



Autoridad Portuaria de Valencia

MEDITERRANEAN PORTS AND SHIPPING

Valencia, 6th October 2021

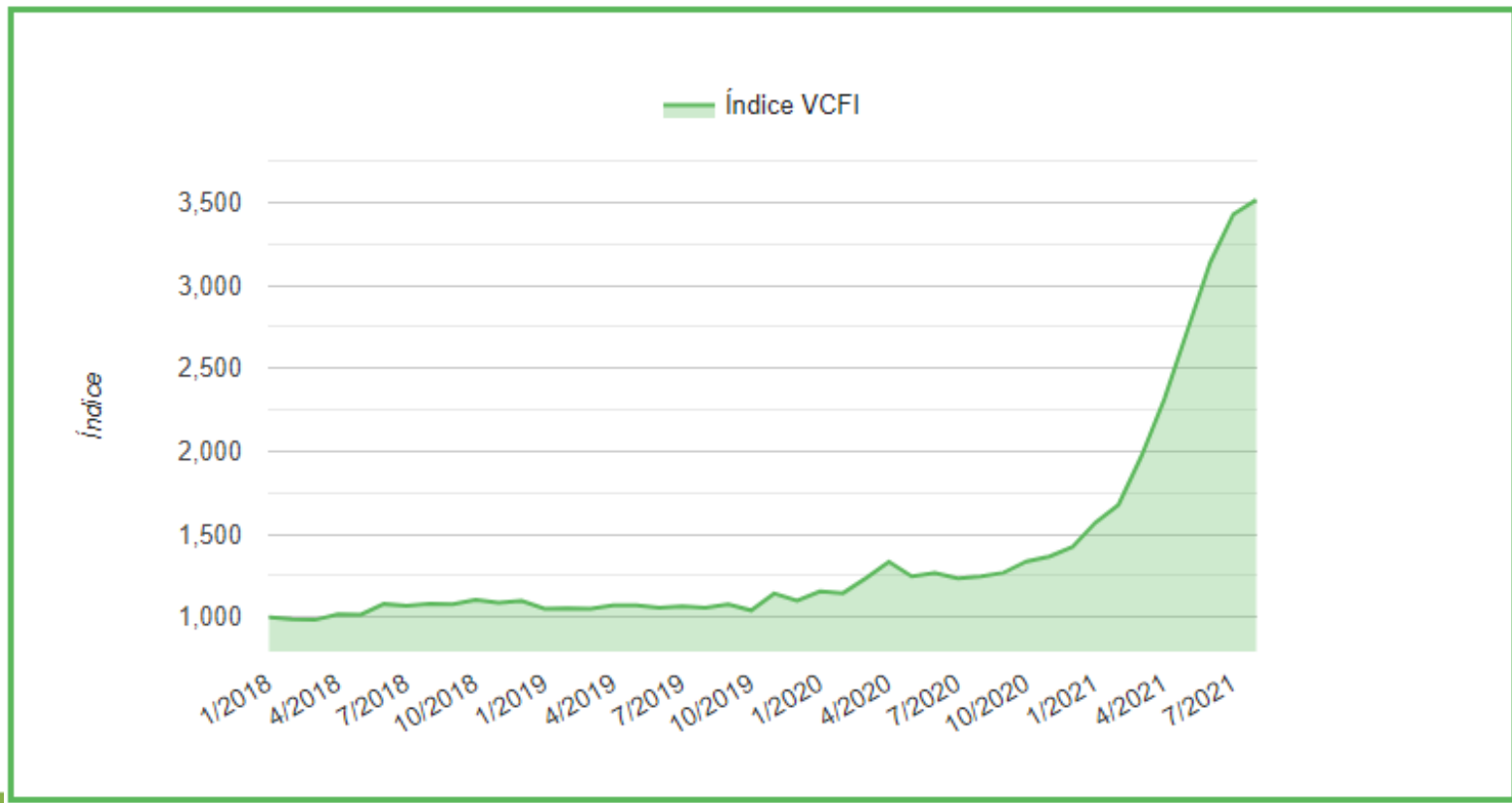
Aurelio Martínez Estévez
Chairman & CEO Valenciaport Authority



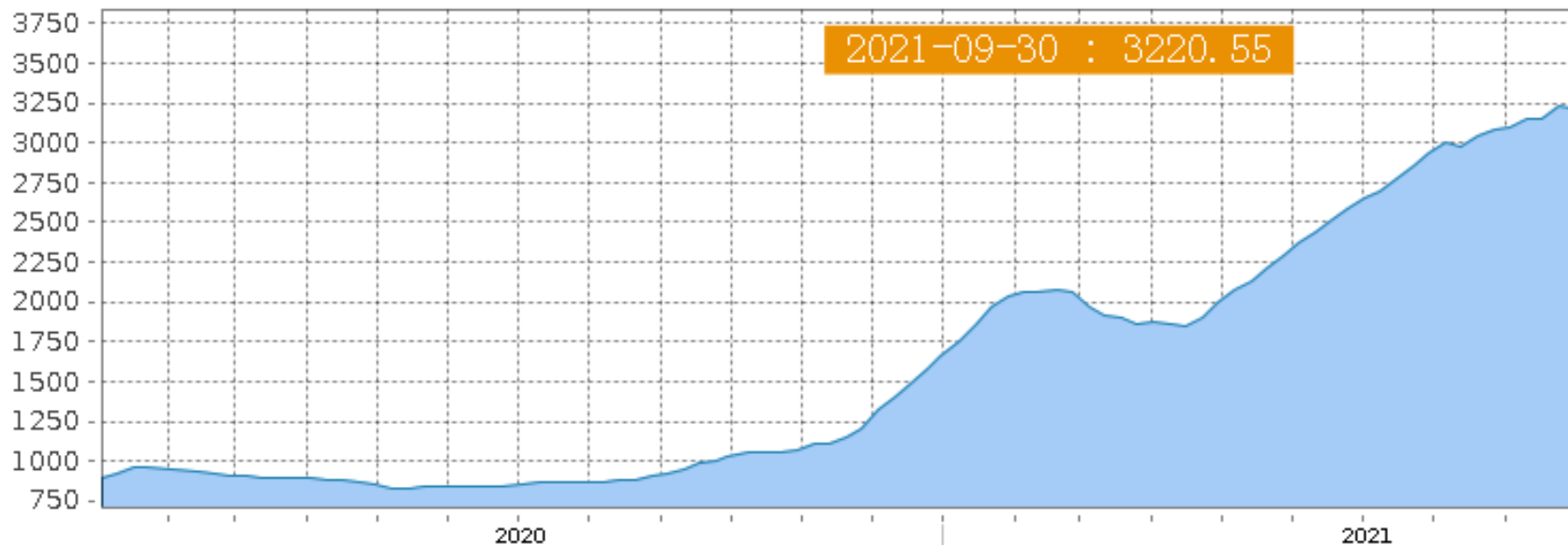
Perhaps the most characteristic feature of the current economic situation is the performance of freight rates.

1. Whichever indicator used and period we look at, they all tell us the same thing:
 - 1) We are at record highs
 - 2) Sustained increases over a long period of time
 - 3) Generalized rises across all routes and traffic types.

