



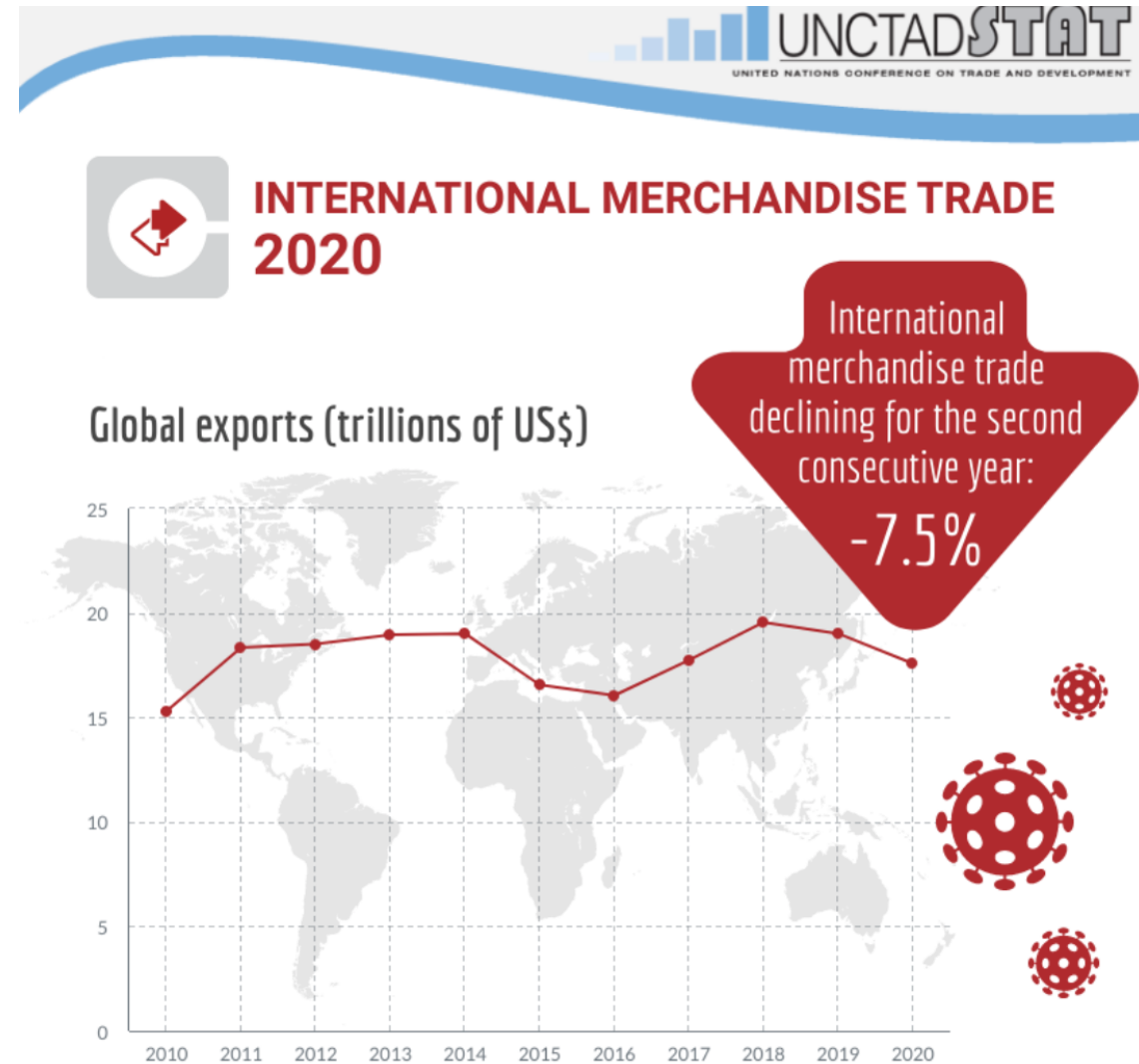
COVID-19 and Maritime Transport: Disruption and Resilience in Africa

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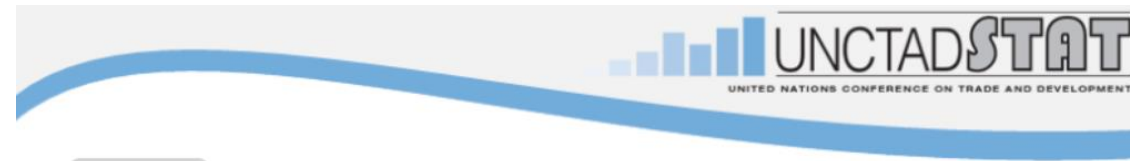
Two years of merchandise trade decline

- Growth of Global exports in 2017 & 2018
- Minor decline in 2019
- But a major decline in 2020: -7,5%



In 2020 the world experienced a deep decline of merchandise exports

- Three Quarters of 2020: signs of a major crisis due to the pandemic
- Q4: recovery back to late 2019 levels



VOLUME INDEX OF MERCHANDISE EXPORTS UNCTAD AND WTO preliminary data

World trade in volume terms shows 0% growth in 2020Q4 YoY basis.



Export volume index (2005 = 100)



0% 
in 2020Q4 yoy

Maritime Trade in the pre-Covid19 era

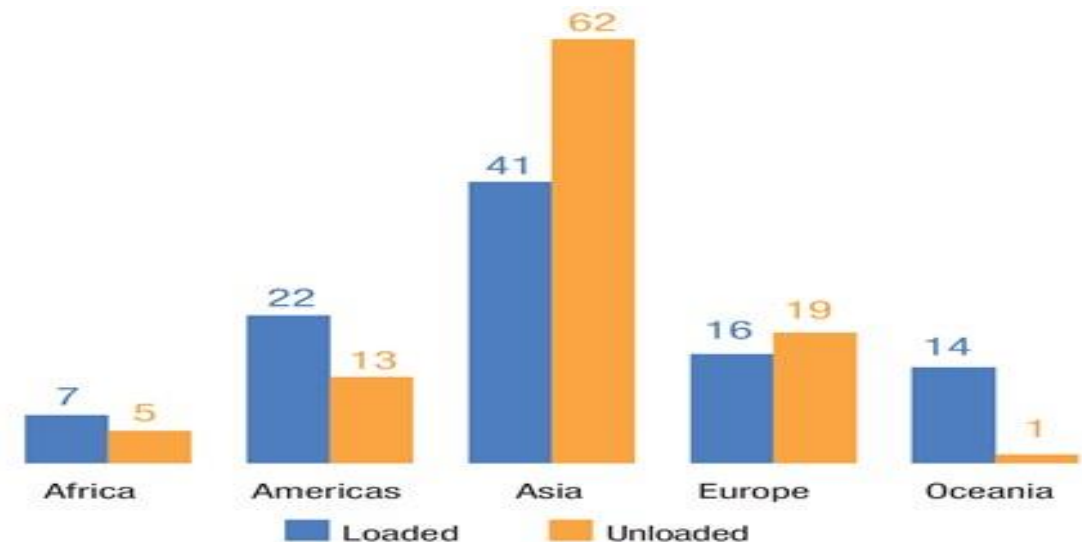


12 November 2020
16:00 - 17:00 hrs. , CET
Online

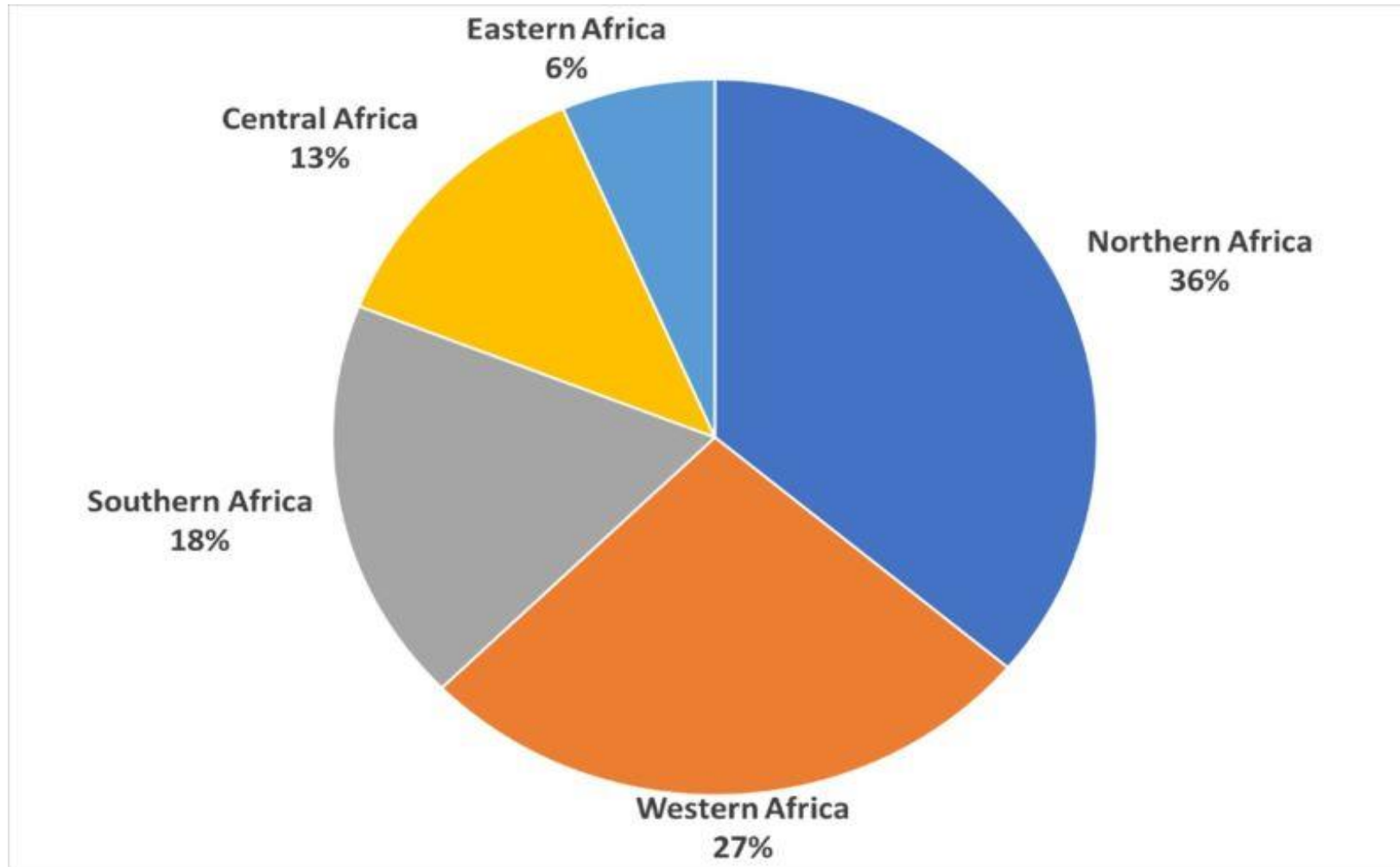
Key trends in maritime trade and port cargo traffic



- **Africa's international trade relies heavily on shipping and ports:** While about one-third of African countries are landlocked, maritime transport remains the main gateway to the global marketplace.
- **Africa accounts for a small share of world merchandise trade by value:** about 2.5% of exports and 3% of imports in 2020.
- **Africa contributes relatively larger shares to globalized maritime trade volumes.** In 2019 African ports:
 - loaded 7% of world maritime trade (exported)
 - unloaded 4.6% of this trade (imported)



Sub-regional participation in Africa's maritime trade in 2019



Africa and Maritime Trade (2019)

- **Marginal relative contribution of Africa to maritime trade:**
 - **12% of the volumes loaded** in developing countries
 - **7% of the volumes unloaded** in developing countries .
- **Maritime trade in Africa**
 - is shaped by the continent's **trade concentration** and **limited diversification**.
 - half of the goods exported by sea composed of **tanker trade**,
 - approx.. 2/3 of imports consist of **dry cargoes** (dry bulks and containerized goods).
- **Containers:**
 - Container ports accounted for about **4% of global containerized trade volume** (much of which: imports of manufactured goods).
 - Targeted trade and industrial policy measures and regional integration initiatives (i.e. the African Continental Free Trade Agreement (AfCFTA) have the potential to enhance Africa's trade flows.



African countries liner shipping connectivity index (LSCI)



- African countries' shipping connectivity is strongly influenced by their geography.
- **The best-connected countries are**
 - **Morocco, Egypt and South Africa** – those countries at the continent's corners, where international shipping routes connect to hub ports.
 - **Djibouti, Togo and Mauritius** - sub-regional load centers.

Pre-COVID 19 connectivity trends:

- Ports in Africa are generally more connected to each other.
- High connectivity was the result of being connected to the same overseas routes, in combination with feedering and transshipment services.
 - **Durban** and **Cape Town** in South Africa: connected by services provided by 12 companies.
 - **Luanda**, Angola: most connected to Cape Town, South Africa with 7 companies,
 - **Mombasa**, Kenya: most connected to **Dar es Salaam, Tanzania** through direct services by 10 companies (also: connected with Ningbo, China through services by 6 companies.
 - **Tanger Med**, Morocco: highest connectivity with Algeciras and Valencia in Spain, through services provided by 9 liner companies.
- Five of the bottom 10 countries ranked according to their port performance (as measured by average port hours weighted by the size of vessels) are located in Africa.



An external crisis: COVID-19 pandemic



COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (J...



Global Cases

136,385,398

Cases by

Country/Region/Sovereignty

31,259,849 US

13,527,717 India

13,482,023 Brazil

5,128,126 France

4,597,400 Russia

4,388,296 United Kingdom

3,903,573 Turkey

3,779,594 Italy

Admin0

Last Updated at (M/D/YYYY)

4/13/2021, 12:20 AM

Cumulative Cases

Incidence Rate

Case-Fatality Ratio

Testing Rate

192

countries/regions

Lancet Inf Dis Article: [Here](#). Mobile Version: [Here](#). Data sources: [Full list](#). Downloadable database: [GitHub](#), [Feature Layer](#).
Lead by [JHU CSSE](#). Technical Support: [Esri Living Atlas team](#) and [JHU APL](#). Financial Support:



