influence on Financial distress, where the value of the coefficient of contribution is 0.084, which means that the effect of Net profit margin on Financial distress is 44.7%.
4. Ha is accepted and Ho is rejected, which means that the growth ratio has a negative influence on the Financial distress, where the value of the coefficient of contribution is 0.084, which means that the effect of the Growth Ratio on Financial Distress is 31.7%.

Theoretical advice

1. To the next researcher, to be able to conduct similar research in other sectors and sub-sectors of the Stock Exchange, so that the research results can be generalized to a larger number of samples
2. Using samples that have carried out listing activities on the IDX to facilitate obtaining annual financial reports
3. Using samples in larger amounts of data

Practical Advice

To Investors, to be able to make Current Ratio, debt to equity ratio, Net profit margin, and growth ratio as indicators to be able to assess the company's financial health. It was found that there were negative effects from these indicators on financial distress that could potentially be experienced by companies.

References

Afriyeni, Endang. 2012. “Model Prediksi Financial Distress Perusahaan”. Polibisnis. Vol. 4, No. 2, ISSN: 1858–3717. Hlm. 1-10.

Almilia, L. S. dan Kristijadi. 2003. Analisis Rasio Keuangan untuk Memprediksi Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta. JAAI. Volume 7, No. 2, 183-210.

Almilia, L. S., & Kristijadi, E. (2003). Analisis Rasio Keuangan Untuk Memprediksi Kondisi Financial Distress Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Jakarta. Jurnal Akuntansi & Auditing Indonesia, 7(2), 1–27.

Almilia, Luciana dan Kristijadi, 2003. Analisis Rasio Keuangan untuk Memprediksi Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta.Jurnal Akuntansi dan Auditing Indonesia (JAAI), Volume 7 Nomor 2.

Anonim, Indeks Logistik Indonesia Tahun 2016 Turun.http://beritatrans.com/2016/06/29/indeks-logistik-indonesia-tahun-2016-turun/, diakses pada 21 Agustus 2018

Ardiyanto, Feri Dwi. 2011. Prediksi Rasio Keuangan Terhadap Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di BEI. Skripsi dipublikasikan, Semarang: Fakultas Ekonomi Universitas Diponegoro.

Atmini dan Arini, M. N. (2014). Prediction of financial distress companies in the trading and services sector in Malaysia using macroeconomic variables.Procedia-Social and Behavioral Sciences, 129, 90–98.

Atmini, Sari dan Wuryana. 2005. “Manfaat Laba dan Arus Kas untuk Memprediksi Kondisi Financial Distress pada Perusahaan Textile Mill Products dan Apparel and Other Textile Products terdaftar di Bursa Efek Jakarta. Simposium Nasional Akuntansi VIII, Solo, hal. 460-474.

Ayu Suci Ramadhani dan Niki Lukviarman, 2009. Perbandingan analisis Prediksi Kebangkrutan Menggunakan Model Altman Pertama, Altman Revisi, Dan Altman Modifikasi Dengan Ukuran Dan Umur Perusahaan Sebagai Variabel Penjelas (Studi Pada Perusahaan Manufaktur yang Terdaftar Di Bursa Efek Indonesia). Jurnal Siasat Bisnis Vol.13 No.1.(15-28)

Beaver, H. William, and Ellen E. Engel. 2011. Discretionary Behavior with Respect to Allowances for Loan Losses and the Behavior of Security Prices. Journal of Accounting & Economics Volume 22.Agustus-Desember: 177-206.

Budiwati, Arie Dwi. 2013. Dahlan "Sentil" Kegagalan IPO Pos Indonesia.https://www.viva.co.id/berita/bisnis/386697-dahlan-sentil-kegagalan-ipo-pos-indonesia.

Endang Afriyeni. 2012, Pengaruh Kinerja Keuangan dan Sensitivitas Perusahaan terhadap Faktor-Faktor Ekonomi Makro dalam Memprediksi Kondisi Financial Distress pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia, Prosiding Seminar Nasional Manajemen Bisnis di Indonesia, Fakultas Ekonomi Universitas Negeri Padang

Fahmi, Irham. 2013. Analisis Laporan Keuangan. Bandung: Alfabeta.

