

Growth and Changing Patterns of Maritime Trade in Sharjah, UAE: A Secondary Data Analysis of Port Cargo Statistics

Dr. S. Senthil Kumar

Assistant Professor, Department of Maritime Business
Sharjah Maritime Academy, Sharjah, United Arab Emirates



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ABSTRACT

Maritime trade is central to the movement of goods through the United Arab Emirates, yet emirate-level analysis is needed to understand how cargo patterns change across individual port systems. This study examines the growth and changing patterns of maritime trade in Sharjah through published secondary data on cargo handled at Port Khalid, Hamriyah Port and Khorfakkan Port. It proposes a descriptive analysis of general cargo volumes, imports and other consistently reported cargo indicators. The analysis will compare equivalent reporting periods, calculate percentage changes and examine differences between cargo categories and ports where disaggregated figures are available. An official Sharjah Ports, Customs and Free Zones Authority publication provides an initial basis for the study. It reports that general cargo handled across Sharjah's three main ports rose from 1,507,397 tonnes in the first half of 2024 to 2,080,090 tonnes in the first half of 2025, an increase of approximately 38%. Reported imports rose from 1,351,790 tonnes to 1,813,984 tonnes over the same periods. These figures establish growth in the indicators reported, but do not by themselves demonstrate a lasting change in cargo composition or the performance of each port.

The proposed study will therefore distinguish changes in total volume from changes in the relative shares of imports, exports and cargo types. It will use only figures with clear definitions and matching time periods, and will identify gaps where port-specific data are unavailable. Statistics for 2025–26 and 2026–27 will be incorporated only after their reporting periods are complete and comparable official publications are available. The study is expected to provide a documented account of Sharjah's maritime cargo trends and a practical basis for further research on port planning and logistics demand. Its conclusions will be limited to the indicators and periods supported by the published data, without treating projected figures as actual trade outcomes.

Keywords: Sharjah ports; Maritime trade; Cargo throughput; General cargo; Port statistics.

INTRODUCTION

Maritime ports connect shipping services with inland transport, storage, customs clearance and distribution. Changes in cargo throughput can therefore affect several parts of a regional logistics system. Sharjah's principal ports are Port Khalid, Hamriyah Port and Khorfakkan Port. Together, they form the port system examined in this study. A rise in total cargo volume may indicate greater activity within that system. It does not, however, show which cargo categories or ports account for the increase. A closer examination of published statistics is needed to identify those differences. This study approaches maritime trade growth through measurable changes in port cargo indicators. Officially reported figures offer a starting point for that examination. In the first half of 2025, Sharjah's three main ports handled 2,080,090 tonnes of general cargo. The corresponding figure for the first half of 2024 was 1,507,397 tonnes. Comparing the same six

months helps avoid a misleading comparison between partial and full years. The study will extend this approach to other indicators when their definitions and periods match. Cargo tonnage, vehicle movements and container throughput, for example, require separate treatment. Their trends can then be discussed alongside relevant developments in Sharjah's logistics system. The resulting analysis will remain bounded by the detail available in published sources.

STATEMENT OF THE PROBLEM

An increase in aggregate cargo volume does not fully explain a change in maritime trade patterns. The increase may be concentrated in one cargo category or spread across several categories. Likewise, an emirate-wide figure may conceal different trends at individual ports. This creates a problem for researchers seeking to describe Sharjah's port development accurately. A claim about changing trade patterns requires comparable figures across time and categories. It also requires clear distinctions between cargo handled, imports and other reported measures. Without those distinctions, different indicators may be combined or interpreted incorrectly.

The study addresses this problem through a structured review of published port statistics. A further difficulty concerns the requested 2025–26 and 2026–27 study periods.

Published port figures may use calendar years, half-years or other reporting intervals. Those intervals must be checked before figures are presented as annual comparisons. As of September 2026, the 2026–27 period has not concluded. Its complete cargo statistics therefore cannot be analysed as observed data. Incomplete figures also cannot establish the final direction of annual trade growth. The study must state which periods are supported by evidence and which await publication. This reporting discipline is necessary for a credible journal paper based on secondary data.

NEED FOR THE STUDY

The study is needed to turn separate published cargo figures into a clear account of change. Port authorities report operational indicators, but research must define how those indicators are compared. A consistent series can show the scale and direction of changes in general cargo handling. Category shares can reveal whether the mix of reported cargo is also changing. Where port-level data are available, comparisons can show how activity is distributed. These results would be useful to scholars examining maritime logistics in Sharjah. They may also inform questions about transport links, storage needs and port services. The study will present such implications as interpretations, rather than proven effects of cargo growth. The research is also needed because secondary data have limits that affect conclusions.