Esri, FAO, NOAA

Global Deaths

2,941,212

562,500 deaths
US

353,137 deaths
Brazil

209,338 deaths
Mexico

170,179 deaths
India

127,346 deaths

Global Deaths

Total Test Results in US

407,918,319

56,363,675 tests
California US

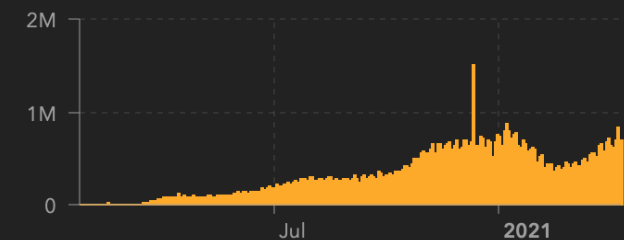
47,470,275 tests
New York US

22,037,982 tests
Texas US

21,532,864 tests
Florida US

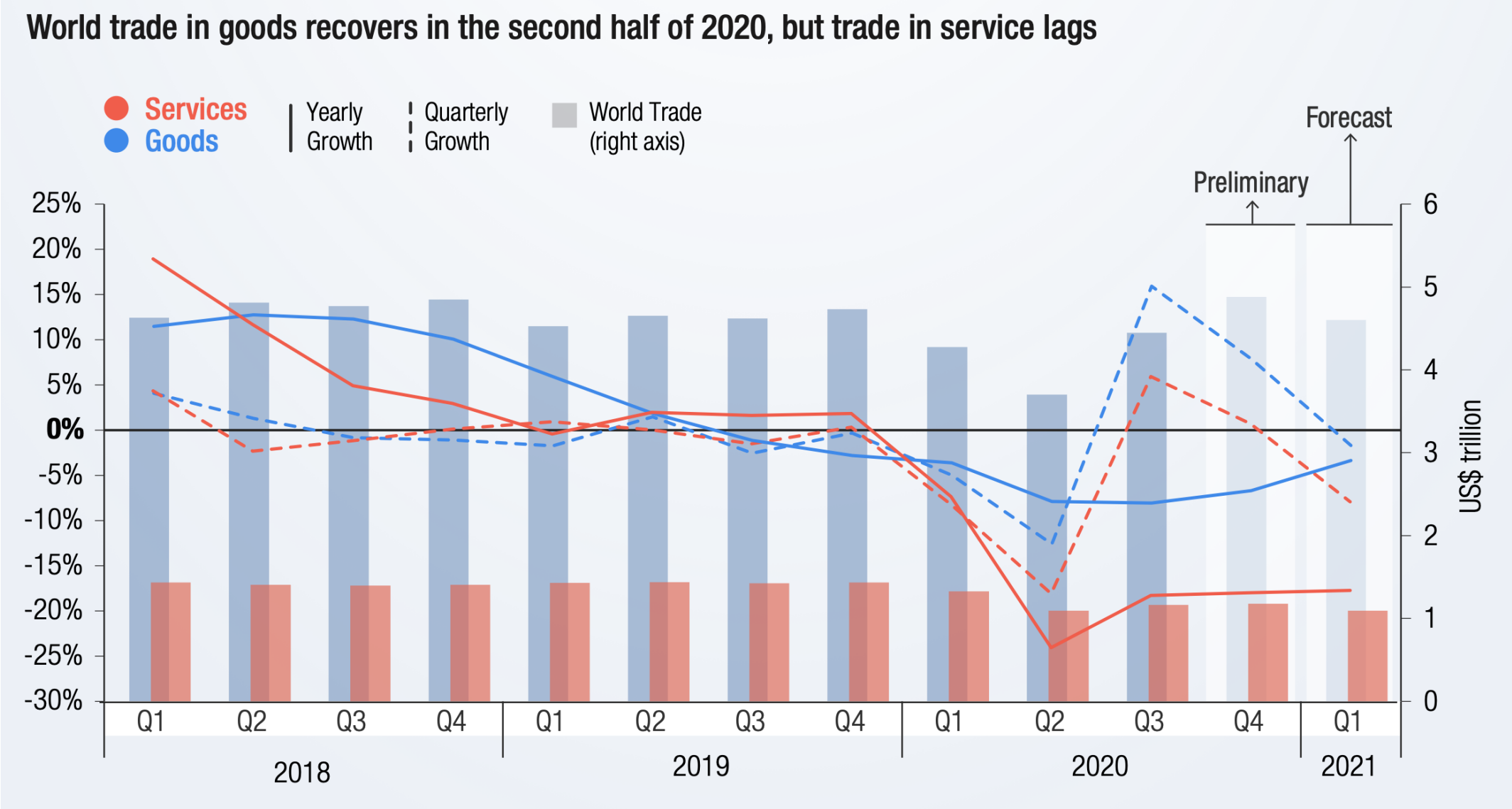
21,172,007 tests

US Test Results



Daily Cases

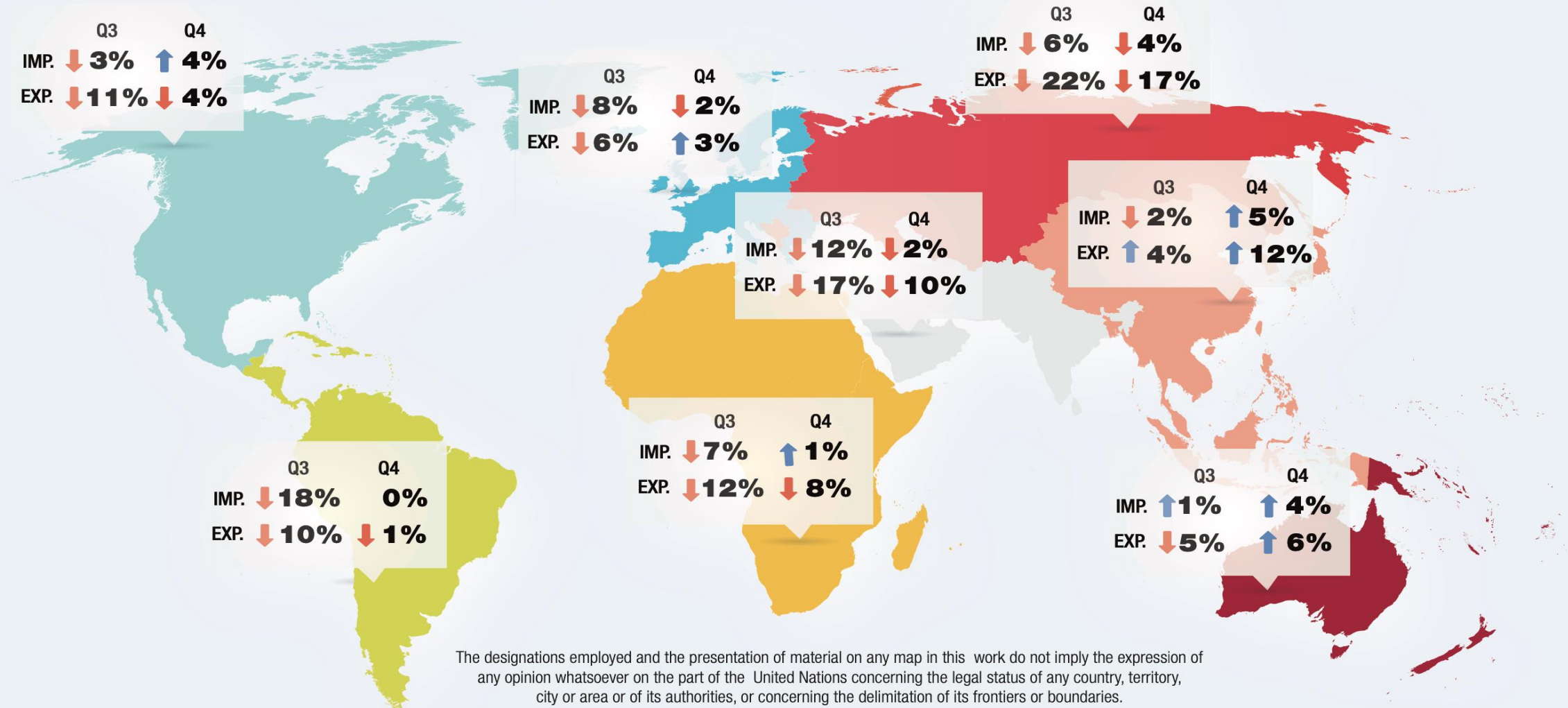
The initial shock: COVID-19 affects trade flows at unprecedented speed & scale



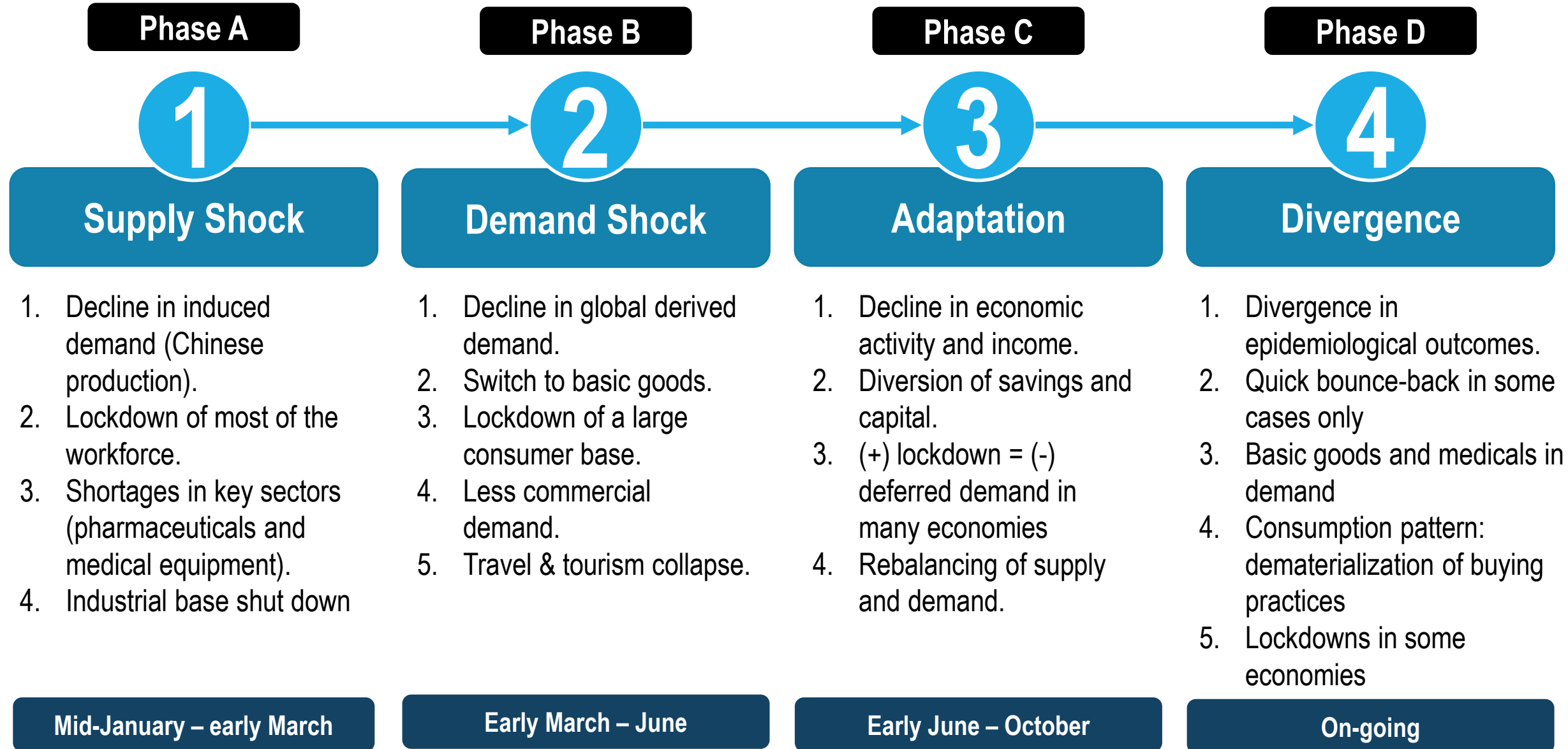
Source: UNCTAD (2020). Global Trade Update (February 2021) (UNCTAD/DITC/INF/2020/4)

Imports & Exports: Regional variations

Goods trade has not rebounded for most regions, except East Asia and the Pacific



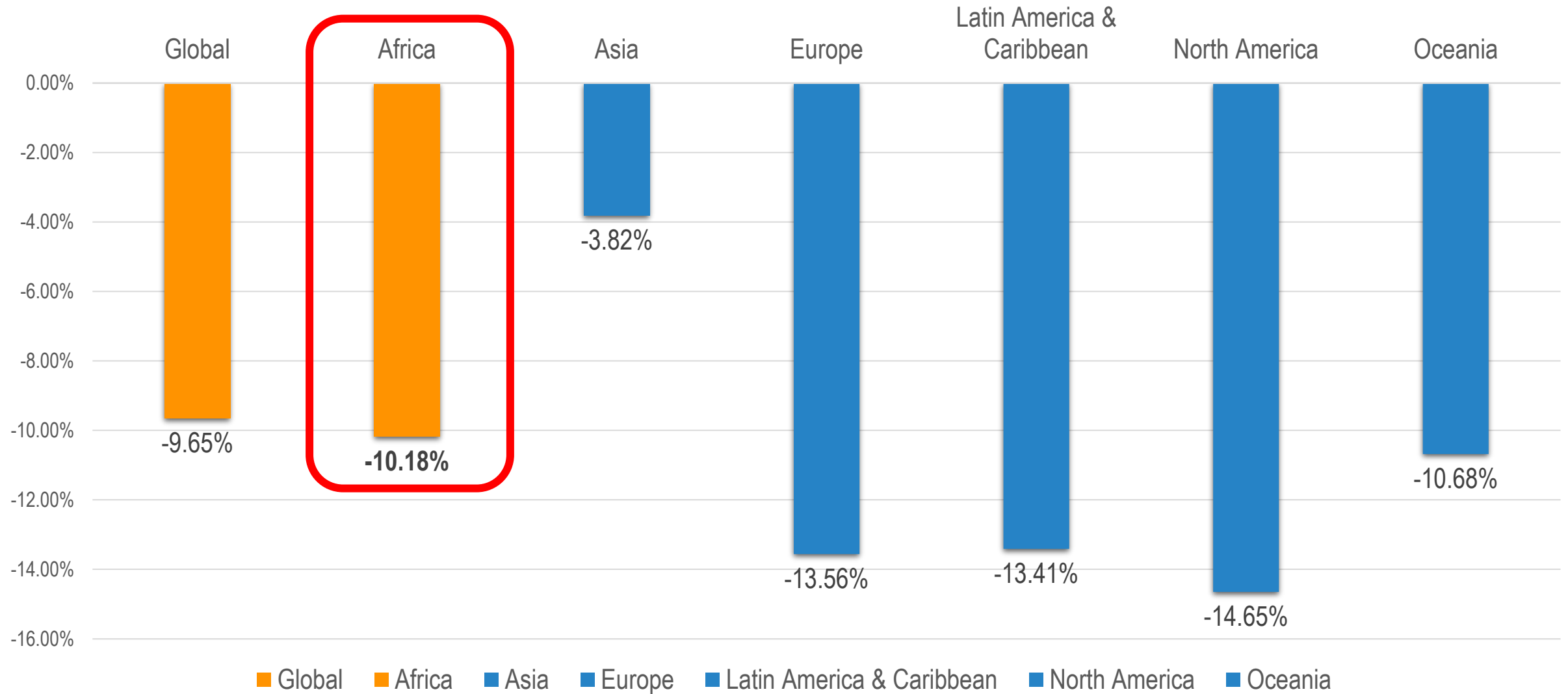
COVID-19 induced Supply Chain Shocks



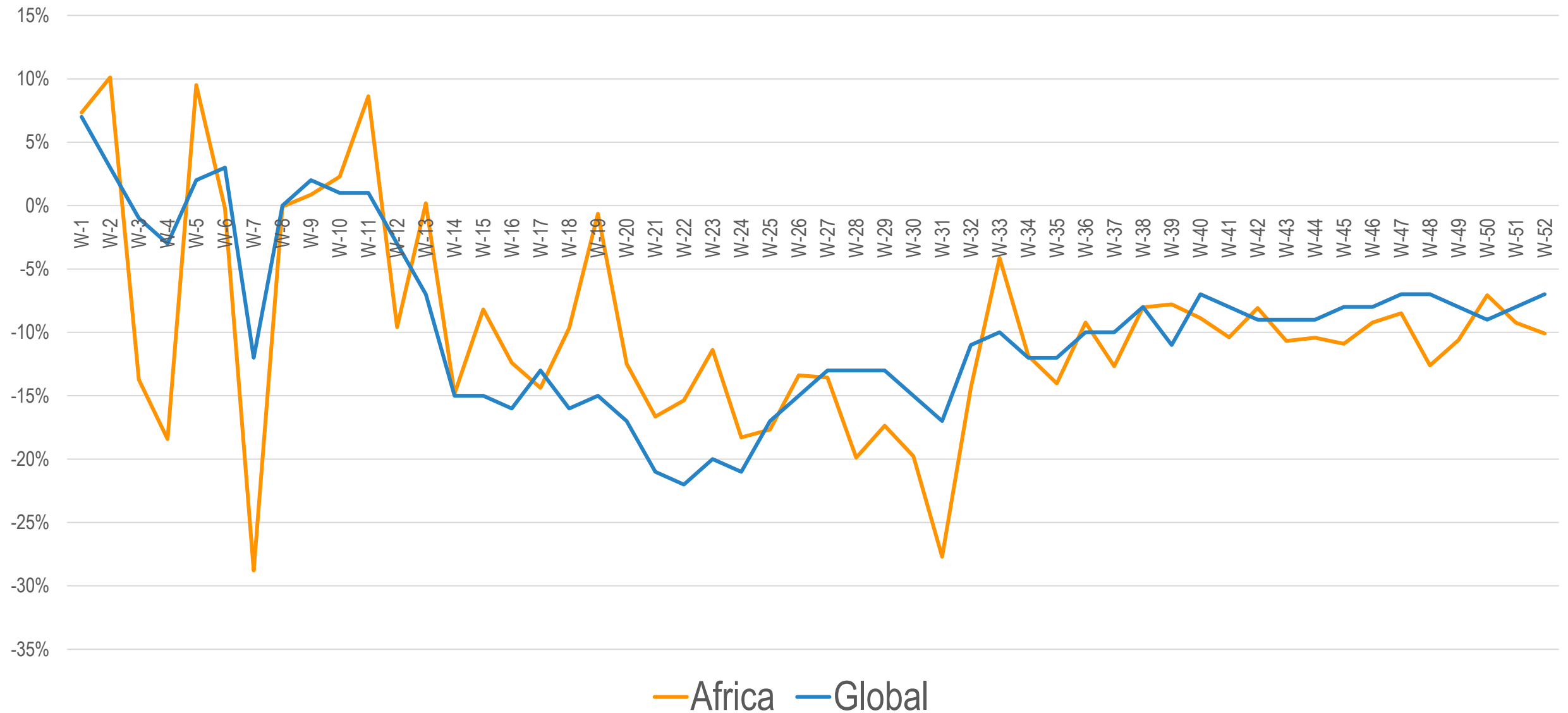


Vessels calls in Africa

Decline of vessels calls in 2020 (% change over 2019)



Vessels calls in 2020: Asia vs Globe, per week (% change over 2019)



Seagoing vessel calls: What happened per region?

East Africa

Year round decline (similar trends with Southern Africa region)

North Africa

The major decline of all; despite a strong start of the year (2020)

Southern Africa

Year round decline (similar trends with East Africa region); very weak Q4

West Africa

Quick recovery after the initial shock; returned to positive trends in Q4

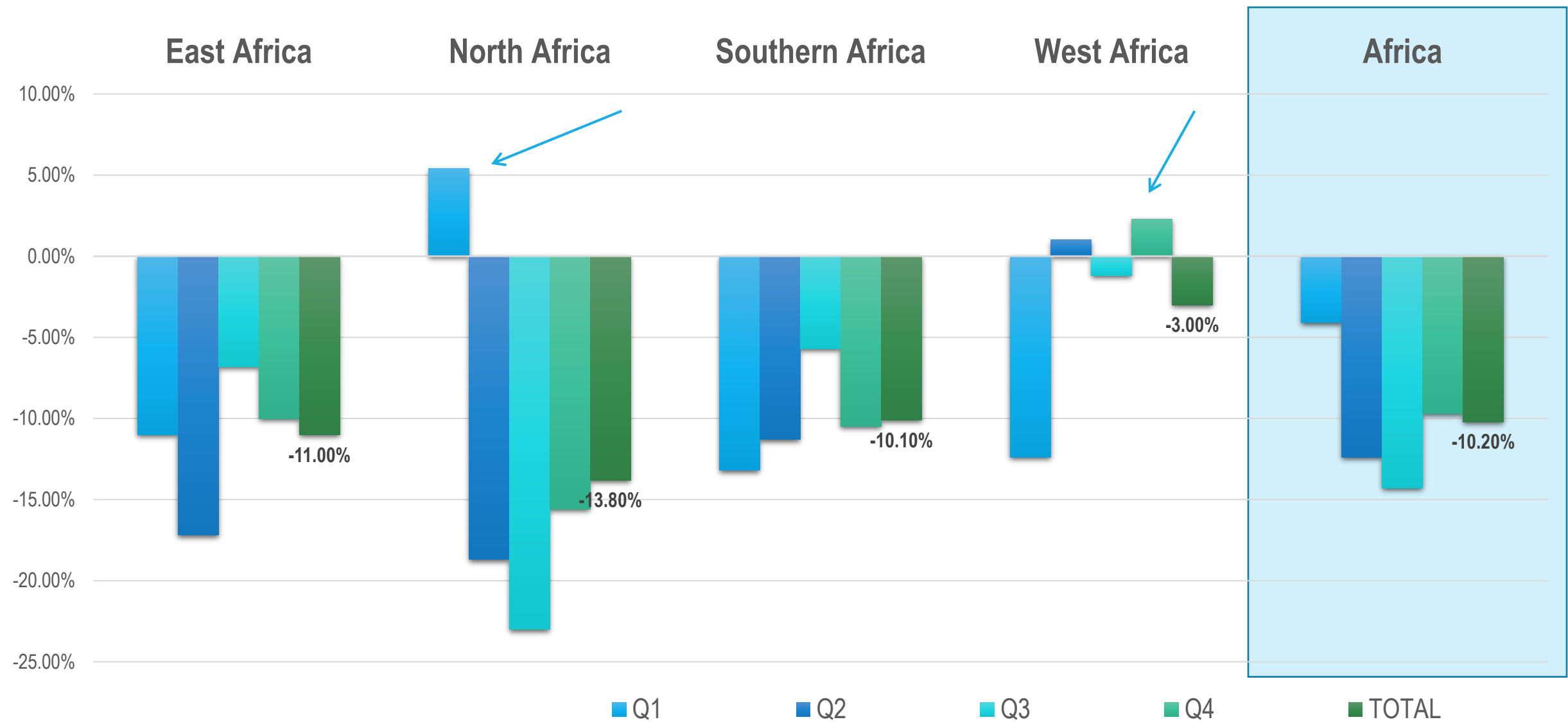
Small Island States

Major decline both at the West side of the continent and the East one;
The impact was severe throughout the year in the West African part.

