FINANCIAL HEALTH ANALYSIS OF PT WASKITA KARYA TBK ACCORDING TO ALTMAN Z-SCORE IN PERIOD OF 2018 – 2020

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ABSTRACT

President Jokowi encouraged the growth of the construction sector by issuing Presidential Regulation No. 3 of 2016 to execute 245 projects and two programs under National Strategic Project. PT Waskita Karya Tbk (Waskita) is one of the construction State-Owned Enterprises (SOEs) that involves building several National Strategic Projects. Waskita's revenue in 2017 had increased 190% of 2016 achievement. However, its profitability was significantly decreased in 2020 up to minus in 2020 compared to the last five years. The financial distress in 2020 was getting worse during the Covid-19 pandemic outbreak in 2020. This study aims to determine the financial health of Waskita in 2018-2020 using the Altman Z-Score to predict corporate bankruptcy. Population and sample were the quarterly financial reports. The results of the Z-Score in 2020 were below the value of 1.10, meaning that Waskita was in financial distress or an unhealthy financial condition. It had a potential experience of bankruptcy in the last quarter of 2020. The most obvious decline occurred in the ratio of Working Capital to Total Assets, Accumulated Retained Earnings to Total Assets, and Earnings Before Interest and Tax to Total Assets, especially in 2020. This study further contributes by providing a comprehensive overview of financial health analysis and reviewing the ratios that contribute to corporate bankruptcy.

Keywords: Financial Distress, Bankruptcy, Altman Z-Score, Covid-19, Construction

INTRODUCTION

The Government of Indonesia (GOI) under the President of Jokowi has established several infrastructure developments projects into National Strategic Projects (PSN) to improve economic growth. An infrastructure development project will be a national strategic project with the consideration that the project is considered strategic and important to be completed in a short time and has a goal to increase growth and equitable development in order to improve the welfare of society and regional development. The legal basis for PSN is Presidential Regulation No. 3 of 2016 which was successively amended by Presidential Regulation No. 58 of 2017, Presidential Regulation No. 58 of 2018, and Presidential Regulation No. 109 of 2020. Based on Figure 1, the GOI has 245 projects and 2 programs. This will be required around Rp 4,197 trillion, with funding sources from the State Budget Rp 525 trillion, State-owned Enterprises (SOEs) Rp 1,258 trillion, and Private Sector Rp 2.414 trillion.

Figure 1. National Strategic Project Established in 2016
Source: Website of The Committee for Acceleration of Priority Infrastructure, 2016

The global economy, including Indonesia, experienced a deep contraction due to the impact of the Covid-19 pandemic outbreak in 2020. The economic slowdown has had a further impact on increasing poverty, unemployment, and decreasing purchasing power of the people. According to Figure 2., the growth of the Indonesian GDP in 2020 was -2.07%. The Indonesian GDP growth before the Covid-19 was positive. However, the GDP growth was significantly decreased influenced by the crisis of the global economy due to the Covid-19 pandemic. The contribution of the construction sector to Indonesia's GDP was still very high. According to Figure 3., the contribution of the construction industry is 10.71% in 2020 where construction is the top four of all industries.

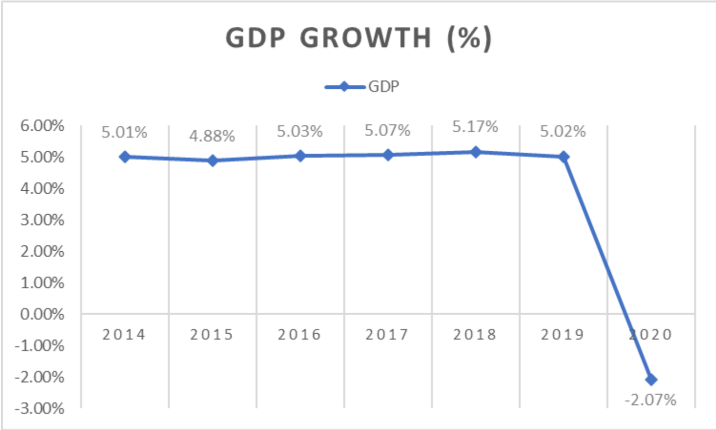

Figure 2. Indonesia GDP Growth 2014-2020
Source: Badan Pusat Statistik, 2020

Waskita is one of the construction SOEs engaged in the infrastructure sector who fully supports the Government's programs by actively participating and providing solutions in accelerating the national infrastructure development. Waskita is committed to continuing the infrastructure investment and development through strengthening strategies and synergies between elements of the Company. Waskita expand the business line from construction business line to many businesses line such as precast, property, energy, and toll road as the reaction to support the PSN.

