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Valuation Model for The Acquisition of PT Prima Globalindo Logistik Tbk (PPGL) Shares by PT Pelayaran Nasional Ekalya Purnamasari Tbk (ELPI)

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ABSTRACT

The aim of this research is to assess the valuation for the acquisition, which is a strategic goal focused on improving performance through product diversification. By acquiring PT Prima Globalindo Logistik Tbk (IDX: PPGL), PT Pelayaran Nasional Ekalya Purnamasari Tbk (IDX: ELPI) intends to broaden its product portfolio by incorporating PPGL's existing offerings. The study utilizes a quantitative approach, which involves gathering numerical data and analyzing it with statistical methods. The goal is to determine an appropriate transaction structure and price for PT Prima Globalindo Logistik Tbk (IDX: PPGL) in the acquisition by PT Pelayaran Nasional Ekalya Purnamasari Tbk (IDX: ELPI). A successful execution of this corporate action requires careful calculations to improve the performance of the purchasing company and achieve its primary objective. One of the research objectives is to determine the valuation of PT Prima Globalindo Logistik Tbk (IDX: PPGL) as a business. The Free Cash Flow to Firm (FCFF) method is a suitable approach for valuation in a corporate context. This method, along with other financial measures, is used to estimate the cash generated by the company. To forecast the company's financial performance for the next five years (2024-2028), an analysis of PPGL's financial reports from 2021 to 2023 is necessary. Based on this analysis, the book value of PPGL is IDR 341,912 million, or IDR 443 per share, when calculated using the FCFF method. In comparison, the market value of equity as of December 2023 is IDR 102 per share, which is lower than its book value, resulting in a Price-to-Book Value (PBV) ratio of 0.23. Given this market value and the conditions in the logistics industry, it is recommended to proceed with a buy action for the transaction.

Keywords : FCFF (Free Cash flow to Firm), Historical Financial Performances, Merger and Acquisition

INTRODUCTION

A company can enhance its survival and growth by implementing mergers and acquisitions (M&A), a strategic economic process where one company gains control over another to achieve various objectives like growth, market expansion, technology access, or reducing competition. Acquisitions, involving the purchase of shares or assets, can

foster accelerated growth compared to organic growth strategies, and offer synergies for operational efficiency.

However, the integration process can be challenging and costly, with the potential for negative outcomes if not managed effectively. There are two main types of acquisitions: mergers, where two firms combine into a new entity, and buyouts, where a larger company acquires a smaller one (Ray, 2022). Acquisitions are often chosen over internal growth, as they can provide quicker non-organic growth, but they require careful alignment with business strategy. Financial performance, including ratios like Debt-to-Equity and Return on Assets, plays a crucial role in determining acquisition targets (Ambar, et al., 2022). M&A can enhance profitability and shareholder value but also present risks if integration fails.

Research suggests that post-merger and acquisition, organizations often prioritize improving earnings quality, potentially sacrificing other financial indicators like profitability, liquidity, and solvency (Irawan & Edi, 2021). The success of an acquisition depends on a well-defined strategy, thorough analysis, and effective execution, with decisions based on a comprehensive evaluation of potential benefits and risks (Levi, Li, & Zhang, 2014). Previous research on the Transportation and Logistic industry highlighted the need for companies like PT Prima Globalindo Logistik Tbk (IDX: PPGL) and PT Pelayaran Nasional Ekalya Purnamasari Tbk (IDX: ELPI) to conduct thorough studies for a successful acquisition (Wuryantadi, 2023). The integration process is divided into three stages: goal-setting, the integration phases (transaction, transition, and integration), and continuous evaluation until synergies are realized (Anwar, 2019). Value creation is challenged by ensuring the price paid aligns with the target company's value, avoiding overpayment or underpayment (Custodio, 2014). This research focuses on determining the fair valuation of PPGL within M&A contexts to assess financial performance and inform bidding strategies.

