

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

**REVIEW  
OF MARITIME  
TRANSPORT**

**2022**

Navigating  
stormy waters



## Seminar on the Future of Maritime Supply Chains in Southeast Asia, 28 February 2023

- Key performance indicators
- Consolidation and competition



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## Chapter 4

# Key performance indicators for ports and the shipping fleet

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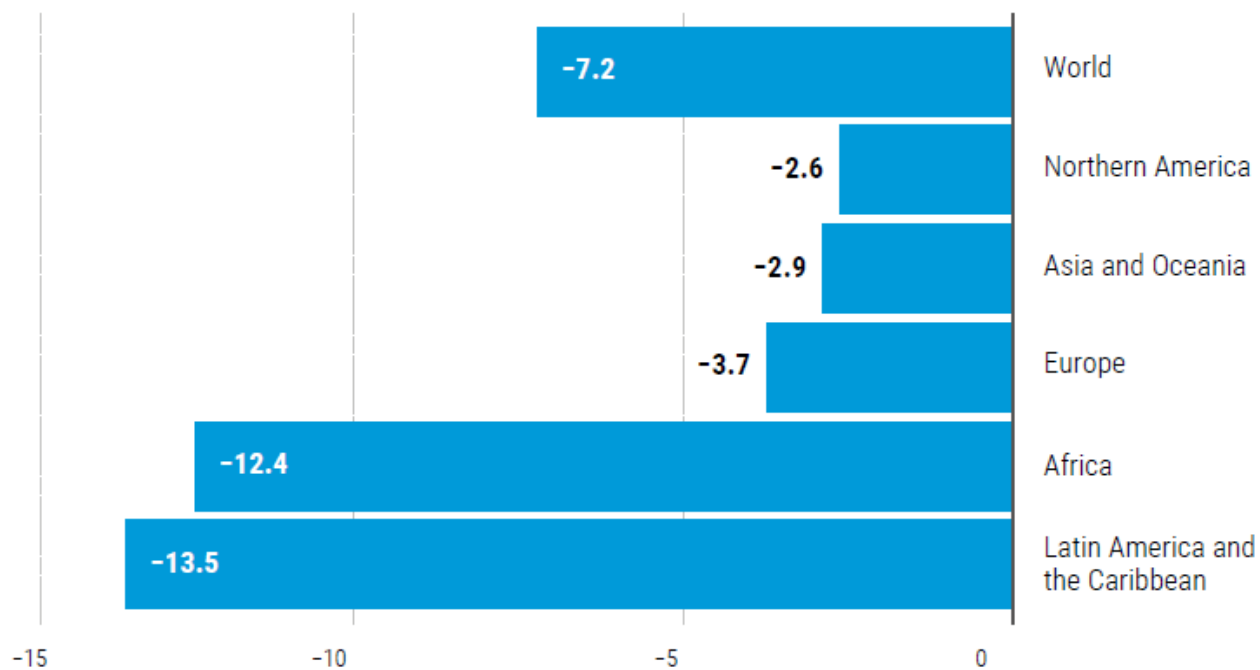


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# Congestion impacted port calls and time spent in port

