DISCOUNTED CASH FLOW VALUATION OF PRIMA MARINE PUBLIC COMPANY LIMITED

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Thematic paper entitled DISCOUNTED CASH FLOW VALUATION OF PRIMA MARINE PUBLIC COMPANY LIMITED

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DISCOUNT CASH FLOW VALUATION PRIMA MARINE PUBLIC COMPANY LIMITED

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ABSTRACT

The valuation assessment on Prima Marine Public Company Limited (PRM) in this paper is conducted using discounted cash flow valuation method with the intent of finding an appropriate target price for the company which we can use to determine the extent of undervaluation or overvaluation of the company. The estimated share value should reflect the company's fundamentals, expected future performance and risk. PRM's primary source of revenue is Floating Storage Units (FSU), which account for 54.8% of total revenue, followed by trading at 37.2%, offshore at 3.8%, and ship management at 4.2%. FSU revenue has an inverse relationship with crude oil prices because as the price of crude oil falls, demand for crude oil storage rises. When the price of crude oil rises, so does the need for crude oil storage. As a result, we expect crude oil prices to affect FSU demand, while PRM trading revenue is mostly based on domestic shipments of crude oil and petroleum chemical products. We anticipate that the capacity of the refinery will be related to PRM trading revenue. Another significant move taken recently by PRM to growth the company's expansion was the acquisition of Truth Maritime Company Limited (previously Thaioil Marine Company Limited), which allows PRM to have additional vessels and ship management contracts.

According to DCF valuation analysis, the target stock price of PRM is THB 12.91 per share, which is an increase of 130.00% from its current market stock price on July 25, 2022, which was THB 5.30 per share. Therefore, it has a 10% or greater upside potential. Thus, our recommendation for PRM is "BUY"

KEY WORDS: PRM.BK/ Discount cash flow Valuation/ Marine Transportation/ Floating Storage Unit/ Oil Tankers

44 pages

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CHAPTER I INTRODUCTION

Prima Marine Public Co.,Ltd (PRM) is a marine transportation company that also provides storage for crude oil and other petroleum products. The company is a key player in the petrochemical industry both domestically and internationally. Its primary customers for their trading business are firms with oil refineries and major oil traders. The company has 4 business segments including trading business, both domestic and international, floating storage unit, offshore vessel business, and ship management business.

The company's primary source of revenue derives from their Floating Storage Unit business, having accounted for more than half of their total revenue (54.8%), followed by their trading business at 37.2%. Its offshore business accounts for 3.8% of the revenue, while its Ship Management unit is attributed to 4.2% of the revenue.

The result of the COVID-19 pandemic and the war in Ukraine has quite an effect on the demand and the price of oil, which by extension affects Prima Marine to a considerable extent in 2021. However, 2022 sees a gradual recovery in economic activities and less stringent traveling restrictions as vaccine coverage increases, resulting in a revenue increase of about 3.5%. Moreover, the business expansion as a result of the acquisition of Truth Maritime Company was able to offset the impact of the pandemic to an extent and allow the company to remain profitable amidst the circumstances. However, the floating storage unit is still affected by the market downturn with the rising oil price and an increase in average bunker cost, having a reduction of 35.2% in QOQ revenue for the first quarter.

As the situation continues to improve, it is likely that Prima Marine is enroute to see further revenue increase and business growth.

The discount cash flow valuation assessment in this paper resulting the target stock price of PRM is THB 12.19 per share, which is an increase of 130.00% from

its current market stock price on July 25, 2022, which was THB 5.30 per share. Therefore, it has a 10% or greater upside potential. Thus, our recommendation for PRM is "**BUY**"



CHAPTER II BUSINESS DESCRIPTION

2.1 Business overview

Prima Marine Public Co.,Ltd (PRM), established 2007,was successfully listed in Stock Exchange of Thailand (SET) in 2017. PRM engages in maritime transportation services with expertise in transportation of fuel oil, crude oil, refined oil, liquid petrochemical, and floating storage. Also, PRM provides maritime supported business and ship management to offshore exploration and production. Main customers are leading petroleum companies and major oil traders i.e. PTT, Shell, Chevron, IRPC.

2.2 Corporate strategy and long-term goals

2.2.1 Vision of the company

According to the company, the vision of Prima Marine is to strive to be 'the leading organization in the integrated business of shipment and offshore support business for petroleum exploration and production in Asia Pacific Region, with excellency of operations and services of shipment and floating storage unit that are reliable and fair for all groups of stakeholders and fulfill customer satisfaction.' (PRM, Annual report, 2021).

2.2.2 Objective of the company

The objective of the company is to generate and maintain a sustainable and satisfactory profit for stakeholders while simultaneously ensuring that the company is shaping itself to become a market leader in energy transportation of Thailand with a strong emphasis on sustainable growth. To achieve this target, the company is eager and determined to connect with all parties to develop communities and society in general with the intent of creating a better quality of life for people while operating a sustainable and successful business operations.

2.2.3 Long-term goal and strategies

In order to operate with optimal efficiency and effectiveness, Prima Marine sees fit to categorize their strategic operations into two aspects: Service Strategy and Marketing Strategy. The intent is to provide a clear direction for both aspects and ensure that they are achievable and in accordance with the vision of the company.

1. Service Strategy

The service strategy section aims to fulfill customer demands while maintaining a satisfactory level of quality for the service they provide. The details of the strategy are as follows:

1. Emphasis on One-stop shipment of chemical products, petroleum, and logistics. This includes maintaining a quality fleet and having expertise in ship management that meets the law and regulations. Stringent care for service quality, punctuality, and safety of vessel operation are also top priorities for the company.

2. Emphasis on producing personnel teams with high expertise; having the capabilities and knowledge to operate the company's daily operation in an effective manner that complies with the law and regulation.

3. Maintaining domestic shipment leadership while ensuring continuous growth of revenue and shipment volume, while simultaneously choosing suitable staff with satisfactory work performance to facilitate growth support.

4. Aims to expand and enhance their reputation and operation in the foreign market business while complying with international operating standards.

5. Emphasis on customer care in terms of long-term partnership by making effective use of human resources and capital, leading to a more expansive navigating routes in both domestic and international regions.

6. Striving to have an effective operating cost management. Emphasis on stringent planning of the purchase of materials and equipment, while constantly keeping in mind as to the price and quality. The same also applies to decisions regarding the selection of potential business partners.

2. Marketing Strategy

The marketing strategy section aims to expand their customer base and form long-term business alliances with potential business partners with the intent of longterm sustainability.

1. Emphasis on retention of a brokerage network that supplies vessels or cargo for both domestic and international markets.

2. Striving for improvement in marketing management to enhance efficiency of ship utilization and competition potential.

3. Emphasis on customer satisfaction via conducted surveys on services for all stages: before, during, and after shipment of cargo. (PRM, Annual report, 2021).

2.3 Business Segments

The core businesses of the PRM are classified into four types of businesses as follows

1. Oil and Petrochemical Tanker Business ("Trading Business") - provides transportation service of crude oil, refined oil products, and liquefied petrochemicals ("Products") to the customers that operate oil refinery businesses, and the major oil trader to transport the cargo to the destination specified by the customers. It gives precedence to safety, occupational health and environment, quality control of the products as determined by customers without contamination and alteration of chemical property of the transported products, and punctuality of transportation. Trading Business consists of domestic oil and petrochemical tankers, and international oil and petrochemical tankers.

