



## **Analysis Of Valuation And Stock Returns As A Basis For Making Stock Investment Decisions With The Discounted Cashflow (Dcf) Method**

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### **Abstract**

*This research is motivated by the development of infrastructure that runs rapidly and results in competition between companies. Therefore the company must be able to survive and improve its business performance to attract more investors to invest. The purpose of this study was to determine the analysis of stock valuation and stock returns in a company as the basis for making stock investment decisions whether undervalued or overvalued by using one of the stock valuation analyzes, namely the Discounted Cash Flow (DCF) method. from the Sea Transportation SubSector Companies Listed on the IDX for the 2017-2021 Period. The results of the analysis in this research are that the condition of the shares of LEAD and MBSS in 2017-2021 is undervalued where the market price is lower than the fair price, so investors should buy these shares. Meanwhile, BBRM, BLTA and HITS 2018 and BBRM, HITS and PTIS in 2020 are overvalued where the market price is higher than the fair price, so investors should sell the company's shares.*

**Keywords:** *Stock Valuation, Stock Returns, Discounted Cash Flow, Investation Decision*

### **Introduction**

When choosing to buy shares in a particular company, investors should believe in the future possibilities of the company. With this method, long-term profits can be maximized for investors. Before investing in stocks, investors should conduct research to evaluate whether the company is worth buying. Investors should do this to reduce the danger that will occur.

Valuation analysis is needed to determine investment decisions. Wira (2014, p. 126) explains that stock valuation is a method that can be used to calculate the estimated fair price of a stock, commonly referred to as fair value. This valuation is needed so that investors can find out whether the share price offered is correctly valued, expensive (overvalued), or cheap (undervalued), so that they can determine the appropriate investment decision. Overvalued refers to a stock market price that is higher than its fair value, while Undervalued refers to a stock market price that is lower than its fair value. Investors are advised to buy Undervalued companies as the price offered is less than the actual value. Meanwhile, inflated stock prices are not recommended to buy because the price of the company is higher than reasonable or arguably expensive.

So that stock valuation can be the basis for making investment decisions for investors, where financial ratios and stocks become the first reference for investors to evaluate company

performance using the DCF approach to help make investment decisions in Marine Transportation Sub-Sector companies. the concept of time value of money is used in the Discounted Cash Flow (DCF) stock valuation approach. This strategy considers all of the company's financial flows, including dividends and earnings. By forecasting future stock prices or future values while considering income growth, dividends, cash flow, and other factors. time value of money can be used to calculate the fair price of shares.

According to RMKusumo (2012) for one investor, investing in the selected securities is certainly expected to provide a rate of return (return) in accordance with the risks that must be borne by investors. For investors, this rate of return is the main factor because the return is the result obtained from an investment.

Investors must be careful in investing their business money in a company, based on the stock return picture, in order to reduce the chance of losing money. In making decisions, investors in the Marine Transportation Sub-Sector Company must assess financial ratios by examining the issuer's financial statements to find out how the company is performing, as well as the impact of financial ratios and stock returns on investment decisions. Based on the background above, the problem formulations in this study are as follows: How is stock investment decision making in marine transportation sub-sector companies listed on the IDX based on the results of valuation analysis and stock returns using the Discounted Cashflow (DCF) method?. The objectives of this study are as follows: To find out how to make stock investment decisions in marine transportation sub-sector companies listed on the IDX based on the results of valuation analysis and stock returns using the Discounted Cashflow (DCF) method.

## **Method**

### **Population and Sample**

The population of this study were 16 companies in the sea transportation sub-sector listed on the Indonesia Stock Exchange from 2017-2021. The sample of this study is using purposive sampling technique which according to Sugiyono (2017, p. 81) Purposive sampling is a sample selection process, meaning that the sample to be selected depends on certain criteria. Based on purposive sampling, there were 6 companies that became research samples.

### **Type and Source of Data**

This research uses descriptive research with quantitative methodology. Descriptive research uses data and numbers that have been collected and then explains the purpose of the statistics that have been managed. Financial ratio analysis and stock returns are used in this study to help decide investment decision making.

While the data sources needed in this study are secondary data for 2017-2021 taken from [www.idx.com](http://www.idx.com) in the form of company financial reports and stock price data in the marine transportation sub-sector listed on the IDX for the period 2017-2021.

