CFA Institute Research Challenge

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WESTPORTS HOLDINGS BERHAD

DATE: 20th December 2024

TICKER: WPRTS
EXCHANGE: KLSE
SECTOR: Infrastructure, Industrials and Transport
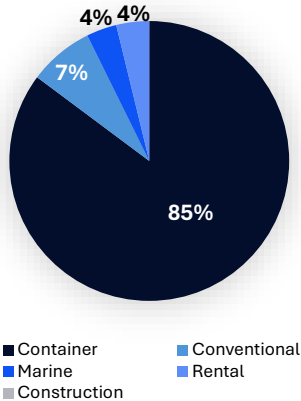INDUSTRY: Marine Shipping

CURRENT PRICE: 4.51
TARGET PRICE: 5.17
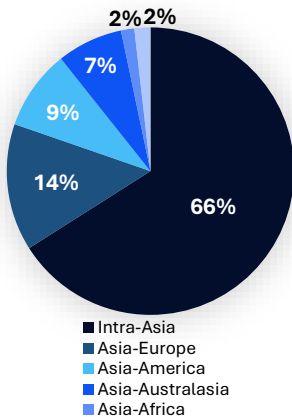UPSIDE: 11.44%
RECOMMENDATION: BUY

RECOMMENDATION: **BUY**
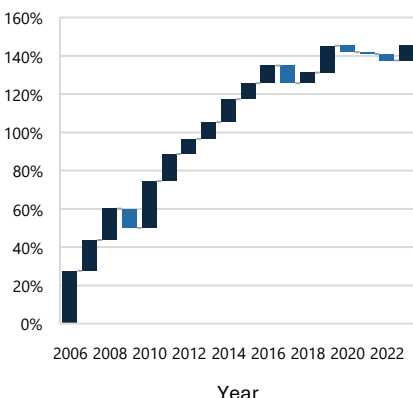
Exhibit 1: Q3 2024 Business Segments

- Container
- Conventional
- Marine
- Rental
- Construction

Source: Company Data

Exhibit 2: Q3 2024 Region Throughput Volume

- Intra-Asia
- Asia-Europe
- Asia-America
- Asia-Australasia
- Asia-Africa

Source: Company Data

Exhibit 3: Operational Revenue GAGR

Source: Company Data

EXECUTIVE SUMMARY

We would initiate the coverage on Westports with a **BUY** recommendation based on a 12-month target price of RM5.17 using both relative and absolute valuation methods. This target price would represent an 11.44% upside from the last close price of RM4.51 on December 20, 2024.

Westports is Malaysia's largest and most strategically positioned port operator, serving as a critical hub for container and conventional cargo in the region. The company's recent investments in capacity expansion and operational efficiency have positioned it for sustained revenue and margin growth. Westports is well-positioned to benefit from ongoing geopolitical shifts, particularly the growing importance of Southeast Asia in global trade flows. With a dominant market share in Port Klang and the ability to handle larger vessels, Westports is poised to maintain its competitive edge and drive strong returns through continued operational improvements and strategic alliances. We view Westports as a highly stable and resilient business with significant growth potential, driven by its strategic location, diverse service offerings, and the expanding role of Southeast Asia in global trade.

Investment Thesis Highlights

Thesis 1: Westports has a dominant market position with minimal competitive threats: Westports holds a near-monopolistic position in Malaysia's port industry, commanding an 80% market share of Port Klang's container business and a 77% overall market share in the port. This dominance is underpinned by Specialization and Infrastructure, Strategic Location and Strong Recurring Revenue.

Thesis 2: Westports is well-positioned to capitalize on geopolitical shifts and trade realignments: Geopolitical and economic developments are reshaping global trade patterns, and Westports is poised to benefit significantly from China +1 Strategy, BRICS Partnership, Impact of Geopolitical Tensions, Upcoming Shipping Alliance Realignments.

BUSINESS OVERVIEW

Located in Port Klang, Westports is one of the three primary ports along the Straits of Malacca, strategically located near the main shipping route. Leveraging natural deep-water berths, the port accommodates large vessels and specializes in handling gateway and transhipment cargo containers. Therefore, Westports serves as the primary gateway for container and conventional cargo in the central Peninsular Malaysia hinterland.
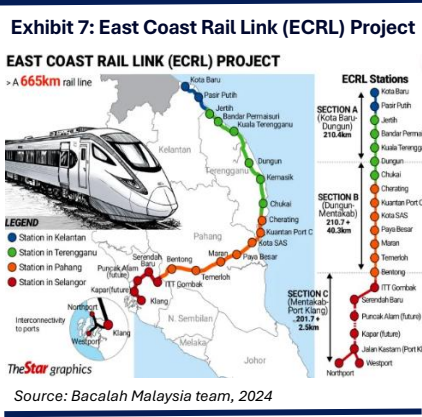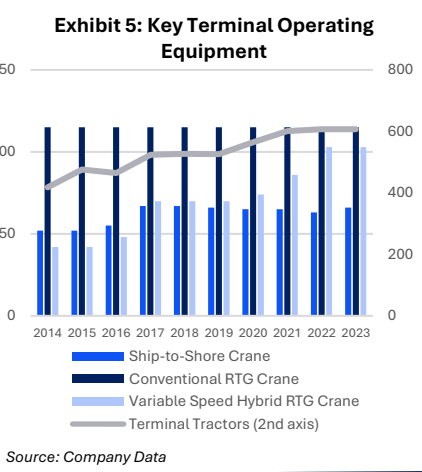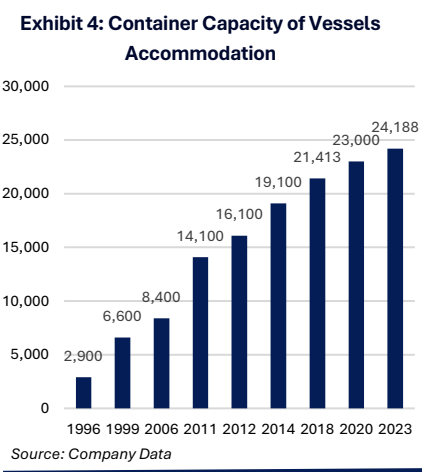
A SWOT analysis can be found in **Appendix 10** to evaluate its internal capabilities and external environment.

Key Operating Segments

Westports generates revenue across multiple business segments, primarily focusing on container-related terminal handling services for shipping lines and forwarders (**Exhibit 1**). These services encompass Terminal Handling Charges (THC), which include container handling between the wharf and yard, initial storage days, and Value-Added Services (VAS) such as storage, refrigerated storage for goods like pharmaceuticals and cosmetics, container freight, and other services upon request. Additionally, marine services contribute 3.5% of revenue, offering tugboat and pilot boat support for berthing and unberthing vessels, with earnings derived from marine consolidated charges and related VAS, which are influenced by the number of container vessel calls. The rental segment, contributing 3.8% of revenue, involves leasing land, storage facilities, and office spaces to customers, primarily conventional cargo operators, with income recognized on a straight-line basis over lease terms, including on-dock depot services. Although construction currently accounts for 0% of revenue in Q3 2024, it arises from the development of terminal facilities under service concession arrangements, such as those at LBT4A. Construction revenue reflects the standalone selling price of services, calculated based on total estimated construction costs plus a profit margin.

Westport Recurring Revenue and Historical Growth

Wesports has demonstrated impressive growth in its container business, expanding from 20,000 Twenty-foot Equivalent Units (TEUs) in 1996 to 10.85 million TEUs in 2019, capturing an 80% market share of Port Klang's container business by that year. Over the decades, the container capacity of

Exhibit 4: Container Capacity of Vessels Accommodation

Source: Company Data

Exhibit 5: Key Terminal Operating Equipment

- Ship-to-Shore Crane
- Conventional RTG Crane
- Variable Speed Hybrid RTG Crane
- Terminal Tractors (2nd axis)

Source: Company Data

Exhibit 6: MNCs Invested in Malaysia

Source: Team Consensus

Exhibit 7: East Coast Rail Link (ECRL) Project

Source: Bacalah Malaysia team, 2024

Exhibit 8: BRICS MEMBERS

Source: Sharma, K. (2024)

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vessels accommodated by Westports has significantly increased, rising from 2,900 TEUs in 1996 to 24,188, TEUs in 2023 (**Exhibit 4**). This is reflected in the container throughput, as it has shown consistent upwards trends with growth in **Appendix 1.** Despite a slowdown from 2012 to 2023, container throughput grew at a CAGR of 4.22% (**Exhibit 3**). Westports became the first port in Malaysia to handle over 10 million TEUs annually, achieving this milestone with a compound annual growth rate (CAGR) of 10.93% from 2000 to 2023, culminating in a record-high container throughput of 10.88 million TEUs in 2023. Additionally, operational revenue grew at a CAGR of 4.96% from 2012 to 2023, reaching a peak of RM2,088.7 million in 2023. This growth has been driven by continuous investments in operational equipment, such as ship-to-shore cranes, conventional RTG cranes, Variable Speed Hybrid RTG cranes, and terminal tractors, significantly improving Westports' operational efficiency and capacity (**Exhibit 5**).

Specialization

Westports is one of the few companies in Southeast Asia capable of handling a diverse range of cargo types, including containers, conventional general cargo, liquid bulk, dry bulk, and roll-on-roll-off (RORO) cargo. Within Malaysia, its specialization in conventional cargo, contributing 7.5% of its revenue, underscores its expertise in managing non-container-related terminal handling services for shipping lines and consignees. This segment generates revenue from a variety of cargo types, including dry bulk, break bulk, liquid bulk, cement cargo, and RORO. Westports' ability to accommodate large shipments and handle a wide range of cargo positions it as a pivotal player in Malaysia's port industry and a strategic logistics hub in the region.

INDUSTRY OVERVIEW

Donald Trump Presidency

The upcoming presidency of Donald Trump sets to begin on January 20, 2025, along with his proposed trade policies which include a 60% tariff on imports from China and 10% on imports from other countries which are expected to disrupt global trade dynamics. The anticipation of these tariffs is likely to trigger cargo frontloading effect between December 2024 and Q1 2025, leading to higher freight rates, increased shipping capacity, greater utilization of larger vessels, and intensified port congestion. This surge in shipping activity may pull demand forward, potentially resulting in reduced transhipment volumes in 2026. Westports, being one of the few ports in the region capable of accommodating large vessels, is well-positioned to benefit from this temporary increase in demand. The economically implication of these polices are projected to slow U.S. GDP growth by 1.3 to 1.8 percentage points and global GDP growth by approximately 1 percentage point, with firms scaling back investments due to heightened trade uncertainties. Despite these challenges, Malaysia's FDI inflows are expected to remain robust, supported by its strategic role in the China +1 strategy and its appeal to multinational corporations seeking growth in low-risk markets. However, the direct impact of these tariffs is minimal for Westports, as the Asia-America trade lane comprises only 9.0% of its total container throughput. Additionally, Westports' diversified operations and strategic regional importance position it to withstand these economic and geopolitical pressures, reinforcing its role as a key logistics hub in the region.

Foreign Direct Investment

Simultaneously, Malaysia stands to benefit from the China+1 strategy, where multinational corporations diversify supply chains to reduce reliance on China. Malaysia's strategic position near major shipping lanes, coupled with its political stability and investment-friendly policies, positions it as a preferred destination for foreign direct investment (FDI). Additionally, initiatives such as the National Energy Transition Roadmap (NETR) and the New Industrial Master Plan (NIMP) 2030 aim to increase Malaysia's manufacturing GDP and attract investments in renewable energy and semiconductor manufacturing. Infrastructure projects like the East Coast Rail Link (ECRL), set for completion by 2027, will enhance connectivity between the Klang Valley and the East Coast, boosting cargo movement efficiency through Port Klang and increasing gateway container volumes (**Exhibit 7**). As The anticipated growth in FDI and infrastructure developments is likely to drive higher gateway volumes at Malaysian ports, fuelled by increased imports of raw materials for infrastructure projects and exports of locally manufactured goods. These advancements will further solidify Port Klang's role as a crucial hub in regional and global trade networks, providing significant benefits to Westports. The success of these initiatives is reflected in the influx of investments from global industry leaders, including Intel Corp, Texas Instruments, Infineon Technologies, AT&S, Amazon Web Services, Microsoft Corp, Geely Holding, NVIDIA, Bosch, Google, and ByteDance. (**Exhibit 6**)

BRICS Alliance

Malaysia's participation as a partner country of BRICS represents a strategic move to enhance its market access and deepen economic collaboration with emerging non-Western powers. BRICS, which accounts for about 45% of the world's population and one-third of global GDP, offers Malaysia a credible platform to engage in trade, supply chain integration, and technology exchange (**Exhibit 8**). While the direct economic impact of BRICS participation is difficult to quantify, it is expected to positively influence trade volumes, including throughput at Malaysian ports, as economic cooperation among BRICS members intensifies.

