



WORLD PORTS TRACKER

EDITION 3
(Quarter 3, 2022)

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WHAT IS THE IAPH WORLD PORTS TRACKER?

We are pleased to present the third edition of the **World Ports Tracker**, an IAPH initiative to monitor and evaluate critical developments in the global port industry as they evolve. The IAPH World Ports Tracker provides ports with a timely understanding of the challenges that emerge regionally and globally.

The tracker relies on a combination of two sources: survey-based results on cargo and passenger markets in ports and container port performance data. The first edition was released in May 2022 introducing this new data tool, which elaborated on the non-survey part of the tracker exercise based on four container port metrics. The second edition was released in July 2022 and presented the analysis of the first survey data, which had been collected in June 2022. This third edition of the IAPH World Ports Tracker combines survey-based results with container port performance data for the first time.

The **survey part** presents the analysis of data collected in November 2022. The IAPH World Ports Tracker survey includes questions revealing the trends in the container market, the other cargo markets (breakbulk and bulk), and the passengers/cruise business. Some of these questions ask about the current status of the ports, while other questions reflect the short-term expectations of port managers for the next quarter or the next twelve months. Along with a question on staff availability, these questions are answered by ports during every quarter of the year. More general issues and strategic and operational considerations for seaports, such as land use, and port-related investments, are reported at the beginning of each year. The survey was sent out in late October 2022 to all IAPH members. The closing date for survey responses was 11 November 2022. A total of 78 valid answers were received, which is slightly below the 96 replies received for the June 2022 survey. North Europe, the Mediterranean and South East Asia & Oceania are the leading regions with 14, 13, and 12 responding ports respectively, providing half of all replies. The Sub-Saharan African port region and Latin America & the Caribbean offer the least responses in this edition (**Figure 1**).

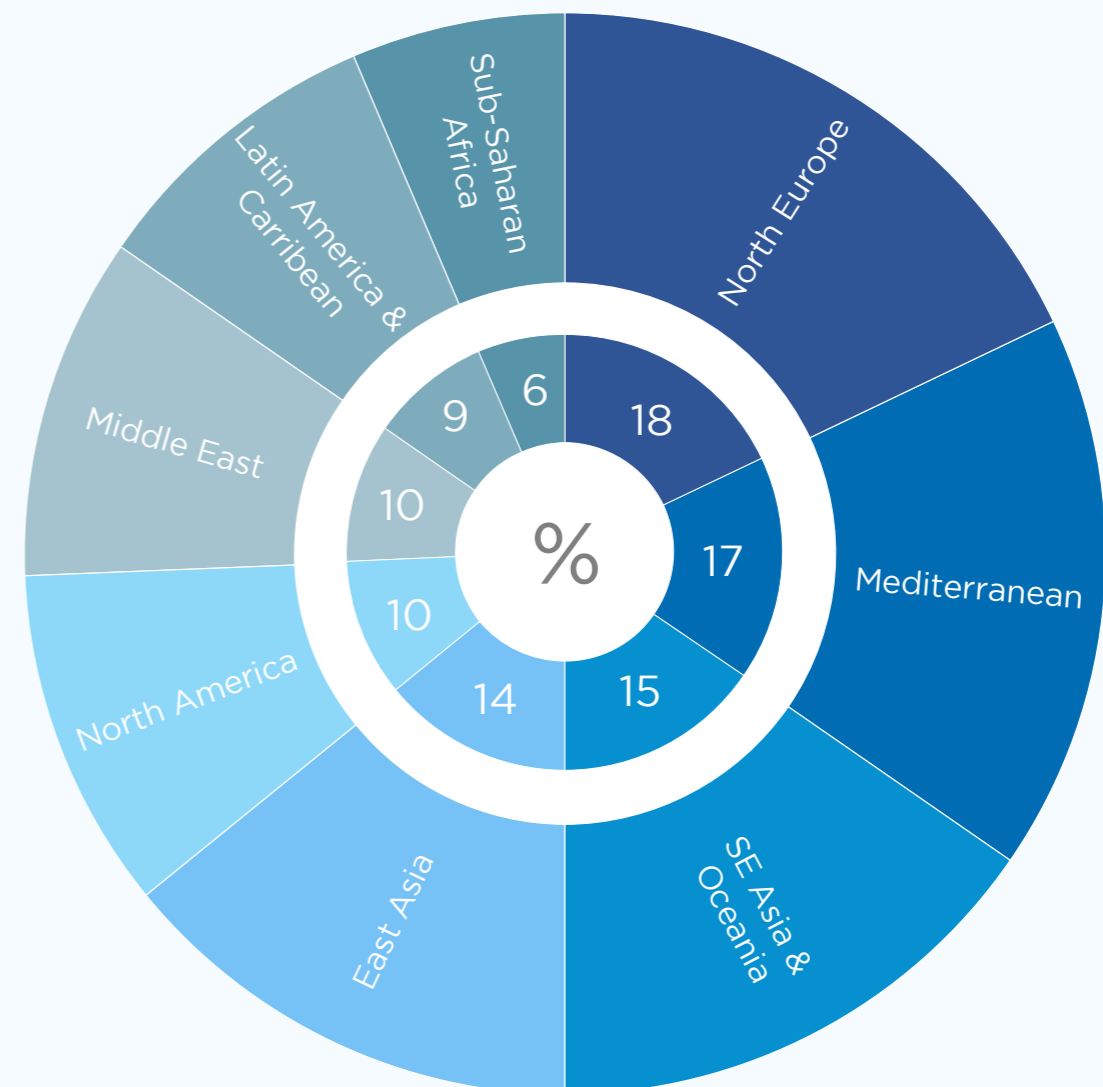
The **non-survey part of the IAPH World Ports Tracker** analyses quarterly container port statistics based on S&P Global Port Performance Program data. These statistics focus on four container port metrics, i.e., the number of vessel calls, the evolution of vessel size, the evolution of call size (number of TEUs handled per call), and port moves per hour, aggregated per region. This data report covers the period from Q1 of 2019 to Q3 of 2022, thus covering the last pre-pandemic year as well as COVID-19 years of 2020 and 2021. The data analysis is based on an index-based evolution (Q1 2019 = 100) in nine different port regions. This report presents the evolution of the respective indexes on a year-on-year basis per region - comparing the calls in Q3 2022 with those of the same quarter of the year before, thereby avoiding any seasonality bias. This part of the analysis also discusses the trends per region, focusing on both the changes that happened in the most recent quarters of 2022 and the level of volatility that might have occurred in the three years under examination.

The results are analyzed and displayed in an aggregated manner per region and for the world as a whole. In view of **analysing regional differences**, each port is assigned to one of the following nine port regions: North America (the U.S. and Canada); Central and South America; East Asia; North Europe; the Med; Sub-Saharan Africa; the Middle East and Central Asia (including Arabian Gulf and Indian Subcontinent); and, South East Asia and Oceania (including New Zealand and Pacific Islands). All information obtained is treated confidentially and only aggregated data are published. No reference is made to individual ports.

Revealing the most recent trends, the IAPH World Port Tracker enables ports to better understand the available prospects and the challenges they might need to address. Via quarterly updates, the IAPH World Ports Tracker will guide ports and stakeholders in their efforts to improve services and develop their strategies. In addition, a summary of the report features in the IAPH *Ports & Harbors* magazine, with the full report circulated to the IAPH membership.



Figure 1
Replies to the Survey (in %)

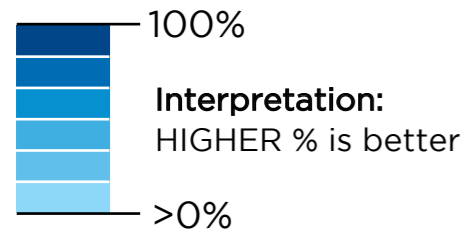


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THE RESULTS AT A GLANCE

Before engaging in a more detailed analysis, the overall results of the survey and non-survey parts of the IAPH World Ports Tracker are summarized in dashboard-like tables.

*Dashboards I to IV present the **IAPH World Ports Tracker survey and non-survey results**. The survey-based exercise covers the trends in world ports as of the beginning of the fourth quarter of 2022 (Q3 2022). The latest results for the world are also compared with the world results of the June 2022 survey (Q2 2022). The dashboards also report on the survey results at a regional level, using five responding ports as a critical threshold. You can find comprehensive data and a more detailed regional analysis of responses to the survey questions for cargo and passenger markets later in this report.*



	WORLD Q3 2022	WORLD Q2 2022	Central and South America	East Asia	Mediterranean	Middle East Central Asia	North America	North Europe	Southeast Asia Oceania	Sub-Saharan Africa
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Dashboard I Trends in World Cargo Ports (November 2022)

Number of vessel calls:
Percentage of ports with >2% growth Q3 2022 vs. Q3 2021

Container vessel	41%	47%	50%	25%	67%	0%	0%	33%	60%	-
Bulk carrier	43%	46%	43%	22%	17%	33%	14%	69%	64%	80%
Tanker and gas carrier	42%	44%	60%	13%	23%	50%	25%	50%	60%	80%
Other cargo vessels	43%	46%	33%	33%	23%	38%	29%	64%	55%	60%

Note: empty cells = less than 5 respondents

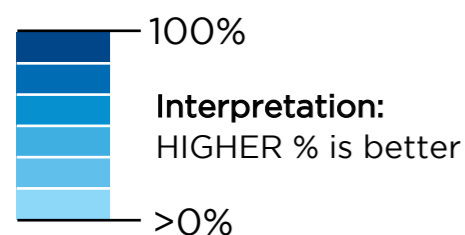
Traffic volume expectations:
Percentage of ports with >2% growth expectation in the next 12 months

Containers (TEU)	52%	59%	50%	40%	50%	71%	-	43%	70%	60%
Dry bulk (tonnes)	52%	49%	57%	11%	50%	80%	33%	46%	82%	60%
Liquid bulk (tonnes)	52%	46%	40%	0%	54%	-	40%	58%	73%	80%
Other cargo (tonnes)	47%	45%	33%	11%	62%	75%	29%	50%	36%	80%

Note: empty cells = less than 5 respondents

Dashboard I summarises the trends in the **number of vessel calls in the different cargo markets.**

Compared to the June survey, there are slightly fewer cargo ports reporting year-on-year growth in the number of vessel calls across all vessel types, i.e., 41 to 43% of respondents in Q3 2022 compared to 44%-47% in Q2 2022. However, except for container traffic, ports around the world are, on average, slightly more optimistic than three months ago about the expected traffic evolution in the next twelve months: 52% of ports expect a growth of at least 2% in the container, dry bulk, and liquid bulk throughput, while this figure amounts to 47% for all other cargo.



Region	Africa	Latin America	Mediterranean	Middle East & India	North America	North East Asia	Northern Europe	Oceania	South East Asia
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Evolution:
(year-on-year) in container ports (index based evolution / Q3 2022 vs Q3 2021)

Number of Vessel Calls	22%	-3%	-4%	6%	-4%	10%	-13%	1%	11%
Share of Containerships of > 8,500 TEU capacity	-12%	7%	5%	0%	0%	2%	13%	28%	-5%
Call Size	-9%	2%	-1%	-3%	10%	-10%	11%	-4%	-10%
Port Moves Per Hour	16%	-4%	-6%	-8%	-5%	9%	-3%	-13%	5%

Evolution:
(Long-term) in container ports (index based evolution / Q3 2022 vs Q1 2019)

Number of Vessel Calls	6%	-12%	-2%	-4%	-20%	-17%	-25%	-13%	-19%
Share of Containerships of > 8,500 TEU capacity	-25%	18%	3%	-7%	29%	15%	3%	-	18%
Call Size	7%	28%	6%	1%	41%	27%	26%	23%	25%
Port Moves Per Hour	-5%	6%	0%	8%	-35%	4%	-9%	-32%	1%

Note: In Oceania the size of such calls is very small, thus the index is highly volatile to any occurring changes

Dashboard II

Trends in Container Ports (November 2022)

Dashboard II summarises the **non-survey part of the IAPH World Ports Tracker** using index-based changes in container ports per region between Q3 2021 and Q3 2022 for all four indicators. The index-based evolution of the vessel calls per region reveals that in Q3 2022 and on a year-on-year basis, three regions show double-digit growth in the number of container vessel arrivals compared with the calls of Q3 2021, i.e., Africa, North East Asia, and South East Asia. In all other parts of the world, container vessel calls saw only minor changes in Q3 2022. The strongest declines are observed in Northern Europe (-13%), the Mediterranean (-3.8%) and North America (-3.7%). Taking a longer-term perspective, vessel calls are down compared to Q1 2019 in all regions except for Africa (+5.5%). Northern Europe (-24.9%), North America (-20.2%), and South East Asia (-19%) record the steepest declines in container vessel arrivals compared to the pre-COVID-19 period.

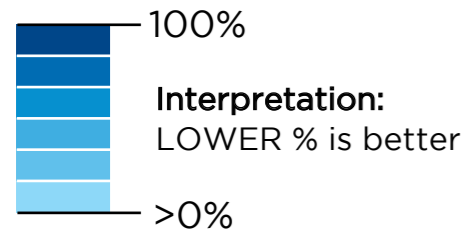
Between Q3 2021 and Q3 2022, the share of container ships of > 8,500 TEU capacity calling in Oceania increased by a hefty 28%, although absolute vessel numbers remain relatively small. A strong increase in this share was also recorded in North Europe (+12.7%). Only two regions recorded a decline in the share of ,8,500+ TEU vessels: Africa (-11.7%) and South East Asia (-5.2%). Oceania went from only 1.8% for 8,500+ TEU vessels of all container vessel arrivals in Q1 2019 to 10.9% in Q3 2022. Double-digit growth was observed in North America, Latin America, South East Asia and North-East Asia. In the past three years, the share of 8,500+ TEU vessels decreased in only two regions, i.e., Africa (-25.3%) and Middle East & India (-7.1%).

Against a backdrop of mixed regional trends in the number of container vessel calls and the share of larger vessels calling around the globe, the past year also brought a mixed picture for call sizes between regions

Northern Europe and North America recorded a 10% increase in average call sizes, while Africa, North East Asia, and South East Asia show a drop of around 10% since Q3 2021. The picture looks very different when focusing on medium-term changes compared to Q1 2019, showing major increases in the call sizes, particularly in North America (+41%), Latin America (+27.7%), North East Asia (+27.4%) and Northern Europe (+25.6%). The increase in the call sizes was less considerable in African and Mediterranean ports, while the Middle East & India saw no change over the past three years.

The regional data on port moves per hour demonstrate that most of the world's port regions had to accept a decline in Q3 2022 compared to the same quarter in 2021. While one might expect otherwise, the deployment of larger vessels and the higher call sizes did not go hand in hand with higher terminal productivity in all regions. Major Asian trading blocks North East Asia and South East Asia recorded a single digit increase, with decreases recorded for six of the eight regions. Africa did well, with a rise in average port moves per hour of 16.4% in the past 12 months. When considering the trends in the past three years, it becomes clear North America (-34.7%) and Oceania (-32.3%) witnessed significant changes in port moves per hour, partly caused by port congestion and reduced schedule reliability. Northern Europe and Africa saw a single-digit decline in average port moves per hour. The best performers in terms of productivity increases compared to Q1 2019 are Middle East & India (+7.9%), Latin America (+5.5%) and North East Asia (+4.1%).





	WORLD Q3 2022	WORLD Q2 2022	Central and South America	East Asia	Mediterranean	Middle East Central Asia	North America	North Europe	Southeast Asia Oceania	Sub-Saharan Africa
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Hinterland transport:
Percentage of ports with delays (6-24h), major disruptions (> 24h) or discontinued operations

Container - Truck	11%	15%	17%	10%	0%	0%	-	8%	0%	-
Container - Rail	18%	27%	-	0%	10%	-	-	0%	-	-
Container - Inland barge	15%	32%	-	0%	-	-	-	25%	20%	-
Bulk/breakbulk - Truck	12%	6%	29%	11%	8%	0%	-	8%	0%	60%
Bulk/breakbulk - Rail	21%	17%	-	17%	22%	-	20%	0%	-	-
Bulk/breakbulk - Inland barge	11%	19%	-	17%	-	20%	0%	0%	17%	-

Note: empty cells = less than 5 respondents

Warehouses/distribution facilities:
Percentage of ports with underutilised capacity or capacity shortages

Containerised cargo	27%	27%	17%	10%	10%	29%	-	43%	27%	40%
Dry bulk	21%	31%	29%	33%	25%	20%	50%	0%	9%	-
Liquid bulk	18%	22%	-	29%	23%	-	33%	23%	10%	-
Other cargo	17%	22%	17%	11%	15%	0%	40%	29%	9%	20%

Note: empty cells = less than 5 respondents

Staff availability:
Percentage of ports reporting moderate to severe shortages

Dock workers	27%	32%	29%	18%	31%	14%	50%	29%	33%	0%
Technical-nautical services	21%	29%	29%	27%	15%	0%	50%	7%	17%	40%
Truck drivers	37%	40%	43%	45%	46%	0%	50%	36%	42%	20%

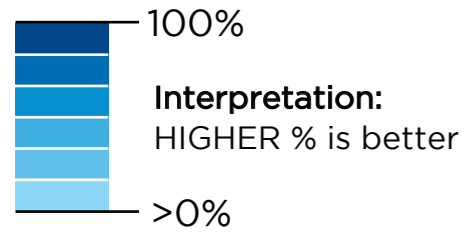
Dashboard III

Trends in World Cargo Ports (November 2022)

Turning back to the survey results, the situation in hinterland transport shows very mixed results (**Dashboard III**).

Compared to Q2 2022, the share of ports facing delays in trucking and rail is down for container traffic and up for bulk/breakbulk flows, while the inland transport situation for barges has improved for all cargo types.

The situation in warehousing and distribution facilities shows no change for containerised cargo compared to Q2 2022. However, the share of ports reporting underutilisation of facilities or capacity shortages has dropped in the other cargo segments, with the strongest decrease observed in the dry bulk market.



Number of passenger vessel calls:
Percentage of ports with >2% growth Q3 2022 vs. Q3 2021

Cruise vessels	64%	63%	-	50%	80%	-	83%	77%	33%	-
Ferries	43%	51%	-	13%	78%	-	-	56%	-	-

Note: empty cells = less than 5 respondents

Cruise activity expectations:
Percentage of ports with >2% growth expectation in the next 12 months

Cruise vessel calls	69%	71%	-	78%	70%	-	67%	62%	71%	-
Cruise PAX movements	73%	64%	-	75%	70%	-	67%	69%	80%	-

Note: empty cells = less than 5 respondents

Dashboard IV

Trends in World Passenger Ports (November 2022)

In the passenger markets (**Dashboard IV**), the share of ports reporting an increase in cruise vessel calls remained fairly stable compared to Q2 2022, while this share declined from 51% to 43% for ferry calls.

In November 2022, there were slightly fewer ports expecting growth in cruise vessel calls in the next twelve months (69% vs. 71% in June 2022). At the same time, a significantly higher share of ports (i.e., 73% in November 2022 vs. 64% in June 2022) foresees growth in cruise passenger movements in the next twelve months.

3

**TRENDS IN CARGO PORTS:
EVOLUTION OF VESSEL CALLS**

What was the trend in the number of calls in the most recent quarter of the year (Q3 2022) compared to the same period of the past year (Q3 2021)? We asked ports to provide their estimation as Q3 2022 concludes, with their estimates distinguishing between four merchant vessel categories: container vessels, dry bulk carriers, tankers and gas carriers, and other cargo vessels.

3.1. Overall survey results

Considering the global population of seaports, Q3 2022 revealed about 42% of respondents experiencing a positive trend in the calls of tankers and gas carriers, dry bulk carriers, and other cargo vessels. Moreover, the trend is marginally least positive for container ships calls, with only 40.6% of ports recording year-on-year growth of more than 2%.

A total of 13% of the responding ports realised a growth of more than 10% in bulk carrier calls. This percentage reaches an even higher 15% for tankers and gas carriers. The percentage of container ports recording in Q3 2022 a double-digit percentage growth is 9%.

