

Disruption

Covid-19 impact on global trade

• Suez-crisis

 Broader effects container-crisis on supply chains

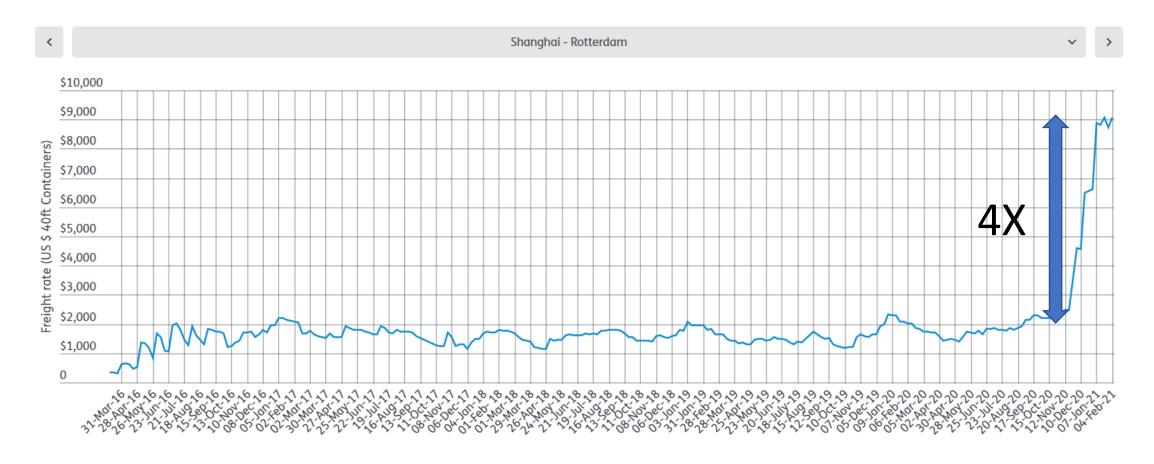






World container index: unprecedented rise

March 2016-February 2021 | assessed by Drewry





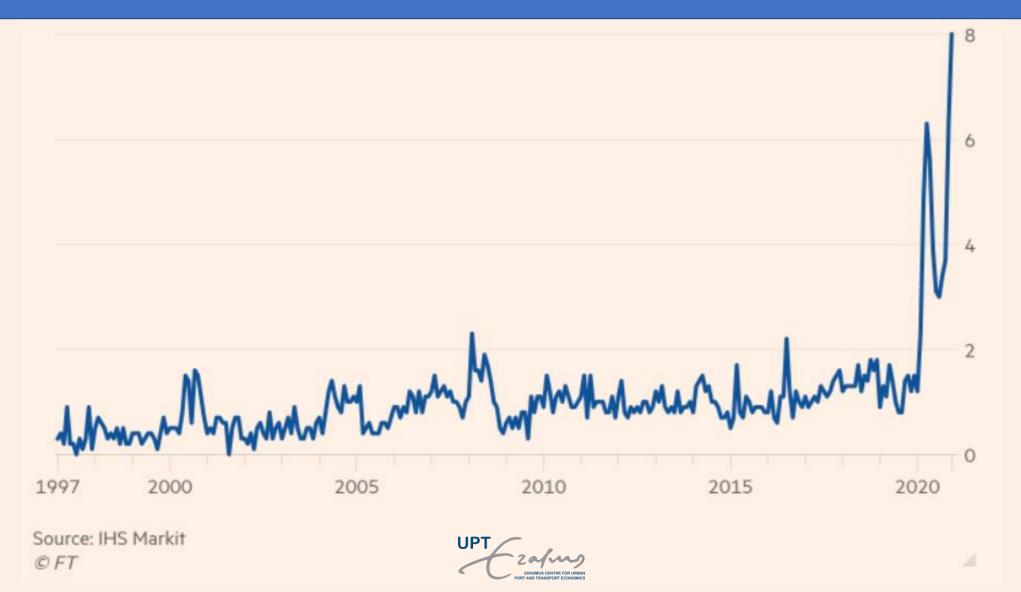
World container index: unprecedented rise

March 2016-February 2021 | assessed by Drewry

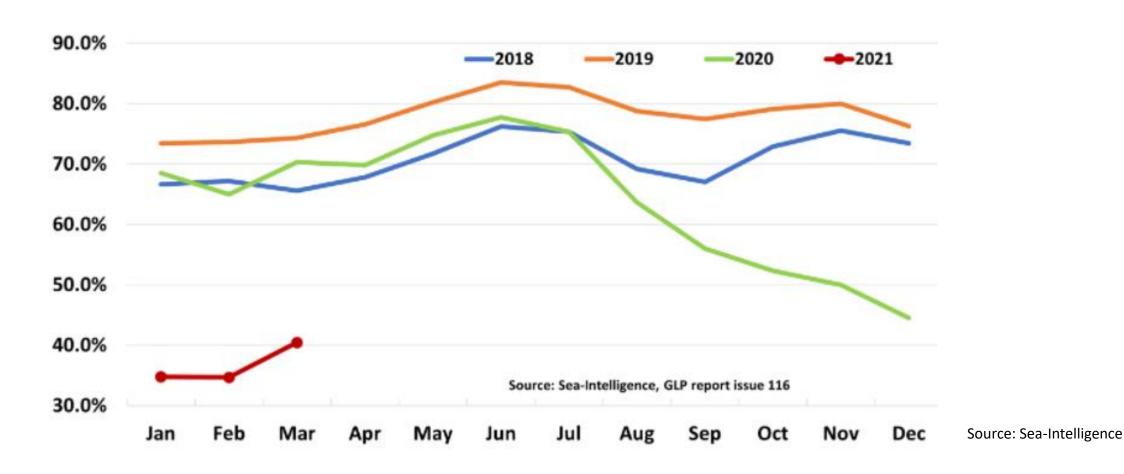


Shipping bottlenecks disrupt global supply chain

% of manufacturers reporting delays related to ports, shipping cargo or containers