Exhibit 9: Westports Market Share of Klang
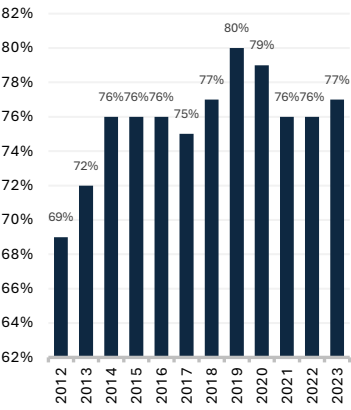
Source: Company Data

Exhibit 10: Top 5 Largest Shipping Vessels

Rank	Vessels	Draft Depth (metres)	Capacity (TEUs)
1	MSC Irina	17.0	24,346
2	OOCL Spain	16.4	24,188
3	ONE Innovation	16.5	24,136
4	MSC Tessa	16.0	24,116
5	Ever Alot	17.0	24,004

Source: GoComet (2023)

Exhibit 11: Peer Comparison in Port Klang

	Westports	Northport
Berths	32	25
Draft Depth (metres)	17.50	15.00
Quay Length (km)	8.80	5.15
Container Terminal Length (km)	5.80	2.60
Container Yard (ground slots)	52,455	19,894
Move Per Hour (mph)	35	28
Container Handling Capacity (million TEUs)	13.70	5.60
Record High Throughput (million TEUs)	10.88	3.32
Reefer Points	4,132	1,052
Quay Cranes	66	30
Rubber-Tyred Gantry (RTG) Cranes	218	84
Terminal Tractors	607	174
Stackers	27	11

Source: Company Data

Exhibit 12: Shipping Land Density
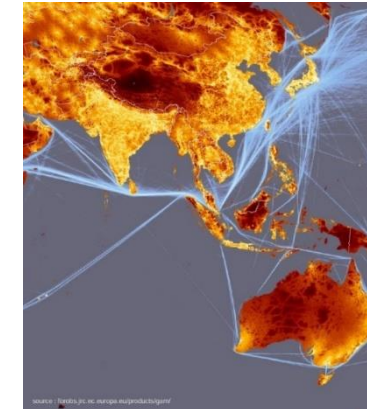
Source: Company Data

Gaza Trade War

The Middle East crisis, Red Sea crisis, and Gaza War have disrupted regional shipping dynamics, leading to attacks on international shipping in the Red Sea and surrounding waterways by Houthi rebels. These conflicts forced shipping lines to adopt longer routes around the Cape of Good Hope, increasing transit delays and impacting traffic through the Suez Canal. The Red Sea crisis exacerbated congestion in the Middle East and South Asia (M&S) regions, further intensified by rerouted shipping and increased tariffs. In response, port congestion in Singapore spilled over to Port of Tanjung Pelepas (PTP) and Port Klang, causing vessel delays, reduced call frequencies, and a decline in container volumes, particularly as some vessels opted to bypass these ports due to berth shortages. Amid these disruptions, Port Klang saw a 2% year-on-year (YoY) decline in throughput in Q3 2024 but recorded higher container revenue driven by increased demand for Value-Added Services (VAS), particularly reefer units and extended storage revenues. Container berth occupancy at Westport rose to 83% in Q2 2024 where it went up from 79% in Q2 2023, while container yard occupancy increased to 91% as compared to 85% in Q2 2023, largely due to ad-hoc discharges of containers. Currently, port congestion at PTP and Port Klang is easing due to effective mitigation efforts. Strengthened cooperation between Northport and Westport, ensuring vessel diversions between terminals, has contributed to reduced congestion. The Asia-Europe trade lane is showing signs of recovery, with a 2% quarter-over-quarter (QoQ) increase in volumes for Westport in Q3 2024. However, the surge in container revenue from VAS during the height of congestion is expected to decline as these bottlenecks subside. Westport's strategic role as one of the few capable of handling large shipments in the region has allowed it to navigate these disruptions and maintain resilience in the face of ongoing challenges.

COMPETITIVE POSITIONING

Competitive Edge Within Port Klang

Westport dominates Port Klang's market, holding 77% market share due to its superior infrastructure, greater handling capacity, and unmatched operational efficiency (**Exhibit 9**). With a container handling capacity of 13.7 million TEUs which more than double Northport's capacity of 5.6 million TEUs hence Westports sets the benchmark for scale and performance in the region. Its infrastructure includes more berths, advanced terminal equipment such as quay cranes, RTG cranes, terminal tractors, stackers, and reefer points, all of which are over twice as extensive as Northport's, enabling superior container handling capabilities. Additionally, Westports' 17.5-meter draft depth exceeds Northport's of 15 meters, enabling it to accommodate ultra-large vessels such as the MSC Irina, the world's largest shipping vessel in 2023, with a capacity of 24,346 TEUs and a draft depth of 17 meters (**Exhibit 10**). Its crane productivity, reaching 35 moves per hour (MPH), far surpasses Northport's 28 MPH, further highlighting its superior operational efficiency. Moreover, upcoming expansions featuring advanced automation technologies are poised to enhance Westports' competitive edge. Details of the comparison between Westports and Northport can be found in **Exhibit 11**.

Leveraging Cost-Effectiveness and Flexibility to Compete

Port Klang's lower tariff rates provide a significant advantage over its competitors, particularly the high-cost Port of Singapore. Flexible discount strategies, volume-based rebates, and loyalty programs help attract and retain clients. Additionally, Port Klang's capacity for future expansion ensures scalability to meet growing trade demands, addressing constraints faced by regional competitors. For more details about peer comparison in the Strait of Malacca, please refer to **Appendix 2.**

Strategic Advantage in the Strait of Malacca Through Cost and Capacity

While Port Klang is located slightly further inland along the Strait of Malacca compared to the Port of Singapore and PTP, Westport compensates with its cost-effectiveness and superior handling capacity. Its lower transhipment tariffs, flexible discount strategies, and ability to accommodate ultra-large vessels ensure it remains a competitive choice for shipping lines. Additionally, Port Klang's ample space for future expansion allows Westport to scale its operations and meet regional trade demands effectively, positioning it as a strong contender in the Strait of Malacca.

INVESTMENT SUMMARY

Thesis 1: Westports has a dominant market position with minimal competitive threats:

Westports' dominant position in Malaysia's port industry is supported by its oligopolistic structure and competitive advantages, driven by specialization, strategic location, and limited regional competition.

1.1 Minimal Competition Due to Diversity and Specialization:

Westports enjoys a oligopolistic position in Malaysia's port industry, benefiting from its ability to handle a wide variety of cargo types. It specializes in containerized cargo, which accounts for the majority of its throughput, while also offering services for general cargo, liquid bulk, dry bulk, and roll-on-roll-off (RORO) cargo. This diverse portfolio of services limits competition from other regional ports that may lack the infrastructure, expertise, or scale to match its capabilities. Moreover, Westports' strategic focus on value-added services such as reefer storage and extended container yard facilities enhances its competitive edge, catering to the needs of diverse industries and trade flows.
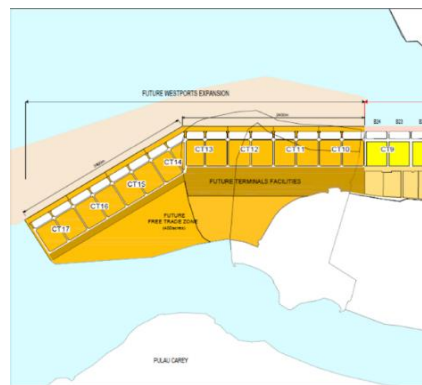
Exhibit 13: Location of Westports
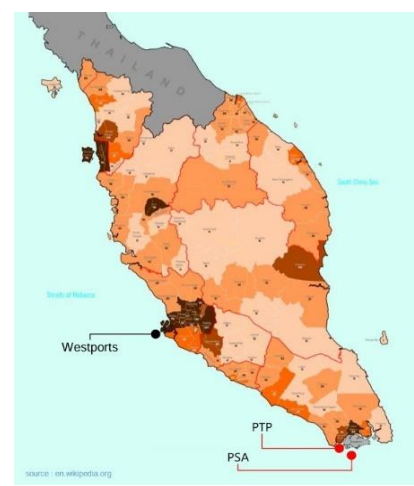
Source: Company Data
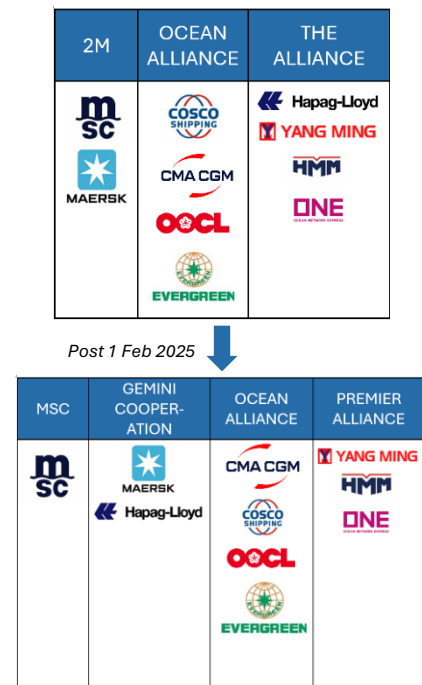

Exhibit 14: Location of Westports 2

Source: Company Data

Exhibit 15: China +1 Strategy in SEA

Cumulative FDI value committed to SEA for key growth sectors[1]

Source: Jll.com.my.

Exhibit 16: Shipping Alliance Reshuffle

Post 1 Feb 2025

Source: Team Consensus

1.2 Strategic Location

Westports' geographical position along the Strait of Malacca, one of the world's busiest maritime trade routes, ensures a steady flow of transhipment volumes (**Exhibit 12 & 13**). Its proximity to key regional markets and the ability to serve as a gateway port for Malaysia solidifies its strategic importance. Additionally, Westports is one of the few ports in the region capable of accommodating ultra-large container vessels (ULCVs), further reinforcing its role as a critical node in global trade. As trade volumes continue to grow in Southeast Asia, Westports remains a preferred choice for shipping lines due to their efficient operations and accessibility, creating significant barriers for potential competitors. This combination of specialization, operational diversity, and strategic location ensures that Westports maintains its dominant position in the industry, with minimal threats from regional competitors.

1.3 Container Business Growth and Operational Expansion:

Westports has demonstrated substantial growth in its container business, expanding from 20,000 Twenty-foot Equivalent Units (TEUs) in 1996 to 10.88 million TEUs in 2023, capturing an 80% market share of Port Klang's container business by that year. Despite a slowdown in throughput from 2012 to 2023, the container throughput grew at a compound annual growth rate (CAGR) of 4.22%. Westports became the first port in Malaysia to handle over 10 million TEUs annually, achieving this milestone with a CAGR of 10.93% from 2000 to 2023, culminating in a record-high container throughput of 10.88 million TEUs in 2023. This growth has been driven by continuous investments in operational infrastructure, including ship-to-shore cranes, conventional RTG cranes, Variable Speed Hybrid RTG cranes, and terminal tractors, enhancing Westports' operational efficiency and capacity.

In addition to this Westports secured approval for the expansion of its container terminals through the extension of its concession agreement with the Malaysian government, now running until 2082, facilitating the development of Westport 2 (WP2) (**Exhibit 14**). This project would encompass 2 phases where phases 1 which would set to take place between 2024 to 2028 would involves the development of CT10–CT13 at an estimated cost of RM6.3 billion, while Phase 2 set to take place in 2036 to 2053 would be focusing on CT14–CT17 with the same budget. The initial development of CT10–CT11 requires a capital expenditure ranging from RM2.2 billion to RM2.4 billion, with operations for CT10 expected to commence soon. WP2 is expected to generate significant economic benefits, contributing an output impact of RM55 billion which comprise of RM22 billion from direct impacts, RM23 billion from indirect supply chain effects, and RM10 billion from induced impacts such as wages paid to employees. Additionally, WP2 is projected to contribute RM19 billion to Malaysia's GDP through sectoral linkages, goods, services, and salaries paid. The project is expected to create 6,000 new full-time job opportunities, strengthen Westports' competitive position, and support the nation's growing regional transshipment requirements, enhancing Malaysia's logistics efficiency and global competitiveness.

Thesis 2: Westports is well-positioned to capitalize on geopolitical shifts and trade realignments:
Westports is strategically positioned to capitalize on shifting global trade dynamics driven by geopolitical developments.
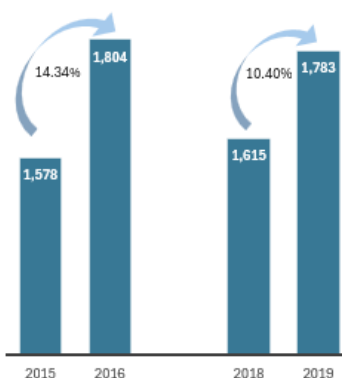
2.1 Role in China +1 Strategy:

As multinational corporations seek to diversify supply chains to reduce reliance on China, Westports is poised to benefit from increased trade activity in Southeast Asia (**Exhibit 15**). Malaysia's strategic location along major shipping routes, coupled with its political stability and investment-friendly policies, makes it an attractive destination for foreign direct investment (FDI). Initiatives like the National Energy Transition Roadmap (NETR) and the New Industrial Master Plan (NIMP) 2030 aim to strengthen Malaysia's manufacturing and logistics sectors, boosting gateway and transshipment volumes at Westports. As neighbouring countries like Thailand, Vietnam, India, and Indonesia have actively pursued investment-friendly policies, positioning themselves as viable alternatives. Malaysia, situated strategically near these nations, is set to benefit from increased shipping activity through the Strait of Malacca, further driving transshipment volumes at Port Klang. These initiatives have already attracted investments from global giants such as Intel Corp, Texas Instruments, Infineon Technologies, AT&S, Amazon Web Services, Microsoft Corp, Geely Holding, NVIDIA, Bosch, Google, and ByteDance.

2.2 BRICS Expansion:

The expansion of BRICS and the group's increasing focus on trade within member countries create new growth opportunities for Westports. As trade between Malaysia and BRICS nations intensifies, Westports is positioned to handle the rise in container and cargo volumes. Its advanced facilities and deep-water berths make it a preferred port for goods transiting between Asia, Africa, and South America especially in regions central to BRICS cooperation.

2.3 Policies from Donald Trump's Presidency:

The anticipated trade policies under Donald Trump's presidency, such as the proposed tariffs on imports from China and other countries, are expected to disrupt global trade flows. This disruption could trigger a cargo frontloading effect and lead to temporary surges in shipping activity between December 2024 and Q1 2025. Westports, as one of the few regional ports capable of handling large vessels, is well-positioned to accommodate increased demand caused by port congestion and rerouted shipments.