The number of ports that in Q3 2022 recorded a lower number of calls compared to the same quarter of the year before has been significant. Reconfirming trends that earlier issues of the IAPH World Ports Tracker also revealed, the lowering of the number of calls in the container markets occurs in several container ports; 29.7% of the ports reported that a drop in container vessel calls happened in the most recent quarter of the year. This percentage is quite similar to the conditions that occurred in the cases of tankers and gas carriers. However, in most cases, the decline is relatively moderate, as 16% of container ports saw the vessel call figures dropping from 2 to 5%. In 13% of container ports the number of vessel calls dropped by double-digit percentages. For the tanker and gas carrier category, the ports reporting a double-digit percentage drop of calls in Q3 2022 were found to be as high as 17% of the total.



Figure 2
Evolution of vessel calls (Q3 2022 compared to Q3 2021)

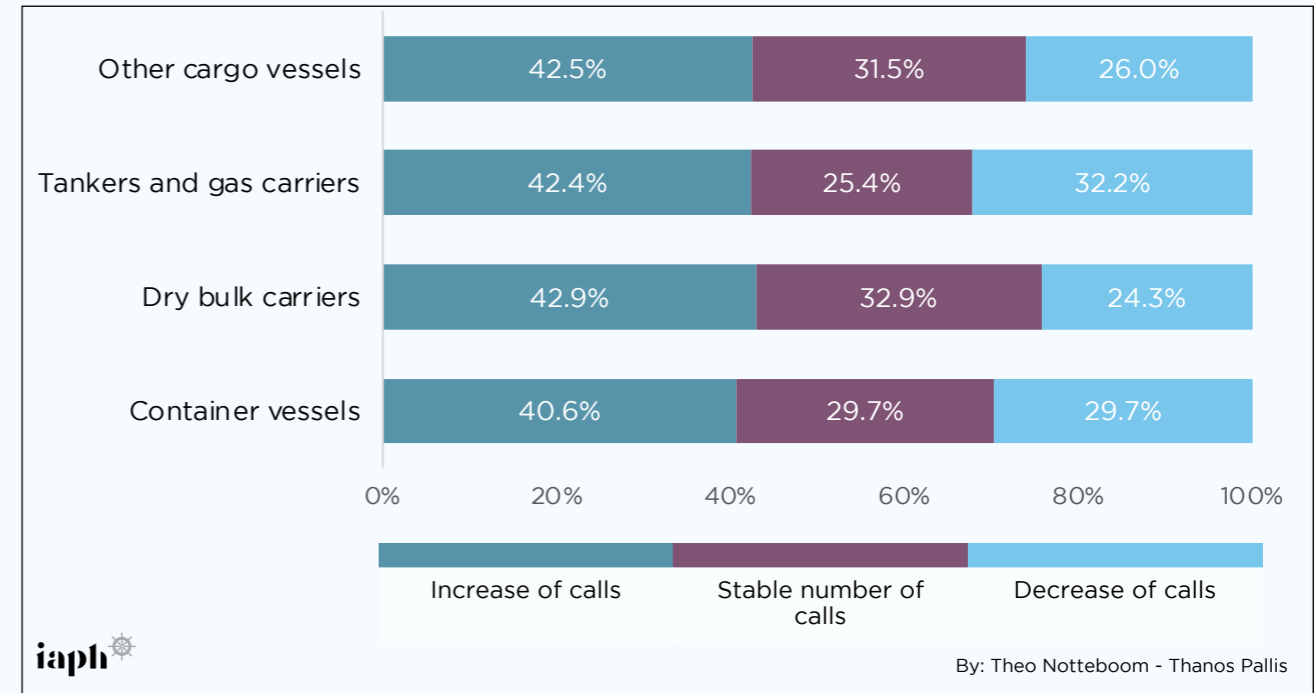
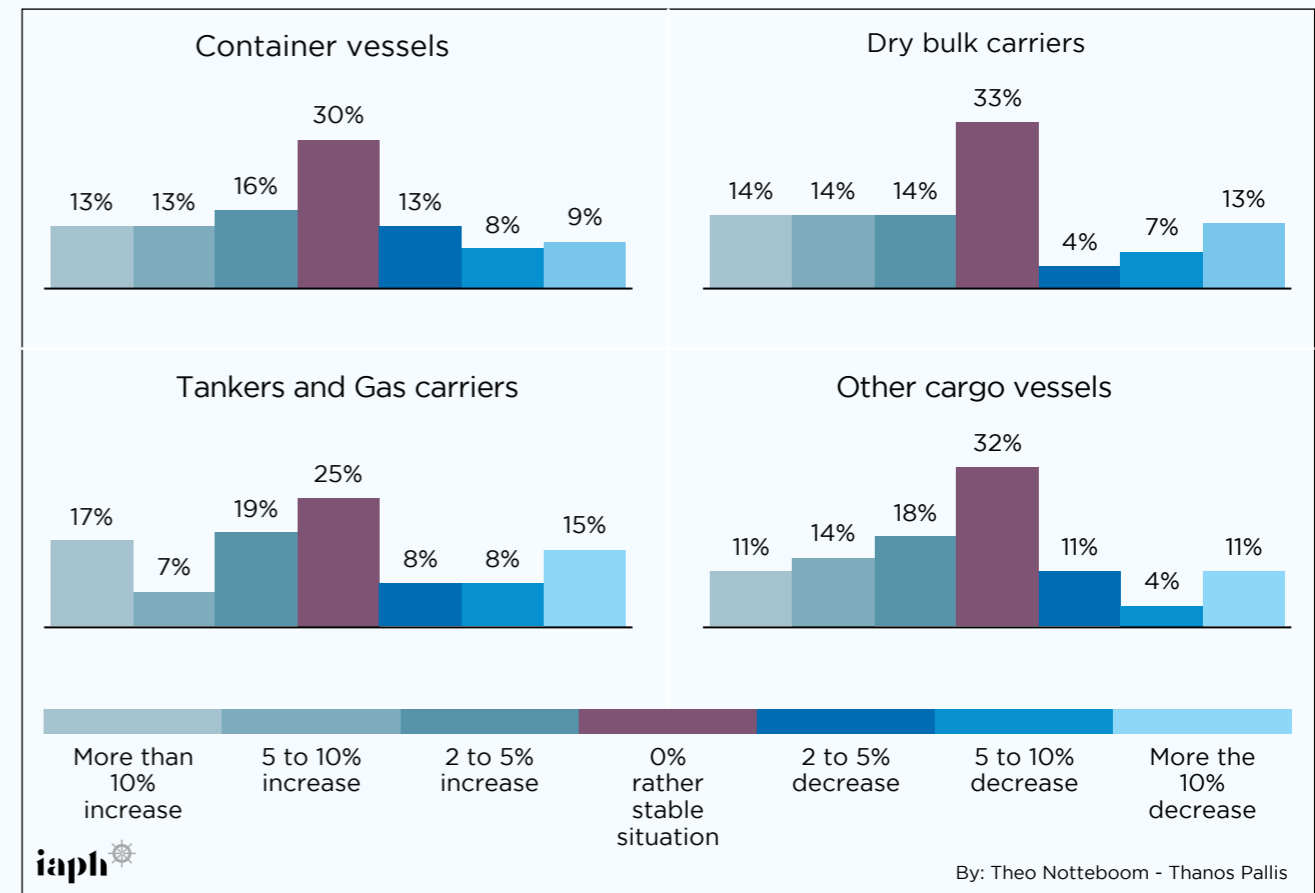


Figure 3
Evolution of vessel calls per type of vessel (Q3 2022 vs. Q3 2021)



3.2. Regional Perspectives

For the regional picture, we focus on the three regions with the highest number of respondents, i.e., North Europe, the Mediterranean, and Southeast Asia & Oceania.

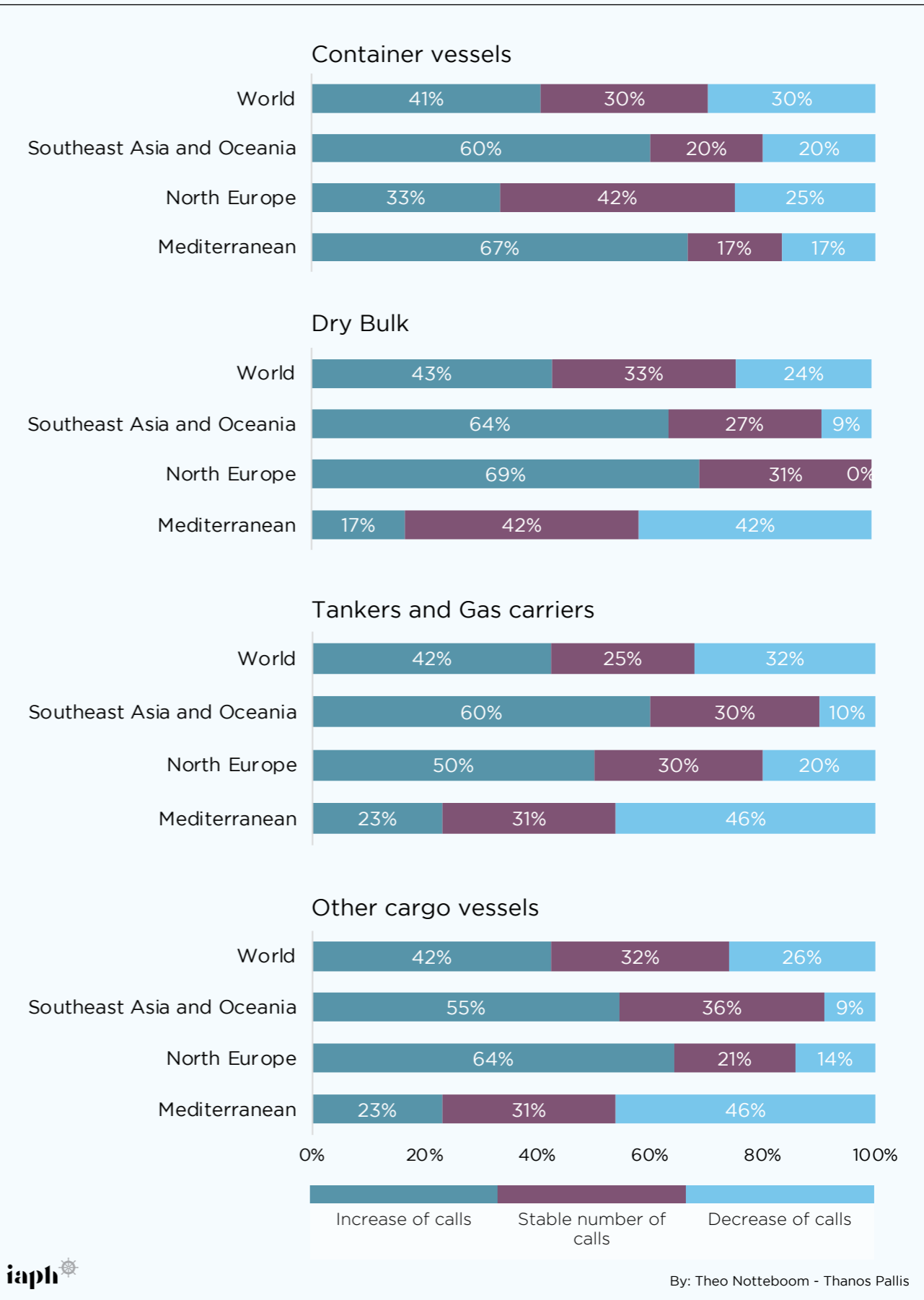
The Mediterranean port region shows the most positive figures for container vessel calls, with about two-thirds of the ports expecting growth above 2%. North Europe offers the least promising figures regarding trends in the number of containership calls: one-third of North European container ports record more than 2% growth. For quite a few North European ports, the war in Ukraine continues to impact transit traffic from/to Russia and Ukraine.

For dry bulk vessels, the Mediterranean shows a relatively even balance between expected increases and decreases, with quite a few ports at the extremes of the measurement scale: 29% see a more than 10% increase in bulk carrier calls, while 14% faced a drop of more than 10%.

For tankers and gas carriers, we received a double-digit number of answers from three regions: the Mediterranean, North Europe and South East Asia/Oceania. In South East Asia/Oceania, 60% of the respondents realised an increase in liquid bulk vessel calls, compared to 50% for North Europe and 23% for the Mediterranean. Conversely, the share of ports expecting a (sharp) decline is the highest in the Mediterranean region (46%).



Figure 4
Evolution of vessel calls per type of vessel in selected world regions (Q3 2022 vs. Q3 2021)





4

TRENDS IN CARGO PORTS:

VOLUME EXPECTATIONS IN THE NEXT TWELVE MONTHS

One of the survey questions aims to reflect the short-term prospects for cargo volumes in world ports for the next twelve months: “In the next twelve months, do you expect the cargo throughput at your port to increase or decline?”. The answering scale includes three positive growth categories (>10%; +5 to +10% and +2 to +5%), three negative growth scales (-2 to -5%; -5 to -10%; and < -10%) and one reflecting a rather stable cargo traffic situation (-2 to +2%). Also, a distinction is made here between containerised cargo, dry bulk, liquid bulk and other cargo (conventional general cargo and breakbulk). The traffic expectations use TEU as a basis for container volumes and metric tonnes for the other goods categories.

4.1. Overall survey results

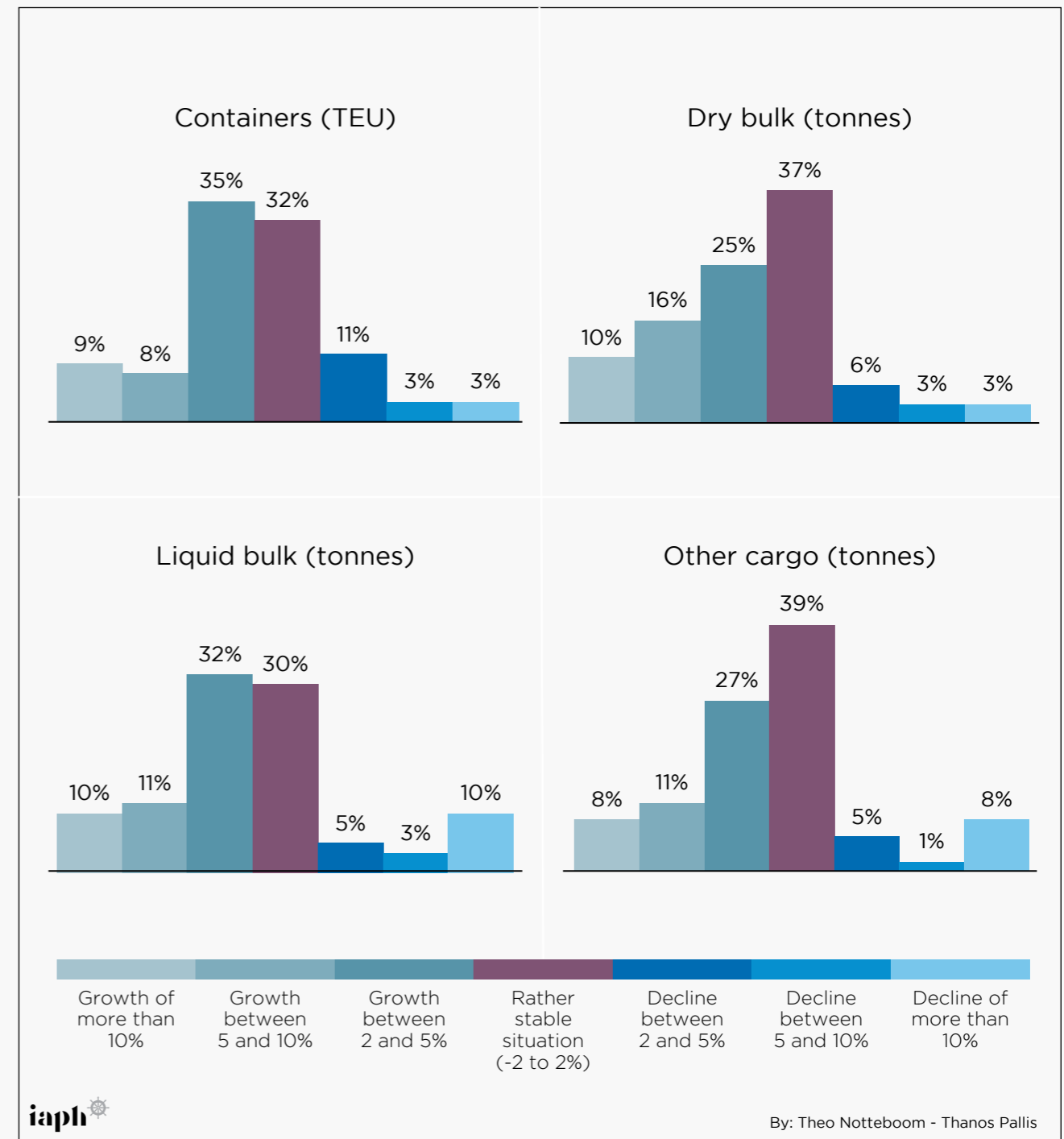
The overall results show that 17% of respondents expect a year-on-year annual growth rate in container volumes of more than 5% for the next twelve months. About 32% of ports do not expect major changes in the handled TEU volume, while about 17% are preparing for a volume decline.

The results for the dry bulk market are noteworthy. One quarter of the ports expect a growth in calls over 5% with one in ten ports forecasting a mostly modest volume decline. For liquid bulk and other cargo flows, 21% and 19% of ports forecast growth of more than 5% in the next twelve months with 18% and 14% predicting a volume decline, respectively.

In the 'other cargo' category, quite a few ports expect a positive volume development for project cargo, mainly related to energy transition projects, and the automotive segment, which is expected to rebound once supply chain shortages of parts for auto makers subside.



Figure 5
Cargo volumes in world ports for the next twelve months: Expectations as of the beginning of Q4 2022



4.2. Regional Perspectives

A regional perspective of the growth figures reveals the port system in South East Asia and Oceania shows a high 70% of respondents count on a minimum container volume increase of 2% over the next twelve months, while 20% are preparing for a TEU drop. The Mediterranean shows a rather wide spread of forecasts in container traffic expectations. Half of the East Asian container ports forecast a relatively stable TEU volume. The bleakest prospects can be found in North Europe, where 57% of the respondents see TEU volumes stagnating or even slightly declining over the next twelve months.

