

Year in review - 2021

Most economies demonstrated resilience in recovery against the waves of COVID19 outbreak in 2021. Demand and supply disequilibrium benefitted shipping lines more than port operators.

Profit surge against supply chain disruption

In almost all our discussions with clients last year, supply chain disruption was among the critical issues faced. Not all are disturbed, however. In container shipping, it would be a mediocre 2021 if your wealth did not double from a year ago. Shipping lines registered a multi-fold increase in their net profits, while their faithful shareholders are grinning from ear-to-ear as their share prices surged past 10-year highs. So long, at last!

As a defensive play to global trade, the port sector lagged the container shipping sector. Port operators' bottom line had likely been boosted by storage income, which could be unwelcoming as the overall handling capacity was curtailed. Stevedoring activities tend to generate higher profitability than storage.

In the previous annual outlook edition, we projected the port throughput rebound to continue into 2021. The IMF varied its GDP forecast with the pace of border reopening. When the Oct 2021 outlook was published, there were signs of stability in new COVID19 cases (before the emergence of the Omicron variant). Despite a hesitancy in vaccine adoption and an uneven distribution of vaccines, some major economies have relaxed their border restrictions, perceiving COVID19 as an endemic. The IMF outlook for 2022 was a buoyant 4.9%.

With a positive outlook, pandemic-driven windfall and continued cheap financing, most port and shipping companies have leveraged their balance sheets for acquisitions. Although there are intentions to tighten monetary supply, policymakers in the Fed believe that the inflationary pressures are transient. Therefore, the interest rate risk of some of the highly leveraged port and shipping companies is not imminent.

As a peripheral business of the port and shipping industry, RHDHV advised port operators on the overdue changes to future-proof their operations for the years to come. This edition of the industry briefing provides an overview of the M&A jostle for supply chain dominance between ports and shipping lines, as well as a current take on the investment opportunities available in 2022.

World's GDP forecast, 2017 – 2026 (%) 8% 6% 4% 00 00 2017 2018 2019 2020 2021f 2022f 2023f 2024f 2025f 2026f -4% -6%

"All the businesses have taken a major hit with these lockdowns"

-Apr-21

Shipping lines:

Oct-20



Source: IMF

Hapag-Lloyd



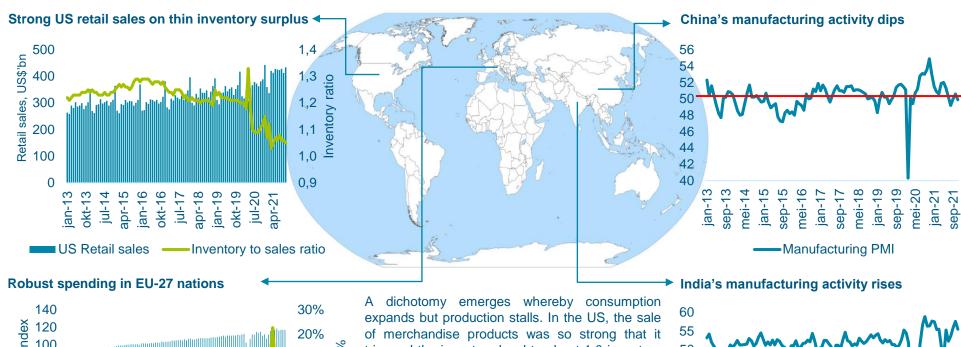
Oct-21





Macro indicators

The macroeconomic indicators continue to lend their cases to a global economic rebound, as restocking and e-Commerce demands remain strong. New variants, lockdowns and rising input costs would dampen the confidence of manufacturers, exacerbating the current trade imbalance.



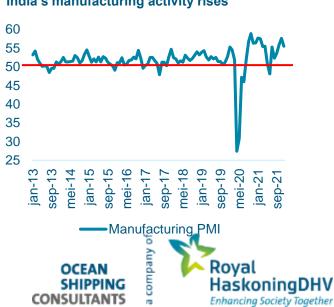


Source: US Census Bureau, Eurostat, Caixin, IHS Markit

trimmed the inventory level to about 1.0 inventory to sales ratio. Across the Atlantic, retail sales in the EU continued to expand.

