



AMC Alumni

Global logistics Integration: “I want it all and I want it now”

Master in Maritime and Air Transport
Management Alumni
Get together 30 September 2022

 **C-MAT**
Centre for Maritime & Air Transport Management
University of Antwerp

ITMMA
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MARITIME MANAGEMENT ANTWERP

Alumni Day – 30 September 2022 – © Theo Notteboom

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Opening minds
to impact the world

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Master in Maritime
and Air Transport
Management



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“I want it all and I want it now”

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By Theo Notteboom

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Universiteit Antwerpen

Embark on a voyage of knowledge

Master & postgraduate programmes

Europe's premier supplier of highly specialized academic and practice-based maritime and logistics education with a 'one-stop shopping' approach:

- ~ M.Sc. in Transport and Maritime Management (MTMM)
- ~ M.Sc. in Transport and Maritime Economics (MTME)
- ~ Ph.D. in Transport and Maritime Economics (Ph.D.TME)
- ~ Postgraduate Diploma in Transport and Logistics Management (Pg.Dip.TLM)

Also:

- ~ Short-term & tailor-made programmes
- ~ Publications
- ~ Trend-setting events & conferences
- ~ Research & consultancy

1996-2015
~1000 students

In cooperation with:



Pre-COVID-19

The search for scale via horizontal integration and network effects

Combined gross revenue of **top 5 3PL companies** is larger than that of the other companies in the top 30

Source: based on A&A ranking



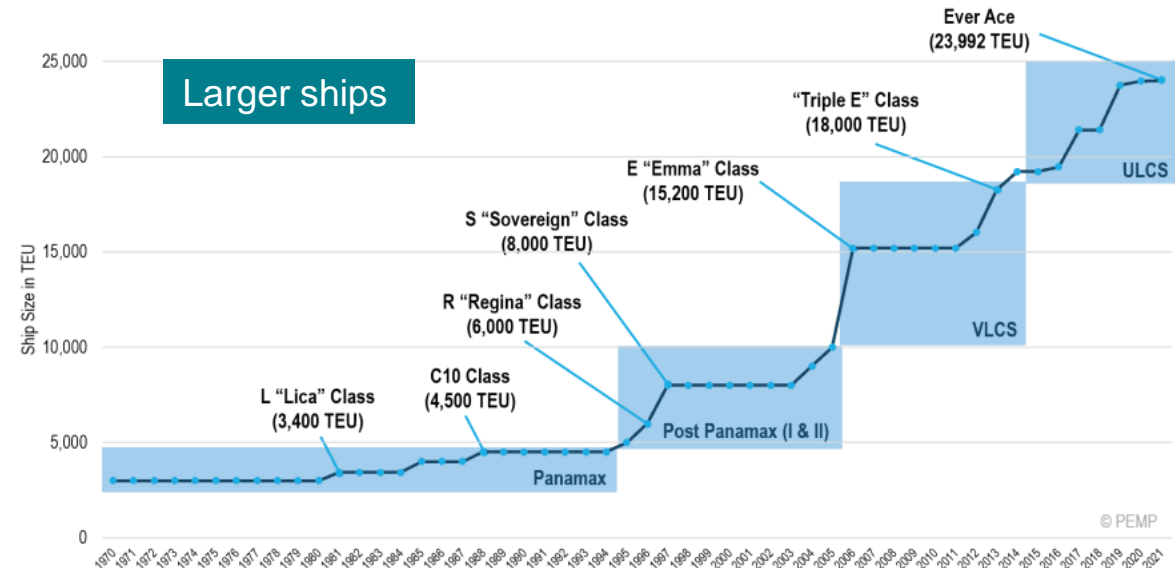
Top 5 container shipping lines control 65% of the global container fleet capacity

Source: Alphaliner



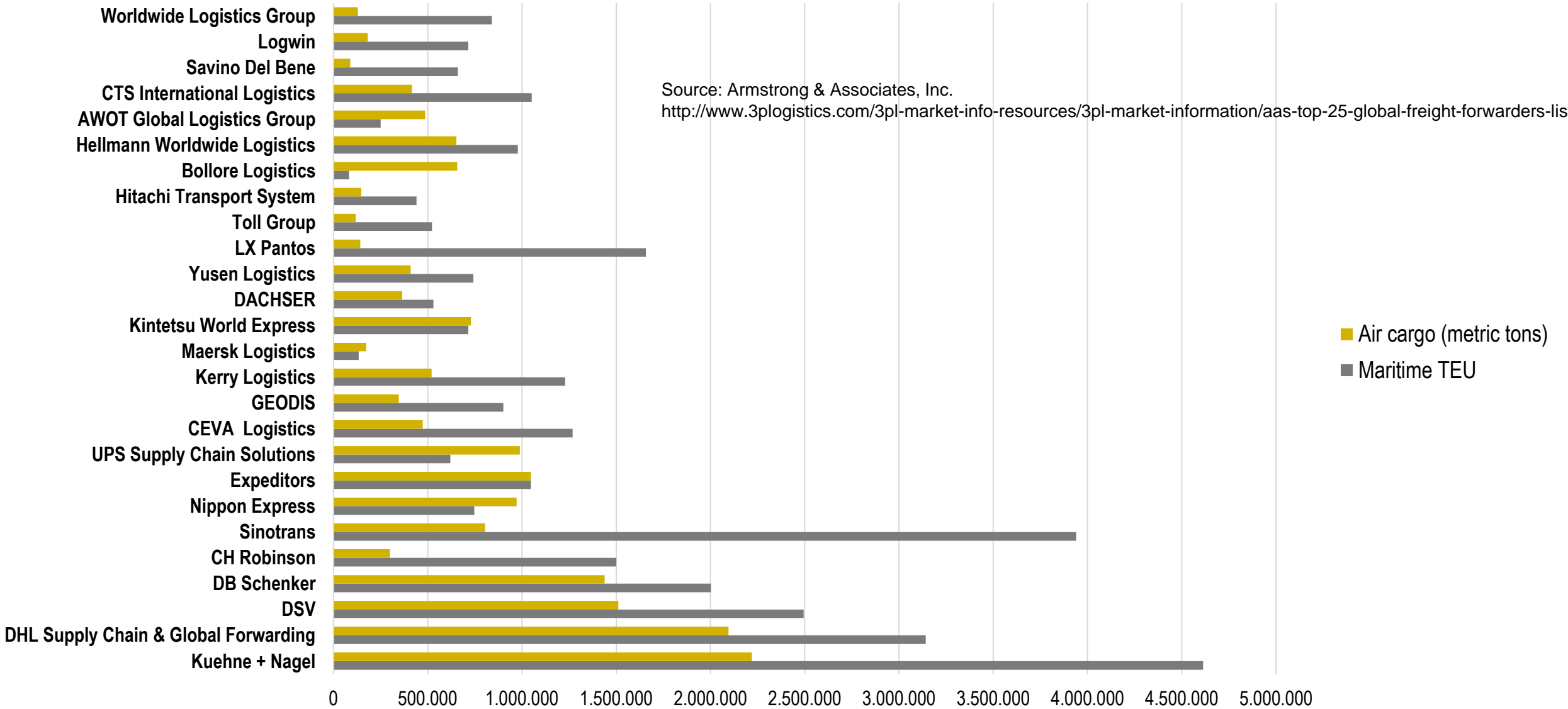
Top 5 global container terminal operators handle about half of the world's terminal throughput on the terminals they are involved in