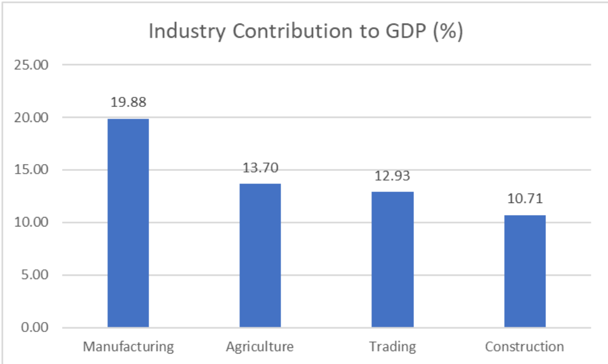

Figure 3. Industry Contribution to GDP in 2020
Source: Badan Pusat Statistik, 2020

These Covid-19 crises affect the profitability experienced by various companies, one of which is Waskita. The revenue of Waskita was decreased in two consecutive years 2019 and 2020. According to Tabel 1., Waskita's revenue decreased to Rp 31,387.39 in 2019 and Rp 16,190.46 in 2020. Waskita recorded a loss of Rp -9,401.23 billion in 2020 while in 2019 Waskita still had positive earnings of Rp 962.76 billion. Based on the Tabel 1., Waskita profitability was negative for the last five years. Therefore, predictive analysis is needed that can be useful to measure the level of the financial health of Waskita that can be used as an early warning for the company whether the company is in the financial distress condition. The aim is to avoid and anticipate the potential for bankruptcy that will be experienced by the company in the future. This information can be obtained through existing financial ratios in the company's financial statements that are used as the basis for the assessment.

According to Fitriani and Huda (2020), financial distress conditions can occur because of various factors, one of the factors causing financial distress is the company management is not able to adapt to the changing business environment. One of the factors that can change the business environment is the financial crisis due to the global pandemic illness. 2020 is a very tough year for the business globally, especially in Indonesia because of the discovery of a new virus that is dangerous and easily contagious called a virus SARS Cov-2 (Covid-19). The Covid-19 pandemic affects all sectors economy, one of which is affected is the infrastructure sector. The Government of Indonesia reallocates a large part of its budget funds to efforts to mitigate the impact of the COVID-19 pandemic. The Covid-19 crisis delayed and postpone several of the infrastructure projects because of the budget changes. According to Golubeva (2021), the Covid-19 crisis impacts the company's productivity as well as company financial performance.

Various bankruptcy analysis models have been developed to predict early corporate bankruptcy, such as the Altman Z-Score model developed in 1968 by Edward I. Altman. The analysis model uses the variables financial ratios contained in the financial statements to predict bankruptcy company. Several studies using the Almant Z-score approach to financial health have been conducted, including those by Silitonga and Daryanto (2020) and Daryanto et al. (2020). These studies are more focused on one object of research or only a few actors or companies in specific sectors, and the object of research is the manufacturing industry.

Tabel 1: Revenue and Profitability Waskita 2016-2020 in billion rupiah

Year	Revenue	Profitability
2016	Rp23,788.32	Rp1,809.18
2017	Rp45,212.90	Rp4,176.78
2018	Rp48,788.95	Rp4,909.06
2019	Rp31,387.39	Rp962.76
2020	Rp16,190.46	-Rp9,401.23

Source: Annual Report Waskita, 2016-2020

Financial distress is a situation where the financial condition of a company experienced a significant decline. The condition of financial distress according to Fitriani and Huda (2020) stems from the inability of the company's management to manage the company, resulting in operating losses or net losses the current year or operating cash flow that is smaller than operating profit. Companies that experience financial distress on an ongoing basis over a long period of time have a high potential for bankruptcy. Analysis of the financial statements that have been published by the company is very important, the analysis is useful for the management so management knows the company's performance conditions accurately, and then the information obtained from the analysis is used in decision-making decisions. Analysis of a financial statement is also useful for management in determining the company's financial strategy so that the company can earn optimal profitability. If the company profitability achievement is not met by the expected by the company, it will have a serious impact on the company. Losses experienced by the company continuously can have an impact on financial distress or financial difficulties for the company or the worst possibility will lead to the bankruptcy of the company. It is also can be a relevant technique to predict the future financial conditions of the company (Anthony et al., 2011).

This research is different from other previous studies, the difference is that this study examines the potential for financial distress in Waskita at the time of the Covid-19 pandemic and uses financial data in the form of company quarterly financial reports period of 2018-2020. The financial statements of each quarter are then analyzed by using the Altman Z-Score method to find out how the financial condition company per quarter. The result will give a contribution to the academic, practitioner, and management of Waskita on how Waskita provides the solution in order to improve the company financial health, and with hope Waskita Z-Score can reach the score above 2.60 in the following year or the following quarter.

LITERATURE REVIEW

Financial Statements

The definition of financial statements in Financial Accounting Standards, according to the Institute of Indonesia Chartered Accountants (2015), is a structured presentation of an entity's financial position and financial performance. A balance sheet, income statement, and cash flow statement are all common components of financial statements. According to Harahap (2013:105), financial statements are reports that show the current financial position of a company or within a certain period. Financial condition current company, namely the company's financial condition on a certain date (for balance sheet) and a certain period (for the income statement). The report used in this study is according to the financial statement contained in the quarterly report of Waskita from the first quarter of 2018 to the fourth quarter of 2020.