VCFI General



China Containerized Freight Index



BDI

D



Compare



Indicators

BALTIC DRY INDEX - 1D - INDEX

E

5267 +65 (+1.25%)



TV

May

Jul

Sep

Nov

2021

Mar

May

Jul

Sep

11



YTD 1Y 5Y All

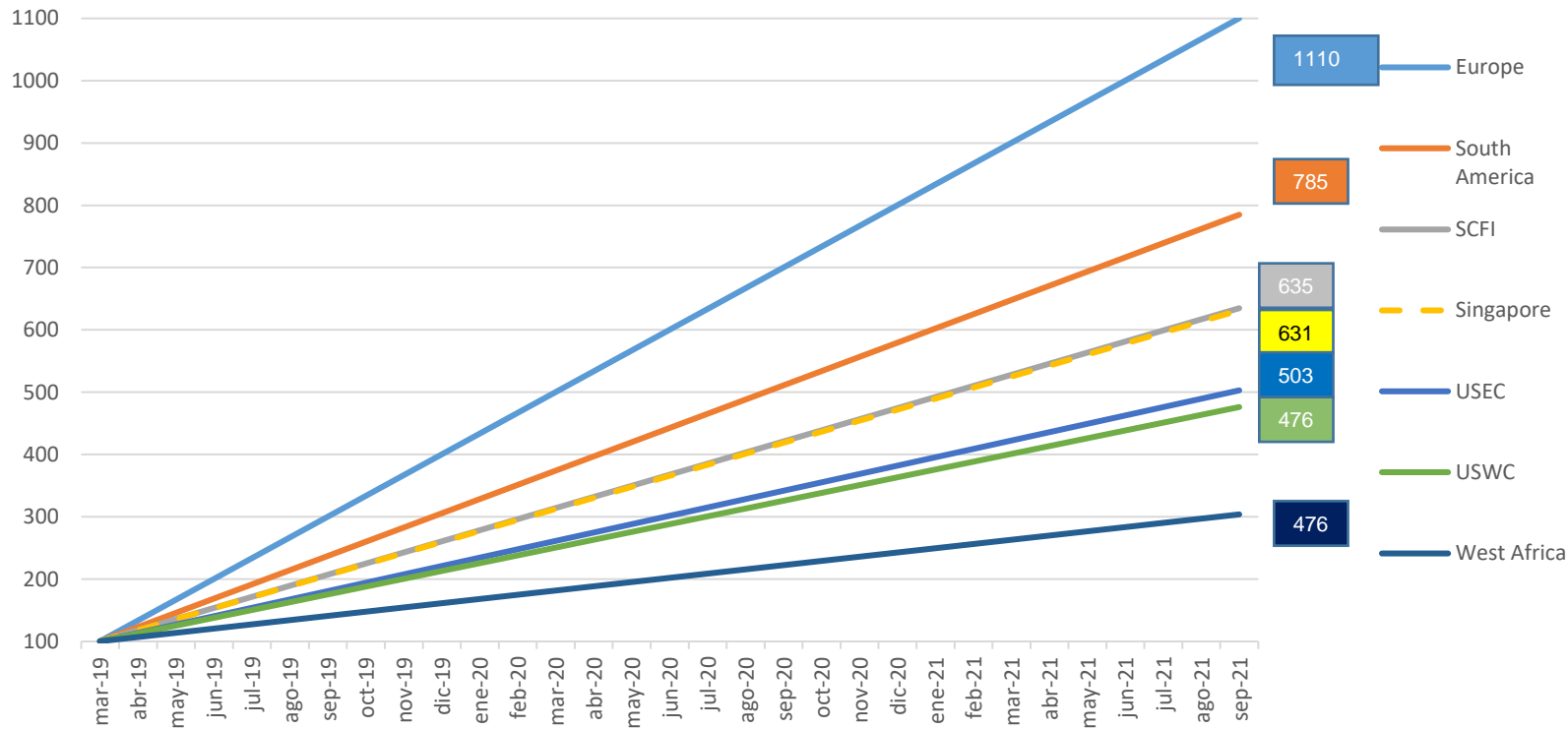
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WHAT DOES THE BEHAVIOUR OF THESE INDICES TELL US?

1. Virtually uninterrupted growth since the last quarter of 2020.
2. The strong disparity experienced in its growth rates
3. The tremendous negative impact on freights to Europe and the Mediterranean despite being the second east-west shipping corridor.
4. The limited negative impact on freight rates to the US regardless of the coast of destination, despite being a large part of the problem.
5. The limited relative increase in freight rates to destinations with low traffic levels (South Africa, Africa West-coast, Brazil...)

Relative Growth March 2019 to September 2021



Shanghai Containerized Freight Index	Latest 17Sep 21	1 week 10Sep 21	1 week Change %	1 month 20Aug 21	1 month Change %	3 months 25 Jun 21	3 months Change %	1 year 18Sep 20	1 year Change %
SCFI	4,623	4,568	1.2%	4,340	6.5%	3,785	22%	1,410	228%
Europe (Base port)	7,524	7,491	0.4%	7,398	1.7%	6,479	16%	1,082	595%
Mediterranean (Base port)	7,511	7,365	2.0%	7,080	6.1%	6,514	15%	1,188	532%
USWC (\$/FEU)	6,322	6,322	0.0%	5,927	6.7%	4,716	34%	3,867	63%
USEC (\$/FEU)	11,759	11,731	0.2%	10,876	8.1%	8,944	31%	4,634	154%
Persian Gulf (Dubai)	3,960	3,941	0.5%	3,720	6.5%	2,997	32%	1,079	267%
Australia (Melbourne)	4,300	4,198	2.4%	3,772	14.0%	2,593	66%	1,358	217%
West Africa (Lagos)	8,354	8,359	-0.1%	8,267	1.1%	7,835	7%	3,180	163%
South Africa (Durban)	6,909	6,732	2.6%	5,845	18.2%	4,476	54%	1,619	327%
South America (Santos)	10,191	10,148	0.4%	9,845	3.5%	9,380	9%	3,646	180%
West Japan (Osaka/Kobe)	355	303	17.2%	275	29.1%	297	20%	232	53%
East Japan (Tokyo/Yokohama)	340	305	11.5%	278	22.3%	305	11%	238	43%
Southeast Asia (Singapore)	934	921	1.4%	860	8.6%	912	2%	130	618%
Korea (Busan)	330	273	20.9%	184	79.3%	231	43%	123	168%

WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

1. Strong growth in global demand

- A. True, but
 - 1) It has been centered on the US
 - 2) The rest of the world has either not grown or has seen negative growth rates.
- B. Conclusion: this variable only partially explains the performance of freight rates.
- C. In any case, everything indicates that we are facing the exhaustion of the expansionary effects.

Demand growth has stalled

Global demand growth stalled in July, and even the North American boom appears to begin to taper off. The unknown factor is the degree to which capacity shortages have served to suppress or postpone demand.