Source: Drewry



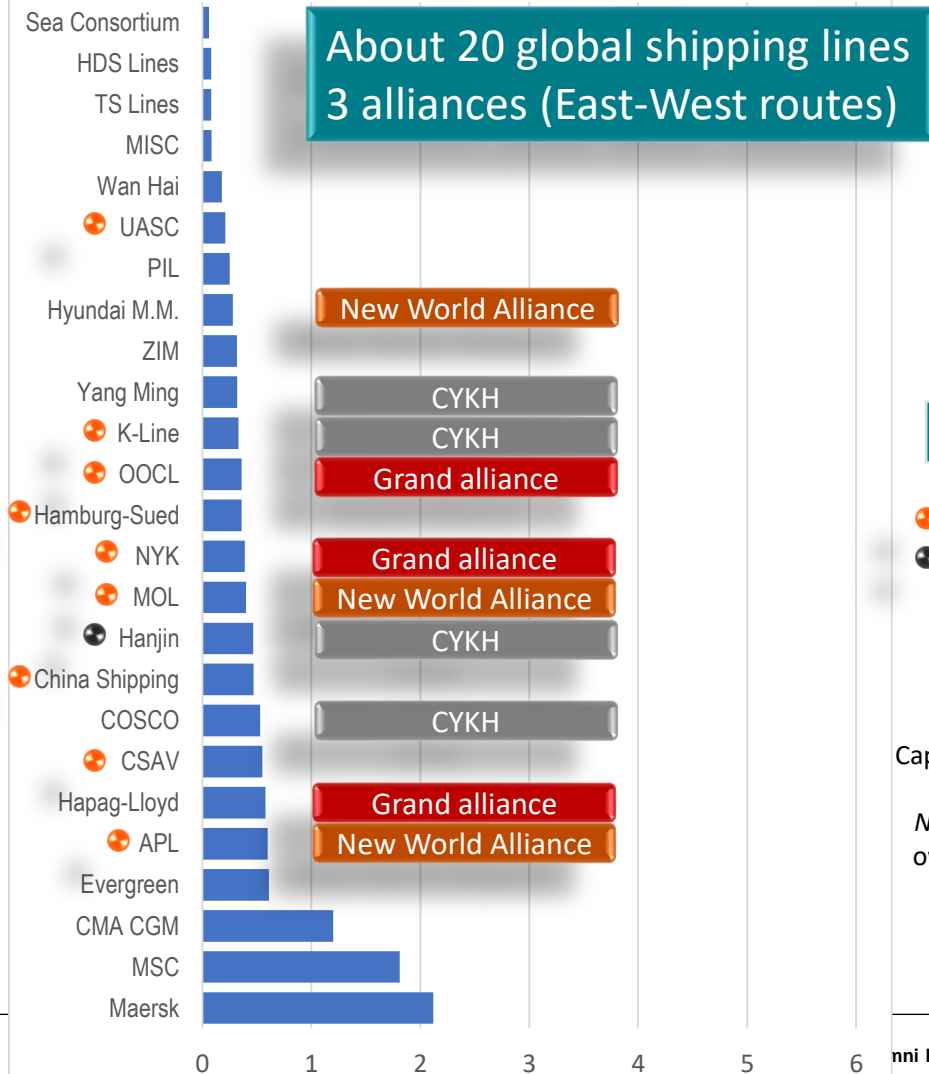
World's Largest Freight Forwarders, 2021

Source: Armstrong & Associates, Inc.
<http://www.3pllogistics.com/3pl-market-info-resources/3pl-market-information/aas-top-25-global-freight-forwarders-list/>



Concentration in Container Shipping: the Impact of the 2014-2017 M&A Wave

Top 25 carriers - 28 September 2010
Fleet capacity in million TEU



About 20 global shipping lines
3 alliances (East-West routes)