## Result

### Research Findings

The development of financial performance conditions is described by fundamental ratios consisting of Earning Per Share (EPS), Price Earning Ratio (PER), Return On Equity (ROE), Return On Assets (ROA). PT Bina Buana Raya National Shipping Tbk (BBRM)

Table 1. Fundamental ratios of PT. Bina Buana Raya National Shipping Tbk (BBRM)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	96,93	21,73	11,61	29,36	1,79
2	PER	0,52	2,30	4,31	1,70	27,94
3	ROE	125,16%	35,46%	24,58%	155,37%	8,30%
4	ROA	40,11%	9,40%	5,78%	30,02%	2,00%

Sumber: data processed (2022)

Based on table 1, it can be seen that BBRM's EPS was the largest in 2017, namely IDR.96.93 and the smallest in 2021, namely IDR.1.79, BBRM's PER was the largest in 2021, namely IDR.27.97 and the smallest in 2017, namely IDR.0.52, BBRM's ROE was the largest in 2017, namely 125.16% and the smallest in 2021, namely 8.30% and BBRM's ROA was the largest in 2017, namely 40.11% and the smallest in 2021, namely 2.00%.

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PT. Berlian Laju Tanker Tbk (BLTA)

Table 2. Fundamental Ratios of PT Berlian Laju Tanker Tbk (BLTA)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	5,01	3,35	0,52	0,49	3,58
2	PER	39,09	58,58	96,82	101,87	13,96
3	ROE	29,41%	18,73%	2,85%	2,93%	18,38%
4	ROA	10,99%	7,60%	1,29%	1,24%	8,38%

Sumber: data processed (2022)

Based on table 2, it can be seen that the largest BLTA EPS in 2017 is IDR.5.01 and the smallest in 2020 is IDR.0.49, the largest BLTA PER in 2020 is IDR.101.87 and the smallest in 2021 is IDR.13.96, the largest BLTA ROE in 2017 is 29.41% and the smallest in 2019 is 2.85% and the largest BLTA ROA in 2017 is 10.99% and the smallest in 2020 is 1.24%.

PT. Humpuss Intermodal Transportation Tbk

Table 3. Fundamental Ratios of PT Humpuss Intermoda Transportasi Tbk (HITS)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	19,09	25,58	25,73	14,52	25,94
2	PER	38,25	27,37	28,18	33,46	14,80
3	ROE	24,10%	23,51%	20,88%	10,75%	20,32%
4	ROA	5,70%	6,35%	6,45%	3,59%	5,77%

Sumber: data processed (2022)

Based on table 3, it can be seen that the largest HITS EPS in 2021 is IDR 25.94 and the smallest in 2020 is IDR 14.52, the largest HITS PER in 2017 is IDR 38.25 and the smallest in 2021 is IDR 14.80, the largest HITS ROE in 2017 is 24.10% and the smallest in 2020 is 10.75% and the largest HITS ROA in 2019 is 6.45% and the smallest in 2020 is 3.59%.

PT Logindo Samudra makmur Tbk (LEAD)

Table 4. Fundamental Ratios of PT Logindo Samudra makmur Tbk (LEAD)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	67,51	162,28	29,34	9,38	9,35
2	PER	1,17	0,31	1,70	5,33	5,99
3	ROE	21,27%	91,85%	21,09%	7,13%	7,54%
4	ROA	9,95%	28,97%	5,66%	1,91%	1,94%

Sumber: data processed (2022)

Based on table 4, it can be seen that the largest EPS LEAD in 2017 is IDR 67.51 and the smallest in 2021 is IDR 9.35, the largest PER LEAD in 2018 is IDR 5.99 and the smallest in 2021 is IDR 0.31, the largest ROE LEAD in 2018 is 91.85% and the smallest in 2020 is 7.13% and the largest ROA LEAD in 2018 is 28.97% and the smallest in 2020 is 1.91%.

PT Mitrahahtera Segara Sejati Tbk (MBSS)

Tabel 5. Rasio Fundamental PT. Mitrahahtera Segara Sejati Tbk (MBSS)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	68,97	138,59	14,36	120,70	99,00
2	PER	8,55	3,52	33,56	3,91	11,01
3	ROE	4,74%	9,77%	1,05%	9,55%	7,18%
4	ROA	3,71%	6,99%	0,83%	7,69%	6,84%

Sumber: data processed (2022)

Based on table 5, it can be seen that MBSS EPS was the largest in 2020 at Rp.120.70 and the smallest in 2019 at Rp.14.36, MBSS PER was the largest in 2019 at Rp.33.56 and the smallest in 2018 at Rp.3.52, MBSS ROE was the largest in 2018 at 9.77% and the smallest in 2019 at 1.05% and MBSS ROA was the largest in 2020 at 7.69% and the smallest in 2019 at 0.83%.