China is regarded as the world's factory. Its persistent pursuit of a zero COVID19 strategy negatively impacts the manufacturing activity. In part driven by the high input cost and labour shortages, the purchasing managers had a neutral to negative outlook in the near term.

Meanwhile, India's manufacturing activity firmed up after the ferocious COVID19 wave had largely subsided.



Throughput forecast

Our high-level forecast of the global gateway throughput shows that Asia remains a quintessential continent for port operators seeking growth in their portfolios.

Regional gateway container throughput forecast, CAGR 2021 - 2025



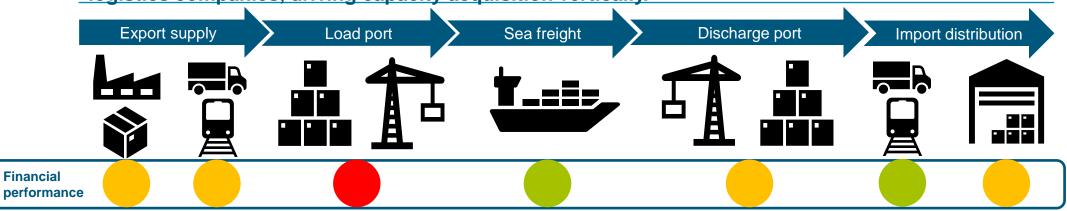
Global acceleration of CAGR 4.5%

- We performed a linear regression of the gateway containerised volumes of 134 countries' against their GDP (real, constant prices in 2015). Between 2021 and 2025, gateway throughput in the list is likely to expand from 613 MTEU to 732.4 MTEU, representing a CAGR of 4.5%.
- By 2025, the global economy is projected to grow at an average pace of 3.6%. Hence, in the near term, the throughput multiplier on GDP is 1.3x. In other words, if a country's GDP were to increase by 1%, we could reasonably expect a port to handle 1.3% more cargo than the previous year.
- South Asia is likely to outperform the global average, driven in part by the positive demographics and infrastructure development. Meanwhile, the Regional Comprehensive Economic Partnership (RCEP) the world's largest free trade agreement that started in Jan 1, 2022, should bode well for the region's container trade.
- Africa and South America regions are expected to underperform the global average. An uneven rollout of the vaccines and poor healthcare infrastructure could detract FDIs that are needed to catalyse economic developments.



Supply chain, who did well in 2021

2021 spotlighted the fragility of the supply chain. Most logistics companies with spot rate services yielded solid financial performance. The bumper year bolstered the earnings of shipping lines and logistics companies, driving capacity acquisition vertically.



- Free zones and industrial estates generate containers for export. Intermodal transportation by truck, rail and sometimes barge is required to position the containers at a load port.
- Manufacturers are unlikely to commit to a long-term lease because of this transient demand. The occupancy rate of free zones was presumably stable.
- In some countries, the lack of empty containers impacted export-oriented inland transportation companies.
 Port closure and congestion decreased the use of inland transportation.

- COVID19 outbreaks in ports with minimal automation and digitisation (aka labour-intensive) caused intermittent port closures. Changing regulations exacerbated port delays.
- Revenue from port storage may not offset the drop in stevedoring revenue. Bottomline growth of these ports may be minimal or negative, as port operations have a high fixed cost (ie concession payment, labour and equipment depreciation).
- Short-sea containers faced difficulties finding shipping slots, as shipping lines opted for long-haul trades. Consequently, cross-border inland transportation increased.

- Shipping lines had an outstanding year. Spot rates rose exponentially, with shipping slots fully taken up for weeks on end. They have expanded capacity, redeployed vessels to long-haul and more profitable routes.
- Peripheral sectors like the container manufacturing and shipyards have strong order books going into 2022.
- Economies of scale, energy-efficient ships and their overall bargaining powers against port operators have augmented their bottom lines.

- Import-oriented ports were handling near their capacity.
 Container vessels were reported to have a long dwell time at anchorages.
- While the handling volume rose in 2021, ports had reported a lack of storage space. In most ports, the tariffs are regulated and have long-term contracts. Consequently, port operators could not raise their rates like how shipping lines raise their spot rates.
- Peripheral sector offering storage solutions, such as ICDs and Info Comms Technology (ICTs), benefitted from an increased utilisation and investments.