New World Alliance

CYKH

CYKH

Grand alliance

Grand alliance

New World Alliance

CYKH

CYKH

Grand alliance

New World Alliance

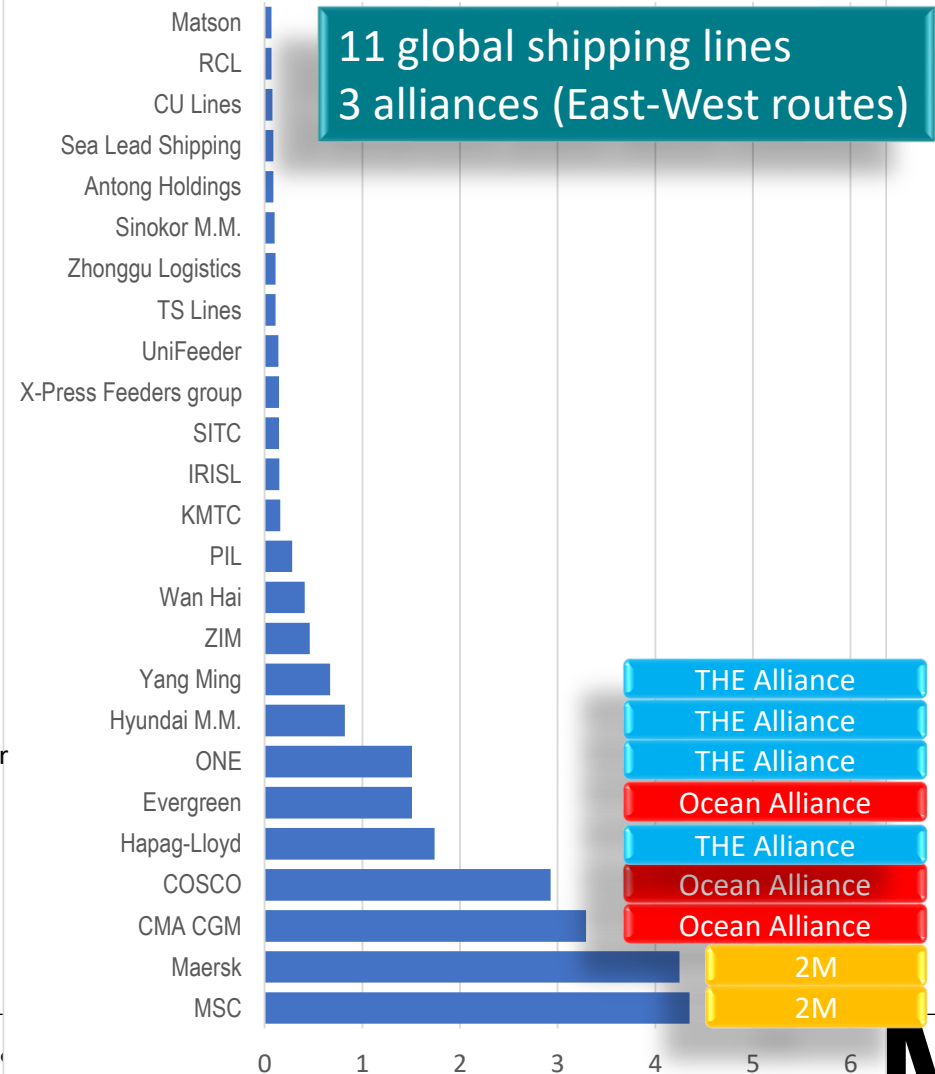


⊕ = merged or acquired
⊖ = bankrupt

Source: own compilation.
Capacity figures from Alphaliner

Note: fleet capacity includes
owned and chartered vessels

Top 25 carriers - 3 May 2022
Fleet capacity in million TEU



11 global shipping lines
3 alliances (East-West routes)

THE Alliance

THE Alliance

THE Alliance

Ocean Alliance

THE Alliance

Ocean Alliance

Ocean Alliance

2M

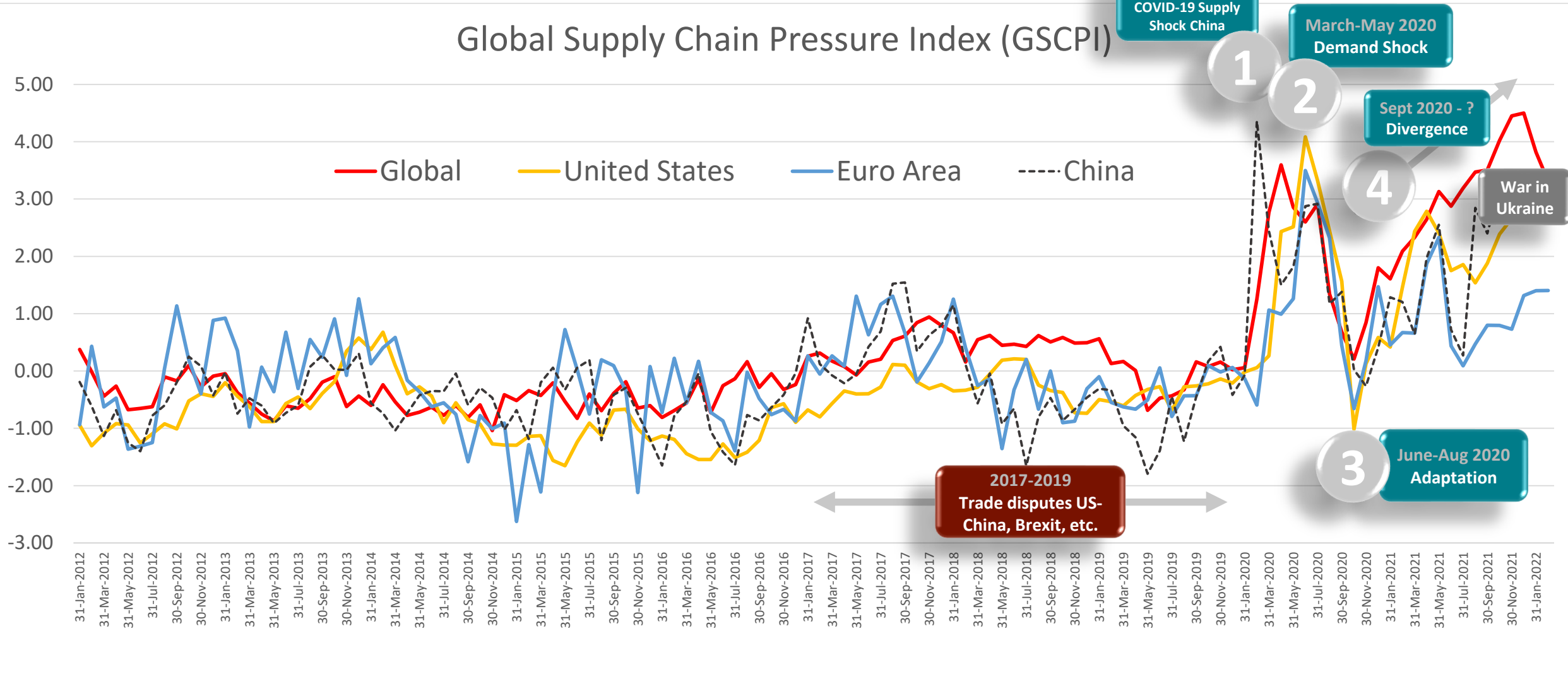
2M



Increased Supply Chain Disruptions

Global supply chain pressure index – 2012 to 2022

Standard deviations from average values

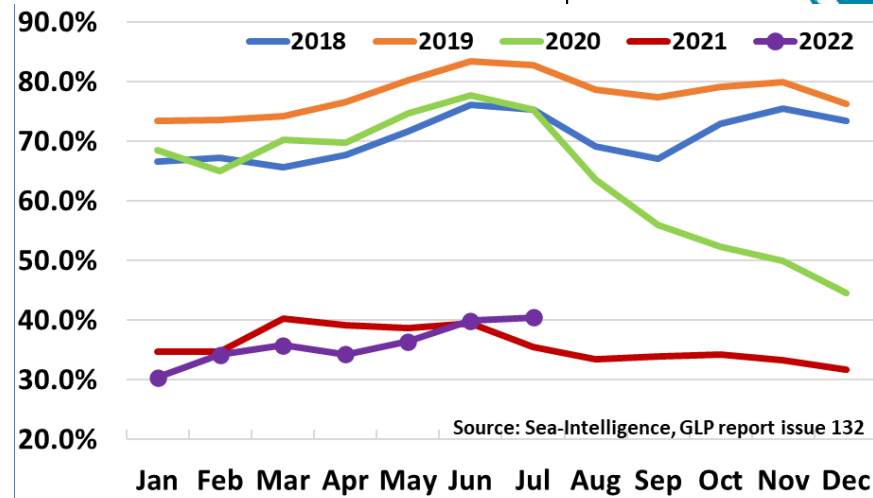


Source: own compilation based on data Di Giovanni et al. (2022)