LITERATURE REVIEW

Mergers and acquisitions (M&A) are strategic economic processes that enable companies to enhance their survival and growth by gaining control over other firms (Astried, et al., 2023). M&A aims to achieve objectives such as market expansion, access to new technologies, growth, and the reduction of competition (Malik, et al., 2014).

Through acquisitions, which involve purchasing shares or assets, companies can realize accelerated growth and operational synergies, often surpassing the results of organic growth strategies (DePamphilis, 2019). However, integrating the acquired company can be complex and costly, and if not managed effectively, may lead to negative outcomes. There are two main types of acquisitions: mergers, where two firms combine into a new entity, and buyouts, where a larger company acquires a smaller one (Hitt, et al., 2015). M&A is often preferred over internal growth as it offers quicker non-organic growth, but it requires careful alignment with the company's overall business strategy.

The success of an acquisition is influenced by various factors, including the financial performance of the target company, with key indicators such as Debt-to-Equity and Return on Assets playing a crucial role in assessing acquisition targets (Hitt, et al., 2019). While M&A can enhance profitability and shareholder value, it also presents risks, particularly in the integration process, which is divided into three stages: goal-setting, transaction, and integration. A strategic and thorough evaluation of potential benefits and risks is essential for determining the fair valuation of a target company, ensuring that the price aligns with the target company's value and avoiding overpayment (Irawan & Edi, 2021; Levi, Li, & Zhang, 2014; Wuryantadi, 2023; Custodio, 2014). This research focuses on determining the fair valuation of PT Prima Globalindo Logistik Tbk (PPGL) within the context of M&A to assess financial performance and inform bidding strategies.

METHOD

The author utilizes a quantitative approach, which involves collecting numerical data and analyzing it using statistical tools. The main goal of the study is to quantitatively measure and offer an objective analysis of various events (Rossi, et al., 2013). In addition, the study aims to test hypotheses empirically and identify patterns and relationships among existing variables. Quantitative research examines the relationships between measurable variables, which are analyzed using various statistical and graphical methods (Saunders, Lewis, & Thornhill, 2019).

The integration process consists of two main stages, starting with setting strategic financial goals. Aligning these goals is crucial for identifying potential value sources (Yaghoubi & Motahhari, 2016). The second phase begins with target identification and

continues until the referral procedure is publicly announced. This phase includes three stages: transaction, transition, and integration (Rossi, Yedidia Tarba, & Raviv, 2013).

During this phase, activities such as pricing, pricing analysis, and synergy evaluation are carried out to align them with the set objectives. According to Anwar (2019), the third phase focuses on continuous evaluation and improvement until the synergistic value is achieved. The research process followed several steps: 1. Collecting data on the target company through annual reports from both companies (Indonesia Stock Exchange, 2023). 2. Reviewing the financial history and identifying key variables ("value drivers") that significantly affect a company's performance. 3. Analyzing the financial targets and potential acquirers, and estimating their respective values.

RESULT

Based on an analysis of the financial statements of the target firm, PT Prima Globalindo Logistik Tbk (IDX: PPGL), over the past three years, the following description can be provided:

Table 1. Financial Statements PT Prima Globalindo Logistik Tbk

	Actual		
	2021	**2022**	**2023**
Sales	**258.805**	**291.114**	**184.210**
Cost of Goods Sold	**199.731**	**225.688**	**127.522**
Gross Profit	59.074,0	65.425,7	56.687,8
SG&A	**22.622,0**	**25.135,1**	**25.273,9**
Other Operating Expense	**4.008,3**	**6.571,8**	**5.986,2**
Depreciation	4.764,0	4.845,2	6.164,6
Amortization			
EBIT	**27.679,7**	**28.873,6**	**19.263,1**
Unusual (Gain) Loss			
(Income) from Affiliates			
Other Expense (Income)	**(142,5)**	**(279,1)**	**5.284,7**
Interest (Income)			
Interest Expense	**(2.327,7)**	**(1.640,0)**	**(1.868,0)**
Earnings before Taxes	**25.209,5**	**26.954,5**	**22.679,7**
Noncontrolling Interest	-	-	-
Taxes	**4.899,2**	**6.509,8**	**5.247,2**
Net Income before Extra Items	**20.310,3**	**20.444,7**	**17.432,5**

Source : Research Data, 2024

The company's revenue decreased by 36.7% in 2023. The Operational Profit Margin increases in terms of contribution margin from previously only 9.92% in 2022 to 10.46% in 2023. The company's net profit decreased from the previous Rp. 20,444 million in 2022 to Rp. 17,432 million in 2023.