SHIPPING

CONSULTANTS

- With a backlog of containers at the port, inland transport rates were high against an increase in fleet utilisation.
- As they have an intensifying concern for supply chain disruption, cargo owners made advance orders and built inventory. Warehouses and distribution centres offer short-term storage solutions to cargo owners.
- The import distribution segment could not expand capacity instantaneously. Hence, the profits that could be made are capped.



Is vertical integration the solution?

Terminal operators and shipping lines acquire vertically to preserve bargaining power over each other. We expect shipping lines to gather steam spending on ports and inland transport companies.

Shipping lines enter the vertical acquisition stream

In the past decade, the vessel upsizing trend and fleet expansion led to an overcapacity across major routes. The plummeting freight rates, in turn, shipping lines' profits, set the backdrop for consolidation, to the extent of having a stronger bargaining power against terminal operators.

Terminal operators enhance their services by reinvesting in their terminals, from new quay cranes to software upgrades. For example, APMT Apapa is set to incur \$438 million to modernise its terminal in Nigeria, while ICTSI invests \$230 million in its Manzanillo (Mexico) terminal. These investments maintain the competitive edge, making shipping lines less likely to switch allegiance.

When opportunities arise with new concessions or brownfield terminals, terminal operators may expand geographically. Global terminal operators such as Cosco Shipping Ports and DP World were active in 2021. A worldwide network allows a terminal operator to offer its shipping line customers a uniform service.

Besides easing the competitive landscape, entering into partnerships with neighbouring terminals enhances the services the collective entity may offer shipping lines. Since June 2021, Haropa Port has been a joint entity of Le Havre, Rouen and Paris ports.

Vertical integration regains some bargaining powers from shipping lines. From the perspective of cargo owners, using an integrated service offered by a port operator could minimise supply chain disruption. From the perspective of terminal operators, supply chain consolidation ensures the captivity of the containers. In 2021, the high-profile vertical acquisitions were PSA acquiring integrated logistics provider BDP International and Bollore buying freight forwarder OVRSEA. To direct cargoes to its complex, ICTSI provides barging services between Tecplata and Port of Santa Fe in Argentina to export containers to Asia.

Shipping lines were similarly active in acquiring vertically. Besides port investments (see Pg 7), there were notable investments by shipping lines in inland transportation companies. The wave of vertical integration is likely to continue in 2022. Despite a bountiful year, we were informed by the industry leaders that the shipping lines continue to exert their bargaining power on some terminal operators for tariff rebates.

As with the cycle, when each division is unsatisfied with being a cost-centre, there might be break-aways whereby some services are best offered as a standalone. Financiers (equity or bond holders) could identify distinct risk and reward propositions, which could enhance the valuation when viewed independently.





M&A review

With their cushy liquidity, shipping lines were comfortable bidding for controlling stakes in ports. In 2021, the EV/EBITDA range stretched to a high of 18.4x that had non-port assets as part of the