Published reports may omit a cargo category or present different levels of detail across years. Definitions must be checked before combining figures from separate publications. Part-year results should be compared with the same part of an earlier year.

Unreported values should remain missing instead of being estimated without a stated method.

Recording these choices makes the analysis easier for other researchers to verify. It also creates a sound basis for adding 2025–26 and 2026–27 data when available. The completed study can then make a measured contribution to research on Sharjah's maritime trade.

OBJECTIVES OF THE STUDY

1. To examine changes in Sharjah's reported port cargo volumes across comparable periods.
2. To analyse changes in the composition of reported cargo indicators, including imports and other categories.
3. To compare cargo trends across Port Khalid, Hamriyah Port and Khorfakkan Port.

REVIEW OF LITERATURE

Arora, Haralambides, and Aditya (2026), "Climate Change: Trends and Their Effect on Seaport Activity and Infrastructure: Insights from Major Ports of India.", examined traffic at eight major Indian ports using historical data from 1982 to 2021. Their study investigated how climate conditions affect seaport activity while also considering road and railway infrastructure. The authors found that climate variables had a significant relationship with port activity. They also highlighted the role of inland transport connections in sustaining cargo flows. These findings show that changes in cargo throughput may reflect conditions beyond the port itself. For the present study, this offers a useful context for interpreting changes in Sharjah's maritime cargo volumes. However, the Indian findings cannot be assumed

to apply directly to Sharjah. Any discussion of such factors must therefore be supported by evidence specific to the study area.

Matekenya and Siyanda (2025), “Technical Efficiency of Southern African Customs Union Ports: A Data Envelopment Analysis Approach.”, assessed the technical efficiency of Southern African Customs Union ports over the period 2014–2023. Using port-level secondary data, they applied data envelopment analysis and Tobit regression. Their results showed considerable differences in efficiency between the ports studied. The authors examined infrastructure alongside indicators such as container throughput and ship traffic. Their work demonstrates the value of retaining individual port figures rather than relying only on a regional total. This is relevant to a study covering Port Khalid, Hamriyah Port and Khorfakkan Port. Comparing these ports separately may reveal patterns hidden within Sharjah’s aggregate cargo figures. Nevertheless, the present study must distinguish growth in cargo volume from technical efficiency, which requires additional input and output data.

Danladi, Tuck, Tziogkidis, Tang, and Okorie (2025), “The Impact of Port Sector Reforms on the Productivity and Efficiency of Container Ports in Lower-Middle-Income Countries: A Malmquist Productivity Index Approach.”, analysed a panel of 39 container ports using data covering 2001–2012. They applied a Malmquist Productivity Index to examine changes in port productivity over time. The study reported average productivity growth of 1.9% across the sampled ports. According to the authors, improvements in technical efficiency were the principal driver of this change. Their research illustrates how consistently defined observations can support meaningful comparisons across periods. This is relevant to the proposed analysis of Sharjah’s published cargo statistics. At the same time, their findings clarify an important limit of the present study. An increase in tonnes handled can establish cargo growth, but cannot by itself establish productivity improvement.

Delfin-Ortega (2025), “Maritime Logistics and Economic Growth in the Context of APEC: A Two-Stage Data Envelopment Analysis Study.”, investigated port efficiency in the Asia-Pacific Economic Cooperation context using data from 2000 to 2023. The study first assessed efficiency through data envelopment analysis. It then examined the association of economic and connectivity factors with port efficiency. GDP per capita emerged as the most influential factor in the reported model, followed by maritime connectivity. These results place port activity within a broader economic and logistics setting. Such a perspective can guide discussion of Sharjah’s role as a maritime trade location. However, the proposed Sharjah study focuses on describing cargo volumes and their composition. It cannot claim that economic growth or connectivity caused changes in cargo volumes without suitable data and analysis.