Seagoing vessel calls: 2020 vs 2019 (% difference)

	Q1	Q2	Q3	Q4	2020	2020 without passenger vessels
East Africa	-11,0%	-17,2%	-6,8%	-10,0%	-10,9%	-8,6%
North Africa	5,4%	-18,6%	-23,0%	-15,6%	-13,8%	-4,7%
Southern Africa	-13,2%	-11,2%	-5,6%	-10,4%	-10,1%	-10,7%
West Africa	-12,4%	1,0%	-1,2%	2,3%	-3,0%	-2,8%
Africa	-4,1%	-12,4%	-14,3%	-9,7%	-10,2%	-5,2%
Small Island States						
East Africa	-3,5%	-33,1%	-35,1%	-23,9%	-23,3%	-22,3%
West Africa	-24,2%	-47,8%	-43,0%	-59,4%	-44,2%	-42,6%
Africa	-6,5%	-35,5%	-36,1%	-30,4%	-26,6%	-5,2%

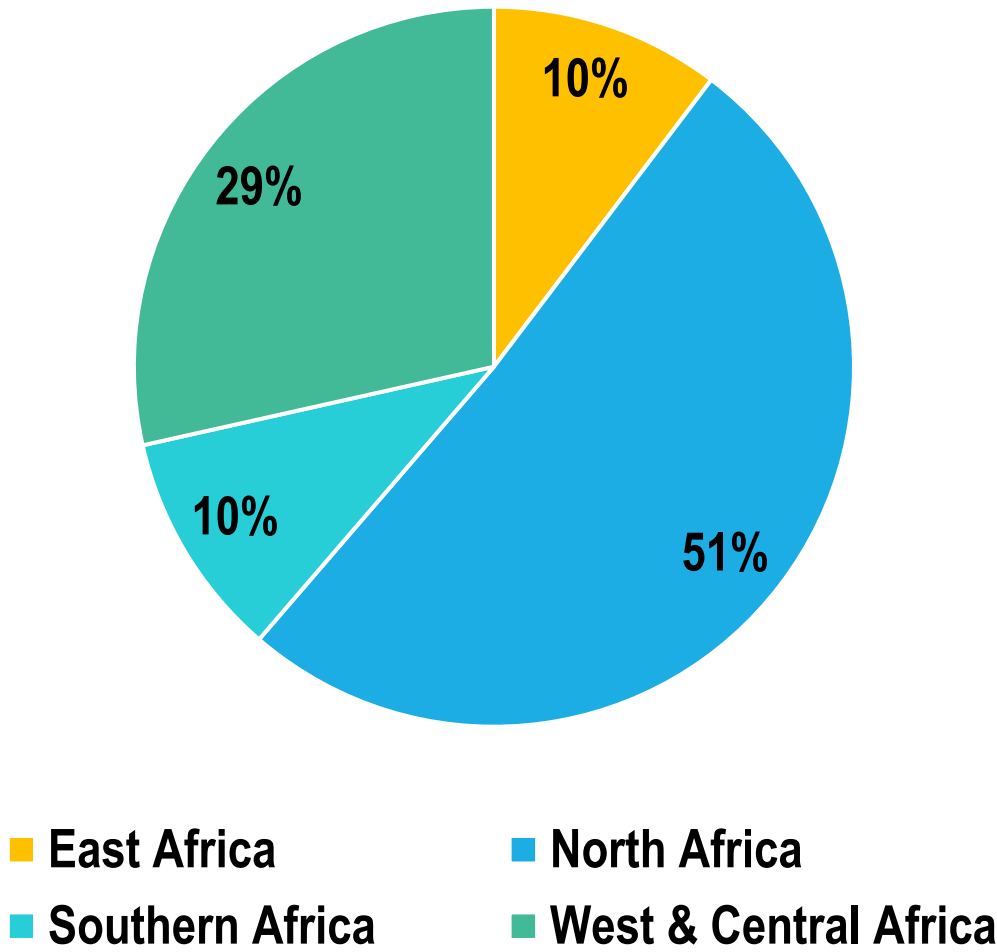
Vessel calls calls in 2020: Intra-Regional Dynamics (% change over 2019)



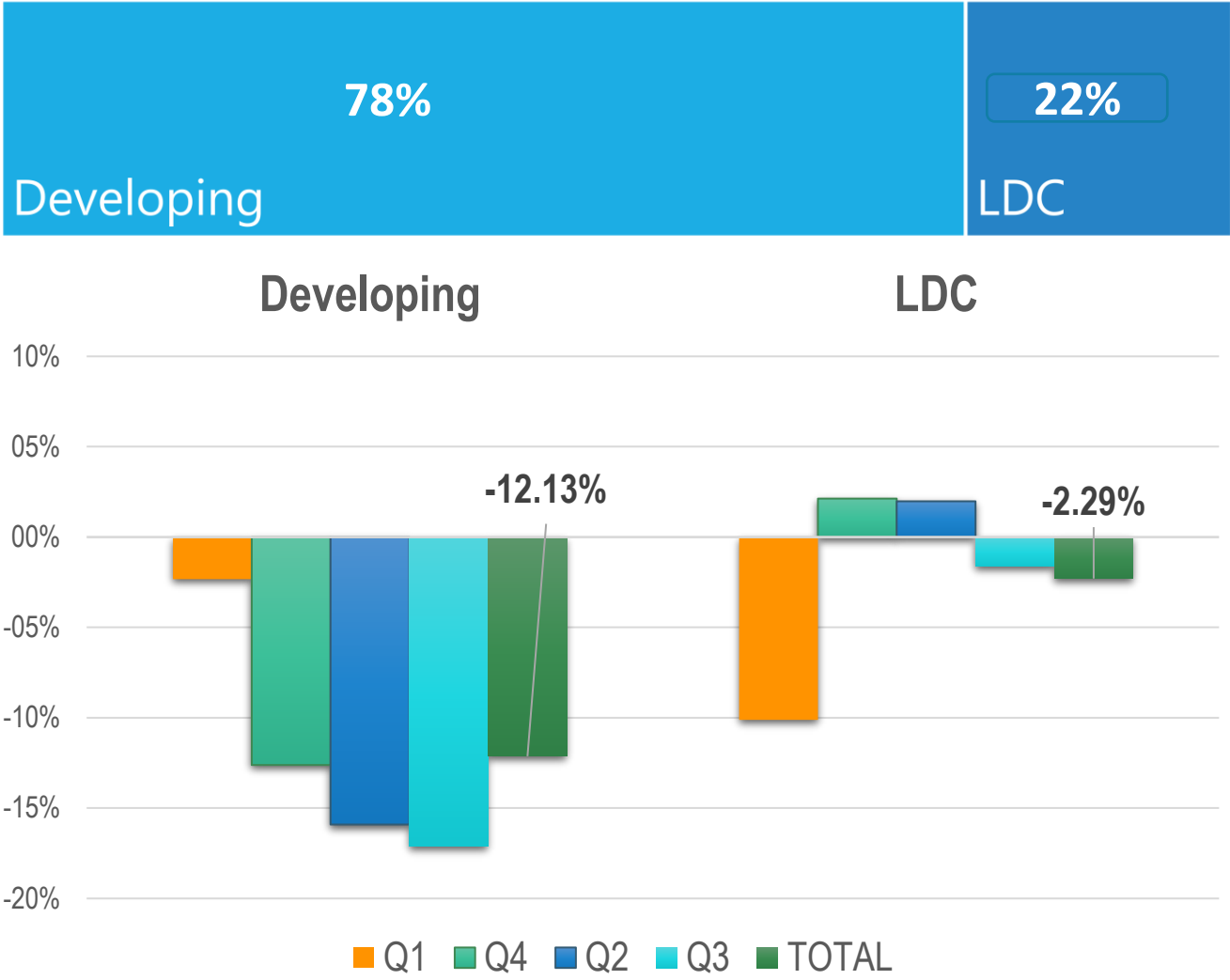
Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

Distribution of vessel calls per region & per type of economy

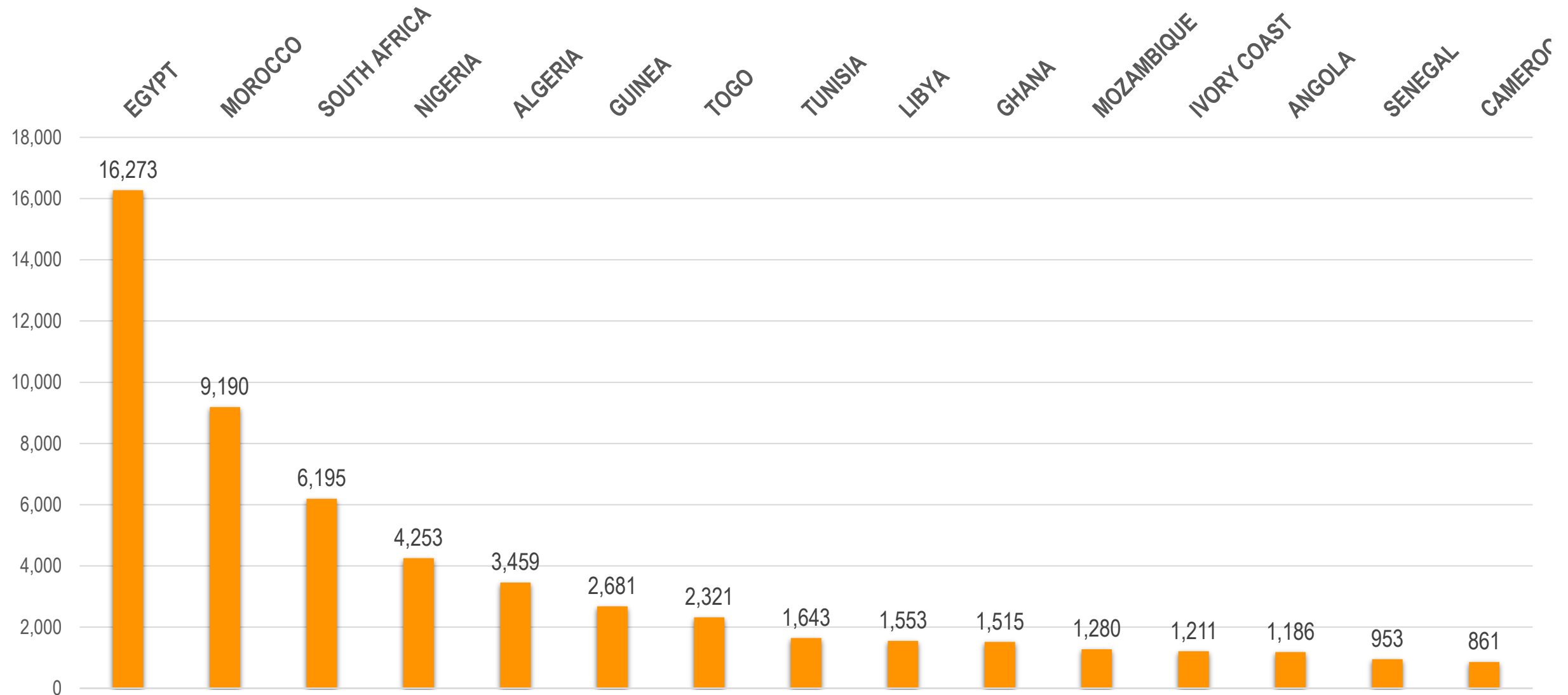
Vessel Calls in 2020



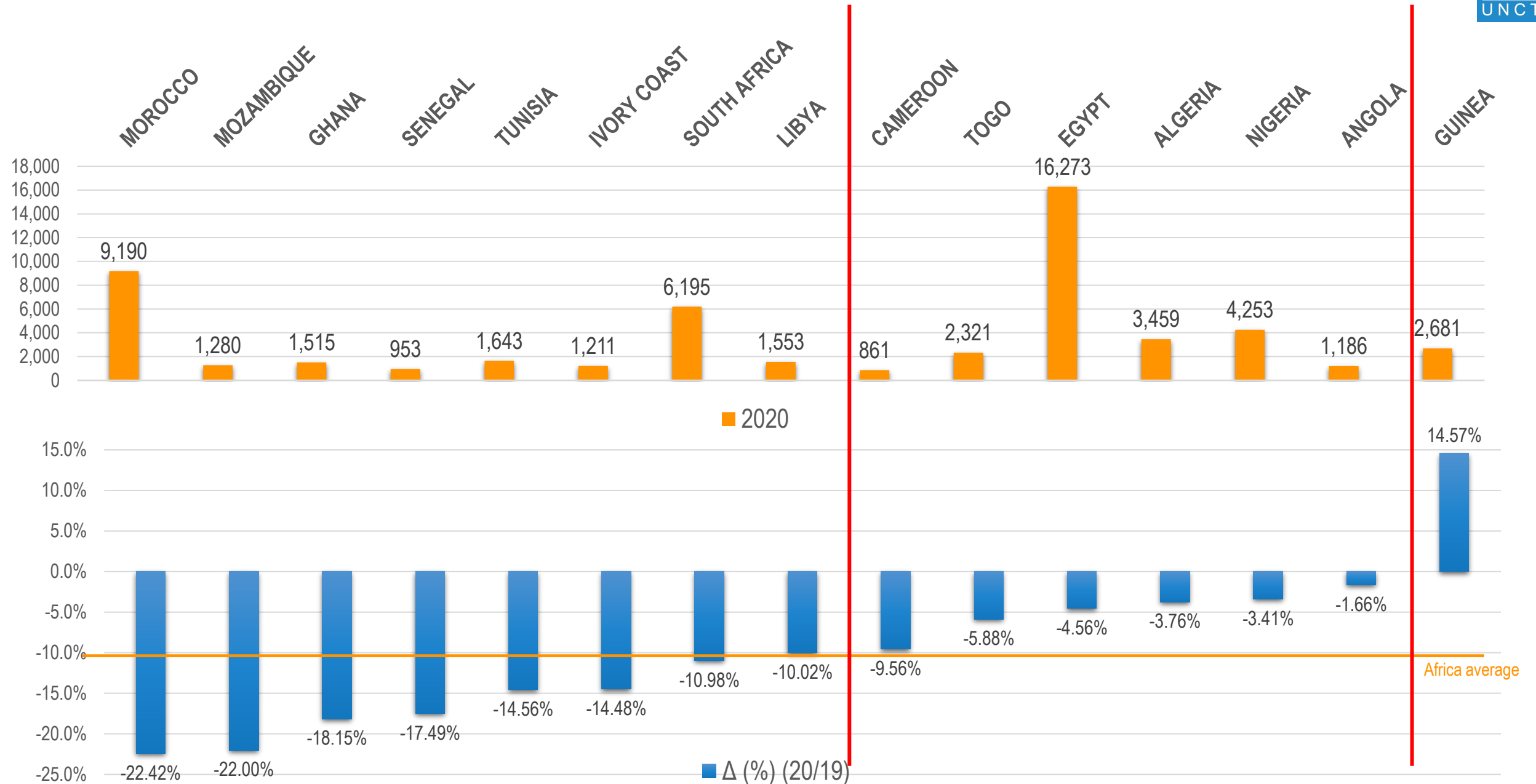
Vessel Calls in 2020



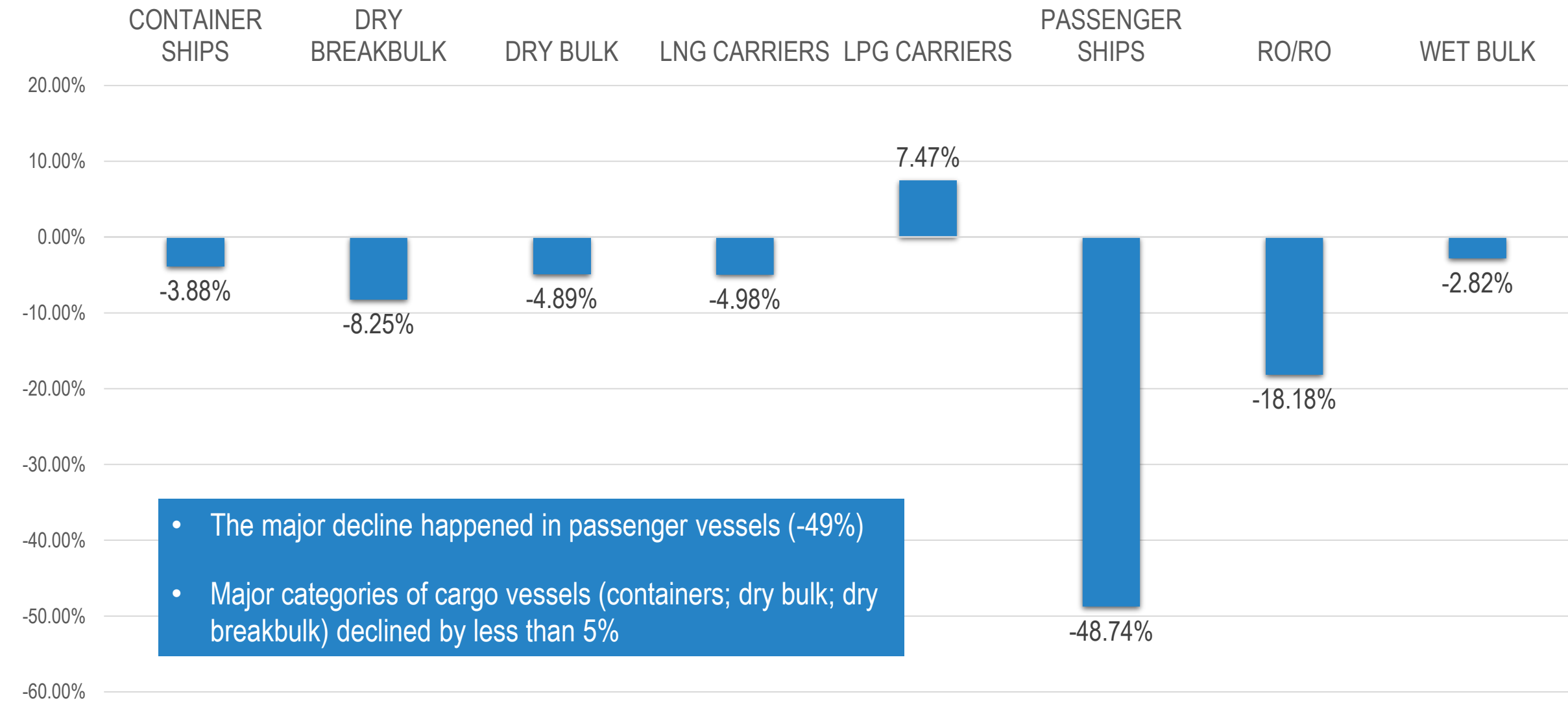
Vessels calls in 2020: 15 African countries with most vessel calls (2020)



Vessels calls in 2020: 15 countries with most calls (% change over 2019)

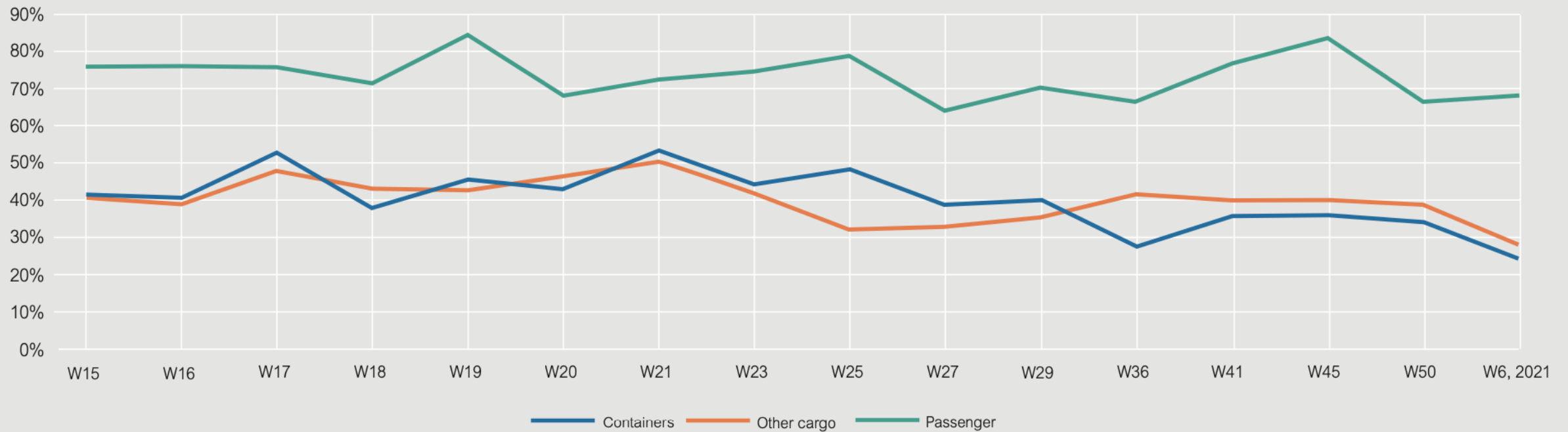


Vessels calls in 2020 per shipping market (% change over 2019)