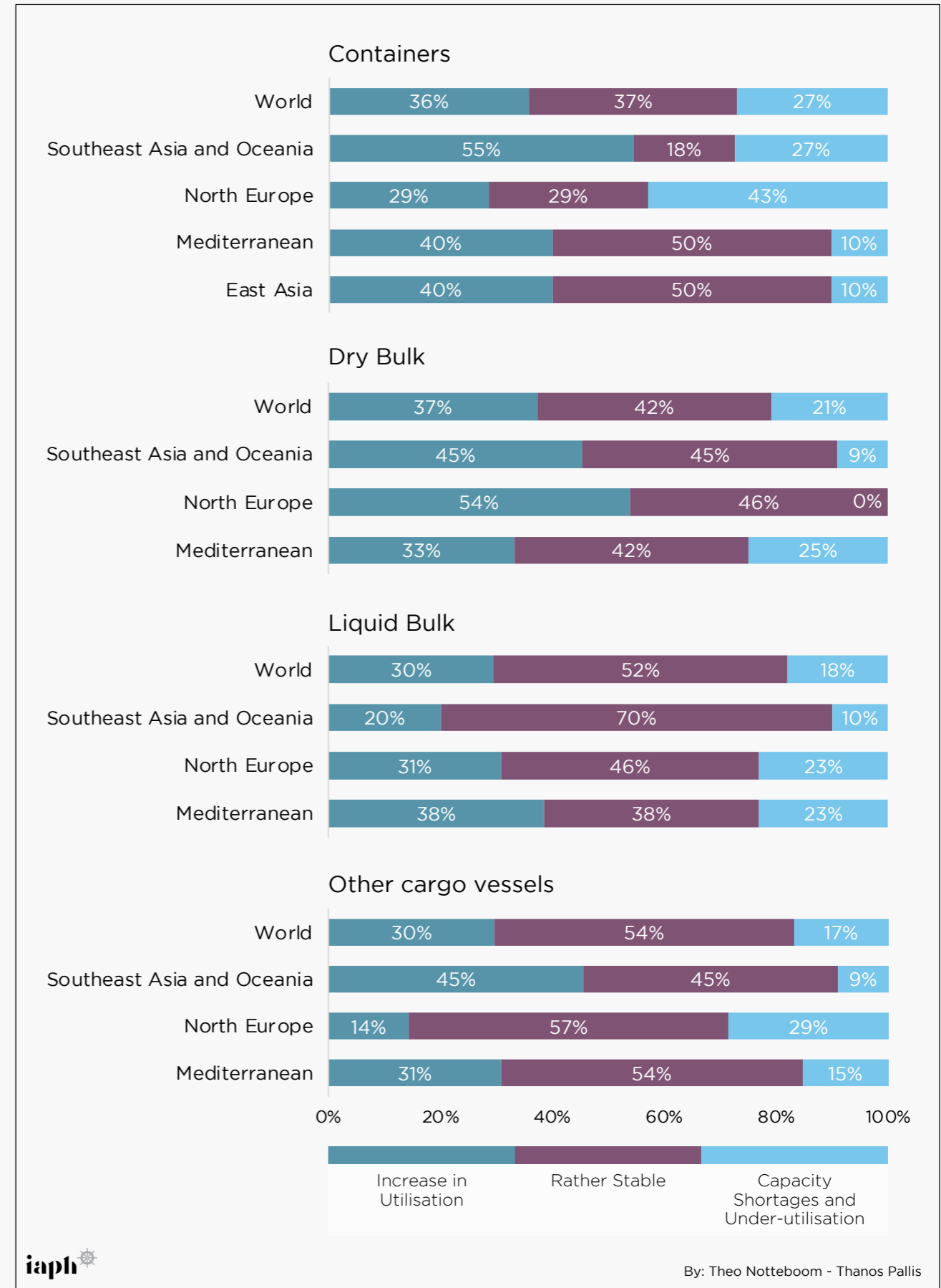
The South East Asia and Oceania port region has the highest volume expectations in the dry bulk market: an impressive 82% of respondents indicate an increase in handled dry bulk tons of at least 2%, but none of the ports forecast a traffic boom of more than 10%. The Mediterranean shows very mixed prospects, although more respondents expect growth than those preparing for a traffic decline in the dry bulk sector.

In most port regions, the spread in answers for the tanker and gas market is significant, demonstrating that drawing overall conclusions about the liquid bulk market is difficult without considering the specific circumstances of each responding port in relation to the energy transition, its energy exposure to the war in Ukraine and the associated investments and actions of the liquid bulk market players in the port's market. Still, there are significantly more ports expecting volume increases in liquid bulk compared to the group of ports counting on volume drops. Actually, none of the surveyed ports of the South East Asia and Oceania region expects tanker and gas traffic to decline over the next twelve months.

The "other cargo" category includes mainly breakbulk and conventional general cargo. This category thus consists of a myriad of different cargo flows such as project cargo (for example, power generation equipment, equipment for the oil and gas industry, mining equipment, and heavy machinery), iron and steel products, non-containerized forest products, reefer vessel trades and break-bulk shipments of smaller lots such as big bags, skidded, and palletized cargoes. This diversity in goods, and the different market prospects that go with each specific commodity and trade flow, might explain why the spread in growth expectations is relatively large in most port regions.



Figure 6
Cargo volumes in world ports for the next twelve months: Expectations in selected port regions as of the beginning of Q3 2022



5

TRENDS IN CARGO PORTS:

**VESSEL ACTIVITY AND PRODUCTIVITY IN
CONTAINER PORTS**

This section of the report provides an in-depth analysis of vessel activity and productivity in container ports. The analysis is based on quarterly container port statistics compiled as part of the S&P Global Port Performance Program. We focus on four container port metrics covering the period from Q1 of 2019 to Q3 of 2022, i.e., the number of vessel calls, the evolution of vessel size, the evolution of call size (number of TEUs handled per call), and port moves per hour, aggregated per region. We start the analysis with an 'in focus' discussion of container port productivity expressed in port moves per hour, followed by a regional analysis of the non-survey data results.



5.1. In focus: port moves per hour

On a year-on-year basis, port productivity in Q3 2022 increased in three world regions. Two are in Asia, North East Asia (+9.4%) and South East Asia (+4.9%) respectively. The third one is Africa (+16.4).

The long-term picture is somewhat different (Figures 7 and 8). Compared to the beginning of 2019, in the Middle East & Asia (+7.9%), Latin America (+5.5%), North East Asia (+4.1%), and South East Asia (+1.4%), the number of port moves per hour stands higher. On the other hand, the change has been marginal in the case of Mediterranean ports (+0.3%). On the negative side, port moves per hour in Africa stand at -5%, and in Northern Europe at -8.6%. The situation has been more challenging in Oceania and North America due to congestion and schedule reliability, with the two regions' port moves per hour in Q3 2022 remaining more than 30% lower than in early 2019.

In two of the three regions that in Q3 2022 recorded significantly lower productivity in terms of port moves per hour than in Q1 2019, i.e., North America and Oceania, an increase of the share of 8,501+ TEU vessels in total vessel calls occurred over the same period. Oceania only served very few vessels of such size in late 2019. In Africa, the 5% decline in port moves per hour has been accompanied by a decrease of the share of 8,501+ TEU vessel calls by 25%. Conversely, in South East Asia, North East Asia, and Latin America ports recorded a higher number of moves in Q3 2022 than in Q1 2019, even though the share of 8,500+ TEU vessels in total vessel calls has increased. In Europe, the share of 8,500+ TEU vessels increased at a marginal scale. Yet, while productivity remained stable in Northern Europe, the number of port moves per hour in the Mediterranean declined considerably. Different productivity trends were recorded in the Middle East: the comparative share of 8,500+ vessels decreased, and the handled moves per hour increased. Apparently, there is no clear association between the changes in productivity and the increase in the size of vessels that call ports in a world region.

In all world regions, ports are confronted with a new challenge. This is the increase in the number of containers they handle per vessel call.

This has happened even in Africa (an increase of calls size in Q3 2022 equals plus 6.8%), the region where the share of calls by vessels of over 8,500 TEU capacity has declined by 25%, and the Middle East and Asia (plus 0.5%) where the share of large vessels declined by 7.1%. The scale of the increase of the size of calls (i.e., number of vessels that are handled per containership call) is larger when the share of the ultra large containership increases: the bigger increase of call size has taken place in North America (plus 41%), followed by Latin America (plus 27.7%), North Asia (plus 27.4%), and Northern Europe (plus 27.7%).

Figure 7
World Regions with increased container ports productivity, Q3 2022 vs. Q1 2019 (Port Moves Per Hour per region)

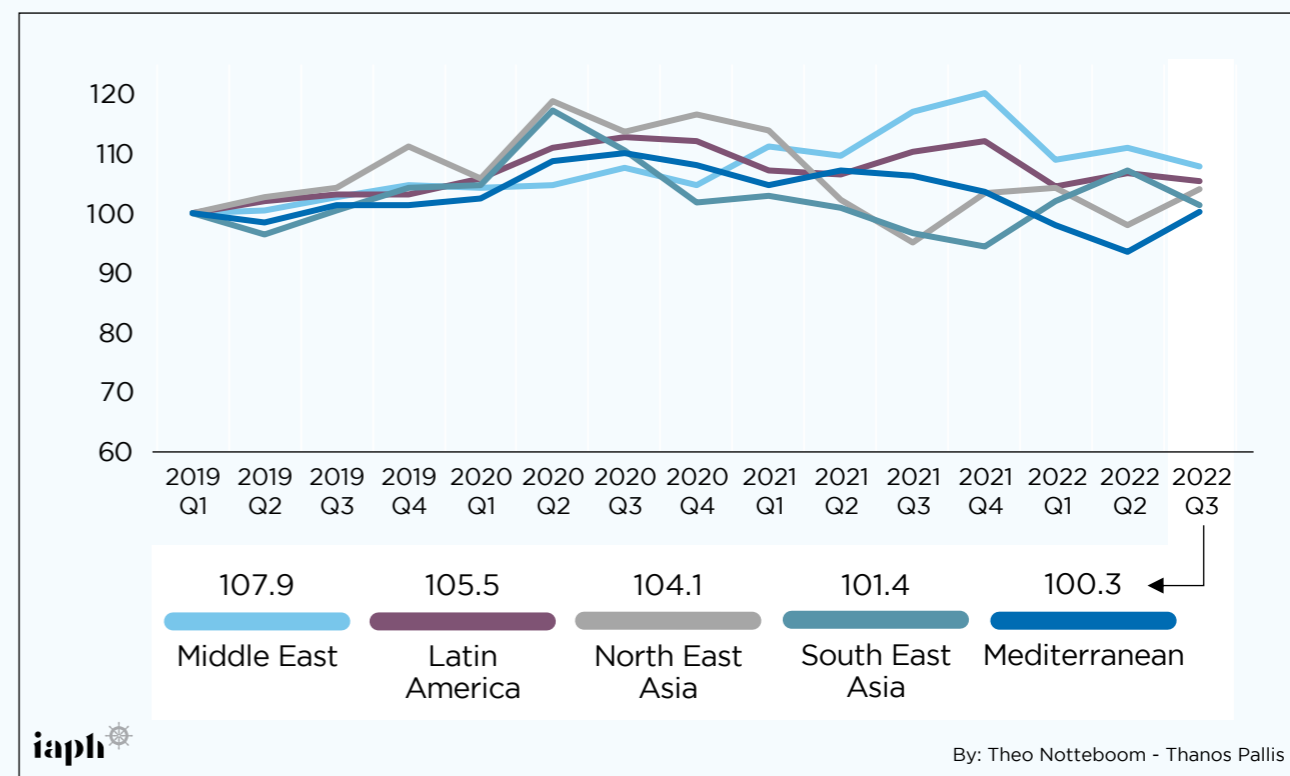
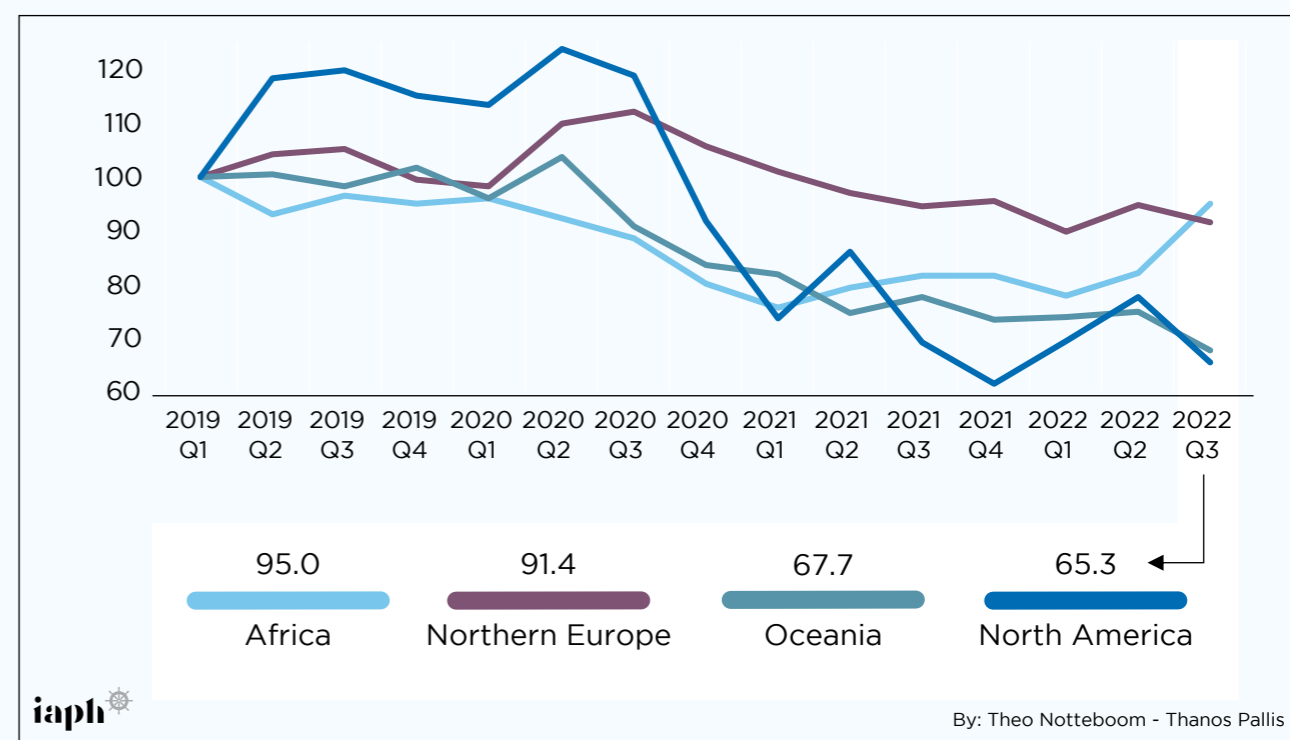


Figure 8
World Regions with decreased container ports productivity, Q3 2022 vs. Q1 2019 (Port Moves Per Hour per region)



5.2. Regional focus: Africa

The African container port system includes large gateway ports and an extensive array of small and medium-sized ports in the East, West, and South of the continent. The large-scale transshipment hubs in Northern Africa are not considered here as they have been included in the Mediterranean region.

A further increase in the number of containership calls in African ports marked the third quarter of 2022. During the third quarter of 2022, the increase on a year-on-year basis was 22%. This means that, within the most recent quarter, 5.5% more containerships called in Africa than at the beginning of 2019. The number of calls had gradually decreased to reach its lowest point during Q2 2020 before fluctuating and the last three months returning at higher levels than in 2019.

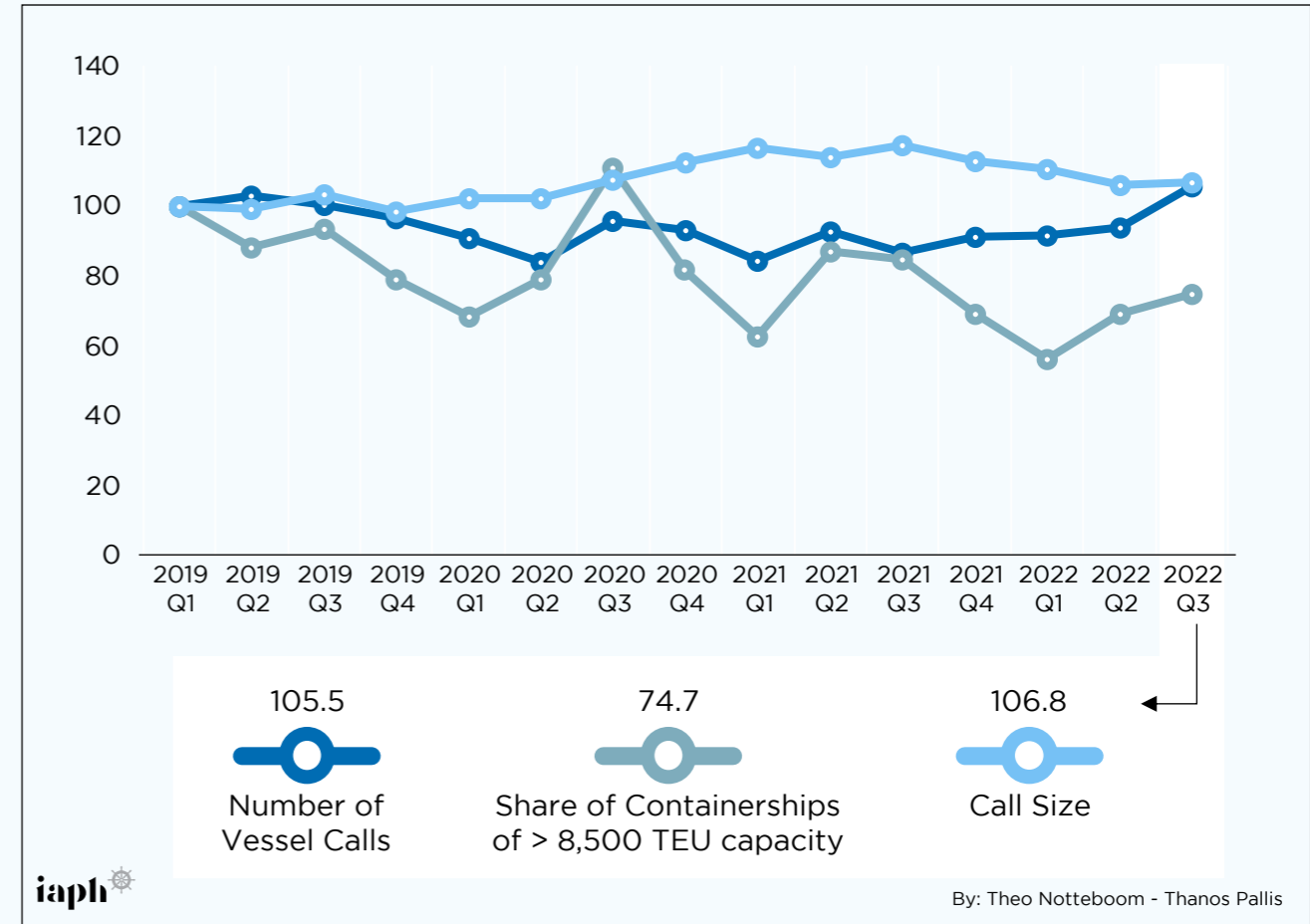
The share of 8,500 TEU+ vessels in total vessel calls remained lower on a year-on-year base. In Q3 2022, this share was lower than in the same quarter of 2021 by 11.7%. The longer-term trend reveals that since 2019 the larger vessels share has declined by 25.3%.

However, the average vessel visit in African ports is associated with more containers handled. Compared to Q1 2019, the average call sizes in African ports in Q3 2022 were higher by 6.8%. This is however the outcome of shifts that happened in the early part of the period. On a year-on-year basis, the size of vessel calls in Q3 2022 was 9% lower than in the same quarter of 2021.

A positive change in the port moves per hour in African ports was also recorded in Q3 2022. This key indicator was 16.4% higher on a year-on-year basis. Yet this does not equal a full recovery and a return to the levels of three years ago. Indeed, during each quarter of the 2019-2021 period, this key performance indicator was lower than at the beginning of 2019. Especially since the pandemic outbreak (in Q1 2020, the index was 96.8) and until Q2 2021, port moves per hour in African ports declined continuously. However, some adjustments were noted since then, with the index standing in Q3 2022 at just 5% below Q1 2019.