PT. Indo Straits Tbk (PTIS)

Table 6. Fundamental Ratios of PT Indo Straits Tbk (PTIS)

No.	Kode	2017	2018	2019	2020	2021
1	EPS	51,98	3,14	5,56	0,10	3,21
2	PER	11,54	101,86	34,86	1.564,89	117,02
3	ROE	12,99%	0,73%	1,33%	0,02%	0,74%

No.	Kode	2017	2018	2019	2020	2021
4	ROA	5,29%	0,31%	0,61%	0,01%	0,34%

Sumber: data processed (2022)

Based on table 6, it can be seen that the largest PTIS EPS in 2017 is Rp.51.98 and the smallest in 2020 is Rp.0.10, the largest PTIS PER in 2020 is Rp.1,564.89 and the smallest in 2017 is Rp.11.54, the largest PTIS ROE in 2017 is 12.99% and the smallest in 2020 is 0.02% and the largest PTIS ROA in 2017 is 5.29% and the smallest in 2019 is 0.01%.

#### Stock Return Analysis Based on Realized Return Approach

#### PT. Bina Buana Raya National Shipping Tbk (BBRM)

Table 7. Comparison of BBRM Stock Returns in 2017-2021

No.	Tahun	Return	
		Saham	Inflasi
1	2017	0,00%	3,81%
2	2018	0,00%	3,20%
3	2019	0,00%	3,03%
4	2020	0,00%	2,04%
5	2021	0,00%	1,56%
Total	2017-2021	0,00%	13,64%

Sumber: data processed (2022)

Based on table 7, it can be seen that from 2017 to 2021 BBRM did not generate stock returns, so the return value of BBRM shares was 0.00%.

#### PT. Berlian Laju Tanker Tbk (BLTA)

Table 8. Comparison of BLTA Stock Returns in 2017-2021

Based on table 8, it can be seen that the lowest BLTA stock return in 2019 was -74.49% during 2017 to 2018 and 2020 to 2021 BLTA did not generate stock returns so that the BLTA stock return value was 0.00%.

#### PT. Humpuss Intermodal Transportation Tbk

Table 9. Comparison of HITS Stock Returns 2017-2021

No.	Tahun	Return Saham	Inflasi
1	2017	-5,19%	3,81%
2	2018	-4,11%	3,20%
3	2019	3,57%	3,03%
4	2020	-32,97%	2,04%
5	2021	-20,99%	1,56%
Total	2017-2021	-59,69%	13,64%

Sumber: data processed (2022)

Based on table 8, it can be seen that the 2019 HITS stock return is positive by 3.57% above the inflation value, while 2017-2018 and 2020-2021 HITS stock returns are negative. With a total stock return of -59.69% for 5 years far below the inflation value for the same period.

#### PT. Logindo Samudra makmur Tbk (LEAD)

Table 10. Comparison of LEAD Stock Returns 2017-2021 Based on table 10, it can be seen that the return

No.	Tahun	Return	
		Saham	Inflasi
1	2017	-26,85%	3,81%
2	2018	-36,71%	3,20%
3	2019	0,00%	3,03%
4	2020	0,00%	2,04%
5	2021	12,00%	1,56%
Total	2017-2021	-51,56%	13,64%

Sumber: data processed (2022)

LEAD stock 2021 is positive by 12% above its inflation value. Meanwhile, the lowest LEAD stock return in 2018 was -36.71% and during 2019 to 2020 LEAD did not generate stock returns, so the return value of LEAD shares was 0.00%. Thus for 5 years the total return of BBRM is negative -51.56%. This means that within a period of 5 years investors suffered losses when investing in LEAD.

PT Mitrabahera Segara Sejati Tbk (MBSS)

Table 11. Comparison of MBSS Stock Return 2017-2021

No.	Tahun	Return	
		Saham	Inflasi
1	2017	85,53%	3,81%
2	2018	-17,29%	3,20%
3	2019	-1,23%	3,03%
4	2020	-2,07%	2,04%
5	2021	130,93%	1,56%
Total	2017-2021	195,87%	13,64%

Sumber: data processed (2022)

Based on table 11 above, it can be seen that MBSS stock returns gave negative returns in 2018 by -17.29%, 2019 by -1.23% and 2020.