"nurchase" nackage

	archase package.					
2021	Target	Stake	Buyer	Seller	Deal size (USD'm)	Valuation
Jan	Red Sea Gateway Terminal	40%	Cosco Shipping Ports (20%) Public Investment Fund (20%)	MMC, Red Sea Port, others	280	9.2x EV/EBITDA
Feb	Dighi Port 100% Adani Ports & SEZ		Adani Ports & SEZ	Balaji Infrastructure Project	97	n.a.
	Tianjin Container Terminal	34.99%	Cosco Shipping Ports	Tianjin Port Holdings	212.1	15.6x P/E.
Mar	Gangavaram Port	100%	Adani Ports & SEZ	Warburg Pincus, DVS Raju, govt	757.3	9.0x EV/EBITDA
Apr	Apr Krishnapatnam Port 25% Adani Ports & SEZ		Adani Ports & SEZ	Vishwasamudra	375.5	10.3x EV/EBITDA
	Tianjin Euroasia Terminal	30%	Tianjin Port Holdings	Cosco Shipping Ports	42.4	39.7x P/E
May	APMT Rotterdam	100%	Hutchison Ports	APM Terminals	n.a	n.a
Jul	Port of Barranquilla	78%	I-Squared Capital	Chilean Southern Cross	220	n.a
Aug	Thessaloniki Port	4.85%	Belterra Investments	Public share tender	14.7	7.7x EV/EBITDA
	Ashcroft Terminal	25%	Canadian Tire	CrescentView Investments	40	n.a
Sept	Hamburg Port CTT	35%	Cosco Shipping Ports	Hamburger Hafen Und Logistiks	116	7.7x EV/EBITDA
	Ports America	90.6%	Canada Pension Plan	Oaktree Capital Management	4,000	n.a.
	Container Terminal Wilhelmshave	n 30%	Hapag Lloyd	Eurogate	n.a	n.A
Oct	Euromax Terminal	35%	Navigator Investco	Cosco Shipping Ports	n.a.	n.a.
Nov	Fenix Marine Services	90%	CMA CGM	EQT Infrastructure	2,300	13.7x EV/EBITDA
	Carrix Inc	51%	Blackstone Infrastructure	Founding family stakes	2,500	n.a
Dec	Bollore Africa Logistics	100%	MSC	Bollore SE	6,473.5	18.4x EV/EBITDA

- Port transactions rose in 2021 from the year before. The 17 deals with a total disclosed value of \$17.4bn more than doubled the \$7.7bn recorded in 2020 on 14 deals. The range of the transaction multiple EV/EBITDA increased to 7.7x - 18.4x, compared with 7.6x - 10.6x in the first pandemic year.
- As the year came to a close in 4Q2021, the major shipping lines CMA CGM and MSC made significant moves. In Nov 2021, the French shipping giant is repurchasing Fenix Marine Services, the terminal it divested when it built up cash for post-NOL acquisition. In the following month, MSC made a bid for Bollore Africa Logistics in purportedly the largest port deal of the year; the exact amount is not disclosed publicly.
- Adani Port & SEZ consolidated its market leader position in port operations with the acquisitions of Gangavaram Port and Krishnapatnam Port.
- At \$8.8bn, North America was a M&A hotbed, accounting for more than half the reported value. Capital rotation amongst funds was notable, along with stake sale motivated by tax considerations as proposed by the Biden administration.
- Meanwhile, Cosco Shipping Ports continues to expand in Europe, taking a 35% stake in CTT Hamburg a major terminal in the heart of Europe. The Chinese port operator partially divested its stake in Euromax Container Terminal, a terminal it acquired for EUR125.4m in May 2016.

Upcoming concessions

Some of the publicly known port concessions and assets available in the near term are listed below. The list is not exhaustive.

Asset	Location	Type of engagement	Progress	Expected timeframe
Laem Chabang Phase 1	Chonburi, Thailand	Concession	Market sounding	2Q2022
Laem Chabang Phase 3	Chonburi, Thailand	Operating agreement	Operating partner search	n 3Q2022
Porto Romano	Durres, Albania	Concession	Initial market sounding	2H2022
JNPCT	Mumbai, India	Concession	Qualification	2022
Contrecoeur Container Terminal	Montreal, Canada	Concession	Request for Qualifications	2022
Port of Sagunto	Valencia, Spain	Construction and Operation	Tender	2022
Cagliari International Container Terminal	Cagliari, Italy	Concession	Relaunch, after rejecting Pifim Company	2022
Louisiana International Terminal	Louisiana, United States America	Concession	2 nd RFP issued	2022
Sao Sebastiao, Santos Port, Codesa, Codeba Itajai ports	' Brazil-wide	Concession for each of the ports as part of government privatisation plan		2022
8 Multipurpose ports in Saudi Arabia	Saudi Arabia-wide	Concession (BOT)	Request for Qualification (Submission of Qualification statement)	9 Feb 2022
Haifa Port privatisation	Haifa, Israel	Concession	DP World pulled out of the winning JV	2022
Port of Duqm	Duqm, Oman	Concession	Invitation to Prequalify	2022
Beirut Container Terminal	Beirut, Lebanon	Concession	Tender	2022
Queen Salote International Wharf	Tongatapu, Tonga	Stevedoring concession	Construction on-going	2022
Port of Newcastle	New South Wales, Australia	Concession	Deliberation on whether to engage operator	2022