2. Floating Storage Unit ("FSU") Business ("FSU Business") - provides Floating Storage Unit (FSU) services of crude oil and fuel oil by using a vessel which has a big cargo storage tank as storage place. The company group has a duty to store cargo of the customer to have quality, property and quantity as determined by the customer in agreed period, and also provide oil blending service on broad based on specification of oil as required by the customer for cargo distribution to other customers in the region in accordance with regulations of laws. 3. Offshore Support Vessel Business ("Offshore Business") - provides offshore support vessel service for petroleum exploration and production to the customers which are mostly the offshore oil exploration and drilling companies. The vessels for services include Floating Storage and Offloading Unit (FSO) for oil drilling platform, Accommodation Work Barge (AWB) Vessel for oil drilling platform staff, and Crew Boat vessel for the ship crew transportation etc.

4. Ship Management Business ("SM Business") - the main scope of work consists of navigation conning (steering) and controlling, supply of crews, training organizing pursuance to the international regulations and standards, and health and safety care of crews, maintenance of vessel hull, engine, and tools and equipment, execution of license and documents related to the government agencies, etc.

2.4 Business Segment Revenue

The revenue structure of the business segment as mentioned in the previous section can be seen in the table below.

			For the accounting year ended								
		31 Decemb	oer 2018	31 Decemb	er 2019	31 December 2020					
	Business Group	Revenue (Million Baht)		Revenue (Million Baht)		Revenue (Million Baht)					
1.	Trading Business	2,254.0	50.3	2,587.9	48.4	2,203.2	37.2				
2.	FSU Business	1,395.7	31.2	1,940.9	36.3	3,248.6	54.8				
3.	Offshore Business	471.8	10.5	491.3	9.2	225.5	3.8				
4.	SM Business	358.2	8.0	326.6	6.1	248.4	4.2				
	Total	4,479.7	100.0	5,346.7	100	5,925.7	100				

Table 2.1 Business Segment Revenue

Source: PRM Annual Report

The fleets utilized by the company for their business operations in these segments are also divided into the table as follows:

 Table 2.2 The fleets utilized by the company for their business operations in these segments

Turne of usersal	Owned and it	Owned by the Company and its subsidiaries		Owned by Joint Venture		Hired by the Company Group*		Total	
Type of vessel	No. of vessel	DWT	No. of vessel	DWT	No. of vessel	DWT	No. of vessel	DWT	
1. Vessel		_							
1.1 Trading Vessel									
Small Vessel									
(0 - 20,000 DWT)	30	100,476.96			-		30	100,476.96	
Aframax Vessel	1	105,996.00	-		-		1	105,996.00	
Total	31	206,472.96	-	-	-	1	31	206,472.96	
1.2 FSU Vessel									
VLCC Vessel	7	2,127,430.00	1	299,930.00	-		8	2,427,360.00	
Total	7	2,127,430.00	1	299,930.00	-	-	8	2,427,360.00	
Grand Total	38	2,333,902.96	1	299,930.00	-	-	39	2,633,832.96	
2. Other Vessel									
AWB Vessel	1	13,207.00		<u>- 10</u>	-		1	13,207.00	

Remark: * Vessel hired by the Company Group means the vessel that the Company Group has entered into the Bareboat Affreightment Contract and Time Charter Contract for managing the ship by themselves and then provide services to the customer of the Company Group.

Source: PRM Annual Report

2.4.1 Impact from the COVID-19 Global pandemic Impact on Refined Oil Consumption

The COVID-19 pandemic has severely impacted refined oil consumption volume on a global scale, which by extension also significantly impacts the company as well. With prolonged preventive measures put in motion by the government, it is severely difficult to facilitate both domestic and international travels. With restrictions on air travel, there has been a drastic decrease in fuel oil consumption for most of the first half of 2020. In the latter half, with the ease of travel restriction comes the resumption of economic activity, and refined oil consumption requirement volume has begun to climb back to normal level. (*PRM, Annual report, 2021*)

2.5 Management and Governance



2.5.1 Major Shareholders

Figure 2.1 Major Shareholders Source: PRM Annual Report

Table 2.3 Major shareholder of Prima Marine

Rank	Major Shareholders	Number of Shares	% Shares
1.	Nathalin Co. Ltd.	1,274,999,800	51.00
2.	Kimberly Asset Limited	82,000.000	3.28
3.	Nathalin Co. Ltd.	80.000.000	3.20
4.	Thai NVDR Company Limited	66,458,128	2.66
5.	MR. BOONCHAI KASAMVILAS	41.045.700	1.64
6.	UOB KAY HIAN PRIVATE LIMITED	28.311.400	1.13
7.	กองทุนเปิค บัวทลวงโครงสร้างพื้นฐานเพื่อการเลี้ยงชีพ	21,205,400	0.85
8.	MS.SUNAN NGAMAKARAKUL	15.223.600	0.61
9.	YUANTA SECURITIES THAILAND CO., LTD.	14.752.600	0.60
10.	MRS. SANYALAK PAKSUKCHAROEN	13,800,000	0.55

As of current, the primary major shareholder of Prima Marine is Nathalin Company Limited, which holds approximately 51% of the shares issued.

2.5.2 Corporate Governance

To achieve those targets set by the company and accomplish the vision they have along with ensuring the smooth operations of daily business activities, the Board of directors of PRM put a lot of priority in the corporate governance policy, seeing that it is regarded as the key maximum success factor, with the intention of shaping the company into an effective organization both in its operation and the responsibilities on all stakeholders.

In order to achieve effective performance and maintain a satisfactory level of transparency to raise confidence among investors, the corporate governance policy of the company will cover 5 sections of different aspects of shareholders as follows. These are subjected to revision by the Board of Directors on a regular basis in order to strive for continuous improvement and ensure compliance with the Corporate Governance Code for Listed Companies 2017 (CG Code 2017) issued by the Office of Securities and Exchange.

> Section 1: The Right of Shareholders Section 2: The Equality of Shareholders Section 3: The Role of Stakeholders Section 4: Information Disclosure and Transparency Section 5: Responsibilities of the Board of Directors



CHAPTER III ANALYSIS OF MACROECONOMY, INDUSTRY, AND COMPETITORS

3.1 Macro-economy Analysis



Figure 3.1 The Global and Thailand's GDP Source: IMF

The global GDP growth is expected to slow down from its initial high post-COVID growth in 2021. For 2022, the figure is projected to drop from 6.1% to 3.59% and maintain this level of growth for the foreseeable period. Such a significant drop despite its previous gradual recovery from the pandemic can be attributed to the war in Ukraine which caused economic damage from war-induced price changes in certain commodities, resulting in a rapid increase in fuel and food price. Moreover, the Omicron variant was also discovered in November of 2021, and its impact, while not as severe, will affect air travel and by extension slow down both domestic and international tourism for quite some time.

On the other hand, Thailand's real GDP was impacted slightly more severely compared to the global GDP by the pandemic and the imposed lockdown restrictions. Its GDP growth percentage change dropped to as low as -6.2%, which is more than doubled that of the global GDP. Despite that, economic growth picked up following the ease of the lockdown measures, as exports and private consumption are expected to rebound. Similar to the global GDP, however, the growth is expected to slow down slightly from the impact of the war in Ukraine as well as high inflation and ongoing travel restrictions in countries like China.