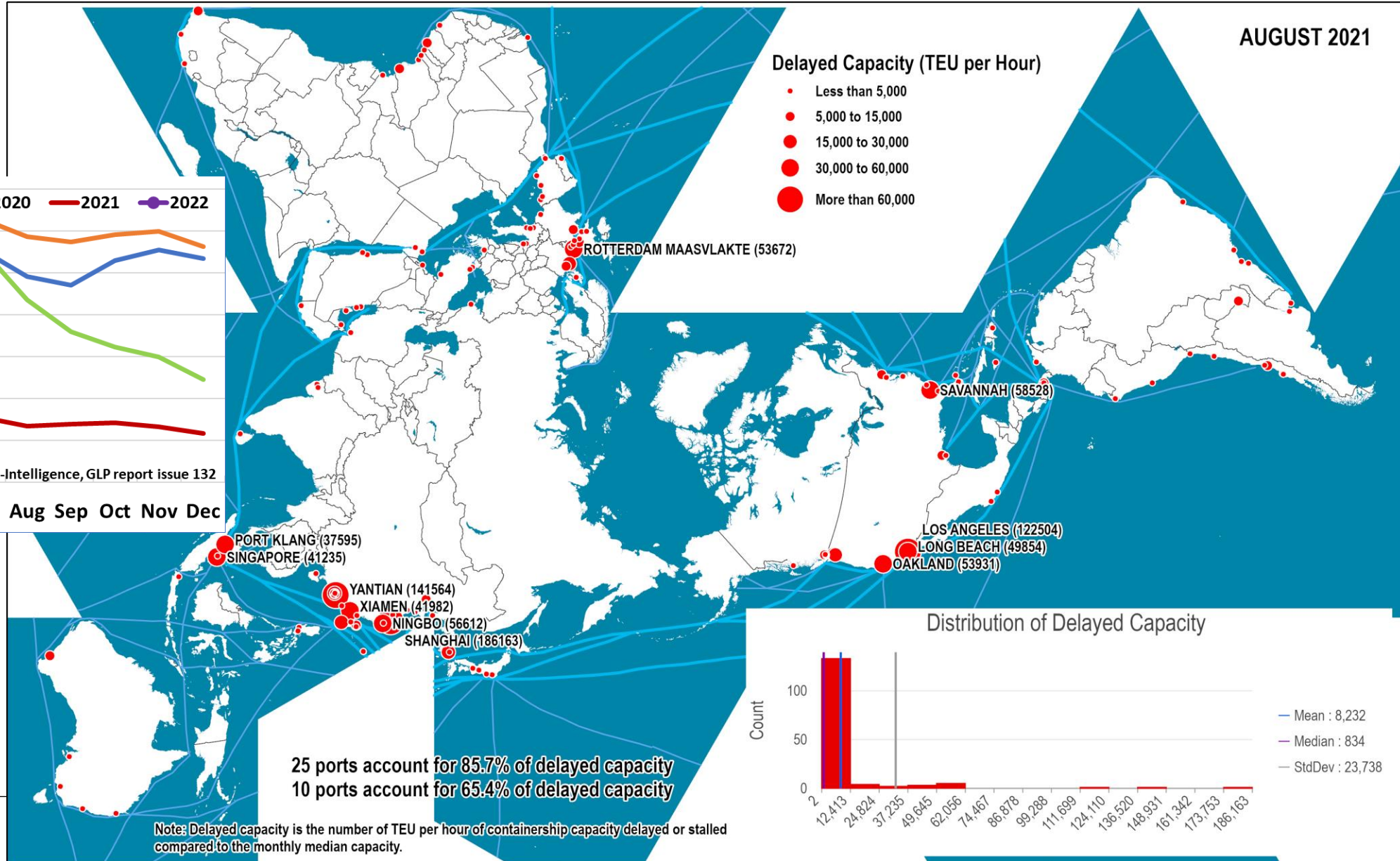
Containership Delayed Capacity in TEU per Hour at Port, August 2021

Global schedule reliability



Source: Sea-Intelligence, GLP report issue 132

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

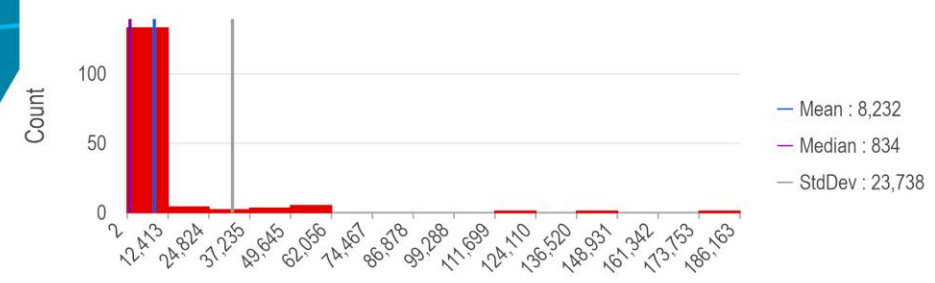


AUGUST 2021

Delayed Capacity (TEU per Hour)

- Less than 5,000
- 5,000 to 15,000
- 15,000 to 30,000
- 30,000 to 60,000
- More than 60,000

