Activity analysis Corporate Finance Using Economic Value Added (EVA) Method (Study on Property and Real Estate Sector Companies)

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Abstract: This research is a quantitative research, where the data source is datasecondary form of the company's annual financial statements for the period 2017 to 2021. The population of this study is the property and real estate sector companies listed on the IDX, the sample of this research is 3 companies with sampling using purposive sampling method, data collection is done through documentation and literature study, then analysis technique using EVA method with NOPAT, Invested Capital, WACC and CC calculations. The results of this study indicate that by using the EVA method, it is known that two companies produce a negative EVA value or EVA <0 meaning that the company can experience losses, namely PT. Pembangunan Perumahan Properti Tbk, PT Plaza Indonesia Realty Tbk, while one company produces a Positive EVA value or EVA> 0 meaning the company can generate economic added value, namely PT. Kawasan Ind. Jababeka Tbk.
Keywords: EVA, NOPAT, IC, CC, WACC and Financial Performance

INTRODUCTION

In the world of financial quality capital markets companies that must be published every period, that's where investors and creditors can see which companies have the potential to be profitable. Naturally before investing capital or shares or giving credit, of course the investors and creditors first analyze the financial performance of a company.

One of the companies whose financial performance is published in the capital market is a property sector company, the property sector is attractive to investors because the selling value of property is increasing every year, in accordance with the increasing selling price of land.In addition, financial performance is also an important consideration for investors, before investing in the property company.

The choice of a property sector company as the object of research is because the company is a company that attracts quite large investors because it promises big profits and will continue to grow. The property and real estate companies that are the sample of this research are companies that are members of the LQ45 index. LQ45 index is a market index shares on the Indonesia Stock Exchange (IDX) which consists of 45 companies with criteria certain property and real estate companies listed as LQ45 For two consecutive years, from

January 2017 to January 2021, the companies used as samples are: PT. Kawasan Ind. Jababeka Tbk., PT Plaza Indonesia Realty Tbk, and PT. Pembangunan Perumahan Properti Tbk, The method used to assess the company's financial performance is the ratio. The ratio method is easy to do, but has a weakness, where this method cannot measure the company's performance through the value of the company.

EVA (Economic Value Added) or economic value added is a method for assessing company performance. With the concept of EVA, it is expected to be able to obtain more realistic calculation results on efforts to create corporate value.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial statement analysis is a process that takes into account the consideration of in order to help evaluate the current and past financial position and results of the company's activation, with the main objective of determining the most likely estimates and predictions regarding the condition and performance of the company in the future. (Kariyoto: 2017:21)

Financial performance is a description of the company's financial condition in a certain period, both in terms of raising funds and distributing funds, which are usually measured by indicators of capital adequacy, liquidity, and profitability. (Jumingan, 2006:239)

1. The company's financial performance is an achievement achieved by the company in a certain period which reflects the company's health level. (Sutrisno, 2009:53)
2. Financial performance is an analysis conducted to see the extent to which a company has implemented it by using financial implementation rules properly and correctly. (Irham Fahmi, 2011:2)

Based on several definitions of financial performance above, it can be concluded that financial performance is a condition where the company is in good condition or not in terms of financial or non-financial. The company's financial performance is closely related to performance measurement and assessment. Performance measurement is the qualification and efficiency and effectiveness of the company in operating the business during the accounting period. Financial performance measurement aims as an indicator in order to improve the company's operational activities, and it is hoped that the company can experience better financial growth and can compete with other companies. EVA is an effective communication tool, both for value creation that can be reached by line managers that ultimately drive company performance and for dealing with capital markets. (S.David Young & Stephen F.O'byrne, 2008:18)

Economic Value Added (Economic Value Added) is a trademark for a special approach developed by consulting firm Stern Stewart and Co. EVA was introduced in the late 1980s. Basically EVA is the economic profit generated by the company after all costs of capital are deducted. More specifically, EVA is net operating profit after tax (Net Operating After Tax or NOPAT) minus the cost of capital expense for the capital used.

EVA (Economic Value Added) is an indicator of the added value of an investment, where if EVA is positive it indicates that the company's management is able to provide added value for investors.