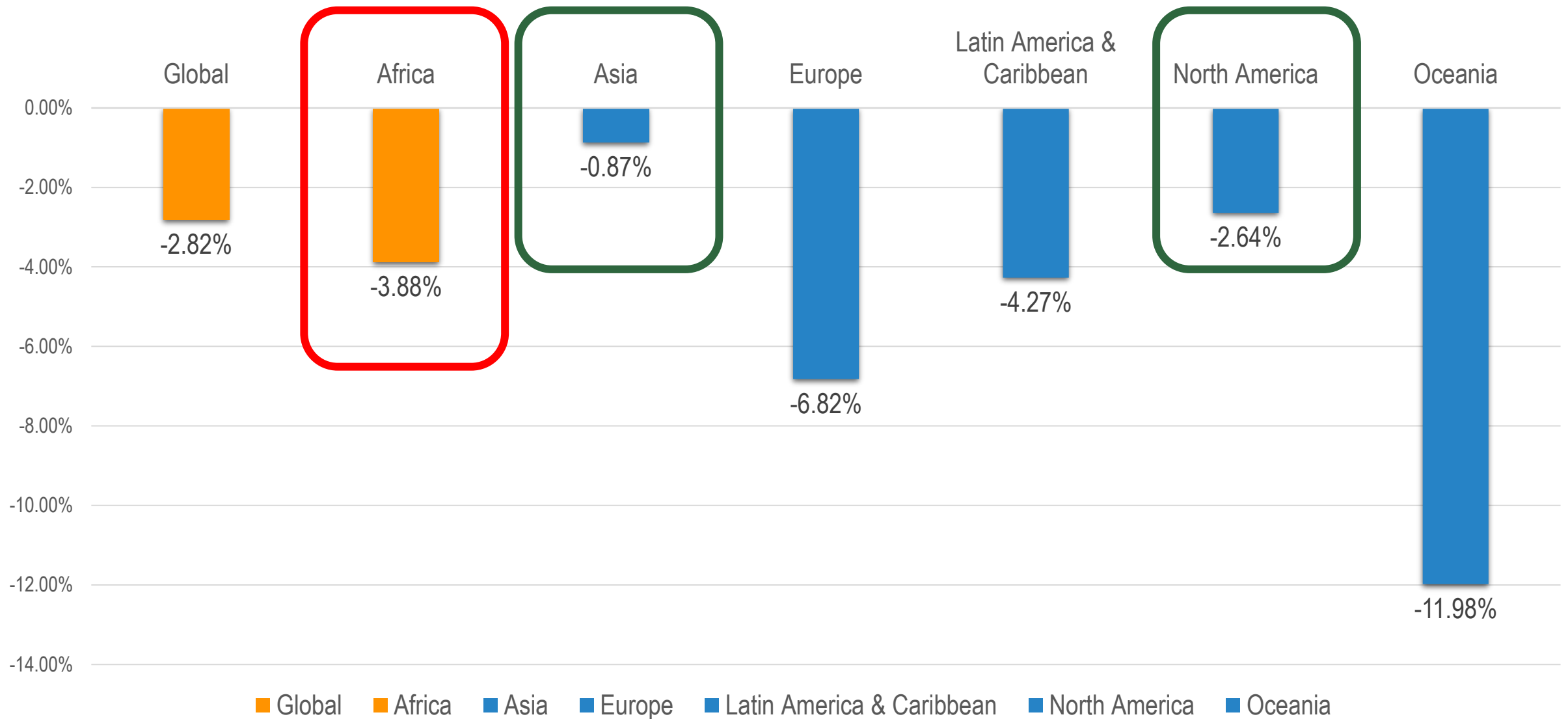
Impact on vessel calls: Only 40-50% of world ports have seen a major decrease

Ports where the number of ship calls is lower than in normal conditions



The container market

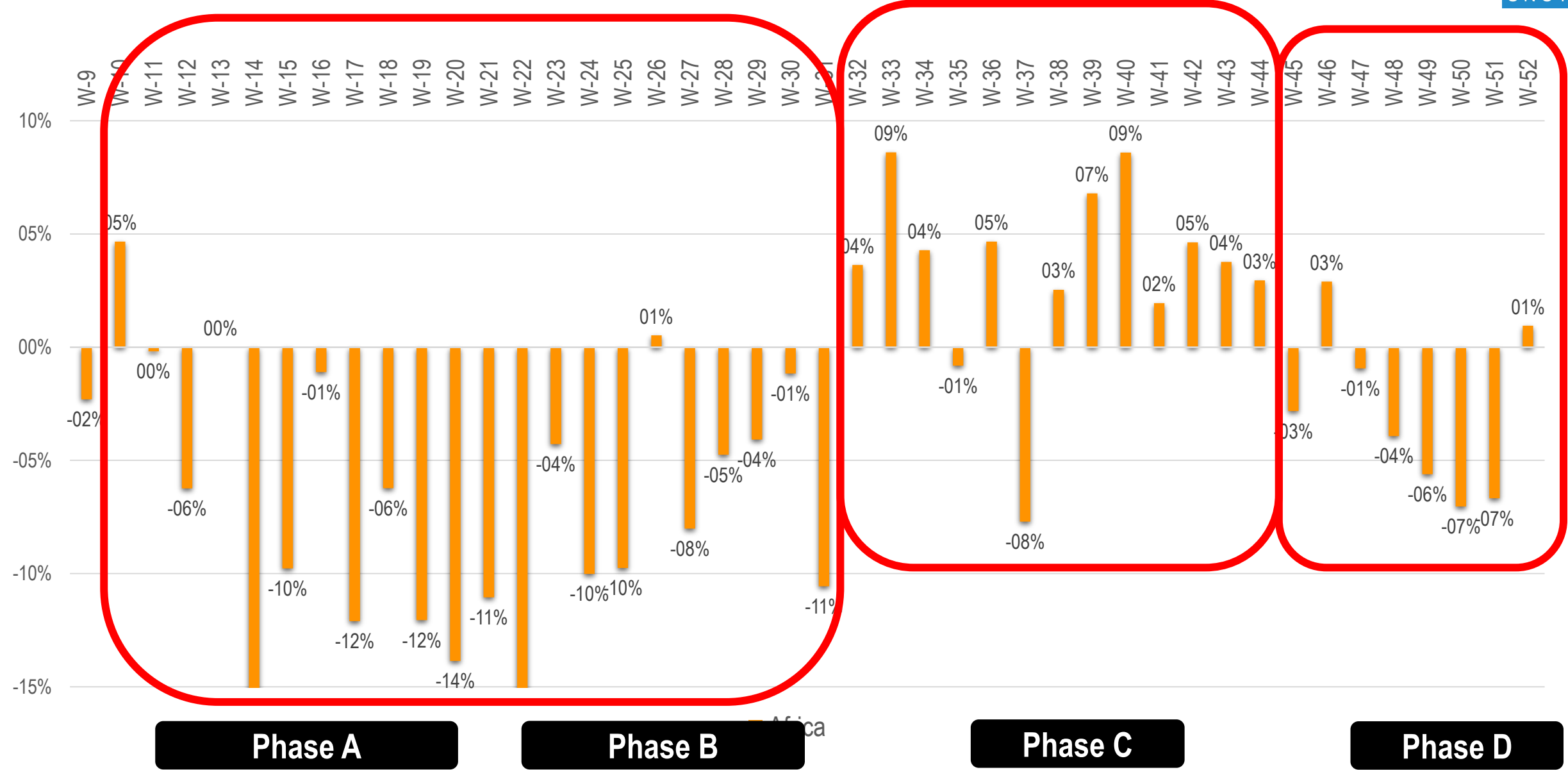
Containerships calls in 2020: Africa vs Globe (% change over 2019)



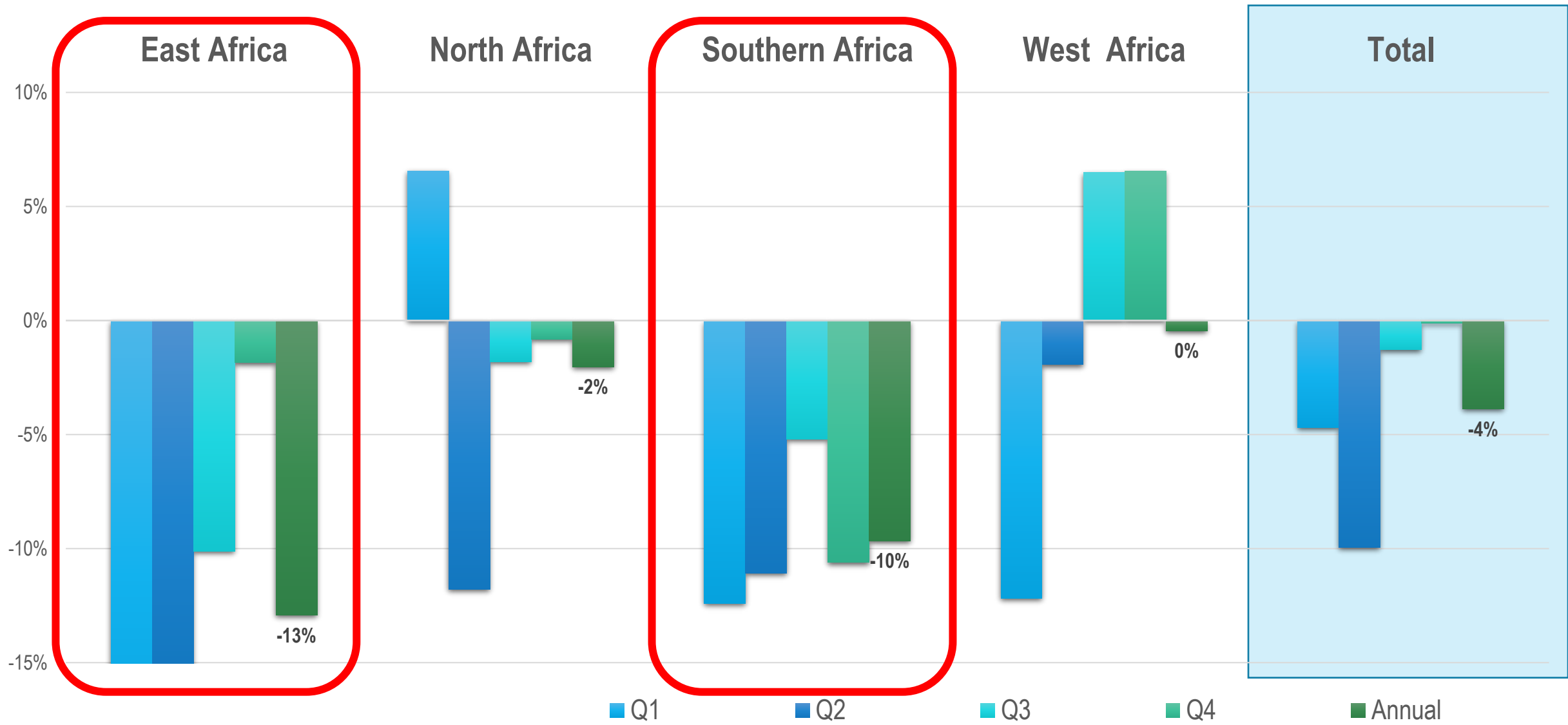
Container vessel calls: What happened per region?

East Africa	The major decline of all (-13%)	7.597 calls
North Africa	A minor decline of containership calls (-2%)	30.996 calls
Southern Africa	A double digit decline (10%)	5.775 calls
West Africa	Marginal impact on the total number of containership calls (-0,5%)	14.777 calls
Small Island States		
East Africa	Small Island States experienced a major decline (-17,5%) East African side: the decline reached -16%	1.638 calls
West Africa	West African side: experience a severe decline (-30%)	240 calls

Containerships calls in 2020 (% change over 2019)

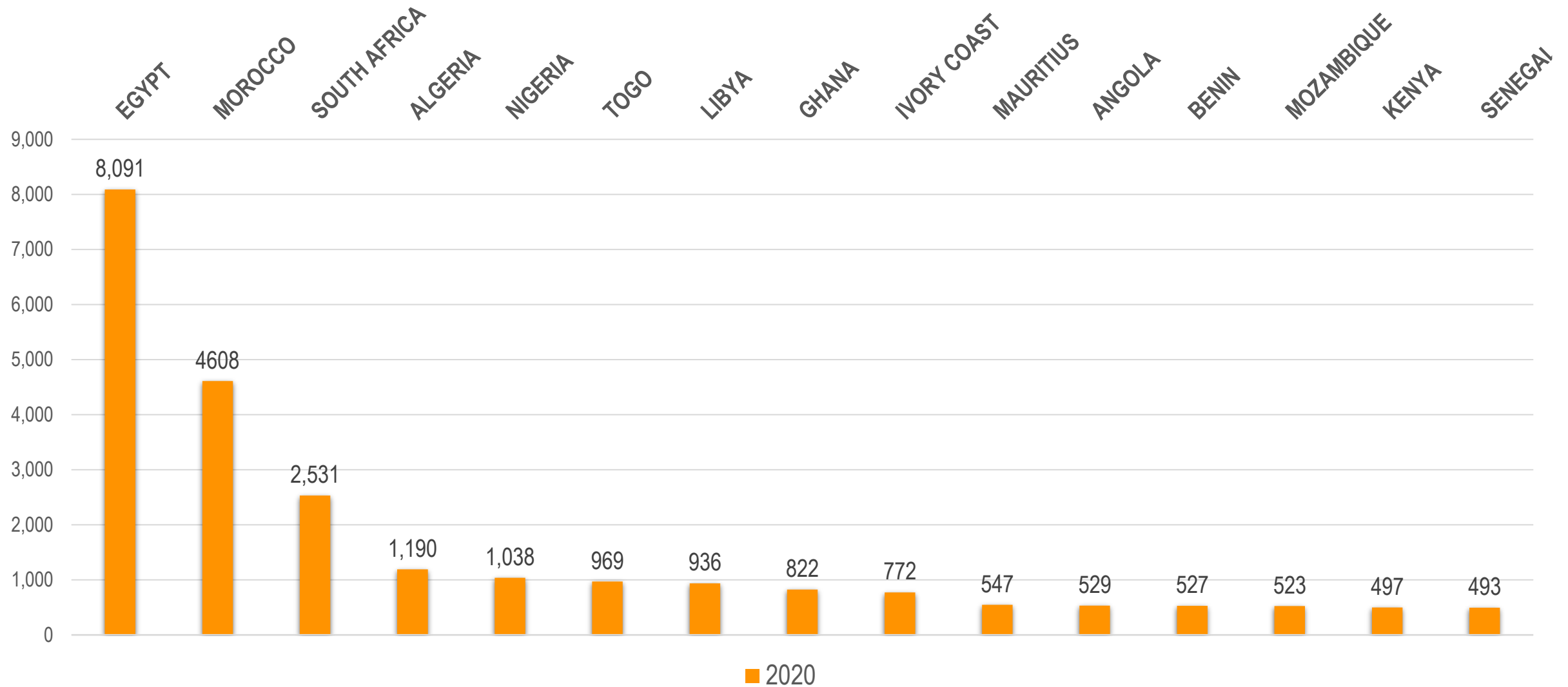


Containerships calls in 2020: Intra-Regional Dynamics (% change over 2019)



Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

Containership calls in 2020: countries with most calls (% change over 2019)



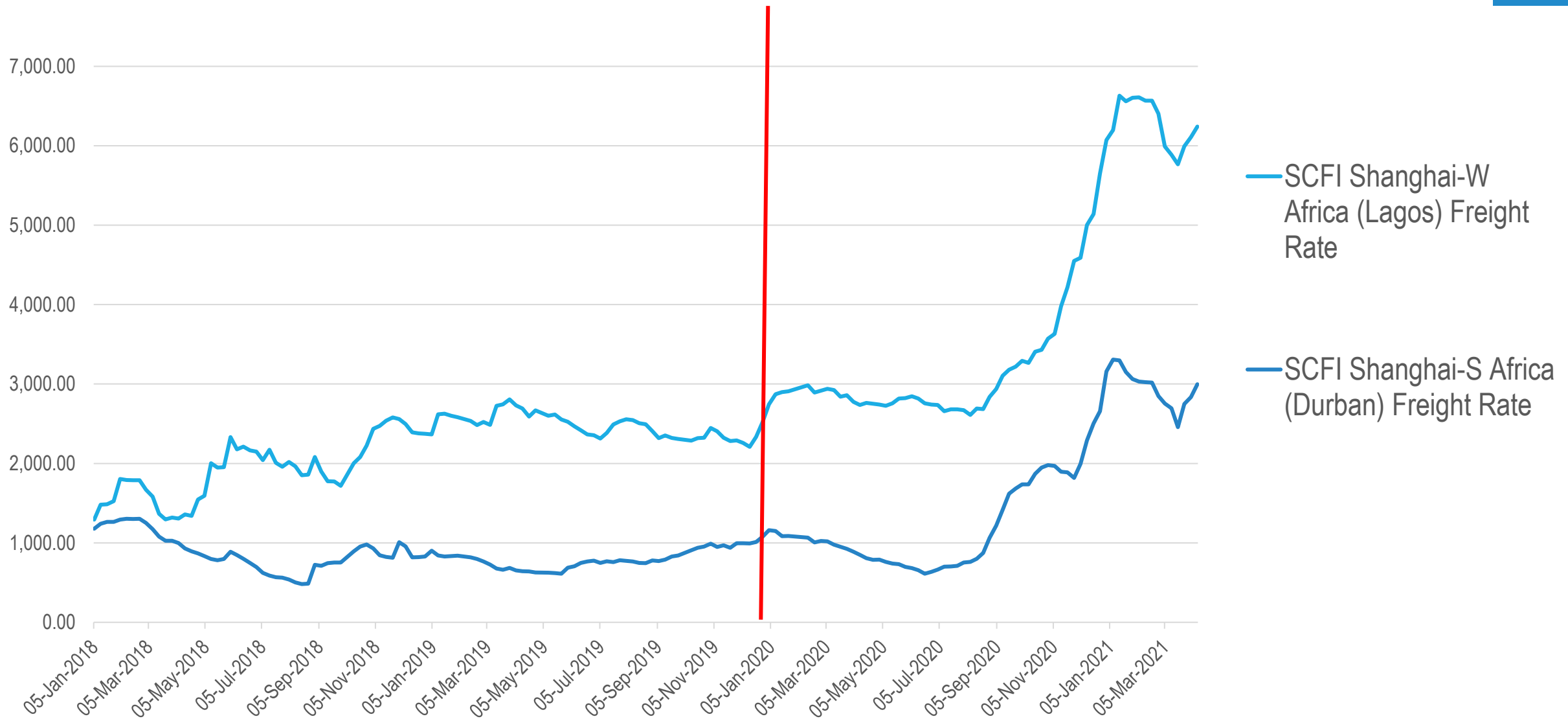
Containership calls in 2020: countries with most calls (% change over 2019)