Distribution of Delayed Capacity



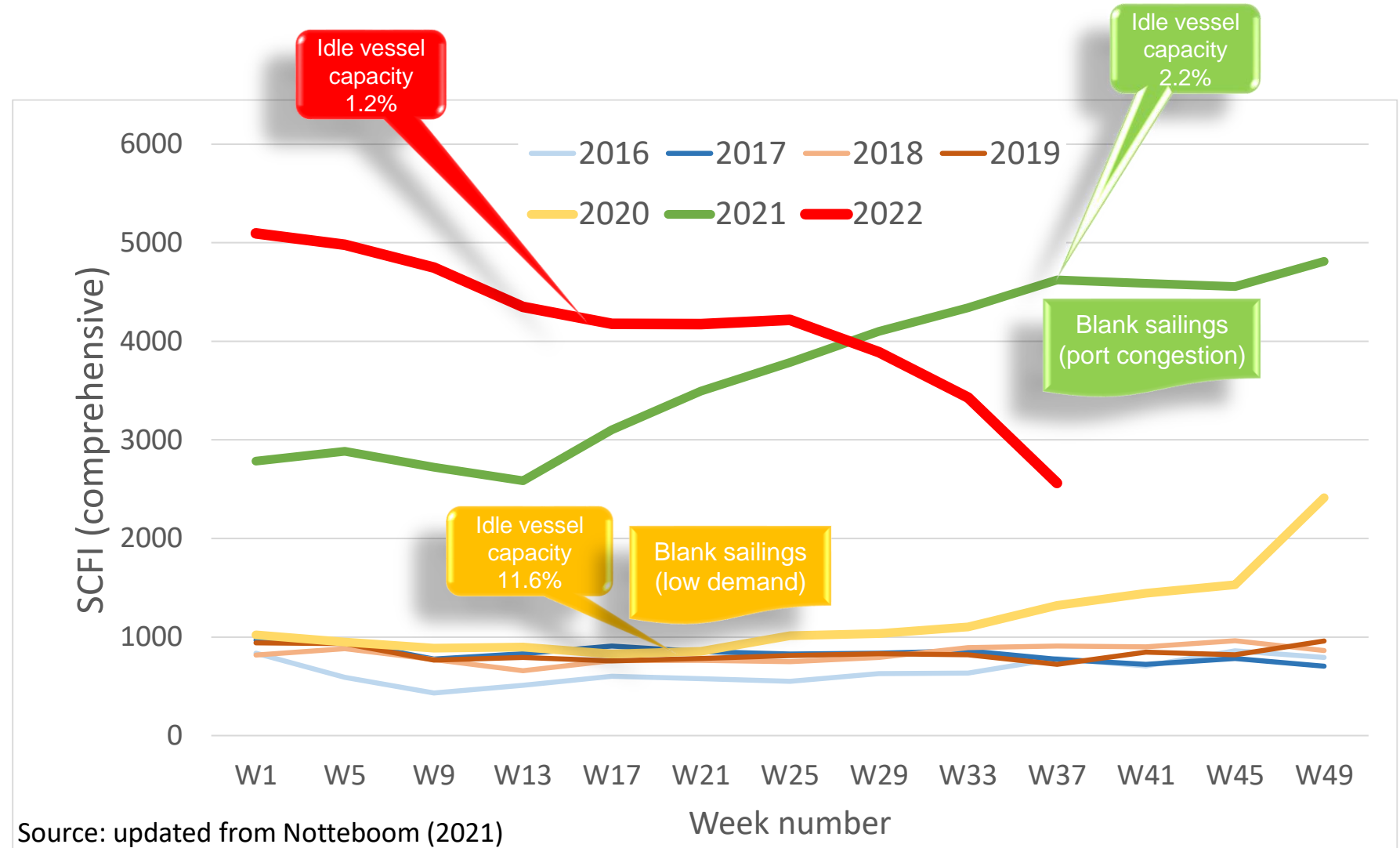
Will rates fall back to the low average levels between 2016-19?

- + Weaker demand
- + Wave of new vessels to enter market by late 2023
- Willingness to pay of customers
- Consolidation within the industry will not be reversed
- Blanked sailings as an instrument of capacity management
- Cost of decarbonization shipping

Supply/demand balance remains key.

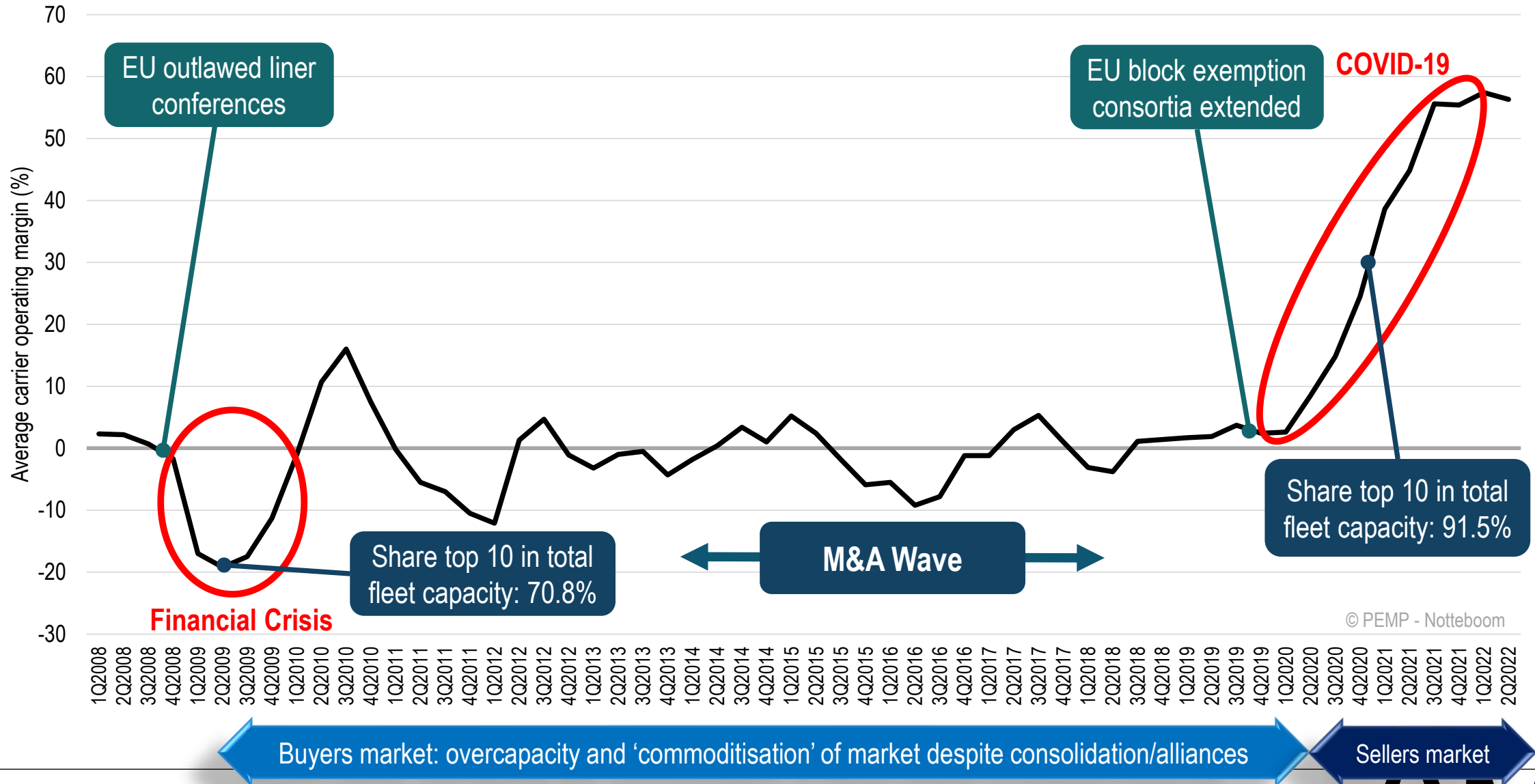
Peak Spot Freight Rates

Shanghai Containerized Freight Index (SCFI, export China) W1 2016 to W17 2022



COVID-19: Carriers Much Better off than during Financial Crisis

Average operating margin of main container carriers by quarter (1Q 2008 to 2Q 2022)