The EVA (Economic Value Added) indicator is a criterion to determine whether or not there is an added value in the company. According to Agnes Sawir (2018: 49) the indicators in EVA assessment are as follows:

1. EVA value > 0 or EVA is positive. In this position, it means that the company's management has succeeded in creating economic added value for the company.
2. EVA value = 0. In this position, it means that the company's management is in the break-even point. The company did not experience a setback but at the same time did not progress economically
3. EVA value <0 or negative EVA. In this position it means that there is no additional economic value for the company, in the sense that the profit generated cannot meet the expectations of creditors and company shareholders (investors).

EVA value does not meet expectations, meaning that the EVA value is equal to zero or the EVA value is less than zero, then there are two ways to increase EVA, among others:

1. Earn more profit without using more capital. This method can be done by cutting costs, meaning that the company's activities are carried out with lower production and marketing costs in order to obtain a larger profit margin. In addition, it can be done by increasing asset turnover, either by increasing sales volume or working with smaller assets.

2. Get a return (return) greater than the capital on investment. This relates to the growth of a company. There are several approaches that can be used to measure EVA. If the company's capital structure only uses its own capital, mathematically EVA can be determined as follows. (Brigham and Houston: 2006)

$$EVA = NOPAT - (WACC \times INVESTED\ CAPITAL)$$

However, if the company structure consists of debt and equity, systematic EVA can be formulated as follows:

$$EVA = NOPAT - (WACC \times TA)$$

NOPAT : Net Operating Profit After Taxes
WACC : Weighted Average Cost Of Capital
TA : Total Assets (Total Capital)

Based on the formula above, there are several steps that must be taken first, if the company's management measures its performance using EVA methods include:

1. Calculating NOPAT (Net Operating After Tax)
   NOPAT is net income plus interest after tax. NOPAT or commonly called operating profit after tax describes the results of creation value within the company.
   NOPAT formula according to Suad Husnan and Enny Pudjiastutik in Eni Suyanti (2018:53):

$$NOPAT = Profit\ before\ tax - Tax$$

2. Calculating Invested Capital (IC)
   Invested Capital is the sum total of the company's financing. so it can be formulated:

$$IC = (Total\ Equity + Total\ Debt) - Short\ term\ debt$$

3. Calculating the Weighted Average Cost Of Capital (WACC)
   WACC or weighted average cost of capital is an average of various source of funds used by the company. These sources of funds are called "components". capital". The capital component may include funds consisting of debt, preferred stock, retained earnings, and common stock. According to Suad Husnan and Enny Pudjiastutik in Eni Suyanti (2018: 53) the WACC formula, namely:

$$WACC = \{(D \times rd)(1 - T)\} + (E \times Re)$$

a. D (capital rate) = $\frac{Total\ Debt}{Total\ Debt + Equity} \times 100\%$

b. rd (Cost Of Dept) = $\frac{Interest\ expense}{Total\ long-term\ debt} \times 100\%$

c. Tax (tax rate) = $\frac{Tax\ expense}{Net\ profit\ before\ tax} \times 100\%$

d. Re (rate of capital cost) = $\frac{Profit\ after\ tax}{Total\ Equity} \times 100\%$

e. E (level of equity) = $\frac{Total\ Equity}{Total\ Debt + Equity} \times 100\%$

4. Calculating Capital Charges
   According to S. David Young and Stephen F. O'byrne "The cost of capital is the opportunities that reflect the returns expected by other investors with the same risk."

$$Capital\ Charges = WACC\ x\ Invested\ Capital$$

5. Calculating EVA

$$EVA = NOPAT - Capital\ Charges$$

METHODS
The scope of research
The scope of research used in this study is the performance, finance of property companies that are listed in LQ45 and listed on the Indonesia Stock Exchange (IDX) which are analyzed using the Economic Value Added (EVA) method.

Research Location and Time
This research is located on the Indonesia Stock Exchange (IDX) by downloading the company's annual financial statements at the website address www.idx.co.id, while the time of the research was carried out from December 2019 to March 2021.