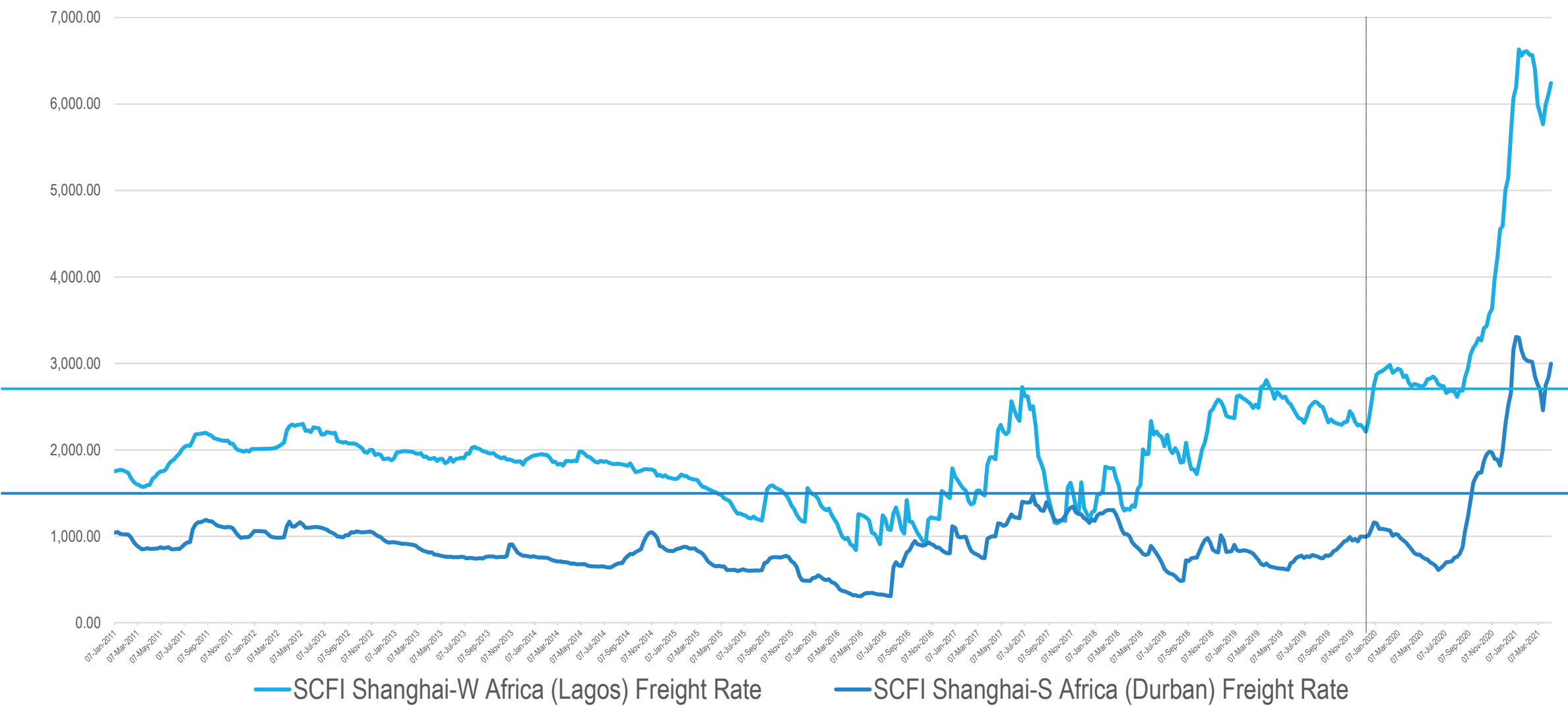
Trends in seagoing vessels calls in Africa

1. **Decline of Calls close to global average;**
2. Africa **performed better than Europe & Americas** that were affected most by the spread COVID-19.
3. **The major problem was experienced in the passenger sector** (where the need of social distancing and sanitary measures resulted in a major decline of shipping operations).
4. In the container market, **the impact was present since the beginning of 2020**; when imports from China were halted (due to both COVID-19 and the traditional trade standstill during the Chinese New Year's eve). But **the situation improved during the second half of the year**.
5. The effect was experienced in all parts of the continent, yet **regional variations existed** – Container ship call provide an example:
 - **East Africa** felt the problem the most; with a major improvement recorded only in Q4, 2020 – blank sailing of vessels departing from Far East to Europe have strongly affected the country having most calls of all, Egypt.
 - **North Africa** started 2020 exceptionally well, felt the impact the most during Q2, but adjusted – in line with the entire Med market in the 2nd half of the year.
 - **Southern African** countries continued to experience lower numbers of call throughout the year,
 - Calls in **West African** ports declined in the first half, since Q2 the recovery of volumes has ben impressive.

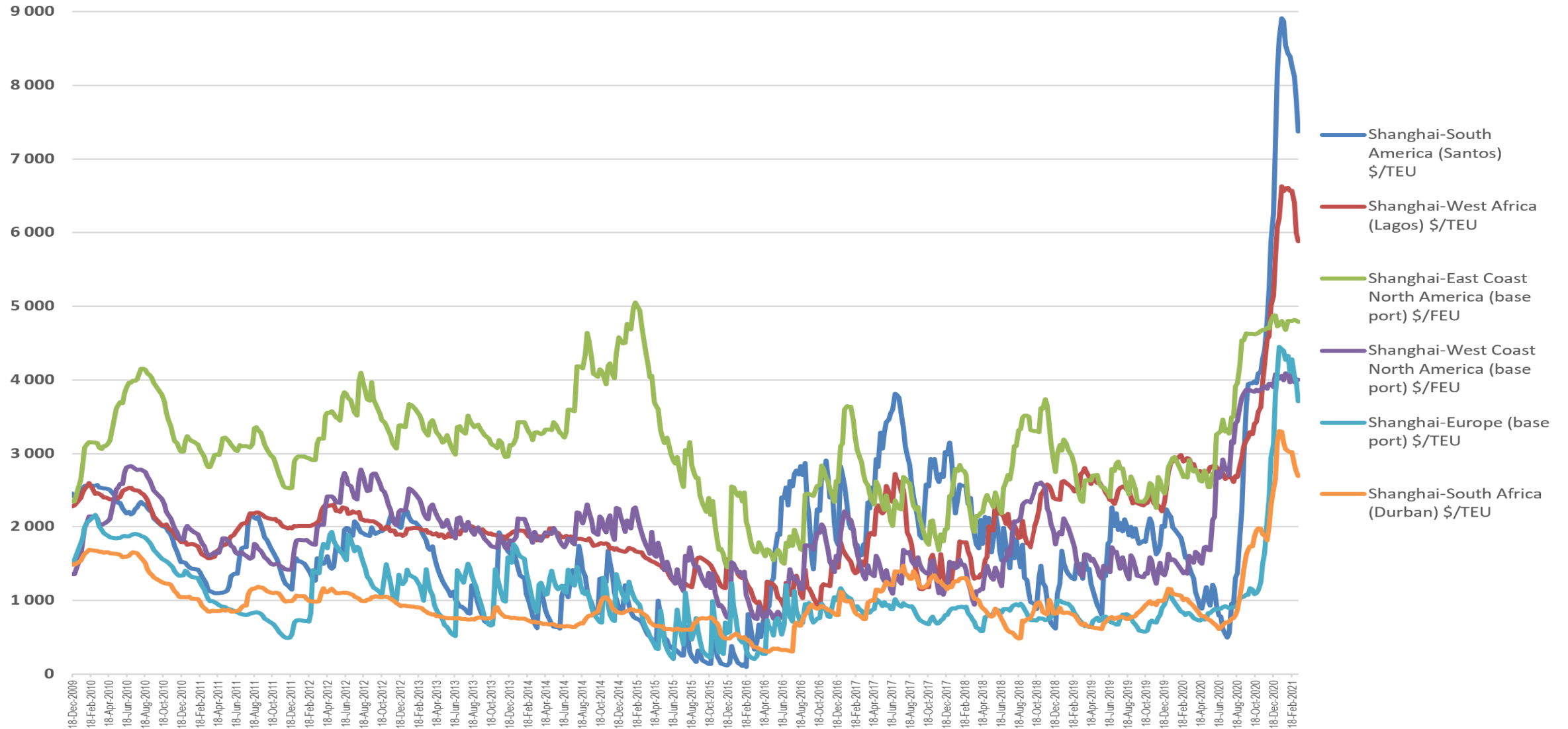
Container Freight Rates Unprecedented increase in 2020 (\$/TEU)



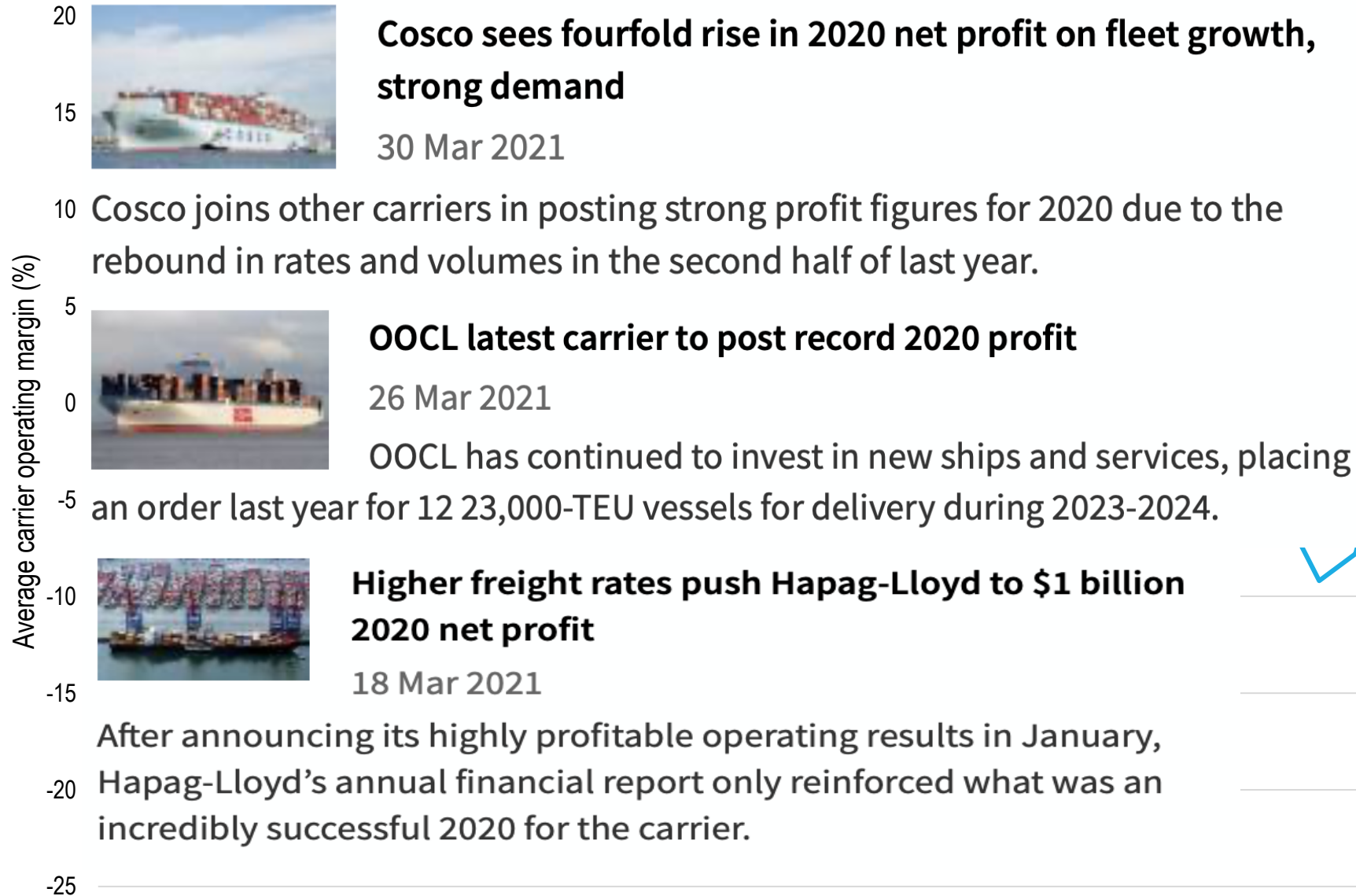
Container Freight Rates in a historical perspective (2010-2021)



Freight rates increase: Yes, this is a global phenomenon



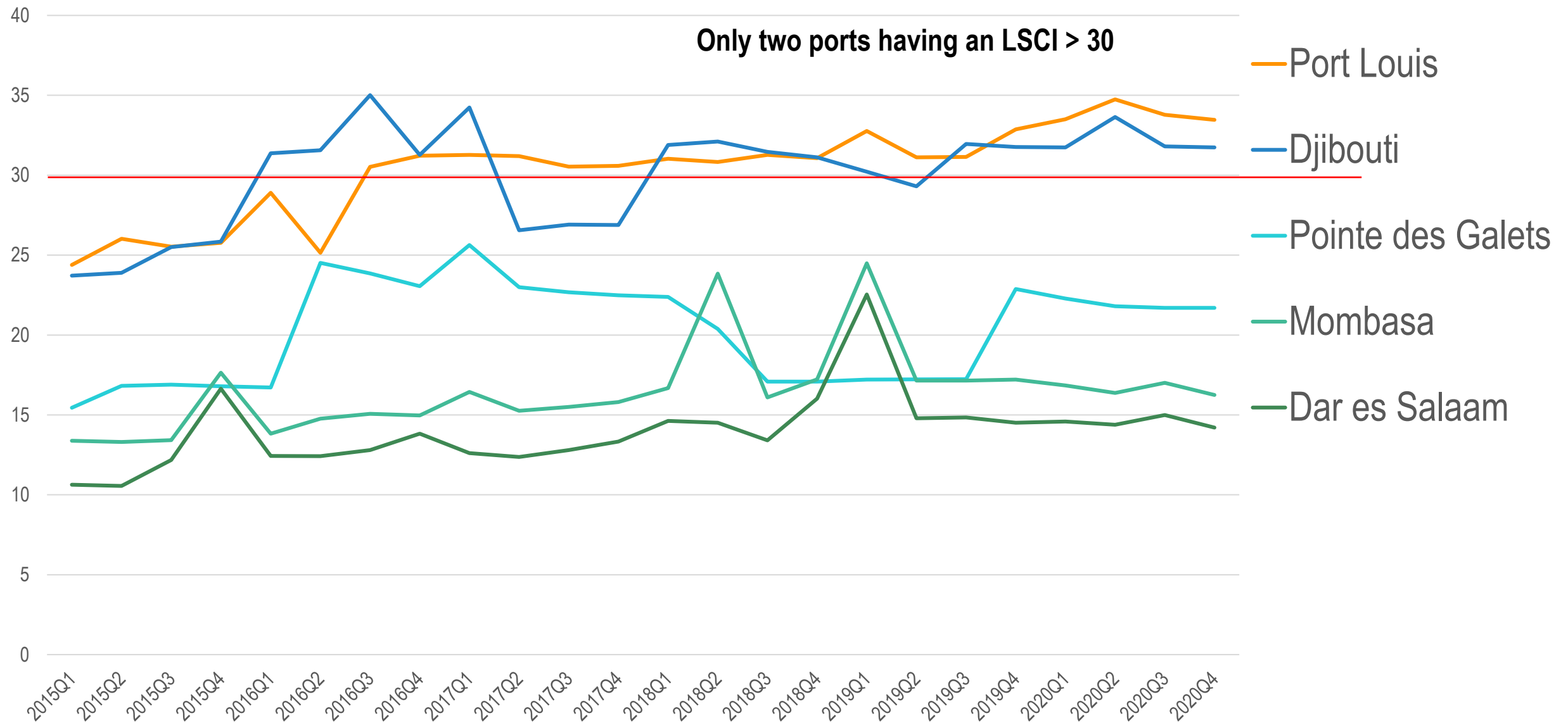
Operating Margins of Shipping Lines, 2008-2020



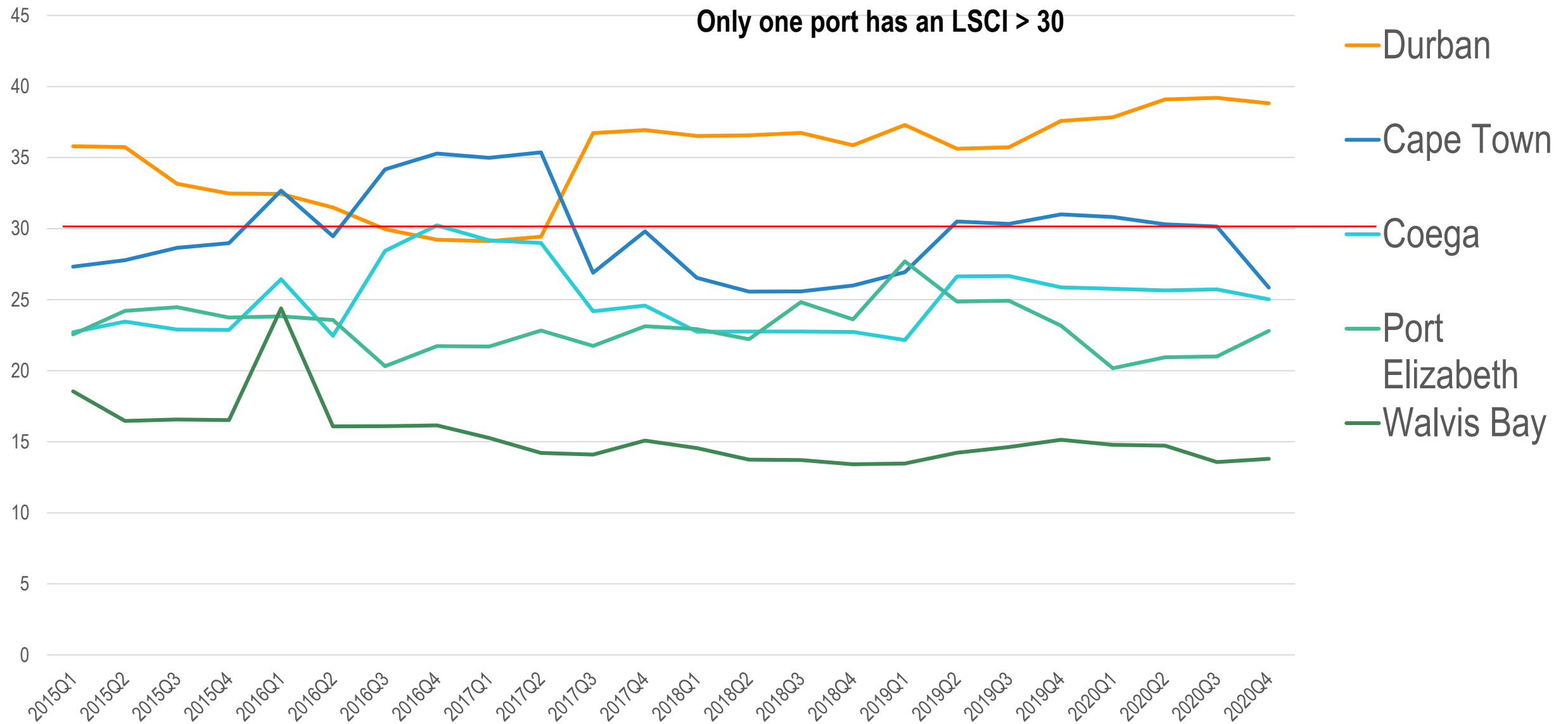


What about the levels of Liner Shipping Connectivity?