Figure 4.19 Changes in direct calls by region, from 2020Q3 to 2022Q2, per cent



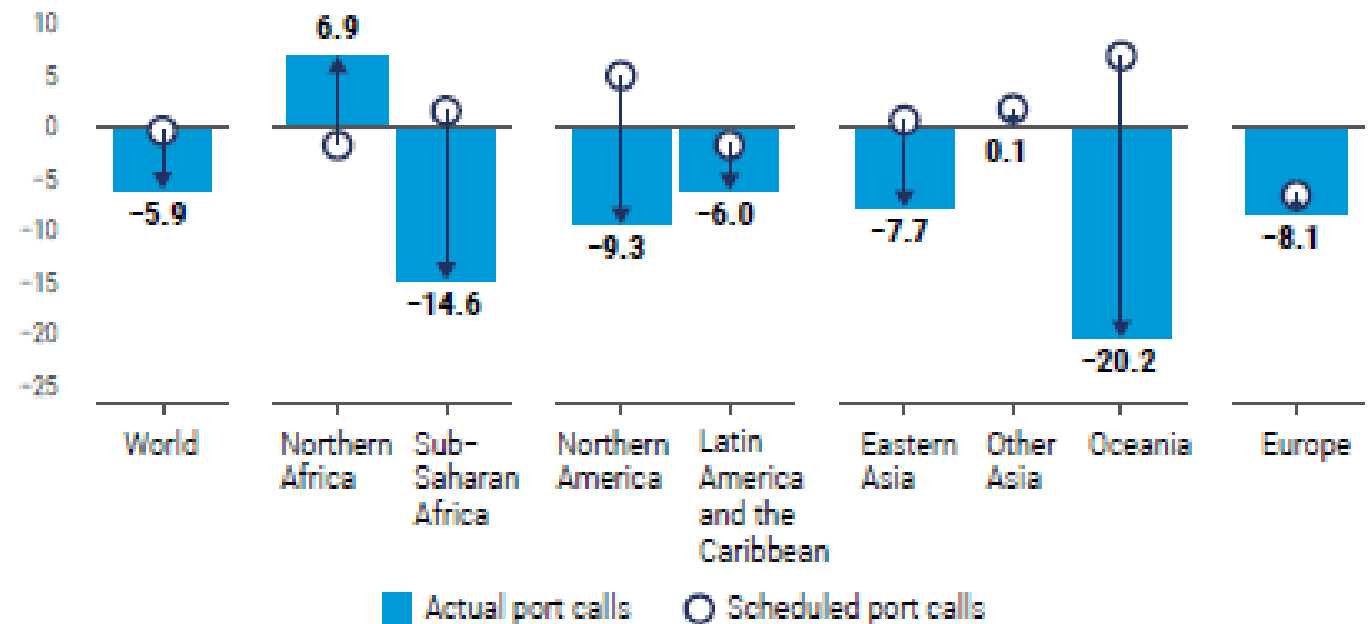
Source: UNCTAD, based on data provided by MDS Transmodal.

2021 Vessel type	Median time in port (days)	Median time in port, annual change (%)
Container ships	0.80	13.7
Dry breakbulk carriers	1.17	2.1
Dry bulk carriers	2.11	2.3
LNG carriers	1.13	0.9
LPG carriers	1.03	-1.5
Liquid bulk carriers	0.98	1.3
<b>All ships</b>	<b>1.05</b>	<b>4.8</b>

Source: UNCTAD based on data provided by MarineTraffic

# Less reliable services

Figure 4.5 Changes in actual and scheduled port calls of container ships from 2019 to 2021, per cent