Fig. A1: Global growth

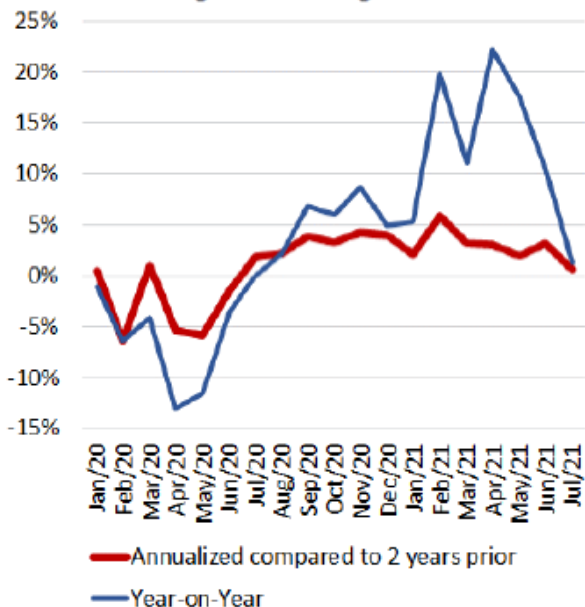


Fig.A2: N.America demand growth 2021 vs 2019
Annual average growth

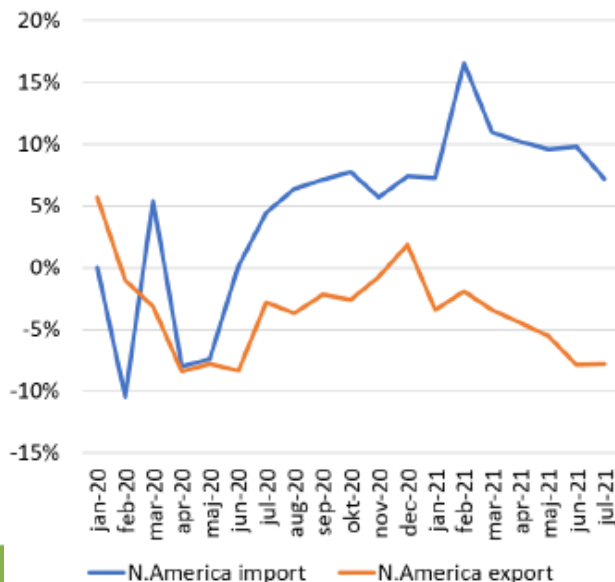


Fig.A3: Europe demand growth 2021 vs 2019
Annual average growth

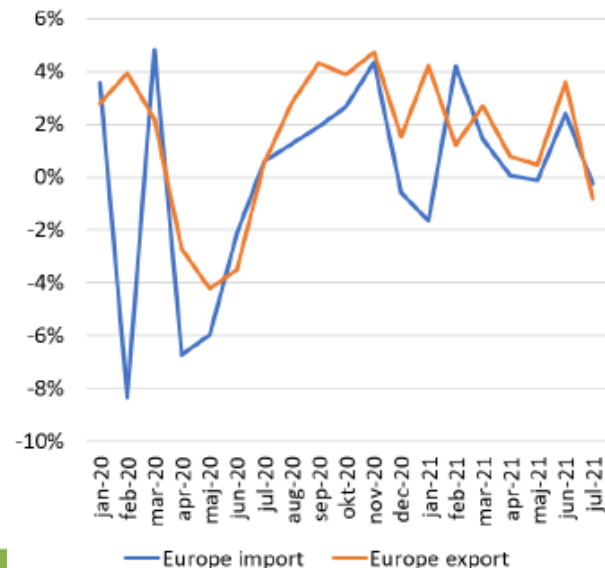


Fig.A8: Asia demand growth 2021 vs 2019
Annual average growth

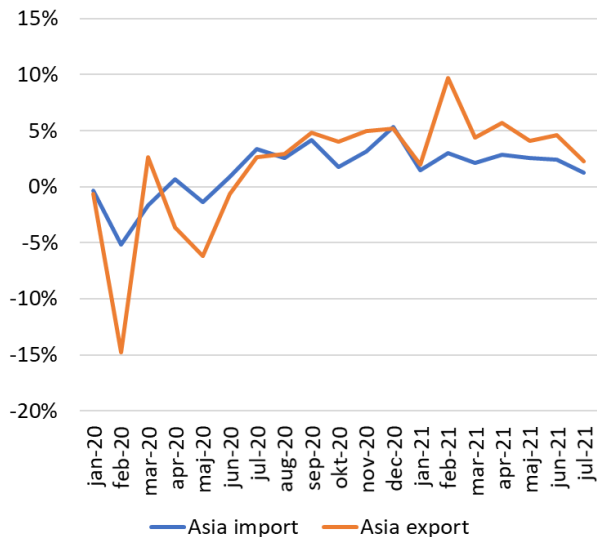


Fig.A4: India subcontinent/Mid East demand growth 2021 vs 2019
Annual average growth

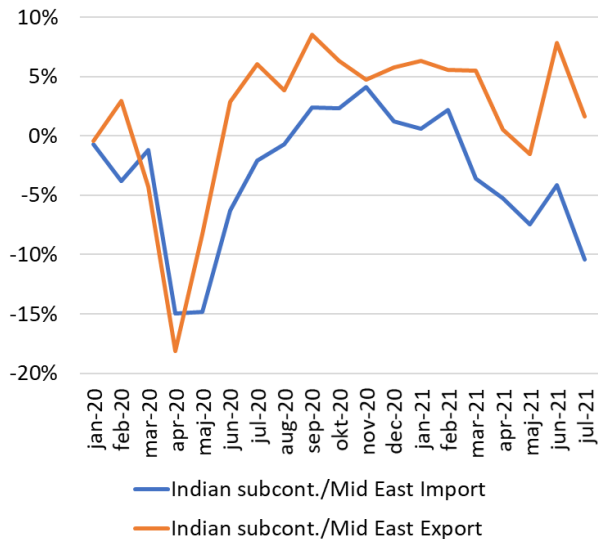


Fig.A5: S.America demand growth 2021 vs 2019
Annual average growth

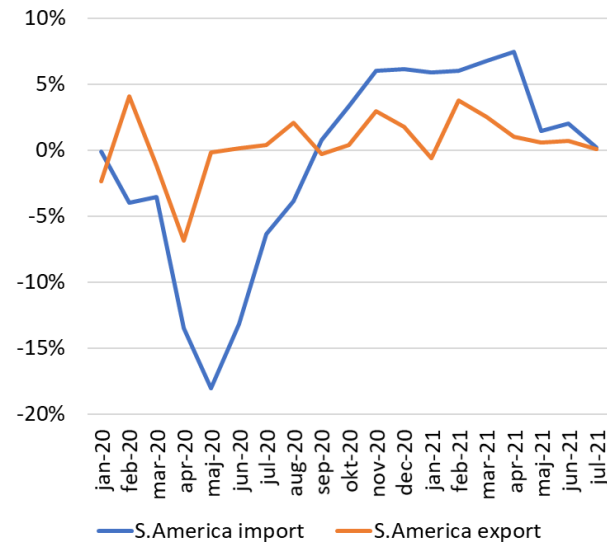


Fig.A6: Africa demand growth 2021 vs 2019
Annual average growth

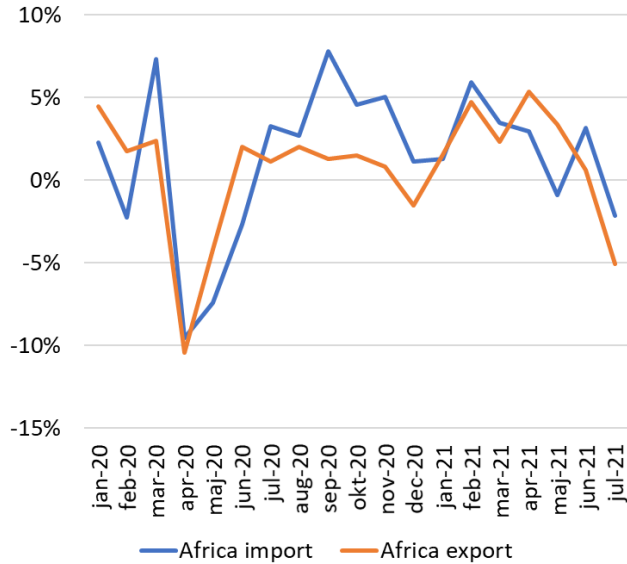
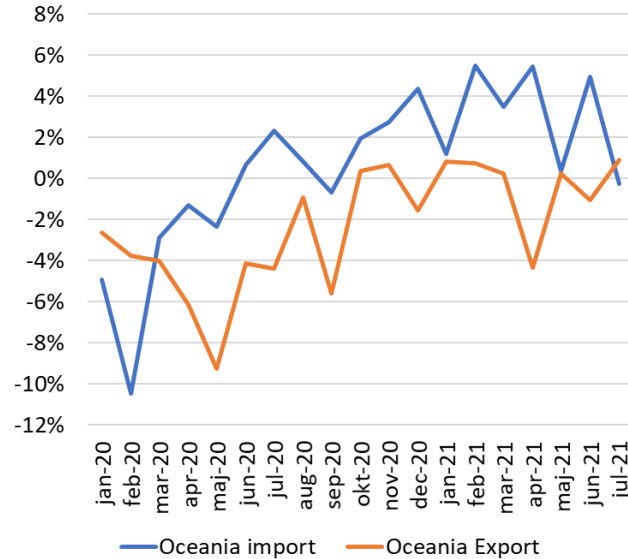


Fig.A7: Oceania demand growth 2021 vs 2019
Annual average growth



WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

2. The bottlenecks generated in the US logistics chain

- A. Perhaps the best summary of what we have experienced (and still continue to experience) are the words of John McLaurin (President of PMSA*) as quoted by an American importer

(*) PMSA: Pacific Merchant Shipping Association

- "I can't get a reservation in China, if I get the reservation, I can't get the container, if I get the container, I can't get the space, if I get the space, the ship will keep waiting outside the port for a week to ten days. When the ship finally unloads, I may not get a chassis, if I get a chassis, I will have to wait for some time before the container is picked up. Finally, if I pick up the container, the warehouse is most likely full."

WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

2. The bottlenecks generated in the US logistics chain

- A. Perhaps the best summary of what we have experienced (and still continue to experience) are the words of John McLaurin (President of PMSA*) quoting an American importer
- B. Congestion which, unfortunately, remains unresolved in the US.

(*) PMSA: Pacific Merchant Shipping Association

Terminal+Intermodal congestion is worsening

Terminal congestion in both North America and Asia are worsening, and in Europe it is not improving. The same development is seen for intermodal congestion.

Figure C1: HMM congestion overview, sample

* ● : Serious problem, ● : Slight Problem, ● : Good

Nation (Location)	Logistics Situation							
	Terminal				Intermodal			
	Berth	Yard	Gate	Labor/Gang	Truck	Rail	Barge	Feeder
Los Angeles Long Beach	●	●	●	●	●	●	●	●
Tacoma	●	●	●	●	●	●	●	●
New York	●	●	●	●	●	●	●	●
Savanah	●	●	●	●	●	●	●	●
Norfolk	●	●	●	●	●	●	●	●
Seattle	●	●	●	●	●	●	●	●

WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

2. The bottlenecks generated in the US logistics chain

- A. Perhaps the best summary of what we have experienced (and still continue to experience) are the words of John McLaurin (President of PMSA*) quoting an American importer.
- B. Congestion which, unfortunately, remains unresolved in the US.
- C. These bottlenecks in the logistics chain effectively result in a reduction of the cargo capacity of shipping lines and the availability of containers stuck in congestion.
- D. And, logically, they have a considerable impact on service delays on the main shipping lines.

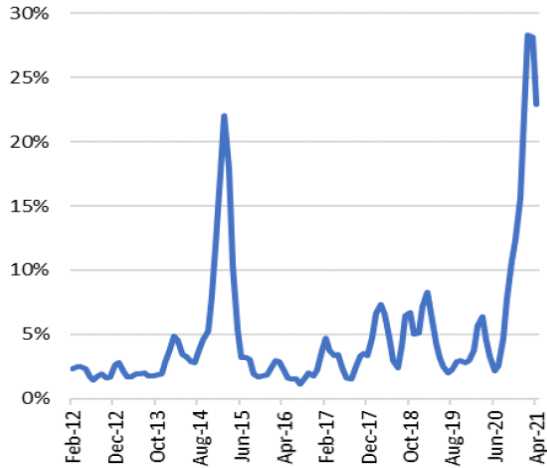
(*) PMSA: Pacific Merchant Shipping Association

Removal of all ULCVs from the market

The extreme vessel capacity shortage can in part be understood through the severe delays. In essence, the increase in vessel delays means that in early 2021, the effect globally equals the removal of all ultra-large container vessels over 18,000 TEU from the global fleet.

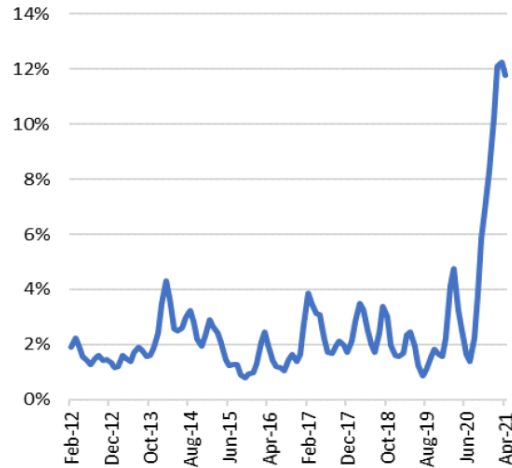
23% fleet increase needed to compensate for delays on Pacific lines

Fig.B2: Pacific Capacity increase needed to absorb delays



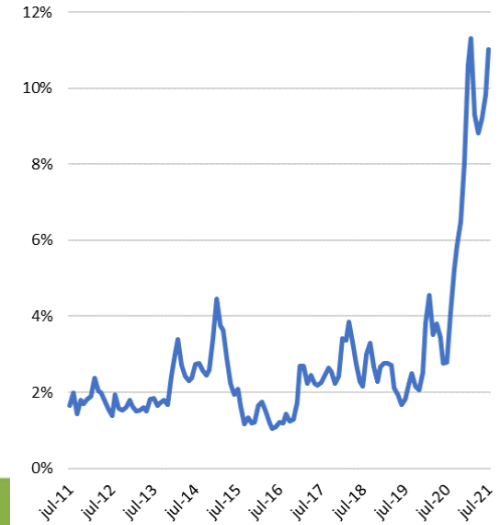
In Europe 12%.

Fig.B4: Asia-Europe Capacity increase needed to absorb delays



World Total 12%

Fig.C1: Absorption of global fleet due to delays



3. Container Shortfall / Mismanagement

- A. The total number of containers at the start of the crisis was 43M TEU, half of which were in the hands of shipping lines and the other half held by leasing companies.
- B. The increased global demand (20%) at the start of 2021 required an equal amount of available TEU to meet this growth.
- C. The shortfall estimated by Nerjus Poskus (Vice President of Global Oceanic Flexport) at the start of 2021 was around 500,000 TEU's.
- D. The geographical imbalances in trade flows have also increased considerably. In the US, the traditional uneven balance of trade ($M > X$) meant that 40% of imported containers were exported in an empty state. This has now increased to 63% or 1,900,000 containers (TEU's).

Large change in empty container imbalance

The upheaval in demand flows in the wake of the pandemic has led to very large changes in the import/export balance of container flows in North America, as well as for Indian Subcontinent and Middle East.

Fig.C1: Monthly creation of empty containers N.America

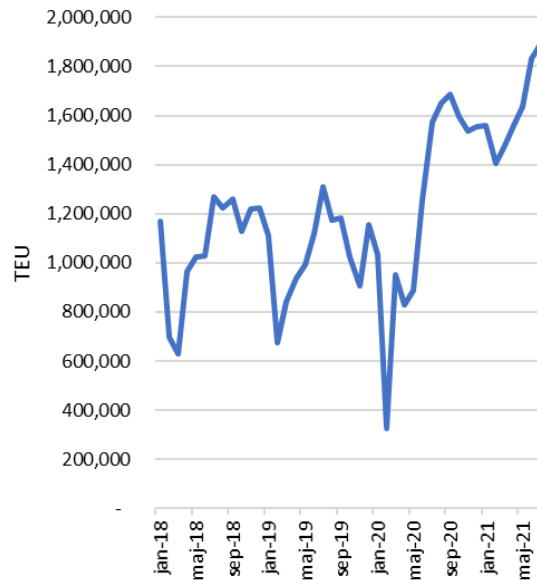
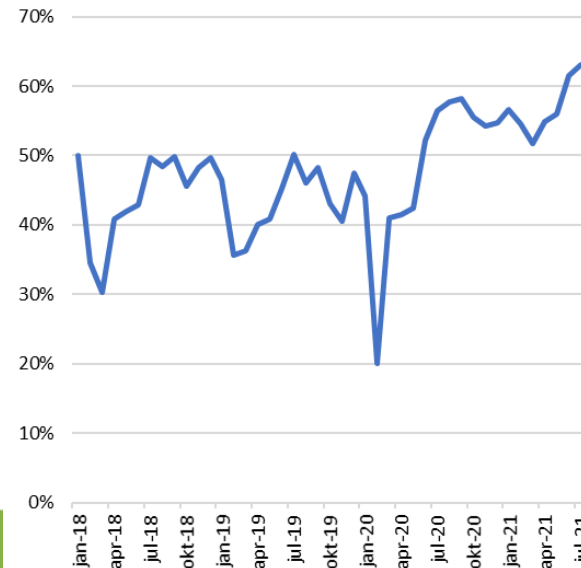


Fig.C2: Share of full imports with no cargo for the backhaul move N.America



WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

3. Container shortage / mismanagement

- E. Congestion at ports in Asia and the US means that a considerable volume of TEUs are not freely entering the commercial circuit.
- F. Between LA/LB and NY/NJ the delay in their logistics chain implies the immobilization of almost 1 million containers.