Identification of Research Variables
In this study, the researcher uses a single variable where the variable is the financial performance of property sector companies that are listed in LQ45 and listed on the Indonesia Stock Exchange (IDX) for analysis using the Economic Value Added (EVA) method. consists of the following:
1. NOPAT = NOPAT is calculated by subtracting profit (loss) with tax.
2. Invested capital = calculated by adding up debt and equity then the result is deducted by short-term debt.
3. WACC(Weigh Average Cost Of Capital)
   To calculate WACC, multiply the total capital (D) with the cost of debt (rd) then multiply (1- tax rate) plus the equity level multiplied by the cost of equity (re).
4. Capital Charges = To calculate Capital Charges by multiplying the WACC result with Invested Capital.
5. EVA (Economic Value Adeed) = Calculating EVA is done by subtracting NOPAT results with Capital Charges.

Population And Sample
The population in this study are all property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) and have gone public in the research period from 2017 to 2021. The sampling method in this study is purposive sampling, purposive sampling is a type of non-probability sampling. where the researcher determines the sample using certain criteria which according to the researcher are in accordance with the objectives of the research conducted and can answer research problems.

RESULT AND DISCUSSION
The data analysis used in this study is the Economic Value Added (EVA) method. The following are the results of the analysis of financial performance with the EVA method on the companies that are the research sample.
Calculating NOPAT (Net Operating After Tax)

Table 1. financial performance with the EVA method PT. Kawasan Ind. Jababeka Tbk.,

Year	Profit before tax	Tax	NOPAT
2017	151.865.003.652	2.024.425.116	149.840.578.536
2018	68.006.964.719	906.561.776	67.100.402.943
2019	143.047.186.935	1.906.879.867	141.140.307.068
2020	45.861.223.153	611.349.618	45.249.873.535
2021	88.819.904595	1.184.007.120	87.635.897.475

Source : Data Research 2022

Based on the table above, the calculation of NOPAT (Net Operating After Tax) at PT. Kawasan Ind. Jababeka Tbk for two consecutive years experienced a decline in 2020 and 2021.

Table 2. NOPAT (Net Operating After Tax) PT Plaza Indonesia Realty Tbk

Year	Profit before tax	Tax	NOPAT
2017	286.288.858	3.867.913	286.288.858
2018	580.422.733	7.841.817	580.422.733
2019	548.538.232	7.411.040	548.538.232
2020	-575.176.897	-7.770.943	-575.176.897
2021	447.757.412	6.049.438	447.757.412

Source : Data Research 2022

Based on the table above, the calculation of NOPAT (Net Operating After Tax), PT Plaza Indonesia Realty Tbk has decreased for two consecutive years wheredrasticin 2020.

Table 3. NOPAT (Net Operating After Tax) PT. Pembangunan Perumahan Properti Tbk

Year	Profit before tax	Tax	NOPAT
2017	465.852.853.162	6.210.016.749	459.642.836.413
2018	503.495.303.449	6.711.806.628	496,783,496,821
2019	365.771.222.063	4.875.886.023	360,895,336,040
2020	128.203.857.831	1.709.01.975	126,494,845,856
2021	21.303.887.816	283.989.889	21,019,897,927

Source : Data Research 2022

Based on the table above, the calculation of NOPAT (Net Operating After Tax), PT. The housing development of Properti Tbk for two consecutive years has decreased wheredrasticin 2020 and 2021.

Invested Capital (IC) in property and real estate sector companies from 2017 to 2021.

Table 4. Invested Capital (IC) PT. Kawasan Ind. Jababeka Tbk.

Year	Total Equity And Debt	Total Short-term Debt	IC
2017	5,005,730,615,665	3,395,076,140,604	1,610,654,475,061
2018	5,825,628,997,710	5,685,378,489,565	140,250,508,145
2019	6,134,059,810,844	7,147,437,444,680	-1,013,377,633,836
2020	4,461,525,879,609	6,056,997,852,049	-1,595,471,972,440
2021	4,509,372,305,428	7,562,356,662,423	-3,052,984,356,995

Source : Data Research 2022

Based on the table above, the calculation of IC (Invested Capital) has decreased every year, where in 2017 Invested (IC) was 1,610,654,475,061, in 2018 it decreased by 140,250,508,145 to and further aggravated IC the more drastic the downfall.

Table 5. IC (Invested Capital) PT Plaza Indonesia Realty Tbk

Year	Total Equity And Debt	Total Short-term Debt	IC
2017	4,639,438,405	824,154,197	3,815,284,208
2018	15,143,755,490	1,135,313,268	14,008,442,222
2019	12,548.031,316	582,233,582	11,965,797,734
2020	11,815,911,491	418,601,976	11,397,309,515
2021	11,971,692,555	457,680,363	11,514,012,192

Source : Data Research 2022

Based on the table above, the calculation of IC (Invested Capital) has decreased every year, where in 2017 Invested (IC) was 3,815,284,208 in 2018 has Increased

14,008,442,222 significant but in 2019 to 2021 it experienced a steady decline.