3.1.2 The Global and Thailand's Inflation rate

Figure 3.2 The Global and Thailand's Inflation rate Source: IMF

Supply chain disruptions due to COVID-19 and the war in Ukraine have elevated the inflation rate to as high as 7.4% as commodity prices significantly surge continuously. With oil and gas being underinvested from previous years due to the impact of the pandemic, the added issue of geopolitical uncertainty only drives inflation to unprecedented levels. There is also an issue of supply bottleneck, which results from recurrent lockdowns and other varying issues related to the aftermath of the pandemic such as port restrictions and shipping congestions. As such, the inflation rate is expected to maintain an abnormally high growth rate and remain elevated for the foreseeable future, while gradually declining.

3.2 Industry Analysis

3.2.1 Overview of Oil & Petrochemical Tanker Business

The tanker industry in general is a very capital-intensive industry. Not only does it require a significant amount of investment for vessel and vessel equipment, the operating expense is just as high due to the cost of fuel oil and insurance expenses. Moreover, the personnel involved in the transportation of domestic and international tankers must be well-versed in the operation of oil shipment and are experienced with the equipment on-board. They also must be certified by the domestic regulatory agencies, and with such a high bar of prerequisites comes high personnel expenses.

Refined petroleum use in Thailand

The impact of the COVID-19 pandemic situation has been relatively significant on the usage of refined-oil related products, especially for the first half of 2021; this can be primarily attributed to the government measure that emphasizes working from home and strict curfew and regulation, leading to a much lower demand for refined petroleum. The impact also further extends to the demand for Jet A-1 fuel, seeing as how air travel was also drastically hindered by the restriction. The latter half of 2021 was troubled with even lower consumption of petroleum products, and this is a direct result of the intensified pandemic issue that leads to harsher lockdown measures.

Fortunately, the situation seems to moderately improve during November, and lockdown restrictions are no longer as strict, which leads to a slight rebound of domestic consumption of refined fuel products. The same, however, cannot be said for air travel, as there are still relatively high limitations with commercial airlines.With stringent limitations on domestic and international tourism, demand for commercial jet fuel (Jet A-1) still stands in relatively low level and is expected to maintain this range for as long as the Omicron variant of the virus still pose a threat to the general public, and travel restrictions remain in place in important tourism markets for Thailand such as China and Japan.



Quantity of the Refined Oil Consumption in Thailand during during Jan - Nov 2021

Figure 3.3 Quantity of the refined oil consumption in Thailand during Jan-Nov 2021

3.2.2 Overview of Fuel and Crude Oil Price in Thailand

With stringent travel restrictions placed on several countries, the worldwide oil consumption requirement volume has dropped significantly in 2020. As a result, there has been an excess supply of crude oil, which leads to a reduction of crude oil price in the market on a global scale. Despite that, there are some upsides that come with the decrease of oil price. Initially, oil trading companies take this opportunity to speculate profit from oil reserving, leading to an increase in requirement for using FSU (Floating Storage Unit) Vessels. In addition, the low cost of fuel oil also leads to lower cost in the business operation part of FSU for the company as well.

In the following year, however, crude oil prices had been increasing continuously since the first month of 2021, but this upward trend in price was suddenly halted by the resurgence of a new variant, the Omicron variant, which hindered the demand for oil due to fear of lockdown measures returning. The global market begins to experience an excess supply of oil once again. In 2022, similar to the trend in oil consumption, however, with the ease of the lockdown restriction, the oil prices have rebounded and increased to a relatively similar level as that of the price prior to the arrival of COVID-19.



Figure 3.4 Fuel &crude oil price of Brent and WTI in 2021

3.2.3 Overview of the Floating Storage Unit

As of current, Prima Marine currently provides its Floating Storage Unit service in both domestic and overseas. They are stationed at their respective docks with the intent of providing storage and mixing service for a variety of oils such as crude oil or low sulfur fuel oil. 5 of the FSU Vessels are docked in Malaysia, while the remaining vessel is docked in Ko Si Chang, Chon Buri, Thailand. Similar to the tanker industry, operating FSU vessels requires a high investment fund to operate in the field. Moreover, entrepreneurs who choose to do so must have the sufficient knowledge in oil mixing under the necessary requirements as provided by their customers without loss of goods. An anchorage license is also needed from the government and must be renewed on an annual basis, making it an arduous task to enter the competition.

Because the demand for storage units correlates directly with utilization of oil, primarily within Singapore and Malaysia due to the fact that they are the regional oil trading hubs, the impact of COVID-19 also affects the industry as a whole due to reduction in Asia Pacific oil consumption requirements. The volatility of global crude oil price as a direct consequence of the War in Ukraine has resulted in decreased demand for FSU vessels in general. When oil prices are high, there is less demand to store them.

With the rebound of oil price and rising average bunker costs, it is likely that this business unit will be taking a slight hit for the foreseeable future.

3.3 Competition Analysis

While Prima Marine possesses 4 business units, the revenue of the company primarily derives from the Oil and Petrochemical Tanker Business and the Floating Storage Unit. The FSU business unit has no direct and comparable competitors in Thailand, while there is one comparable peer in the market for the Tanker Business: VL Enterprise PLC.

3.3.1 VL Enterprise PLC.

Similar to PRM, VL Enterprise PLC operates a transportation service for petroleum and chemical products both domestically and internationally. The company currently has 8 vessels for its domestic operations and 5 vessels for international operations. Their transportation revolves around transporting oil and petrochemicals such as crude oil, petroleum benzine, diesel fuel, and bunker oil. The company both offers transportation in the form of a **contract of affreightment**, which is a contract for transportation of approximately 1-3 years in duration, and spot charter, which centers around a 'by-trip' basis for its calculation of price and selection of the appropriate vessel. The details regarding the company's finance can be seen below.

CHAPTER IV VALUATION

4.1 Financial Analysis

In this section will look at Dupont's analysis of ROE, growth analysis over the previous five years, and industry-specific financial ratios. The key competitor for PRM is VL ENTERPRISE PCL (VL). As PRM's primary revenue comes from (1) oil and petrochemical tanker business (tanker) and (2) floating storage unit (FSU), which has no direct competitor because PRM is the only player in the FSU business in Thailand, we chose VL as its primary competitor because both PRM and VL are major players in the tanker business, and although VL is approximately 12 times smaller than PRM, it is the only publicly traded company that operates in the tanker business.

4.1.1 Growth analysis

PRM's operating revenue increased at a CAGR of 6.9% between 2017 and 2021, while VL's operating revenue decreased at a CAGR of -0.7%. In the 2020 fiscal year, %. In fiscal year 2020, PRM's operating revenue peaked at THB 5,926 million as a result of an adjustment to the service price of 6 FSUs beginning in Q2/2020 and a downward trend in crude oil prices, which decreased to an average of 39.2 US dollars per barrel from 57.0 US dollars per barrel in 2019 and 75.4 US dollars per barrel in 2018. There was a high demand for oil storage in order to store inexpensive crude oil, which benefited PRM's FSU in terms of full utilization and price increase, whereas VL has maintained a stable income over the past five years.