Financial Distress

Financial distress according to Ross, Westerfield, and Jaffe (2010:917) is a situation where a firms' operating cash flows are not sufficient to satisfy current obligations and the firm is forced to take corrective action. Financial distress may lead a firm to default on a contract, and it may involve financial restructuring between the firm, its creditors, and its equity investors. Usually, the firm is forced to take action that it would not have taken if it had sufficient cash flow. The financial distress can be expanded into insolvency (inability to pay one's debt). Insolvency may lead to bankruptcy. Firms deal with financial distress in several ways, such as these:

1. Selling major assets
2. Merging with another firm
3. Reducing capital spending and research and development
4. Issuing new securities
5. Negotiating with banks and other creditors
6. Exchanging debt for equity
7. Filing for bankruptcy

Financial distress may involve both asset restructuring and financial restructuring. Financial distress can serve as a firm's "early warning" system for trouble. Firms with more debt will experience financial distress than firms with less debt. However, firms that experience financial distress earlier will have more time for private workouts and reorganization. Firms with low leverage will experience financial distress later and, in many instances, be forced to liquidate.

Bankruptcy

Corporate financial failure is the inability of a company to pay financial obligations at maturity that lead to bankruptcy. A company is declared bankrupt if the company fails to carry out business operations to achieve its goal. The main conditions to declare bankruptcy is when finding this situation which is a debtor having two or more creditors and failing to pay at least one debt which has matured and became payable shall be declared bankrupt through a Court decision, either at his petition or at the request of one or more of his creditors. An illiquid company is not necessarily required to declare bankruptcy, but it must find new resources to bridge the gap. In so doing, it forfeits some of its independence because it will be obliged to devote a portion of its new resources to past uses. In times of recession, it may have trouble doing so and indeed be forced into bankruptcy.

According to Vernimmen, Quirry, Dallocchio, Levur, and Salvi (2014:854), a bankruptcy process can allow a company to reorganize, often requiring asset sales, a change in ownership, and partial debt forgiveness on the part of creditors. In other cases, bankruptcy leads to liquidation – the death of the company. Generally speaking, bankruptcy is triggered when a company can no longer meet its short-term commitments and thus faces a liquidity crisis. Nevertheless, the exact definition of the financial distress leading the company to file for bankruptcy may differ from one jurisdiction to another.

Predicting Corporate Bankruptcy: The Altman Z Score's Model Approach

Edward Altman, a professor at New York University, has developed a model using financial statement ratios and multiple discriminant analyses to predict bankruptcy. In 1995, the Altman model was modified so it is not only limited to analyzing public and non-public manufacturing companies, can but also be used to study various industries or sectors, both public and non-public. In this study, the Altman model that was used was Altman (1993) due to its relevancy to the object of this research. Al-Manaseer & Al-Oshaibat (2018) use the Almant Z-score formula in the case of non-manufacturing companies operating in emerging markets using four financial ratios in this model. The formula of the modified Altman model is as follows:

$$Z = 6{,}56X_1 + 3{,}26X_2 + 6{,}72X_3 + 1{,}05X_4$$

Note:
Z = Bankruptcy Index
X1 = Net Working Capital/Total Assets
X2 = Retained Accumulated Earnings/Total Assets
X3 = Earnings Before Interest and Tax/Total Assets
X4 = Market Value of Equity/Total Liabilities

If the Z value > 2.60, the company is categorized as not experiencing bankruptcy or a safe zone. If the value of 1.10 ≤ Z ≤ 2.60, the company is classified as being in a grey area. If the value of Z < 1.10, the company is included in the category of bankruptcy or distress zone.

RESEARCH METHOD

This study uses a descriptive type of research with an approach quantitative. Descriptive research method with this quantitative approach is carried out by analyzing report data The company's financial statements are then tabulated in order to determine the category the company can be considered to be healthy or unhealthy. Data have been collected from the company's quarterly financial reports published on the Waskita Investor Relation information website over the period of the first quarter of 2018 and the fourth quarter of 2020.

Research Concept Framework

The research concept framework is based on previous research theory and study results. The purpose of this research is to examine the financial health of Waskita. The Altman Z-Score model bankruptcy indicator is used to determine the company's financial health. According to Figure 4., first, the data is collected from the financial report from Waskita's quarterly financial report. Second, after all the data collected then measure the Z-Score to get the result of predicting corporate bankruptcy. Third, interpret the corporate bankruptcy and categorize which quarters are in the safe zone, grey area, and distress zone. Finally, using the interpretation of the Z-Score and bankruptcy analysis then the conclusion is made.

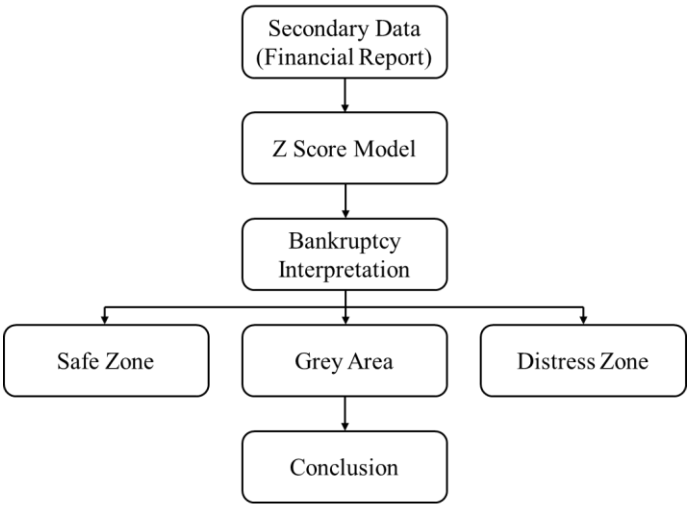

Figure 4. Research Concept Framework (Authors, 2021)