2.4 Opportunities from Shipping Alliance Reshuffling:

Although Westports experienced challenges during the 2017 shipping alliance reshuffling, the upcoming Gemini Cooperation and Premier Alliance realignments present new opportunities (**Exhibit 16**). Unlike the 2017 reshuffle, which led to a 9% year-over-year decline in container throughput, Westports' deep-water berths, operational efficiency, and ability to accommodate mega-vessels enhance its attractiveness as a partner in these new alliances. Maersk's equity stake in the PTP further solidifies Westports' role as a critical alternative hub should PTP face congestion. The Johor-Singapore Special Economic Zone is expected to generate positive spillover effects, boosting Westports' role as a transhipment hub. With its capacity to handle larger vessels, Westports is well-positioned to capture increased transhipment volumes resulting from these realignments, reinforcing its status as a key player in the evolving global shipping network.

2.5 Potential Tariff Rate Revision and Revenue Growth Impact:

Westports has previously adjusted its container tariff rates in phases, with the first phase implemented on 1 November 2015, resulting in an approximate 15% increase on key tariff items. The second phase vwas applied on 1 March 2019 (**Exhibit 17**). Westports has reaffirmed the need for tariff adjustments, with projected increases expected sometime in September of the following year. According to the Port Klang Authority (PKA), these tariff hikes are justified based on the higher earnings multiplier effect, driven by increased gateway volumes. Anticipated tariff revisions could contribute to an additional 10% increase in Westports' revenue, enhancing its profitability and operational sustainability based on Westports projection.

VALUATION

In this section, we use a combination of intrinsic, absolute, and relative valuation methods to determine a 12-month target price. By assigning equal weighting to the Dividend Discount Model, DDM, and Relative Valuation, the resulting 12-month target price is projected at RM 5.17 (**Exhibit 18**). Incorporating insights from our Long Short-Term Model, the stock is expected to experience a dip during the first six months, followed by a consolidation phase before trending upwards toward the target price. replacement for the valuation.

Discounted Cashflow Model with 6 Years Projections

To value Westports financially, a Discounted Cash Flow (DCF) model was used, projecting cash flows over six years with key assumptions such as a 7% increase in depreciation and amortization from additional concession assets and a 2024 capital expenditure (Capex) hike due to dredging projects to expand port capacity (**Exhibit 19**). Inputs include a 5% cost of debt, 6.6% cost of equity, and a 6 sustainable growth rate, aligned with 2023 growth trends. Revenue growth is expected to be driven by rising throughput volumes and regional trade, while operating expenses will increase due to higher depreciation. Using a 5.6% cost of capital and a terminal growth rate of 6%, the DCF valuation estimates a share price of RM 5.42, reflecting Westports' resilience in a competitive market. To assess Westports' valuation under varying economic conditions, a scenario analysis was conducted, incorporating both bull and bear case projections to reflect potential outcomes influenced by macroeconomic trends and operational strategies. In a bull case, a favorable economy supports robust growth, with Capex rising 15% for capacity expansion and NWC increasing 80% to accommodate higher operational activity. The share price is projected at RM 5.64. Conversely, the bear case reflects economic challenges, with the sustainable growth rate slightly reduced to 5.9%, Capex decreasing by 30% to prioritize cash flow preservation, and NWC remaining constant, resulting in a projected share price of RM 4.84. These scenarios underscore Westports' valuation sensitivity to macroeconomic and operational factors.

WACC

Cost of Debt: Westports has RM2 billion Sukuk Musharakah and RM5 billion Sukuk Wakalah, both with AAA ratings by RAM, offering a yield of 4.29%. While the typical borrowing cost for Malaysia AAA-rated sukuk ranges from 3% to 4%. However, we would propose a more conservative borrowing cost of 5.5% for Westports to better reflect their long-term financial commitments and risk profile. This higher borrowing cost would account for factors such as extended duration of the borrowings, including the perpetual tenure of Sukuk Wakalah with no expiry date, as well as the significant capital expenditure required for the development of Westport 2 and rising operational costs. The Sukuk Wakalah, which had an initial drawdown of RM355 million at 4.29%, is being issued in tranches, and as additional drawdowns occur, the debt-to-equity ratio will gradually increase, limited by a maximum ratio of 40:60.

Exhibit 21: Weekly Westports Share Price of LSTM

Source: Company Data
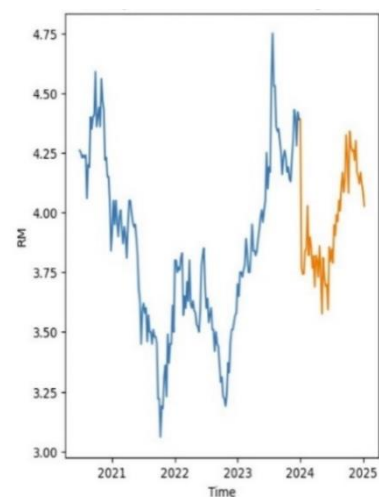
Exhibit 22: Component of DDM

Component	Value
R1	6.46%
R2	4.40%
Bear Growth Rate	0.60%
Base Growth Rate	0.69%
Bull Growth Rate	0.72%

Source: Team Consensus

Exhibit 23: Relative WACC

Relative WACC	
Hutchison Port Holdings Trust	4.90%
Port of Tauranga Ltd	8.10%
COSCO Shipping Ports Ltd	4.20%
Adani Ports & Special Economic Zone Ltd	11.20%
International Container Terminal Services, Inc.	9.09%
China Merchants Port Holdings Co Ltd	4.50%
Average	7.00%

Source: Team Consensus

Exhibit 24: Target Price Projection Range

Source: Team Consensus

This higher borrowing rate also aligns with the current 30-year Malaysian government bond yield of 4.25%, offering a cautious and realistic estimate to account for potential financial risks.

Cost of Equity: Westport's beta of 0.5 is derived from peer benchmarking, which ranges from 0.46 to 0.66. Using an expected return of FBMKLCI at 9.4% and the Malaysia Government Bonds 10-Year Yield at 3.8%, a market risk premium of 5.6% is calculated. Including an equity risk premium of 2.8%, Westport's cost of equity is 6.6%.

WACC: With total debt of RM1.168 billion and a market capitalization of RM14.56 billion, Westport's total capital amounts to RM15.729 billion. The current debt-to-equity ratio of 0.08 remains well below the maximum limit of 2.0. Allocating 7.43% to debt and 92.57% to equity, the WACC is calculated at 6.44% (**Exhibit 20**). This is relatively conservative compared to peer companies, which have an average WACC of 6.07% (**Exhibit 23**).

Share Price Prediction using Long Short-Term Memory (LSTM) Recurrent Neural Network

Using LSTM, we observed that the share price of Westports experiences a short dip during the first half year then during the subsequent month Westports share price will consolidate and switch to an upward trend (**Exhibit 21**). Therefore, our team would come to the conclusion of Westports share price would experience a dip at first prior to consolidating and moving to an upward trend, towards the direction of the intrinsic value that is provided in the valuation section. The structure of the LSTM model is provided in **Appendix 3** for Westports, where the model input incorporates both company and market data. For a more in-depth description and detailed specification of the LSTM model, please refer to the **Appendix 3**.

Dividend Discount Model with 6 Years Projections

The Dividend Discount Model (DDM) is used to project Westports' share price for the next six years (**Exhibit 22**). The dividend stream is calculated based on historical data from 2015 to 2024. The payout ratio is set at 0.72, reflecting the average dividend payout based on net income, as detailed in the **Appendix 4.1**. Westports will implement a Dividend Reinvestment Plan (DRIP) from 2025 to 2026, where 2/3 of the dividend will be reinvested. During this period, we account for both DRIP and non-DRIP dividend streams, assuming a maximum subscription rate of 25% and a minimum of 5%. From 2027 onwards, the dividend stream returns to a single-stream model. The projected share price using the DDM ranges from RM 5.08 at a 25% subscription rate to RM 5.04 at a 5% subscription rate. Taking a middle ground, we arrive at RM 5.06. For the detailed form of the Dividend Discount Model (DDM), please refer to **Appendix 4.2**.

Relative Valuation

Although identifying suitable peers for Westports is challenging, as most port operators in Malaysia and Singapore are not publicly listed. Therefore, to conduct a relative valuation, we would select publicly listed port operators from various countries, including China Merchants Port Holdings, COSCO SHIPPING Ports Ltd, Adani Ports & Special Economic Zone Limited, Hutchison Port Holdings Trust, International Container Terminal Services, Inc., and Port of Tauranga Limited. The highlights line in relative pricing can fixed by firstly comparing the WACC between Westports and its industrial peers, we can observe that Westports WACC is lower than the industrial average indicating competitive advantage compared to its peers. Then computing the median Price-to-Earnings (P/E) ratio and Enterprise Value-to-EBITDA (EV/EBITDA) ratio among these peers are 20.50x and 12.69x, respectively. Applying these multiples to Westports' share price as of December 23, 2024, suggests a target price of RM5.09 based on the P/E ratio and RM4.96 based on the EV/EBITDA ratio. Assigning equal weight (50%) to both metrics results in a combined target price of RM5.03. It is important to note that the EV/Revenue metric was excluded from this analysis, as Westports' revenue occasionally includes construction revenue, which is subsequently deducted as a cost, potentially distorting the valuation. **(Appendix 4.3)**

FINANCIAL ANALYSIS

Stronger and Resilient Growth during COVID

Westports has demonstrated strong and resilient revenue growth during the COVID-19 period, with revenue increases of 10.42% in 2019 and 10.77% in 2020. This was largely driven by tariff rate revisions of 15% in 2015 and 2019, which bolstered revenue despite external shocks. Given Westports historical performance, a conservative growth rate of 10% for 2026 is anticipated. However, in 2018, net income experienced an 18% decline due to rising fuel costs and the impact of MFRS 15 accounting standards, alongside reduced vessel operations and construction activity. For the period between 2024 and 2029, significant investments are expected in the form of Westport 2 expansion and dredging reclamation, contributing to increased operational revenue and sustained growth. **(Appendix 5)**

Ratio Analysis

Profitability ratios reveal that Westports has consistently maintained a dividend payout ratio of approximately 0.72 since 2015, aligning dividend distributions with net income growth. Looking ahead, a dividend reinvestment plan (DRIP) is anticipated to reduce the payout ratio to 0.5 from 2025 to 2026. This adjustment is expected to lower the cost of equity to 4.4% and marginally enhance the growth rate (**Appendix 6**). A DuPont analysis further emphasizes Westports' asset-intensive business model and
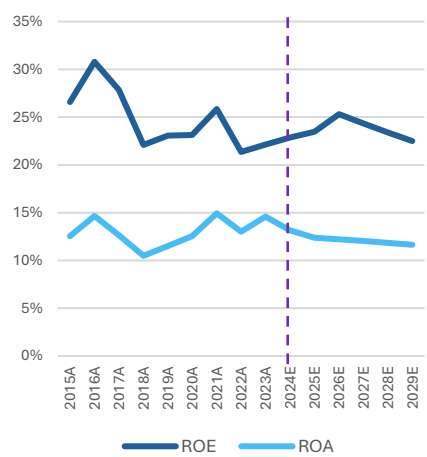
Exhibit 25: ROE & ROA

Source: Team Consensus

Exhibit 26: Financial Ratios of Industrial Peers

	ROE	ROA	Current Ratio
Westports	22.14%	14.60%	0.49
China Merchants Port Holdings	6.81%	1.41%	0.87
Cosco Shipping Ports LTD	6.71%	3.25%	0.96
Adani Ports and Special ecnomic Zone Limited	5.95%	2.10%	1.06
Hutchison Port Holidngs Trust	3.85%	2.74%	0.68
International Container Terminal Services, Inc.	23.51%	12.04%	1.32
Industrial Average	11.50%	6.02	0.90

Source: Team Consensus

Exhibit 27: Westports Capital Structure

■ Total Debt ■ Market Value of Equity

Source: Company Data

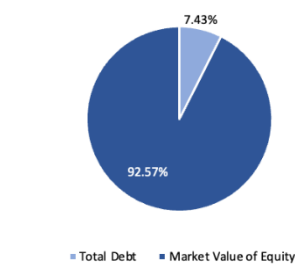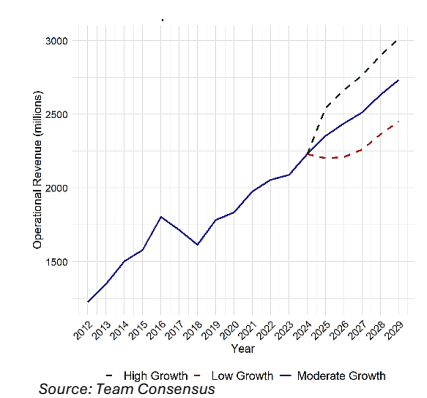**Exhibit 28.1: Operational Revenue**

– High Growth — Low Growth — Moderate Growth

Source: Team Consensus

high leverage, with a steady revenue-to-asset ratio of 32% to 40%, demonstrating effective asset utilization. Despite significant planned capital expenditures for expansions, such as CT10 and CT11 in 2028 and 2029, Westports has maintained a stable return on equity (ROE) above 22%, showcasing its resilience and long-term investment appeal (**Exhibit 25**). On the liquidity front, Westports has shown an improving trend in its Current Ratio over the years. Historical data reveals the following ratios: from 2012 to 2016, the ratio ranged between 0.33 and 0.44, indicating limited short-term liquidity during this period. From 2017 to 2022, a gradual increase was observed, with the ratio rising from 0.42 to 0.62, highlighting improvements in managing short-term liabilities. In 2023, the Current Ratio slightly declined to 0.57, but it remains relatively stable compared to earlier years. While Westports' current liquidity position shows progress, its historical Current Ratio still reflects tighter working capital management compared to industry standards. Addressing liquidity constraints will be key to complementing its strong profitability and sustaining its growth trajectory amidst planned expansions.