Figure 4.1 Operating revenue trend of PRM and VL *Source: SETSMART, Enlite and team calculation*

According to the cost of goods sold charts, it appears that VL was able to manage its cost of goods sold to be in line with historical levels. However, based on the ratio of cost of goods sold to operating revenue, both PRM and VL have the same trend, as the majority of their cost of goods sold was attributed to fuel oil.



Figure 4.2 Cost of goods sold trend of PRM and VL

Source: SETSMART, Enlite and team calculation



Figure 4.3 Cost of goods sold (%) trend of PRM and VL *Source: SETSMART, Enlite, and team calculation*

According to charts of net profit and net profit margin, PRM and VL appear to have an upward trend in net profit with CAGR at 11.39% and 34.57% respectively. The sharp increase in PRM's net profit in 2020 was due to the sale of two FSUs.



Figure 4.4 Net profit trend of PRM and VL

Source: SETSMART, Enlite, and team calculation



Figure 4.5 Net profit margin trend of PRM and VL *Source: SETSMART, Enlite, and team calculation*

PRM's earnings per share have steadily increased since 2017, with a CAGR of 14.13%, while VL's earnings per share have been steadily declining from 2017 to 2020, with a significant decline in 2021, resulting in a CAGR of -40.54%.



Figure 4.6 EPS trend of PRM and VL

Source: SETSMART, Enlite, and team calculation

It is evident that VL's free cash flow to firm is highly volatile, whereas PRM's free cash flow to firm has increased over the past four years and peaked at 954 million baht in the most recent year.



Figure 4.7 Free cash flow of PRM and VL Source: SETSMART, Enlite, and team calculation

4.1.2 Dupont's analysis

To determine how profitable a company is relative to its equity, we employ Dupont's analysis to analyze PRM's performance compared to its primary competition, VL. PRM's return on equity increased from 11.29% in 2018 to 17.51% in 2021, indicating that for 100 baht invested in equity, shareholders will receive a return of 17.51 baht in the form of net income in 2021, whereas VL's return on equity has decreased from 12.92% in 2018 to 2.67% in 2021, indicating that for 100 baht invested in equity, shareholders will receive a return of 2.67 baht in net income in 2021. Even VL has had a higher asset turnover than PRM over the previous five years (2017-2021), but PRM has a higher NPM and equity multiplier. PRM's NPM in 2021 is 7.44 times that of VL's, and PRM's equity multiplier is 4.14 times that of VL's. Thus, PRM has a greater ROE than VL. The formula used to calculate the Dupont ROE is shown below;

$ROE = Net Profit Margin \times AT \times EM$

where:

Net Profit Margin	= Net Income / Sales
Asset Turnover (AT)	= Sales/ Average Total Assets
Equity Multiplier (EM)	= Average Total Assets / Average Shareholders' Equity

Table 4.1 Dupont's analysis of PRM

PRM	2017	2018	2019	2020	2021
Net profit margin	16.87%	16.66%	20.99%	28.72%	25.96%
Asset turnover		0.42	0.45	0.44	0.38
Equity Multiplier		1.63	1.68	1.71	1.78
ROE		11.29%	15.75%	21.81%	17.51%

Source: SETSMART, Enlite and team calculation

Fable 4.2 Dupont's analysis of VL										
VL	2017	2018	2019	2020	2021					
Net profit margin	10.79%	8.78%	11.34 <mark>%</mark>	13.05%	3.49%					
Asset turnover		4.05	2.15	1.50	1.79					
Equity Multiplier		0.36	0.55	0.53	0.43					
ROE		12.92%	13.48%	10.41%	2.67%					
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Source: SETSMART, Enlite and team calculation

4.2 Discounted cash flow valuation

The discounted cash flow (DCF) method is used to value an investment by discounting the estimated future cash flows. The PRM share value is estimated to be THB 12.19 using the Discounted Cash Flow valuation method. Estimates and projections for FCFF, Terminal Growth Rate, and WACC are required to arrive at the final estimated share value. The sections that follow explain how we arrived at our conclusion.

4.2.1 Performa statement

4.2.1.1 Revenue forecast

To forecast revenue from 2023 to 2026, we used the actual revenue from 2021 as a base year, using the proportion of sales 2021 of the 3 business units, which are (1) FSU business, (2) Tanker business, and (3) Other businesses (offshore support vessels business and ship management business) by 40.12%, 49.12%, and 10.76%, respectively.

Beginning with the FSU's revenue forecast for 2022F, we used the first quarter of 2022 to forecast revenue for the full year of 2022. The operating revenue for the first quarter of 2022 was THB 505.4 million, 14.5% increase compared to Q4/2021's revenue of THB 441.4 million. This increase was due to the fact that the Russia-Ukraine conflict was expected to last longer, resulting in a higher demand for low sulfur fuel oil, as the conflict showed no sign of ending at the time of writing (August,2022). Therefore, based on the revenue from the first quarter of 2022 (multiplied by 4), our revenue forecast for 2022 is THB 2,021.66 million.

For FSU's revenue forecast during 2023 -2026, we find a correlation between oil prices and FSU revenue, because if oil prices are low, there will be a lot of oil storage. However, if crude oil prices rise, the amount of oil stored will fall. As a result, we correlated (log regression) oil prices and revenues of FSU businesses from 2018 to 2021 and used Fitch ratings oil projections from 2023 to 2026 to calculate revenue of FSU businesses between 2023 and 2026.



Figure 4.8 A correlation between average WTI prices and PRM's FSU revenue

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Average annual WTI price (USD/barrel)	50.8	75.4	57.0	39.2	68.0	100	81	62	50	50
PRM's FSU Revenue	1,960	1,396	1,941	3,249	2,359	2,022	1,444	2,082	2,596	2,596

 Table 4.3 Average annual WTI price (USD/barrel) and PRM's FSU Revenue

Source: Fitch Ratings and team calculation

For tanker revenue forecasting, we use the relation between PRM's customers' refinery production and tanker revenue. As higher PRM's customer refinery oil production volumes increase, oil product transportation will increase also it reflect higher tanker revenue, on the other hand, if PRM's customers' refinery oil production volumes fall, oil product transportation also falls, resulting in lower tanker revenue. For PRM's customer refinery production, we forecast refinery capacity growth using the historical refinery capacity data during 2006 – 2021 (15 years) from Department of Energy Business (DOEB), resulting 1.27% CAGR.

PRM's major customers are typically IRPC, Shell, Chevron, and PTT; however, on April 20,2021, PRM acquired Truth Marine Co., Ltd (formerly Thaioil Marine Co.,Ltd), allowing PRM to have additional vessels from truth marine, which was originally going to transport oil to Thai Oil PCL; therefore, in 2021, Thai oil is an additional major customer for PRM.