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Table 2. Financial Statements PT Prima Globalindo Logistik Tbk

	Actual		
	2021	**2022**	**2023**
Assets (Rp.M)			
Cash & Short Term Investments	3.663	14.784	10.780
Accounts Receivable	54.220	53.578	42.685
Other Receivables	1.773	2.722	3.016
Total Receivables	55.994	56.301	45.701
Inventory	0	19.067	21.600
Prepaid Exp.	650	1.166	5.532
Other Current Assets	33.553	4.500	0
Total Current Assets	**93.860**	**95.818**	**83.613**
Gross Property, Plant & Equipment	96.627	95.820	115.834
Accumulated Depreciation	(35.475)	(39.240)	(39.077)
Net Property, Plant & Equipment	**61.152**	**56.580**	**76.757**
Deferred Tax Assets, LT	185	202	245
Other Long-Term Assets	7.784	24.416	38.312
Total Assets	**162.982**	**177.016**	**198.927**

Source : Research Data, 2024

From the balance sheet side, Current Assets experienced a decrease in contribution to total assets, from previously 54.13% in 2022 to only 42. 03% in 2023. Meanwhile, fixed assets have increased from the previous amount of IDR 95,820 million in 2022, to IDR 115,834 million in 2023, or an increase of 120.89%.

Table 3. Financial Statements PT Prima Globalindo Logistik Tbk

	Actual		
	2021	**2022**	**2023**
Liabilities (Rp.M)			
Accounts Payable	17.705	9.024	6.379
Accrued Exp.	1.250	482	1.249
Short-term Borrowings	0	14.079	9.939
Curr. Port. of LT Debt	969	0	0
Current Portion of Leases	3.822	1.701	2.026
Curr. Income Taxes Payable	348	952	691
Unearned Revenue, Current	482	13	13.521
Other Current Liabilities	8.700	5.287	5.122
Total Current Liabilities	**33.276**	**31.539**	**38.926**
Long-Term Debt	1.249	483	12.958
Long-Term Leases	3.137	1.437	193
Pension & Other Post-Retire. Benefits	843	877	1.044
Total Liabilities	**38.505**	**34.335**	**53.121**
Equity (Rp.M)			
Common Stock	16.500	16.966	16.966
Additional Paid In Capital	10.461	13.212	13.212
Retained Earnings	15.469	26.216	34.676
Comprehensive Inc. and Other	8.272	9.747	10.962
Total Common Equity	50.703	66.141	75.816
Total Minority Interest	73.774	76.541	69.991
Total Equity	**124.477**	**142.681**	**145.807**
Total Liabilities And Equity	**162.982**	**177.016**	**198.927**

Source : Research Data, 2024

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In line with the increase in assets, long-term debt has also increased from the previous Rp. 483 million to Rp. 12,958 million in 2023. The assumptions depicted in Figure 4 pertain to the projection of PPGL's performance throughout the course of the subsequent five years, based on the use of factual data from the preceding three years.