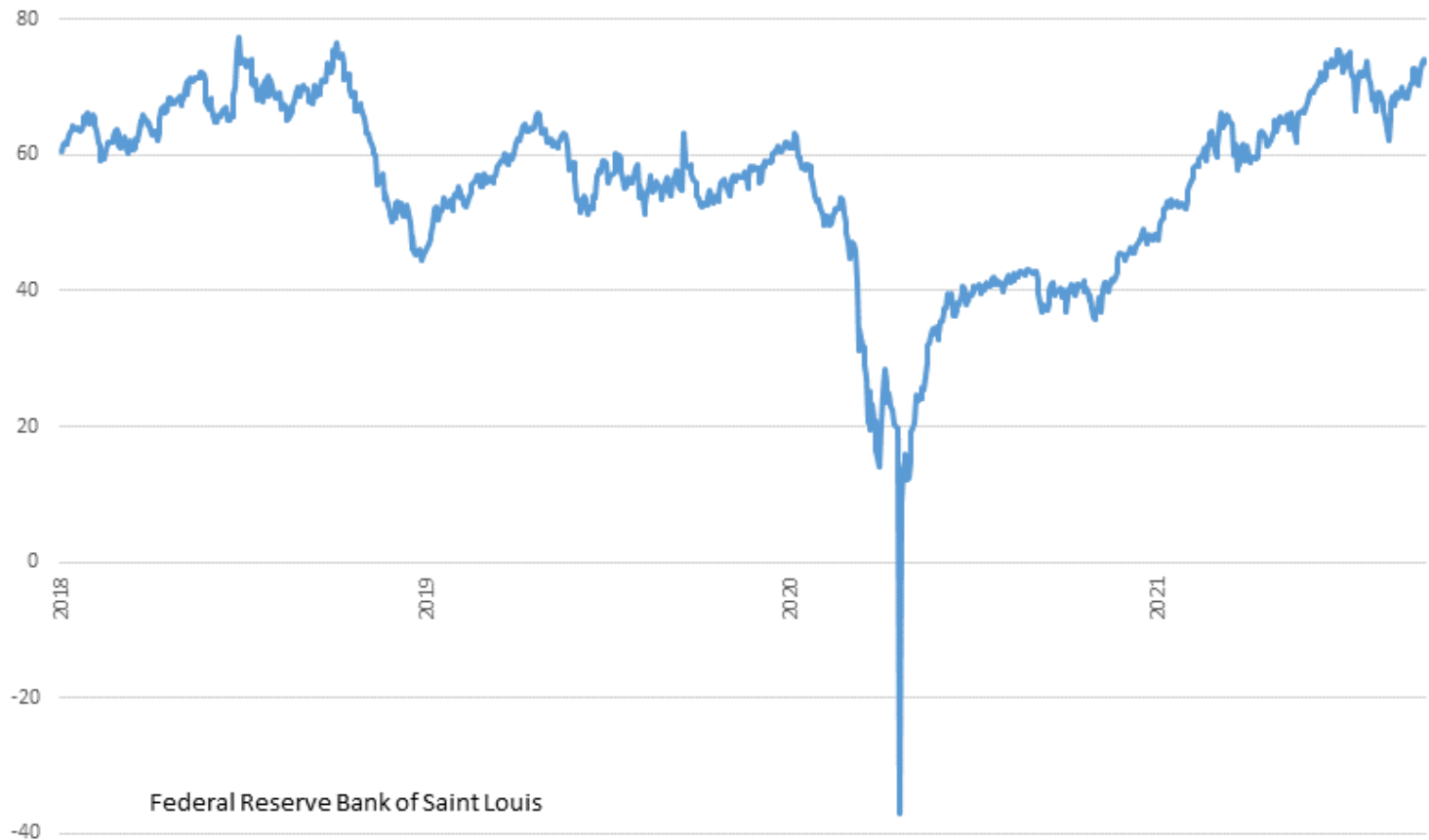
WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

4. Bunkering

- A. The cost of bunkering has been another of the variables used to justify the increase in freight rates.
- B. The increase is true if we compare current prices with the minimum levels reached in 2020, but if we do so with the levels from 2019, there are no such increases.
- C. Neither are oil prices higher now than in 2019, nor bunkering prices

\$/Barril

CRUDE OIL PRICE: WEST TEXAS INTERMEDIATE



Federal Reserve Bank of Saint Louis

VLSFO

MGO

LSMGO

IFO380

ULSFO

LNG

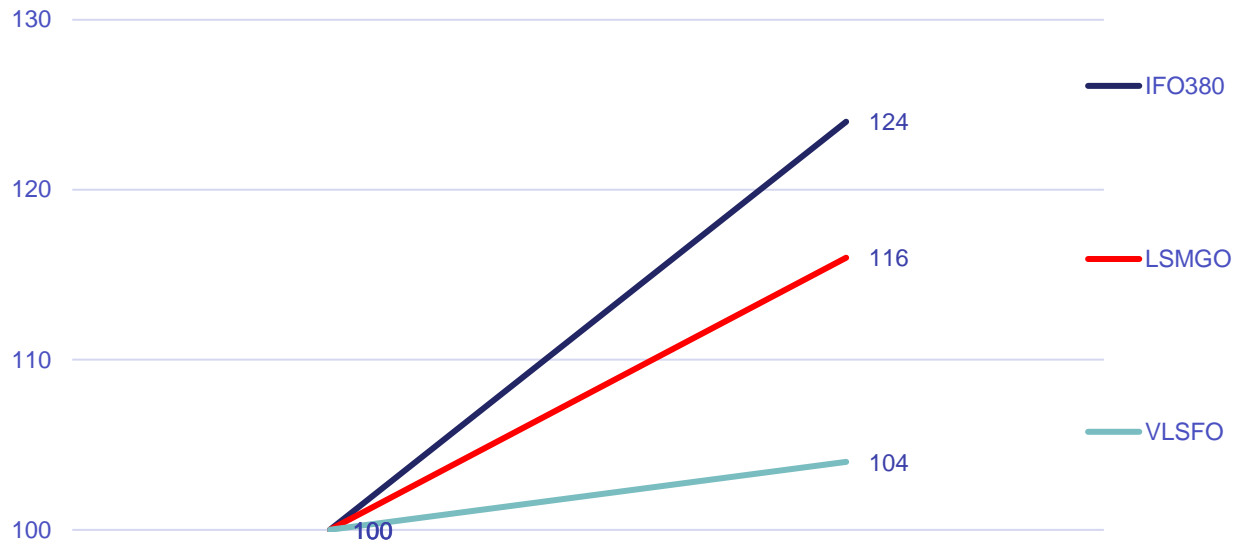
LNG-380e

LNG-MGOe



Jan 2, '19 - Sep 30, '21	High	Low	Average	Spread
Rotterdam - LSMGO	\$642.25	\$191.75	\$488.50	\$450.50
Rotterdam - VLSFO	\$595.75	\$157.75	\$424.50	\$438.00
Rotterdam - IFO380	\$448.25	\$125.25	\$323.00	\$323.00

Bunkering average Price growth



		ago-19	sep-21	
VLSFO		534	554	104
LSMGO		554	642	116
IFO380		359	446	124

WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

5. Shipping Company profits

- A. This section displays the most unexpected behavior.
- B. In the midst of the pandemic, with bottlenecks throughout the logistics chain, with waiting times exceeding all expectations, etc., the profits of the shipping companies (carriers) have continued to rise to unexpected margins.
- C. The operating profit of the 11 companies providing data for Q2 exceeds 24.5 B\$, which allows us to extrapolate to 100B\$ at the end of the year and at least 150/200B\$ for the whole system.