Comparative Financial Performance Analysis

Westports demonstrates strong financial performance compared to its peers and the industry average, as evidenced by its superior Return on Equity (ROE) and Return on Assets (ROA). With an ROE of 22.14%, Westports significantly outperforms the industry average of 11.50%, as well as all its peers, including International Container Terminal Services, Inc. (ICTSI) at 23.51%, which is the second highest among the group (**Exhibit 26**). This indicates Westports' exceptional ability to generate profit from shareholders' equity, showcasing robust efficiency in utilizing invested capital. Similarly, Westports excels in ROA, achieving 14.60%, far above the industry average of 6.02%. This reflects its efficient use of assets to generate profits, surpassing peers such as ICTSI (12.04%) and China Merchants Port Holdings (1.41%), further solidifying its position as a market leader in operational efficiency. However, in terms of liquidity, as measured by the Current Ratio, Westports lags both the industry average (0.90) and most of its peers, with a current ratio of 0.49. This suggests that Westports may face challenges in covering its short-term liabilities using current assets, especially compared to peers like ICTSI (1.32) and Adani Ports (1.06). While this could indicate tighter working capital management, it may also imply potential risks in meeting short-term financial obligations.

Revenue Projections

To project Westports' revenue for the next five years, various methods are used, leveraging historical data and key economic indicators. The Q4 2024 forecast is generated using exponential smoothing, combining data from Q1, Q2, and Q3. Marine and rental revenues are forecasted using exponential smoothing, capturing trends and seasonality. Gateway volume is projected using exponential smoothing, time series model and a linear regression model based on FDI inflows, GDP growth, and container handling capacity, with weighted averages to determine the final forecast. Transhipment volume is estimated using exponential smoothing, and conventional volume is projected using simple trend methods. The average revenue per container for transhipment and gateway is calculated from 2022 to 2024, adjusted for a 7.5% tariff hike for post-hike projections. Conventional revenue per container is forecasted based on the same three-year average. Total revenue is estimated by multiplying forecasted volumes by their respective revenue per unit. For detailed specifications of these models, please refer to **Appendix 7.1**. Therefore, these projection after applying to bear, base, and bullish cases, demonstrate expected revenue growth, driven by factors like geopolitical developments, tariff hikes, and operational expansions. In the bear case, low growth is expected, while the base case moderate growth. In the bullish case, high revenue increases are projected, driven by successful tariff implementations and significant infrastructure expansions, ensuring Westports' sustained growth and market dominance as seen in appendices. The projected revenue growth under each scenario will be visualized in the accompanying graph (**Exhibit 28.1**).

However, based on the LSTM model predictions as shown in **Exhibit 28.2**, the KLCI market is expected to experience a downward trend in 2025. Furthermore, applying the MSAR model for market regime detection indicates a high likelihood of the market entering a bear phase (**Appendix 7.2**). This projection suggests an increased probability of lower growth in the coming months, potentially influencing Westports' growth trajectory.

INVESTMENT RISKS

The likelihood and impact of each risk is displayed in a matrix as shown in **Exhibit 31**.

Risk #1: Credit Risks

Westports' ambitious container terminal expansion program introduces significant credit risk, which could affect the company's overall financial returns and pose challenges for investors. A key risk arises from the need to secure substantial funding for its long-term capital expenditure while maintaining financial stability. The company's reliance on external funding increases its exposure to credit risk, as any deterioration in its credit profile could lead to higher borrowing costs and reduced access to financing. While Westports Malaysia Sdn Bhd (WMSB) currently holds an AAA credit rating, the financial strain of the expansion program and the additional debt required to fund it may pressure this rating, potentially impacting investor confidence and the cost of future capital. Moreover, compliance with
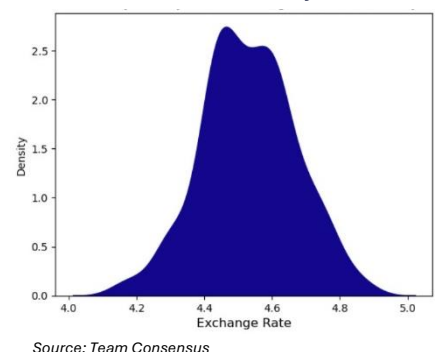
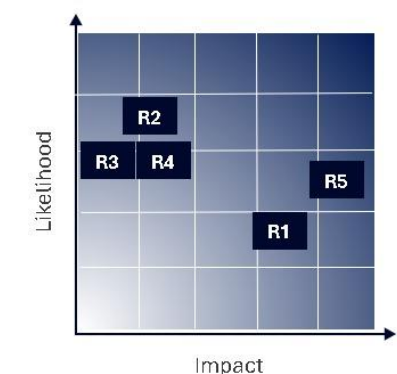**Exhibit 28.2: Weekly KLCI Index Prediction Using LSTM**

Source: Team Consensus
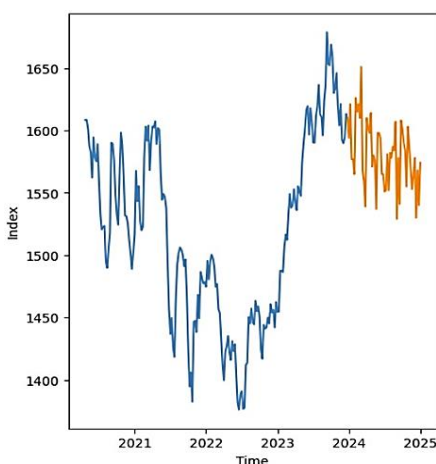
Exhibit 29: Daily USD/MYR Prediction using Heston Model

Source: Team Consensus
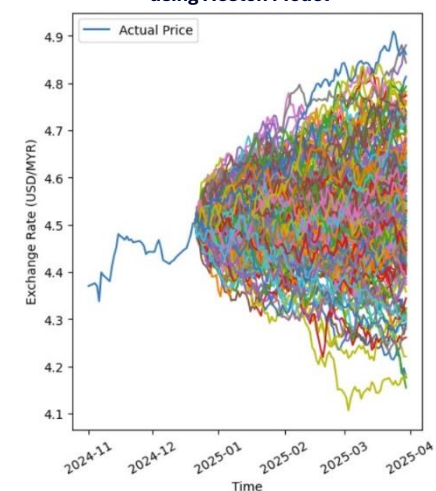
Exhibit 30: Density Plot of the Exchange Rate After 100 Days

Source: Team Consensus

Exhibit 31: Risk Matrix

Source: Team Consensus

debt covenants tied to its RM2 billion Sukuk Musharakah Medium Term Note remains critical. Any breach of these covenants could trigger default provisions, further exacerbating credit risks and creating uncertainty for stakeholders. To address these challenges, Westports has established a RM5 billion Sukuk Wakalah Programme with perpetual tenure. While this initiative aligns with sustainability goals and provides long-term funding, it also adds to the company's debt burden, increasing its financial leverage. Investors should closely monitor the program's execution and the possibilitiy of Westports exceeding its 40:60 finance to equity limit.

Risk #2: Currency Risks

Westports' extensive involvement in international trade exposes the company to fluctuations in the USD/MYR exchange rate, which could directly impact on the volume and profitability of shipping activities. As international shipping charges and many trade agreements are denominated in USD, any volatility in the exchange rate may significantly influence operational costs and revenues. To assess this risk, the Heston stochastic volatility model, which accounts for the dynamic and mean-reverting nature of exchange rate fluctuations, can be applied (**Exhibit 29**). This provides a statistically robust framework to evaluate potential future exchange rate scenarios. The Heston model estimates that the USD/MYR exchange rate is most likely to fluctuate within the range of 4.4 to 4.8, allowing Westports to analyze potential financial impacts under various scenarios (**Appendix 8**). In an optimistic scenario where the exchange rate is 4.4, a stronger MYR would lower import costs for local industries, potentially boosting trade volumes; however, it might reduce export competitiveness, slightly impacting outbound shipping volumes. The base case, with an exchange rate of 4.6, reflects a stable economic environment characterized by balanced trade flows, where Westports experiences a minimal impact from exchange rate fluctuations. In a pessimistic scenario with the exchange rate at 4.8, a weaker MYR could enhance export competitiveness but would also increase the cost of imported goods and services. This could place financial strain on industries reliant on imports, potentially leading to reduced trade activity in specific sectors.

Risk #3: Physical Risks

Westports faces potential physical risks associated with climate change that could impact its operational resilience over the long run. Recognizing this, Westports tasked DHI in 2021 to conduct an in-depth assessment of the impact of climate-related factors on its port facilities. The evaluation considered six critical parameters such as wind, water levels, waves, currents, rainfall, and air temperature, over a 60-year horizon extending to 2080. The findings indicated that rising water levels pose a significant physical risk under the worst-case climate scenario (RCP 8.5). This is particularly relevant as Westports has extended its operational rights to 2082, with plans for further expansion of container assets. Elevated water levels could affect infrastructure, operational efficiency, and long-term sustainability.

To address this, Westports is committed to periodically reassessing physical risks, with another comprehensive evaluation planned within the next five years. This updated analysis will incorporate recent data to provide a more accurate understanding of climate impacts and inform mitigation strategies. By prioritizing adaptive measures to address rising water levels, Westports aims to safeguard its infrastructure and operations against long-term physical risks associated with climate change.

Risk #4: Operational Risks

Operational risks such as fire and liquid spillage at Westports encompass potential disruptions that could impact daily activities, employee safety, and financial performance. To mitigate these operational risks several measures are taken in place which include rigorous enforcement of safety protocols by the Port Police and Conventional Operations teams, regular fire drills and emergency preparedness training for the Port Police and Environmental, Health, and Safety (EHS) teams, and ongoing surveillance audits coupled with routine maintenance of all equipment to prevent malfunctions and ensure operational continuity. By proactively addressing these potential risks, Westports aims to maintain a secure working environment and uphold the efficiency of its port operations.

Risk #5: Market Risks

The market risk assessment reveals significant findings regarding the behavior of the Kuala Lumpur Composite Index (KLCI) and its implications. Utilizing Long Short-Term Memory (LSTM) models, a downwards trend in the KLCI has been predicted, while the Markov Switching Autoregression (MSAR) model forecasts a transition into a Bear market. The MSAR model classifies market regimes as Bull or Bear by analyzing the volatility dynamics within each regime. Based on the observation exhibit by this classification, Bull markets are characterized by lower variance and more stable trends, while Bear markets typically exhibit higher variance, greater fluctuations, and often increased transaction volumes. The heightened volatility associated with the Bear market would lead to increased uncertainty, which can have a cascading effect on the economy. Uncertainty often undermines business confidence, causing a reduction in Foreign Direct Investment (FDI) and company investment activities. This decline in investment can have far-reaching consequences, adversely impacting on the long-term growth plans of key infrastructure projects, such as Westport's expansion initiatives. Such

Exhibit 32: Emissions Intensity

- Scope 1 and 2 Intensity (CO2ekg/TEU)^
- Electricity/TEU (kWh/TEUs)^
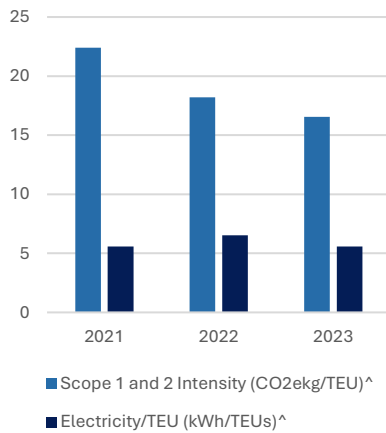
Source: Company Dat3

Exhibit 33: Contribution to the Local Community

Contribution to the Local Community	2021	2022	2023
Total CSR Investments RM'000	5,649	3,061	1,594
Total Local Procurement RM'000	599,657	634,098	697,170

Source: Company Data

Exhibit 34: Employee Gender

- Total Number of Employees
- Total Number of Male
- Total Number of Female
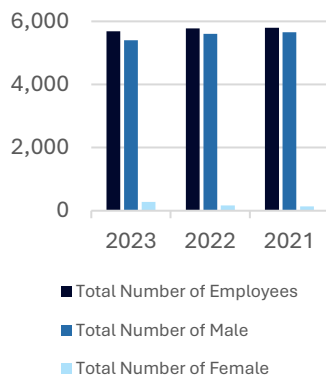
Source: Team Consensus

disruptions not only affect immediate market stability but also pose risks to future economic development, hindering the ability to capitalize on growth opportunities in the region (**Appendix 7.2).**

ENVIRONMENTAL, SOCIAL & GOVERNANCE

With the increasing emphasis on environmental sustainability, social welfare, and adherence to government regulations, thus the ESG profile of Westports would significantly influence its stakeholders. Westports is classified as a negligible risk, notably S&P Global ESG Score ratings indicate that all three ESG categories surpass the industry average (**Appendix 9.1**).

Environmental

Westports' strong ESG ratings are driven by factors such as its ISO 14001 certification since 2009, in collaboration with Bursa Malaysia and OCBC on the Centralized Sustainability Intelligence (CSI) Platform to monitor and track carbon emissions, and as well as the alignment with the Task Force on Climate-Related Financial Disclosures (TCFD) framework, and the expansion of its rainwater harvesting system capacity.

Sustainable Energy Source and Reduction Energy Consumptions: In 2024, Westports received The Edge ESG Awards for the second consecutive year, recognizing its Solar Panel Project for renewable energy at TSG Hall. Solar energy generation increased significantly in 2023, reaching 233MWh which is a 95.8% rise since the panel installation was completed in 2022 from 119MWh. Additionally, Westports plans to further expand solar energy generation to exceed 16,000MWh across two warehouses, partnering up with Solarvest Holdings Bhd to install photovoltaic systems at Westports Logistics Centre. Furthermore, initiatives to increase key energy efficiency that has been completed would involve converting to LED lighting, installing submeters to monitor energy consumption across facilities, adopting sustainable lighting in the Tower Block, and implementing IoT power meters for floor and chiller systems. Future plans include exploration of an energy monitoring dashboards online and evaluating the use of occupancy sensors in restrooms. Moreover, operational efficiency was also enhanced with the replacement of seven outdated Impsa Quay Cranes with energy-efficient Mitsui Quay Cranes, reducing electricity consumption per TEU by 6% while increasing operational volume by 8%.