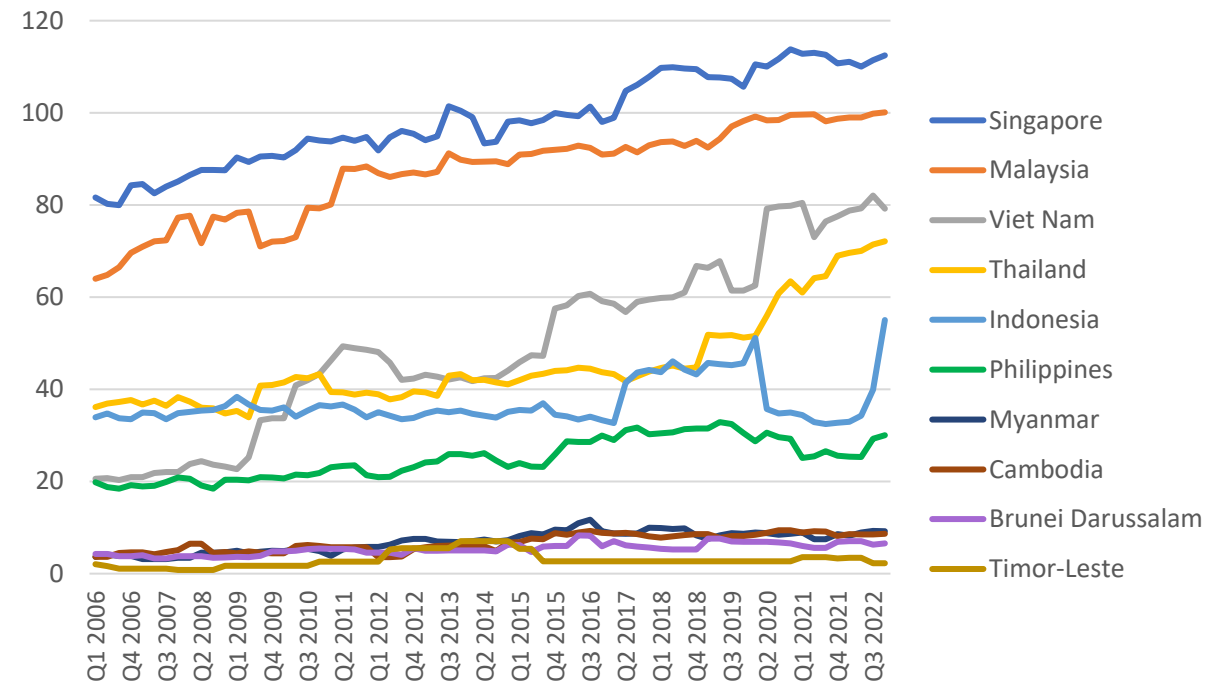
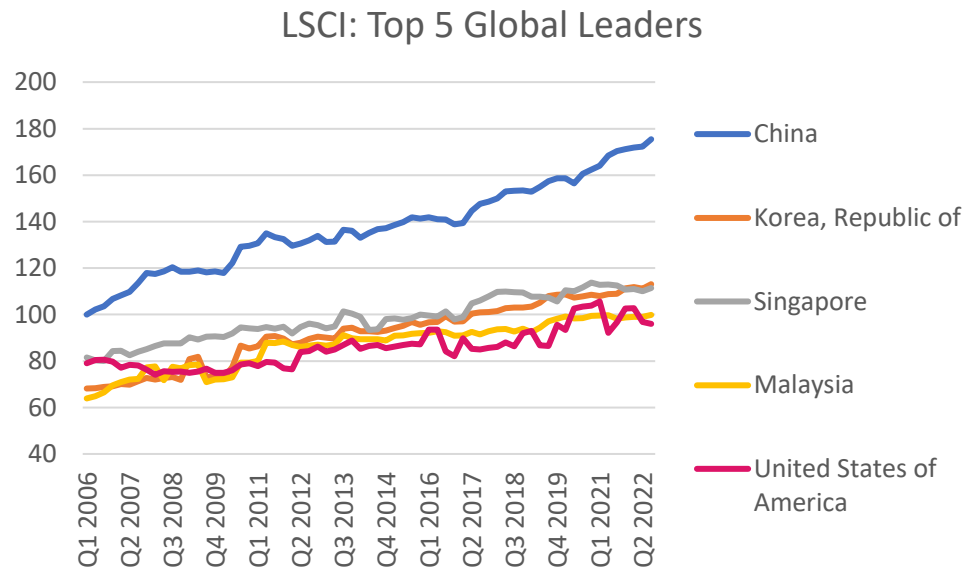
## Thailand indicators: *Port calls*

YEAR	Number of arrivals		Median time in ports (days)		AVG cargo carrying capacity per vessel		MAX carrying capacity per vessel	
	2020	2021	2020	2021	2020	2021	2020	2021
All ships	28'480	29'505	0.67	0.72	11'431 dwt	11'599 dwt	321'225 dwt	321'300 dwt
Liquid bulk carriers	12'363	12'551	0.62	0.65	11'389 dwt	11'478 dwt	321'225 dwt	321'300 dwt
LPG carriers	2'728	3'027	0.47	0.48	2'578 dwt	2'480 dwt	58'677 dwt	54'936 dwt
LNG carriers	77	89	1.14	1.15	92'423 dwt	92'643 dwt	121'957 dwt	130'102 dwt
Dry bulk carriers	737	818	2.90	3.36	41'667 dwt	41'209 dwt	206'331 dwt	208'283 dwt
Dry breakbulk carriers	2'317	2'351	1.63	2.22	9'635 dwt	10'347 dwt	70'500 dwt	70'417 dwt
Ro/Ro ships	754	844	..	..	11'844 dwt	12'350 dwt	32'441 dwt	27'178 dwt
Container ships	8'107	8'321	0.67	0.75	2'177 TEU	2'059 TEU	23'656 TEU	19'630 TEU
Passenger ships	1'397	1'504	..	..	..	..	..	..