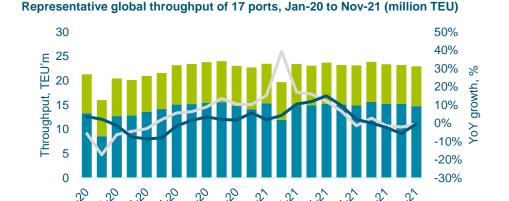




Financial performance

Port operators have rich valuations against the declining throughput growth, as most companies trade nearer to the 52-week price range.

- As represented by 17 ports worldwide, global throughput slowed as the low-base effect of 1H2020 wore off in the second half of 2021. The major Chinese ports registered 5 consecutive months of negative throughput growth through November 2021, while the Rest of the World (RoW) declined only in the last 3 months through November 2021.
- Juxtaposing with the throughput growth, the investment valuation of the port sector was persistently rich even in the second half of 2021. Most of the listed operators in our sample list are sitting at the top half of their 52-week price range. We selected 9 global terminal operators, with a cumulative market capitalisation of US\$ 47.5 billion, to be representatives of the investment sentiment in the port sector. While having an extensive global presence, DPW, PSA and Hutchison Ports are not listed.
- All terminal operators were profitable in the trailing 12 months period. At the beginning of 2021, the same basket of companies had a combined market capitalisation of US\$ 34.9 billion. Hence, excluding the credit market's subscription for port-related corporate bonds, investment interest for port-related equities surged 36% in 2021.
- In pre-pandemic times, the average port sector valuation was about 20x P/E. Despite shipping lines being massively profitable, most ports are regulated with the maximum tariffs imposed for their key services. Hence, the profits may be crimped by escalating costs without a corresponding increase in revenue.
- The Chinese terminal operators trade at a discount to their book value, probably due to the reporting concerns and political risks associated with Chinese operators.
- The Price-to-Free Cash Flow for most terminal operators is rich, more than the average 5x P/FCF before the pandemic. Meanwhile, Adani does not have a reading in this metric as it has negative free cash flow. The Indian port operator is on an ambitious path towards being the world's largest terminal operator by 2030.



Rest of World

Growth in RoW

Current trading multiples of major listed ports

China & HK

Growth in China

	Market cap (US\$'m)	P/E	P/B	P/FCF	Price range (52-week)
ICTSI	7,745	45.79	5.10	14.17	•
HHLA	1,740	17.13	2.38	8.77	•
Adani	21,156	29.40	5.05	n.a	•
CSP	2,826	9.92	0.50	55.27	•
CMPH	7,231	4.95	0.56	9.14	•
HPHT	2,004	10.97	0.60	2.19	•
GPI	753	8.26	1.83	4.17	•
Westports	3,252	20.49	4.67	67.36	•
Santos Brasil	826	38.12	2.02	60.64	•
Weighted	47,532	25.17	3.69	13.13	