Febriani. 2013. Prediksi Kebangkrutan dengan Model Grover, Altman Z-Score, Springate, dan Zmijewski pada Perusahaan Food and Beverage di Bursa Efek Indonesia. EJurnal Akuntansi Universitas Udayana, Vol.5, No.2:417-435.

Firda Mastuti, Muhammad Saifi, Devi Farah Azizah .2013.Altman Z-Score Sebagai Salah Satu Metode Dalam Menganalisis Estimasi Kebangkrutan Perusahaan (Studi Pada Perusahaan Plastik dan Kemasan yang Terdaftar (Listing) di Bursa Efek Indonesia periode tahun 2010 sampai dengan 2012)

Ghozali, Imam. 2013. Aplikasi Analisis Multivariate dengan Program SPSS. Edisi Ketujuh. Semarang : Badan Penerbit Universitas

Hanafi, Mamduh M dan Abdul Halim, 2007, Analisis Laporan Keuangan, Edisi Ketiga, Yogyakarta :STIE YKPN. Hanafi,

Hanafi, Mamduh M dan Abdul Halim, 2007, Analisis Laporan Keuangan, Edisi. Ketiga, Yogyakarta : STIE

Hanafi, Mamduh M, 2012, Manajemen Keuangan, Edisi Pertama. Cetakan ke-5, Jakarta: BPFE.

Harahap Sofyan Syafri (2009), Analisis Kritis atas Laporan Keuangan Edisi Ke satu. Jakarta: PT. Raja Grafindo Persada

Harahap, Sofyan Syafri, 2013, Analisis Kritis Atas Laporan Keuangan, Jakarta: PT. RajaGrafindo Persada.

Harahap, Sofyan Syafri. 2008. Analisis Kritis Atas Laporan Keuangan. Raja. Grafindo Persada, Jakarta.

Ikatan Akuntansi Indonesia, 2009, Standar Akuntansi Keuangan, PSAK No. 1 : Penyajian Laporan keuangan. Jakarta : Salemba Empat

Indrawati, Sri. 2010. Analisis Laporan Keuangan. Edisi Revisi. Malang: STIE Malangkucecwara.

Indri Hapsari,Evanny . 2012. Kekuatan Rasio Keuangan dalam Memprediksi Kondisi Financial Distress Perusahaan Manufaktur di BEI. Jurnal Dinamika Manajemen (JDM) Vol. 3, No.2 PP : 101-109

Jogiyanto. (2010). Metodologi Penelitian Bisnis: Salah Kaprah dan Pengalaman-Pengalaman, cetakan ketiga, BPFE, Yogyakarta.

Jumingan. (2006). Analisis Laporan Keuangan, Cetakan Pertama. Jakarta: Bumi Aksara.

Kasmir. (2012), Analisis Laporan Keuangan. Jakarta : PT. Raja Grafindo Persada.

Kasmir. 2009. Analisis Laporan Keuangan. Raja Grafindo Persada, Jakarta.

Kustini, D dan Ekawati. 2006. Analisis Perataan Laba dan Faktor-Faktor yang mempengaruhi. Jurnal Riset Akuntansi dan Keuangan, Vol 2, No. 1, Februari, hal: 53-56.

Lawi, Gloria Fransisca Katharina.2016.BIAYA LOGISTIK: Kirim Daging NTT ke Jakarta Rp 3.000/Kg, Dari Australia Hanya Rp 700/Kg. http://industri.bisnis.com/read/20160119/98/510875/biaya-logistik-kirim-daging-ntt-ke-jakarta-rp-3.000kg-dari-australia-hanya-rp-700kg

Luciana, Spica Almilia dan Emanuel Krisijadi. 2003. Analisis Rsio Keuangan untuk Memprediksi Kondisi Financial Distress pada Perusahaan Manufaktur yang Terdaftar di BEJ. Jurnal Akuntansi dan Auditing

Mamduh M dan Abdul Halim, 2009, Analisis Laporan Keuangan, Edisi Keempat, Yogyakarta : STIE YKPN.