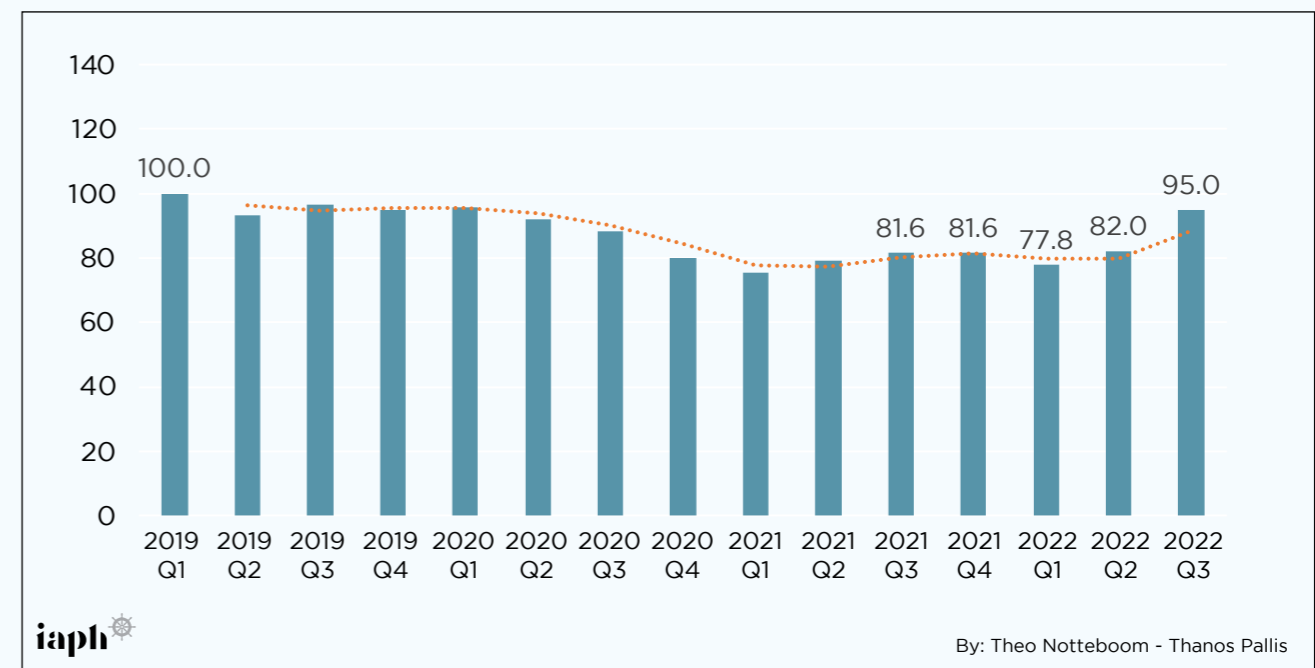
Figure 9
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in Africa; index-based: Q1 2019 = 100)



By: Theo Notteboom - Thanos Pallis



Figure 10
Evolution of Port Moves per Hour (Ports in Africa; index-based: Q1 2019 = 100)



By: Theo Notteboom - Thanos Pallis

5.3. Regional focus: Latin America

During the first three quarters of 2022, the number of containerships calls in Latin America remained fairly stable. However, the total number of calls that occurred during each of these quarters was lower than the respective total in any quarter since 2019 (Figure 11). In Q1 2020, the number of calls in Latin America started to decline gradually. The return to the early 2019 levels in Q4 2020 proved to be temporary. In Q4 2021, the number of containership calls was lower on a year-on-year basis by 9.3%. By Q3 2022, this figure further decreased to -11.8%.

Latin American ports do not serve calls from the largest containerships in the world (i.e., vessels over 20,000 TEU capacity), as such vessels are deployed in other regions of the globe. Yet, during the last three years the share of 8,500 TEU+ vessels, as a percentage of the total container vessel calls in the ports of the region, increased. In Q4 2019 this index was 2.2 percentage points higher than at the beginning of the same year. In Q4 2020 the index was even higher (Index Q4 2020= 113.2) before reaching its peak in the most recent period Q3 2022 (Index Q3 2022= 118.1).

The observed increase in calling vessel capacity has been associated with an increased size of unitised cargoes handled per call. Between Q3 2020 and Q4 2021, the average vessel call at Latin American ports was associated with more containers handled than the respective average that had occurred the quarter before. The growth curve levelled off in the past year with a modest 2.4% year-on-year change. In Q3 2022, average call sizes were 27.7% higher than in Q1 2019.

Despite these substantial changes in the frequency, size of vessels, and call sizes, Latin American ports managed only marginally to increase their productivity. This is reflected in the evolution of the average port moves per hour recorded in the region since early 2019 (Figure 12). This average has been modestly higher than in Q1 2019 in each quarter of 2019-2021. The average port moves per hour in Q3 2022 in Latin America was only 5.5% above the Q1 2019 level.

Figure 11
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in Latin America; index-based: Q1 2019 = 100)

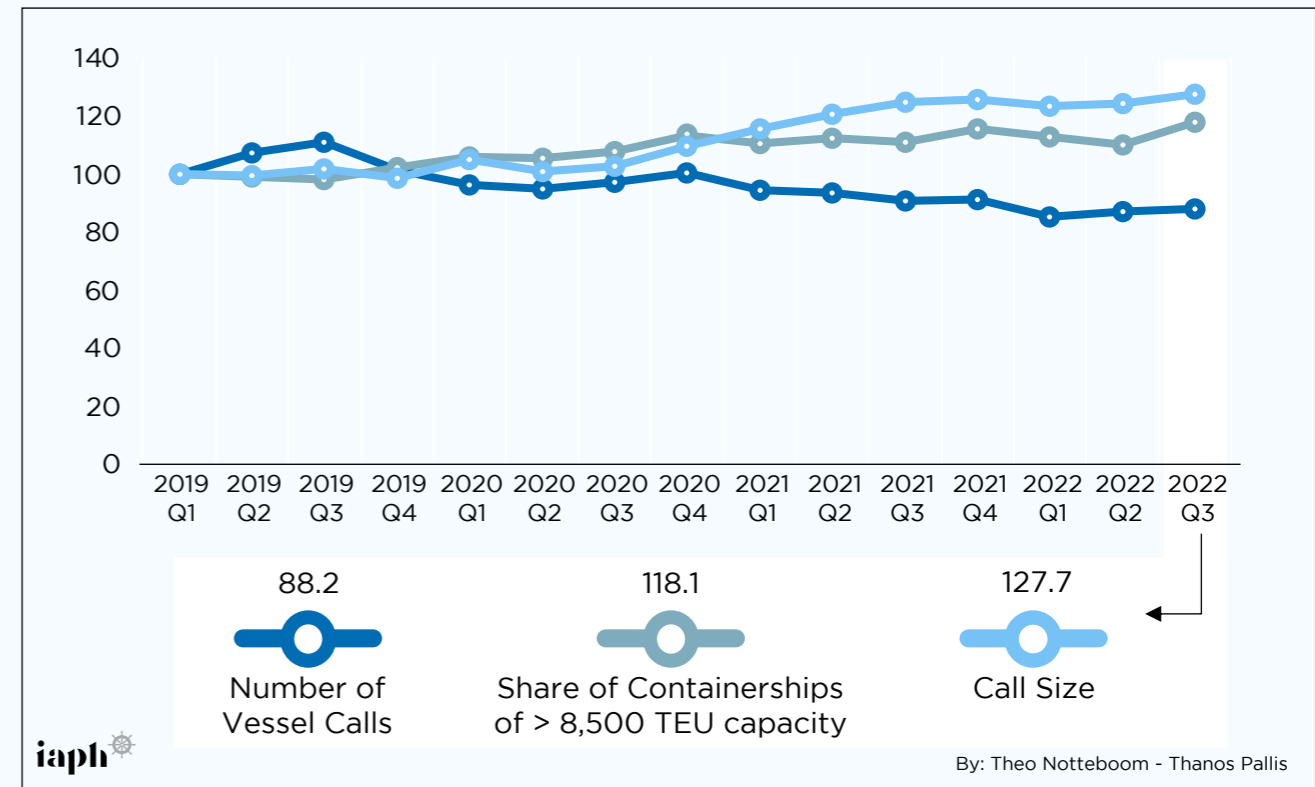
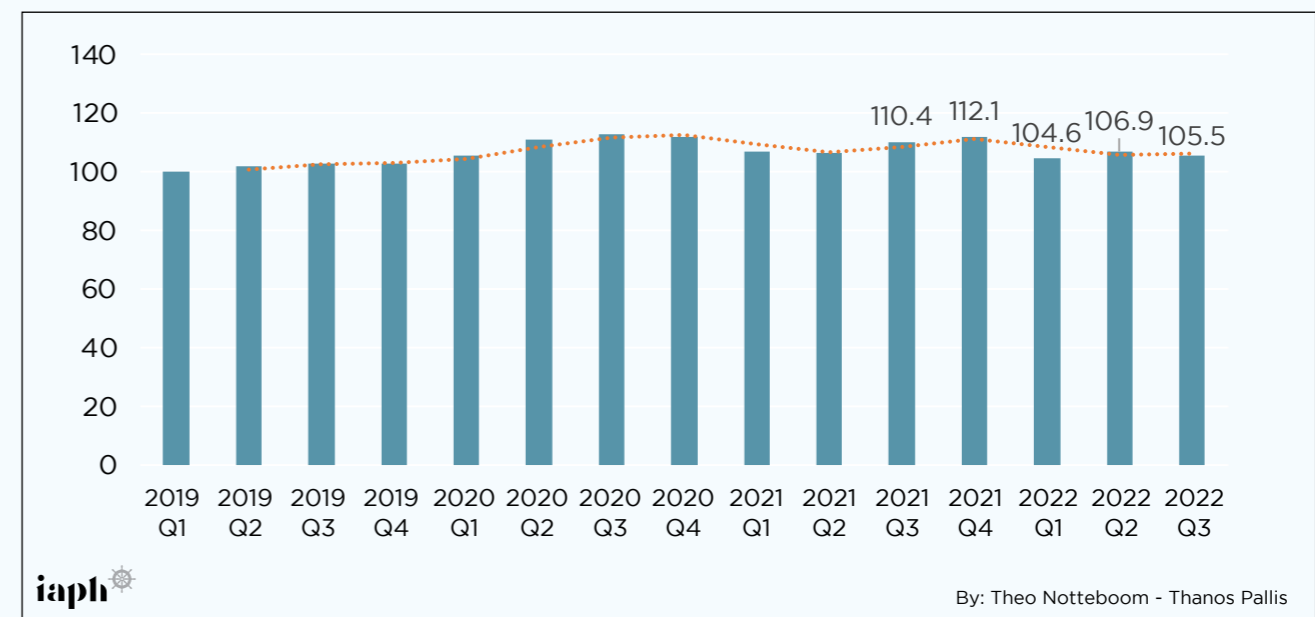


Figure 12
Evolution of Port Moves per Hour (Ports in Latin America; index-based: Q1 2019 = 100)



5.4. Regional focus: The Mediterranean Sea

Since the beginning of 2019 and until Q3 2021, the number of containership calls, the call size, and the share of 8,500+ TEU vessels in ports of the Mediterranean Sea remained almost stable. In Q1 2022, some divergence could be observed combining a decline in vessel calls with an increase in the other two indicators (Figure 13). On a year-on-year basis, the number of vessel arrivals declined by 3.8%. Average calls size remained stable (-0.5%), while the percentage of the calls made in Mediterranean ports by containerships of 8,500 TEU+ capacity was up 5.2% compared to Q3 2021. Compared to Q1 2019, the changes remain very small.

Despite the disruptions in the maritime and other supply chains in the region following the outbreak of the COVID19 pandemic, Mediterranean ports have managed to keep their productivity at more or less the same level (Figure 14). Notably, this index has reached its peak in Q3 2020, as it started increasing in the first quarter of that year. In 2021 the growth was halted. On a year-on-year basis, the port moves per hour in Q3 2022 in the Mediterranean ports were 5.7% fewer than in Q3 2022. However, these moves were almost the same as in Q1 2019 (+0.3%). It is still early days to conclude whether the 7.1% increase of the port moves per hour in Q3 2022 compared Q2 2022 signifies the start of an upward trend in port productivity in Mediterranean ports.

Figure 13
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in the Mediterranean Sea; index-based: Q1 2019 = 100)

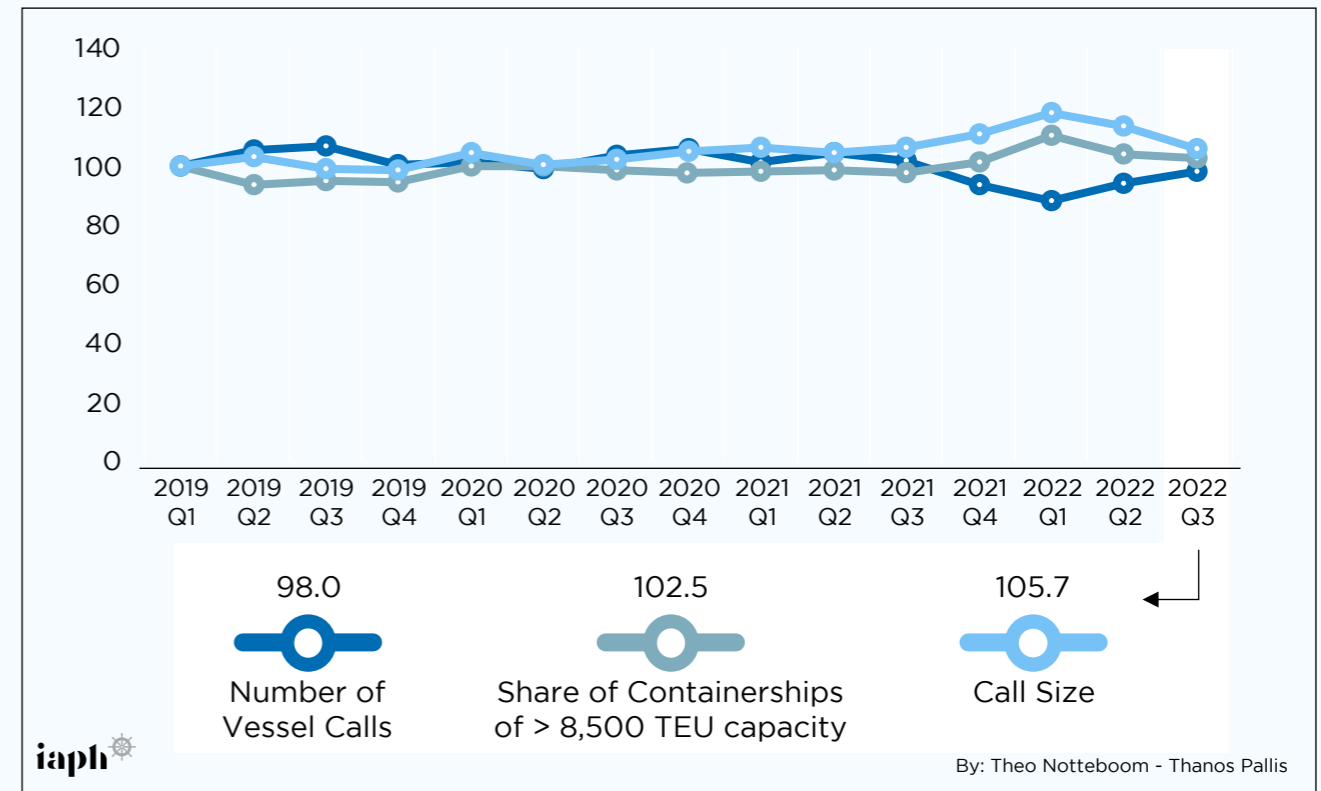
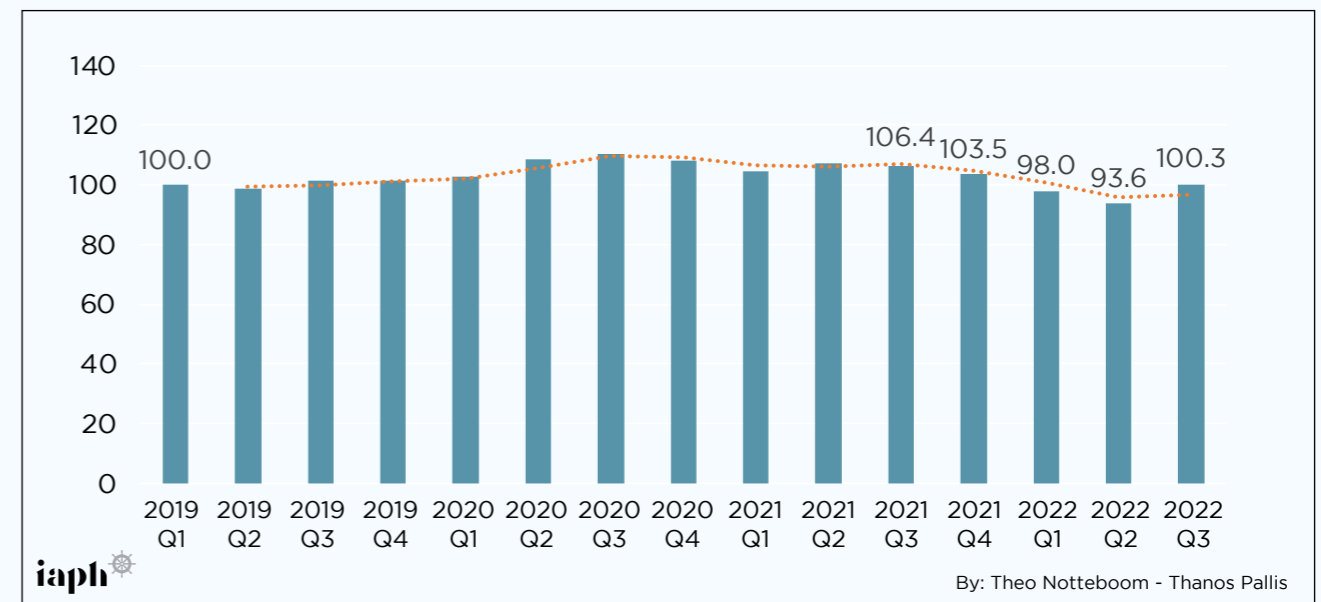


Figure 14
Evolution of Port Moves per Hour (Ports in the Mediterranean Sea; index-based: Q1 2019 = 100)



5.5. Regional focus: Middle East & India

The container port system of the Middle East and India spans a large number of Arab, Persian and Central Asian countries, as well as seaports in Pakistan, India, Sri Lanka and Bangladesh. In addition, the region is home to transshipment, as well as many small, medium-sized and large gateway ports.

The three indicators in Figure 15 hardly changed throughout 2019 and 2020, except for some modest alterations in Q2 2020, when COVID-19 was officially declared a pandemic. The changes in late 2021 and early 2022 are more noticeable. On the one hand, one can observe a gradual decline in the number of vessel calls and the share of the larger container ships. On the other hand, the call sizes saw an upward trend. However, the above changes were partly undone by the time we reached Q3 2022. Compared Q1 2019, the number of vessel calls is 4.1% lower, the share of large ships is 7.1% lower and the average calls size is 0.5% higher.

The Middle East and India is the only region in the world that managed to substantially increase the port moves per hour in 2021 compared to the base quarter Q1 2019 (+20%, see Figure 16). Obviously, these are relative figures showing the development path. These figures say nothing about container handling productivity in absolute figures compared to other regions. Thus, in contrast to most other regions, COVID-19 and the associated supply chain crisis - on average - did not result in lower moves per hour figures in container ports located in the Middle East and India region. However, after an upward trend in the period 2019-2021, productivity levels declined in 2022 with a year-on-year change of -7.8%. Nevertheless, when taking a longer-term perspective, the average moves per hour is still 7.9% above the Q1 2019 level.