Carbon Reduction by using Biodiesel: In 2023, Westports sustained its commitment to reducing GHG emissions, by maintaining a steady decline in the intensity of Scope 1 and 2 emissions, and intensity of emissions from electricity per TEU (**Exhibit 32**). As part of its efforts to lower its carbon footprint, Westports implemented a biodiesel program that utilizes B7 Biodiesel across terminal tractors (TTs), new RTG models, and all container yard equipment, contributing to a measurable reduction in GHG emissions, as reflected in the data presented above. Looking ahead, the company plans to transition hybrid and variable-speed RTGs to fully electric RTGs by 2026 to further mitigate emissions. Additionally, Westports has reinforced its sustainability strategy by increasing its internal carbon pricing to RM50 per tonne, representing a significant rise of RM35 from 2022, underscoring its proactive approach to addressing environmental challenges.
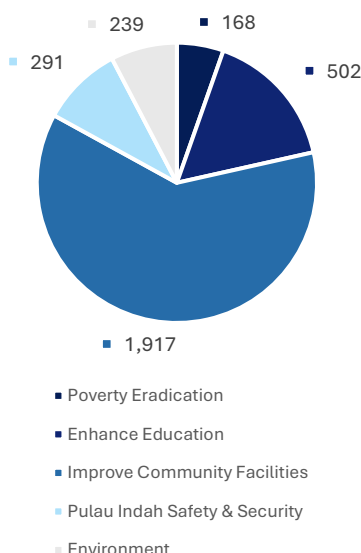
Climate Change and Pollution: The Westports' 2050 Net-Zero Carbon Emissions target, launched in April 2022, aligns with the TCFD Framework and Malaysia's National Energy Transition Roadmap (NETR). Plans are underway to achieve zero Scope 1 emissions by transitioning to electric-powered trucks, cranes, and boats, with equipment upgrades expected within three years. However, achieving zero Scope 2 emissions by 2050 is contingent on the national grid attaining net-zero status. This dependency was underscored during a 2022 proof-of-concept trial of autonomous electric terminal trucks, which demonstrated limited CO2 reduction due to the current energy mix of the grid. Despite these challenges, Westports procured non-autonomous electric terminal trucks in late 2023 for further operational evaluation.

Conservation: In addition to technological initiatives, Westports has continued its mangrove planting program, adding 398 mangroves in 2023, a 4.31% increase from the previous year. Since 2015, the company has planted 9,636 mangroves across six species, contributing to biodiversity conservation and carbon sequestration.

Effluents: Westports conducts monthly laboratory analyses in compliance with the Ministry of Health Malaysia to ensure effective water quality management. In 2023, the company's effluents remained within the limits set by the Department of Environment Malaysia. Plans to construct two small-scale sewage treatment plants (SSTPs) at CT10 and CT14, intended to support maintenance workshops and the administration building, have been in discussion since 2021 but have yet to progress significantly.

Waste reductions: To manage scheduled waste, Westports purchased a hydraulic recycling machine to repurpose used hydraulic oil, reducing the volume of waste discarded. Additionally for paper waste management, the company began tracking paper consumption in 2022, setting a target to reduce usage by 20% in 2023 and introducing a zero-paper-use policy by 2024. By 2023, efforts to reduce paper consumption included the introduction of the Electronic Container Damage Report (E-CDR) system, digitization of manual forms, and automation of gate passes and temporary passes.

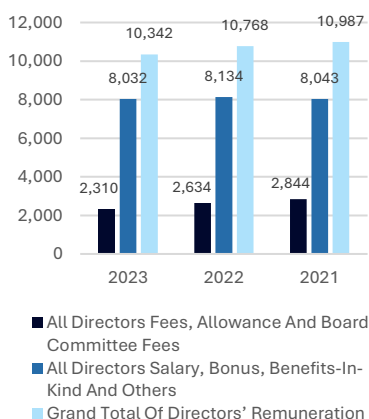**Exhibit 35: Total Volunteer Hours in Community Investment Areas**

- 168
- 502
- 239
- 291
- 1,917

- Poverty Eradication
- Enhance Education
- Improve Community Facilities
- Pulau Indah Safety & Security
- Environment

Source: Company Data

Exhibit 36: Years of Service on the Board

<3 years	>3 and <6 years	>6 and <9 years	>9 years
6 directors	0 directors	2 directors	2 directors

Source: Company Data

Exhibit 37: Directors' Remuneration RM'000

- All Directors Fees, Allowance And Board Committee Fees
- All Directors Salary, Bonus, Benefits-In-Kind And Others
- Grand Total Of Directors' Remuneration

Source: Company Data

Exhibit 38: Directors' *Remuneration as a Percentage of Profit Before Tax (%)*

Financial Year	All Directors Fees, Allowance and Board Committee Fees	All Directors Salary, Bonus, Benefits-In-Kind and Others	Grand Total of Directors' Remuneration
2023	0.20%	0.80%	1.00%
2022	0.30%	0.90%	1.10%
2021	0.30%	0.80%	1.10%

Source: Company Data

Social

Westports prioritizes the social dimension of ESG, which significantly contributes to its high ESG ratings in S&P Global ESG Scores, LSEG ESG Scores, and Refinitiv. In 2023, Westports invested RM1.6 million in CSR initiatives and RM727,401 through the Westports Foundation, though this shows a continuous decline since 2021, despite this, Westports continues to increase spending on local procurement, playing a significant part in contributing to local businesses (**Exhibit 33**). Additionally, Westports ensures employees' rights to association and collective bargaining. The company's data privacy management is certified under ISMS, ISO 27001.

Diversity, Equal Opportunities, and Non-Discrimination: Westports maintains a zero-tolerance policy toward discrimination, bullying, and harassment, supported by a dedicated whistleblowing channel to address any grievances. In 2021, women made up 2.4% of Westports' workforce, which increased to 2.91% in 2022 (**Exhibit 34**). By 2023, women now represent 4.98% of the workforce, with a target set to raise this proportion to 7%. Therefore, Westports remains committed to fostering a culture of Diversity, Equal Opportunities, and Non-Discrimination, ensuring an inclusive environment for all employees.

Local Hiring and Community Engagement: In 2023, Westports spent a total of 3,117 hours dedicated to 5 different community investment areas (**Exhibit 35**). Westports employs many local residents, including members of the Penghulu community. Since 2011, the Penghulu Programme has supported and guided local Penghulus working in Westports and Pulau Indah. The company frequently engages with the Pulau Indah community to discuss the impact of its operations. It also runs various educational initiatives in collaboration with local schools.

Career Development: In 2023, Westports sponsored employees' professional certifications, including the Green Book Certificate by the Department of Occupational Health and Safety Malaysia. The company aims to provide 100% of its executives with digital training skills by 2024. As of December 2022, 75% of executives had been trained, and Westports is confident in reaching its goal soon.

Employee Satisfaction and Benefits: Employee satisfaction remains a key focus for Westports, which narrowly missed its 2023 target of 80%, achieving a still commendable satisfaction rate of 78.5%. Health and safety are considered critical priorities, and since 2009, Westports has operated Klinik Westports to provide healthcare services for employees. In April 2023, it expanded this initiative by opening a new clinic near Kesas Highway to serve both staff and the public. Furthermore, the Westports Medical Team organizes regular health talks to promote employee well-being and address prevalent health concerns.

Governance

Westports follows the policies and regulations set by the Malaysian Government as stated in their Code of Conduct.

Board of Directors: Westports' Board of Directors consists of 10 members and 2 alternative directors, 6 of which are independent to provide an unbiased perspective in decision making. The other 6 members are non-independent directors, where 4 of these directors are connected to Hutchison Ports, through South Port Investment Holdings Limited, which is one of the few major shareholders of the Company (**Appendix 9.4**). Two of the other non-independent directors have familial connections with the late Executive Chairman, Tan Sri Datuk G. Gnanalingam. 40% of members has served over six years and 80% are aged 51 and above, this exemplifies experienced leadership and extensive company expertise. In 2023, the number of female representations on the Board has increased to 50%, surpassing their target of 30% (**Appendix 9.2).**

The Management Team: Westports' Management Team consists of 9 people, which is an increase from the previous year (7 in 2022 to 9 in 2023), with the introduction of the Deputy Chief Executive Director and the Head of Human Resources. All the 7 members from 2022 has retained their positions in 2023. Each member is an experienced of professional from relevant backgrounds in logistics, operations, engineering, finance, human resource and digital transformation. None of the members of on Management Team has other directorships in other public listed companies and listed issuers. None of the members has any known conflicts of interest or has any familial relationships with any directors or major stakeholders of the company (**Appendix 9.3**).

While the team is highly skilled, there is room for improvement in terms of the gender ratio in the Management Team to raise the score of the Governance component.

Executive Compensation: Remuneration is determined by the Nomination, Remuneration and Corporate Governance Committee ("NRCGC"). Executive Directors compensated through a base salary, determined according to scope of duty and responsibilities, experience, corporate and individual performance (**Exhibit 37**). Since 2021, directors' remuneration has been a small part of Westports' overall profits before tax, accounting for less than 1.2% (**Exhibit 38**).
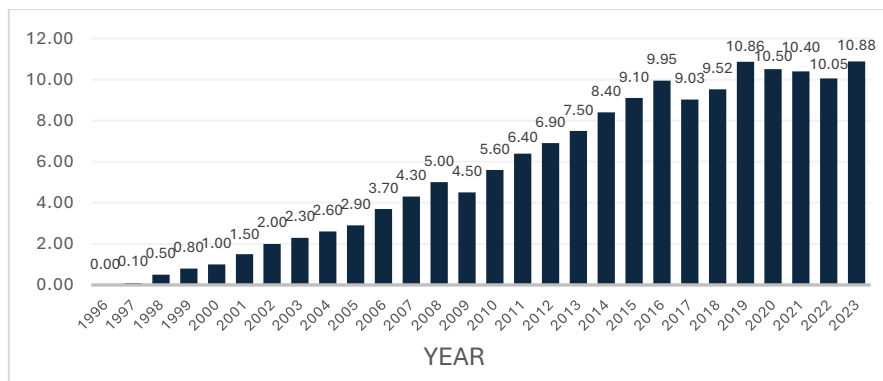
APPENDIX MAP

1. Container Throughput
2. Peer Comparison
3. Share Price Prediction using Long Short-Term Memory
4. Valuation
5. Financial Analysis

6. Ratio Analysis
7. Scenario Analysis
8. Currency Risk
9. Environmental, Social and Governance
10. SWOT Analysis
11. References

Appendix 1: *Container Throughput*

Source: Company Data

Supplement: The Transshipment-to-Gateway Mix Ratio shows that gateway volume is starting to close the gap with transhipment volume, which is advantageous for Westports since gateway operations yield higher margins than transhipment.
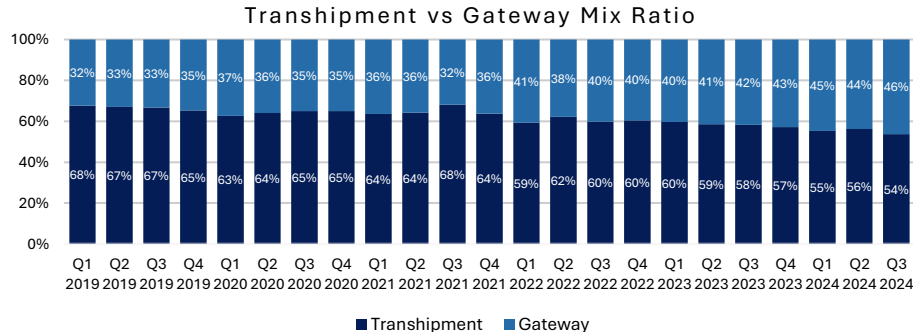
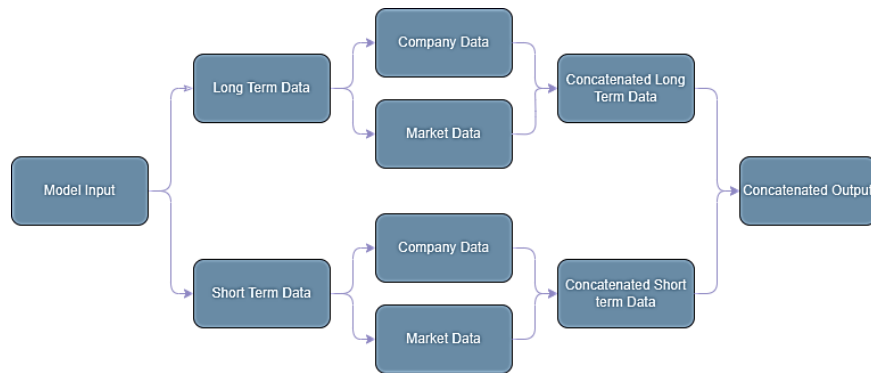Source: Company Data

Appendix 2: *Peer Comparison*

Characteristics	Westport	Northport	Port of Penang	Pelabuhan Tanjung Pelepas	Port of Singapore
Berths	32	25	17	14	55
Draft Depth (metres)	17.5	15.0	12.0	18.0	18.0
Quay Length (km)	8.8	5.2	3.3	5.0	>15.5
Container Handling Capacity (million TEUs)	13.7	5.6	2.2	12.5	43.9
Record High Throughput (million TEUs)	10.9	3.3	1.5	12.0	39.0
Reefer Points	4,132	1,052	688	4,703	13,000
Quay Cranes	66	30	12	58	>190
Rubber-Tyred Gantry (RTG) Cranes	218	84	33	186	-
Terminal Tractors	607	174	103	595	-
Stacker	27	11	3	4	-
Ranking In 2023 (by Lloyd's List)	11	11	-	15	2