Variable Operational Definition

Working Capital to Total Asset(X1)

This ratio shows the ability of a company to generate Net Working Capital from its total assets. This ratio is calculated by dividing Net Working Capital by total assets. According to Daryanto et al (2020), Negative Net Working Capital is likely to face problems covering short-term liabilities because there are not enough current assets to cover these liabilities. On the other hand, companies with positive Net Working Capital rarely face difficulties in paying off their obligations. The formula for X_1 is:

$$X_1 = \frac{\text{Net Working Capital}}{\text{Total Sales}}$$

Retained Earnings to Total Assets (X2)

This ratio shows the company's ability to generate retained earnings from the company's total assets. According to Daryanto et al (2020), this ratio is used to measure the cumulative profit against the company's age, which shows the strength of earnings. The formula for X_2 is:

$$X_2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

Earnings Before Interest and Tax to Total Assets (X3)

This ratio shows the company's ability to generate profits from the company's assets before interest and tax payments. The formula for X_3 is:

$$X_3 = \frac{\text{EBIT}}{\text{Total Assets}}$$

Market Value of Equity to Total Liabilities (X4)

This ratio shows the company's ability to meet its obligations and obligations from the market value of its capital (common stock). The formula for X_4 is:

$$X_4 = \frac{\text{Market Value of Equity}}{\text{Total Liabilities}}$$

RESULT AND DISCUSSION

RESULT

According to Table 2., several data will be used to calculate each of the Variable Operational (X1, X2, X3, and X4). The data shown are consist of Net Working Capital, Total Asset, Accumulated Retained Earning, EBIT (Earnings Before Interest and Tax), Market Value of Equity, and Total Liabilities, all data are shown in billion rupiahs. According to Table 1., the Net Working Capital, accumulated retained earnings, and EBIT of Waskita was decreased significantly during the period of 2020 and in the fourth quarter of 2020, the Net Working Capital and EBIT were in the negative.

Based on that data, the results of the Z-Score calculation are shown in Table 3. The Z Score value obtained from the year 2018 to 2020 each quarter has decreased in value. According to the Altman Z Score analysis, Waskita experienced a decrease in the Altman Z Score in the first quarter of 2020 until the fourth quarter of 2020 that less than 1.10 which was predicted for bankruptcy or Distress Zone. In 2019, there was the only period in the Safe Zone, whereas there were three periods in the Grey Area in 2019. In 2018, there were three periods in the Safe Zone, while the Grey Zone had one period in the fourth quarter of 2018.

Table 2: Source of Data for the Variable Operational 2018-2020 in billion rupiah

Period	Net Working Capital	Total Asset	Accumulated Retained Earning	EBIT	Market Value of Equity	Total Liabilities
Q1-2018	8,426.58	111,173.81	8,201.38	2,611.58	33,527.54	86,682.15
Q2-2018	14,411.17	117,604.19	9,346.96	4,136.70	26,129.76	91,366.55
Q3-2018	15,398.32	129,244.76	10,083.39	5,907.88	23,075.63	102,231.72
Q4-2018	10,189.40	124,391.58	10,347.40	7,194.87	22,804.16	95,504.46
Q1-2019	10,497.96	128,952.38	11,063.65	1,538.29	26,944.29	99,273.69
Q2-2019	9,989.46	132,574.02	10,375.83	2,455.11	27,283.64	103,719.15
Q3-2019	7,363.44	137,239.96	29,226.59	3,381.49	22,397.02	108,013.37
Q4-2019	4,014.35	122,589.26	10,233.41	4,233.10	20,157.32	93,470.79
Q1-2020	463.16	116,365.86	8,417.70	625.96	6,569.79	89,095.81
Q2-2020	128.30	114,072.20	7,233.01	598.70	9,637.51	88,248.31
Q3-2020	-1,253.74	115,628.42	5,691.13	666.67	6,759.83	91,861.23
Q4-2020	-15,699.07	105,588.96	-440.12	-3,680.12	19,546.49	89,011.41

Source: Processed by Authors, 2021

According to Table3., the X1, X2, and X3 variables were in the negative value in the last two quarters of 2020 especially in the fourth quarter of 2020 both X1, X2, and X3 are negatives. The Altman Z-Score trend from quarter to quarter was decreased due to the impact of the decreasing of X1, X2, and X3 variables. Waskita in 2018 was in the Safe Zone, in 2019 was in the Grey Area, and in 2020 was in the Distress Zone. The pandemic of Covid-19 that happened in 2020 was impacted Waskita's overall financial performance and resulted several of the financial ratio were in very bad ratio such as profitability, liquidity and solvency.