Table 4. Asumption

	Projections for the Period Ending December 31,				
	2024	**2025**	**2026**	**2027**	**2028**
Income Statement					
Sales Growth	**5,0%**	5,0%	5,0%	5,0%	5,0%
COGS as a % of Sales	**74,6%**	74,6%	74,6%	74,6%	74,6%
SG&A % annual increase (decrease)	**3,9%**	3,9%	3,9%	3,9%	3,9%
Other Operating Expense as a % of Sales	**3,2%**	3,2%	3,2%	3,2%	3,2%
EBITDA Growth	(35,1%)	6,8%	6,7%	6,7%	6,6%
EBITDA Margin	8,5%	8,7%	8,8%	9,0%	9,1%
Balance Sheet					
Receivable Days	**84,6**	84,6	84,6	84,6	84,6
Inventory Days	**61,8**	61,8	61,8	61,8	61,8
Other Current Assets % of Sales	**0,1**	7,3%	7,3%	7,3%	7,3%
Accounts Payable Days	**18,3**	18,3	18,3	18,3	18,3
Other Current Liabilities % of COGS	**0,0**	3,6%	3,6%	3,6%	3,6%
Cash Flow					
Capital Expenditures	2.550,7	2.678,2	2.812,1	2.952,7	3.100,4
Capex as a % of Sales	**1,3%**	1,3%	1,3%	1,3%	1,3%
Depreciation	6.674,7	7.210,4	7.772,8	8.363,3	8.983,4
Depreciation as a % of Sales	**3,3%**	3,3%	3,3%	3,3%	3,3%
Retirement of Senior Debt	**2.996,8**	2.996,8	2.996,8	2.996,8	2.996,8
Effective Tax Rate	**22,0%**	22,0%	22,0%	22,0%	22,0%
Other					
Average Interest Rate	18,25%	18,25%	18,25%	18,25%	18,25%

Source : Research Data, 2024

Sales is projected would increase 5%, due to the increasing of Logistic demand that projected will increase 5%. Cost of Goods Sold are projected to be the as same as the average margin over the historical period. SG&A are projected will increase 3,9% per year as same as the average historical SG&A's growth. and for Capex, it is estimated that there will be purchases of fixed assets related to operational assets.

We can obtain the Profit and Loss, Balance Sheet and Cash Flow projections, as presented in Figures 4, 5 and 6 below:

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Table 5. Profit and Loss

(In Million IDR)

Details	2024	2025	2026	2027	2028
Sales	193.420	203.091	213.246	223.908	235.104
Cost of Goods Sold	144.373	151.592	159.172	167.130	175.487
Gross Profit	**49.047**	**51.500**	**54.074**	**56.778**	**59.617**
SG&A	26.256	27.277	28.337	29.439	30.583
Other Operating Expense	6.285	6.600	6.930	7.276	7.640
Depreciation	6.675	7.210	7.773	8.363	8.983
Amortization	-	-	-	-	-
EBIT	**9.831**	**10.412**	**11.035**	**11.700**	**12.411**
Other Expense (Income)	-	-	-	-	-
Interest (Income)					
Interest Expense	**(546,9)**	**(546,9)**	**(546,9)**	**(546,9)**	**(362,0)**
Earnings before Taxes	**10.378**	**10.959**	**11.582**	**12.247**	**12.773**
Noncontrolling Interest	-	-	-	-	-
Taxes	2.283	2.411	2.548	2.694	2.810
Net Income After Tax	**8.094**	**8.548**	**9.034**	**9.552**	**9.963**

Source : Research Data, 2024

Table 6. Balance Sheet

(In Million IDR)