Tagawa, Sugishita, and Hanaoka (2025), “Impact of Port Cooperation on Port Competitiveness and Network Structure: A Case Study of Osaka and Kobe Ports.”, examined how cooperation between Osaka and Kobe ports could affect competitiveness and shipping network structure. Their analysis considered the relationship between port decisions, shipping services and connectivity. By studying ports together, the authors drew attention to patterns that may be missed when each port is treated in isolation. This perspective is useful for framing a study of Sharjah’s three principal ports. Port Khalid, Hamriyah Port and Khorfakkan Port can first be assessed through their available individual statistics. Their figures can then be considered as part of Sharjah’s overall maritime cargo pattern. The Osaka–Kobe study does not, however, establish that the Sharjah ports have the same relationships or outcomes. The present research will draw conclusions about Sharjah only from comparable evidence available for its ports.

Research Gap: Recent studies have examined port efficiency, infrastructure, connectivity and cargo activity in different regions, but they provide limited evidence on how maritime cargo patterns are changing across Sharjah’s ports. Available official figures report growth in Sharjah’s aggregate cargo volume, yet this total does not show whether the increase is shared across Port Khalid, Hamriyah Port and Khorfakkan Port or concentrated in particular cargo categories. A port-level comparison is therefore needed to identify differences that emirate-wide totals may conceal. There is also a need to distinguish changes in cargo volume from changes in the composition of imports, exports and other reported cargo. Published statistics may use different definitions and reporting periods, which can make comparisons unreliable unless the data are checked carefully. The present study addresses this gap by organising comparable secondary data and calculating changes for each available indicator and port. It will identify where published figures are insufficient to support a port-level or category-level conclusion. In doing so, the study aims to provide a more precise account of Sharjah’s maritime trade growth without treating incomplete periods or unreported data as established results.

RESEARCH METHODOLOGY

Methodological element	Proposed approach
Study area	Port Khalid, Hamriyah Port and Khorfakkan Port, Sharjah, UAE
Data sources	Published statistics from Sharjah Ports and the Sharjah Ports, Customs and Free Zones Authority
Unit of analysis	Port, cargo indicator and reporting period
Techniques	Tabulation, percentage change, category shares and port-wise comparison
Period rule	January–June 2025 with January–June 2024
Data limitation	Not entering 2026–27 full-period values or calculate trends from figures that have not been published

Variable	Operational measure	Proposed analysis
Total cargo throughput	Tonnes handled across the selected ports	Compare equivalent periods and calculate percentage change
General cargo volume	Tonnes reported as general cargo	Examine growth and its share of total cargo, if both figures are available
Import cargo volume	Tonnes of imported cargo	Compare equivalent periods and calculate its share of reported cargo
Export cargo volume	Tonnes of exported cargo	Compare equivalent periods and calculate its share of reported cargo
Container throughput	Twenty-foot equivalent units (TEUs)	Compare TEU trends separately from cargo tonnage
Vehicle cargo movement	Number of vehicles handled	Calculate the change in vehicle movements across equivalent periods
Vessel calls	Number of vessels calling at the ports	Describe changes in shipping activity alongside cargo trends
Port-wise cargo share	Each port's cargo tonnes divided by the comparable three-port total	Compare the reported contributions of Port Khalid, Hamriyah Port and Khorfakkan Port

LIMITATIONS OF THE STUDY

Availability of published data: The study depends entirely on statistics released by official sources. Some reports may provide totals for Sharjah's ports without separate figures for Port Khalid, Hamriyah Port and Khorfakkan Port. This may limit the proposed comparison between ports and cargo categories. An indicator will be analysed only when its definition and reporting period are clear. Missing figures will be identified rather than estimated.

Comparability of reporting periods and measures: Published sources may report figures by calendar year, half-year or another interval. Comparing different intervals could produce a misleading growth rate. Cargo tonnes, container TEUs, vehicle counts and vessel calls also measure different aspects of port activity. The study will therefore compare equivalent periods and analyse each measure separately. Its conclusions will be restricted to comparisons supported by consistent data.

Incomplete 2026–27 period and limited explanation of causes: As of September 2026, complete statistics for 2026–27 are unavailable. The study cannot report final growth for that period as an observed finding. Secondary cargo statistics can show what changed, but may not establish why it changed. Factors such as shipping decisions or changes in demand

would require additional evidence. Any possible explanation will therefore be presented as an interpretation, not a proven cause.