Table 3. Calculation Results of Altman Z-score Variable

Period	X1	X2	X3	X4	Altman Z-Score	Interpretation
Q1-2018	0.08	0.07	0.02	0.39	3.36	Safe Zone
Q2-2018	0.12	0.08	0.04	0.29	3.02	Safe Zone
Q3-2018	0.12	0.08	0.05	0.23	2.60	Safe Zone
Q4-2018	0.08	0.08	0.06	0.24	2.47	Grey Area
Q1-2019	0.08	0.09	0.01	0.27	2.65	Safe Zone
Q2-2019	0.08	0.08	0.02	0.26	2.54	Grey Area
Q3-2019	0.05	0.21	0.02	0.21	2.47	Grey Area
Q4-2019	0.03	0.08	0.03	0.22	1.97	Grey Area
Q1-2020	0.00	0.07	0.01	0.07	0.76	Distress Zone
Q2-2020	0.00	0.06	0.01	0.11	0.95	Distress Zone
Q3-2020	-0.01	0.05	0.01	0.07	0.59	Distress Zone
Q4-2020	-0.15	-0.004	-0.03	0.22	0.45	Distress Zone

Source: Processed by Authors, 2021

DISCUSSION

a) **Ratio X1 (Net Working Capital / Total Assets)**

According to Table 4., the Net Working Capital of Waskita in 2018-2020 shows that the working capital of Waskita is showing negative numbers in the last two quarters in 2020, due to the increasing current liabilities of the company in 2020. This ratio is used to measure the ability of PT. Waskita Karya Tbk in fulfilling short-term liabilities and measuring the level of liquidity of assets. According to Wardah (2020) states that a positive value working capital shows the company's ability to pay its bills, whereas if a company has negative working capital, then the company will be having difficulty fulfilling its current debts. This indicates that there is a tendency to have problems serious financial distress.
Table 2. Calculation Results of Altman Z-score Variable

Table 4: Net Working Capital to Total Assets

Period	Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020
Net Working Capital	8,426.58	14,411.17	15,398.32	10,189.40	10,497.96	9,989.46	7,363.44	4,014.35	463.16	128.30	-1,253.74	-15,699.07
Total Asset	111,173.81	117,604.19	129,244.76	124,391.58	128,952.38	132,574.02	137,239.96	122,589.26	116,365.86	114,072.20	115,628.42	105,588.96
Value of X1	0.076	0.123	0.119	0.082	0.081	0.075	0.054	0.033	0.004	0.001	-0.011	-0.149

Source: Processed by Authors, 2021

According to Waskita Annual Report (2020), the Company’s Total Current Liabilities in 2020 amounted to Rp48,237.84 billion, increased by 7.14% or equivalent to Rp3,214.34 billion compared to that of 2019 amounted to Rp45,023.50 billion. Such increase came from the increased Accrued Expense by 108.25% or equivalent to Rp782.04 billion and increased Other Short-Term Liabilities by 95.31% or equivalent to Rp470,178 billion. Accounts Payable, Short-Term Bank Loans, Advances on Short-Term Contract, and Current Maturities of Long-Term Bank Loan increased as of the end of 2020. Accrued Expenses in 2020 amounted to Rp1,502.67 billion, increased by 108.52% or equivalent to Rp782.04 billion compared to that of 2019 amounted to Rp720.63 billion. Such increase was caused by an increase in Interest Expenses, Employee Expenses, Building Expenses, and others. Current Maturities of Long-Term Bank Loan in 2020 amounted to Rp1,220.25 billion, increased by 46.49% or equivalent to Rp387.25 billion compared to that of 2019 amounted to Rp833.00 billion. Such an increase was caused by matured loan in 2020 to BRI and BTN.

b) **Ratio X2 (Accumulated Retained Earnings / Total Assets)**

Based on previous research conducted by (Adi et al, 2015) according to Altman, companies that have high retained earnings also show that the company can finance its assets through its profits so the company does not use huge debt. The higher the resulting ratio of retained earnings to total assets means the company has high profits to finance its assets and pay dividends so that it will reduce the possibility of financial distress.

Table 5: Accumulated Retained Earnings to Total Assets

Period	Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020
Accumulated Retained Earning	8,201.38	9,346.96	10,083.39	10,347.40	11,063.65	10,375.83	29,226.59	10,233.41	8,417.70	7,233.01	5,691.13	-440.12
Total Asset	111,173.81	117,604.19	129,244.76	124,391.58	128,952.38	132,574.02	137,239.96	122,589.26	116,365.86	114,072.20	115,628.42	105,588.96
Value of X2	0.074	0.079	0.078	0.083	0.086	0.078	0.213	0.083	0.072	0.063	0.049	-0.004

Source: Processed by Authors, 2021

According to Table 5, regarding the accumulated retained earnings of Waskita in 2018-2020 shows that the accumulated retained earnings of Waskita is showing negative numbers in the last quarter in 2020, due to the negative earning of the company in 2020. The value of the X2 ratio in the fourth quarter of 2020 shows a negative number which means the Company has not been able to generate a profit, so that retained earnings have a negative value, this results in the use of debt that will continue to grow to finance the company's operational activities.

c) **Ratio X3 (Earnings Before Interest and Taxes / Total Assets)**

Earnings Before Interest and Tax to Total Assets show the company's ability to generate profits from company assets before interest and tax payments. This X3 ratio is used to measure the ability or productivity of assets in generating profits. The lower the value X3 ratio shows the low productivity of assets in generating profits, the greater the value of this ratio, the more effective the management of all assets owned by the company.