Details	2024	2025	2026	2027	2028
Assets (Rp.M)					
Cash & Short Term Investments	15.856	22.837	30.577	39.122	50.406
Accounts Receivable	44.819	47.060	49.413	51.884	54.478
Other Receivables	3.016	3.016	3.016	3.016	3.016
Total Receivables	47.835	50.076	52.429	54.900	57.494
Inventory	24.454	25.677	26.961	28.309	29.724
Prepaid Exp.	5.532	5.532	5.532	5.532	5.532
Other Current Assets	-	-	-	-	-
Total Current Assets	**93.678**	**104.122**	**115.499**	**127.863**	**143.156**
Gross Property, Plant & Equipment	118.385	121.063	123.875	126.828	129.928
Accumulated Depreciation	(45.752)	(52.962)	(60.735)	(69.098)	(78.082)
Net Property, Plant & Equipment	**72.633**	**68.101**	**63.140**	**57.730**	**51.847**
Deferred Tax Assets, LT	245	245	245	245	245
Other Long-Term Assets	38.312	38.312	38.312	38.312	38.312
Total Assets	**204.868**	**210.780**	**217.196**	**224.150**	**233.560**
Liabilities (Rp.M)					
Accounts Payable	7.222	7.583	7.962	8.360	8.778
Accrued Exp.	1.249	1.249	1.249	1.249	1.249
Short-term Borrowings	9.939	9.939	9.939	9.939	9.939
Curr. Port. of LT Debt	-	-	-	-	-
Current Portion of Leases	2.026	2.026	2.026	2.026	2.026
Curr. Income Taxes Payable	691	691	691	691	691
Unearned Revenue, Current	13.521	13.521	13.521	13.521	13.521
Other Current Liabilities	5.122	5.122	5.122	5.122	5.122
Total Current Liabilities	**39.769**	**40.130**	**40.510**	**40.908**	**41.326**
Long-Term Debt	9.961	6.964	3.967	970	-
Long-Term Leases	193	193	193	193	193
Pension & Other Post-Retire. Benefits	1.044	1.044	1.044	1.044	1.044
Total Liabilities	**50.967**	**48.331**	**45.714**	**43.115**	**42.562**
Equity (Rp.M)					
Common Stock	16.966	16.966	16.966	16.966	16.966
Additional Paid In Capital	13.212	13.212	13.212	13.212	13.212
Retained Earnings	42.770	51.319	60.352	69.905	79.867
Comprehensive Inc. and Other	10.962	10.962	10.962	10.962	10.962
Total Common Equity	83.910	92.459	101.492	111.045	121.007
Total Minority Interest	69.991	69.991	69.991	69.991	69.991
Total Equity	**153.901**	**162.449**	**171.483**	**181.035**	**190.998**
Total Liabilities And Equity	**204.868**	**210.780**	**217.196**	**224.150**	**233.560**

Source : Research Data, 2024

Table 7. Cash flow

(In Million IDR)

Details	2024	2025	2026	2027	2028
Net Income	8.094	8.548	9.034	9.552	9.963
Depreciation & Amortization	6.674,7	7.210,4	7.772,8	8.363,3	8.983,4
Change in					
Accounts Receivable	(2.134,3)	(2.241,0)	(2.353,0)	(2.470,7)	(2.594,2)
Inventory	(2.854,3)	(1.222,7)	(1.283,8)	(1.348,0)	(1.415,4)
Accounts Payable	842,9	361,1	379,1	398,1	418,0
Cash Flow from Operating Activities	**10.623,6**	**12.656,0**	**13.548,7**	**14.495,2**	**15.354,4**
Capital Expenditures	(2.550,7)	(2.678,2)	(2.812,1)	(2.952,7)	(3.100,4)
Cash Flow from Investing Activities	**(2.550,7)**	**(2.678,2)**	**(2.812,1)**	**(2.952,7)**	**(3.100,4)**
Net Change in Equity					
Net Change in Debt	(2.996,8)	(2.996,8)	(2.996,8)	(2.996,8)	(970,4)
Cash Flow from Financing Activities	**(2.996,8)**	**(2.996,8)**	**(2.996,8)**	**(2.996,8)**	**(970,4)**
Net Change in Cash	5.076,1	6.981,0	7.739,8	8.545,7	11.283,5
Beginning Cash Balance	10.779,9	15.856,0	22.837,0	30.576,7	39.122,4
Cash Available for Revolving Credit	**15.856**	**22.837**	**30.577**	**39.122**	**50.406**

Source : Research Data, 2024

The concluding phase involves assessing the value of the target company and the recently acquired company in order to derive the valuation outcomes that will be utilized to formulate an offer to the target company, (PPGL), as presented in Figure 13. In this study, the authors adopted the free cash flow to firms (FCFF) method approach. The aforementioned are financial principles and indicators employed to evaluate the cash flow created by a company entity, taking into consideration all expenses related to operations, investments, and the replenishment of working capital due to currency exchange. The Free Cash Flow to Firm (FCFF) is a financial metric that quantifies the cash resources accessible to various stakeholders inside a company, including owners, creditors, and other entities engaged in the company's operations. The computation of free cash flow for a corporation encompasses various significant elements, namely: earnings before interest and taxes (EBIT); taxation; depreciation and amortization expenses; alterations in working capital; and the cost of capital, specifically capital expenditure.