Figure 4.9 A correlation between PRM's customers refinery production and PRM's tanker revenue

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
PRM's customers refinery production (million liters)	34,629	38,442	43,314	42,021	60,167	60,167	60,933	62,494	63,289	64,094
PRM's Tanker Revenue	1,706	2,254	2,588	2,203	2,576	2,722	2,743	2,764	2,785	2,806

Table 4.4 PRM's customers refinery production and PRM's tanker revenue

Source: Department of Energy Business and team calculation

Table 4.5 PRM's customers refinery production

Refinery production	2017	2018	2019	2020	2021
IRPC, Shell, Chevron, PTT (major customers)	34,628.52	38,441.55	43,314.72	42,021.52	39,958.33
Thai oil (new major customer)					20,208.98
Total refinery production of its major customer	34 <mark>,6</mark> 28.52	38,441.55	43,314.72	42,021.52	60,167.31

Source: Department of Energy Business and team calculation

For forecasting VLCC (very large crude carriers) business unit which is a new business of PRM after acquiring Truth Marine Co., Ltd, which allow PRM to entered into long-term contract in providing 3 VLCC international crude oil tankers to Thai Oil Public Company Limited, the 1st tanker service was in May 2021, while the 2nd and 3rd vessels will be in service during the 2nd and 4th quarters of 2022, respectively.

From 2021 financial statement stated that VLCC's revenue were THB 312.72 million which annualize revenue would be THB 360.20 million (divided by 3 and multiply by 4). Therefore, we forecasted that annual revenue of one VLCC would be THB 360.20 million.

Table 4.6 PRM's VLCCs revenue

	2021	2022F	2023F	2024F	2025F	2026F
Very large crude carriers	312.72	630.35	1,080.60	1,080.60	1,080.60	1,080.60
Source: PRM Annual Rep	bort 2021, F	PRM MD&	A Q1/202	l and team	calculatio	on

For forecasting other business units, we use revenue from offshore support vessels and ship management in 2020 as the base year, because on April 20,2021 there was an acquisition of Truth Marine Co., Ltd, which resulted in

a sharp increase in revenue in 2021 (offshore business revenue increased by THB 81.8 million, ship management revenue increased by THB 76.9 million), and such increases in revenue are from Truth Marine operations. So, Truth Marine's annualized offshore support vessel revenue would be THB 122.7 million (divided by 3 and multiplied by 4), and its annualized ship management revenue would be THB 115.35 million (divided by 3 and multiplied by 4). Then, we forecast revenue for 2022 and beyond by combining 2020 revenues with annualized sales from Truth Marine operations. As PRM had an annual contract with its client, we cannot predict the probability of additional contracts or declines in contracting. As a result, we anticipate consistent revenues beginning in 2022.

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Offshore	480.05	471.80	491.24	225.47	307.27	348.17	348.17	348.17	348.17	348.17
Support										
vessels										
Ship	355	358.24	326.56	248.38	325.28	363.73	363.73	363.73	363.73	363.73
management										

Table 4.7 PRM's offshore support vessels and ship management revenue

Source: PRM Annual Report 2021 and team calculation

4.2.1.2 Cost of goods sold forecast

Beginning with the cost of good sold forecast for 2022F, we used the first quarter of 2022 to forecast cost of goods sold for the full year of 2022. The cost of good sold for the first quarter of 2022 was THB 1,037.7 million, 6.21% decrease compared to Q4/2021's cost of goods sold of THB 1,102.1 million. This was due to the recovery of economic activity compared to the Q4/ 2021, which increased the consumption of all types of oil in the nation. As a result, the number of oil transportation cycles at the company has increased, resulting in economies of scale and a reduction in the cost of goods sold. Therefore, based on the cost of good sold from the first quarter of 2022 (multiplied by 4), our cost of goods sold for 2022 is THB 4,150.80 million

For FSU's cost of goods sold forecast during 2023 -2026, we find a correlation between oil prices oil prices and cost of goods as bunker consumption (oil consumption) is a major component of variable cost of goods sold. Therefore, we correlated (linear regression) oil prices and cost of goods sold from 2018 to 2021 and

used Fitch ratings oil projections from 2023 to 2026 to calculate cost of goods sold from 2023 to 2026.



Figure 4.10 A correlation between crude oil prices and cost of goods sold.

Table 4.8	Crude of	il prices	and cost	of	goods	sold.
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	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Crude oil price	50.8	75.4	56.99	39.16	67.99	100	81	62	50	50
Cost of goods sold	74.87	75.20	68.29	58.51	69.16	72.20	77.13	68.96	63.80	63.80
(%)	%	%	%	%	%	%	%	%	%	%
Cost of goods sold	3,370	3,369	3,651	3,467	4,067	4,151	4,612	4,578	4,577	4,590

Source: Fitch Ratings, PRM Annual Report 2021 and team calculation

4.2.1.3 Selling and general administrative expenses forecast

For the forecast of selling and general administrative expenses,

we find a correlation between SG&A and total revenue from 2017 to 2021, and then use the forecast of total revenue from 2022 to 2026 to calculate SG&A for that period.



Figure 4.11 A correlation between total revenue and selling and general administrative expenses

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Total revenue	4,501	4,470	5,347	5,926	5,880	6,086	5,980	6,639	7,173	7,195
SG&A	345	390	435	486	498	481	473	521	560	561
<i>G</i> DD1	# A	1.0	. 0.00	1 1		1 1				

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Table 4 9 total	revenue and	i selling and	general	administrative	evnenses
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Source: PRM Annual Report 2021 and team calculation

4.2.1.4 Other income forecast

Regarding other income, two categories can be distinguished: (1) other income, which we forecast other income between 2022 and 2026 by dividing the average other income by sales from 2017 to 2021, resulting in an average of 1.73% other income to sales, and (2) revenue generated from vessel disposal, which the company is likely to dispose of the vessel when it reaches 25 years of age due to high maintenance costs, with 1 FSU turning 25 years in 2022, 3 in 2023, 1 in 2025 and 1 in 2026. As a result, we assume that they will dispose of the FSU when it reaches the age of 25 years, and we use the reference price of disposal FS based on the selling price per FSU in 2022, which was THB 149.47 million.

Vessel name		Country of vessel registration	Maximum tonnage capacity (DWT)	Vessel age (Year)
Prima Marine P	ublic Company	/ Limited		
1) Crystal S	tar	Thailand	298,570.00	21
2) Aquarius	Star	Thailand	298,641.00	20
3) Phoenix	Star	Thailand	307,151.00	23
Singha Tanker 1) Grace Sta	Company Limit ar	ed Thailand	312,638.00	23
Bongkot Marin1)Bongkot	<mark>e Company Lin</mark> Star	nited Thailand	299,930.00	24
Amity Asset Ma 1) Fortune	a <mark>nagement Inc</mark> . Star	Thailand	298,023.00	23
Total tonnage	capacity		1,814,953.00	

Figure 4.12 PRM's FSU in 2021

Source: PRM Annual Report 2021

4.2.1.5 Finance cost forecast

We forecast financial costs from 2022 to 2026 using the effective interest cost that the firm paid to financial institutions to operate the business, calculated from the average financial statement from 2017 to 2021, which is 4.64%.

4.2.1.6 Tax forecast

We use corporate tax from the department of revenue to calculate tax, which is currently 20%.