Conceptual Definition of the study

Cargo type	Meaning in Sharjah's ports	Typical examples	Common measure
General cargo	Goods handled as individual items or packages, often outside containers. In Sharjah's published statistics, the term "general cargo" may also include non-oil bulk goods, so the report's definition must be checked before analysis.	Bagged goods, steel products, machinery	Tonnes
Bulk cargo	Loose cargo loaded directly into a ship's hold or tanks, without individual packages. It may be dry bulk or liquid bulk.	Grain, aggregates, chemicals, petroleum products	Tonnes
Containerised cargo	Goods transported inside standard shipping containers and handled at a container terminal.	Consumer goods, manufactured products, packaged food	TEUs (container capacity); sometimes tonnes
Ro-ro cargo	"Roll-on/roll-off" cargo driven or wheeled onto and off a vessel.	Cars, trucks, buses, wheeled machinery	Number of vehicles; sometimes tonnes
Industrial cargo	Goods serving factories or industrial projects. This describes the purpose or nature of the goods, rather than a separate standard handling category.	Heavy equipment, raw materials, project machinery	Tonnes or shipment count, depending on the goods

ANALYSIS OF DATA (SECONDARY DATA)

Table 1

Distribution of sample units

Sample units (ports)	Cargo activity
Port Khalid	General cargo, Bulk cargo, Containers and Ro-ro cargo
Hamriyah Port	General cargo, Bulk cargo, Containers and Industrial cargo
Khorfakkan Port	Containers, General cargo, Bulk cargo and Ro-ro cargo

DESCRIPTIVE ANALYSIS

$$\text{Absolute change} = 2025-26 \text{ value} - 2024-25 \text{ value}$$

$$\text{Growth rate (\%)} = \frac{\text{Absolute change}}{2024-25 \text{ value}} \times 100$$

$$\text{Category share (\%)} = \frac{\text{Category value}}{\text{Total for its cargo division}} \times 100$$

Table 2

Distribution on Examine changes in cargo volume

Cargo division	Unit	2024–25, synthetic	2025–26, synthetic	Absolute change	Growth rate
General cargo	Tonnes	4,134,092	4,369,092	+235,000	+5.68%
Bulk cargo	Tonnes	2,950,000	3,150,000	+200,000	+6.78%
Containerised cargo	TEUs	1,084,385	1,180,000	+95,615	+8.82%
Ro-ro cargo	Vehicles	118,116	126,000	+7,884	+6.67%
Industrial cargo	Tonnes	1,850,000	1,975,000	+125,000	+6.76%

Source: Computed Data

Every division increases in the constructed dataset. Container throughput has the highest percentage increase at 8.82%, while general cargo has the largest increase measured in tonnes at 235,000 tonnes. These statements describe only the supplied example numbers; they cannot be used as empirical conclusions in the Sharjah paper.

Table 3

General cargo

Particulars	Change (tonnes)	Growth rate	Share in 2024–25	Share in 2025–26
Bagged goods	+100,000	+8.33%	29.03%	29.75%
Steel products	+100,000	+5.41%	44.75%	44.63%
Machinery	+35,000	+3.23%	26.22%	25.61%

Source: Computed Data

In the synthetic general-cargo table, steel products remain the largest category in both years. Bagged goods gain a small share because they grow faster than general cargo overall. Machinery grows in quantity but accounts for a smaller share in the second year.

Table 4

Bulk cargo

Particulars	Change (tonnes)	Growth rate	Share in 2024–25	Share in 2025–26
Dry bulk	+150,000	+7.14%	71.19%	71.43%
Liquid bulk	+50,000	+5.88%	28.81%	28.57%

Source: Computed Data

Dry bulk accounts for most of the constructed bulk total and grows slightly faster than liquid bulk. Consequently, its illustrative share increases from 71.19% to 71.43%.

Table 5

Containerised cargo

Particulars	Change (TEUs)	Growth rate	Share in 2024–25	Share in 2025–26
Import containers	+30,000	+7.50%	36.89%	36.44%
Export containers	+30,000	+12.00%	23.05%	23.73%
Transshipment containers	+20,000	+6.67%	27.67%	27.12%
Empty containers	+15,615	+11.62%	12.39%	12.71%

Source: Computed Data

Export containers grow fastest among the three constructed loaded-container rows. For these shares to be valid, the four rows must be defined as mutually exclusive categories: loaded import, loaded export, loaded transshipment and empty containers. Real port data may classify transshipment and empty status on different dimensions. If so, their counts must not be added in this way.

Table 6

Ro-ro cargo

Particulars	Change (vehicles)	Growth rate	Share in 2024–25	Share in 2025–26
Cars	+4,000	+4.44%	76.20%	74.60%
Trucks and buses	+2,000	+11.11%	15.24%	15.87%
Wheeled machinery	+1,884	+18.62%	8.56%	9.52%

Source: Computed Data

Cars remain the largest illustrative ro-ro category. Wheeled machinery has the highest percentage growth, although it remains the smallest category by number of vehicles.