Figure 15
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in the Middle East and Asia; index-based: Q1 2019 = 100)

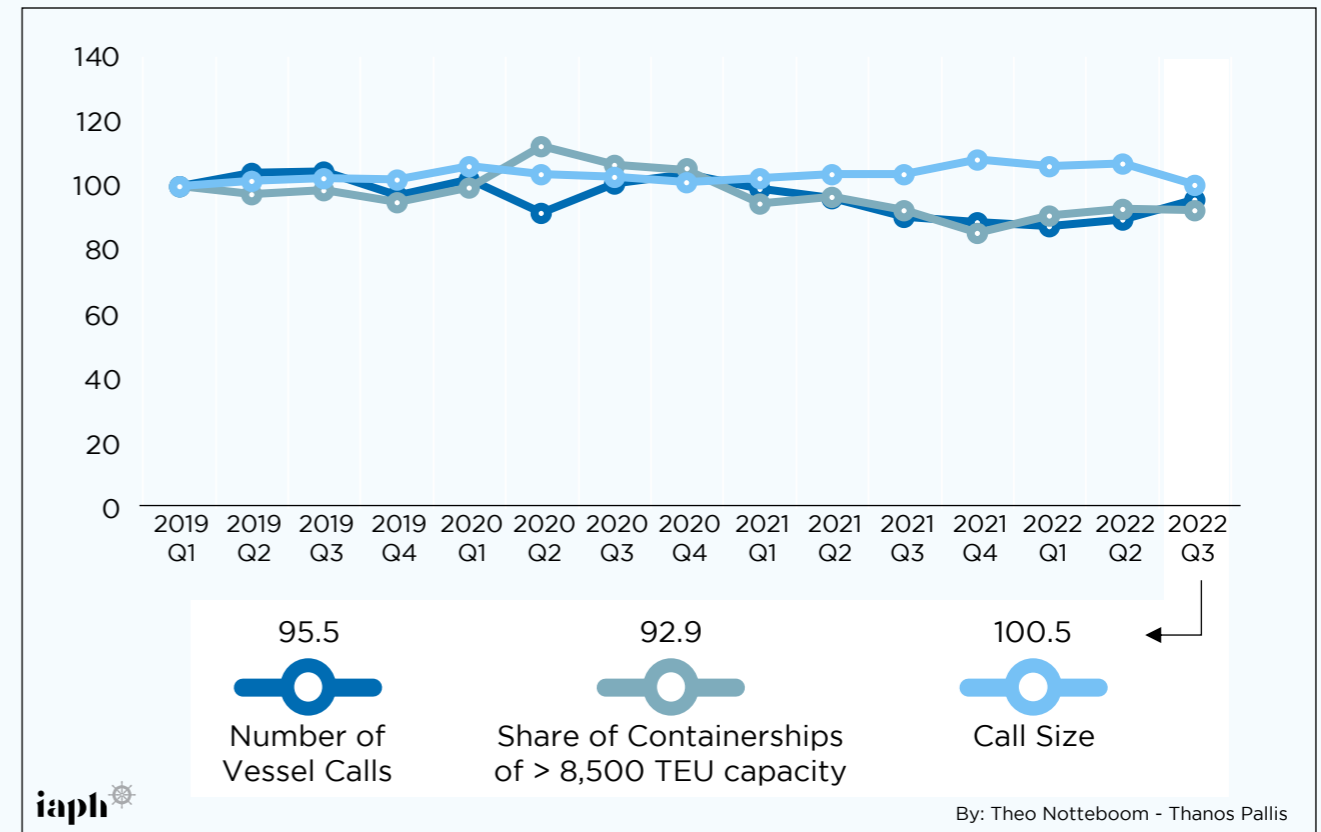
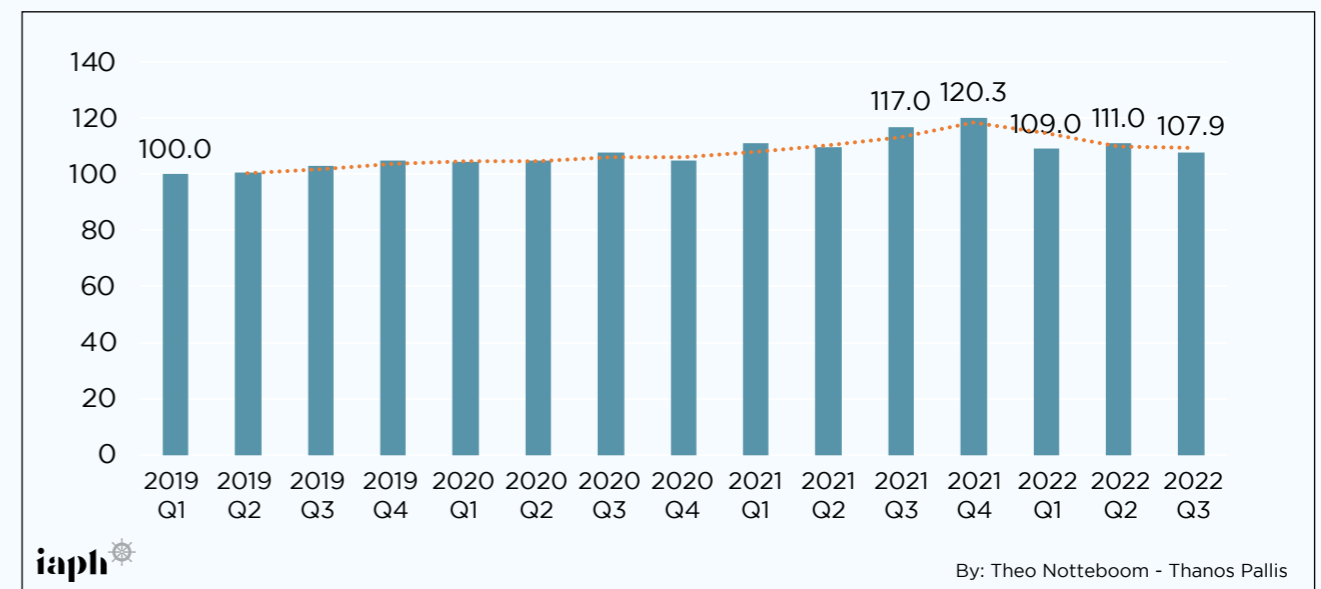


Figure 16
Evolution of Port Moves per Hour (Ports in the Middle East and Asia; index-based: Q1 2019 = 100)



5.6. Regional focus: North America

The North American container port system consists of gateway ports in the United States and Canada along the West Coast, the East Coast and the US Gulf Coast. In the past four years, this port system has witnessed a combination of larger vessels and bigger call sizes with significant drops in vessel calls and port moves per hour (Figures 17 and 18). However, each variable followed its distinctive path. Vessel arrivals only started to decline in late 2019. In early 2020, the decline in container demand in relation to North America led to blanked sailings and idled vessels, particularly on the trans-Pacific route. Since the summer of 2020, container throughput figures in most North American ports strongly recovered following the start of a period characterised by strong demand. Still, the number of vessel calls continued to drop. In Q1 2022, the number of vessels calls was about 30% lower than in Q1 2019. Since then, the curve is moving upward to reach an index figure of 79.8% in Q3 2022.

Growing terminal capacity issues at some of the continent’s major gateway ports combined with the emergence of a global supply chain crisis not only prevented a rise in the number of vessel calls, but also triggered a sharp decline in the port moves per hour in late 2020 and the whole of 2021. While port congestion in the region has somewhat eased in 2022, terminal productivity figures did not improve. On a year-on-year basis, port moves per hour are even down by 5.4% compared to Q3 2021.

At the same time, North American ports are welcoming more large container vessels in relative terms, although the share of 8,500 TEU+ vessels seem to have reached its peak in late 2020, with an upward trend observed in 2022. Call sizes have been rising since late 2019 with many ports announcing records in this field. Since early 2022, the average call size levelled off at some 40% above the Q1 2019 figure.

Figure 17
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in North America; index-based: Q1 2019 = 100)

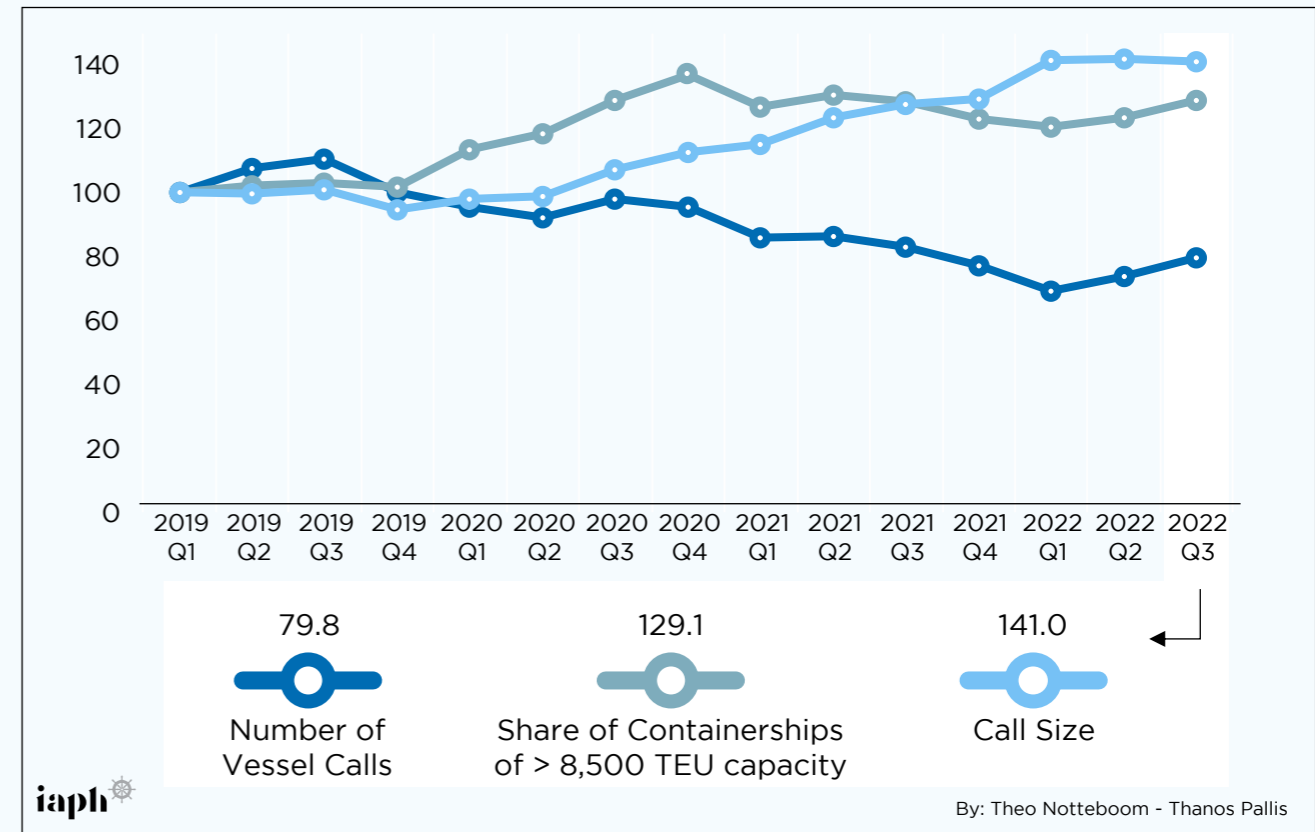
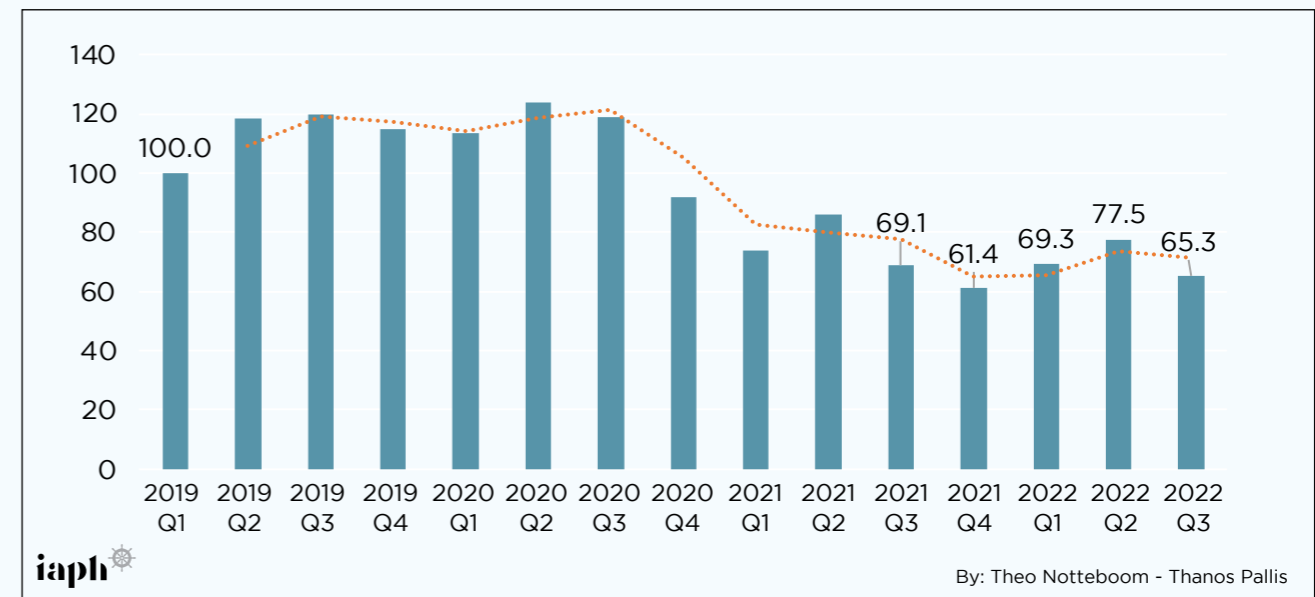


Figure 18
Evolution of Port Moves per Hour (Ports in North America; index-based: Q1 2019 = 100)



5.7. Regional focus: North East Asia

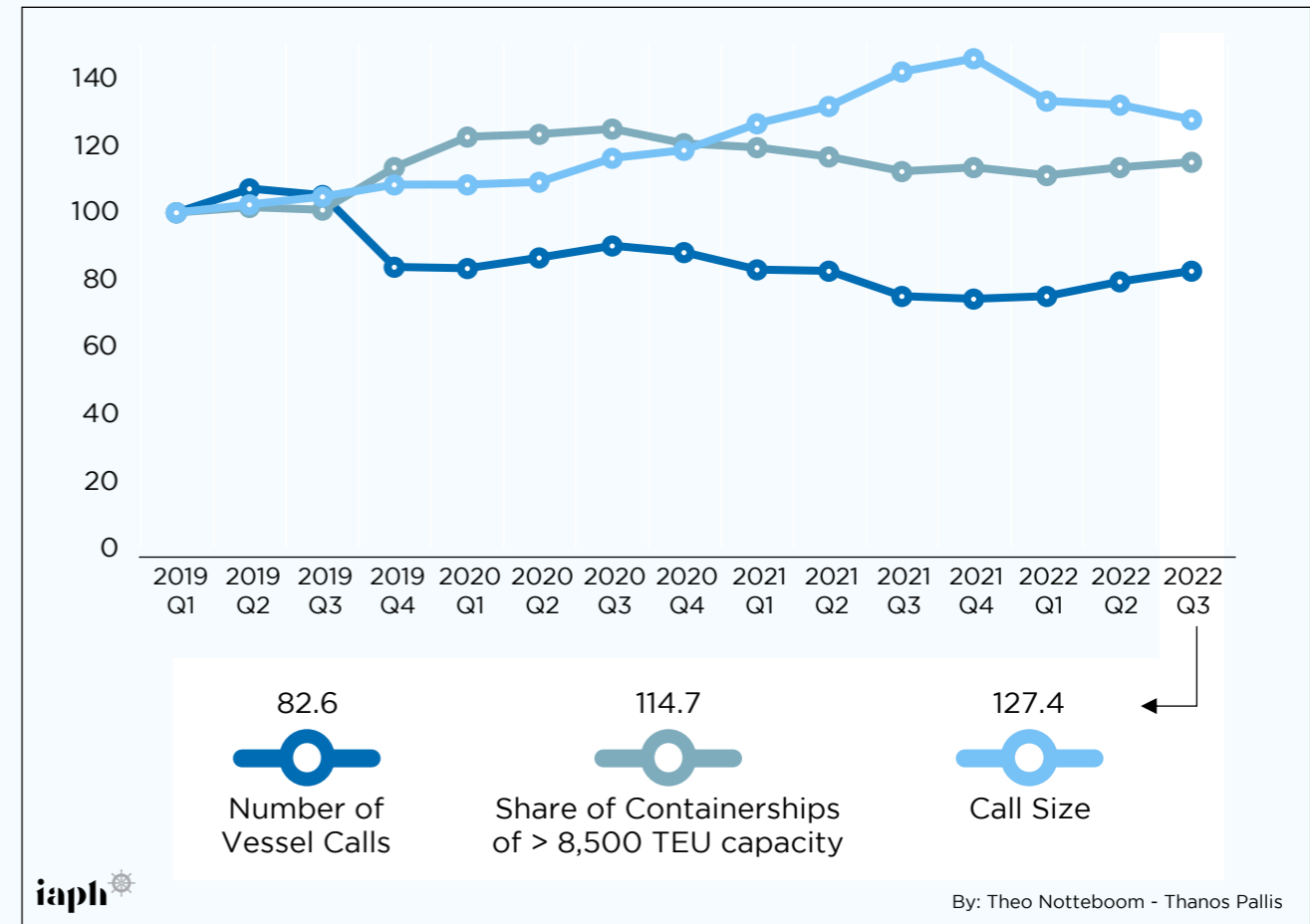
The North-East Asian container port system covers Japanese, South Korean, mainland Chinese and Taiwanese ports. While ports on mainland China serve a vast hinterland through long-distance inland transport corridors, the cargo generating effect of the coastal provinces still forms the backbone of the ports' container throughput. Japan, the Republic of Korea and Taiwan are island or quasi-island economies, implying a significant role in short-distance inland corridors, coastal shipping and sea-sea transshipment. North-East Asia is home to a number of major port clusters with some of the largest gateway ports in the world.

The number of vessel calls in North-East Asian ports has dropped 17.4% since early 2019, but the changes remained fairly small since late 2019 (Figure 19). The call sizes increased significantly to peak in Q4 2021 (+46% compared to Q1 2019). In the first three quarters of 2022, call sizes have dropped to reach an index of 127.4 in Q3 2022. The combination of fewer vessel calls and much larger call sizes has not been caused by a strong upscaling in vessel sizes. Indeed, the share of 8,500 TEU+ vessels in Q3 2022 was only 14.7% higher than in early 2019, with a peak of +25% in mid-2020. In relative terms, the share of 8,500 TEU+ ships in total container vessel calls reached an elevated 39.1% in Q3 2020 compared to 31.3% in Q1 2019 and 35.3% in Q3 2022, the highest share of all port regions around the world.

At first glance, the port moves per hour in North-East Asia fluctuated only mildly throughout the analysed period. However, a closer investigation of the figures shows an initial 20% increase by mid-2020 followed by a gradual decline to below the 100-marker in Q3 2021. In the meantime, productivity levels are again 4.1% above the Q1 2019 level. These observations point to some (moderate) impact on terminal productivity of the temporary terminal closures in mainland China in late 2020, 2021 and early 2022, and congestion issues in quite a few major container ports.



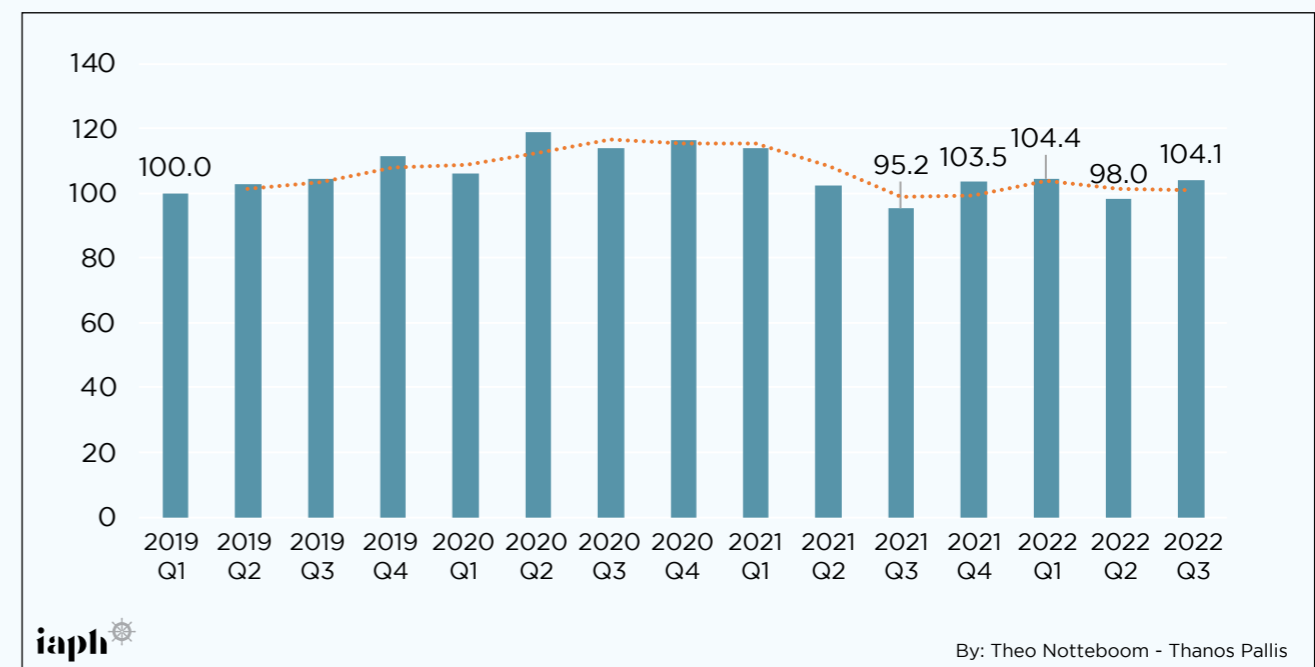
Figure 19
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in North-East Asia; index-based: Q1 2019 = 100)



By: Theo Notteboom - Thanos Pallis



Figure 20
Evolution of Port Moves per Hour (Ports in North East Asia; index-based: Q1 2019 = 100)



By: Theo Notteboom - Thanos Pallis

5.8. Regional focus: Northern Europe

As is the case in most other port regions, the North European port system does not consist of a homogenous set of ports. Instead, it features established large ports as well as a whole series of medium-sized to smaller ports each with specific characteristics in terms of hinterland markets served, and nautical conditions and location. The large container ports on mainland Europe have a cargo mix combining large gateway flows with substantial sea-sea transshipment volumes in relation to the Baltic, UK/Ireland and the Mediterranean. Also, the UK is home to some large container ports as well as a large number of smaller container facilities.