Record USD 24.5bn Carrier EBIT in 2021-Q2

Carriers recorded a combined USD 24.5bn in operating profits in 2021-Q2, with 7 of the 11 carriers recording EBIT of over USD 1.5bn. Volume increases have been high and average freight rate increases have been substantial, for nearly all of the reporting carriers.

Table A2: Q2 Segment Revenue 2010-2021 in Millions USD

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Y/Y 21/20	Y/Y 21-20
Maersk*	6,119	6,276	7,322	6,651	6,902	6,263	5,061	5,541	6,952	7,196	6,570	11,072	68.5%	4502
CMA CGM	N/A	N/A	4,100	4,050	4,200	4,100	3,540	5,311	5,703	7,699	7,004	12,410	77.2%	5406
COSCO**	4,153	3,954	2,750	2,580	2,947	1,880	2,393	3,317	3,288	5,164	5,199	11,287	117.1%	6088
Hapag-Lloyd	1,985	2,155	2,272	2,219	2,272	2,640	2,060	2,723	3,287	3,610	3,389	5,553	63.8%	2164
ONE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,066	2,875	2,736	5,776	111.1%	3040
Evergreen***	N/A	N/A	1,257	1,209	1,177	1,127	922	1,240	1,255	1,519	1,489	3,579	140.3%	2089
OOCL	1,392	1,411	1,560	1,407	1,503	1,362	1,136	1,406	1,462	1,566	1,584	3,468	119.0%	1884
Yang Ming	N/A	N/A	1,172	992	1,147	1,055	862	1,093	1,101	1,303	1,078	2,623	143.3%	1545
HMM	1,670	1,685	1,792	1,604	1,545	1,289	881	1,085	1,112	1,210	1,145	2,616	128.4%	1471
ZIM	933	1,000	1,051	976	875	763	612	746	803	834	795	2,382	199.6%	1587
Wan Hai	N/A	N/A	539	490	557	534	445	503	522	593	552	1,719	211.3%	1167

*Only Ocean segment

**Container Shipping Segment

***Evergreen Marine Corp. (Taiwan) Ltd.

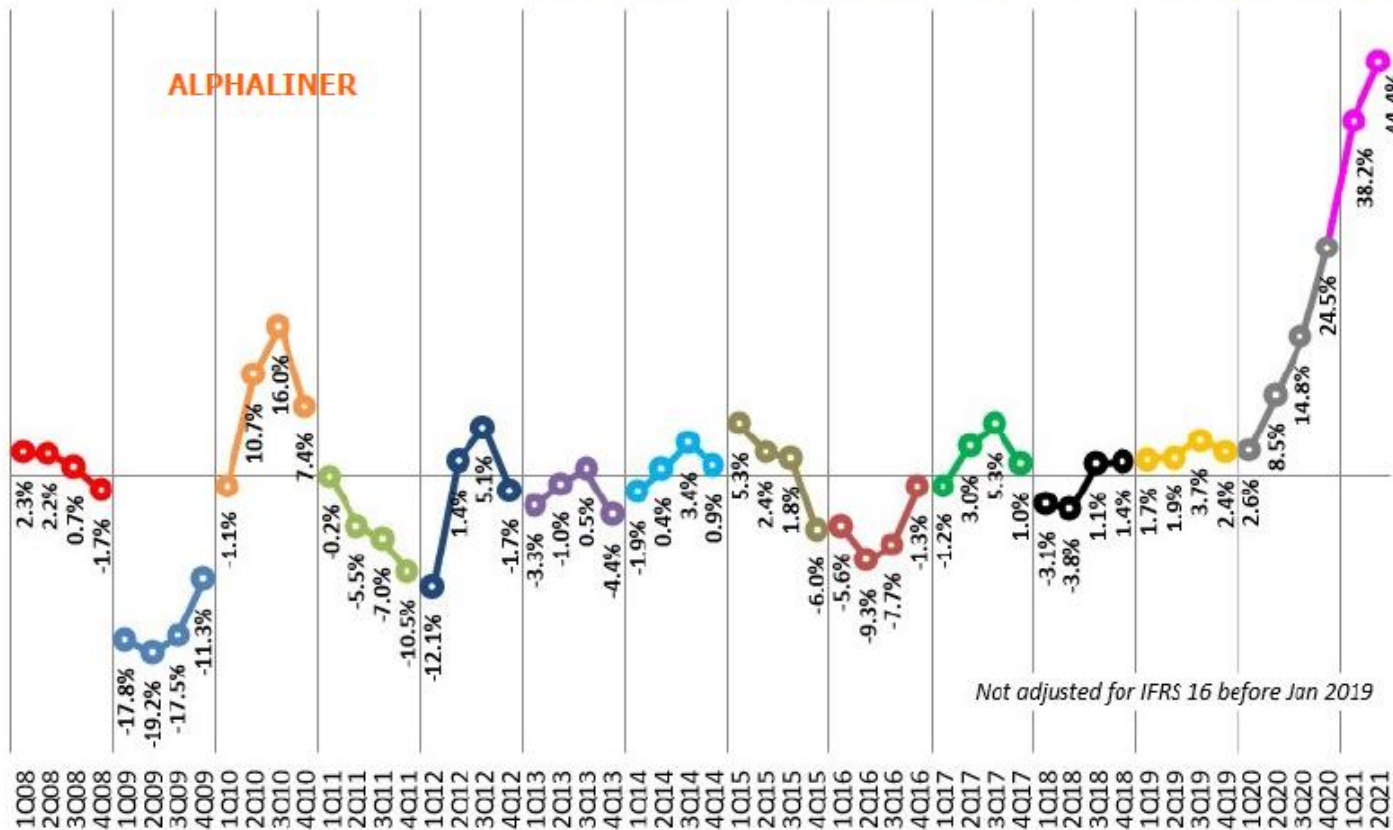
WHICH VARIABLES CAN JUSTIFY SUCH GROWTH?

5. Shipping company profits

- A. This section displays the most unexpected behavior.
- B. In the midst of the pandemic, with bottlenecks throughout the logistics chain, with waiting times exceeding all expectations, etc., the profits of the shipping companies (Carriers) have not stopped rising to unsuspected margins.
- C. The operating profit of the 11 companies providing data during Q2 exceeds 24.5 B\$, which allows us to extrapolate to 100B\$ at the end of the year and at least 150/200B\$ for the whole system.
- D. System EBIT as calculated by Alphaliner reaches 44.4% in Q2

Main carriers: Average core EBIT margin by quarter

Average Carrier Operating Margin



WHAT ARE THE VARIABLES RESPONSIBLE FOR THIS GROWTH?

5. Shipping Company Profits

- A. This section displays the most unexpected behavior.
- B. During the pandemic, despite bottlenecks throughout the logistics chain and waiting times that exceeded all expectations, etc., the profits of shipping companies (Carriers) have continued to rise to unforeseen levels.
- C. The operating profit of the 11 companies that have provided Q2 data is in excess of \$24.5 T, which allows us to extrapolate 100T\$ for the year-end and to double it for the entire system.
- D. System EBIT as calculated by Alphaliner reached 44.4% in Q2.
- E. If we take 2 significant companies (Maersk -Ocean section- and Happa-Lloyd) and examine the accounts published on their websites, we observe that:
 - 1) Maersk multiplied its EBITDA by 4 between the first half of 2019 and 2021.
 - 2) Happa-Lloyd multiplied the group's profits by 20, for the same period.