Table 6. IC (Invested Capital) PT. Pembangunan Perumahan Properti Tbk

Year	Total Equity And Debt	Total Short-term Debt	IC
2017	11,266,320,312,348	1,067,196,855,057	10,199,123,457,291
2018	11,783,772,244,027	1,144,917,357,852	10,638,854,886,175
2019	12,184,611,579,312	1,395,923,707,329	10,788,687,871,983
2020	12,200,175,979,870	1,378,761,274,765	10,821,414,705,105
2021	12,292,090,330,026	1,320,149,276,793	10,971,941,053,233

Source : Data Research 2022

Based on the table above, the calculation of IC (Invested Capital) has increased every year, where in 2017 Invested Capital (IC) of 10,199,123,457,291 in 2018 experienced an increase of 10,638,854,886,175 significantly and consecutively increased until 2021 at 1% per year.

Calculating WACC (Weight Average Cost Of Capital

With the following calculation formula:

$$WACC = \{(D \times rd)(1 - T)\} + (E \times Re)$$

1. WACCPT. Housing Development Properti Tbk gets a percentage every year of 2017:6.61%, 2018: 2019: 4.52%, 5.87%, 2020: 6.98%, and 2021: 6.72%.
2. WACC PT Plaza Indonesia Realty Tbk, gets an annual percentage of 1.45%, 3.36%, 5.41%, 6.23% and 6.11%.
3. WACCPT. Kawasan Ind. Jababeka Tbk., gets an annual percentage of 3.43%, 2.29%, 3.02%, 3.58%, and 3.50%.

Calculating Capital Charges (CC)

With the following calculation formula:

Capital Charges = WACC x Invested Capital

Table 7. Calculating Capital Charges (CC) PT. Kawasan Ind. Jababeka Tbk.

Year	IC	WACC	CC
2017	1.610.654.475.061	3,43	5.524.544.849.459
2018	140.250.508.145	2,29	321.173.663.652
2019	-1.013.377.633.836	3,02	-3.060.400.454.185
2020	-1.595.471.972.440	3,58	-5.711.789.661.335
2021	-3.052.984.356.995	3,50	-10.685.445.249.483

Source : Data Research 2022

Based on the table above, the calculation of the Capital Charges of PT. The Ind Jababeka Tbk area in 2017 experienced a significant decline every year, but there was a drastic decline in 2019 to 2021.

Table 8. Calculating Capital Charges (CC) PT Plaza Indonesia Realty Tbk

Year	IC	WACC	CC
2017	3.815.284.208	1,45	5.532.162.102
2018	14.008.442.222	3,36	47.068.365.866
2019	11.965.797.734	5,41	64.734.965.741
2020	11.397.309.515	6,23	71.005.238.278
2021	11.514.012.192	6,11	70.350.614.493

Data Research 2022

Based on the table above, the calculation of Capital Charges of PT Plaza Indonesia Realty Tbk in 2017 experienced a significant increase every year, but there was a decrease in 2021 after experiencing a drastic increase in 2020.

Table 9. Calculating Capital Charges (CC) PT. Pembangunan Perumahan Properti Tbk

Year	IC	WACC	CC
2017	10.199.123.457.291	6,61	67.416.206.052.694
2018	10.638.854.886.175	4,52	48.087.624.085.511
2019	10.788.687.871.983	5,87	63.329.597.808.540
2020	10.821.414.705.105	6,98	75.533.474.641.633
2021	10.971.941.053.233	6,72	73.731.443.877.726

Data Research 2022

Based on the table above, the calculation of Capital Charges PT. Pembangunan Perumahan Properti Tbkin 2017 experienced a significant increase every year, but there was a decline in 2021 after a drastic increase in 2020.

EVA (Economic Value Added) Calculation

Table 10. EVA (Economic Value Added) Calculation PT. Kawasan Ind. Jababeka Tbk.