Source of data: UNCTADstat

- Number of port calls, annual
- Port call performance (Time spent in ports, vessel age & size), annual

# Country LSCI leaders: Top 5 global and Southeast Asia

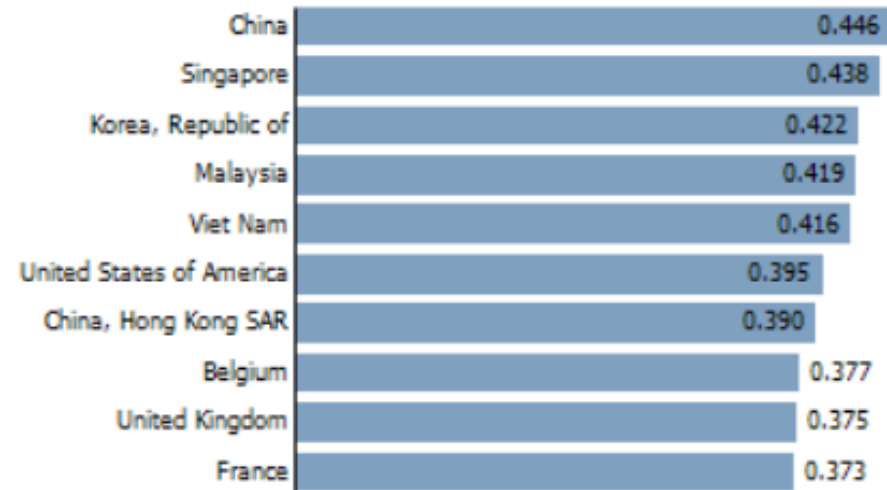


Source of data: [Liner shipping connectivity index \(country LSCI\) in UNCTADstat](#)

# Indicators indicators: *Bilateral and Port LSCI*

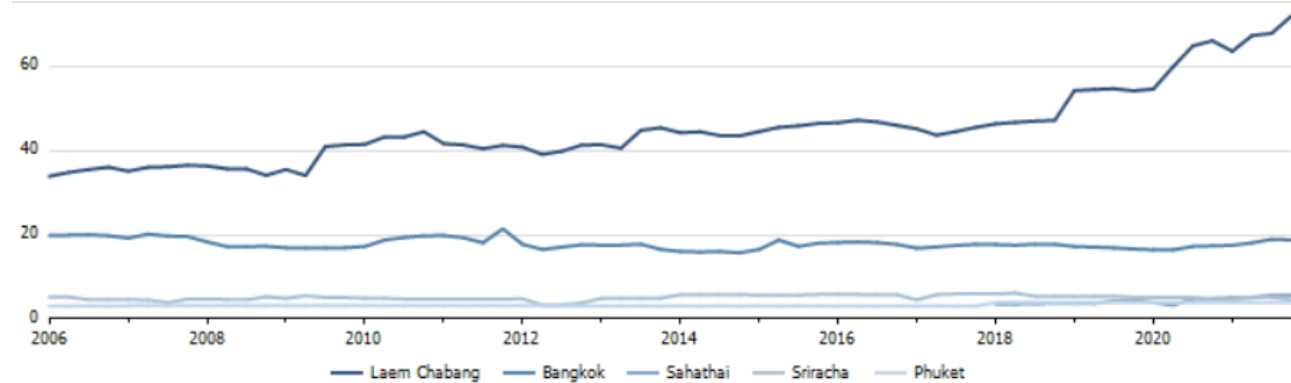
## Bilateral connectivity index - Top 10 partners in Q1 2021<sup>11</sup>