	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
Revenue from FSU unit	1,960.10	1,395.66	1,940.94	3,248.64	2,359.02	2,021.60	1,444.45	2,082.53	2,596.00	2,596.00
Revenue from Tanker unit	1,705.80	2,254.02	2,587.92	2,203.26	2,888.42	3,015.71	3,046.72	3,078.13	3,109.93	3,142.15
Revenue from other buss (offshore + ship management)	835.05	830.04	817.8	473.85	632.55	711.9	711.9	711.9	711.9	711.9
Revenue from VLCC		8			312.72	630.35	1,080.60	1,080.60	1,080.60	1,080.60
Total revenue (from operating)	4,500.95	4,479.72	5,346.66	5,925.75	5,879.99	6,086.07	5,979.79	6,638.76	7,173.38	7,194.80
Cost	3,369.78	3,368.56	3,651.17	3,467.37	4,066.56	4,150.80	4,612.21	4,578.09	4,576.62	4,590.28
Gross Profit	1,131.17	1,111.16	1,695.49	2,458.38	1,813.43	1,935.27	1,367.58	2,060.67	2,596.76	2,604.52
SELLING AND ADMIN. EXPENSES	345.05	389.69	435.36	485.53	498.1	480.83	473.1	521.01	559.88	561.43
Other Income	39.75	92.46	58.05	55.53	143.23	83.69	73.87	117.12	126.55	126.93
vessels disposition	i.			,	448.4	149.47	448.4	I	149.47	149.47
Other income	39.75	92.46	58.05	55.53	591.63	233.15	522.27	117.12	276.01	276.39
EBIT	825.86	813.93	1,318.18	2,028.39	1,906.96	1,687.59	1,416.75	1,656.78	2,312.90	2,319.48
FINANCE COSTS	217.44	167.78	210.99	214.14	248.81	288.64	229.83	173.26	162.05	122.46
EBT	608.42	646.15	1,107.18	1,814.25	1,658.15	1,398.95	1,186.92	1,483.51	2,150.85	2,197.01
TAX (20%)	2.01	58.26	124.44	191.46	133.81	337.52	283.35	331.36	462.58	463.9
PROFIT	606.41	587.89	982.75	1,622.79	1,524.34	1,061.43	903.57	1,152.16	1,688.27	1,733.12
Non-Controlling Interests	41.18	34.61	99.11	168.59	123.7	87.6	74.57	95.09	139.33	143.03
Net Profit (Loss) Attributable To :	717 93	711 82	1 023 39	1 533 06	1 402 84	1 149 03	978-14	1 247 25	1 877 61	1 876 15
Owners Of The Parent	C/-111	70.111	10.070,1	00.000.1	1,102.01	CO./F1,1	1.000	(77.1 F -7, I	1,021.01	01.070.1
NUMBER OF SHARES (MN)	2,275.51	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
EARNINGS PER SHARE (EPS)	0.33	0.28	0.41	0.61	0.55	0.46	0.39	0.5	0.73	0.75

 Table 4.10 Proforma statement forecast

4.2.2 DCF Analysis

To determine the value of the company, we employ the discounted cash flow method (DCF). We use a discount rate to determine the current value of the business by discounting the company's forecasted cash flow for the next five years. The weighted average cost of capital formula is used to calculate the discount rate.

$WACC = W_eK_e + W_dK_d * (1-Tax)$

where:

WACC = weighted average cos of capital

W_e = weighted of equity

 $K_e = cost of equity$

 W_d = weighted of debt

 $K_d = cost of debt$

Tax = corporate tax

$$Ke = R_f + MRP*Beta$$

where:

 $K_e = cost of equity$

 $R_f = risk$ -free rate (10-year government bond yield)

MRP = market risk premium

Beta = relative market risk

To calculate the cost of equity (K_e), we use a risk-free rate from the 10-year government bond yield on July 25, 2022, which is 2.61%. MRP is obtained from Damodar (https://pages.stern.nyu.edu/~adamodar/New Home Page/ datafile/ ctryprem.html). Thailand's MRP is 5.82% as of January 5, 2022, according to the latest MRP data. We chose to use the historical price of the SET index and PRM from 2017 to 2020 to calculate their daily returns, because we decided to omit the price during the crisis years. Then we use the daily returns to calculate PRM's beta using a linear regression, which yielded a Beta of 1.19. As a result, cost of equity (K_e) equals 9.55%.

Cost of debt (K_d), we use the average effective cost of debt form financial statements (2017 - 2021), which is 4.64%.

Tax, we use an income tax rate of 20% as the official rate for Thai corporations.

For calculating the weight of equity (W_e) and the weight of debt (W_d), we took the data from the latest annual statement (2021) and accounted for all interestbearing debt as short-term loans, current portion of long-term debt, current portion of lease liabilities, long term debt, and lease liabilities, then divided all interest-bearing debt by the sum of all interest bearing debt and equity resulting in 74.90% for weight of equity (W_e) and 25.10% for weight of debt (W_d).

The WACC is then calculated, which is 8.09% as shown in calculation table 4.11.

Risk-free rate (R _f)	2.61%
Market risk premium (MRP)	5.82%
Beta	1.19
Cost of equity; $K_e = R_f + Beta*MRP$	9.55%
Weight of equity (W _e)	74.90%
Weight of debt (W _d)	25.10%
Cost of debt (K _d)	4.64%
Tax	20%
After tax cost of debt ; K_d *(1-Tax)	3.71%
WACC; $W_eK_e + W_dK_d*(1-Tax)$	8.09%

Table 4.11 WACC Calculation

So, we obtained WACC and used it to compute the present value of future cash flows. Terminal value, we determined the company's terminal value by forecasting the future cash flow and discounting it back to present value.

$$\mathbf{TV} = \mathbf{FCF}(1 + \mathbf{g})/(\mathbf{WACC} - \mathbf{g})$$

where:

TV = Terminal value

FCF = Free cash flow

g = perpetual growth of free cash flow

In terms of terminal value, we employ a constant growth rate of 3.42% based on the average annual growth of Thailand's nominal GDP from 2015 to 2019, excluding the covid-19 epidemic crisis year.

	2021	2022F	2023F	2024F	2025F	2026F	Terminal
PERIOD		0	1	2	3	4	Value
EBIT	1,906.96	1,687.59	1,416.75	1,656.78	2,312.90	2,319.48	
TAX (20%)	-381.39	-337.52	-283.35	-331.36	-462.58	-463.90	
EBIT AFTER							
TAX	1,525.57	1,350.07	1,133.40	1,325.42	1,850.32	1,855.58	
(NOPAT)	952 87	816.48	747 08	717 34	759.98	747 19	
DEPRECIATION	1/9.93	707.75	-193 52	63 19	51.27	2.05	
WCR CHANGE	806.63	101.15	307.18	1 210 02	609.51	1 210 02	
CAPEX	-890.03	-	-397.10	-1,219.02	-009.51	1,219.02	
	1,731.74	2,916.75	1,289.77	886.93	2,052.06	1,385.81	30,721.44
FCFF		2,916.75	1,247.12	829.24	1,855.14	1,211.39	26,854.89
DISCOUNT							
CASH FLOW	1,906.96	1,687.59	1,416.75	1,656.78	2,312.90	2,319.48	
PV OF FIRM							
VALUE	34,9	14.53	Million Baht				
NET DEBT	4,4	40.07	Million Baht				
PV OF EQUITY							
VALUE	30,4	74.47	Million Baht				
No. OF SHARES	2,5	00.00	Million Share	es			
EST. SHARE							
VALUE		12.19	Baht				

Table 4.12 Discount cash flow

The company has operating income (EBIT after tax) start from THB 1,687.59 million in 2022F and continually increased to THB 2,319.48 million in 2026F.

We calculate the average depreciation to fixed assets from historical data from 2017 to 2021, and the average depreciation to fixed assets is approximately 8.50%. As a result, we expect depreciation to be 8.50% of the fixed asset from 2022 to 2026.