Free cash flow to the firm (FCFF) represents the amount of cash flow from operations available for distribution after accounting for depreciation expenses, taxes, working capital, and investments. FCFF is a measurement of a company's profitability after all expenses and reinvestments. It is one of the many benchmarks used to compare and analyze a firm's financial health. Net Cash Flow to the Company (Free Cash Flow to Firm) is calculated as follows:

EBIT

- Tax

+ Depreciation

- Increase (Decrease) in Working Capital

- Addition of Capex

= Net Cash Flow for the Company (Free Cash Flow to Firm)

Discount Rate calculation.

In calculating the discount factor for Net Cash Flow (FCFF) we use a discount rate based on the Weighted Average Cost of Capital (WACC) with the following formula:

$$\mathbf{WACC = [\{e/(e+b)\}x\ ke] + [\{b/(e+b)\}\ x\ kb\ x\ (1-t)]}$$

Where :

WACC = weighted average cost of capital

We = market value of equity

Wd = market value of debt

Ke = cost of capital for equity

Kd = cost of capital for debt

t = tax rate

Determining the Cost of Capital for Equity

The discount rate for equity is obtained by applying a modified Capital Asset Pricing Model (CAPM) model. This model states that the cost of equity is risk-free interest plus a premium to cover the systematic risk of stock securities, an additional premium is also required to be able to attract equity into an investment and to cover the impact of the business scale and specific conditions of the subject company being valued. The cost of equity formula is as follows:

$$\mathbf{Ke = Rf + ß\ (Rm\text{-}Rf)}$$

Where :

Rf = rate of return for risk-free investments

Rm = rate of return expected by the equity market

ß = factor to cover the systematic risk of an equity

Results of Market Rate of Return Analysis (Rm)

The market rate of return is the rate of return based on the development of the stock index. The market return is calculated by measuring the difference between the market

index in the current month (t) and the previous month (t-1) then divided by the IHSG in the previous month (t-1).

Table 8. Market Rate of Return

Date	Opening	High	Low	Close	Return	Vol (Bilion)
Dec 1, 2023	7.080,06	7.309,78	7.022,77	7.272,80		420,06
Nov 1, 2023	6.751,94	7.109,61	6.639,82	7.080,74	2,71%	390,64
Oct 1, 2023	6.939,89	6.992,63	6.666,41	6.752,21	4,87%	396,29
Sep 1, 2023	6.953,26	7.046,48	6.900,59	6.939,89	-2,70%	346,75
Aug 1, 2023	6.931,08	7.008,49	6.823,75	6.953,26	-0,19%	370,59
Jul 1, 2023	6.661,74	6.966,17	6.660,82	6.931,36	0,32%	306,44
Jun 1, 2023	6.633,26	6.744,64	6.578,76	6.661,88	4,05%	268,6
May 1, 2023	6.915,72	6.920,34	6.562,96	6.633,26	0,43%	381,39
Apr 1, 2023	6.805,28	6.971,91	6.735,19	6.915,72	-4,08%	190,75
Mar 1, 2023	6.843,10	6.889,51	6.542,79	6.805,28	1,62%	323,05
Feb 1, 2023	6.838,92	6.961,92	6.781,23	6.843,24	-0,55%	324,33
Jan 1, 2023	6.850,74	6.932,71	6.557,92	6.839,34	0,06%	330,67
				Total	6,51%	
				Max	4,87%	
				Min	-4,08%	

Source : Research Data, 2024

The table shows that the sum of the market rate of return (Rm) is 6,51%.