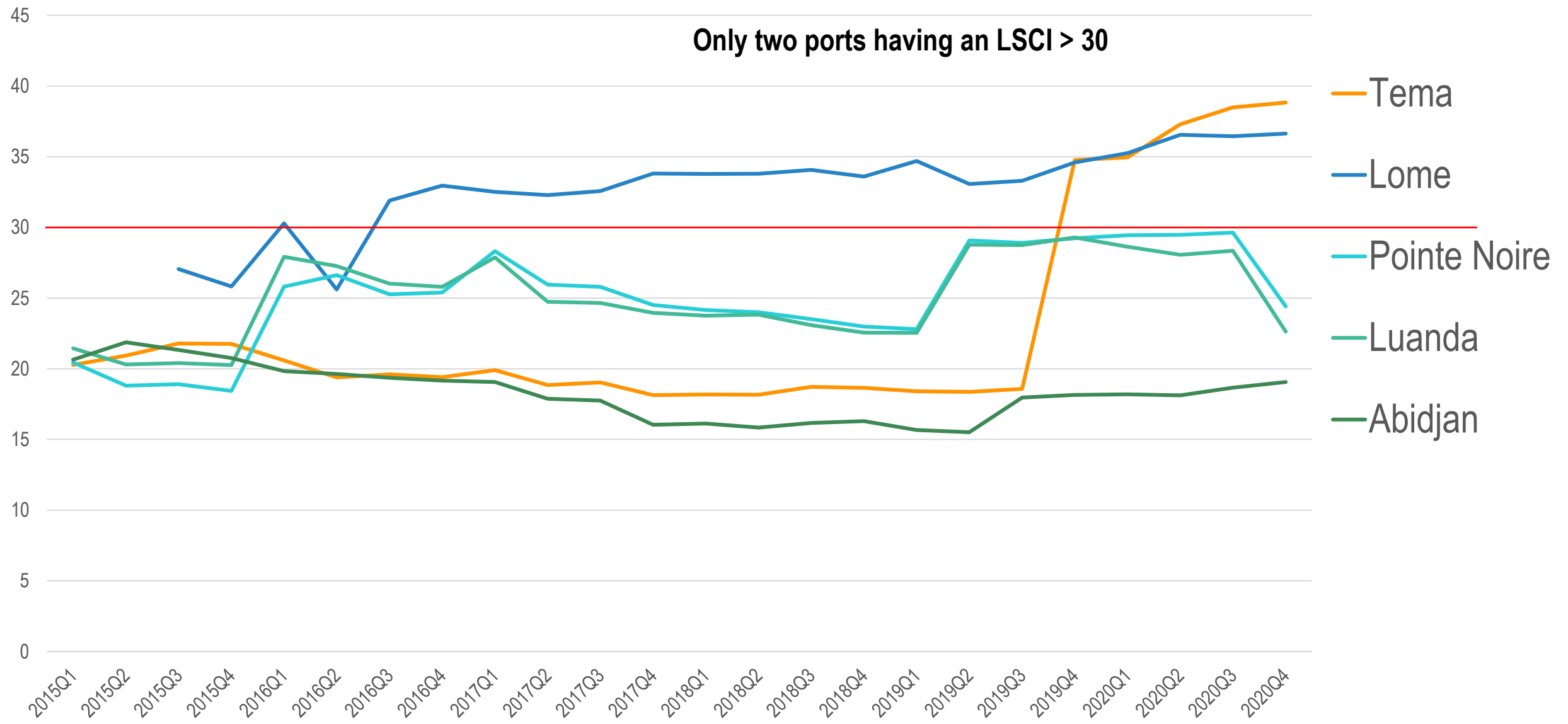
Top-5 East African ports on UNCTAD's liner shipping connectivity index (LSCI)



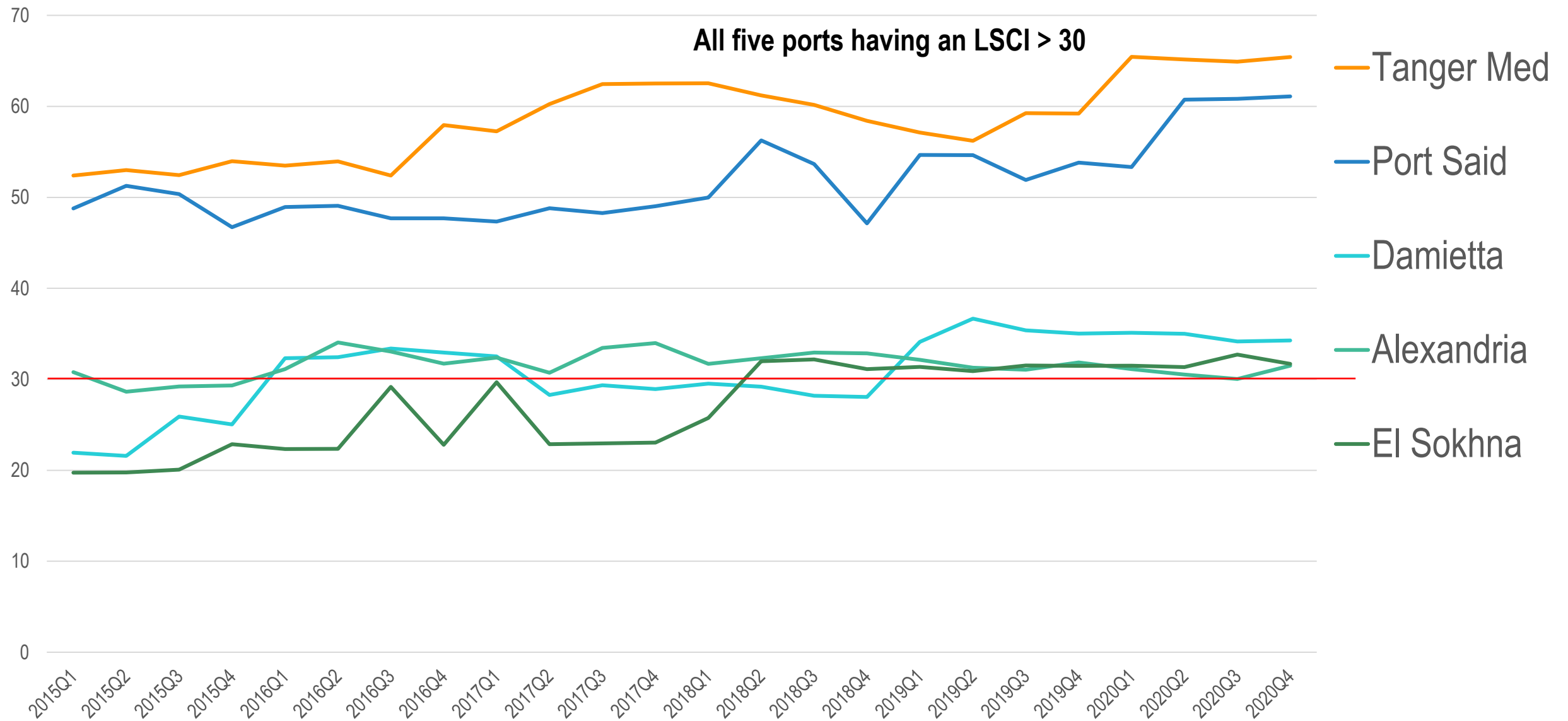
Top-5 Southern African ports on LSCI



Top-5 West African ports on LSCI



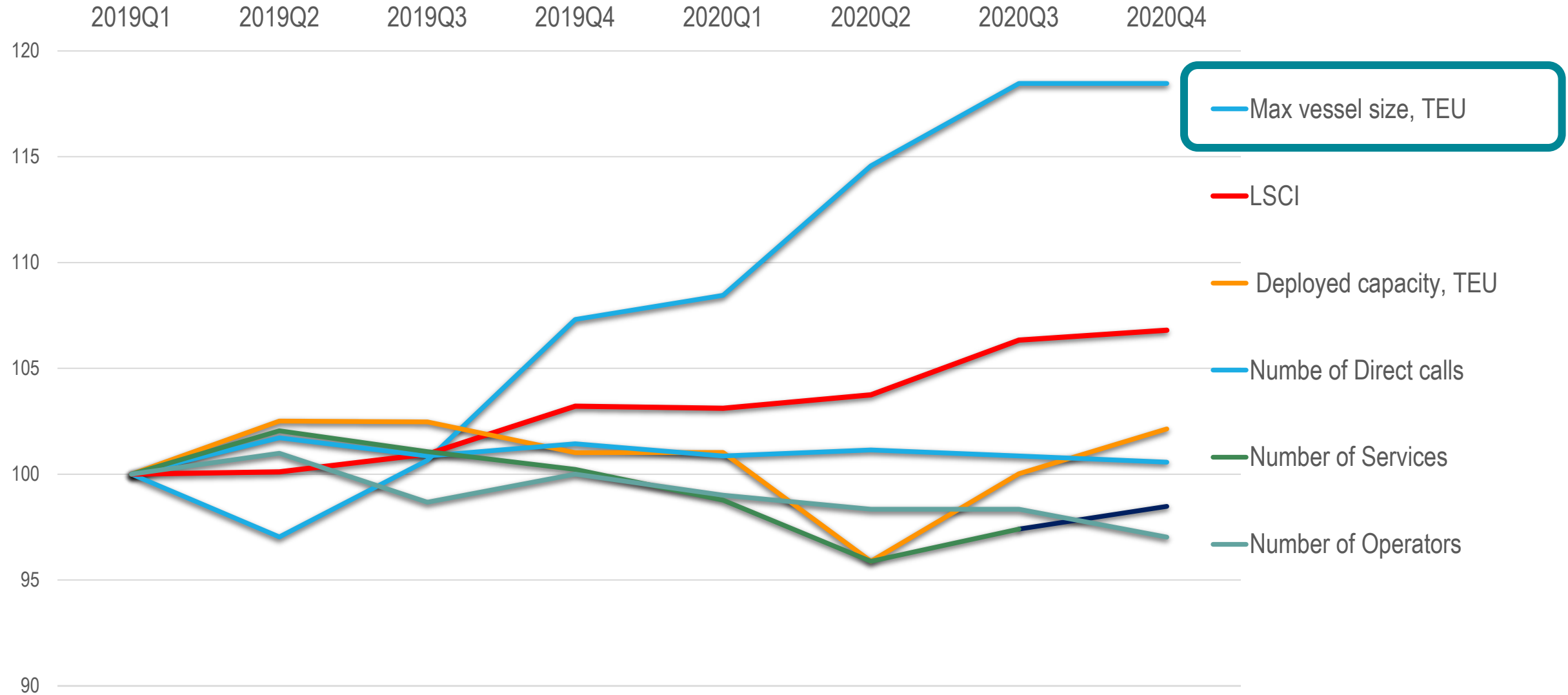
Top-5 North African ports on LSCI



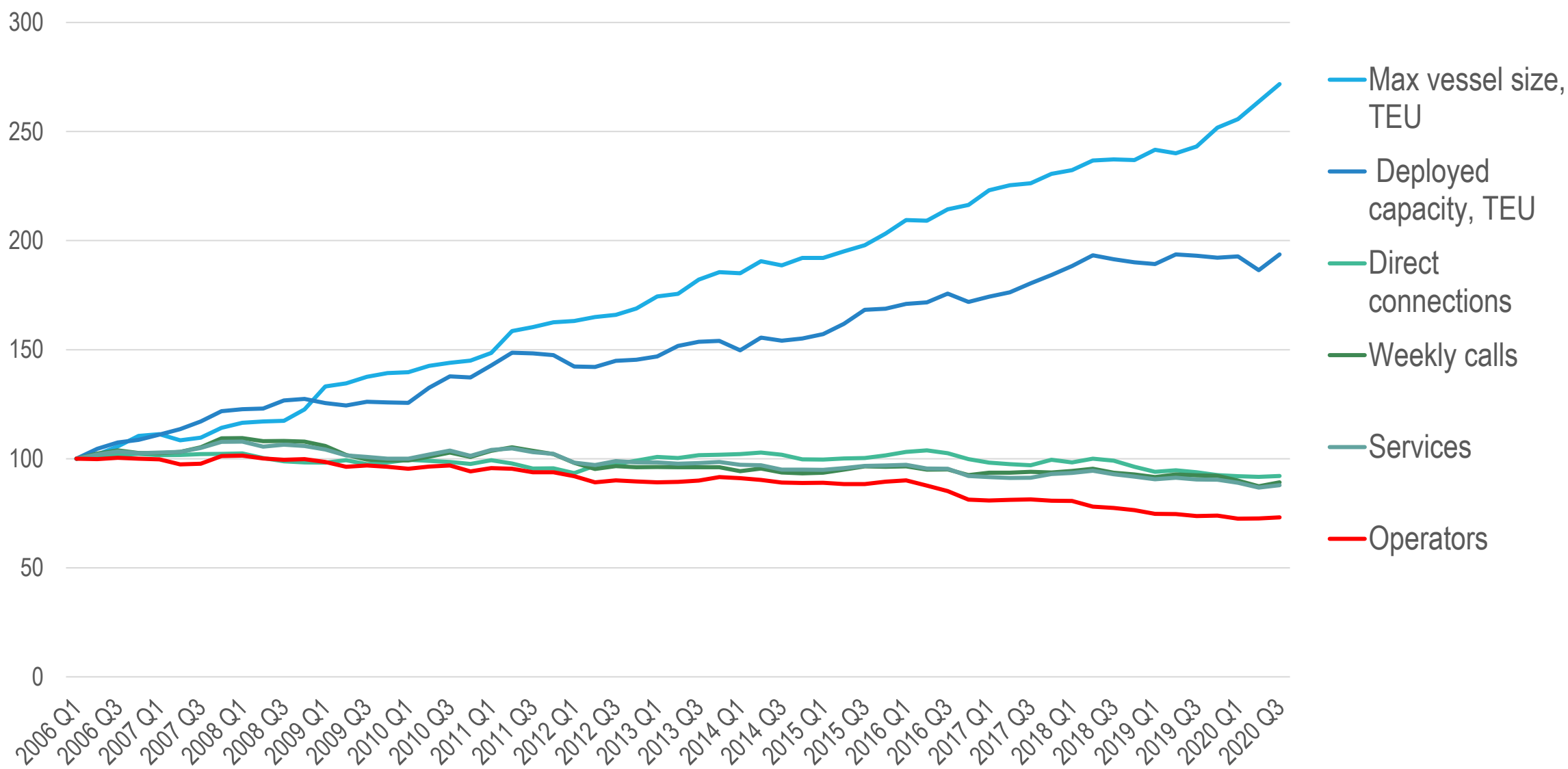
Trends in African ports LSCI amidst the Pandemic (2020)

- **The positive trends in the 5 most connect ports of the African continent continued.**
- **Major regional variations were recorded:**
 - In **West African** ports, only two of the best connected ports saw some improvements in the LSCI, while two others saw the Index deteriorating in 2020.
 - LSCI in top-5 **East African** ports did not improve in 2020; a rather stable picture was recorded
 - A stable picture was recorded in the top-5 **North African Ports** as well.
 - In the top-5 **Southern African** ports the situation has been mixed.
- As a result the **intra-regional variation sustains**, or even expands.
- The major change is the **increase of container vessels size (which goes hand in hand with better utilization of the capacity of the vessels)**
- In short: many ports face **fewer calls by bigger vessels carrying more cargoes** to be (un)loaded

Liner Shipping Connectivity Index (2019-2020) at the global level

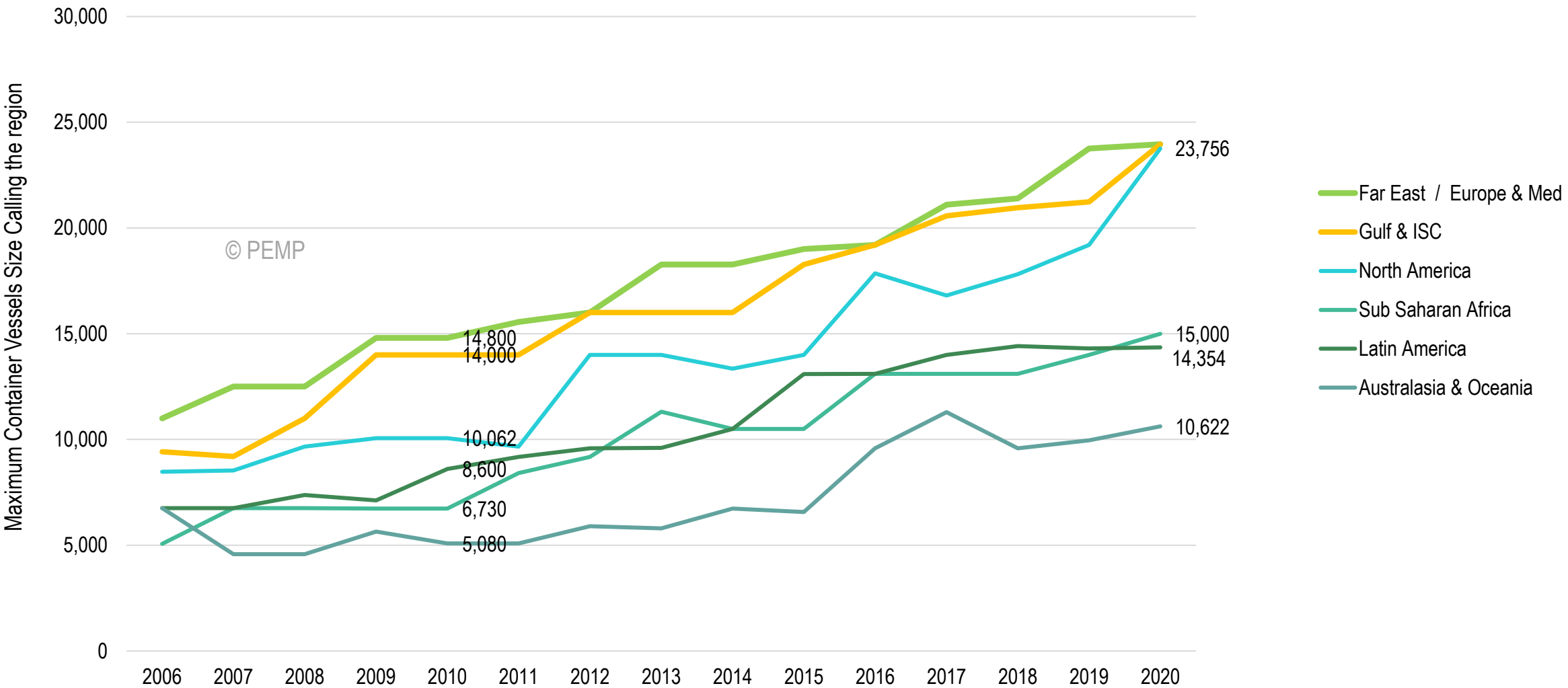


Averages on container ships deployment (2006-2020) at the global level



Source: our calculations in the context of the UNCTAD Project (in progress) "Assessing the impact of COVID-19 on the maritime transport systems"

Maximum Containership Size Calling per Region (2006-2020)



Blockage of the Suez Canal



- **A traffic jam** on both entries of the canal (the Mediterranean and the Red Sea) where about 380 ships were forced to wait. For shipping lines, this resulted in a loss of revenue and a loss of capacity.
- **Supply chain disruptions** as several shipments were delayed, particularly European imports from Asia.
- **Loss of revenue** for the Suez Canal authority, including salvage cost, in the range of 100 million dollars.
- **Diversion of several ships** through the Cape Route around Africa as for 6 days the situation remained uncertain, with shipping lines deciding to re-route some of their ships, even if this entailed about 10 additional sailing days.