Year	NOPAT	CC	EVA
2017	149.840.578.536	5.524.544.849.459	-5.374.704.270.923
2018	67.100.402.943	321.173.663.652	-254.073.260.709
2019	143.045.280.055	-3.060.400.454.185	3.203.445.734.240
2020	45.249.873.535	-5.711.789.661.335	5.757.039.534.870
2021	87.635.897.475	-10.685.445.249.483	10.773.081.146.958

Data Research 2022

Based on the table above, the EVA value at PT Ind Region. Jababeka Tbk in 2017 the EVA value from -5,374,704,270,923 increased in 2018 to -254,073,260,709 which indicates a positive EVA value.

Table 11. EVA (Economic Value Added) Calculation PT Plaza Indonesia Realty Tbk.

Year	NOPAT	CC	EVA
2017	282.420.945	5.532.162.102	-5.249.741.157
2018	572.580.916	47.068.365.866	-46.495.784.950
2019	541.127.192	64.734.965.741	-64.193.838.549
2020	-567.405.954	71.005.238.278	-71.572.644.232
2021	441.707.974	70.350.614.493	-69.908.906.519

Data Research 2022

Based on the table above, the EVA value at PT Plaza Indonesia Realty Tbk in 2017 the EVA value is - 5,249,741,157 and has a negative increase until 2021 by -69,908,906,519 which shows a negative EVA value.

Table 12. EVA (Economic Value Added) Calculation PT Pembangunan Perumahan Properti Tbk.

Year	NOPAT	CC	EVA
2017	459.642.836.413	67.416.206.052.694	-66.956.563.216.281
2018	496.783.496.821	48.087.624.085.511	-47.590.840.588.690

2019	360.895.336.040	63.329.597.808.540	-62.968.702.472.500
2020	126.494.845.856	75.533.474.641.633	-75.406.979.795.777
2021	21.019.897.927	73.731.443.877.726	-73.710.423.979.799

Data Research 2022

Based on the table above, the EVA value at PT Pembangunan Perumahan Properti Tbk in 2017 the EVA value was – 66,956,563,216,281 and reached a negative increase until 2021 of -73,710,423,979,799 which indicates a negative EVA value.

Table 13. Average EVA value of the company

NO	PT	Average
1	PT. Kawasan Ind. Jababeka Tbk	**2.820.957.776.887**
2	PT. Plaza Indonesia Realty Tbk	-51.484.183.081
3	PT. Pembangunan Perumahan Property Tbk	-65.326.702.010.609

Data Research 2022

Based on the table above, it can be seen that the average EVA value of the company during the study period where two companies namely PT Pembangunan Perumahan Property Tbk and PT Plaza Indonesia Realty Tbk showed an EVA value of < 0 meaning that during the research period the company was able to generate economic added value for the company, where this added value become one of the considerations for investors in investing.

CONCLUSIONS

Based on the results of research on financial performance analysis using the EVA (Economic Value Added) method in property and real estate sector companies that are listed on the Indonesia Stock Exchange (IDX) for the 2017 to 2021 research period, where the companies that are the research sample are property sector companies. and real estate included in the LQ 45 index.

The results of the calculation of NOPAT (Net Operating After Tax), Invested Capital, WACC (Weigh Average Cost of Capital) and CC (Capital Charges) of the company during the study period fluctuated, meaning that there was an increase and decrease, this situation was due to profit, total equity, the amount of debt, long-term debt, short- term debt, taxes and interest expense of each company also fluctuated.

EVA value fluctuated during the study period so that it showed different EVA average results, PTProperty Housing Development Tbk andPT Plaza Indonesia RealtyTbkindicates a NEGATIVE EVA or EVA < 0 which means that the company has not been able to generate economic added value whileInd Region. Jababeka Tbkshows a Positive EVA or EVA> 0 which means the company can generate economic added value because the value of NOPAT is greater than the value of Capital Charges. The added economic value that the company is able to generate can be used as a consideration for investors in investing and become a benchmark for the company's management performance.

The order of obtaining the average EVA of the companies that became the research sample:
1. PT Kawasan Ind. Jababeka Tbk 2.820.957.776.887 or EVA POSITIVE
2. PT Pembangunan Perumahan Properti Tbk   -65.326.702.010.609 or negative EVA
3. PT Plaza Indonesia RealtyTbk -51.484.183.081 or negative EVA

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