Table 6: Earnings Before Interest and Taxes to Total Assets

Period	Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020
EBIT	2,611.58	4,136.70	5,907.88	7,194.87	1,538.29	2,455.11	3,381.49	4,233.10	625.96	598.70	666.67	-3,680.12
Total Asset	111,173.81	117,604.19	129,244.76	124,391.58	128,952.38	132,574.02	137,239.96	122,589.26	116,365.86	114,072.20	115,628.42	105,588.96
Value of X3	0.023	0.035	0.046	0.058	0.012	0.019	0.025	0.035	0.005	0.005	0.006	-0.035

Source: Processed by Authors, 2021

According to Table 6, the result of Ratio X3 was positive from the first quarter of 2018 until the third quarter of 2020. Then in the fourth quarter of 2020, the result of the X3 was negative. Based on the result of X3 it can be concluded that from the first quarter of 2018 until the third quarter of 2020 the company was able to manage its assets productively and still able to balance its operational costs. However, in the fourth quarter of 2020, the results of the X3 ratio value were negative it can mean that in that quarter the company's operating costs are very large so that the company's performance becomes unproductive, this can be an indication of financial distress.

d) **Ratio X4 (Market Value of Equity / Total Liabilities)**

Market Value of Equity to Total Liabilities indicates the company's ability to meet its obligations long-term value of its capital (common stock). Based on previous research by (Adi et al., 2015) according to Altman, the lower this ratio reflects the smaller the company's ability to meet long-term obligations length that comes from own capital, so it will increase the possibility of the company is experiencing financial distress.

Table 7: Market Value of Equity to Total Liabilities

Period	Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020
Market Value of Equity	33,527.54	26,129.76	23,075.63	22,804.16	26,944.29	27,283.64	22,397.02	20,157.32	6,569.79	9,637.51	6,759.83	19,546.49
Total Liabilities	86,682.15	91,366.55	102,231.72	95,504.46	99,273.69	103,719.15	108,013.37	93,470.79	89,095.81	88,248.31	91,861.23	89,011.41
Value of X4	0.387	0.286	0.226	0.239	0.271	0.263	0.207	0.216	0.074	0.109	0.074	0.220

Source: Processed by Authors, 2021

According to Table 7, the result of Ratio X4 was decreased since the first quarter of 2018 and the lowest one was in the first quarter of 2020 and the third quarter of 2020. In the fourth quarter of 2020, the X4 ratio increase becomes 0.22. Based on the above explanation, it can be concluded that Waskita was able to meet long-term debts/liabilities owned in total company equity. However, it can also be seen that the value of the equity to total ratio debt continues to decline from 2018-2020.

e) **Result of Altman Z-Score**

According to the calculation of the Z-Score in Table 3, it can be said that from the first quarter of 2018 until the fourth quarter of 2020 has decreased and is in the bankrupt criteria or below 1.10 during the period of 2020, due to a decrease in the value of Net Working Capital, profit retained earnings, earnings before interest and taxes, and the market value of capital. This condition shows that the company is in the category of very large and risky financial difficulties high so the probability of bankruptcy is greater, it shows that the company's financial performance can be said to be less good especially in the period of 2020.

Financial distress can occur from various factors, one of which is internal factors company (Peter & Yoseph, 2011) where the financial distress experienced by Waskita in the period of 2020 occurred due to losses suffered by the company, especially in the fourth quarter of 2020. The company's short-term liabilities also increased, and current assets continue to decline, resulting in the company's performance becoming unstable good. In addition to internal factors, financial distress can also occur due to external factors (Peter & Yoseph, 2011), the pandemic Covid-19 that happened in early 2020 makes Waskita unable to get the project done and unable to recycle the asset so Waskita has to increase company debt to pay the company expenses. Based on the calculation results of Altman Z-score formulation variables resulted in Z value <1.1 during the period of 2020. With Z value was less than 1.10 during 2020, it can be interpreted that the company is in a state of experiencing serious financial distress and can be said to continue to experience financial difficulties or predicted to be bankrupt.

After going through the calculation process under the Altman variable, Waskita experienced financial distress or bankruptcy zone during the period of 2020. It was occurred due to the value of current debt owed by the company greater than current assets so that it has an impact on the company's working capital which is negative. Furthermore, the company in 2020 is unable to make a profit or suffer a loss. As well as the weakening of the value of variables in other Altman ratios show that the company is in a condition of serious financial distress and the end the company going bankrupt.

CONCLUSION

The Covid-19 pandemic that happened in early 2020 has had an impact on the performance of Waskita. This is demonstrated by the difference in the composition of the Altman Z-score during the pandemic (in 2020) and before the pandemic (2019 and 2018). Financial performance of Waskita based on results ratio calculation of Net Working Capital to Total Assets, Retained Earnings to Total Assets, Earning Before Interest and Taxes to Total Assets, and Market Value of Equity to Total Liabilities showing significance decreased in the fourth quarter of 2020 due to the internal factor of Waskita where the company was contributed loss in profits and lead to unable to pay its company obligations means the company is in illiquid and insolvent.