OCEAN HIGHLIGHTS

USD million

MAERSK

	H1 2021	H1 2020	H1 2019
Revenue	20.550	13.800	14.211
Total operating costs	12.618	11.520	12.180
Container handling costs	4.827	3.976	4.554
Bunkering costs	2.388	2.161	2.352
Network costs (excluding bunker)	3.463	3.262	3.534
Selling, General & Administration	1.314	1.259	1.332
Costs of goods sold and other operational costs	626	862	408
Other income/costs, net	-88	252	-14
EBITDA	7.844	2.532	2.017

HAPAG-LLOYD

USD million

	H1 2021	H1 2020	H1 2019
Revenue	10.551	7.005	7.047
Total operating costs	7.078	6.459	6.627
Transport expenses	5.736	5.210	5.451
Personal expenses	431	375	375
Depreciation, Amortisation and Impairment	752	724	640
Other operating results	159	150	161
Operating result	3.473	546	420
Other	-189	-232	-255
Group profit/loss	3.284	314	165

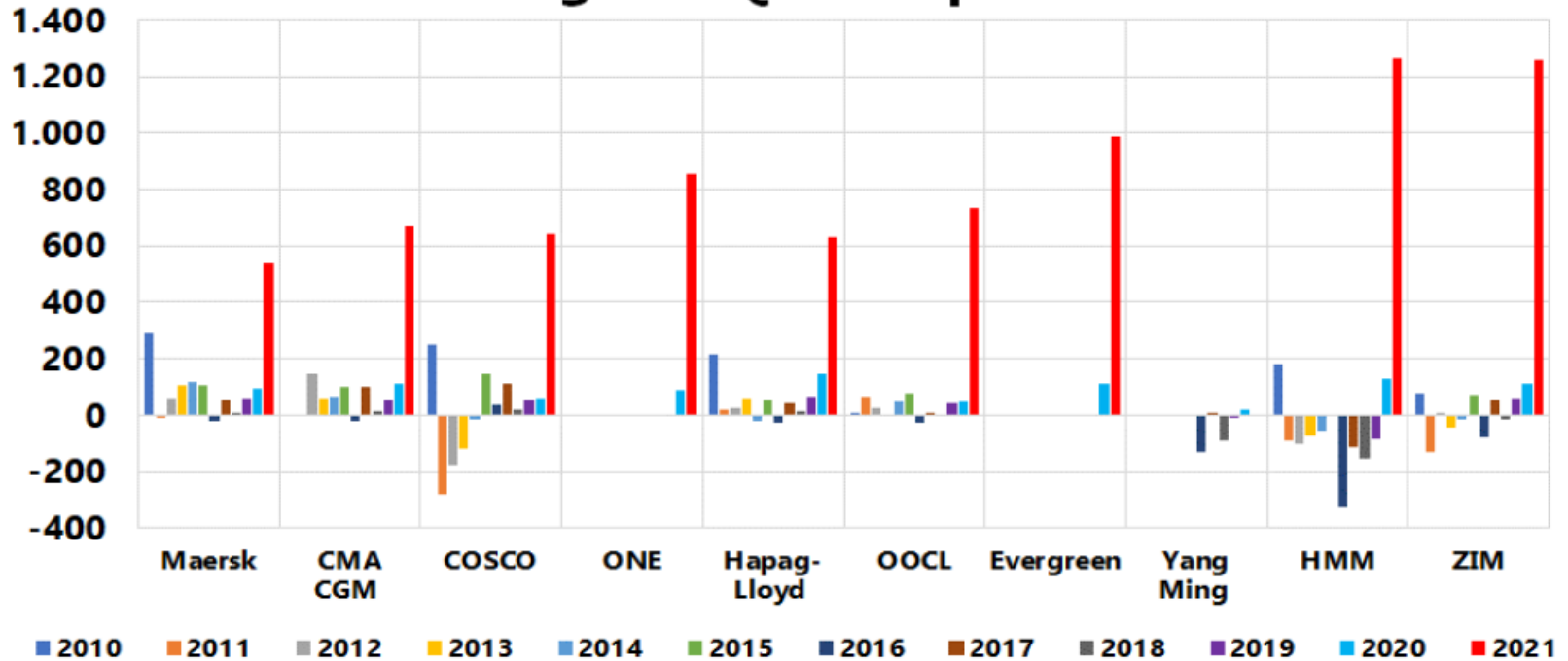
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- F. If we think that the number of full port-to-port containers was 430 million according to DREWRY (2020) and we divide it by 2 (two ports, one on each side), for each full container handled, shipping companies are obtaining an operating profit of around 900\$.
- G. Finally, incidentally, the most significant improvements in the profit and loss accounts are to be found in the medium sized shipping lines.

Maybe big is not better?

Fig. A7: Q2 EBIT per TEU

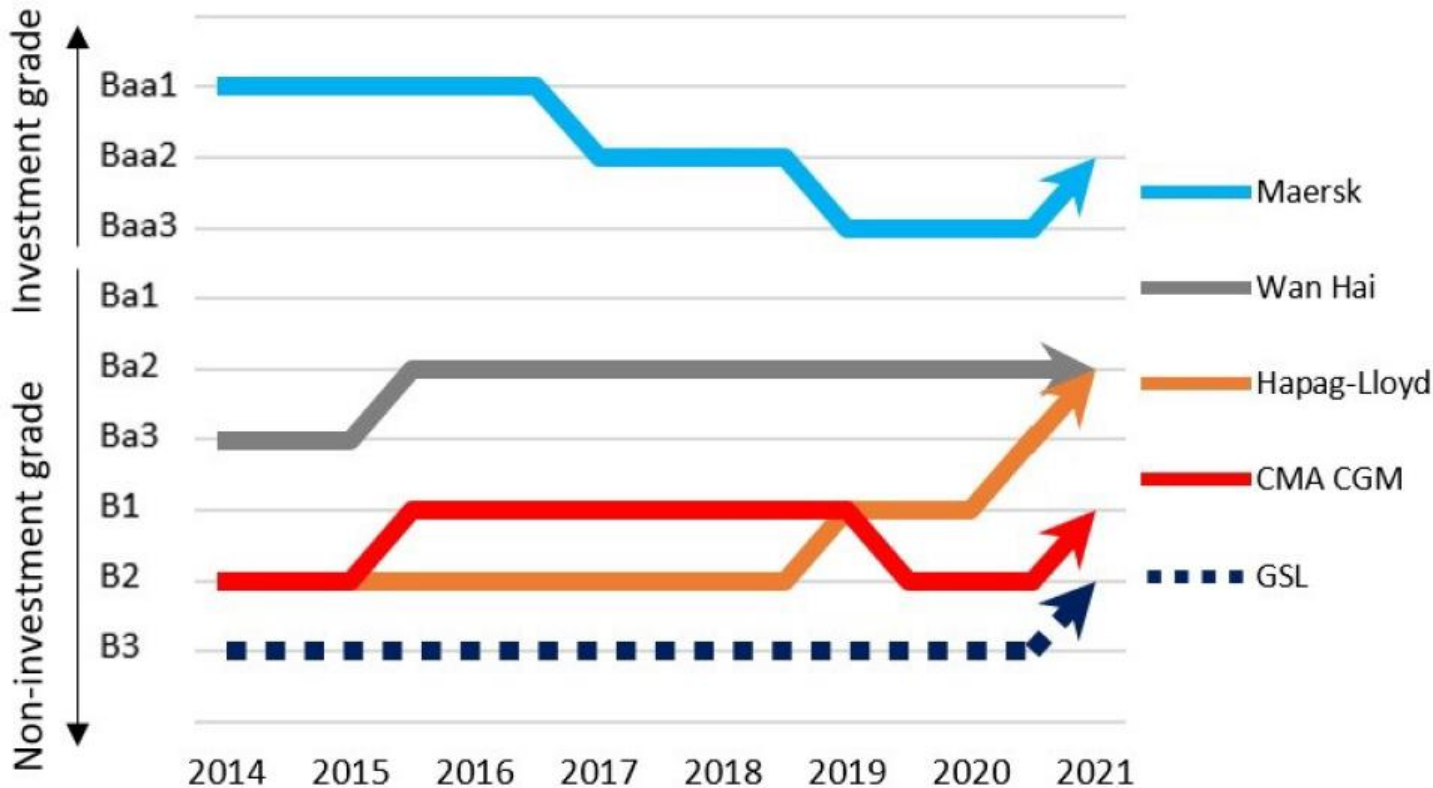


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- G. Finally, incidentally, the most significant improvements in the profit and loss accounts are to be found in the medium sized shipping lines.
- H. It is not surprising to see that ratings agencies have substantially upgraded the ratings of the shipping companies.