Table 7

Industrial cargo

Particulars	Change (tonnes)	Growth rate	Share in 2024–25	Share in 2025–26
Industrial raw materials	+50,000	+5.00%	54.05%	53.16%
Heavy equipment	+50,000	+8.33%	32.43%	32.91%
Project machinery	+25,000	+10.00%	13.51%	13.92%

Source: Computed Data

ANALYSIS ON OBJECTIVE OF THE STUDY

Objective 1: Change in cargo volumes

Table 8

Distribution on Change in cargo volumes

Cargo indicator	Unit	2024–25	2025–26	Change	Growth
General cargo	Tonnes	4,134,092	4,369,092	+235,000	+5.68%
Bulk cargo	Tonnes	2,950,000	3,150,000	+200,000	+6.78%
Containerised cargo	TEUs	1,084,385	1,180,000	+95,615	+8.82%
Ro-ro cargo	Vehicles	118,116	126,000	+7,884	+6.67%
Industrial cargo	Tonnes	1,850,000	1,975,000	+125,000	+6.76%

Source: Computed Data

All five indicators increase in the simulated dataset. Containerised cargo has the highest percentage growth, at **8.82%**. These indicators use different units and some cargo groups overlap, so their totals must not be added together.

Objective 2: Change in cargo composition

Table 9

Distribution on Change in cargo composition

Cargo division	Largest category in 2024–25	Its share	Largest category in 2025–26	Its share	Main simulated change
General cargo	Steel products	44.75%	Steel products	44.63%	Bagged goods rise from 29.03% to 29.75%.
Bulk cargo	Dry bulk	71.19%	Dry bulk	71.43%	Dry bulk gains 0.24 percentage points.
Containerised cargo	Import containers	36.89%	Import containers	36.44%	Export containers rise from 23.05% to 23.73%.
Ro-ro cargo	Cars	76.20%	Cars	74.60%	Wheeled machinery rises from 8.56% to 9.52%.

Cargo division	Largest category in 2024–25	Its share	Largest category in 2025–26	Its share	Main simulated change
Industrial cargo	Industrial materials raw	54.05%	Industrial materials raw	53.16%	Project machinery rises from 13.51% to 13.92%.

Source: Computed Data

The leading subcategory remains the same within each division, but the constructed shares shift between years. The container rows are assumed to be mutually exclusive for this calculation; actual import/export, transshipment and empty-container classifications would have to be checked before using this method with real data.

