Determining Factors of Financial Distress in Retail Companies (Listed on Indonesia Stock Exchange 2016-2020)

Ade Supriadi
Anin Diadeci
Muhammad Rafli Dwisatria
Nada Zahra
Sarah Fauziah
Andina Nur Fathonah

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Ade Supriadi, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: supriadi.ade@widyatama.ac.id

Anin Diadeci, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: anin.diadeci@widyatama.ac.id

Muhammad Rafli Dwisatria, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: rafli.dwisatria@widyatama.ac.id

Nada Zahra, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: nada.zahra@widyatama.ac.id

Sarah Fauziah, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: sarah.fauziah@widyatama.ac.id

Andina Nur Fathonah, *Faculty of Economics and Business, Widyatama University, Bandung, Indonesia*
Email: andina.fathonah@widyatama.ac.id

ABSTRACT

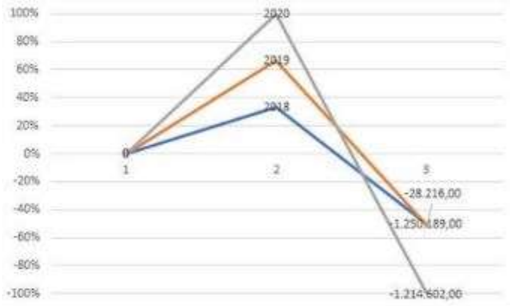
The retail sector has a great role to the national economy, where the retail sector is able to absorb a large workforce and contribute greatly to national economic growth. This study aims to discover the factors that affect financial distress in retail subsector (retail trading) listed on Indonesia Stock Exchange. This study is a qualitative with secondary data sources obtained from the official website of each company and from the Indonesia Stock Exchange while the method for sampling determination is purposive sampling with a population of 20 companies during 2016-2020. Statistical methods used to answer the formulation of the problem using logistic regression. Financial ratios, sales growth and cash flow operating activities are used as proxy in predicting distress condition. It is proposed the formulation of the problem to discover *the factors that affect financial distress. From the result of data collected and tested showed that variable liquidity ratio, profitability ratio, activity ratio had an effect, while the leverage ratio, sales growth, and operational cash flow had no effect on financial distress*

Keywords: Financial Distress, activity ratio, liquidity ratio, profitability ratio, logistic regression

INTRODUCTION

The retail has a great role to the national economy, where the retail sector is able to absorb a large amount of workforce and contribute greatly to national economic growth, according to the trade minister Agus Suparmanto in 2020 the retail sector contributes 12.83% to the total Gross Domestic Product (GDP) and contributes to the national consumption by 57.31%. The definition of retail is simply the activity of selling goods or services to consumers for the purpose of profit, retail business includes travelling sellers to department stores, the scope of retail business includes all activities involving the sale of goods or services directly to the final consumers for personal use and not for business interest, the retail industry does not only sell products in store either offline, or online, but also involves services such as e-commerce payment service, electricity bill, train tickets and other additional services that are able to added value to goods and services that will be consumed by the final consumer. The phenomenon in 2018 about the number of large retail companies who closed their offline outlets such as Hero (PT Hero Supermarket Tbk) further strengthened indications of financial distress that was happening in Indonesian retail industry, the covid-19 pandemic that hit Indonesia and the rest of the world also contributed to the financial performance of the retail sector, especially because of the government regulations that closed some of the retail outlets led a dropped in retail sector revenues.

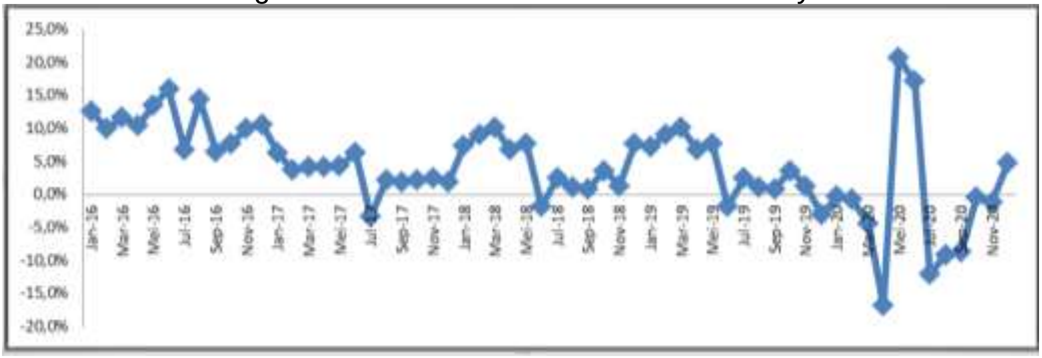
Figure 1 Net Profit of PT Hero Supermarket