*Can only take values between 0 (minimum) and 1 (maximum)*



## Port liner shipping connectivity index - Top 5 ports in 2021<sup>11</sup>

*Maximum 2006=100 for China, Hong Kong SAR*



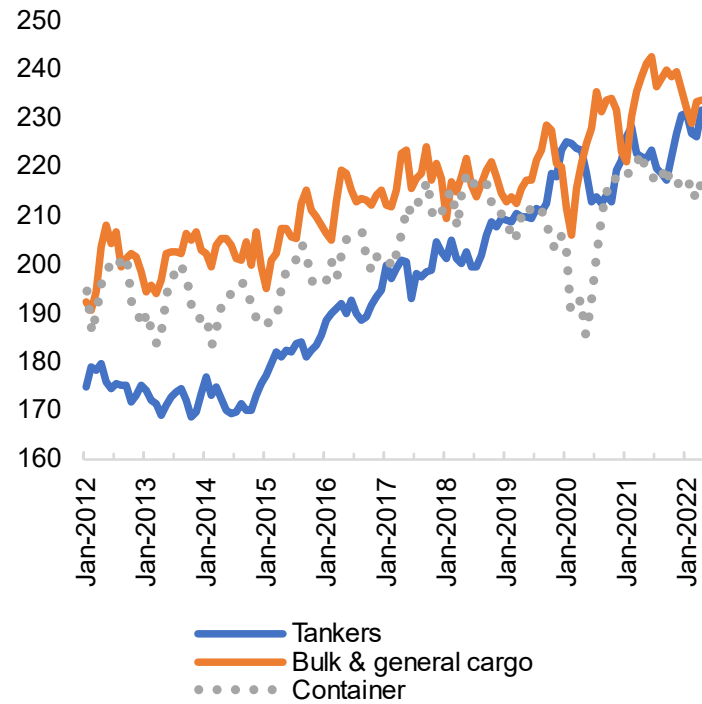
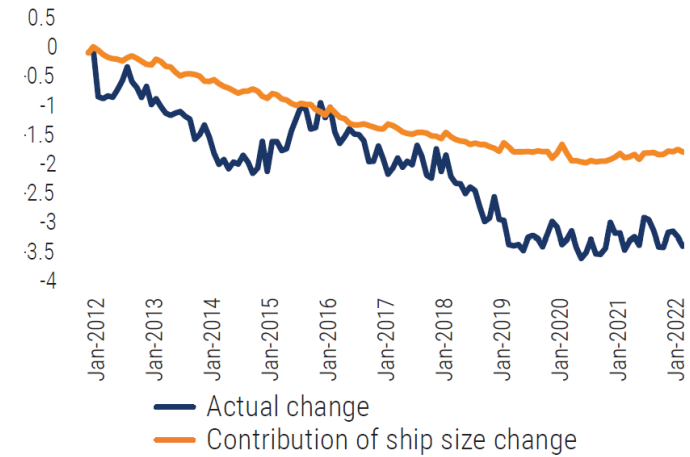


Figure 4.34 Cumulative change from January 2012 in CO<sub>2</sub> emission intensity, and contribution of ship size change of container ships, grams per ton-mile



Between 2020 and 2021 total emissions increased by 4.7%



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Source: UNCTAD, based on data provided by Marine Benchmark.