Figures 21 and 22 show the changes in the indicators considered. First, there is a clear increase in the average call sizes. In Q3 2022, average call sizes were 25.6% above the Q1 2019 level. These figures have gradually been going up since mid-2020. This is mainly caused by a significant rise in call sizes over 6000 TEU after the outbreak of COVID 19. Particularly for vessels in the 20,000 TEU+ class, a few North European container ports reported records of close to 25,000 TEU handled during a vessel call.

Secondly, the rise in call sizes since Q2 2020 went hand in hand with a gradual decline in the port moves per hour. This development seems to suggest that productivity in North European ports (primarily in the bigger load centres) has been negatively affected by poor schedule integrity of the vessels, longer container dwell times and overall terminal capacity shortages. However, the decrease in port moves per hour remained rather small when compared to the North American situation. All that time, the share of the larger container ships remained fairly the same in North Europe, fluctuating between 26 and 31% of all vessel calls. As a result, Q3 2022 brought the highest share of 8,500+ TEU vessels in total container vessel calls, i.e., 31.1% or 3.3% higher than in Q1 2019.

Thirdly, the number of vessel calls has gradually decreased since mid-2019, with some stabilization at an index value of 75 in the last three quarters. Thus, this implies we are looking at a combination of fewer vessel arrivals, a rather stable share of the larger container vessels in the total vessel arrivals, larger call sizes, and lower moves per hour.

Figure 21
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in Northern Europe; index-based: Q1 2019 = 100)

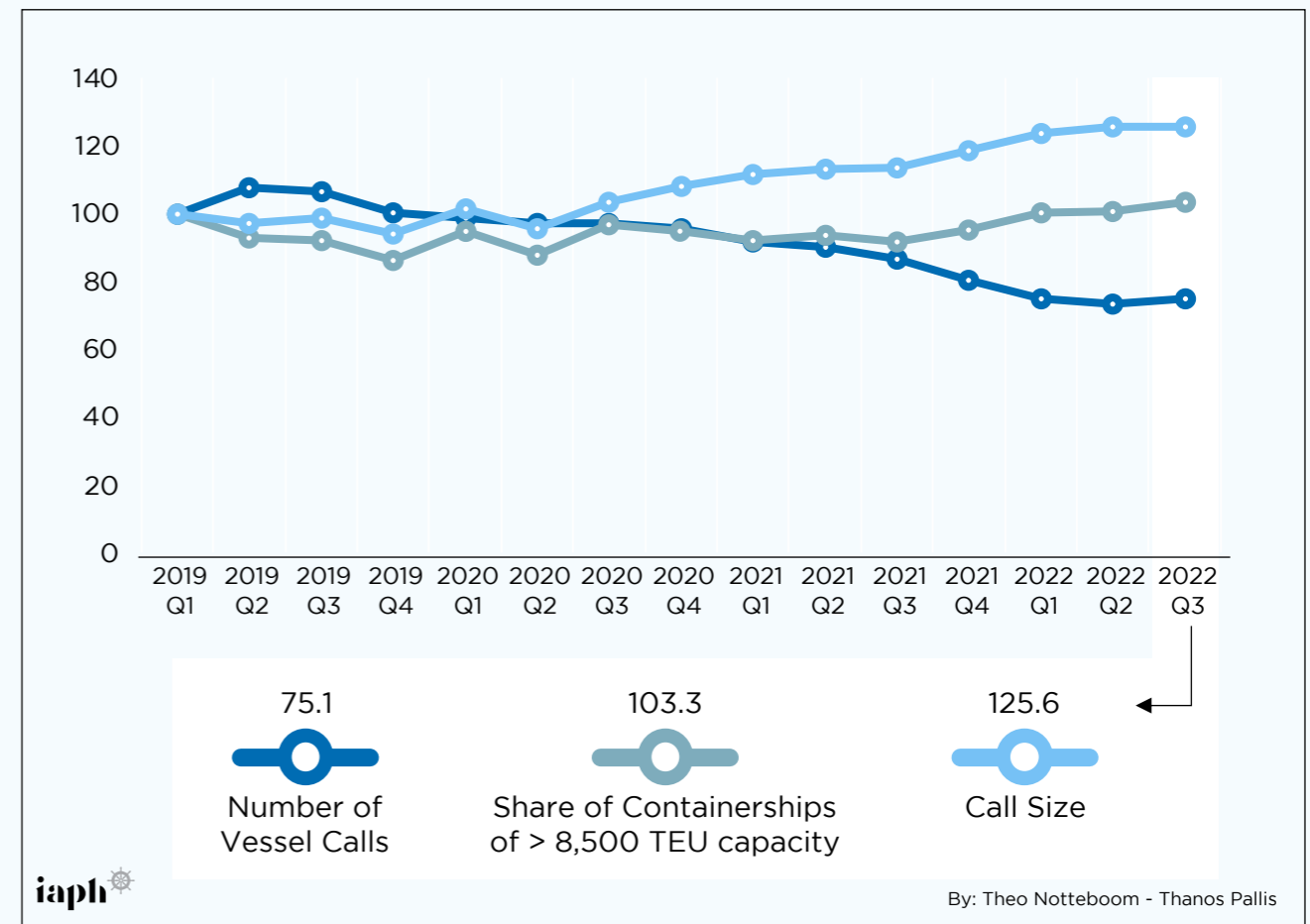
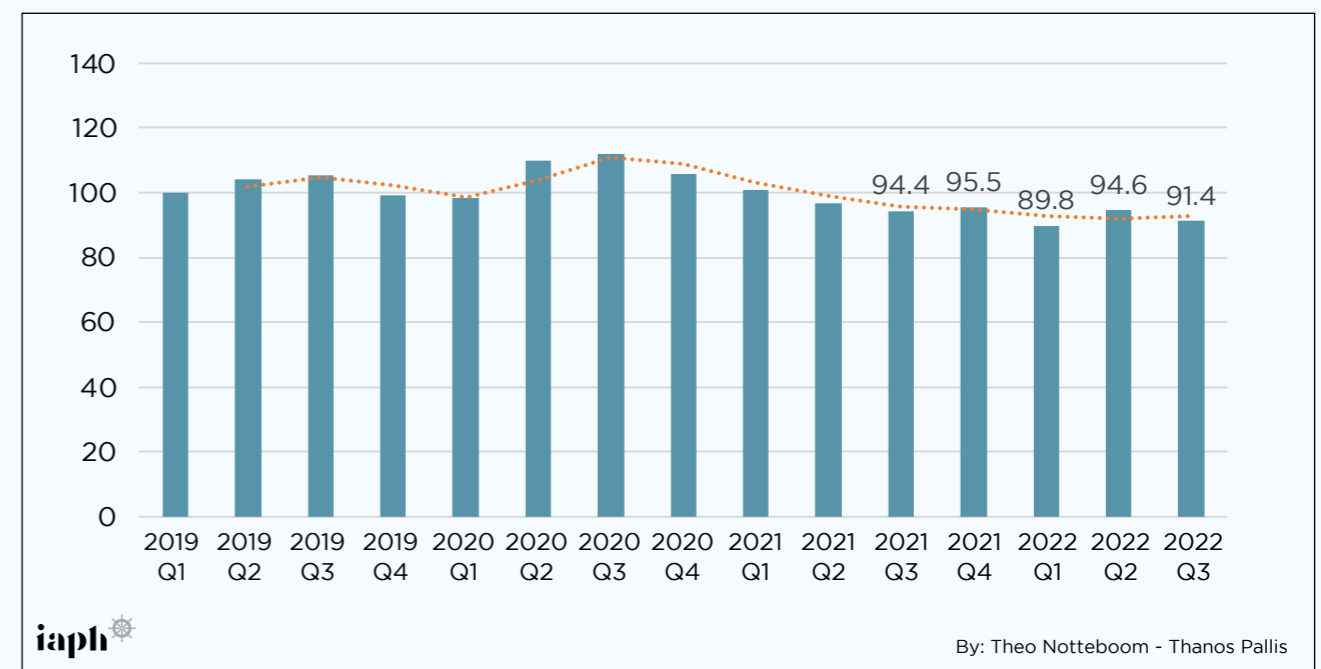


Figure 22
Evolution of Port Moves per Hour (Ports in Northern Europe; index-based: Q1 2019 = 100)



5.9. Regional focus: Oceania

The container port system in Oceania includes the ports in Australia, New Zealand and some smaller port facilities in Pacific Island economies. Figure 23 only includes two of the three indicators. The share of 8,500 TEU+ vessels was not included given a significant increase from 0.7% (index 100) in Q1 2019 to 11.3% in Q1 2021 (index value of 1557) and 10.9% in Q3 2022, showing that this ship class is finding its way to Oceania.

The increasing share of larger ship sizes went hand in hand with a 33% increase in average call sizes by Q4 2022 and a 20% decrease in the number of vessel calls. In Q3 2022, vessel calls were 13.1% lower compared to Q1 2019 and average call sizes 22.7% higher. However, the quayside terminal productivity hardly grew with ship size and call sizes. The port moves per hour in Q3 2022 were only 5.5% higher than in early 2019.

Figure 23
Evolution of Number of Vessel Calls, and Call Size (Ports in Oceania; index-based: Q1 2019 = 100)

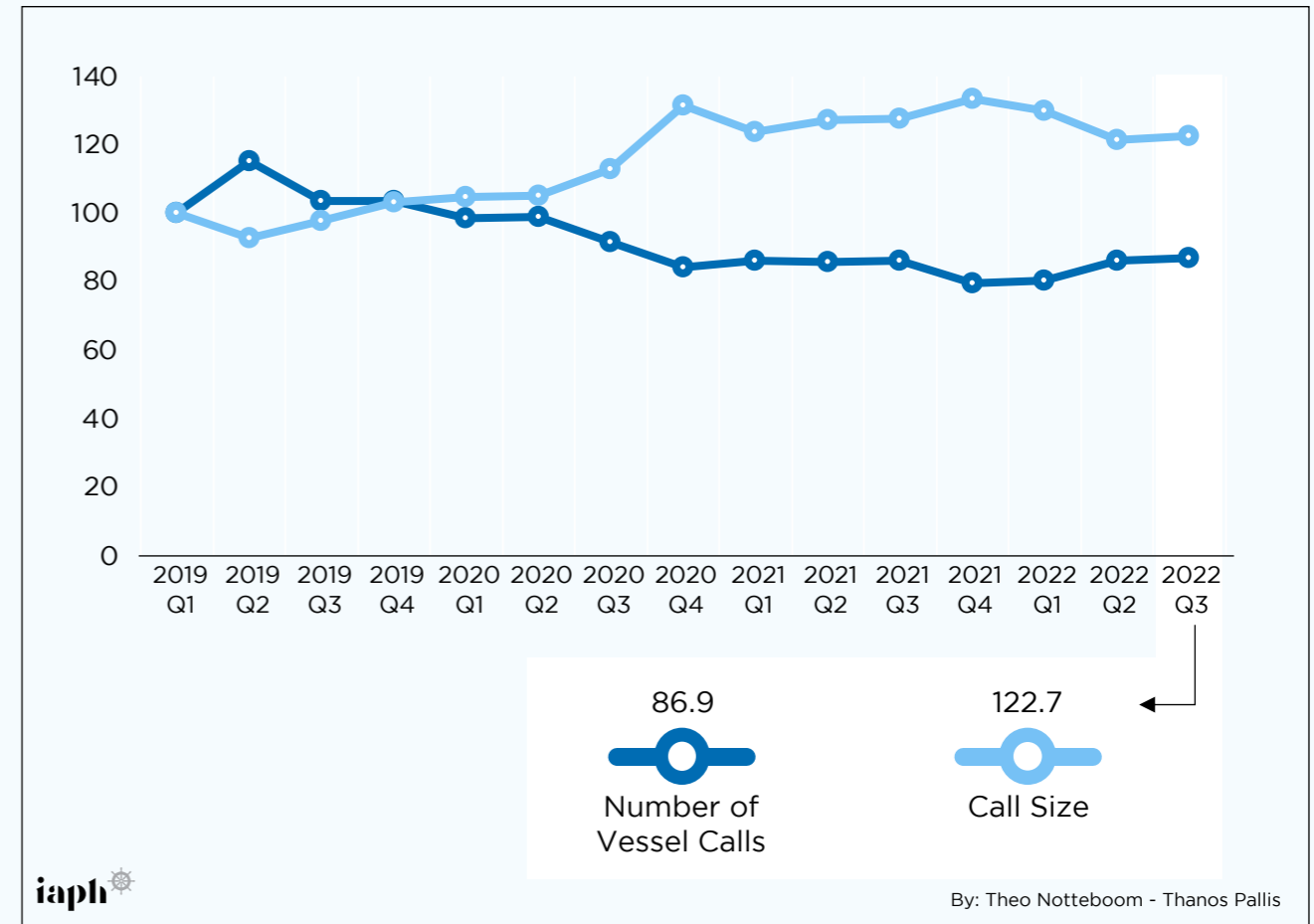
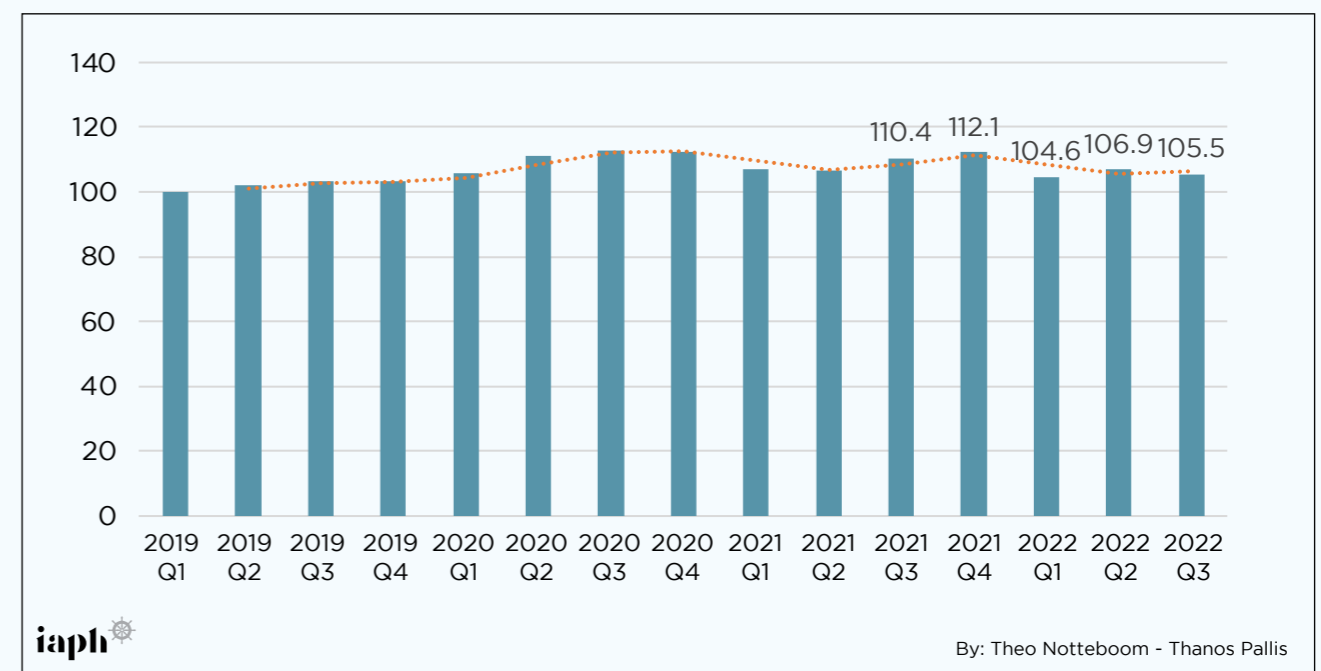


Figure 24
Evolution of Port Moves per Hour (Ports in Oceania; index-based: Q1 2019 = 100)



5.10. Regional focus: South East Asia

The South-East Asian container port system stretches from major economies such as Indonesia, Thailand, Malaysia, Singapore, and the Philippines, to small island economies. Given the region's distinct geography, South-East Asia is home to some large transshipment hubs connecting intercontinental services to intra-regional container services as well as major gateway ports.

Throughout the period of observation, South-East Asia witnessed a significant decrease of 19.1% in the number of vessel calls. This drop was already initiated in late 2019 but further deepened during the COVID-19 years. However, the vessel call number is on the rise in 2022 after having reached its lowest level in Q4 2021. Indeed, the number of vessel calls in Q3 2022 has risen 11.3% on a year-on-year basis. As observed in many other regions, the call sizes saw a strong upward trend (+44% by Q4 2021). However, average call sizes have been down about 10% in the past 12 months. In early 2019, about 17% of vessels calling at the South-East Asian port system were larger than 8,500 TEU. By late 2020, this share had risen to 22.9%, a 34 percentage point increase. In Q3 2022, the share of 8,500+ TEU vessels in total container vessel calls decreased slightly to 20.2%, although this is still 18.1% higher than in early 2019.

The port moves per hour went up in the early months of the pandemic (+17% between Q1 2019 and Q2 2020). However, the global supply chain crisis has decreased productivity figures since late 2020. The year 2021 closed with a 5.5% decrease in port moves per hour compared to the first quarter of 2019. Terminal productivity improved in 2022, although the figure for Q3 2022 is only 1.4% above the Q1 2019 level.