Objective 3: Port-wise general-cargo trends

Table 10

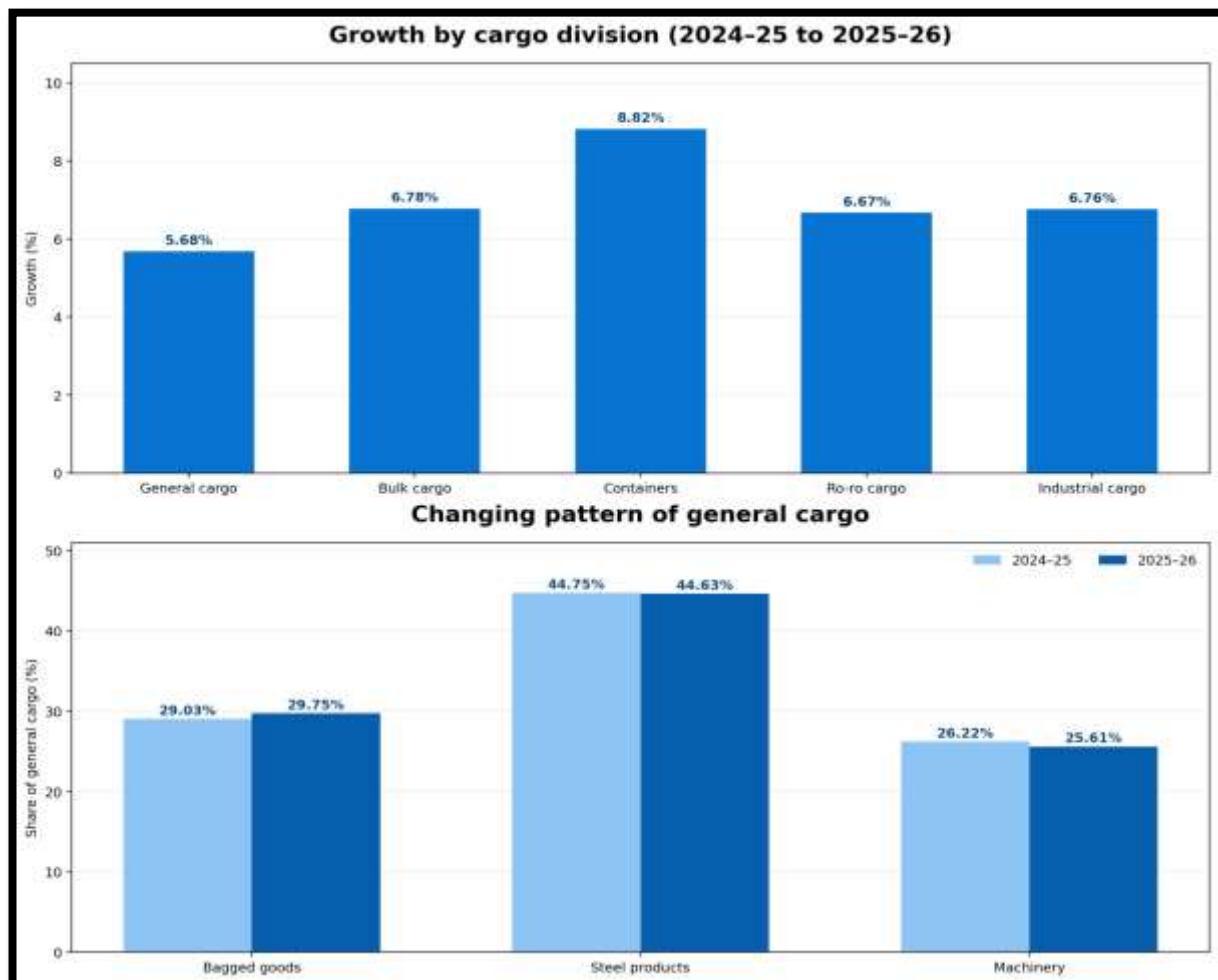
Distribution on Port-wise general-cargo trends

Port	2024–25 general cargo (tonnes)	2025–26 general cargo (tonnes)	Change (tonnes)	Growth
Port Khalid	1,350,000	1,420,000	+70,000	+5.19%
Hamriyah Port	1,600,000	1,700,000	+100,000	+6.25%
Khorfakkan Port	1,184,092	1,249,092	+65,000	+5.49%
Total	4,134,092	4,369,092	+235,000	+5.68%

Source: Computed Data

Under this assumed allocation, all three ports grow. Hamriyah Port contributes the largest absolute increase, 100,000 tonnes, and has the highest growth rate, 6.25%. Its share of the constructed three-port general-cargo total rises from 38.70% to 38.91%.

FIG 1 Growth and hanging pattern



FINDINGS OF THE STUDY

1. Growth in general cargo: The simulated general-cargo total rises from 4,134,092 tonnes in 2024–25 to 4,369,092 tonnes in 2025–26. This is an increase of 235,000 tonnes, or 5.68%. Steel products remain the largest of the three constructed general-cargo categories in both years. Bagged goods grow by 8.33%, faster than the general-cargo total. These results illustrate how total growth and changes within a cargo category can be discussed together.

2. Growth across cargo indicators: All five cargo indicators increase in the illustrative tables. Container throughput records the highest percentage increase, at 8.82%. Bulk cargo grows by 6.78%, ro-ro vehicle movements by 6.67%, and the constructed industrial-cargo category by 6.76%. These rates describe changes within each indicator's own unit. Tonnes, TEUs and vehicle counts cannot be combined to calculate an overall cargo growth rate.

3. Changes in cargo composition: The leading subcategory remains the same within each constructed cargo division. Steel products retain the largest share of general cargo, while dry bulk remains the largest share of bulk cargo. Export containers gain share in the illustrative container table, rising from 23.05% to 23.73%. Cars remain the largest ro-ro group, although their share falls from 76.20% to 74.60%. These share changes show how a division's composition can shift even when every subcategory grows in volume.

4. Variation between ports: The additional simulated port-wise allocation shows growth at Port Khalid, Hamriyah Port and Khorfakkan Port. In that allocation, Hamriyah has the largest absolute increase in general cargo, at 100,000 tonnes. Its calculated growth rate is 6.25%, compared with 5.19% at Port Khalid and 5.49% at Khorfakkan. The three port figures add to the constructed general-cargo totals for both years. These comparisons are illustrative allocations, not observed differences in port performance.