No.	Tahun	Return	
		Saham	Inflasi
1	2017	0,00%	3,81%
2	2018	0,00%	3,20%
3	2019	-74,49%	3,03%
4	2020	0,00%	2,04%
5	2021	0,00%	1,56%
Total	2017-2021	-74,49%	13,64%

Sumber: data processed (2022)

Of -2.07%. Meanwhile, in 2017 and 2021 MBSS shares gave a return above the inflation value. Thus in a period of 5 years MBSS was able to provide a total return of 195.87% above the inflation value in the same period.

PT Indo Straits Tbk (PTIS)

Table 12. Comparison of PTIS Stock Returns 2017-2021

No.	Tahun	Return	
		Saham	Inflasi
1	2017	-25,00%	3,81%
2	2018	-46,67%	3,20%
3	2019	-39,38%	3,03%
4	2020	-17,53%	2,04%
5	2021	135,00%	1,56%
Total	2017-2021	6,43%	13,64%

Sumber: data processed (2022)

Based on table 12, it can be seen that PTIS stock returns provide negative returns from 2017-2020. Meanwhile, PTIS stock returns provide a positive return in 2021 of 135.00% far above the inflation value. Thus, within a period of 5 years PTIS was able to provide a total return of 6.43% below the inflation value in the same period.

Table 13. Results of Analysis of Investment Decisions of Sea Transportation Sub-Sector Companies in 2017-2019

Emiten	Keputusan investasi		
	2017	2018	2019
BBRM	<i>undervalued</i> membeli	<i>Overvalued</i> menjual	<i>undervalued</i> membeli
BLTA	<i>undervalued</i> membeli	<i>Overvalued</i> Menjual	<i>undervalued</i> membeli
HITS	<i>undervalued</i> membeli	<i>Overvalued</i> Menjual	<i>Overvalued</i> Menjual
LEAD	<i>undervalued</i> membeli	<i>undervalued</i> membeli	<i>undervalued</i> membeli
MBSS	<i>undervalued</i> membeli	<i>undervalued</i> membeli	<i>undervalued</i> membeli
PTIS	<i>undervalued</i> Membeli	<i>undervalued</i> Membeli	<i>Overvalued</i> Menjual

Sumber: data processed (2022)

Table 14. Results of Analysis of Investment Decisions of Sea Transportation Sub-Sector Companies in 2020-2021

Emiten	Keputusan investasi	
	2020	2021
BBRM	<i>Overvalued</i> menjual	<i>undervalued</i> membeli
BLTA	<i>undervalued</i> membeli	<i>undervalued</i> membeli
HITS	<i>Overvalued</i> Menjual	<i>undervalued</i> membeli
LEAD	<i>undervalued</i> membeli	<i>undervalued</i> membeli
MBSS	<i>undervalued</i>	<i>undervalued</i>

	membeli	membeli
PTIS	<i>Overvalued</i>	<i>Overvalued</i>
	Menjual	Menjual

Sumber: data processed (2022)

Based on tables 13 and 14 above, it can be seen that the investment decision that can be recommended to investors is to buy shares of LEAD and MBSS companies with the results of this large fair price analysis, so the investment decision for these companies is worth buying. Shares in undervalued conditions should be purchased because the share price is cheap, so if investors buy these shares, the possibility of experiencing profits is very large and it can be concluded that the company is within safe limits to buy. Furthermore, the companies BBRM, BLTA and HITS in 2018 and BBRM, HITS and PTIS in 2020 are in an overvalued condition. This means that the company's market price is lower than its fair price. Stocks in overvalued conditions should not be purchased because the share price is too high, meaning that if investors buy these shares, the possibility of experiencing losses is very large and it can be concluded that the company is not within safe limits to buy, but it is safer to sell.

### Conclusion

Based on the results of research on Marine Transportation Sub-Sector Companies in 2017-2021, the following conclusions can be drawn: The results of stock investment decisions using the Discounted Cash Flow (DCF) method show that LEAD and MBSS shares in 2017-2021 are undervalued where the market price is lower than the fair price, so investors should buy these shares. BBRM, BLTA and HITS in 2018 and BBRM, HITS and PTIS in 2020 are overvalued where the market price is higher than the fair price, so investors should sell the company's shares.

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