Based on the Z-score result in 2020, Waskita experienced financial distress and potential for bankruptcy. There are several ways that Waskita can do as the exit way of financial distress. According to the financial distress literature review Ross, Westerfield, and Jaffe (2010), reducing capital spending and research and development, issuing new securities, and negotiating with banks and other creditors. Waskita needs support from GOI due to the PSN projects need to continue by Waskita however Waskita needs relaxation on the capital and the cash flow to ensure the continuation of the project execution.

The findings of this study can be used as input and consideration for managers managing companies and innovating during difficult times, such as the Covid-19 pandemic or economic turmoil. This study adds to the evidence that in a pandemic situation, GOI will prioritize Government spending to recover the pandemic Covid-19. In a period, full of uncertainties, Waskita must set the strategy to strengthen the core construction business and financial capacity through project portfolio rebalancing and financial restructuring to overcome the mismatch financing. Furthermore, toll road divestment is key to reducing debt levels and removing pressure from interest expense to company earnings. Waskita still can get out of the bankruptcy zone if the company can recover all the internal issues such as the financial restructuring and divestment of the toll road very soon. This study gives valuable information for academician, practitioner, and manager implication for Waskita on how to analyze financial health and what will be the exit way to recover if the company experienced financial distress.

REFERENCES

Adi, Bonifacius Andaru & Daryanto, W. M.. (2021). Financial Performance Analysis Of Food And Beverage Public Listed Companies For The Three Quarters Before And After The Covid-19 Pandemic In Indonesia, South East Asia Journal of Contemporary Business, Economics, and Law, Vol. 24, Issue 2 (April). ISSN 2289-1560

Adi, S. W., Intan, A., & Rahmawati, E. (2015). Analisis Rasio Keuangan Terhadap Kondisi Financial Distress Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2008-2013. Diponegoro Journal of Accounting, 4(2), 737–747

Afriza, Eka, S, D,. & Daryanto, W. M.. (2019). Measuring And Comparing The Financial Performance Of Construction Industry: An Indonesia Experience, International Journal of Business, Economics and Law, Vol. 19, Issue 1 (August). ISSN 2289-1552.

Aji, Tony Hartono. (2014). Analisis Faktor-Faktor Yang Mempengaruhi Profitabilitas Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia Sektor Properti Dan Real Estate. Puwokerto. Skripsi: Program Studi Manajemen S1 Fakultas Ekonomi Universitas Muhammadiyah Purwokerto.

Altman, E. I.. (1968). Financial Ratios, Discriminant Analysis and The Prediction of Corporate Bankruptcy. The Journal of Finance.

Altman, E. I.. (1993), Corporate Financial Distress and Bankruptcy, Second Edition, John Wiley & Sons, New York

Al-Manaseer, S. R., Al-Oshaibat, S. D.. (2018). Validity of Altman Z-Score Model to Predict Financial Failure: Evidence From Jordan. International Journal of Economics and Finance; Vol. 10, No. 8; 2018 ISSN 1916-971X E-ISSN 1916-9728

Anthony, R.N., Hawkins, D.F., & Merchant, K.A. (2011). Accounting: Text and Cases, 13th Edition. McGraw-Hill Companies, Inc.

Annual Reports 2016 of PT. Waskita Karya, Tbk years ended December 31, 2016

Annual Reports 2017 of PT. Waskita Karya, Tbk years ended December 31, 2017

Annual Reports 2018 of PT. Waskita Karya, Tbk years ended December 31, 2018

Annual Reports 2019 of PT. Waskita Karya, Tbk years ended December 31, 2019

Annual Reports 2020 of PT. Waskita Karya, Tbk years ended December 31, 2020

Badan Pusat Statistik, (2021), Pertumbuhan Ekonomi Indonesia Triwulan IV-2020.

Brigham, Eugene F dan Philip R. Daves. (2019). Intermediate Financial Management. 13th ed. Candana. Cengage. ISBN: 978-1-337-39508-3

Darmawan, (2020). Dasar-Dasar Memahami Rasio & Laporan Keuangan. Yogyakarta. UNY Press.

Daryanto, W. M., Amalia, S., & Nofyan, S. K. (2020). Financial Health Analysis of PT Ciputra Development TBK According to Altman Z-Score in the Period of 2015-2019. PROCEEDINGS E-BOOK, 392.

Daryanto, W. M., Shafa, I. D. & Fitri, Disotyani Nurrahma. (2019). Financial Performance Analysis Of Conventional Taxi In Indonesia: Before And After The Emergence Of Ride-Hailing Company, South East Asia Journal of Contemporary Business, Economics, and Law, Vol. 19, Issue 1(August). ISSN 2289-1560

Daryanto, W. M., Arlinda Wibiayu & Reapina, Elsadora. (2020). Financial Health Level Of Indonesian Mobile Telecommunication Device Retail During Digital Transformation: A Case Study Of Pt Erajaya Swasembada Tbk, International Journal of Business, Economics and Law, Vol. 23, Issue 1 (December). ISSN 2289-1552