We calculate working capital change by dividing the change in working capital for each year. We define account receivables days as 35 days because historical records exclude crisis year (2020-2021) account receivables days range 30 - 35 days while inventory days have not changed despite experiencing covid-19 situation, inventory days range 13 - 15 days between 2017 - 2021, so we forecast inventory days to be 15 days from 2022 onwards. Account payables days range between 40 and 52 days from 2017 to 2019 (in crisis years, account payables days range 70 - 80 days). As a result, from 2022 onwards, we use an average account payables day from 2017 to 2019, which is 45 days.

We make assumptions about crude oil prices to determine the CAPEX forecast. This is because historical data shows that as crude oil prices rise, the volume of FSUs used by the company decreases. So, in order to maximize efficiency, the company will sell the FSU to reduce costs, but if the oil price is low, the company will buy FSU to support the increase in oil storage volumes. Furthermore, if the FSU is 25 years old, the company will most likely dispose of it due to high maintenance costs. PRM had a total of 6 FSUs in 2021, with 1 FSU turning 25 years in 2022, 3 in 2023,1 in 2025, and 1 in 2026. As a result, we forecast that PRM will not buy FSU in 2022 because the forecast crude oil price from Fitch ratings is 100 USD per barrel, which is higher than average crude oil price in 2021. In contrast, crude oil prices appear to decline after 2022, with prices expected to fall to 81 USD per barrel in 2023, 61 USD per barrel in 2024, and 50 USD per barrel in 2025 and 2026. As a result, we onticipate PRM to acquire three additional FSU in 2023, two in 2024, one in 2025 and two in 2026.

Table 4.13	PRM's	total	number	of FSU
		CO COLL		

Year	2021	2022F	2023F	2024F	2025F	2026F
crude oil price	67.99	100	81	62	50	50
Number of FSU at the start of the year	6	6	5	5	7	7
disposal	0	1	3	0	1	1
additional FSU	0	0	3	2	1	2
Number of FSU at the end of the year	6	5	5	7	7	8

Source: PRM Annual Report 2021 and team projections

The company's terminal value is THB 26,854.89 million, which is equal to 87.41% of total FCFF.

The company has a present value of THB 30,474.47 million, which divides to 2,500 million shares given the estimated share price of THB 12.19 per share as of December 31, 2022. This is 130.00% greater than the latest share price as of July 25, 2022, which was THB 5.3 per share.

4.2.3 The scale for the rating

We use the rating scale as a guide to determine whether we should buy, sell, or hold this stock. As shown in Table 4.12, there are three rating scales based on the difference between the latest market share price and the valuation target price.

 Table 4.14 The scale for the rating

Rating Rules	
Buy	10% or Greater upside
Hold	Between 10% upside and 10% downside
Sell	Sell 10% or More downside

PRM's estimated stock price based on the DCF valuation is THB 12.19 per share, which is an increase of 130.00% from its current market stock price on July 25, 2022, which was THB 5.30 per share. Therefore, it has a 10% or greater upside potential. Thus, the DCF model's recommendation is "BUY

4.2.4 Sensitivity Analysis

Prices for DCF valuations can be affected by a number of significant factors. Therefore, we conduct sensitivity analysis using key factors such as the cost of debt, WACC, and terminal growth to determine how sensitive the price is to changes of 5%, 10%, 20%, 30%, 40%, and 50% in these variables.

Sensitivity	Cost of debt	Price (THB)	Cost of equity	Price (THB)	WAC C	Price (THB)	Terminal growth	Price (THB)
50%	6.97%	11.21	14.32%	7.53	12.13%	7.20	5.13%	17.51
40%	6.50%	11.39	13.37%	8.11	11.32%	7.79	4.79%	16.00
30%	6.04%	11.58	12.41%	8.81	10.51%	8.52	4.45%	14.78
20%	5.57%	11.78	11.46%	9.67	9.70%	9.43	4.10%	13.74
10%	5.11%	11.98	10.50%	10.77	8.89%	10.61	3.76%	12.90
5%	4.88%	12.08	10.03%	11.42	8.49%	11.33	3.59%	12.53
0%	4.64%	12.19	9.55%	12.19	8.09%	12.19	3.4 2%	12.19
-5%	4.41%	12.30	9.07%	13.09	7.68%	13.21	3.25%	11.87
-10%	4.18%	12.41	8.59%	14.15	7.28%	14.43	3.08%	11.58
-20%	3.71%	12.64	7.64%	16.94	6.47%	17.88	2.74%	11.05
-30%	3.25%	12.88	6.68%	21.37	5.66%	23.82	2.39%	10.57
-40%	2.79%	13.12	5.73%	29.22	4.85%	36.49	2.05%	10.16
-50%	2.32%	13.38	4.77%	47.63	4.04%	82.27	1.71%	9.80

 Table 4.15 Sensitivity Analysis

The stock price is most sensitive to the WACC, as evidenced by when WACC changed by 50%, the target stock price changed to THB 7.20 (decreased by 40.87%) whereas when WACC changed by -50%, the target stock changed shift to THB 82.27 (increased by 85.20%).

Alternatively, the least sensitive to the stock price is cost of debt as evidenced by when the cost of debt changed by 50%, the target stock price changed to THB 11.21 (decreased by 8.03%), whereas when cost of debt changed by -50%, the target stock price changed to THB 13.38 (increased by 8.91%).

6 10.51% 9.70% 8.89% 8.49% 8.09%
10.23 11.8 14.04 15.56 17.5
10.1 11.61 13.75 15.2 17.
9.66 10.99 12.83 14.04 15.
9.28 10.46 12.06 13.09 14
8.94 10 11.4 12.29 13
8.64 9.6 10.84 11.62 11
8.52 9.42 10.6 11.33 1
8.39 9.26 10.38 11.07 1
8.28 9.11 10.17 10.82 1
8.06 8.83 9.79 10.37 1
7.86 8.56 9.44 9.97 10
7.69 8.34 9.14 9.62 10
7.53 8.13 8.87 9.31

Table 4.16 Sensitivity Analysis of Perpetual Growth and WACC

According to the aforementioned analysis, WACC is the most sensitive input factor for stock price, and the target price of THB 12.19 per share is determined by 8.09% of WACC as 9.55% of the cost of equity using the DCF model.

Stock Price	Implied cost of	Implied WACC	Perpetual Growth
(THB)	equity		
5.30	20.69%	16.43%	3.42%

Table 4.17 Implied cost of equity and WACC

According to the table above, based on terminal growth rate of 3.42%, the implied cost of equity is 20.69% and the implied WACC is 16.43% which both are higher than our estimates (cost of equity at 9.55% and WACC at 8.09%) in order to maintain the current stock price at THB 5.30. Consequently, it is possible to draw the conclusion that the stock of PRM is undervalued.

4.3 Valuation recommendation

Based on our DCF valuation analysis, we recommend BUY the stock because it is undervalued since the current market price is THB 5.30, which is lower than the estimated share price of THB 12.19, indicating upside potential of 130.00% from the current price. However, investors should be aware of the stock's target price sensitivity to the DCF assumptions and be prepared for the possibility that something will go wrong.