Maulana, Rivki .2017. "Bisnis Logistik Diestimasi Tumbuh 10% Pada 2018" https://industri.bisnis.com/read/20171107/98/706742/bisnis-logistik-diestimasi-tumbuh-10-pada-2018

Maulana, Rivki.2017. Bisnis Logistik Diestimasi Tumbuh 10% Pada 2018. http://industri.bisnis.com/read/20171107/98/706742/bisnis-logistik-diestimasi-tumbuh-10-pada-2018 diakses pada 12 Juli 2018

Maulana, Rivki.2017."Transportasi & Pergudangan Melaju Kencang" http://industri.bisnis.com/read/20171106/98/706568/transportasi-pergudangan-melaju-kencang. Juni 2017, diakses pada 12 Juli 2018

Munawir. 2007. Analisis Laporan Keuangan. Yogyakarta : Edisi Empat,. Liberty.

Peter & Yoseph. 2011. Analisis Kebangkrutan dengan Metode Z-Score Altman Springate dan Zmijewski pada PT. Indofood Sukses Makmur Tbk Periode 2005 2009. Akurat Jurnal Ilmiah Akuntansi, No.04 Januari-April, Tahun ke- 2.

Prakoso,2018.Keuntungan Rendah, PT Pos Indonesia Terancam Gulung Tikar?.http://news.solopos.com/read/20180418/496/911242/keuntungan-rendah-pt-pos-indonesia-terancam-gulung-tikar. news.solopos.com, 2018

Prastowo, Dwi dan Rifka Julianti. 2005. Analisis Laporan Keuangan. Konsep dan. Aplikasi. Edisi Kedua. UPP AMP YKPN, Yogyakarta.

Rahman, Abdul.2017.Fokus Pembenahan Internal, JNE Tunda IPO. http://industri.bisnis.com/read/20170406/98/643311/fokus-pembenahan-internal-jne-tunda-ipo

S. Munawir,2007,Analisa Laporan Keuangan. Liberty, Yogyakarta.

Sari Atmini, Wuryan. 2005. Manfaat Laba dan Arus Kas untuk Memprediksi Kondisi Financial Distress pada Perusahaan Textile Mill Products dan Apparel and Other Textille Products yang Terdapat di Bursa Efek Jakarta, Simposium Nasional Akuntansi VIII. Ikatan Akuntan Indonesia.

Sari, Sri Mas.2018.http://industri.bisnis.com/read/20180817/98/829010/hut-kemerdekaan-ri-dirut-pelindo-ii-konektivitas-jadi-pemersatu-bangsa, diakses pada 21 Agustus 2018

Sartono, Agus. 2008. Manajemen Keuangan Teori dan Aplikasi. Penerbit BPFE: Yogyakarta.

Setijadi.2016.LPI 2016, Indonesia Turun ke Peringkat 63.http://supplychainindonesia.com/new/lpi-2016-indonesia-turun-ke-peringkat-63/

Subramanyam dan John J. Wild. 2012. Analisis Laporan Keuangan. Jakarta: Salemba Empat

Sugiyono. (2010). Metode Penelitian Pendidikan, Alfabeta, Bandung.

Sunjoyo, dkk. (2013). Aplikasi SPSS untuk Smart Riset (program IBM SPSS 21.00), Alfabeta, Bandung.

Supriadi,Agust.2015.Perusahaan Jasa Angkut Bangkrut Akibat Biaya Logistik Tinggi.https://www.cnnindonesia.com/ekonomi/20150928163346-92-81414/perusahaan-jasa-angkut-bangkrut-akibat-biaya-logistik-tinggi

Tya Restianti and Linda Agustina.2018.The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company

Yadiati, W. (2017). The Influence Of Profitability On Financial Distress : A Research On Agricultural Companies Listed In Indonesia Stock Exchange. International Journal Of Scientific & Technology Research Volume, 6(11), 233–237.

Yanda.2018.Dilema Bisnis Logistik: Pengiriman Meningkat Tapi Tak Untung Besar, di Mana Letak Salahnya? http://www.tribunnews.com/bisnis/2018/02/27/dilema-bisnis-logistik-pengiriman-meningkat-tapi-tak-untung-besar-di-mana-letak-salahnya, diakses pada 21 Agustus 2018

Yoseph, 2011. Analisis Kebangkrutan dengan Metode Z-Score Altman, Springate dan Zmijewski pada PT. Indofood Sukses Makmur, Tbk Periode 2005-2009. Akurat Jurnal Ilmiah Akuntansi, No. 4