Daryanto, W. M., Jessica Wijaya & Renatauli, Regina. (2020). Financial Performance Analysis Of Pt. Ace Hardware Indonesia, Tbk. Before And After The Launch Of Ruparupa.Com, International Journal of Business, Economics, and Law, Vol. 23, Issue 1 (December). ISSN 2289-1552

Daryanto, W. M., Firdaus Tubagus & Aulia, Firdha. (2020). Financial Performance Analysis Of Pt Astra Agro Lestari Tbk. And Pt Sinar Mas Agro Resources And Technolgy Tbk. The year 2015-2019, South East Asia Journal of Contemporary Business, Economics and Law, Vol. 23, Issue 1 (Dec). ISSN 2289-1560

Daryanto, W. M., Daniswara R. N., & Zanaria, Mifta (2020). Measuring Financial Performance Of Pt. Perusahaan Gas Negara (Persero) Tbk During Covid-19 Crisis In Indonesia, South East Asia Journal of Contemporary Business, Economics and Law, Vol. 23, Issue 1 (Dec). ISSN 2289-1560

Dewi, S., Halawa, M., & Nifanngelyau, L. (2021). Dampak Covid-19 Terhadap Bisnis Property. Jurnal Pendidikan Ekonomi (JPE), 1(1), 20-25. https://doi.org/10.30598/jpe.v1.i1.p20-25

Fitriani, Marissa. Nurul Huda. (2020). Analisis Financial Distress Dengan Metode Springate (S-Score) Pada PT Garuda Indonesia Tbk. Nominal : Barometer Riset Akuntansi dan Manajemen, 9(1), 45-62.

Golubeva, O. (2021). Firms' performance during the COVID-19 outbreak: international evidence from 13 countries. Corporate Governance: The International Journal of Business in Society.

Harahap, S. S., (2013), Analisis Kritis Atas Laporan Keuangan, Edisi 1- 11; Jakarta. PT. Rajawali Pers.

Ikatan Akuntan Indonesia. (2015). Standar Akuntansi Keuangan.

IDX (Indonesia Stock Exchange). 2021. IDX Statistic 2020. Jakarta. Data Service Division.

Junaedi, Dedi dan Faisal Salistia. (2020). Dampak Pandemi Covid-19 terhadap Pasar Modal di Indonesia: Studi Kasus Indeks Saham Komposit (ISHG). l-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah. Volume 2 No 2: 109-131 P-ISSN 2656-2871 E-ISSN 2656-4351. DOI: 10.47467/alkharaj.v2i2.112

Kasmir. (2016). Analisis Laporan Keuangan. Cetakan Kelima. Jakarta: PT Raja Grafindo Persada.

Lubis, A. W.. (2020). Modul: Analisa Laporan Keuangan. Program Studi Akuntansi Syariah Fakultas Ekonomi Dan Bisnis Islam. Universitas Islam Negeri Sumatera Utara.

Martono, A dan D. Agus Harjito. (2007). Manajemen Keuangan. Edisi Kedua. Yogyakarta: Ekonisia.

Munawir. (2010). Analisis Laporan Keuangan. Yogyakarta: Liberty.

Muttaqin, Ahmad. (2020). Ketahui Tentang Cash Ratio, Quick Ratio Dan Current Ratio Dalam Hutang Perusahaan. https://itstime.id/ketahui-tentang-cash-ratio-quick-ratio-dan-current-ratio-dalam-hutang-perusahaan/. diakses 5 Juli 2021

Permana, Monica. (2020). Cara Menghitung Current Ratio, Lengkap dengan Komponen Penting. https://greatdayhr.com/id/blog/current-ratio-adalah/. Diakses 5 Juli 2021

Peter, & Yoseph. (2011). Analisis Kebangkrutan Dengan Metode Z-Score Altman, Springate dan Zmijewski Pada PT.Indofood Sukses Makmur TBK Periode 2005-2009. Jurnal Ilmiah Akuntansi

Quarterly Reports 2018-2020 of PT. Waskita Karya, Tbk.

Riyanto, Bambang. (2011). Dasar Dasar Pembelanjaan Perusahaan. Edisi empat. Yogyakarta: BPFE-Yogyakarta.

Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2010). Corporate Finance (Fifth Edit).

Sawir, Agnes. (2010). Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan. Cetakan Keenam. Jakarta. Gramedia Pustaka Utama

Shintia, Novi. (2017). Analisis Rasio Solvabilitas Untuk Menilai Kinerja Keuangan Terhadap Asset Dan Equity Pada PT Bank Rakyat Indonesia (Persero) Tbk Periode 2012 – 2015. At-Tadbir: Jurnal Ilmiah Manajemen. Volume I Nomor 1, Januari 2017. ISSN 1979-1127 E-ISSN 2502-7433

Syamsudin, Lukman. (2009). Manajemen Keuangan Prusahaan, Konsep Aplikasi dalam Perencanaan, Pengawasan dan Pengambilan Keputusan. Jakarta: PT Grafindo Persada.

Vernimmen, P., Quiry, P., Dallocchio, M., Le Fur, Y., & Salvi, A. (2014). Corporate finance: theory and practice. John Wiley & Sons.

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https://kppip.go.id/en/national-strategic-projects/
https://www.idx.co.id/

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