CHAPTER V INVESTMENT RISKS

Risk assessments provide a strong foundation for any sound investments. This chapter, therefore, illustrates and describes the risks factors that could potentially be detrimental to the operations and by extension the profitability of the company. The risks factor as illustrated here will be primarily focused on industry risks, seeing as how PRM.BK has a solid liquidity position and strong debt serviceability.

RISK	MATRIX		Impact				
		Low	Medium	High			
	High			Risk from the fluctuations and volatility in demand and supply of oil consumption			
Likelihood	Medium	30181	NUNU	Risk from difficulty regarding the purchase and selling of vessels			
	Low	_	Risk from possible drastic change in transportation service business	Risk from the possibility of Coronavirus (COVID-19) pandemic resurgence			

Figure 5.1 The risks factor

5.1 Macro and Industry Risks

5.1.1 Risk from the possibility of Coronavirus (COVID-19) pandemic resurgence

The impact of the COVID-19 pandemic had proven to be severe to myriads of industries worldwide on an unprecedented level. The Thai economy has suffered severely from the stringent regulations on travel and social distancing, resulting in a significant slowdown in economic growth. The Oil and Petrochemical Tanker Business and the Floating Storage Unit Business of PRM.BK are no exception to the disruption from the pandemic. With the prevention measure regarding airline travel, fuel oil consumption took a rather significant dive on near global scales, leading to a strong drop-off in consumption requirement especially in Asia Pacific.

The offshore business unit of PRM.BK is also affected by the pandemic as well, albeit to a lesser degree. There is a moderate increase in administrative expenses arising from stringent COVID preventive measures that necessitate the use and procurement of equipment that abide by the regulations, such as the Antigen Test Kit (ATK), protective gear, hygienic masks, hand sanitizers etc. Were there to be a resurgence in COVID-19, possibly attributing to new COVID variants or an influx of new cases, businesses in general are likely to suffer significantly, and the possibility of another economic downturn might not be out of the question.

5.1.2 Risk from the fluctuations and volatility in demand and supply of oil consumption

The business operations of PRM.BK is directly tied to the demand and supply of oil consumption, whether it be in regard to the transportation of petrochemicals or the storage of these substances. The second quarter of 2022 sees a rebound of oil demand and by extension its price, following the gradual economic recovery from the pandemic and lighten preventive measures now that vaccine coverage is gradually improving. Despite that, it is possible that a fluctuation in demand and price is on the horizon for the oil and petrochemical market. To begin with, a resurgence of new waves of COVID-19 could result in the return of stringent regulatory measures, leading to a possible drop-off in air travel. In addition, the turmoil from the Russia - Ukraine conflict was one of the primary reasons for the scarcity in oil, especially with Russia being heavily sanctioned despite being one of the major producers of oil. It is an arduous task to gauge how prolonged the war will be, and for that reason, it is reasonable to assume that fluctuations in demand and supply will be a given for the foreseeable future.

5.1.3 Risk from possible drastic change in transportation service business

As of current, the transportation of fuel oil for marine transportation primarily concerns crude oil and petroleum products. The company now, however, anticipates the arrival of other types of closely-related transportations, which could be battery, Liquefied Natural Gas, or Hydrogen Fuel. PRM.BK has expressed concerns over possible new entrants to the market from such occasions, and the difficulty by which their operations could be gauged relative to that of PRM.BK and whether they could be considered as competitors from the same industrial business.

5.2 Company-specific Risks

5.2.1 Risk from difficulty regarding the purchase and selling of vessels

The primary business operations of PRM.BK require the need to both purchase additional vessels and sell accordingly depending on the current level of demand and circumstances regarding petrochemical marine transportation. As such, transactions involving vessels or fleets occur on a moderately frequent basis. However, there are some caveats when it comes to both buying and selling. The scope of businesses to buy or sell vessels from are rather limited, making negotiations and buying opportunities quite constrained. If the firm cannot sell a vessel, there is maintenance cost to keep in mind for the freight or vessel in question. On the other hand, not having enough vessels leads to possible loss in opportunity from having inadequate vessels to meet demands, resulting in lower sales.

CHAPTER VI CONCLUSION

In prior segments of the thematic paper, we conduct an assessment on the company's valuation in order to achieve a rational investment recommendation as to whether the prospect of PRM.BK indicates that it would be an appropriate decision to invest in the company under the current circumstances. With regard to the valuation methods, we have assessed the company using relative valuation and discounted cash flow model.

In this thematic paper, PRM is evaluated by discounted cash flow valuation method to evaluate the target price. This method defines the intrinsic value of PRM by cover 5 years-forecasted cash flow under business condition and perpetual growth. We also use sensitivity analysis to gauge a fair price under different scenarios for the company's stock price. Lastly, there is always room for reassessment considering the circumstances regarding fuel oil and petrochemicals. For instance, the lifting of sanctions on Russia could alleviate the scarcity of oil to an extent, resulting in potentially lower price point, which could affect our assessment of the industry as a whole.

6.1 Investment Recommendation

As discounted cash flow (DCF) valuation is based on the cash flows it expects to generate in the future (2022 - 2026). Therefore, the key components of the financial statement were forecast based on the financial statement, the price of crude oil, and the refinery production of PRM's customers. In WACC Calculation, the cost of capital was determined using the CAPM model, and the cost of debt was determined using PRM's interest expenses.

Our target share price is THB 12.19 based on the outcome of our discounted cash flow analysis, which represents an upside of 130.00% from the stock's current price of THB 5.30 as of July 25, 2022. In addition, we conduct a sensitivity analysis utilizing

the two fundamental input parameters of WACC and perpetual growth to determine a possible stock price range of THB 6.60 to THB 534.51 per share, with the stock price decreasing as the most sensitive element of WACC increases. Therefore, based on our analysis of the company using discounted cash flow (DCF) valuation, we advise investors to BUY this stock.

6.2 Triggers for re-assessment

The primary drivers of discounted cash flow valuation are sales growth, cost of capital cost of debt, and perpetual growth. Consequently, these factors are the impetus for reevaluation.

Sales growth, energy prices reaching all-time highs will have a negative impact on PRM's sales growth and operating income, as sanctions against Russia show no sign of being lifted anytime soon.

Cost of capital, especially the cost of equity, when investors anticipate a higher rate of return.

Cost of debt, as PRM has not utilized short-term bank debt (overdraft, promissory note), it has only current-portion long-term debt and long-term debt with fixed interest, which may necessitate a reevaluation when PRM issues new debt.

Perpetual growth, we use a constant growth rate of 3.42% based on the average annual growth of Thailand's nominal GDP from 2015 to 2019, excluding the covid-19 epidemic crisis year; however, the terminal growth rate will need to be reconsidered if there is a pandemic resurgence or a new epidemic.

6.3 Limitations

As the company has limited internal information, all input data were obtained from publicly available sources. Initially, DCF valuations are extremely sensitive to input assumptions. Second, the projected free cash flow was only for the next five years, leaving the future years undetermined. Thirdly, the terminal value is uncertain; any changes to the perpetual growth rate after 2025 could result in different outcomes, and it is subject to fluctuation over time. Theoretically, the cost of equity can be computed using beta, the risk-free rate, and the market risk premium; however, it is difficult to calculate each parameter precisely. In addition, the vast majority of the data was derived from historical documents that may not accurately reflect the current situation and unpredictable future developments.



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