Evolution of Moody's container credit ratings since 2014



Results of this whole process

1. Increased stopover times for ships in ports

11% increase in port stay duration

According to new data from UNCTAD, the median time container vessels spent in port have increased 11%, compared to the pre-Covid normality.

Fig.A1: Global median time spent in port
Container Vessels

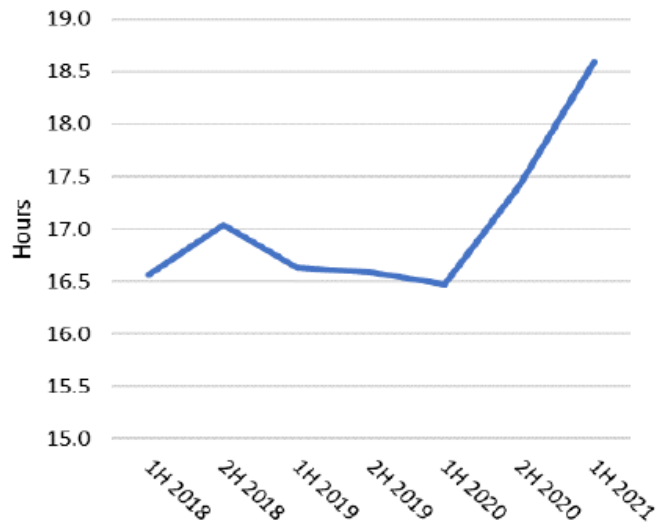


Fig.A2: Increase in median port stay time
1H 2021 vs Average 2018-2019

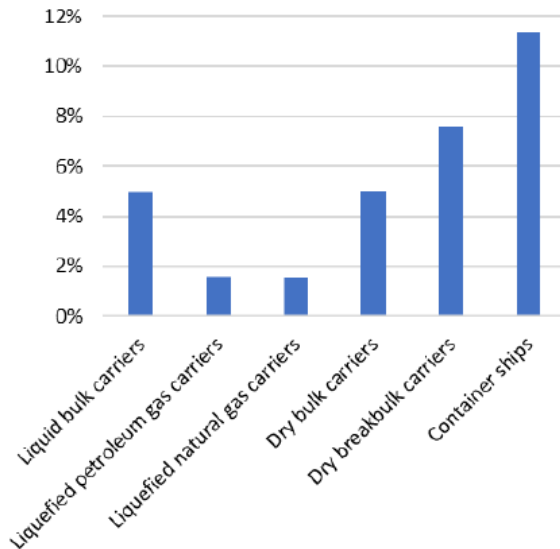
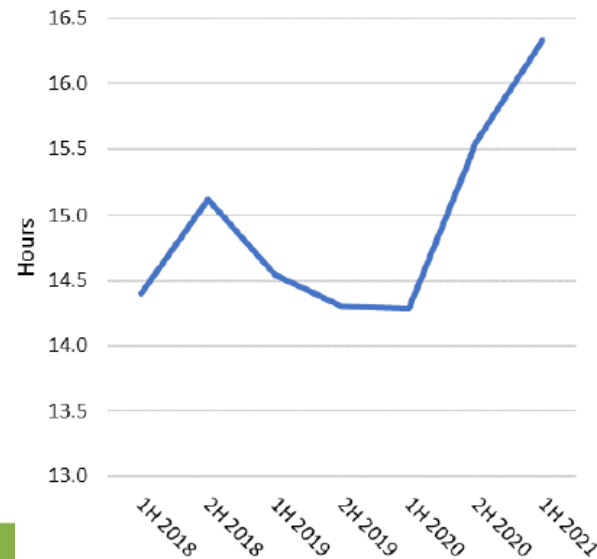


Fig.A6: China median time spent in port



11% increase in port stay duration

According to new data from UNCTAD, the median time container vessels spent in port have increased 11%, compared to the pre-Covid normality.

Fig.A3: USA median time spent in port

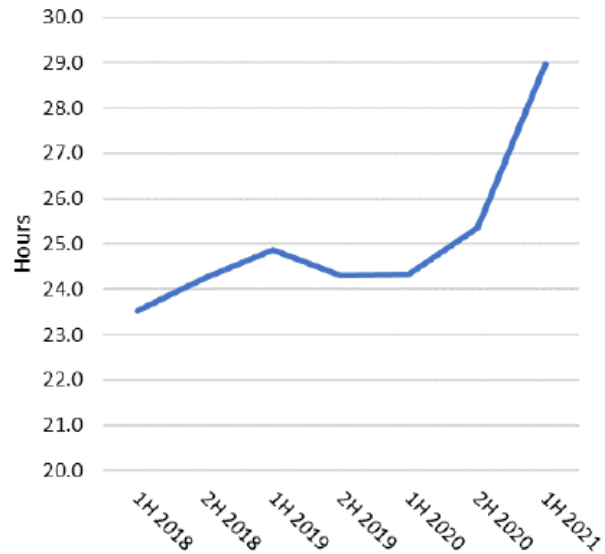


Fig.A4: Europe median time spent in port

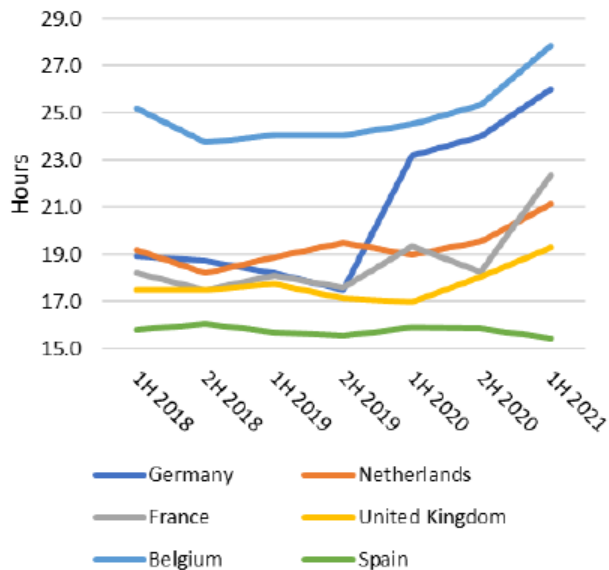
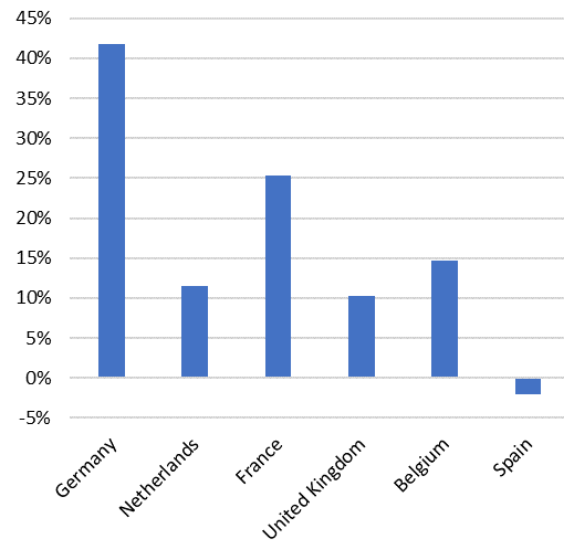


Fig.A5: Change in median port stay time 1H 2021 versus average 2018-19



Results of this whole process

1. Increased stopover times for ships in ports
2. Significant shortfalls in the entire logistics chain in some countries
3. Impact on inflation
4. Increased import/export costs and therefore,
5. Slowdown in global growth
6. Increasing trade imbalances in the world (US)
7. Falling productivity in the sector

In any case, everything seems to point to a slow but gradual normalization of the sector (by medium 2022),

I hope this is more than just wishful thinking