Figure 25
Evolution of Number of Vessel Calls, Share of Containerships of > 8,500 TEU capacity, and Call Size (Ports in South-East Asia; index-based: Q1 2019 = 100)

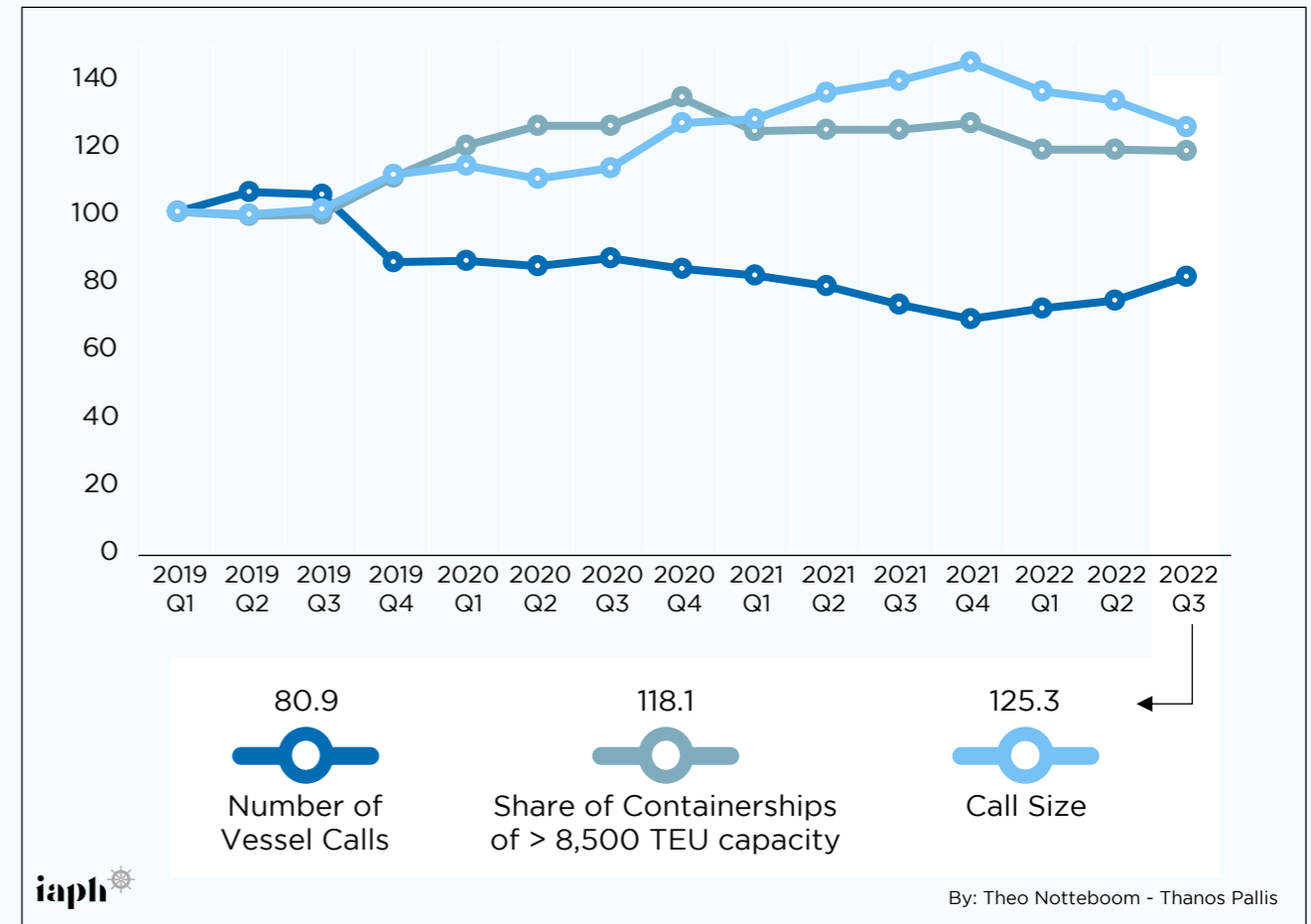
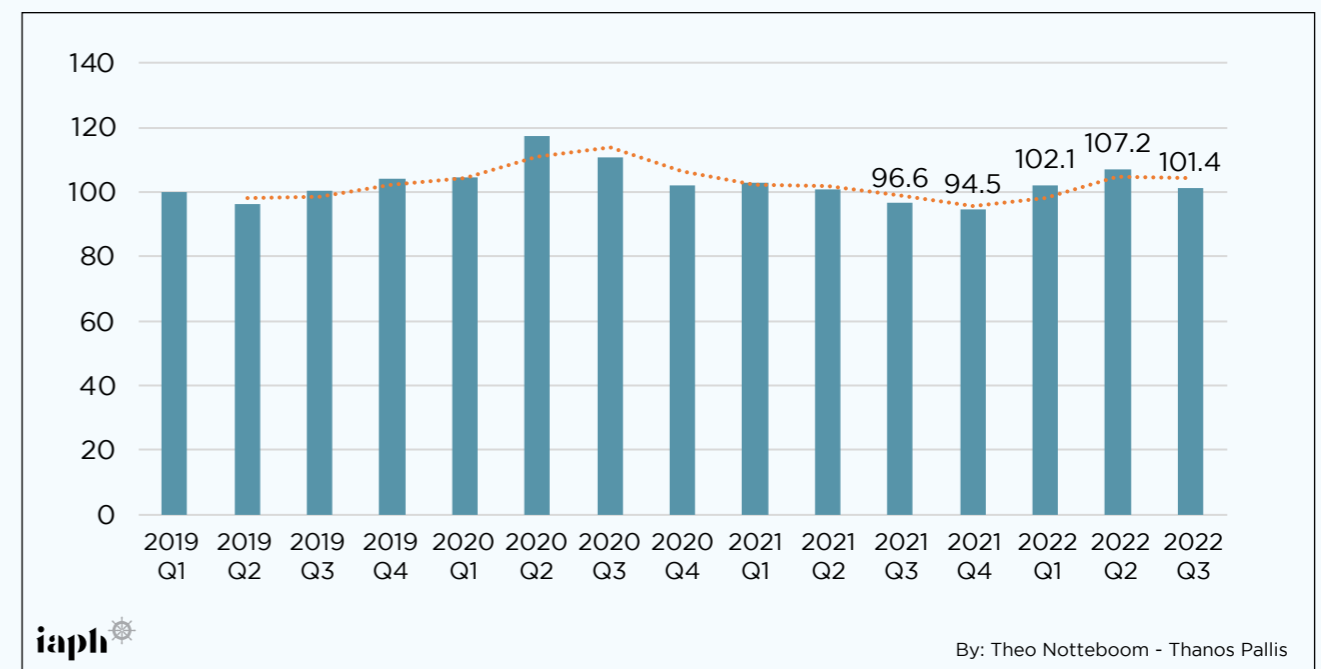


Figure 26
Evolution of Port Moves per Hour (Ports in South-East Asia; index-based: Q1 2019 = 100)



6

TRENDS IN CARGO PORTS: HINTERLAND TRANSPORT SITUATION

In the remainder of the report, we turn back to the survey-based results of the IAPH World Ports Tracker. One of the survey questions deals with the current hinterland transport conditions in the ports. In particular, we explore to what extent the responding ports are facing delays and disruptions in inland transport operations by truck, rail, and barge (where available).

There can be multiple causes of delays or disruptions in inland transport, including low availability of transport equipment such as containers, chassis, or wagons; low availability of personnel such as truck drivers, congestion or disruptions in terminal operations, and heavy congestion/capacity issues in the inland transport network. These can negatively affect inland transport operations in/out of the port area and the hinterland. In view of recognizing potential differences in market dynamics per cargo type, the survey distinguishes between the inland transport of containers and the inland transport of bulk and breakbulk cargo.

When it comes to inland container transport, about 11% of the ports report delays (6-24 hours) or major disruptions (> 24 hours) in road transportation, while one quarter faces minor delays (< 6 hours). Delays and major disruptions are more common in the rail and barge markets, accounting for 15% of all responding ports.

The share of ports not encountering any delays in inland transport amounts to 65% for trucking, 56% for rail, and 81% for transportation by inland barge.

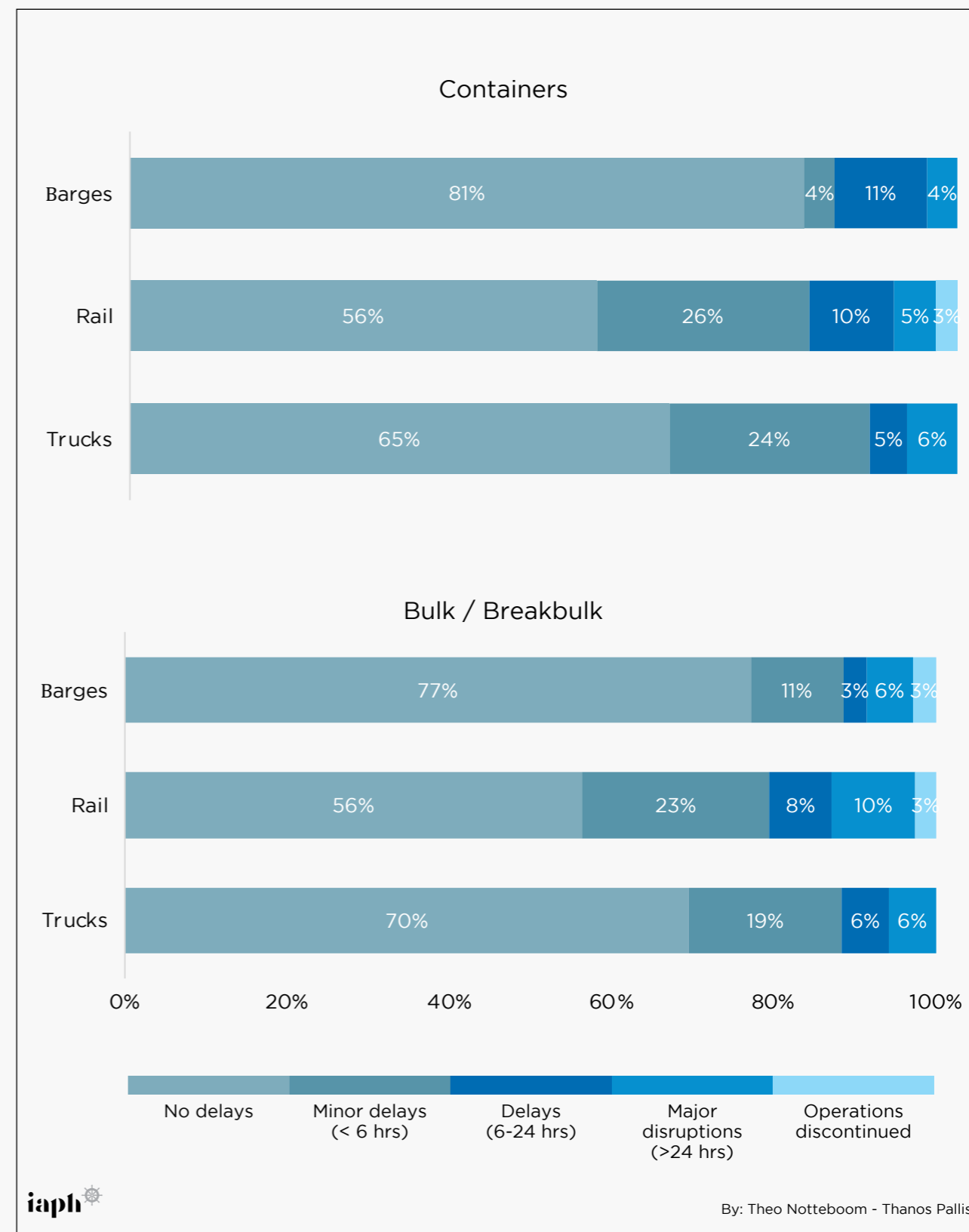
The inland transportation activities for bulk and breakbulk cargo seem less impacted by delays. Over 70% of respondents are neither facing inland barge nor truck transport delays, while 56% show no problems in rail operations. Breakbulk/bulk inland transport is hampered by delays or even major disruptions for only 12% of ports in the case of trucking, 18% for rail, and 9% for barge transport. The findings demonstrate that the situation in inland container transport operations is, on average, slightly more disrupted than in the case of breakbulk / bulk cargo flows.

Still, there are rather significant differences among the port regions as indicated in the related Dashboard III. When considering inland container transport by truck, only Latin America & the Caribbean have a share of ports above 10% reporting delays or significant disruptions. The number of responses per region for rail is, in some cases, far below 10, but overall ports are not facing any major disruptions in rail. In North Europe and Southeast Asia & Oceania, respectively 25% and 20% of the ports report delays/major disruptions in barge operations.

The situation for breakbulk/bulk cargo shows some regional differences. North European ports report no delays in rail and inland barge operations, with only 8% facing disruptions in trucking. In most regions, no delays or only minor delays in trucking are observed. The only exceptions are Latin America & the Caribbean, and Sub-Saharan Africa with 29% and 60% of respondents respectively facing delays or major disruptions in inland truck operations for breakbulk/bulk cargo (though the sample in both cases is small). In the rail market, the share of ports mentioning delays/major disruptions is the highest in the Mediterranean. In all regions, at least 80% of ports record zero or only minor delays in inland waterway transport of breakbulk and bulk cargoes.



Figure 27
Evolution of hinterland transport conditions in ports (Q3 2022 vs. Q3 2021)



7

TRENDS IN CARGO PORTS:

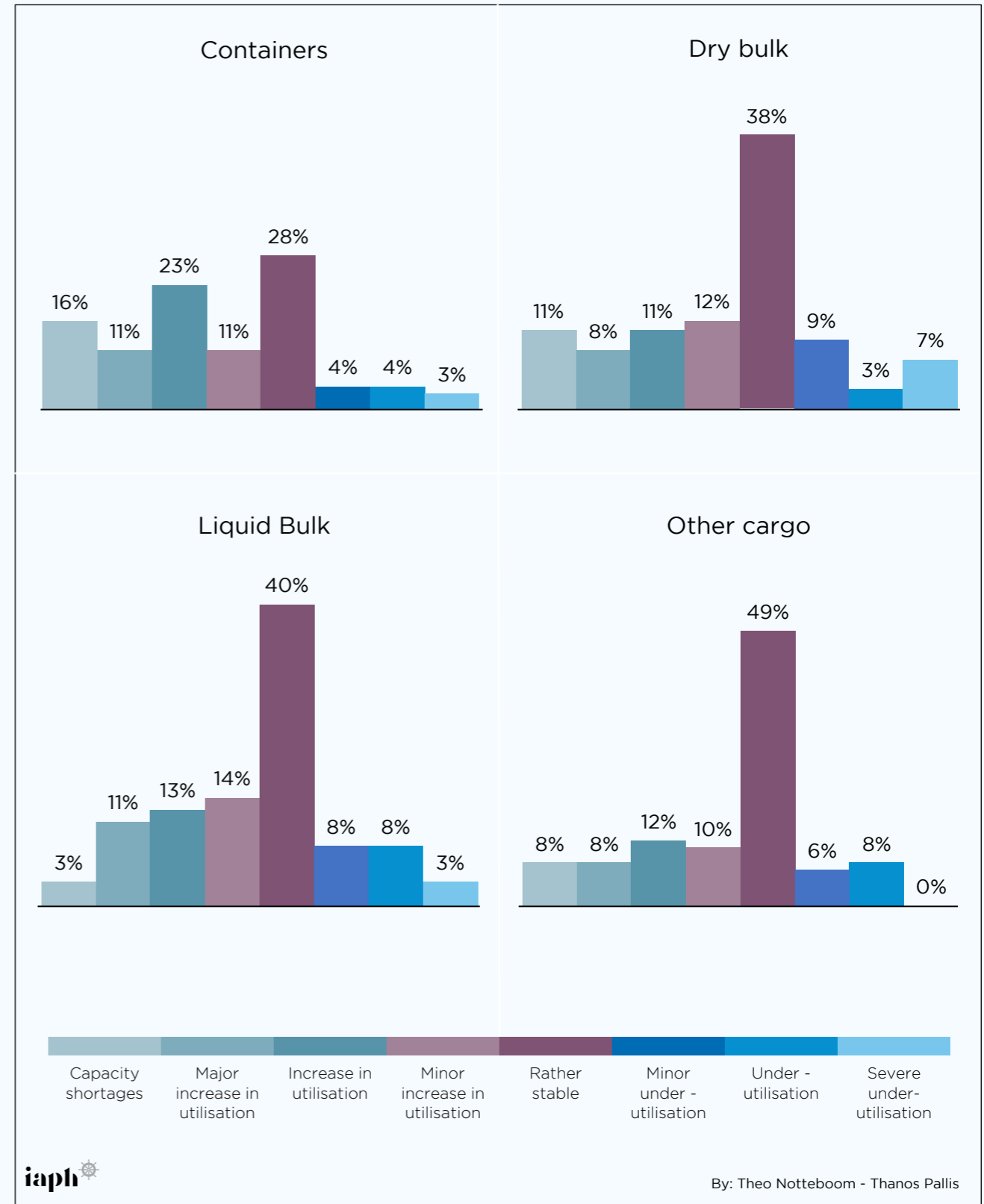
**CAPACITY UTILISATION IN WAREHOUSING
AND DISTRIBUTION ACTIVITIES**

Another question of the survey zooms in on the current capacity utilisation of warehouses/distribution facilities in world ports. Warehousing and distribution activities in ports may change due to demand and inventory (re)stocking of traders, importers and retailers. Tank storage parks for liquid bulk, and oil products in particular, might see changes in their utilization degree caused by changes in oil prices and the demand for oil products such as kerosene, diesel and gasoline, and the strategies of major traders. In view of capturing the particularities associated with different types of goods flows, this part of the survey distinguishes between the warehousing/distribution situation for containerized goods, dry bulk, liquid bulk, and other cargo (conventional general cargo and breakbulk).

The survey results show 34% of ports reporting an increase or major increase in the utilisation of warehousing and distribution facilities for containerized goods, with 16% reporting capacity shortages.

Only 11% of respondents report an underutilisation of warehousing and distribution facilities. In the other goods categories, the share of ports with under-utilized capacity ranges between 14% and 20%. While one quarter of the ports are observing an increase or major increase in the utilisation degree of liquid bulk storage facilities, only 3% of ports face capacity shortages. In the dry bulk market, 20% of surveyed ports face (major) increases in facility use with another 8% being confronted with a lack of capacity.

Figure 28
Warehousing and Distribution Services: Capacity Shortages and Under-Utilisation per market (Q3 2022 vs. Q3 2021)



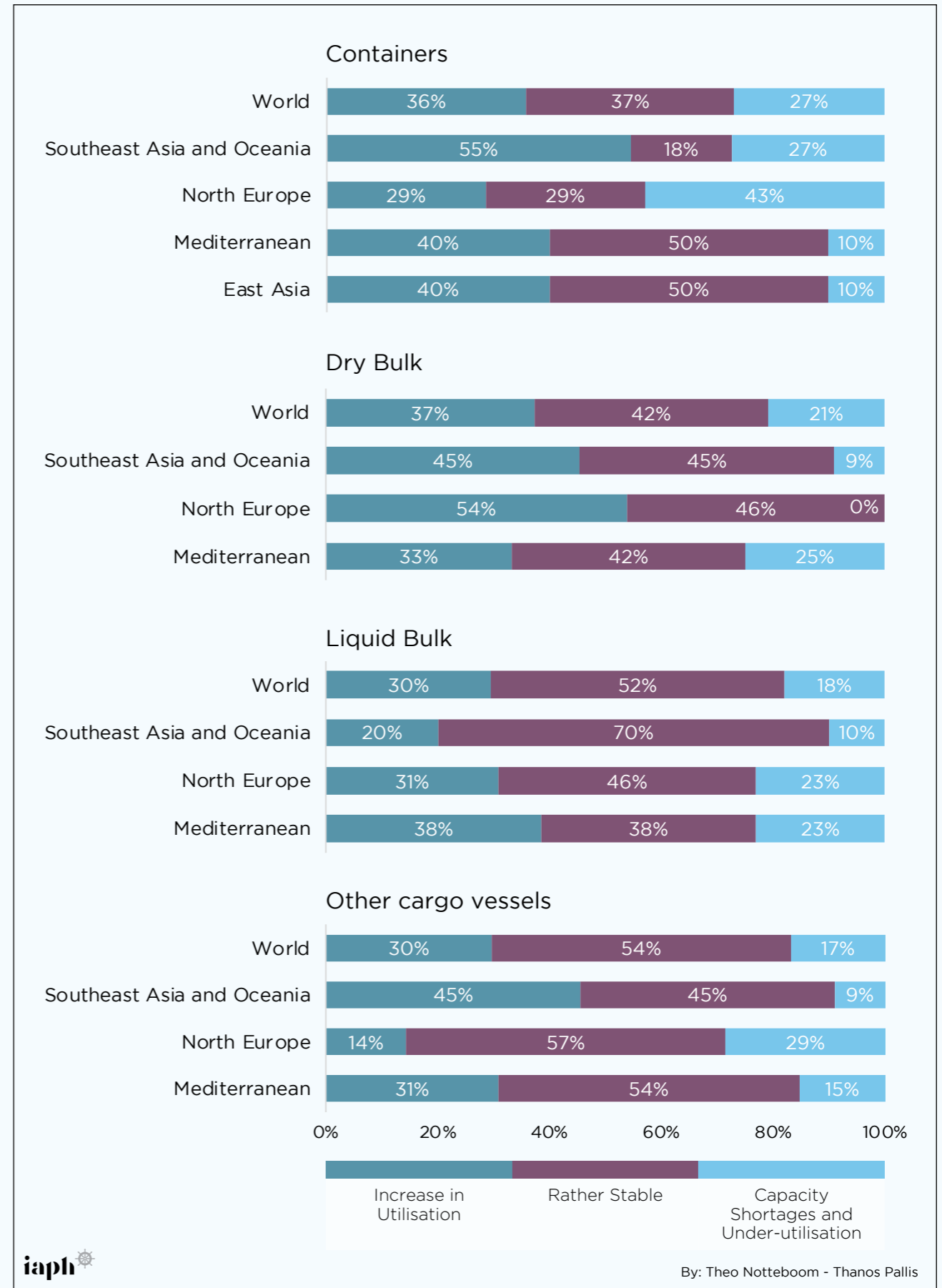
The regional analysis reveals North America and North Europe having the highest share of ports reporting capacity shortages at warehousing /distribution facilities for containerised cargo, i.e., 50% and 43% respectively. There are no North American or North European ports pointing to underutilisation.