Source: http://www.hero.co.id

Data from the association of the Indonesia Retail Administrators (Aprindo) said that until the end of 2020 there were 1200 stores or an average of 4-5 retail stores closed per day, retail store revenue in food segment also decreased on average of 60%. However, small-scale retail can actually record revenue growth, although not significant as experienced by PT Sumber Alfaria Trijaya Tbk. From the data of the Bank Indonesia Retail Sales Survey in 2016 to 2020 the performance of the national retail Industry shows a trend that is varied but tends to fall especially in the period of the end of 2019 and 2020, this shows indications of financial distress in retail companies in Indonesia.

Figure 2 Bank Indonesia Retail Sales Survey Data



Source : http://www.bi.go.id

FORMULATION OF PROBLEMS

In this study, the objects selected were public companies of retail subsector (retail trading) listed on the Indonesia Stock Exchange and the financial ratio, sales growth and cash flow of operating activities were used as proxy in predicting financial distress conditions. The formulation of the problems that will be studied in this study is as follows: how is the financial health condition of retail subsector companies listed on the IDX? How does the condition of financial health relate to the status of the company based on the integral process of financial distress? What are the financial factors that affect the condition of financial distress in retail subsector companies listed on the IDX?

PURPOSE AND BENEFITS

Based on the background description and formulation of problems, the objectives to be studied in this study are as follows: to reveal how the effect of liquidity ratio to financial distress conditions on the retail industry listed on IDX, to reveal how the profitability ratio to financial distress conditions on the retail industry listed on IDX, to reveal how the effect of the ratio of leverage to financial distress conditions on the retail industry registered with IDX, to reveal how the ratio of activity to financial distress conditions on the retail industry listed on IDX, to reveal how the effect of sales growth on financial distress conditions on the retail industry listed on IDX and to reveal how the effect of cash flow from operating activities on financial distress conditions in the retail industry listed on IDX. Some of the benefits that can be obtained from this research are as follows: for investors, this research can be used as additional information in looking at the potential bankruptcy of retail sector companies so that it becomes a consideration of investment decision making in the capital market, while for this research company can be used as an identification process regarding financial factors that affect financial distress, thus providing input to management. In taking policies based on the company's financial condition, and the results of this study can be used as a reference for further research.

HYPOTHESIS

H1: Liquidity affects the prediction of financial distress conditions
H2: Profitability affects the prediction of financial distress conditions
H3: Leverage affects the prediction of financial distress conditions
H4: Activity affects the prediction of financial distress conditions
H5: Sales Growth affects the prediction of financial distress conditions
H6: Operating cash flow affects the prediction of financial distress conditions

RESEARCH METHODS

This is a qualitative study with a population of 20 retail companies registered on IDX for period 2016-2020, while the selection of samples of this study uses purposive sampling method, makes all the members of the population as a sample of research, the number of this study samples are 20 companies x 5 years of their financial data = 100 data. The data used is a secondary data, in the form of retail company financial statements in 2016, 2017, 2018, 2019 and 2020 obtained from the official website of each company and http//www.sahamok.com, while the reason for using secondary data is to consider the ease of obtaining the data, and to test these hypotheses, the logistic regression equation model is used, by testing whether liquidity ratio variables, Profitability, Leverage, Activity, Sales Growth and Operating Cash Flow affect Financial distress. The analysis model is as follows:

$$Y = + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6 + e \quad (1)$$

Information:
Y: Financial distress
: constant
β1X1: Liquidity Ratio
β2X2: Profitability Ratio
β3X3: Leverage Ratio
β4X4: Activity Ratio
β5X5: Sales Growth
β6X6: Operating Cash Flow
e : error

$$Zi = 1.2\,X1 + 1.4\,X2 + 3.3\,X3 + 0.6\,X4 + 1.0\,X5 \quad (2)$$

Information:
X1 = (Current Assets - Current Debt)/Total Assets
X2 = Retained Earnings/Total Assets
X3 = Earnings Before Interest and Taxes/Total Assets
X4 = Common Market Value and Preferred Share/Book Value of Total Debt
X5 = Sales/Total Assets