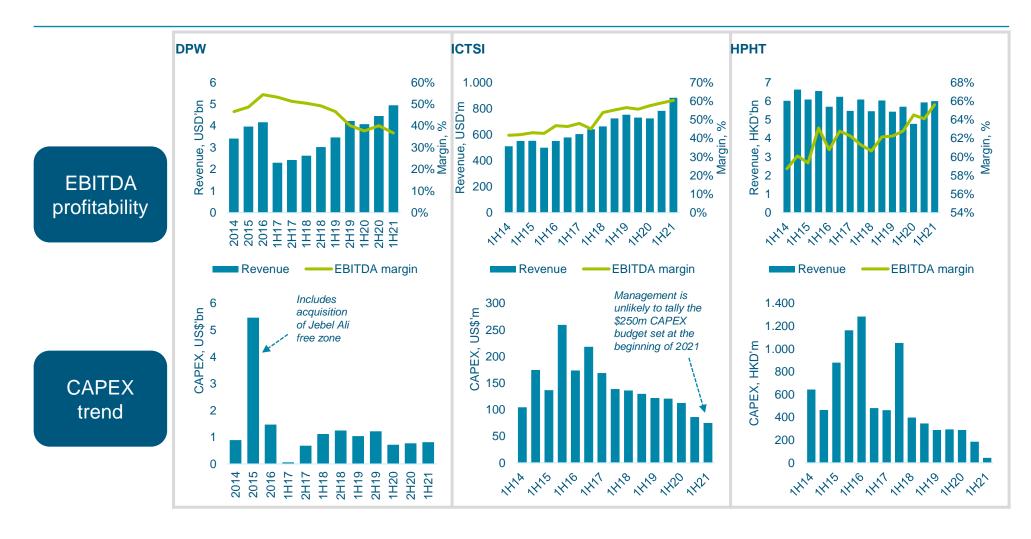
Source: Reuters, as of 12 Jan 2022





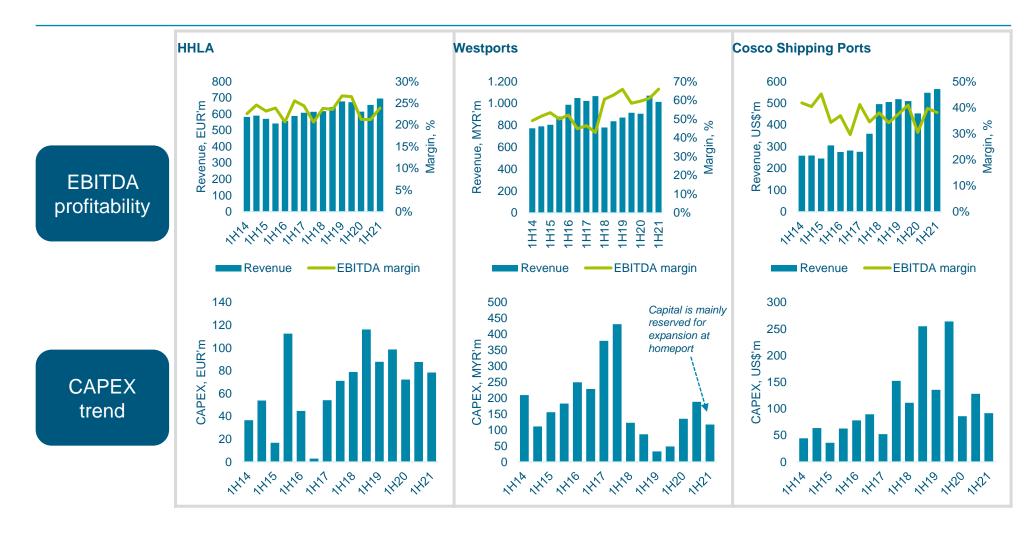
Company's profitability and investment appetite

Uptrend profitability in ICTSI, HPHT and Westports, while a more vertically-diversified DP World saw EBITDA margin compression. All operators showed a moderation in their investment appetite.



Company's profitability and investment appetite

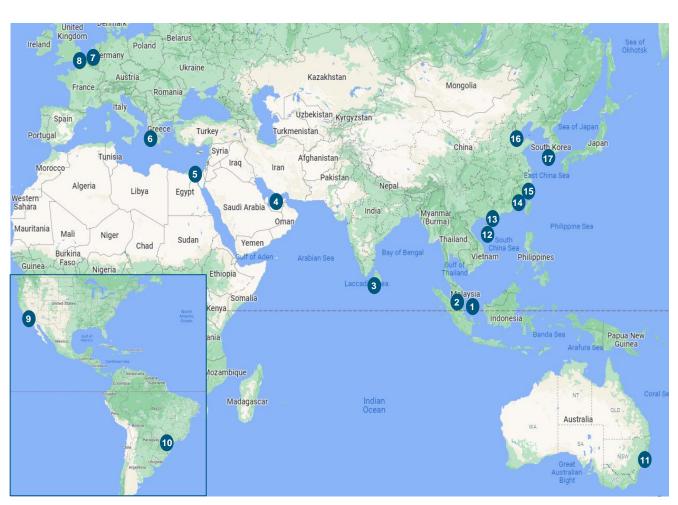
Uptrend profitability in ICTSI, HPHT and Westports, while a more vertically-diversified DP World saw EBITDA margin compression. All operators showed a moderation in their investment appetite.