Source: Team Consensus

Structure of the LSTM model for Share Price of Westports

Structure of the LSTM model for Index Price of KLCI
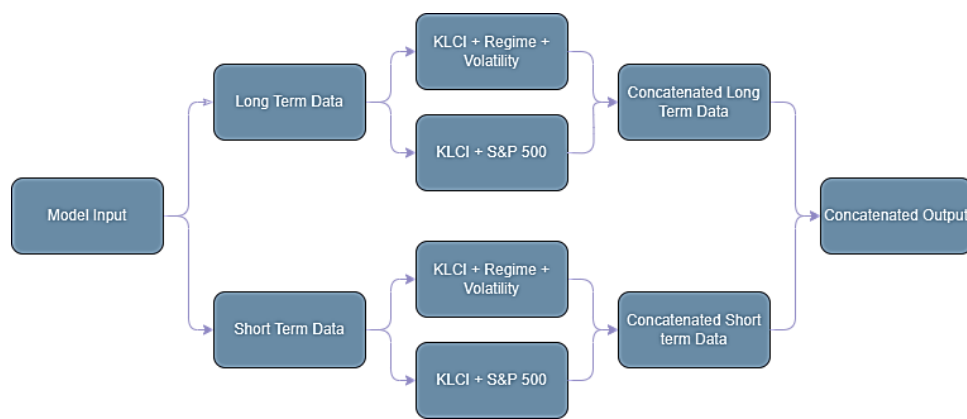
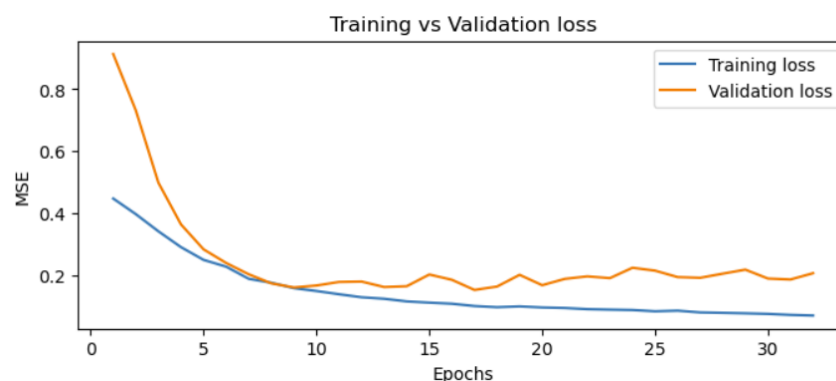*Supplement: Westports LSTM Model Explanation*
Our LSTM Model, utilizing market data such as KLCI index prices and **company-specific data** like current assets and net income, achieved a Mean Squared Error (MSE) of 0.1524. The model predicts a short-term downward trend for WPRTS, following a recent price spike and subsequent rebound, with a potential resistance level identified.

While the **intrinsic value of RM5.17** exceeds current share prices, the stock is expected to decline over the next 4 – 8 months due to market dynamics and a bearish outlook for KLCI in 2025. In the long term between 1 to 3 years, the price is anticipated to rise as the company stabilizes following its ongoing expansion, projected for completion between 2026 and 2028. This expansion phase introduces higher debt and risk, deterring risk-averse investors but attracting risk-seeking ones who likely contributed to the recent spike.

The LSTM has limitations, **relying solely on historical data** without accounting for future events or external shocks, such as the expansion of Westports, leading to potential inaccuracies, particularly in the prediction for late 2025. Despite these limitations, the broader trend is expected to follow a fall by consolidation before moving to an upwards trend. A similar trend LSTM model structure has been used to predict trends for the KLCI index.

Supplement: KLCI LSTM Model Explanation:
The KLCI LSTM Model is **a simplified version of the Westports LSTM Model**. This is because KLCI exhibits significantly lower volatility and variance, maintaining a much more stable trend compared to Westports. As a result, it is relatively easier to predict, leading to a lower Mean Squared Error (MSE) of 0.0294. For further details, refer to the section below on the Westport LSTM Model.

Appendix 4: Valuation

Appendix 4.1: Dividend Stream for Dividend Discount Model

MYR (in million)	Net income	Dividend Paid	Payout ratio
2015 Y	504.9	391.1	0.77
2016 Y	637.1	446	0.7
2017 Y	651.4	445.8	0.68
2018 Y	533.6	455.2	0.85
2019 Y	590.9	445.7	0.75
2020 Y	654.6	385.7	0.59
2021 Y	808.4	510.5	0.63
2022 Y	699.5	552.1	0.79
2023 Y	779.4	533.7	0.68
2024 Y EST	854.16	615	0.72
2025 Y EST	918.43	661.27	0.72
2026 Y EST	987.2	710.78	0.72
2027 Y EST	1060.79	763.77	0.72
2028 Y EST	1139.52	820.45	0.72
2029 Y EST	1223.77	881.11	0.72

Component	Value
R1	6.46%
R2	4.40%
Growth Rate	0.69%

Source: Team Consensus

Appendix 4.2: Explicit form of the DDM

$$Price\ of\ Dividend\ Stream\ 1 = \sum_{i=1}^{n=9} \frac{D_i}{(1+r_1)^i} + \frac{D_n \times (1+g)}{(r_1-g) \times (1+r_1)^n}$$

$$Price\ of\ Dividend\ Stream\ 2 = \sum_{9}^{11} p \times \frac{D_n}{(1+r_1)^t} + (1-p) \times \frac{D_n}{(1+r_2)^t}\ where\ p\ is\ the\ percentage\ of\ DRIP\ subscription$$

$$Price\ of\ Dividend\ Stream\ 3 = \sum_{11}^{14} \frac{D_i}{(1+r_1)^i} + \frac{D_n \times (1+g)}{(r_1-g) \times (1+r_1)^n}$$

The share price would be,

$$Price = \frac{Price\ of\ Dividend\ Stream\ 1}{(1.0305)^9} + \frac{Price\ of\ Dividend\ Stream\ 2}{(1.0305)^{11}} + \frac{Price\ of\ Dividend\ Stream\ 3}{(1.0305)^{14}}$$

Where 1.0305 is the latest interest rate of Malaysia

Source: Team Consensus

Appendix 4.3: Relative Valuation

(5 year average)	Market Cap (MYR)	P/E (5YA)	EV/EBITDA (5YA)	EV/Rev (5YA)
Target Company				
Westports Holdings Berhad	15,515,500,000	17.50x	11.05x	6.71x
Listed Port Operators				
China Merchants Port Holdings	31,872,277,876	7.55x	13.39x	7.47x
COSCO SHIPPING Ports Ltd	9,801,630,348	6.52x	11.99x	3.96x
Adani Ports & Special Economic Zone Limited	134,882,181,587	21.53x	14.80x	8.92x
Hutchison Port Holdings Trust	6,530,826,223	19.67x	7.03x	4.15x
International Container Terminal Services, Inc.	61,884,381,447	21.32x	10.35x	5.92x
Port of Tauranga Limited	11,135,181,032	34.86x	20.83x	10.58x
Quartile 1		10.58x	10.76x	4.59x
Median		20.50x	12.69x	6.70x
Quartile 3		21.48x	14.45x	8.56x
Discount to median		-14.61%	-12.91%	0.22%
Share Price				
Quartile 1		2.63	4.18	2.83
Median		5.09	4.96	4.20
Quartile 3		5.34	5.67	5.41
Weightings		50.00%	50.00%	0.00%
Implied Share Price				
Lower bound				3.40
Target Price				5.03
Upper bound				5.50

EPS (TTM)	0.25
EDITDA (TTM)	1,377,367,000
Revenue (TTM)	2,222,768,000
Net Debt	568,665,000
Shares Outstanding	3,410,000,000
Current Stock price	4.51
Upside	11.44%

Source: Team Consensus

Appendix 5: Financial Analysis

Appendix 5.1: Income Statement

MYR (in million)	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Total Revenue	1,681	2,035	2,089	1,615	1,783	1,975	2,022	2,069	2,152	2,283	2,420	2,662	2,849	3,048	3,261
Cost of Goods Sold	799	1,044	1,163	660	671	812	791	879	916	905	954	1,064	1,123	1,184	1,248
Gross Profit	882	991	926	955	1,112	1,163	1,231	1,190	1,236	1,379	1,466	1,598	1,726	1,864	2,013
Operating Expenses	174	211	207	180	222	231	216	234	232	256	258	314	350	390	434
Operating Income	6	33	27	10	13	26	86	8	31	25	20	30	30	30	30
Operating Income (EBIT)	713	813	746	784	903	958	1,100	964	1,035	1,148	1,228	1,314	1,406	1,504	1,610
Non-Operating Income (Loses)	57	65	68	75	75	65	63	6	31	68	68	68	68	68	68
Abnormal Loses	6	(7)	2	8	54	27	(2)	14	(2)	12	12	12	12	12	12
Pretax Income	650	755	677	701	774	865	1,040	944	1,006	1,068	1,148	1,234	1,326	1,424	1,530
Tax Expense	145	118	25	168	183	211	231	244	227	214	230	247	265	285	306
Net Income	505	637	651	534	591	655	808	700	779	854	918	987	1,061	1,140	1,224

Source: Company Data and Team Consensus

Appendix 5.2: Balance Sheet

MYR (in million)	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Cash & Cash Equivalent	499	421	560	444	696	779	706	552	578	1,100	1,791	2,006	2,247	2,516	2,818
Accounts Receivable	216	271	248	286	274	244	243	188	249	275	267	259	251	243	236
Inventories	-	-	11	6	6	5	5	5	5	5	5	5	5	5	5
Other Current Assets	24	68	109	145	84	35	53	93	52	280	95	95	95	95	95
Total Current Assets	740	760	928	881	1,059	1,063	1,008	838	884	1,660	2,158	2,365	2,598	2,860	3,155
Net PPE	1,369	3,590	4,218	4,207	4,073	4,149	4,293	4,383	4,284	4,669	5,089	5,548	6,047	6,591	7,184
Other Non-Current Assets	1,921	-	-	-	-	-	115	161	171	171	171	171	171	171	171
Total Non-Current Assets	3,290	3,590	4,218	4,207	4,073	4,149	4,408	4,543	4,455	4,840	5,261	5,719	6,218	6,762	7,355
Total Assets	4,030	4,349	5,146	5,088	5,132	5,212	5,415	5,382	5,339	6,501	7,419	8,084	8,816	9,622	10,510
Payable and Accruals	188	279	367	184	122	180	194	195	159	163	174	181	195	207	220
Short-term Debt	-	32	33	143	176	174	199	149	152	164	177	191	206	223	241
Other Current Liabilities	126	165	250	301	350	319	366	276	305	450	560	411	420	430	440
Total Current Liabilities	314	476	650	627	649	673	759	620	616	777	911	783	822	860	900
Long-Term Debt	1,150	1,487	1,804	1,661	1,546	1,192	1,021	892	766	1,743	2,141	2,945	3,181	3,435	3,710
Other Non-Current Liabilities	668	317	355	384	377	568	509	496	437	456	456	456	456	456	456
Total Non-Current Liabilities	1,818	1,804	2,159	2,045	1,923	1,760	1,530	1,388	1,203	2,199	2,597	3,401	3,637	3,891	4,166
Total Liabilities	2,132	2,280	2,809	2,672	2,572	2,433	2,289	2,007	1,819	2,976	3,508	4,184	4,458	4,751	5,066
Share Capital & APIC	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038	2,238	2,238	2,238
Retained Earnings	888	1,079	1,347	1,425	1,570	1,839	2,137	2,284	2,530	2,747	2,920	2,909	2,167	2,681	3,254
Other Equity	(28)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)
Total Equity	1,898	2,069	2,337	2,415	2,560	2,829	3,127	3,274	3,520	3,737	3,911	3,900	4,357	4,871	5,444
Total Liability & Equity	4,030	4,349	5,146	5,087	5,132	5,262	5,415	5,282	5,339	6,713	7,419	8,084	8,816	9,622	10,510
Property, Plant & Equipment	2,176	5,042	5,811	5,991	6,071	6,366	6,820	6,929	7,120	7,476	7,850	8,242	8,654	9,087	9,541
Accumulated Depreciation	807	1,453	1,593	1,784	1,998	2,217	2,527	2,547	2,836	3,120	3,526	3,984	4,502	5,087	5,748
Net PPE	1,369	3,590	4,218	4,207	4,073	4,149	4,293	4,383	4,284	4,356	4,324	4,258	4,153	4,000	3,793