Variable Operationalization

a. Financial Distress (Y)

Financial Distress uses dummy variables with a nominal size of one (1), if the company experiences it and zero (0) if the company does not experience it [1]. Financial distress is measured using the Altman Z-score method. Because the most common bankruptcy capital used in detecting bankruptcy of a company is the Altman Z-score[1]. Altman's reported cut-off point is if the average score of Z between 1.81-2.99 can be called a vulnerable area, and Z scores below 1.88 can be called experiencing financial distress.

b. Liquidity (X1)

Liquidity is measured by a current ratio that compares the amount of current assets with the amount of current debt. The current ratio provides an important indication of the company's ability to meet its obligations or short-term debt. If the current debt exceeds its current assets it means the company is unable to pay its debt [2]. The formula is:

$$\text{Current Ratio} = \text{Current assets} / \text{Current Liabilities} \quad (3)$$

c. Return on Asset (ROA) (X2)

Return on Asset reflects how much the company has gained on all the financial resources invested in the company. Return on Asset ratio are often used by top management to evaluate business units within companies whose multidivisional [2], the formula is:

$$\text{ROA} = \text{Net Income} / \text{Total Assets} \tag{4}$$

d. Leverage (X3)

Leverage is used to measure the balance of spending sources of capital obligations alone, measurement of the role and influence of outside capital [2], the formula is:

$$\text{Debt Ratio} = \text{Total Liabilities} / \text{Total Assets} \tag{5}$$

e. Activity (X4)

Measuring the efficiency of the use of property that has been invested in the company, measuring the level of effectiveness of the use of sources of funds by the company [3]. This ratio indicates the total turnover of activity measured from sales volume in other words how far the ability of all activities creates sales. The higher this ratio the better [3], the formula is:

$$\text{Total Asset Turnover} = \text{Sales} / \text{Total assets} \tag{6}$$

f. Sales Growth (X5)

This ratio describes the presentation of the growth of the company's posts from year to year [4], the formula is:

$$\text{Sales Growth Rate} = (\text{Current Period Sales} - \text{Prior Period Sales}) / \text{Prior Period Sales} \tag{7}$$

g. **Operating Cash Flow (X6)**

The amount of cash flow used in this ratio is equal to that used in the ratio of operating cash flow / current liabilities of term and current notes payable. To be more conservative, the amount of debt used in the ratio is all debt that is likely to be presented on a balance sheet as used in the debt / equity ratio. The formula is:

$$\text{OCF} = \text{Operating Cash Flow} / \text{Total Liabilities} \tag{8}$$

LITERATURE REVIEW

Maintaining the company's financial health condition is the responsibility of management for the benefit of all stakeholders both in the internal and external parties such as investors, creditors and other parties, therefore must synergize with each other in order for the company's financial condition can be controlled in to avoid financial distress, which is a condition where the company experiences financial problems that result in bankruptcy[1, 4, 5]defines financial distress as a stage of downturn in financial performance before heading to bankruptcy or liquidation. The characteristics of these conditions are usually with delays in delivery, the quality of the product decreases, delaying the payment of bills to creditors and if the condition can be known early then the company can avoid liquidation or bankruptcy.

[1]financial distress is a condition where the company experiences negative net operating income for more than three consecutive years, more than one year does not make dividend payments, labor stops and even eliminate dividend payments. [1, 6] financial distress is the condition of the company experiencing net income and consecutive negative equity book value and the company has been merged, a company is considered to experience it if one of the following events occurs: negative net operating profit for several years, termination of dividend payments, financial restructuring and mass layoffs. It can be concluded that financial distress can be interpreted as a condition where the company is unable to pay financial obligations at maturity that cause the threat of bankruptcy for the company[6-8].