In the dry bulk sector, the Central/South American port region has three out of ten ports struggling with capacity shortages. Conversely, the Mediterranean, North Europe and South East Asia/Oceania do not report any shortages.

Underutilisation of liquid bulk storage facilities is most present in East Asia (29%) and North Europe (23%). Capacity shortages are only found in the Med (8% of responding ports) and North America (17%). For the very diverse other cargo vessels category, we find capacity shortages in 40% of the only five North American ports that responded to the survey. Most port regions report no capacity shortages.



Figure 29
Warehousing and Distribution Services: Capacity Shortages and Under-Utilisation in selected Regions (Q3 2022 vs. Q3 2021)



8

**STRATEGIC AND OPERATIONAL
ISSUES IN PORTS:**

STAFF AVAILABILITY

The availability of port related workers is an important strategic and operational consideration in world ports. The past and current measures (where applicable) to fight COVID-19 can affect the availability of port related workers. However, the IAPH-WPSP Port Economic Impact Barometer on the impact of COVID-19 on world ports in the period April 2020 to April 2021 demonstrated that the level of impact limiting ports' capacity to operate was relatively small. The shock of the first weeks after the COVID-19 outbreak resulted in some serious difficulties, with shortages of personnel and workers at all levels reaching their peak in April 2020. These initial shortages were due to dockers and administrative personnel remaining home for the first weeks following the COVID-19 pandemic.



At the same time, the impact of any workforce shortages was alleviated by several industries linked with ports remaining inoperative, with fewer goods transported to and/or from ports. Since then, shortages have been decreasing. However, staff availability issues resurfaced in early 2021 in some parts of the world, contributing to supply chain disruptions.

Question 8 of the survey addresses the staff availability issues in world ports by specifically focusing on three categories of port-related workers: dock workers, truck drivers and staff working in nautical-technical services (technical personnel of towage companies, pilots, mooring specialists, lock operators, etc.).

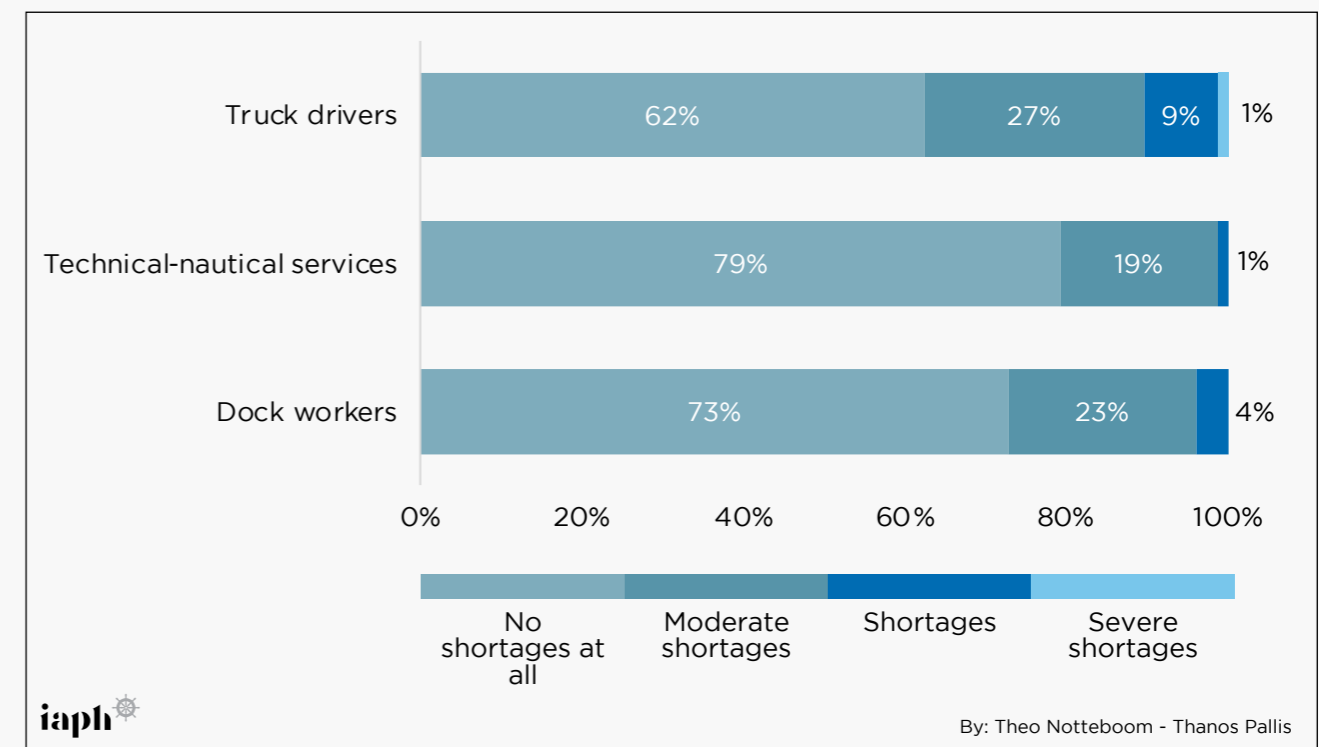
The survey results revealed that the vast majority of responding ports faces no shortages of operational workers.

A total of 73% of the responding ports recorded no shortages in the case of dock workers; 79% of the responding ports recorded no shortages in the case of technical-nautical services, and 62% of the ports that participated in the survey reported no shortages of truck drivers.

The situation is least favourable in North America with half of the small number of surveyed ports reporting moderate to severe shortages across all three staff categories. The Middle East and Central Asia overall faces the lowest staff availability challenges. The availability of truck drivers remains a major concern, with most regions having 40% to 50% of ports pointing to moderate to severe shortages. The truck driver availability is the most favourable in the Middle East & Central Asia and Sub-Saharan Africa.



Figure 30
Staff availability in World Ports (Q3 2022 vs. Q3 2021)



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TRENDS IN WORLD PASSENGER PORTS

Passenger ports continue to gradually recover from the collapse in the passenger related activities that the COVID-19 pandemic had brought in 2020 and 2021.

With the resumption of cruise activities in the post-pandemic period in progress, the number of cruise vessel calls in the vast majority of world cruise ports continues to increase.

Compared to the same quarter of the previous year, in Q3 2022 48% of the ports participating in the survey experienced a double-digit percentage growth of such calls. A further 12% of the responding ports experienced single-digit growth.



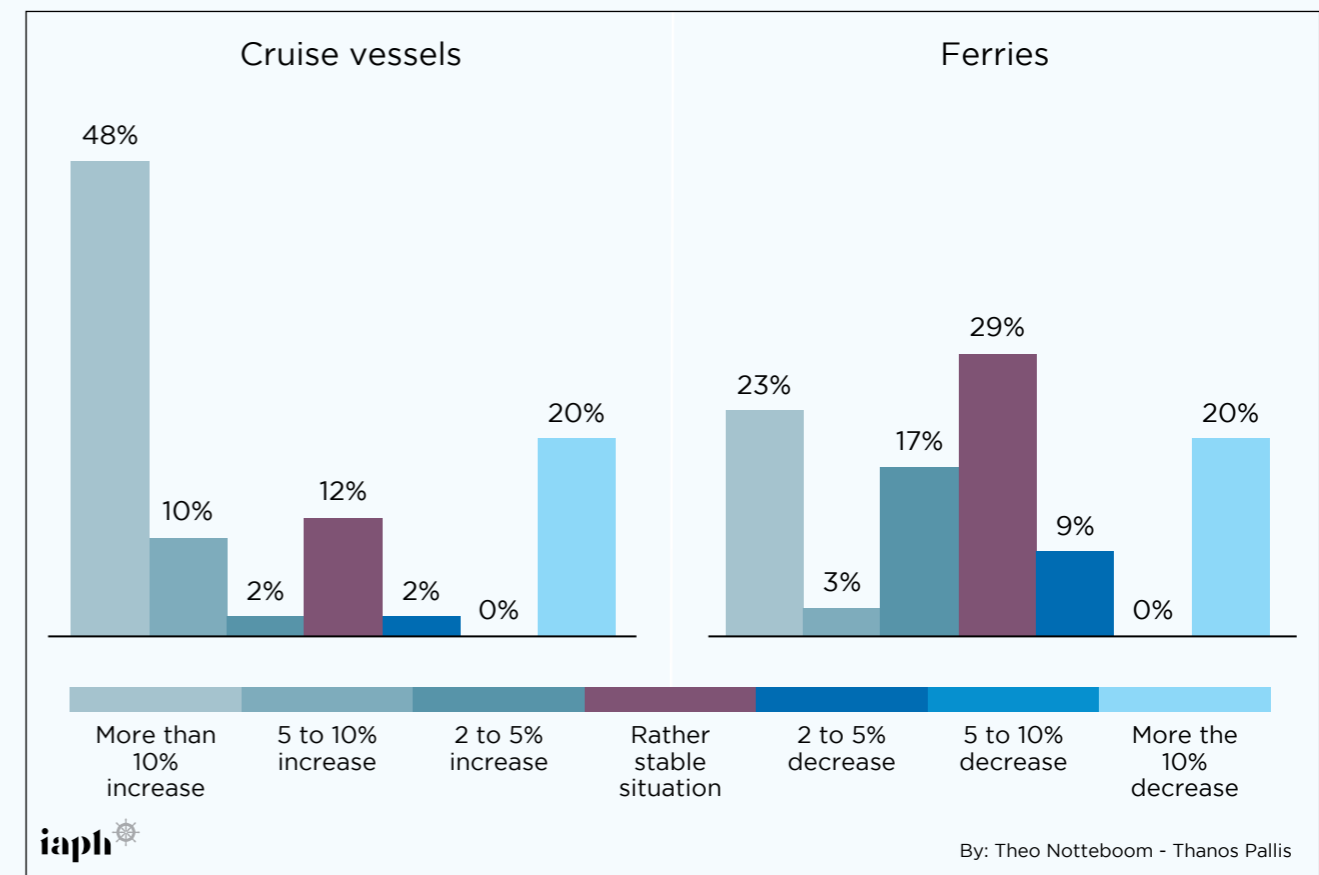
On the other hand, some evidence of the redeployment of cruise vessels and respective itineraries appears to accompany the 're-booting' of cruise shipping. For 22% of cruise ports, the number of vessels that called in Q3 2022 was lower than that of the same period in 2021, even though not all cruise lines were in operation in 2021. For the remaining 12% of ports that serve the cruise market, the number of cruise vessel calls in the most recent quarter of 2022 did not differ from the number of calls in Q3 2021.

A somewhat similar trend is revealed as regards the operation of ferries. Of the responding ports and within the period under examination, 23% realised a growth of more than 10% in ferry calls, and a further 20% experienced single-digit growth. The percentage of passenger ports recording a decline in ferry calls in Q3 2022 is 29%, with two-thirds of them reporting a decline exceeding 10%. For 29% of passenger ports, the number of ferry calls in Q3 2022 remained similar to the figures registered in the same quarter of the previous year.

With cruise ports serving different cruise markets and thus various sizes of cruise vessels, it is worth noting that the above replies reflect a sample of ports that were hosting different sizes of cruise vessels at the time of the survey. Several ports have (are building) the infrastructure available to berth cruise vessels of any size, so the infrastructure panorama of the industry's post-COVID-19 'new normal' remain to be seen.



Figure 31
Evolution of cruise and ferries calls in passenger ports (Q3 2022 compared to Q3 2021)



EXPECTATIONS IN CRUISE PORTS FOR THE NEXT TWELVE MONTHS

The positive trend of the recent period is expected to continue. About 70% of cruise ports expect that in the next twelve months, the number of cruise vessel calls at the port will increase; four out of ten ports participating in the survey expect the scale of this growth to be a double-digit percentage. At the same time, 19% of the ports expect the number of cruise ship calls to remain relatively stable (i.e., between 2% growth and 2% decline). Only a few ports with specific profiles (i.e., high COVID-19 related country risk in the current period) expect fewer cruise activities than today.

The picture is very similar regarding the number of cruise passengers visiting the respective ports.

Some ports are forecasting the largest cruise season on record in terms of vessel calls scheduled and passengers visiting the port and the destination. Expectations of growth in the number of cruise passengers visiting the respective ports are even higher than those referring to cruise ships calls.

About three-quarters of cruise ports foresee an increase in passengers to be hosted in the next twelve months, and only 10% of cruise ports expect this number to decline.

The following 12 months are expected to be the period when cruise ships will continue to return to operations, redeployed in old and new itineraries, while implementing new protocols and further adjustments to the new normal for the industry in the post-COVID-19 era. It is noteworthy that, due to the nature of the market, cruise itineraries and associated port calls are characterized by advanced planning that exceeds one year. This increases the information available to ports regarding future cruise activities, and thus the information available to feed expectations.

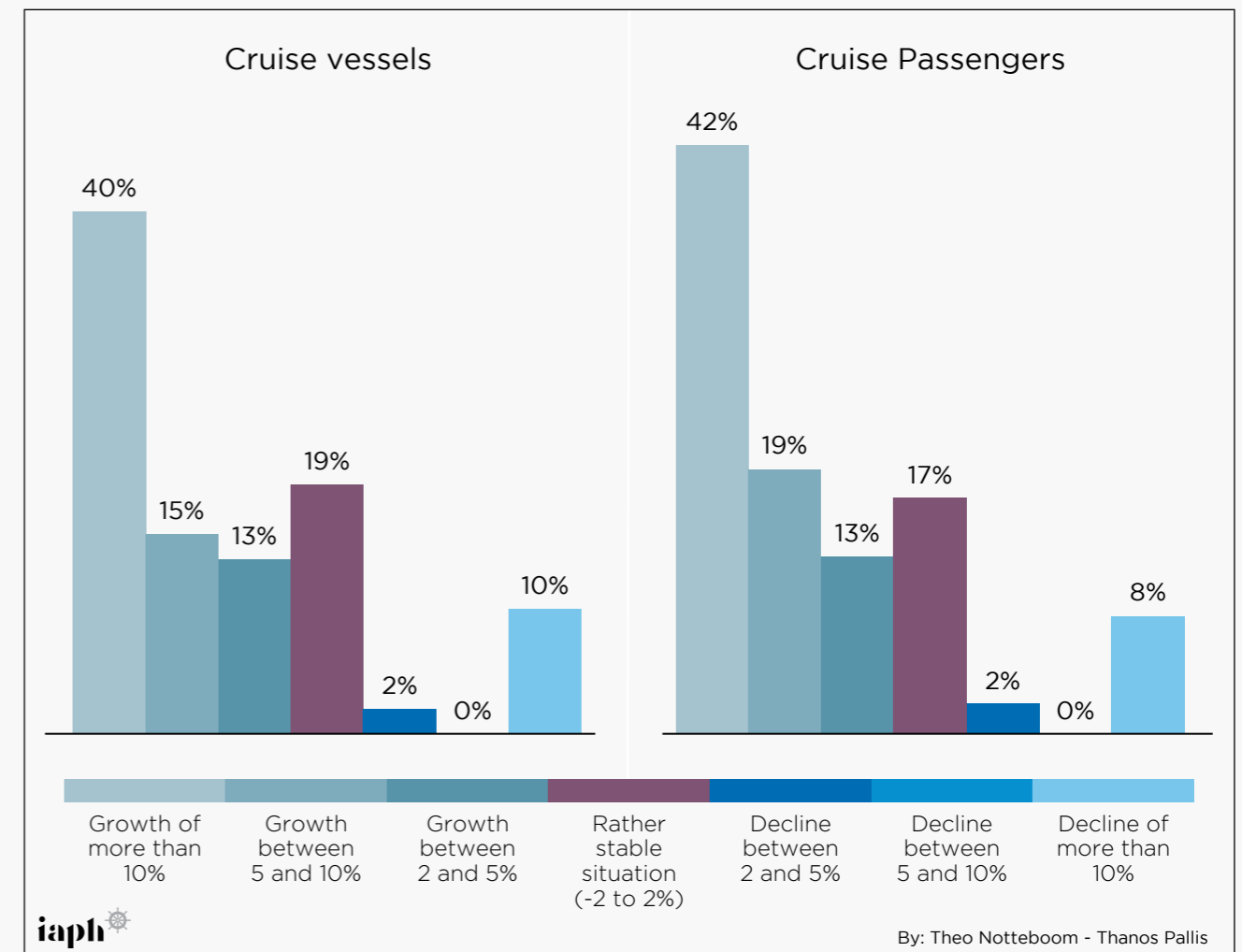
The survey revealed that trends significantly diverge in the regional markets, resulting from the pandemic's heterogeneous impact. Ports in the Mediterranean, Middle East, North Europe, and North America reported that due to the pandemic, they did not record any passenger traffic for at least the first half of 2021, and the situation was reversed in the recent period (late 2021, the first half of 2022). While there are a number of ports reporting significant upticks in cruise traffic after the cancellations, some are even forecasting the largest cruise season on record in terms of vessel calls scheduled and passengers visiting the port and the destination. This situation has led others to progress new investments in the terminal and other cruise port capacities. Others expect a speedy return of cruise calls to what they term 'the normality' of 2019, but with fewer cruise passengers than in 2019 due to lower vessel capacity than before. Still, several ports in East Asia, and Southeast Asia and Oceania mentioned that cruise activities have yet to restart or are expected to resume in late 2022, while ferries pertain to domestic calls.

Beyond the diverse trends, the survey revealed that the pandemic produced some structural changes in the market. Even in those regions experiencing a full return of services, some ports in North Europe advise that regular cruise or ro-pax traffic similar to levels until 2019 or early 2020 has yet to return. Others report an actual increase in ferry services compared to the pre-pandemic period.

The trends in the Asian market seem to diverge. On the one hand, there is optimism due to improving WHO health classifications of some countries in those regions and positive trends of cruise lines applications for scheduling cruises leads to expectations for cruise vessel calls and cruise passenger movements to increase as recovering from the impact of the COVID-19. On the other hand, in some other countries clarity over the pandemic situation remains questionable and ports do not expect to accommodate cruise vessels calls in its ports in the next twelve months. A lot on the forthcoming trends in the passenger markets remain dependent on the developments on the COVID-19 pandemic front.



Figure 32
Cruise ships calls and passenger movement in world cruise ports for the next twelve months: Expectations as in the beginning of Q3 2022



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