Source: Company Data and Team Consensus

Appendix 5.3: Cashflow Statement

MYR (in million)	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Net income	505	637	651	534	591	655	808	700	779	847	918	987	1,061	1,140	1,224
Depreciation & Amortisation	153	165	185	213	256	260	259	265	259	250	268	286	307	328	351
Non-Cash Items	79	16	(0)	92	62	69	33	(105)	44	167	176	184	194	203	214
Change in Non-Cash Working Capital	(8)	78	261	(239)	68	54	7	47	(79)	57	25	25	25	25	25
Net Cash From Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash from Operating Activities	730	896	1,097	599	976	1,037	1,107	906	1,003	1,322	1,387	1,483	1,586	1,696	1,813
Disposal in Fixed & Intangibles	2	1	1	1	-	0	2	0	3	9	2	2	2	2	2
Acquisition of Fixed & Intangibles	(251)	(491)	(812)	(210)	(81)	(323)	(371)	(246)	(227)	(550)	(605)	(666)	(732)	(805)	(886)
Net Cash From Acquisition and Diversture	-	-	-	-	-	-	(115)	-	-	-	-	-	-	-	-
Other Investing Activities	(89)	116	-	-	-	(50)	6	56	2	4	5	5	5	5	5
Net Cash from Discountinued Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash from Investing Activities	(338)	(374)	(811)	(209)	(81)	(373)	(478)	(190)	(222)	(537)	(598)	(659)	(725)	(798)	(879)
Dividends Paid	(391)	(446)	(446)	(455)	(446)	(386)	(511)	(552)	(534)	(615)	(397)	(341)	(764)	(820)	(881)
Cash From (Repayment) Debt	(49)	(51)	299	(51)	(198)	(195)	(242)	(268)	(222)	81	540	240	260	(540)	240
Cash (Repurchase) of Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Financing Activities	(1)	(1)	(4)	(1)	(1)	(1)	(1)	(1)	(1)	(9)	(2)	(2)	(2)	(2)	(2)
Net Cash From Discontinued Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash from Financing Activities	(441)	(498)	(150)	(508)	(645)	(582)	(753)	(820)	(757)	(543)	141	(103)	(506)	(1,362)	(643)
Net Changes in Cash	(50)	23	136	(118)	250	82	(124)	(105)	25	242	930	721	355	(465)	291

Source: Company Data and Team Consensus

MYR (in million)	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Growth Ratios (%)															
Revenue Growth		21%	3%	-23%	10%	11%	2%	2%	4%	6%	6%	10%	7%	7%	7%
EBITDA Growth		13%	-5%	7%	16%	5%	12%	-10%	5%	2%	7%	7%	7%	7%	7%
EBIT Growth		16%	-10%	4%	10%	12%	20%	-9%	7%	6%	8%	7%	7%	7%	7%
EBT growth		16%	-10%	4%	10%	12%	20%	-9%	7%	6%	8%	7%	7%	7%	7%
Net income growth		26%	2%	-18%	11%	11%	24%	-13%	11%	10%	8%	7%	7%	7%	7%
Profitability Ratios															
Gross Margin	52%	49%	44%	59%	62%	59%	61%	58%	57%	60%	61%	60%	61%	61%	62%
EBITDA margin	52%	48%	45%	62%	65%	62%	67%	59%	60%	58%	59%	57%	57%	57%	58%
EBIT margin	42%	40%	36%	49%	51%	49%	54%	47%	48%	50%	51%	49%	49%	49%	49%
Net Profit margin	30%	31%	31%	33%	33%	33%	40%	34%	36%	37%	38%	37%	37%	37%	38%
Payout Ratio	75%	75%	75%	75%	75%	60%	75%	70%	74%	75%	50%	50%	75%	75%	75%
DuPont Analysis															
Net Profit Margin	30%	31%	31%	33%	33%	33%	40%	34%	36%	37%	38%	37%	37%	37%	38%
Revenue/Asset	42%	47%	41%	32%	35%	38%	37%	38%	40%	35%	33%	33%	32%	32%	31%
Asset/Equity	212%	210%	220%	211%	200%	184%	173%	164%	152%	174%	190%	207%	202%	198%	193%
ROE	27%	31%	28%	22%	23%	23%	26%	21%	22%	23%	23%	25%	24%	23%	22%
ROA	13%	15%	13%	10%	12%	13%	15%	13%	15%	13%	12%	12%	12%	12%	12%
Leverage & Expense Analysis															
Asset/Liability	1.89	1.91	1.83	1.9	2	2.14	2.37	2.68	2.94	2.18	2.11	1.93	1.98	2.03	2.07
Capex/Revenue	0.15	0.24	0.39	0.13	0.05	0.16	0.18	0.12	0.11	0.36	0.17	0.16	0.15	0.38	0.35
Current Ratio	0.35	0.33	0.33	0.33	0.41	0.44	0.44	0.42	0.49	0.56	0.62	0.57	0.58	0.6	0.62

Source: Company Data and Team Consensus

Appendix 7.1: Revenue Projections

The revenue projections are based on several key assumptions:
1. Tariff Hike Impact:
    o The estimated increase in revenue per container after the tariff hike is projected at approximately 7.5% based on historical performance. Transshipment revenue per container is assumed to be 61% of gateway revenue per container.
2. Marine and Rental Revenue Forecasting:
    o Marine and rental revenues are forecasted using the exponential smoothing method, leveraging historical trends and seasonality.
3. 2024 Data and Long-Term Forecasts:
    o For 2024, Q4 data will be estimated using Q1, Q2, and Q3 data through exponential smoothing. The Q4 estimate will be combined with data from the first three quarters to derive the full-year figure, which will serve as the baseline for forecasting for the next five years.
4. Revenue Per Container Calculation:
    o Transshipment and gateway revenue per container prior to the tariff hike are assumed to equal the average of the preceding three years (2022, 2023, 2024).
    o Post-tariff hike, revenue per container is adjusted by multiplying this three-year average by 1.075.
5. Conventional Revenue:
    o Conventional revenue per metric ton (MT) is assumed to remain constant over the next five years, based on the average of the preceding three years (2022, 2023, 2024), as only container tariffs are expected to be revised.
6. Average Revenue per Container for 2024:
    o For 2024, the average revenue per container is projected at RM177.
    o Transshipment and gateway revenues are determined using the following equations:
       1. $x = 0.61y$, where x is the transshipment revenue per container and y is the gateway revenue per container
       2. $\frac{5.92}{10.83}x + \frac{4.91}{10.83}y = 117$, 5.92 million TEUs and 4.91 million TEUs represent transshipment and gateway volumes, respectively.

Methodology for Revenue Projection:
To project Westports' operational revenue over the next five years, a structured methodology employing time series models and statistical techniques was used. The selection of models was based on the lowest Akaike Information Criterion (AIC) score, ensuring the optimal fit for each forecast.
1. Forecasting Q4 2024
    o Q4 2024 data was forecasted using the exponential smoothing method, leveraging trends and seasonality observed in Q1, Q2, and Q3 of 2024.
    o This Q4 estimate was combined with data from the first three quarters to derive full-year 2024 data, which serves as the foundation for forecasting the subsequent five years.
2. Marine and Rental Revenue Forecast
    o Marine and rental revenues were projected using the exponential smoothing method, capturing seasonality and recent trends.
3. Gateway Volume Forecast
    o Gateway volume was forecasted using three methods:
       ▪ ARIMA(2,1,1): A time series model designed for non-stationary data.
       ▪ Linear Regression Model: Incorporating FDI inflows, GDP growth rates, and container handling capacity as explanatory variables.
       ▪ Exponential Smoothing: To account for observed patterns and seasonality.

- o Final gateway volume was determined by assigning weights to the outputs of the three methods based on their performance metrics.
4. Transshipment Volume Forecast
   - o Transshipment volume was estimated using two methods:
     - ▪ ARIMA(1,1,0): A time series model suitable for univariate data with trends.
     - ▪ Exponential Smoothing: To include seasonal effects.
   - o Weighted averages of the outputs were used to derive the final transshipment volume forecast.
5. Conventional Volume Forecast
   - o Conventional volume was forecasted using two methods:
     - ▪ ARIMA(0,1,1): A parsimonious time series model.
     - ▪ Exponential Smoothing: To identify trends and seasonal variations.
   - o Weighted averages were applied to generate the final forecast.
6. Revenue Per Unit Approximation
   - o Transshipment and Gateway Revenue per Container (Pre-Tariff):
     Calculated as the average revenue per container for the years 2022, 2023, and 2024.
   - o Transshipment and Gateway Revenue per Container (Post-Tariff):
     Estimated by taking the pre-tariff average and multiplying by 1.075 to account for the 7.5% tariff hike anticipated from September 1, 2025.
   - o Conventional Revenue per Metric Ton (MT):
     Assumed to remain consistent, calculated as the average revenue for 2022, 2023, and 2024.
7. Revenue Projection
   - o Container Revenue: Forecasted volumes for transshipment and gateway containers were multiplied by their respective revenue per unit.
   - o Conventional Revenue: Forecasted volumes were multiplied by the conventional revenue per metric ton.
8. Total Operational Revenue
   - o Summed contributions from container revenue, conventional revenue, marine revenue, and rental revenue to estimate total operational revenue for the next five years.

Year	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Transhipment Containers (million TEUs)	6.60	7.39	6.22	6.23	7.23	6.75	6.75	6.08	6.35	5.92	6.38	6.43	6.48	6.53	6.58
Gateway Containers (million TEUs)	2.50	2.56	2.81	3.30	3.63	3.75	3.65	3.97	4.53	4.91	4.88	4.97	5.24	5.69	6.06
Total Container Throughput (million TEUs)	9.10	9.95	9.03	9.52	10.86	10.50	10.40	10.05	10.88	10.83	11.26	11.41	11.72	12.22	12.64
Container handling capacity (million TEUs)	11.00	12.00	13.00	14.00	13.90	13.60	13.60	13.70	13.70	13.70	13.70	13.70	13.70	15.20	16.70
Conventional (million metric tons (MT))	10.20	11.80	10.90	10.70	9.90	10.90	11.30	12.10	11.60	12.59	12.06	12.21	12.35	12.50	12.64
Average revenue per container (MYR/TEU)	144.62	154.43	160.78	141.75	141.52	152.80	166.83	176.48	165.96	177.00	182.88	187.53	188.58	190.31	191.64
Container Terminal Capacity Utilisation	83.00%	82.88%	69.42%	68.00%	78.00%	77.00%	77.00%	74.00%	79.00%	79.05%	82.19%	83.27%	85.58%	80.38%	75.69%
Gateway Ratio	27.47%	25.70%	31.08%	34.63%	33.43%	35.73%	35.10%	39.47%	41.64%	45.34%	43.30%	43.61%	44.71%	46.54%	47.94%
Transhipment revenue per container	122.75	132.38	133.81	115.76	116.31	124.06	135.90	140.52	130.68	136.79	142.80	146.20	146.20	146.20	146.20
Gateway revenue per container	202.34	218.20	220.57	190.81	191.71	204.49	224.02	231.62	215.41	225.48	235.38	240.98	240.98	240.98	240.98
Conventional revenue per metric tons (MT)	14.12	12.46	13.34	13.35	12.33	10.62	11.83	12.81	11.95	12.76	12.51	12.51	12.51	12.51	12.51
Container Revenue (millions)	1,316.00	1,536.00	1,451.00	1,350.00	1,537.00	1,605.00	1,735.00	1,774.00	1,805.00	1,920.48	2,059.33	2,139.28	2,211.00	2,325.23	2,422.47
Convetional Revenue (millions)	144.00	147.00	145.44	142.85	122.10	115.77	133.65	154.97	138.64	160.66	150.90	152.72	154.53	156.35	158.17
Marine Revenue (millions)	82.00	84.00	78.12	77.25	83.23	75.51	65.38	76.31	91.01	85.00	85.00	84.39	85.22	86.04	86.87
Rental Revenue (millions)	35.00	37.25	41.55	44.87	40.81	39.41	43.32	49.75	53.76	64.00	57.58	59.69	61.80	63.91	66.03
Operational Revenue (millions)	**1,578.00**	**1,804.32**	**1,716.27**	**1,615.00**	**1,783.00**	**1,835.85**	**1,977.73**	**2,055.37**	**2,088.70**	**2,230.14**	**2,352.80**	**2,436.08**	**2,512.56**	**2,631.54**	**2,733.53**
Operataion Revenue Growth Rate	5.00%	14.34%	-4.88%	-5.90%	10.40%	2.96%	7.73%	3.93%	1.62%	6.77%	5.50%	3.54%	3.14%	4.74%	3.88%

Source: Team Consensus

Supplment: Container Growth

The linear regression model for gateway volume is given by:

Gateway volume = $9.4910 - 6(\text{FDI}) - 7.711(\text{GDP}) + 1.53410 - 1(\text{Capacity})$

Where, FDI = foreign direct Investment inflows, GDP = GDP Malaysia GDP growth rate, Capacity = container handling capacity (TEUs). The statistical summary for this model: $R^2=0.9944$ and p-value=1.45210-11 which is an appropriate model.
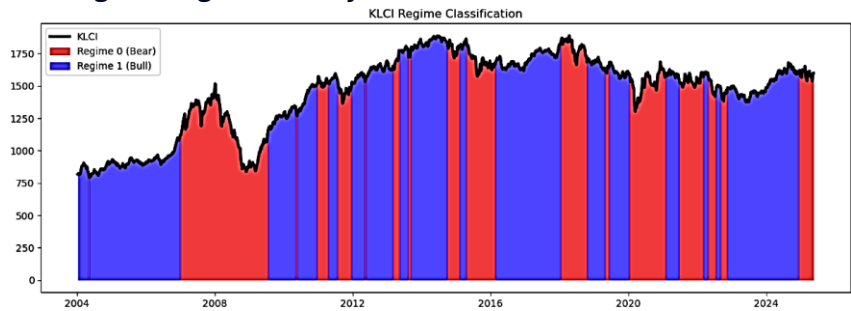
Source: Team Consensus

Supplement: Financial Regime

Financial regimes represent distinct phases in market cycles, such as Bear, Bull, and Static periods. Shift in these regimes would typically signal changes in consumer behaviour and economic conditions, including shifts in market volatility, asset returns, and risk premiums. The theory of Financial Regime is based on the idea that the financial markets operate under varying conditions influenced by the broader economic landscape. These regimes are dynamic, evolving in response to changes in key macroeconomic factors such as interest rates which capture the economic performance and technical factors such as exponential moving average which gauges the market sentiment. There are 2 major types of financial regimes that are associated with the economic cycles which are the expansionary regimes, characterized by stable markets with higher revenues, increased investments, and lower volatility during periods of growth, and contractionary regimes, marked by volatile conditions, reduced consumer spending, and heightened risk aversion during economic downturns.
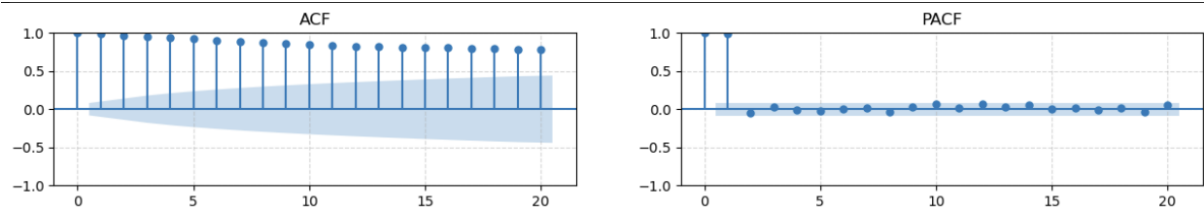
Source: Team Consensus

Appendix 7.2: Markov Switching Autoregressive Projection

Using LSTM, a prediction is made, which is then fitted into a Markov Switching Autoregressive model to detect the market regime.