There are several indicators to know the signs of financial concern seen from the company's internal parties, namely: Decreased sales volume due to management's inability to implement policies and strategies. Company's ability to make profit got weaken. Relying too much on debt. Conversely, some indicators to know the signs of financial difficulties seen from external parties are: a decrease in the number of dividends distributed to shareholders for several consecutive periods, a continuous decrease in profits in the company experiencing losses, closing or selling one or more business units, massive dismissal of employees and prices in the market began to decrease continuously. The impact of financial distress not only worsens the company's financial condition, but also has other impacts such as poor assessment of the company's management performance, the number of important employees who decide to stop working because there will be a possible decrease in salary/wages, suppliers refuse to provide credit and creditors do not want to provide loans[2-4].

RESULT

Table 1

Variable in the Equation

	B	S.E	Wald	df	Sig,	Exp(B)	95% C.I Exp(B)	
							Lower	Uper
Rasio likuiditas (x1)	-.917	.552	2.761	1	.097	.400	.136	1.3179
Rasio Profitabilties (X2)	-58.523	25.783	5.152	1	.023	.000	.000	.000
Rasio Levwrage (X3)	5.395	3.705	2.119	1	.145	220.206	.154	313986.797
Rasio Aktivitas (X5)	-4.972	2.590	3.684	1	.055	.007	.000	1.111
Sales Growth (X5)	-.080	.063	1.605	1	.205	.923	.815	1.045
Arus Kas Operasi (X6)	-.123	.679	.033	1	.857	.885	.234	3.345
Constant	-.585	1.277	.210	1	.647	.557		

Effect of Liquidity, Profitability, Leverage, Activity, Sales Growth and Operating Cash Flow on Financial Distress

According to the results of this study, showing that liquidity variables as measured by current ratios have an effect, the decline in liquidity performance is almost experienced by most retail companies, this shows that companies use short-term debt more in financing their operational activities indicated by the continued increase in the value of short-term debt until 2020, can also mean that the company abilty to pay short-term debt got weaken, of course this becomes a warning for the company to improve its financial performance[1, 5, 9-13].

The performance of retail companies in generating profitability is decreasing this is evidenced by return on asset (ROA) which has a significant influence, covid-19 as one of the triggers, with the restriction of operating hours even until the closure of some outlets can be a potential loss, but the decrease in profitability has also occurred in the period before the covid-19 pandemic, it can be said that the customers started to abandoned this company, in this case it happens to PT. Matahari Department Store Tbk and PT. Hero Supermarket Tbk to take the option to close some of its outlets in 2020 because the burden incurred by the company is not proportional to the profit generated, while PT. Ace Hardware Indonesia and PT. Sumber Alfaria Trijaya Tbk still consistently maintains the value of ROA is expected to be positive, meaning that the company managed to maintain profit growth and reduce financial distress risk. The decrease in the value of sales affects the ratio of activity as measured by total asset turnover, this is due to the shift in consumer spending patterns from conventional to e-commerce, the convenience offered by e-commerce makes retail companies less competitive, especially retail with large outlets such as department stores, hypermarkets and supermarkets, consumer spending patterns have now changed with e-commerce. Consumers can shop anytime and anywhere with great flexibility. It is a challenge for retail companies to transform following consumer spending patterns and can continue to increase the value of sales. The results of this study are in line with previous research done by [1, 4-6, 9] which showed the ratio of liquidity, profitability and activity is influential.

Leverage as measured by debt ratio has no effect, the addition of debt value will actually strengthen the company's capital structure, but the company must also be wise in managing debt, especially for short-term debt in order to pay according to maturity. The increase or decrease in the value of sales growth does not have the influence to predict financial distress conditions, because if the company experiences a decrease in sales will not directly impact at that time also experiencing financial distress, but will affect the decrease in net cash receipts obtained by the company. As for the cash flow obtained from operating activities whether negative or positive also has no influence, the greater the cash flow from operating activities shows the better the company can fund the company's operations, this is also a key indicator to evaluate whether the company is able to generate enough cash to manage the company's operations, pay off loans, pay interest and dividends, and make new investments without relying too much on outside sources of funding. The results of this study are in line with previous research done by [1, 5, 12, 13]which showed the ratio of leverage, sales growth and operating cash flow had no effect on financial distress conditions..