Results of Systematic Risk Analysis

Table 9. Rate of Return of PPGL

Date	Open	High	Low	Close	Adj Close	Return	Volume
Dec 1, 2023	102	107.00	95.00	102	97,57	1,93%	5,272,500
Nov 1, 2023	100	110.00	100.00	102	95,72	0,98%	7,306,900
Oct 1, 2023	104	110.00	98.00	101	94,79	-2,88%	7,642,600
Sep 1, 2023	101	107.00	98.00	104	97,6	1,96%	10,700,200
Aug 1, 2023	120	120.00	98.00	102	95,72	-15,03%	29,730,600
Jul 1, 2023	124	130.00	114.00	122	112,65	-1,61%	25,288,300
Jun 1, 2023	126	130.00	120.00	124	114,49	-1,59%	7,188,500
May 1, 2023	123	135.00	120.00	126	116,34	2,44%	15,328,700
Apr 1, 2023	121	127.00	117.00	123	113,57	1,66%	6,899,400
Mar 1, 2023	131	136.00	113.00	121	111,72	-7,64%	9,879,500
Feb 1, 2023	130	138.00	128.00	131	120,96	2,34%	8,660,500
Jan 1, 2023	137	145.00	125.00	128	118,19		16,966,200
					Average	-17,43%	

Source : Research Data, 2024

Risk Free (Bank of Indonesia)

The BI rate data in this study is used as an indicator in calculating the Risk-Free rate (Rf); the results of the calculation of the Risk-Free rate are as follows:

Table 10. Risk Free Rate for the Period Januari 2023 to Desember 2023

No.	BI-Rate	BI-7Day-RR
1	21-Dec-23	6,00%
2	23-Nov-23	6,00%
3	19-Oct-23	6,00%
4	21-Sep-23	5,75%
5	24-Aug-23	5,75%
6	25-Jul-23	5,75%
7	22-Jun-23	5,75%
8	25-May-23	5,75%
9	18-Apr-23	5,75%
10	16-Mar-23	5,75%
11	16-Feb-23	5,75%
12	19-Jan-23	5,75%
	Risk Free	5,81%

Source : Research Data, 2024

Rf (Risk free rate), is the interest rate for instruments that are considered to have no possibility of default. For this case, the risk-free instrument chosen is the long-term government bond interest rate of with an average rate of 5,81%.

Risk Premium (Rm-Rf), is the Market Risk Premium for the equity market as a whole. Based on th formula of Risk Premium, which is (Rm-Rf), the calculation would be 6,51% – 5,81% equals to 0,70%.

Systematic risk or Beta (β) is a measure of market risk that affects the price of a share. The beta value of a stock comes from the relationship between the rate of return of a stock and the market rate of return (Hartono, 2012).

Table 11. Systematic Risk (β) of the Stock for the Period Januari 2023 to Desember 2023

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	- 0,0169	0,0176	- 0,9622	0,3611	- 0,0567	0,0229	- 0,0567	0,0229
RT	0,1823	0,6751	0,2700	0,7932	- 1,3449	1,7095	- 1,3449	1,7095

Source : Research Data, 2024

Systematic Risk (β) of the Stock for the Period Januari 2023 to Desember 2023

Beta (β) is a factor to cover the systematic risk of an equity. Beta will be multiplied by the market risk premium to get the equity risk premium. The beta occurred from this calculation is 0,183.

Capital Aset Pricing Model Calculation

Based on the formula mentioned above, the calculation of the CAPM resulted as follows:

Table 12. CAPM Calculation

Uraian	Jumlah
Cost Of Equity:	
Risk Free	5,81%
Risk Premium	0,70%
Beta	0,1823
Cost Of Equity:	5,94%

Source : Research Data, 2024

Cost of Debt

The Cost of Debt is obtained based on the interest rate that the bank gives to PPGL minus the percentage of Coorporate Income Tax which is 22%. The average Interest rate for the loans they applied related to their business activities is 7,58%. Based on the Formula of the Cost of Debt Calculation, 7,58% x (1-22%) = 5,91%.