© PEMP - Notteboom



Vertical Integration Carriers

- **Past:** Waves in logistics integration (invest vs. divest) but with continued interest in terminals
- **Present:** COVID-19 and deep pockets support transition from carrier to logistics integrator, although large differences among carriers remain

Company	Shipping activity	Terminal activity
AP Moller	Maersk Line	APM Terminals
China Cosco Group	COSCO and OOCL	COSCO Shipping Ports
NYK Group	Ocean Network Express-ONE (together with MOL and K-Line)	
MSC	MSC	Terminal Investment Limited (TiL) (*)
CMA CGM	CMA CGM	Terminal Link (51%) en CMA Terminals (100%) (**)



(*) Fully owned by MSC till 2013, stake brought to 60% in May 2019. Other shareholders are Global Infrastructure Partners (GIP) and GIC Private Limited, a Singaporean Sovereign Wealth Fund; (**) Terminals controlled by CMA Terminals were transferred to Terminal Link in late 2019

Vertical Integration Carriers

Cases of Maersk, MSC and CMA CGM



MAERSK

Transformation from a diversified conglomerate to a focused and integrated global logistics company

- Jan 2021: Damco's Air and LCL integrated into the Maersk brand.
- Investments in e-commerce business, e.g. HUUB (fashion industry); B2C Europe Holding (NL); Visible SCM (US); Pilot Freight Services (US, Feb 2022)
- Nov 2021: take-over Senator International (air freight forwarding) + new plane orders
- Digital platforms such as Tradelens (with IBM), Traxens, supply chain platform NeoNav (cf. Unilever deal), etc..
- Planned investments in storage facilities



Moving beyond ad hoc opportunity grasping?

- Logistics company Medlog including subsidiaries such as intermodal operator Medway
- 2019: Increase in shareholding of TiL
- Dec 2021: USD 6.43 billion offer for take-over of Bollore Africa Logistics (20,800 employees + 16 container terminal concessions, including in Ivory Coast, Ghana, Nigeria and Gabon + three rail concessions in the region).
- Jan 2022: take-over of Brazilian company Log-In Logistica
- Jan 2022: MSC and Lufthansa joint bid to take a controlling stake in ITA Airways (successor of Alitalia). Sept 2022: bid unsuccessful.
- Sept 2022: announcement of start MSC Air Cargo in early 2023



The CEVA Logistics game changer

- CMA CGM intermodal services (CC Log through partners)
- Early 2019: controlling stake in CEVA Logistics; March 2019: Share in CEVA Logistics from 50.6% to 89%
- CMA CGM reduced terminal assets to support Ceva Logistics acquisition (CMA Terminals => Terminal Link)
- Sept 2020: 30% stake in French airline company Groupe Dubreuil Aero
- Nov 2021: Order of 4 air freighters for CMA CGM Air Cargo
- Dec 2021: Majority stake in Ingram Micro's Commerce & Lifecycle Services (CLS) of US to boost e-commerce expertise
- Feb 2022: preliminary agreement to acquire a 51% stake in the Colis Privé Group (e-commerce services & last-mile logistics)

Vertical Integration Terminal Operators

From local port operators to supply chain solutions provider



**GLOBAL PORT OPERATOR
2005 - 2017**

**SUPPLY CHAIN SOLUTIONS
PROVIDER 2018 - PRESENT**

2005-2006

2018-Present

CSX World Terminals and The Peninsular & Oriental Steam Navigation Company acquired
Global network and market position increased

Dubai Maritime City and Drydocks World (UAE) acquisitions

Created investment platform with NIIF to invest upto USD 3bn in ports, logistics and related sectors in India

2013-2014

Opening of London Gateway (UK) deep sea port and logistics park

Acquisition of Continental Warehousing Corporation (India)

Acquisition of Unifeeder



Opened Jebel Ali Terminal 3 (UAE), one of the largest semi-automated facilities in the world

Acquisition of Topaz Energy and Marine Limited, a leading international marine logistics services and solutions company

2015-2017

Economics Zones World FZE (EZW) acquired
Consolidated stake in Pusan Newport (South Korea) with 66% ownership

Unifeeder acquire 77% stake Feedertech Group

Unifeeder acquire Transworld Feeders FZCO & Avana Logistek Limited (India)

DP World joins Dubai's World Logistics Passport initiative

Consolidated DP World Santos (Brazil) with 100% ownership

Acquisition of syncreon, global logistics provider

Offer to acquire Imperial Logistics (acquisition expected to close in Q4 2021 or Q1 2022)

Mission: "To be the port operator of choice in the world's gateway hubs, renowned for best-in-class services and successful partnerships." *Source: PSA International*

Mission: "We are the leading provider of smart logistics solutions, enabling the flow of trade across the globe. We think ahead, anticipate change and deploy industry-leading technology to create the smartest, most efficient and innovative trade solutions, while ensuring a positive and sustainable impact on economies, societies and our planet." *Source: DP World*

Large 3PL's



At home, anywhere in the world



Threat of New Entrants?

German Retailer Lidl Starts Shipping Line to Buy Containerships



Large retailers

MONEY / ECONOMY

Walmart, Target and More Charter Private Ships To Combat Great Depression-Level Supply Chain Issues