## Chapter 6

# Consolidation and competition in container shipping

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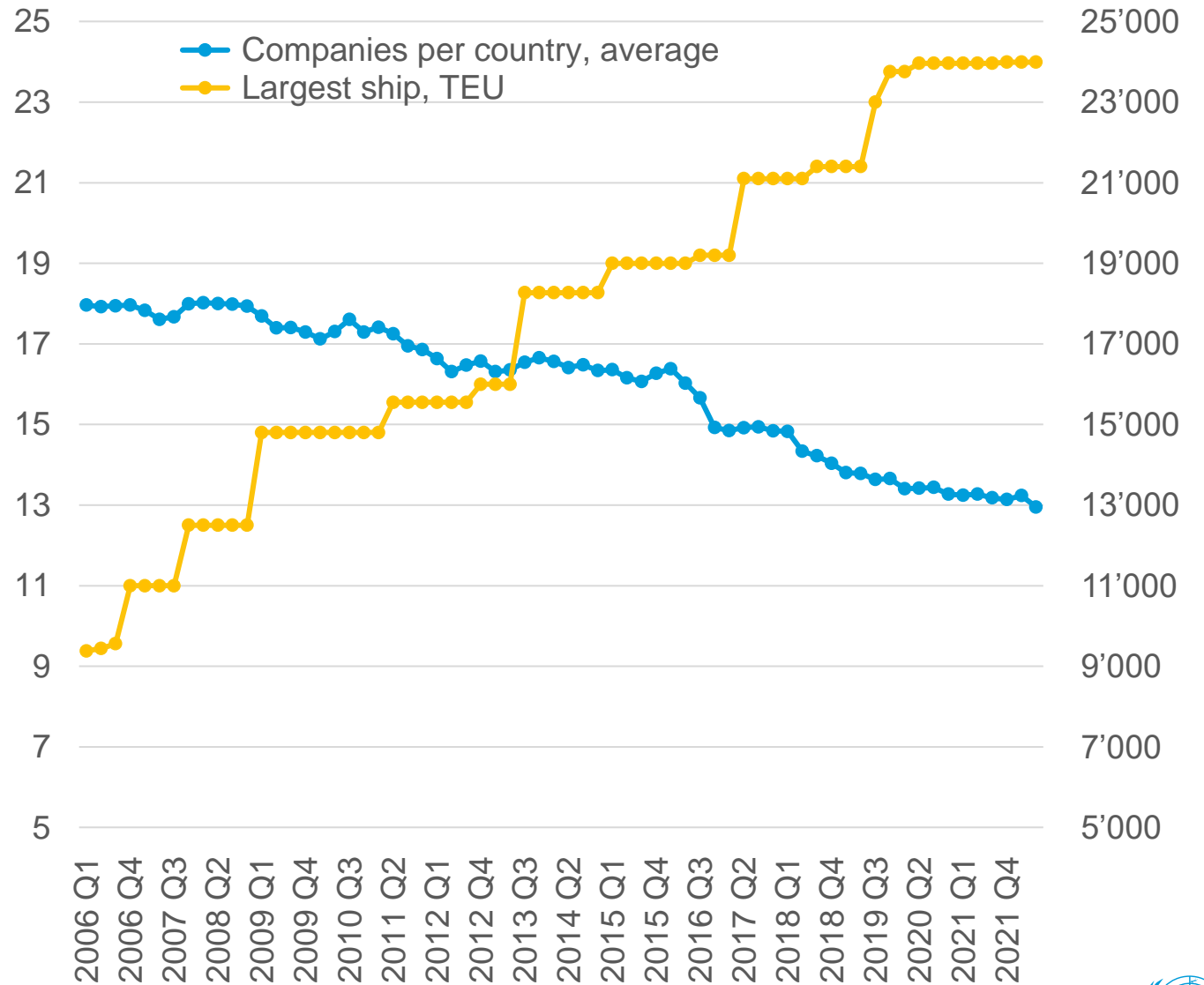
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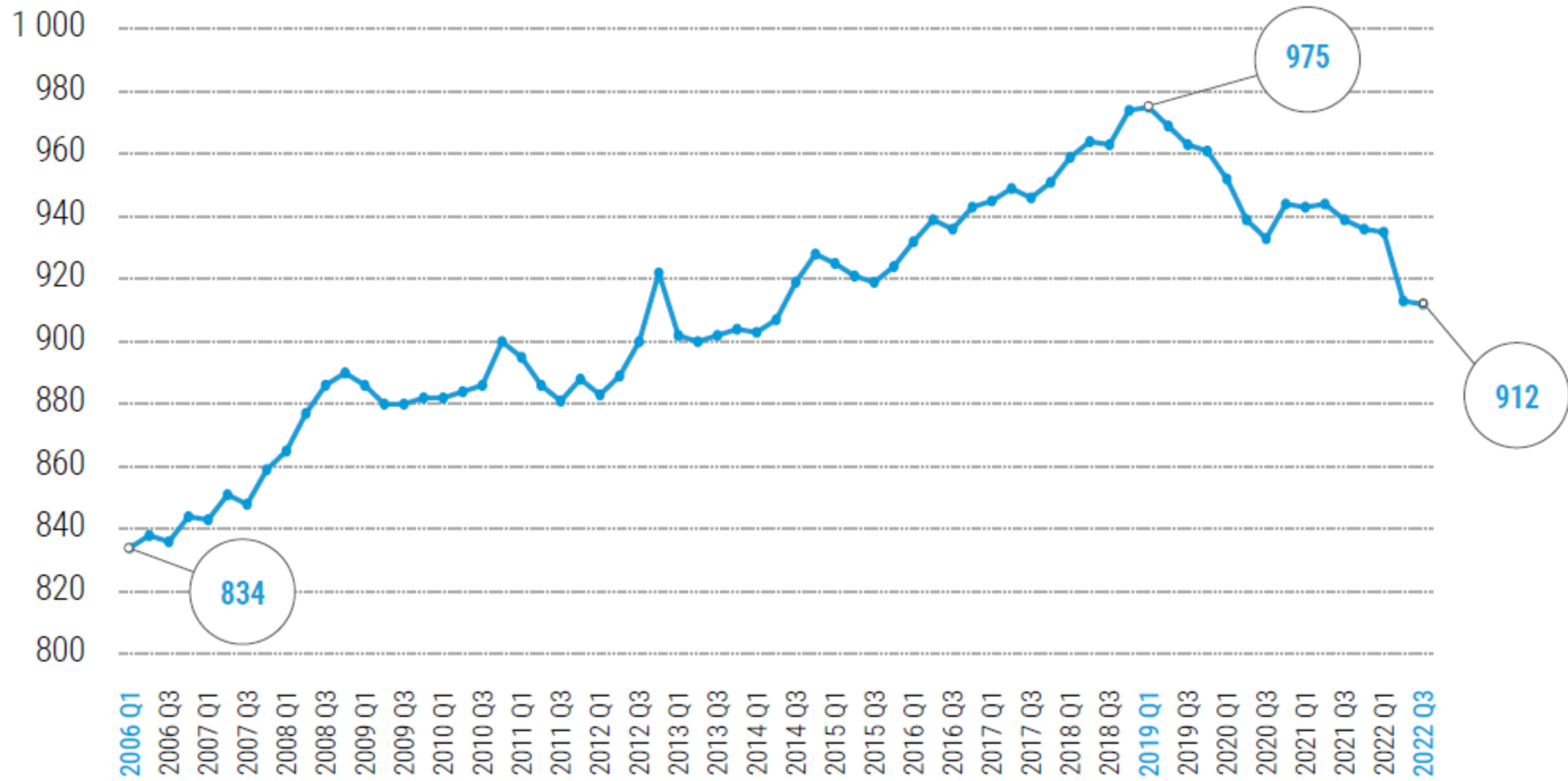
▼ **Number of companies providing services per country**

▲ **Size of largest container ship**



Source: UNCTAD, based on data provided by MDS Transmodal.

**Figure 6.5** Number of container ports served by regular liner shipping services, quarterly, 2006–2022



Source: UNCTAD, based on data provided by MDS Transmodal, <https://www.mdst.co.uk>.

# Preparing for future challenges

1. Tackle supply-side constraints
  - Infrastructure + services
2. Move to a clean energy and low-emissions future
  - Investment predictability
  - Awareness raising
  - Harness opportunities
3. Ensure competitive markets
  - Safeguard shippers' interests
  - Monitor anti-competitive behavior
  - Strengthen national capacity
  - Strengthen cross-border cooperation

**Thank you!**

## Access our data:

### [Container port throughput](#)

Liner shipping connectivity index:

- [Country LSCI](#) / [Bilateral LSCI](#) / [Port LSCI](#)

Number of port calls:

- [Annual](#) / [semi-annual](#)

Port call performance (Time spent in ports, vessel age & size):

- [Annual](#) / [semi-annual](#)

### [National maritime country profiles \(Thailand\)](#)