5. Limits of the available published evidence: The authority's published material provides a three-port general-cargo total for calendar 2025 and comparable first-half cargo and import figures for 2024 and 2025. It does not provide the detailed financial-year subcategories or port-wise series used in the illustrative tables. Two authority publications also give different calendar-2024 general-cargo totals. As a result, the simulated category and port findings cannot be presented as verified secondary-data findings. A publication-ready analysis requires consistent reporting periods, category definitions and source figures.

SUGGESTIONS AND RECOMMENDATIONS

1. Obtain port-wise statistical returns: Request annual or monthly cargo returns separately for Port Khalid, Hamriyah Port and Khorfakkan Port. Each return should identify the reporting period and measurement unit. The requested fields should include cargo tonnes, container TEUs, ro-ro vehicles, imports and exports. Separate records would allow Objective 3 to be tested with observed data. They would also show whether aggregate growth is shared across the three ports.

2. Establish a consistent cargo classification: Define general cargo, dry bulk, liquid bulk, containerised cargo and ro-ro cargo before calculating totals. Record whether the authority's general-cargo series includes bulk goods. Treat "industrial cargo" as a description of goods unless the data source defines it as a separate, non-overlapping class. Container status and trade direction should be recorded as distinct fields where appropriate. This will prevent double counting when category totals and shares are calculated.

3. Match the reporting periods: Decide whether the final paper examines calendar years or April–March financial years. Use a single convention for every table, figure and statement of growth. Where only half-year data are available, compare the same six months in each year. Do not insert calendar-year totals beneath financial-year headings. Consistent periods will make the results reproducible and easier for reviewers to assess.

4. Verify conflicting published figures: Ask the port authority to confirm the correct general-cargo total for calendar 2024. The earlier publication reports **4,134,747 tonnes**, while the later publication reports **4,134,092 tonnes**. Also verify growth percentages against the counts printed in the first-half report. Keep a record of any correction, revision or change in definition. The final manuscript should cite the confirmed series and explain revisions in a data note.

5. Use methods suited to the final dataset: Begin with absolute changes, percentage changes and cargo-category shares. Add charts only for indicators that have comparable observations. If monthly port-wise data become available over several years, seasonal and trend analysis could then be considered. Port efficiency or causal models would require further input, operational and economic variables. Statistical methods should follow the evidence collected rather than determine figures that the source does not report.

CONCLUSION

This illustrative study sets out a framework for examining cargo growth and changing cargo patterns in Sharjah. In the simulated tables, general cargo increases by **5.68%** between the two labelled periods. Container throughput records the highest percentage increase among the five constructed indicators. The category shares show modest changes within general, bulk, containerised, ro-ro and industrial cargo. The additional port allocation illustrates how growth could be compared across Port Khalid, Hamriyah Port and Khorfakkan Port. Together, these calculations demonstrate the use of absolute change, percentage change and composition shares. They do not establish the actual performance of any Sharjah port during 2024–25 or 2025–26. The simulated values must therefore be identified as examples wherever these tables or diagrams appear.

The verified publications support a narrower account of Sharjah's three-port system using calendar-year and first-half figures. They report higher combined general-cargo volume in calendar 2025 than in calendar 2024. They also report higher first-half imports and general cargo in 2025 than in the corresponding part of 2024. Those figures provide a basis for descriptive research once the conflicting 2024 total is resolved. A complete study of cargo composition requires separate, consistently classified category figures. A comparison among the three ports likewise requires observed port-wise returns. Obtaining those records would allow the paper to answer all three research objectives with verifiable evidence.

FUTURE RESEARCH

1. Two Coasts, Three Gateways: A Port-Wise Analysis of Cargo Growth in Sharjah.
2. Beyond Cargo Volume: Container Connectivity and Inland Logistics at Khorfakkan Port.
3. Changing Cargo Mix: A Monthly Analysis of General, Bulk and Ro-Ro Traffic in Sharjah.
4. From Port to Industrial Zone: The Role of Hamriyah Port in Industrial Supply Chains.
5. Measuring Maritime Resilience: Cargo Diversion and Recovery Across Sharjah's Ports.