Large retailers

Forwarder resurrects the Ellerman brand to create new British liner

Sam Chambers · February 2, 2022

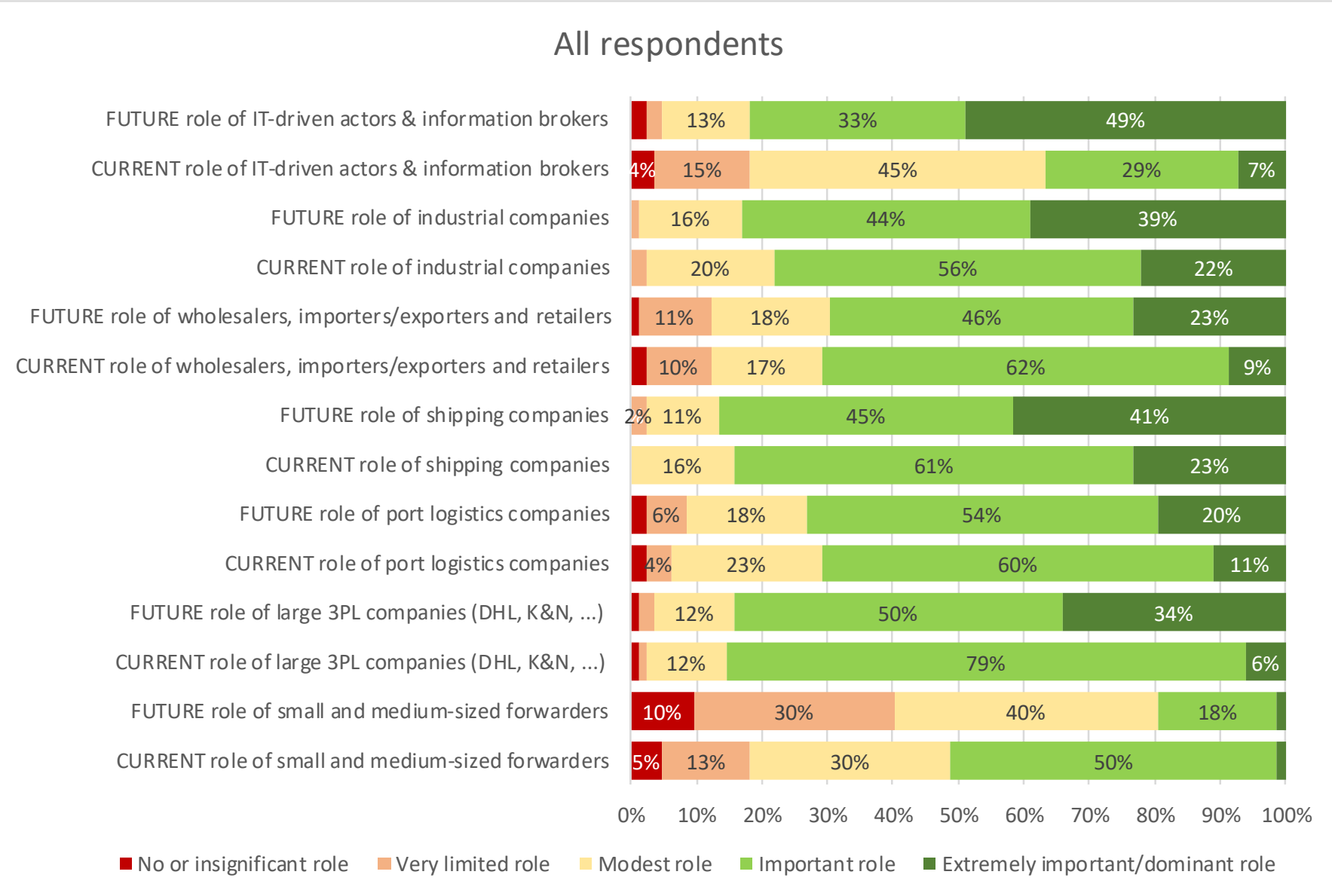
4 3,408 1 minute read



Container analysts at Alphaliner have provided details on a new British shipping line. UK-based forwarder Uniserve, which had chartered some ships last year, has gone a step further, creating a dedicated liner subsidiary, Ellerman City Liners.

ING Study on the Future of Port Logistics (Notteboom and Neyens, 2017)

How will the power relations within the supply chains change in the coming 10 years?



Shipping companies, industrial companies and large 3PL companies and IT-driven actors seen as players with the strongest role in the supply chains in the FUTURE.

The role of IT-driven actors is expected to grow the most.

=> Importance of digitalisation to build and secure competitive advantage



Vertical integration: “I want it all and I want it now” frenzy?



Key considerations in vertical integration

1. Strategic intent of vertical integration

- Add-on to existing core business OR change of core business (transform)
- Core strategy OR ad hoc opportunity grasping

Example A.P. Moller – Maersk: transformation from a diversified conglomerate to a focused and integrated global logistics company

FROM

Maersk
Line

APM
Terminals

Damco

Oil
business

TO

Integrated global logistics company

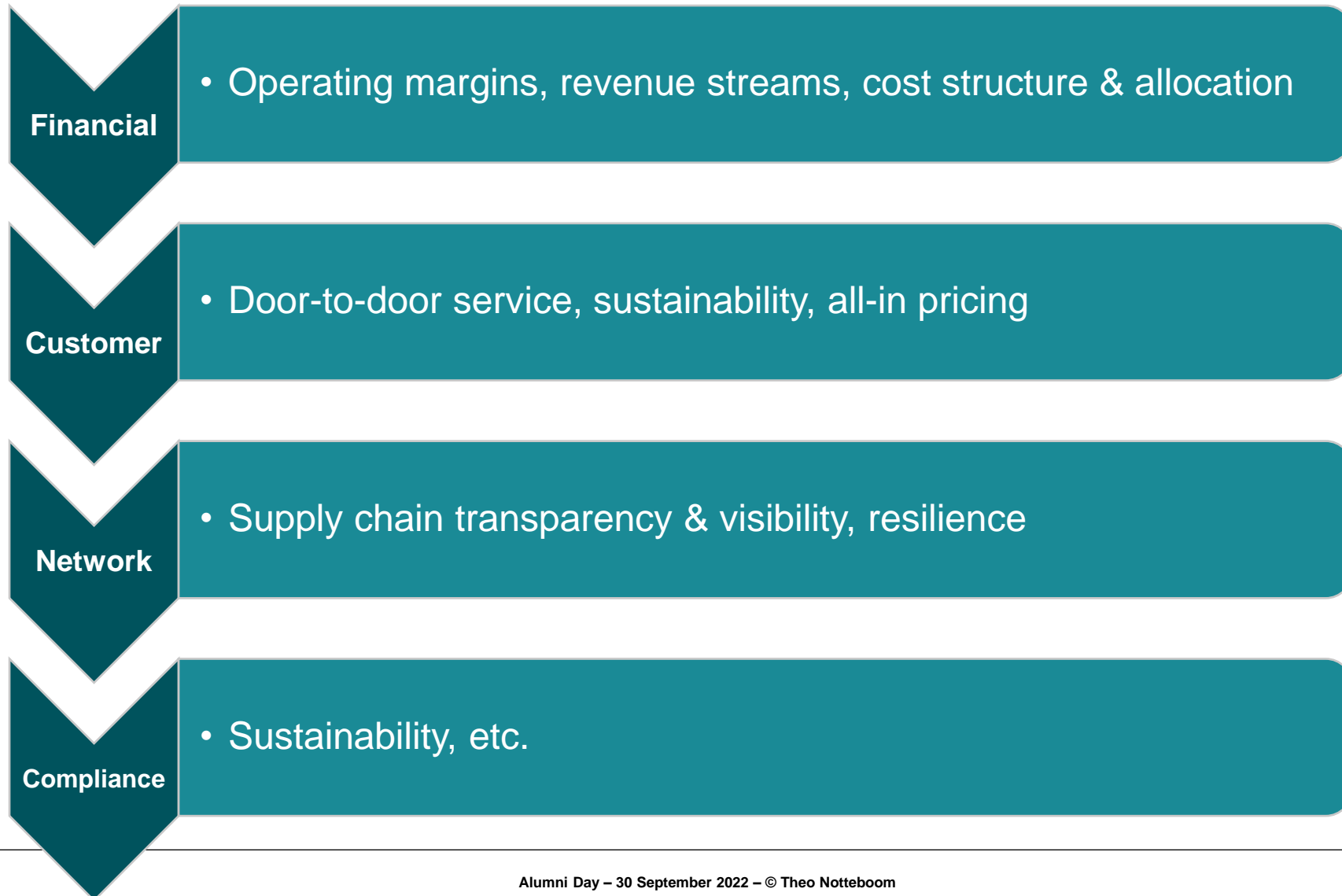
End-to-end digitally enabled transport and logistics services by integrating land-based logistics and ocean business.