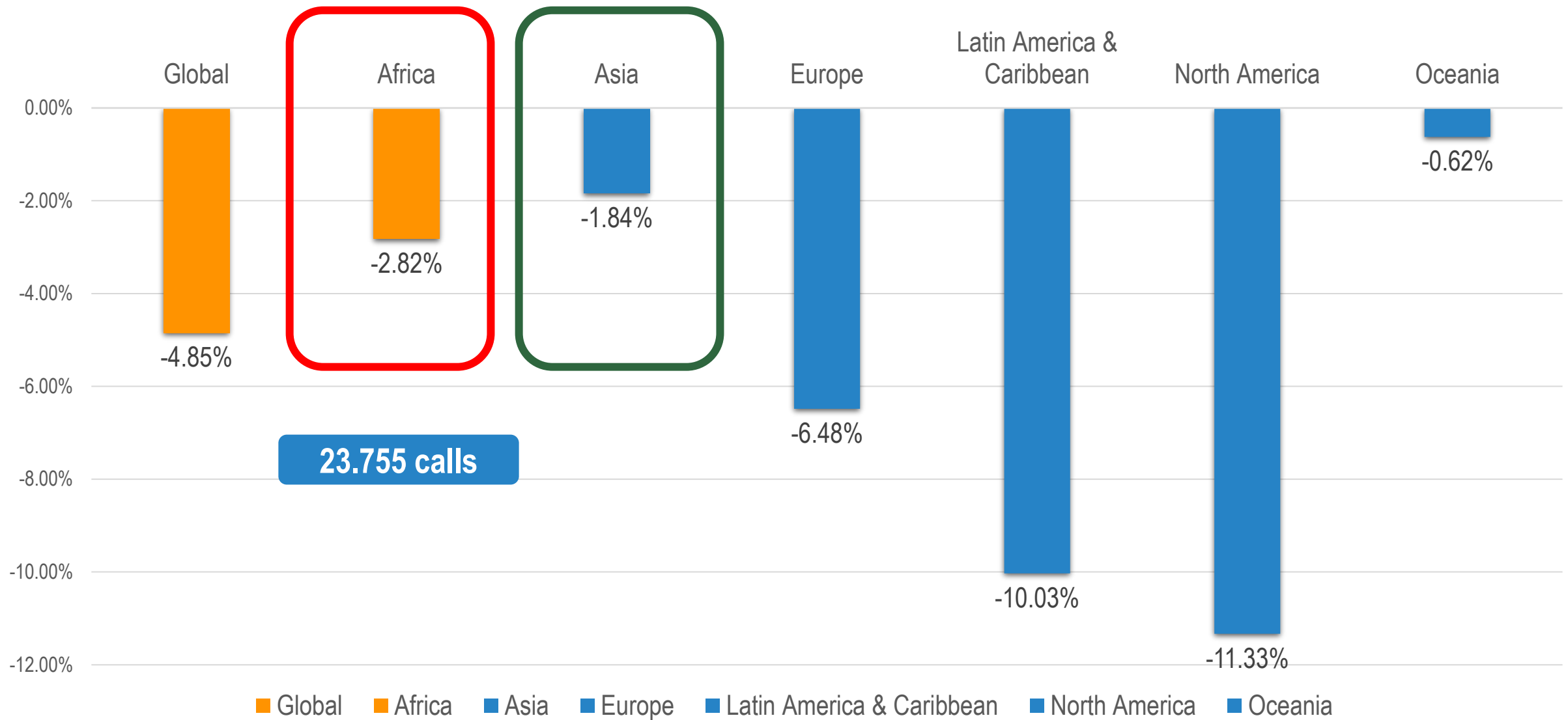
Maximum Container Vessel size in African Ports (2020)

SIZE	PORTS	
>15.000 – 23.756 (3 ports)	Tanger Med Port Said	El Sokhna
10.000-15.000 (11 ports)	Cape Town Coega Damietta Djibouti Durban Lome	Luanda Pointe Noire Port Louis Tema Tripoli (LB)
5.000-10.000 (17 ports)	Abidjan Alexandria Apapa Beira Cotonou Dakar Dar es Salaam Kribi Lagos	Maputo Mombasa Onne Pointe des Galets Port Elizabeth San Pedro Tin Can Island Walvis Bay

Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

Other shipping markets: Wet Bulk and Dry Bulk

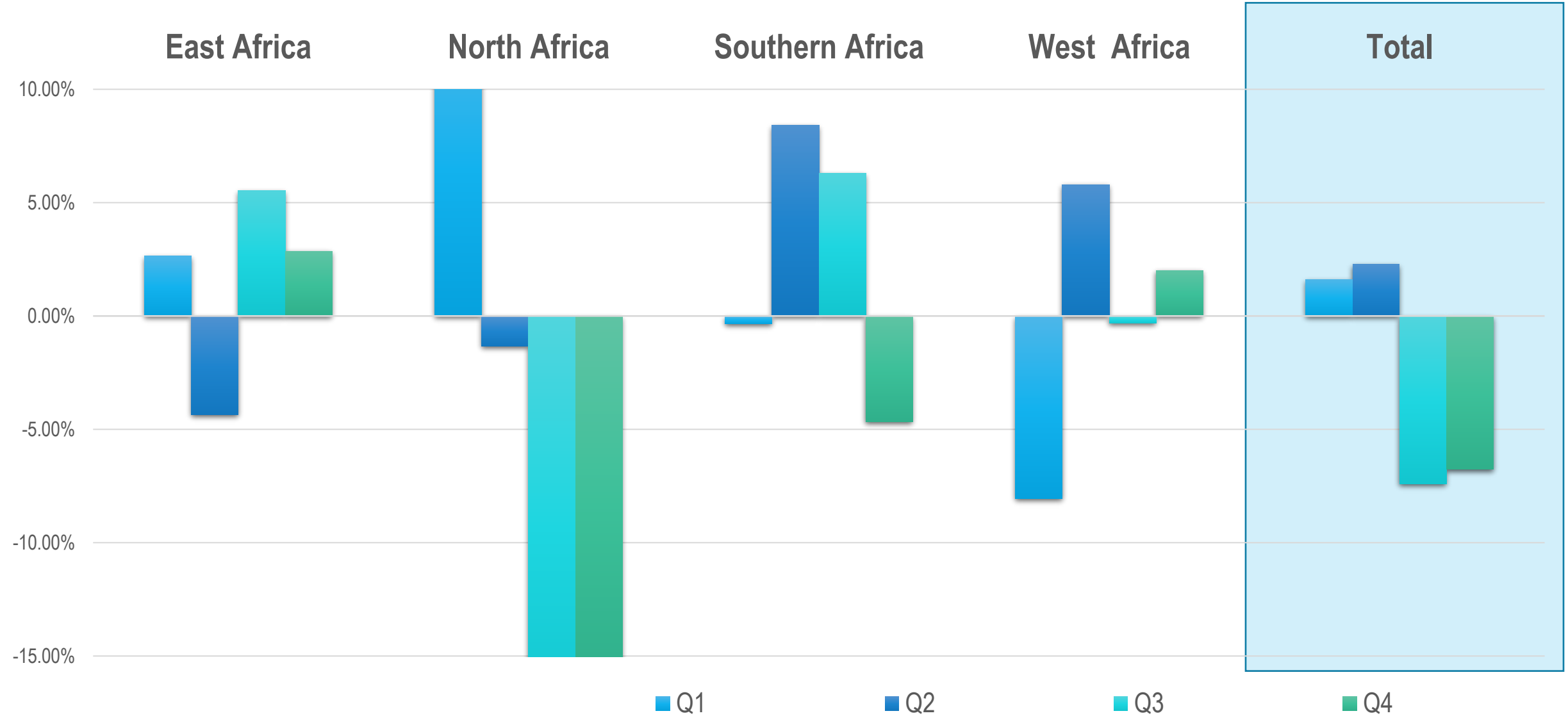
Wet bulk vessel calls in 2020 (% change over 2019)



Wet bulk calls: What happened per region?

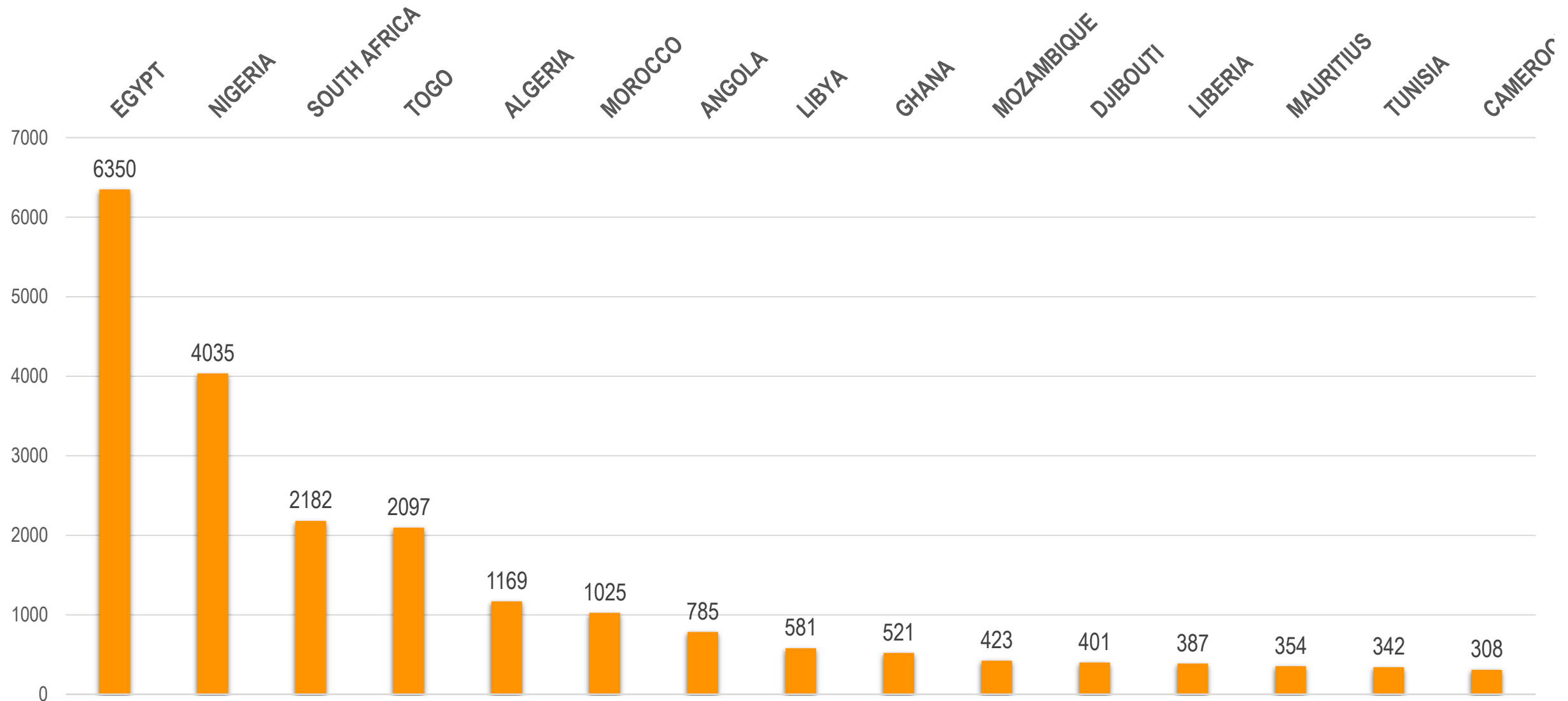
East Africa	A +2,1% in the year (only Q3, 2020 has been negative (-4,4%))	1.976 calls
North Africa	The decline of wet bulk vessel calls reached -7%	9.708 calls
Southern Africa	Positive trends, despite a decline in Q4 : 2,3%	2.301 calls
West Africa	Marginal impact on the total number of containership calls (-0,5%)	9.770 calls
Small Island States	Small Island States experienced a major decline (-20.1%)	486 calls
East Africa	East African side: the decline reached -17,5%	
West Africa	West African side: experience a severe decline (-44%)	37 calls

Wet bulk vessels calls in 2020: Intra-Regional Dynamics (% change over 2019)



Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

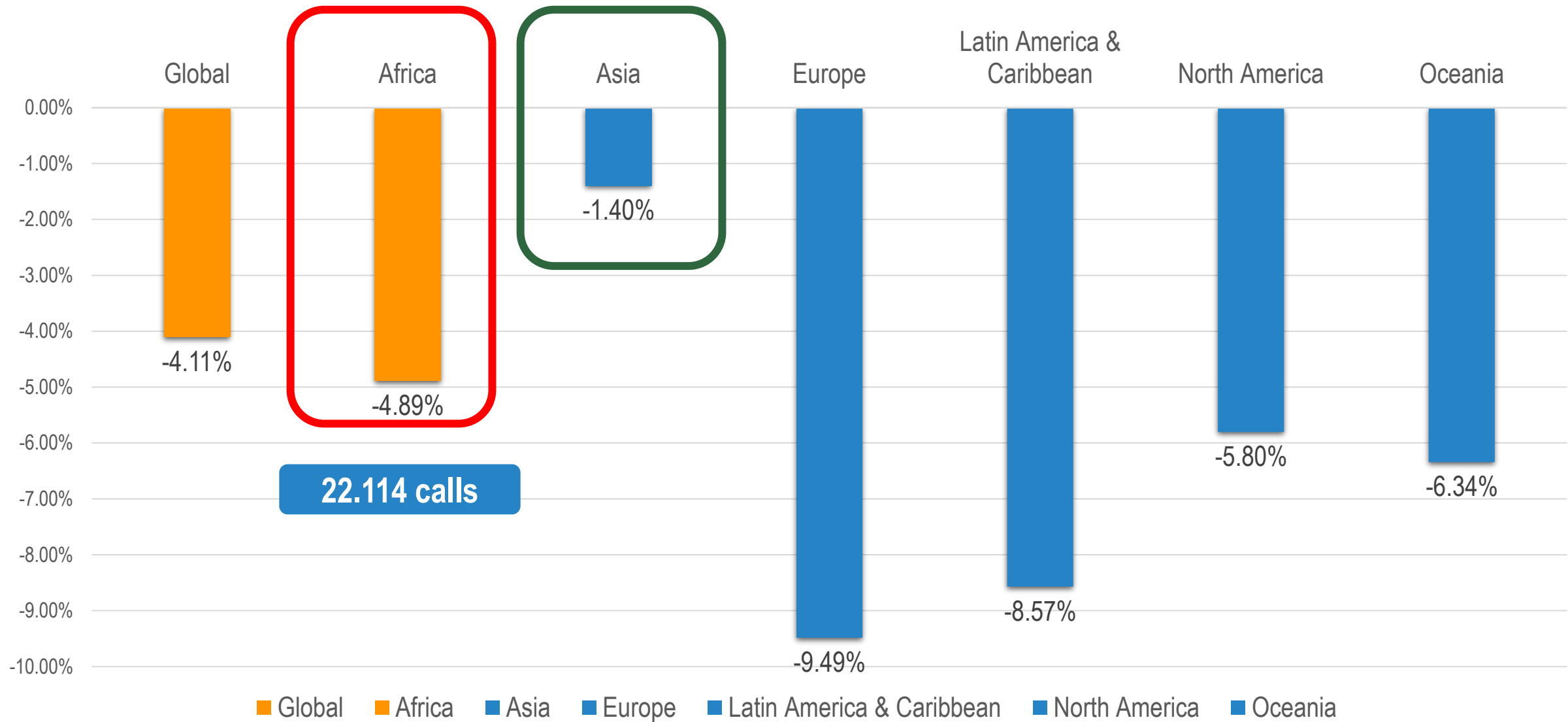
Wet bulk calls in 2020: countries with most calls



Wet bulk calls in 2020: countries with most calls (% change over 2019)



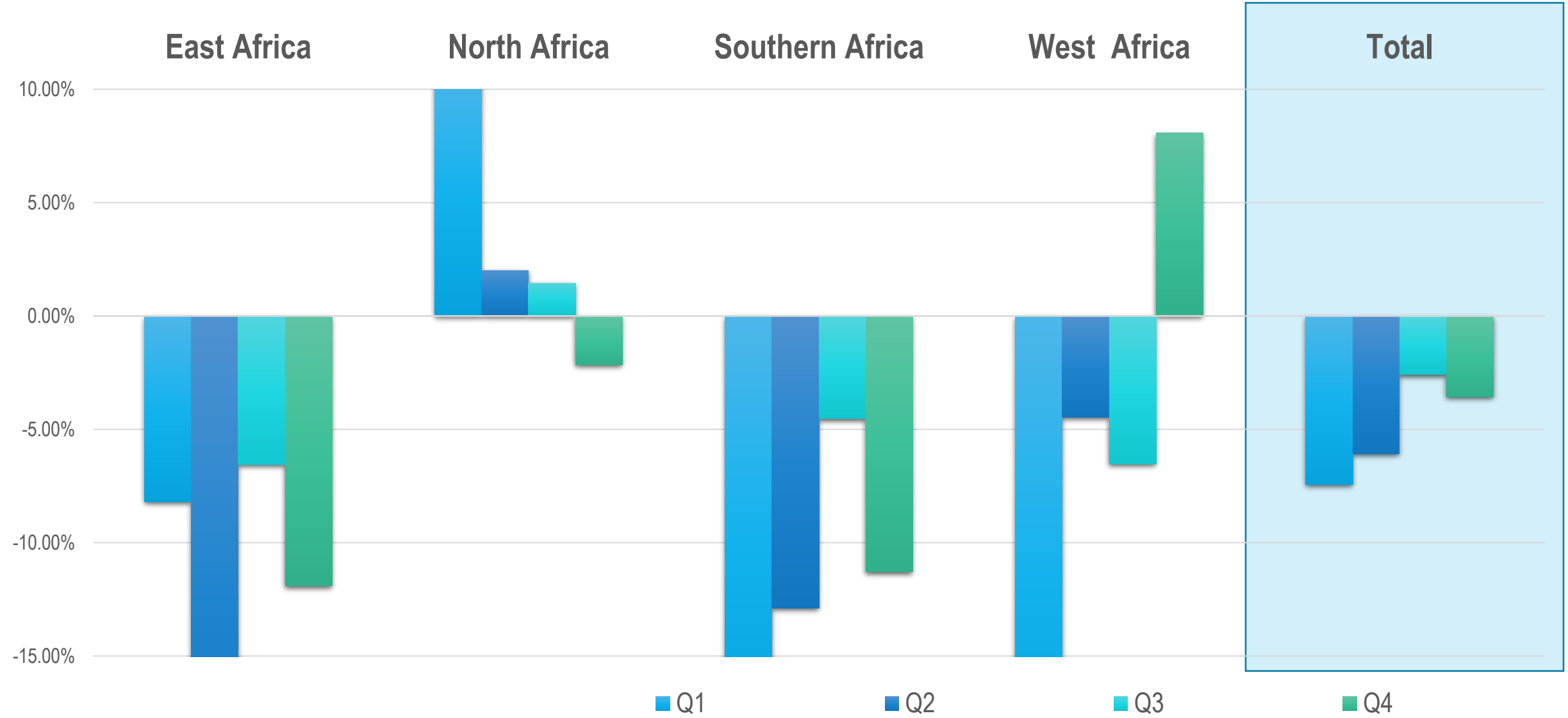
Dry bulk vessel calls in 2020 (% change over 2019)



Dry bulk calls: What happened per region?