CONCLUSION

Based on the results of data collected and tested, it can be concluded that the ratio of liquidity, profitability, and activity has an effect, while variable leverage, sales growth and cash flow from operating activities has no effect on financial distress conditions in retail companies listed on the IDX.

REFERENCES

1. Ratna, I. and M. Marwati, *Analisis Faktor-Faktor Yang Mempengaruhi Kondisi Financial Distress Pada Perusahaan Yang Delisting Dari Jakarta Islamic Index Tahun 2012-2016, 1(1), 51-62*
Jurnal Tabarru': Islamic Banking and Finance, 1(1), 51-62., 2018. **1**(1).DOI: https://doi.org/10.25299/jtb.2018.vol1(1).2044.

2. Schwartz, A., *Security interests and bankruptcy priorities: a review of current theories.* The Journal of Legal Studies, 1981. **10**(1): p. 1-37.DOI: https://doi.org/10.1086/667765.
3. Roos, G. and J. Roos, *Measuring your company's intellectual performance.* Long range planning, 1997. **30**(3): p. 413-426.DOI: https://doi.org/10.1016/S0024-6301(97)90260-0.
4. Nurdani, R. and I.Y. Rahmawati, *The Effect of Firm Sizes, Profitability, Dividend Policy, Asset Structure, Sales Growth and Free Cash Flow on Debt Policy.* AMAR (Andalas Management Review), 2020. **4**(1): p. 100-119.DOI: https://doi.org/10.25077/amar.4.1.100-119.2020.
5. Putri, N. and N. Merkusiwati, *The effect of corporate governance mechanisms, liquidity, leverage, and firm size on financial distress.* E-Jurnal Akuntansi Universitas Udayana, 2014. **7**(1): p. 93-106.
6. Lord, J., et al., *Predicting nursing home financial distress using the Altman Z-Score.* Inquiry: The Journal of Health Care Organization, Provision, and Financing, 2020. **57**: p. 0046958020934946.DOI: https://doi.org/10.1177/0046958020934946.
7. Ghozali, I., *Application of Multivariate Analysis With IBM SPSS 19 Program, Edition 5. Semarang: Diponegoro University Publishing Agency.* 2011.
8. Ginting, M.C., *Pengaruh Current Ratio dan Debt to Equity Ratio (DER) Terhadap Financial Distress pada Perusahaan Property & Real Estate di Bursa Efek Indonesia.* Jurnal Manajemen, 2017. **3**(2): p. 37-44.
9. Agustini, N.W. and N.G.P. Wirawati., *The Effect of Financial Risk on Distress of Retail Companies Listed on the Indonesia Stock Exchange (IDX). E-Journal of Accounting Udayana University Vol. 26. January 1 (2019): 251-280.* 2019.
10. Dirman, A., *Financial distress: The impacts of profitability, liquidity, leverage, firm size, and free cash flow.* International Journal of Business, Economics and Law, 2020. **22**(1): p. 17-25.
11. Fahmiati, N. and Widaryanti, *Analysis of the Effect of Financial Risk on Financial Distress (a case study on retail trading sector companies on the Indonesia Stock Exchange for the period 2012-2015). JAB vol 3 No. 01 June 2017.* 2020.
12. Rahman, B.N. and B. Artinah., *Faktor-Faktor yang Mempengaruhi Financial Distress (Studi Empiris pada Perusahaan Retail yang Terdaftar di Bursa Efek Indonesia Periode 2016-2018). JUMA, April 2021, Volume 22 Nomor 1.* . 2021.DOI: https://doi.org/10.37010/duconomics.v1.5476.
13. Yadiati, W., *The influence of profitability on financial distress: A research on agricultural companies listed in Indonesia Stock Exchange.* Journal of Scientific & Technology Research, 2017. **6**(11): p. 233-237.