Financial & operational synergies between ocean business and terminals business for lower cost, productivity and asset utilisation

Build competitive advantage through technology. Building new digital platforms, which enable integrated offerings, standardisation & automation

Key considerations in vertical integration

2. Contribution/objectives of vertical integration



Key considerations in vertical integration

2. Contribution/objectives of vertical integration

Cannibalizing the customer base?

16 DECEMBER 2021

CLECAT calls for fair competition and a level playing field in the maritime logistics supply chain

Maersk and Hamburg Sud have announced that they will cease to provide services to certain freight forwarders from 1 January 2022 through named account contracts. This refusal to deal with a part of their customers base will apply to logistics service providers in order to increase the carriers' direct business with shippers who would otherwise prefer to use freight forwarders to take care of their logistics supply chain needs.

Geneva, 30 June 2022

The global voice of freight logistics



FIATA calls for balanced and fair maritime market system

The global voice of freight logistics addresses threat to global supply chain in maritime sector

Container shipping customers and service suppliers call for immediate start to review of competition rules



Press Release

Container shipping customers and service suppliers call for immediate start to review of competition rules

European and international business organisations are urging the European Commission to start an immediate review of its competition regulations for container shipping.

Brussels, 22 July 2022 - Ten trade organisations, representing the owners and forwarders of cargo, port terminal operators and other parts of the supply chain dependent on container shipping, are demanding an immediate start to the review of European Union's Consortia Block Exemption Regulation for the container shipping industry.

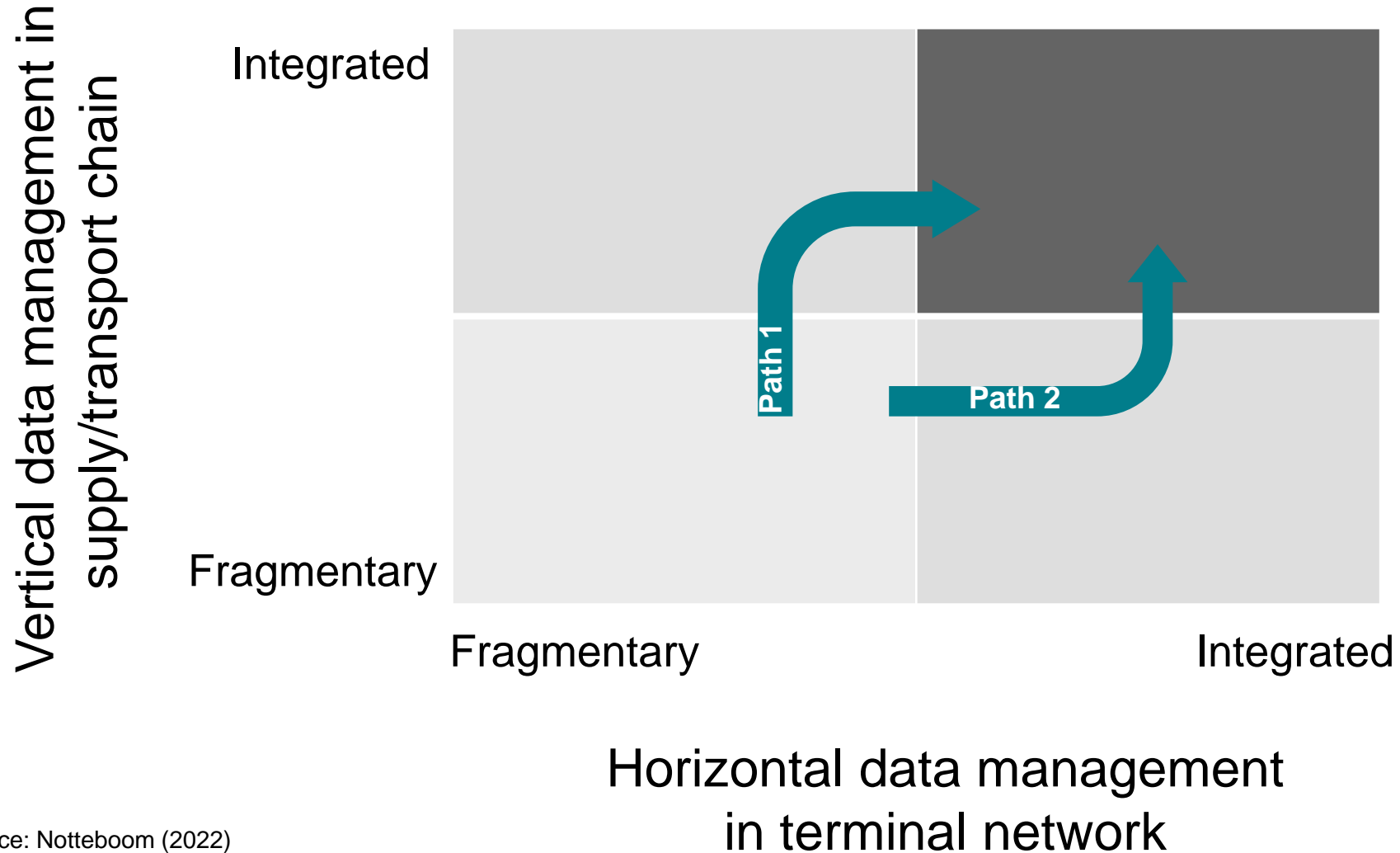
Key considerations in vertical integration

3. Governance of vertical integration

- Separate business unit/subsidiary OR full integration in corporate structure at all levels
- Asset ownership OR partnerships with asset owners
- Transparency/visibility in chains and data management

Key considerations in vertical integration

3. Governance of vertical integration: Data management in a vertical integration setting



Source: Notteboom (2022)

Concluding Remarks

Logistics integration is happening...

1. More difficult to classify or tag companies as carrier, forwarder, etc.
2. Higher demands for digital transformation solutions

But...

1. High-profile logistics integration moves receive lots of media coverage
2. Remains to be seen whether the outcomes will be favorable
3. Logistics integration does not eliminate the need for smaller and medium-sized specialized niche players
4. Regulatory authorities are expected to set boundaries
5. Risk of a cannibalization of part of the customer base.

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Professor Dr. Theo NOTTEBOOM

theo.notteboom@uantwerpen.be

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