Port sample representation

The IMF projects a 5.4%y/y economic growth for 2021. Port volumes, in the first 11M2021, grew 6%y/y. At 1.1x GDP multiple and a forecast of 4.9% economic growth in 2022, port volumes are likely to tally 5.4%y/y growth in 2022. Check our services for a more detailed analysis of your interested port region.

Sample ports of global throughput



We represent the global throughput growth with a sample of 17 ports below:

- 1. Singapore
- Westports Port Klang
- Colombo International Container Terminal
- 4. DP World Jebel Ali
- Suez Canal Container Terminal
- 6. Piraeus Port
- Euromax Container Terminal
- 3. Antwerp Gateway
- 9. Port of Long Beach
- 10. Santos Port
- 11. Botany Port
- 12. Kwai Tsing Terminals
- 13. Ports in Guangzhou province
- 14. Ningbo-Zhoushan Port
- 15. Shanghai Port
- 16. Tianjin Port
- 17. Busan Port Terminal

In the first 11 months of 2021, global port volume expanded 6%, from 237.9 MTEU in 2020 to 252.2 MTEU in 2021.



Disclaimer

This report is confidential and has been prepared by RHDHV solely for its client in accordance with the terms of appointment, the methodology, qualifications, assumptions and constraints as set out in the report and may not be relied upon by any other party for any use whatsoever without prior written consent from RHDHV. RHDHV accepts no responsibility or liability for the consequence of this report being used for a purpose other than the purposes for which it was commissioned. RHDHV accepts no responsibility or liability for this report to any party other than the person by whom it was commissioned. This report may be provided to third parties solely to inform any such party that our report has been prepared and to make them aware of its substance but not for the purposes of reliance. Third parties will conduct their own independent investigation of those matters which they deem appropriate without reliance upon RHDHV or any materials set out in this report.

This report is prepared upon the application of specific industry practices and professional judgment to certain information and data with resultant subjective interpretations. Assumptions, estimates, projections and opinions expressed in the report constitute RHDHV's professional judgment as of the date of this report and are subject to change. RHDHV is under no obligation to update the information herein.

This report may contain certain forward-looking statements, including estimates, forecasts and projections. Such forward-looking statements, estimates, forecasts and projections (i) reflect various assumptions concerning future industry performance, general business, economic and regulatory conditions, market conditions and other matters, which assumptions may or may not prove to be correct and (ii) are inherently subject to significant contingencies and uncertainties, many of which are outside the control of RHDHV and difficult to predict.

Actual results can be expected to vary and those variations may have a material impact on analyses, projections or estimates. RHDHV expressly disclaims any liability for the realisation of any forward-looking statements, projections, forecasts, opinions or estimates.

While the report has been prepared by RHDHV in good faith to make the information in this report as accurate as possible, no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by RHDHV in relation to the adequacy, accuracy, completeness or reasonableness of this report and RHDHV expressly disclaims any liability for errors and omissions in its contents. In particular, but without prejudice to the generality of the foregoing, no representation, warranty, assurance or undertaking is given as to the achievement or reasonableness of any future projections, estimates, prospects or returns contained in this report, or in such other information, notice or document.

RHDHV makes no representation or warranty that use of the recommendations, findings or conclusions of this report will result in compliance with applicable laws. In addition, the information, statements and opinions provided in this report are not to be construed as legal advice.



Our interactive Capability Statement is now available online. Click here!

GET IN TOUCH

Name: Christianne van Dijk

Position: Director Advisory Group (NL) **Email**: christianne.van.dijk@rhdhv.com

Name: Jolke Helbing Position: Director (NL)

Email: jolke.helbing@rhdhv.com

Name: Nishal Sooredoo

Position: Principal Consultant (UK) **Email**: nishal.sooredoo@rhdhv.com

Name: Jason Chiang

Position: Director (Singapore)

Email: jason.chiang@rhdhv.com

Author: Victor Wai, CFA

Position: Consultant (Singapore) **Email**: Victor.Wai@rhdhv.com











https://osc-capstat.ireport.royalhaskoningdhv.com/services/overview/