Supplement: KLCI MSAR Model Details:

Based on the ACF and PACF plots, we selected an AR order of 1 in the MSAR model. It is important to note that an AR order of 1 does not imply an AR (1) process; it simply indicates that the current index is determined using one past index. The number of regimes was set to 2 based on performance, representing a Bull-Bear dynamic. This analysis highlights a transition to a Bear regime in 2025. Key parameters of the model are summarized below:

Parameter of MSAR			
Regime	**Intercept (x1)**	**Variance (σ^2)**	**AR(1)**
Bull Regime	0.0007	0.0103	0.9927
Bear Regime	0.0008	0.0022	0.9958

The regime transition probabilities indicate a high likelihood of staying in the same regime, with a probability of 0.9519 (p < 0.001) for remaining in the Bull regime and 0.0293 (p = 0.003) for transitioning from Bear to Bull. The model's performance metrics include a log-likelihood of 1385.950, AIC of -2755.901, BIC of -2715.934, and HQIC of -2740.776, highlighting its robustness. The regime-specific variances reveal higher volatility in the Bear regime (σ^2 = 0.0022) compared to the Bull regime (σ^2 = 0.0103). The high persistence of regimes, with probabilities of remaining in the same regime exceeding 95%, underscores the model's reliability. According to the analysis, the market would transition into a Bear regime in the year of 2025.

Supplement: MSAR Model Description:

The Markov Switching Autoregressive (MSAR) model is a statistical framework that extends traditional autoregressive models by incorporating regime-switching dynamics, governed by an unobservable Markov process. This model assumes that the underlying time series can transition between multiple regimes, each characterized by its own set of parameters, such as mean, variance, and autoregressive coefficients. By allowing for these shifts, MSAR effectively captures changes in market behaviour, such as transitions between bullish and bearish market conditions, volatility clustering, or structural breaks. The switching mechanism, controlled by transition probabilities, enables the model to identify and adapt to changes in the data-generating process, making it a powerful tool for analysing non-linear and non-stationary financial time series. This adaptability makes MSAR particularly useful in applications like financial forecasting, risk management, and understanding economic cycles.

Supplement: LSTM Model Description

Long Short-Term Memory (LSTM) is a specialized type of recurrent neural network (RNN) designed to effectively handle sequential and time-series data by addressing the vanishing gradient problem common in standard RNNs. LSTMs achieve this through a unique architecture that includes memory cells and gating mechanisms: the forget gate, input gate, and output gate. These gates control the flow of information, allowing the network to retain relevant long-term dependencies while discarding irrelevant data. This capability makes LSTMs well-suited for capturing patterns in time-series data with long-range temporal dependencies, such as stock prices. However, unlike traditional time-series models, LSTMs can handle non-linear patterns, making them a versatile tool for complex forecasting and sequence prediction tasks.

Supplement: Mixed Model Approach

While MSAR and LSTM each offer unique strengths, implementing them independently would have inherent drawbacks. MSAR models are limited by their reliance on the same transition probability for shifts, regressing solely on past values without incorporating additional features, and they struggle to capture long-term dependencies like LSTM. Conversely, while LSTM excels at identifying long-term patterns, it is less effective at detecting abrupt regime shifts. Therefore, a combined implementation of MSAR and LSTM is required to leverage their complementary capabilities, enabling the detection of both sudden regime changes and long-term dependencies in time-series data.

Supplement: Heston Model:

Using the Method of Moments (MoM) estimation, the key parameters of the Heston model, such as volatility of volatility and the rate of mean reversion, are calibrated to historical USD/MYR exchange rate data. The Key parameters if the Heston would include The **Volatility of Volatility (v)** captures the variability in the stochastic variance process, with higher values indicating greater fluctuations in variance over time, reflecting rapid changes in market conditions. The **Rate of Mean Reversion (κ)** determines how quickly the variance returns to its long-term mean (θ), where larger values imply faster reversion and smaller values indicate more persistent volatility. The **Long-Term Variance (θ)** represents the average level of variance around which the process mean-reverts, while the **Initial Variance (v₀)** is the starting variance at the beginning of the observation period, typically estimated directly from the data. Thus, the explicit form of the Heston model can be expressed as below.

The Heston Model Explicit:

$$dS_t = rS_t dt + \sqrt{V_t} S_t dW_{1t}$$
$$dV_t = k(\theta - V_t)dt + \sigma\sqrt{V_t} dW_{2t}$$

Where:
- W_{1t} is the Brownian Process of the asset Price
- W_{2t} is the Brownian motion of the asset's price variance
- S_t is the price of a specific asset at time *t*
- $\sqrt{V_t}$ is the volatility of the asset price
- σ is the volatility of the volatility
- r is the risk-free interest rate
- θ is the long-term price variance
- k is the rate of reversion to the long-term price variance
- dt is the indefinitely small positive time increment

Using the Method of Moments (MoM) estimation, the key parameters of the Heston model, such as volatility of volatility and the rate of mean reversion, are calibrated to historical USD/MYR exchange rate data.

Source: Team Consensus

Appendix 9: Environmental, Social & Governance:

Appendix 9.1: ESG Ratings

Provider	Maximum Score	Industry Average	Westports Holdings Bhd.	Environmental (Average)	Social (Average)	Governance (Average)
Sustainalytics	0	Not Stated	8.5 (low)		Not Stated	
S&P Global	100	32	45	39	51	50
Refinitiv/ LSEG ESG Scores	100	Not Stated	72	58	80	76
FTSE4Good ESG Ratings	4 Stars	Not Stated	4 Stars		Not Stated	

Source: Sustainalytics, S&P Global, LSEG and Bursa Malaysia

Appendix 9.2: Overview of the Board Members

Name	Position	Member Since	Education	Professional Competencies	Connections/ Conflict of Interests
Datuk Ruben Emir Gnanalingam bin Abdullah	Executive Chairman and Group Managing Director	5 July 2005	• BSc (Hons) in Economics • Diploma in Port Management	• Business and Industry-Related Leadership	Eldest son of the late Executive Chairman, Tan Sri Datuk G. Gnanalingam
Ahmad Zubir bin Zahid	Independent Non-Executive Directo	1 January 2022	• MBA • BSc in Economics and Accounting	• Accountancy • Audit • Valuation • Appraisal	No
Chan Soo Chee	Senior Independent Non-Executive Directo	1 January 2018	• MBA in Finance and Marketing	• Marine Industry • Operations • Audit and Risk • Consortium Corporate Strategic Planning	No
Shanthi Kandiah	Independent Non-Executive Director	1 August 2017	• Masters in Law • LL.B (Hons)	• Niche legal and regulatory services • Financial Reporting on Corporate Governance	No
Datuk Siti Zauyah binti Md Desa	Independent Non-Executive Director	1 January 2022	• MBA in International Banking • BSc (Hons) in Quantity Surveying	• Quantity Surveyance • Secretarial • Advisor • Budgeting •	No
Sing Chi IP	Non-Independent Non-Executive Director	5 April 2013	• B.A. •	• Marine Industry •	Executive Director of Hutchison Port Holdings Management Pte. Limited, a major shareholder of Westports
Diana Tung Wan LEE	Non-Independent Non-Executive Director	1 January 2022	• B.Com •	• Accountancy • Finance	Group Chief Financial Officer of Hutchison Ports, a major shareholder of Westports

Name	Position	Appointed	Education	Professional Competencies	Other Information
Tan Sri Dato' Seri Mohd Khairul Adib bin Abd Rahman	Independent Non-Executive Director	1 September 2022	▪ PgD in Public Management ▪ Masters in Public Policy ▪ BSc	▪ Transportation ▪ Government Affairs and Public Service	No
Dato' Tengku Marina binti Tunku Annuar	Independent Non-Executive Director	1 September 2022	▪ B.A. in International Relations	▪ Public Relations ▪ Corporate Regulation	No
Shaline Gnanalingam	Non-Independent Non-Executive Director	9 June 2023	▪ MBA (Hons) ▪ Bachelor's degree in Economics	▪ Banking Acquisitions ▪ Endowment Planning ▪	Chief Investment Officer at Pembinaan Redzai Sdn Bhd, a major shareholder of the Company since 2008 Daughter of the late Executive Chairman, Tan Sri Datuk G. Gnanalingam.
John Stephen Ashworth	Alternate Director to Sing Chi IP, Non-Independent Non-Executive Director	1 July 2016	▪ B.A.	▪ Accountancy ▪ Finance ▪ Management	Hutchison Ports, through South Port Investment Holdings Limited, is a major shareholder of Westports
Andy Wing Kit TSOI	Alternate Director to Diana Tung Wan LEE, Non-Independent Non-Executive Director	1 January 2022	▪ MBA ▪ B.A.	▪ Banking ▪ Loans	Hutchison Ports, through South Port Investment Holdings Limited, is a major shareholder of Westports

Source: Company Data

Appendix 9.3: Overview of the Management Team

Name	Position	Appointed	Education	Professional Competencies
Lee Mun Tat (Eddie)	Chief Executive Officer/ Acting Chief Financial Officer	9 June 2023	▪ BBA	▪ Accountancy ▪ Commercial Affairs ▪ Business Development, ▪ Terminal Service Contracts ▪ Pricing ▪ Statistics ▪ Credit Control.
Vijaya Kumar Puspowanam	Deputy Chief Executive Officer	May 2023	▪ B.A. in International Business	Gate and Vessel Operations Terminal Planning Conventional Business and Customer Service IT
Tan Wei Chun	General Manager Information Technology	October 2019	▪ Degree in Transportation and Logistics	Operations Customer Services Gate and Logistic operations Berth, Vessel and Yard Planning
Nanthakumar A/L Murokana @ Murugan	General Manager Conventional Business	-	▪ B.A. ▪ Diploma in Port Management	▪ Container and Control Room Operations ▪ Training & Development ▪ Logistics ▪ Project Management
Rosman bin Mohd Yunus	Head of Department Container Operations and Resources	June 2022	▪ Bachelor of Mass Communication	▪ Performance Management ▪ Container Operations and Planning
Ahmad Damanhury bin Ibrahim	Head of Engineering	2007	▪ Masters of Science in Facilities Management ▪ Degree in Civil Engineering ▪ Diploma in Port Management	▪ Civil Engineering ▪ Project Development ▪ Facilities Planning ▪ Design and Construction Management ▪ Contracts Administrations ▪ Commercial and Economic Evaluations
Nadarajan A/L Krishnan	Head of Planning Department	-	▪ Bachelor of Urban Planning and Economy	▪ Berth, Vessel and Yard Planning ▪ Town Planning
Megat Amirul Zameer bin Megat AB.Rahma	Head of Finance	August 2020	▪ Bachelor's degree in accounting and finance	▪ Accountancy ▪ Finance ▪ Audit
Muhammad Imran Kunalan bin Abdullah	Head of Human Resources	April 2023	-	▪ Human Resources ▪ Digital Transformation ▪ Consultancy

Source: Company Data

Appendix 9.4:

Major Shareholders	Equities	%
Pembinaan Redzai Sdn. Bhd.	1,446,461,500	42.42%
South Port Investment Holdings Ltd.	802,962,600	23.55%
Employees Provident Fund	293,444,915	8.605%
Kumpulan Wang Persaraan	224,111,510	6.572%
Semaking Ajaib Sdn. Bhd	105,638,500	3.099%
Lembaga Tabung Haji	64,071,800	1.880%

Source: Bloomberg

Appendix 10: SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats

• **Strategic Location**
  - Located in -Port Klang, the 11th busiest port in the world, providing a strategic advantage for international shipping routes.
• **Strong Financial Performance:**
  - Consistently high profitability and positive financial results, with significant revenue from container and conventional cargo handling.
• **Comprehensive Services:**
  - Offers a wide range of port services including marine, rental, and ancillary services.
• **Received AAA rating from RAM regarding existing sukuk and sustainability linked sukuk**
	• **Earnings Growth Outlook:**
	  - The earnings growth outlook lacks momentum due to high Capex
	• **Dependence on Transhipment:**
	  - Challenges in the Asia-Europe transhipment sector due to irregular vessel calls and blank sailing.
	• **High annual CAPEX until 2053 due to 2 phases of Westports' development.**
		• **Expansion of Westport 2 provides further growth opportunities**
		• **Technological Advancements:**
		  - Opportunities to streamline financial processes and improve efficiency through automation and technology adoption.
		• **Intra-ASEAN Trade Growth:**
		  - Growth in the intra-ASEAN trade due to China plus one strategy and high FDI in Malaysia
		• **Revised tariff rate with government allows higher revenue possibilities**
			• **Global Economic Uncertainty:**
			  - Economic slowdowns and trade tensions, such as the TRUMP 2.0, central bank rates and conflicts arising
			• **Regulatory Changes:**
			  - Changes in international trade regulations and tariffs could affect the company's operations and profitability.
			• **Reshuffling of shipping alliance leading to more uncertainty**

Source: Team Consensus

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