Determining the Weighted average Cost of Capital (WACC)

Because the calculation of the PPGL value is carried out by discounting the rate of return on the total capital, the discount rate used is the weighted average cost of capital, both from long-term loans and from equity.

Determining the optimal leverage level position is to find the point where the additional tax savings derived from additional debt will be equal to the additional interest costs as a result of the anticipated risk of default from the existence of the entire debt.

For valuation purposes, company value refers to the value of the company's capital structure, the debt in the capital structure used in the projection is PPGL's long-term debt and the cost of debt is equivalent to the average loan interest rate at PPGL interest rates for investments before tax of 5,91%. By considering the above factors and the strengths/advantages and risks of PPGL, we are of the opinion that a discount rate of 5,93% per year is reasonable for discounting net cash flows with the following calculation:

Table 13. Determining the Weighted average Cost of Capital

Details	Composition of D/E	Cost	Weighted
Debt	26.70%	5.94%	1.58%
Equity	73.30%	5.91%	4.35%
WACC			5.93%

Source : Research Data, 2024

Terminal Value and Growth Rate

Terminal Value (CV) is obtained through capitalization of perpetual period net cash flows with a cap rate that corresponds to the discount rate. Terminal Value is used for

assessment subjects in going concern companies, where the company will continue running even if there is a change in company owner or management.

Figure 14. Terminal Value and Growth Rate

Valuation of PPGL	2024	2025	2026	2027	2028
Free Cash Flow					
EBIT	9.830,6	10.412,4	11.034,7	11.699,8	12.410,5
Taxes	(2.162,7)	(2.290,7)	(2.427,6)	(2.574,0)	(2.730,3)
Deprec. & Amort..	6.674,7	7.210,4	7.772,8	8.363,3	8.983,4
Gross Capex	(2.550,7)	(2.678,2)	(2.812,1)	(2.952,7)	(3.100,4)
Δ NWC	(4.145,6)	(3.102,6)	(3.257,7)	(3.420,6)	(3.591,6)
Free Cash Flow	7.646,3	9.551,2	10.310,0	11.115,9	11.971,6
Period	1,00	2,00	3,00	4,00	5,00
Mid-Year Convention	0,50	2,00	4,50	8,00	12,50
Discount Factor	0,94	0,89	0,84	0,79	0,75
PV FCFF	7.218	8.511	8.673	8.827	8.974

PV (Years 1- 5)	42.203
PV (Terminal Value)	315.089
Enterprise Value	357.292
Plus Cash	10.780
Less Debt & Min. Int.	26.160
Equity Value	341.912
Equity Value Per Share	443
Assumptions:	
WACC	5,93%
WD	26,7%
WE	73,3%
Kd	7,6%
Marginal Tax Rate	22,0%
ke	5,94%
Rf	5,8%
Rf - Rm	0,7%
Beta	0,18
Terminal Value	
FCF 2028	11.971,6
Terminal Growth Rate	3,0%
Terminal Period WACC	5,9%

Source : Research Data, 2024

Based on the calculation results carried out using the DCF-FCFF method, the Enterprise Value of PPGL with a cut-off date of December 31, 2023 is IDR357,292 million. This value is then added by cash and subtracted from interest-bearing debt as of December 31, 2023, so that the equity value is IDR341,912 million, the Equity Value then devided by the Number of Shres, so that the Price per Share obtained is IDR443 per share. Based on the market information, The Market price per share of PPGL on December 31, 2023 is IDR102 per share, so that when compared between the market price per share and the book value per share, the PBV is 0.23 times. With this result, it can be

concluded that the market value is lower than the Book Value, so that the suggestion that can be conveyed is to make a purchase of the shares offered.

CONCLUSION

From the discussion above, it can be concluded that using the free cash flow to firm (FCFF) method, the book value of PPGL is IDR341,912 million or IDR443 per share. In contrast, the market value of the equity as of December 2023 is IDR102 per share, which means PPGL's market value is below its book value, with a price-to-book value (PBV) ratio of 0.23. Given this market value and the current state of the logistics industry, it is recommended to proceed with a buy action for the transaction.

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