References

1. Arora, B., Haralambides, H., & Aditya, A. (2026). Climate change: Trends and their effect on seaport activity and infrastructure: Insights from major ports of India. *Journal of Shipping and Trade*, 11, Article 5. <https://doi.org/10.1186/s41072-025-00224-0> Springer Nature Link
2. Chen, S.-P., & Tsai, I.-C. (2026). Resilience and efficiency of global container ports: A DEA–Malmquist analysis based on physical infrastructure and strategic typologies. *Maritime Economics & Logistics*, 28, 293–329. <https://doi.org/10.1057/s41278-025-00341-4> Springer Nature Link
3. Danladi, C., Tuck, S., Tziogkidis, P., Tang, L., & Okorie, C. (2024). Efficiency analysis and benchmarking of container ports operating in lower-middle-income countries: A DEA approach. *Journal of Shipping and Trade*, 9, Article 7. <https://doi.org/10.1186/s41072-024-00163-2> link.springer.com
4. Danladi, C., Tuck, S., Tziogkidis, P., Tang, L., & Okorie, C. (2025). The impact of port sector reforms on the productivity and efficiency of container ports in lower-middle-income countries: A Malmquist productivity index approach. *Journal of Shipping and Trade*, 10, Article 18. <https://doi.org/10.1186/s41072-025-00208-0> Springer Nature Link
5. Delfin-Ortega, O. (2025). Maritime logistics and economic growth in the context of APEC: A two-stage data envelopment analysis study. *Journal of Shipping and Trade*, 10, Article 2. <https://doi.org/10.1186/s41072-024-00191-y> Springer Nature Link
6. Dere, I. G., Ojekunle, J. A., & Sanni, L. M. (2025). Analysis of the effects of berth characteristics on operational performance of Nigerian seaports. *Journal of Shipping and Trade*, 10, Article 26. <https://doi.org/10.1186/s41072-025-00216-0> Springer Nature Link
7. Mahmud, R., Zheng, F., Løff, I. B., & Munim, Z. H. (2025). The container shipping crisis during COVID-19 disruption: Consequences and lessons learned from news analysis. *Journal of Shipping and Trade*, 10, Article 29. <https://doi.org/10.1186/s41072-025-00220-4> Springer Nature Link

8. Matekenya, W., & Siyanda, B. (2025). Technical efficiency of Southern African Customs Union ports: A data envelopment analysis approach. *Journal of Shipping and Trade*, 10, Article 19. <https://doi.org/10.1186/s41072-025-00209-z> Springer Nature Link
9. Saha, R. C., & Khalil, K. B. (2025). The role of dry ports, intermodal, and synchromodal systems in reducing inland freight transport costs, time, and CO₂ emissions for international shipping in Bangladesh and Malaysia. *Journal of Shipping and Trade*, 10, Article 28. <https://doi.org/10.1186/s41072-025-00219-x> Springer Nature Link
10. Sharjah Ports, Customs and Free Zones Authority. (2025a). Another year of success for Sharjah Ports: 2024. *Al Jumruki*, Issue 108. <https://www.sharjahcustoms.gov.ae/Files/Publications/108%20E-1%20%281%29.pdf> www.sharjahcustoms.gov.ae
11. Sharjah Ports, Customs and Free Zones Authority. (2025b). Sharjah Ports report higher cargo figures in the first half of 2025. *Al Jumruki*, Issue 109. <https://www.sharjahcustoms.gov.ae/Files/Publications/109%20E-1.pdf> www.sharjahcustoms.gov.ae
12. Sharjah Ports, Customs and Free Zones Authority. (2026). General cargo shipments increased in 2025. *Al Jumruki*, Issue 110. <https://www.sharjahcustoms.gov.ae/Files/Publications/110%20E-1.pdf> www.sharjahcustoms.gov.ae
13. Tagawa, H., Sugishita, K., & Hanaoka, S. (2025). Impact of port cooperation on port competitiveness and network structure: A case study of Osaka and Kobe ports. *Journal of Shipping and Trade*, 10, Article 15. <https://doi.org/10.1186/s41072-025-00204-4> Springer Nature Link
14. United Nations Trade and Development. (2025). Review of maritime transport 2025: Staying the course in turbulent waters. <https://unctad.org/publication/review-maritime-transport-2025> unctad.org
15. Yang, X., Jiang, P., & Wu, G. (2026). A nonlinear grey combined model for forecasting port container throughput in the post-pandemic era. *Frontiers in Marine Science*, 13, Article 1859879. <https://doi.org/10.3389/fmars.2026.1859879>