East Africa	A major decline by -12,2%	2.927 calls
North Africa	An annual growth by 2,8%	10.199 calls
Southern Africa	Positive trends, despite a decline in Q4 : 2,3%	4.231 calls
West Africa	Major growth by 8,1%	4.557 calls
Small Island States	Small Island States experienced a major decline (-35.1%) East African side: the decline reached -31.9,5% West African side: experience a severe decline (-56.9%)	789 calls 75 calls
East Africa		
West Africa		

Dry bulk vessels calls in 2020: Intra-Regional Dynamics (% change over 2019)



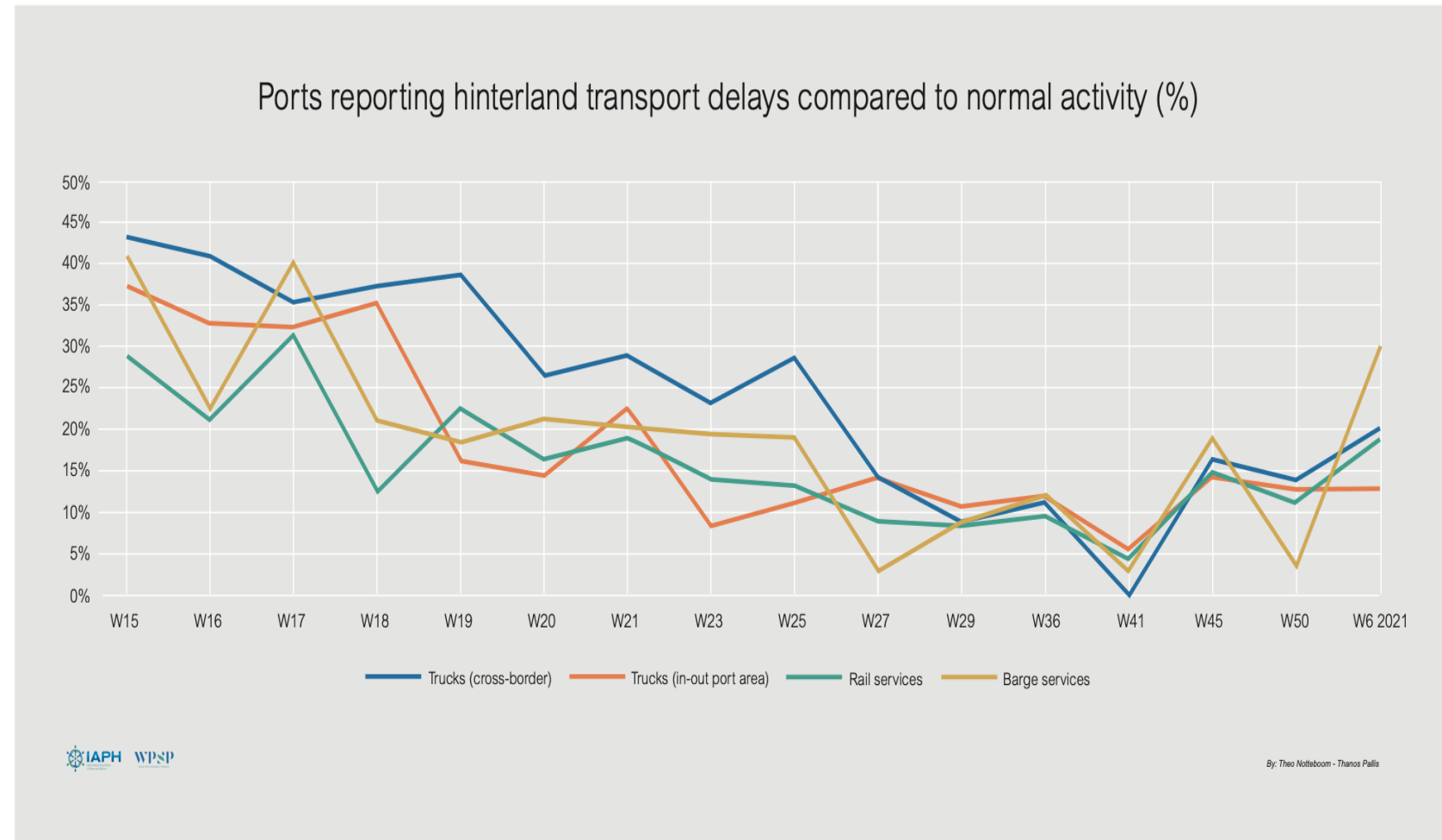
Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

What happened in Bulk markets?

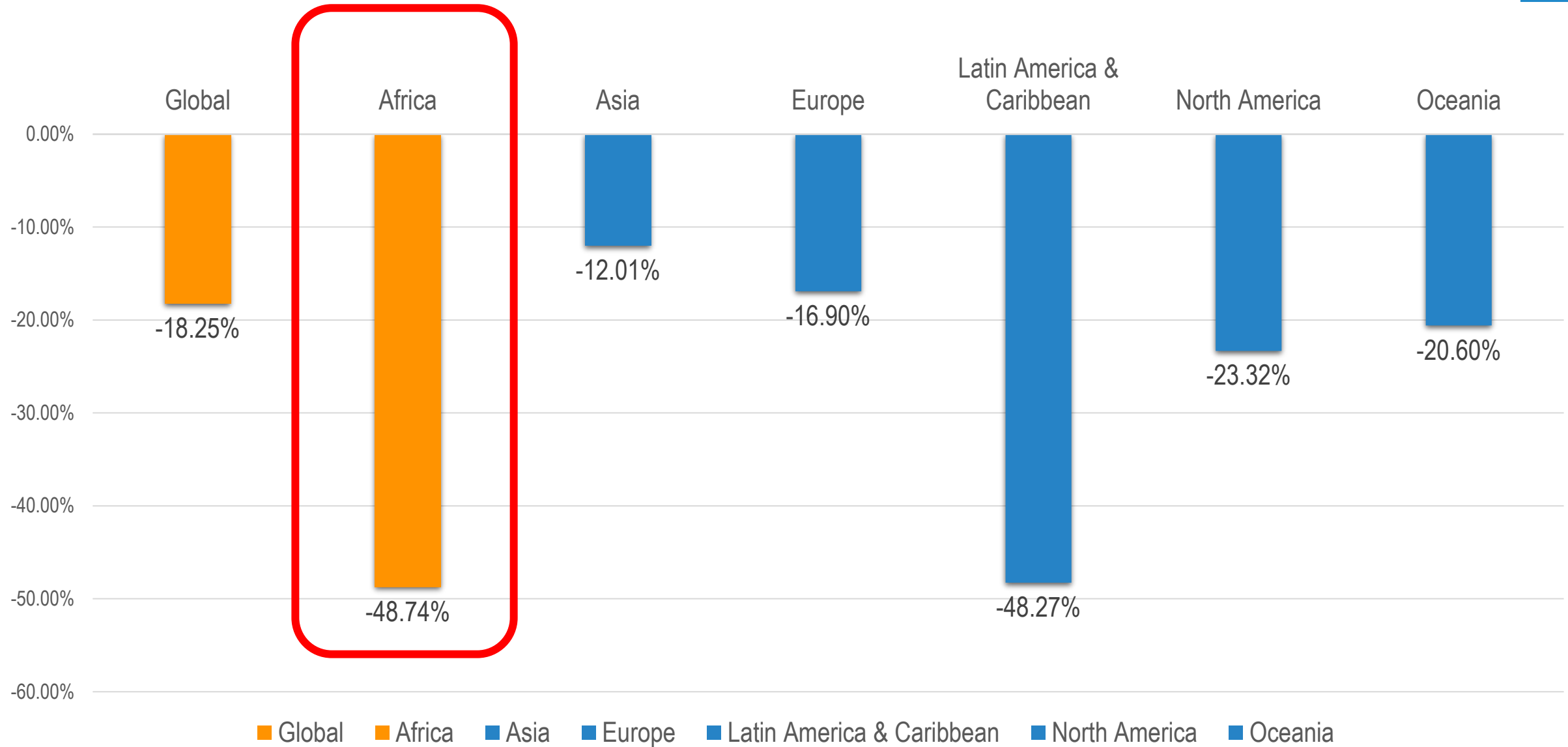
- **Wet Bulk vessels calls:**
 - An inconsistent and therefore inconclusive picture
 - A story of two halves: The impact was felt in Q3 & Q4, 2020 when North African ports received less calls.
- **Dry Bulk vessel calls:**
 - Less calls throughout the year
 - After the first shock (Q1) the situation improved.
 - A strong performance was recorded in North Africa countries
 - On the contrary East Africa and Southern Africa are the two regions that have been affected the most

Among the most critical challenges of all: Hinterland delays

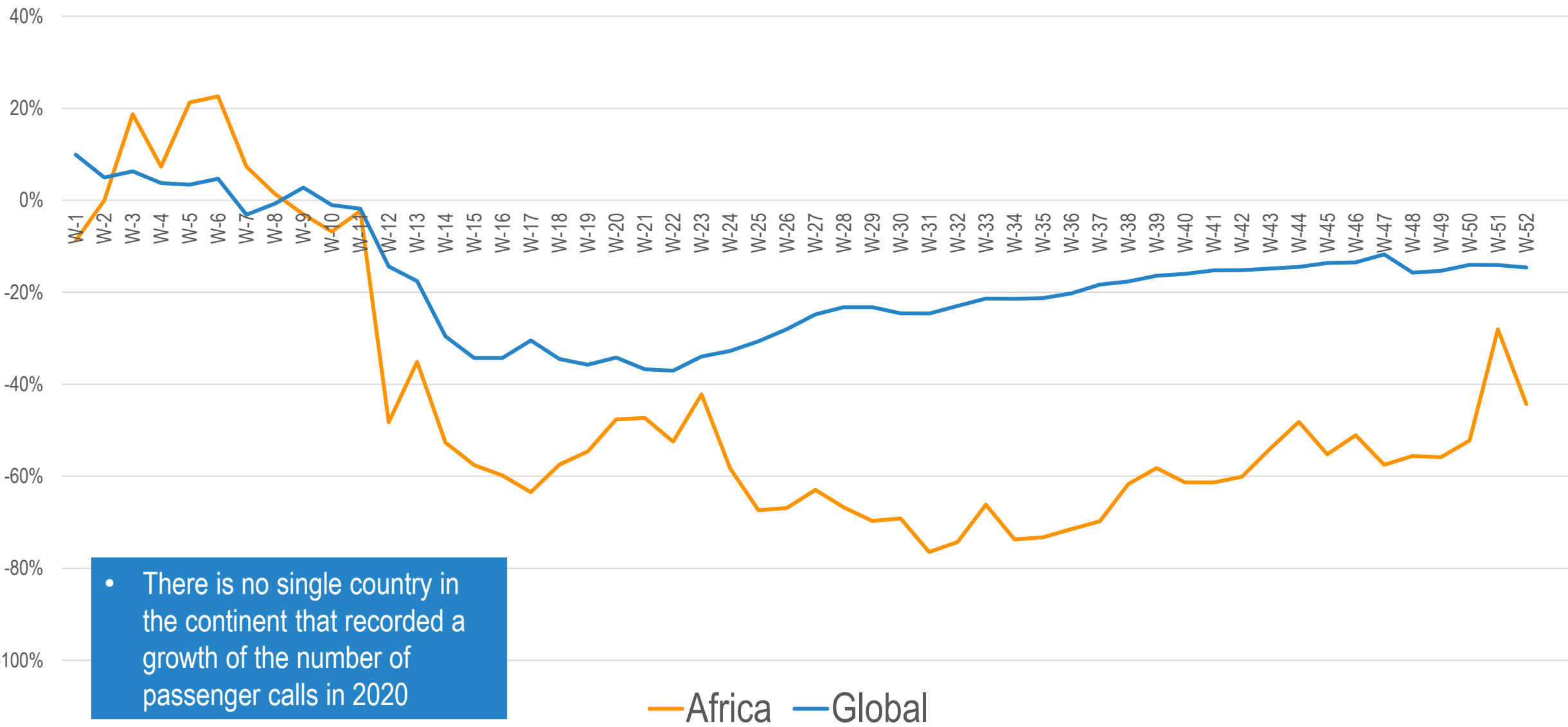
- Cross border crossing has been difficult
- Cross-border crossing delays resulted in long ques to/from the port
- In the early part of 2020 there were needs for adjustment of the procedures for going in/out of the port gate.



Passenger vessel calls in 2020 (% change over 2019)



Passenger ships calls in 2020: Africa vs Globe, per week (% change over 2019)



Source: UNCTAD (in progress) maritime transport component of the UNDA project "COVID-19 Response on Transport/Connectivity and Trade".

The adaptability process

The adaptability process

1

Operational adjustments

- Prioritization of essential services;
- Reorganization of operations & working conditions (sanitary protocols)
- Advancement of digitalization and communication strategies.

2

Communications coordination

- Established, collective actions have been more effective in combating risks.
- Adjustments to governance and communication strategies of entire supply chain.

3

Financial Adjustments

- Manifold implications – ports, the “cash cows”, had to facilitate both providers and users
- More pronounced difficulties in the case of fully privatized ports.

4

Coordinating Hinterland links

- Shippers and ports work to address land-side operations, but the ability to adapt has not been always effective.
- Digitalization of interactions and information sharing
- Adjustment to public policies

Measures aiming to facilitate adaptation



1. Responses have been multi-dimensional.
2. Existing contingency plans have facilitated quick responses to the crisis.
3. Public policy initiatives have facilitated relief & recovery in the maritime transport sector.



1. Reorganization of operations
2. Collaboration and coordination among all stakeholders
3. Digitalization of interactions and information sharing have been critical to the continuity of maritime transport operations during the pandemic.
4. Working & operational adjustment measures that helped the sector adapting have been transformational



1. Maintaining landside operations has been the most difficult task for those involved in the maritime supply chain.
2. Shippers and ports have worked to address land-side operations, but the ability to adapt has not been always effective.

Resilience of Ports



- 1. For ports, the financial implications of the crisis are manifold and more pronounced in the case of fully privatized ports.**
- 2. Ports continue to invest in infrastructure despite the crisis**
- 3. Ports continue to invest in sustainability projects despite the crisis**



- The (i) ‘crew changes’, but also (ii) the management of crew presence at the ports, are two challenges that highlight the need for orchestrating an integrated approach by all.**

Key activities carried out by UNCTAD:

- Research and extensive data compilation and analysis to help assess the impact of the COVID-19 disruption on the global and regional maritime transportation systems
- Analysis and identification of relevant response measures introduced by varied stakeholders in the face of the COVID-19 disruption
- Identification of good practices that allowed for effective management of the crisis and maintaining business continuity in the maritime supply chain
- Development of guidance material and training to build capacity and upgrade skills with a view to maritime supply chain resilience-building.

UNCTAD continues to facilitate the building of port resilience capacities

Outline of the Course

NEW 2021

Course Objectives	
Objectives Be able to:	• Build port resilience against pandemics • Keep ports safe and operational during pandemics • Implement standards, guidelines, metrics, tools and methodologies to facilitate the flow of goods and service • Identify suitable technology solutions

Section 1: Crisis Protocol and Communication Strategy

Section 2: Staff Management, Well-Being and Resilience

Section 3: Technology Preparedness

Section 4: Cargo Flow Continuity

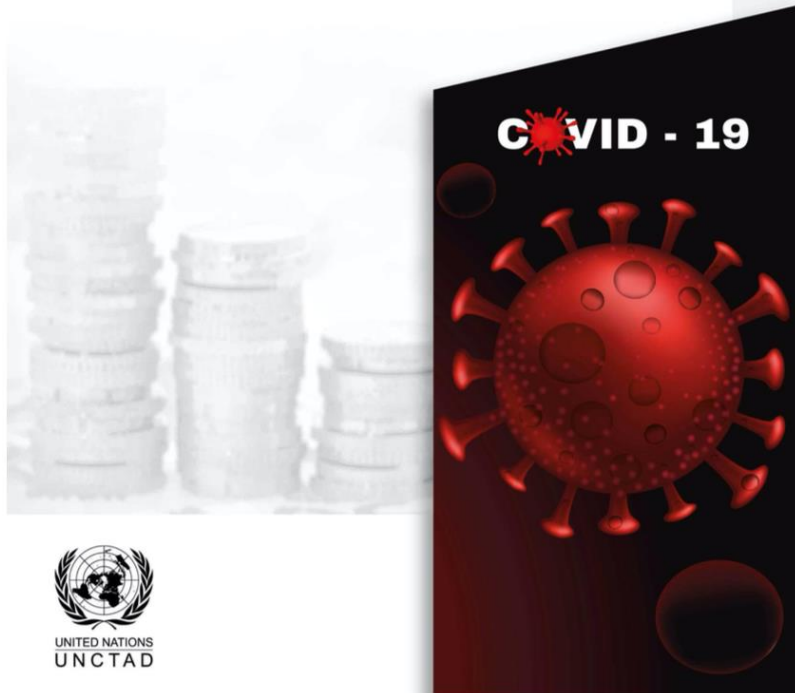
UNCTAD continues to facilitate the building of port resilience capacities

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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COVID-19 and maritime transport: Impact and responses



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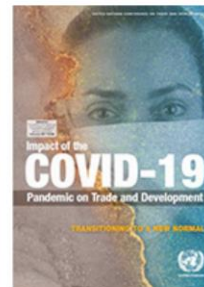
About Topics Projects Publications Meetings Statistics COVID-19

COVID-19 response

UNCTAD is monitoring the effects of the global pandemic on manufacturing, trade, foreign direct investment and economic growth.

We stand ready to provide technical assistance that can help countries mitigate or recover from the economic impacts of COVID-19.

Publications



Impact of the COVID-19 pandemic on trade and development: transitioning to a new normal



COVID-19 and e-commerce: impact on businesses and policy responses



Global Investment Trend Monitor, No. 37 [Special RCEP Agreement Edition]



COVID-19 and commodities: Assessing the impact on exports from Commonwealth countries

CORONAVIRUS DISEASE #COVID19 #Coronavirus

Information and guidance from the United Nations and the World Health Organization (WHO) regarding the current outbreak of novel coronavirus (COVID-19)

Podcasts



You can also contribute the building of port resilience capacities – your experience counts

Participate in the forthcoming UNCTAD (short) survey exploring three key questions:

1. What has been/will be the impact of the pandemic on your port and the linked maritime chains (immediate and long term)?
2. How did the port/maritime supply chains respond/cope with the disruption? What measures were taken?
3. What lessons were learned? What was considered good practice?
4. What kind of capacity building, technical assistance was/will continue to be needed to better prepare for future disruptions and enhance the resilience of the maritime supply chain in Africa (shipping, ports, hinterland connections and other relevant stakeholders)?