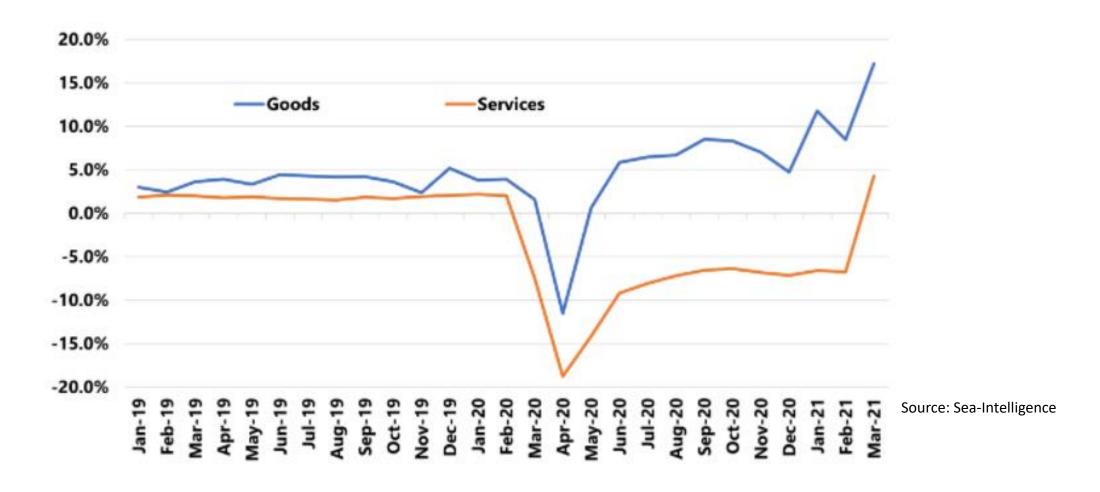
Global schedule reliability: Jan-Feb: lowest ever





Driver: personal consumption of goods booming

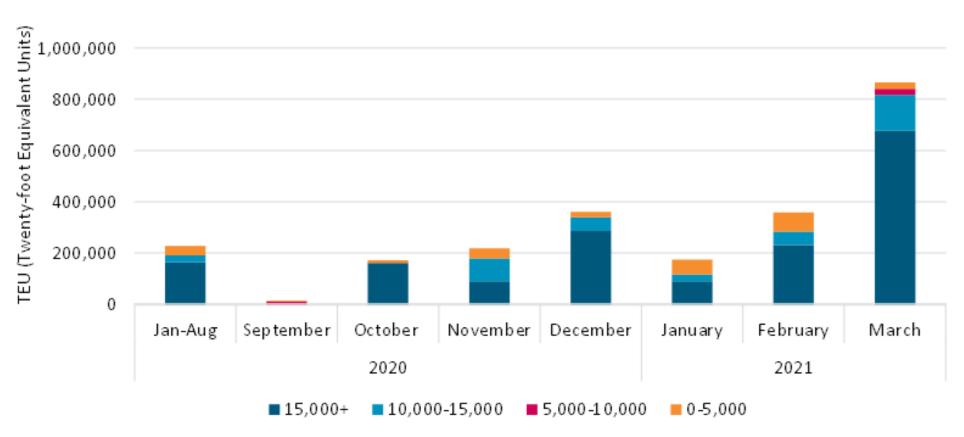
Personal consumption growth (y/y) US





March '21: all-time record: 45 ULCS ship orders

Containership ordering 2020-21



Source: BIMCO/Clarcksons



Outlook for European ports: not very good

- Consultants: dramatic situation deepsea container market continues up to 2022
- This puts pressure on deepsea container-terminals:
 - Effects aftermath Suez-blockade still going on
- Ports must find answers to structural problems deepsea-carriers:
 - Increased use of IT-planning tools
 - Coordination/cooperation with parties in Hinterland
 - Disruptions are happening: deployment of general cargo vessels for East-West deepsea container services
- One of the main drivers behind globalization is showing a strong hiccup!



Congestion in the ports



Congestion in the ports

At present, average waiting times for the handling of our barges in the seaports are:

Antwerp: 33 hours

Rotterdam: 123 hours



Deglobalisation



^{*} Traditional trade includes products entirely produced in one country and consumed in another Source: OECD \oslash FT

Deglobalisation

COVID-19 showed vulnerabilities, results:

- Shorter supply chains
- More transparent supply chains
- Regionalization: increased near-sourcing
- Increased shortsea
- More local production & consumption
- Increased safety stock-levels needed (chip-crisis!)
- A negative effect on deepsea-trade and port throughput volumes





Digitalization

- E-commerce driver for global trade
- Wave of digital technology will enable global trade in the coming decades:
 - transparent maritime chains, intelligent containers, Blockchain, Internet of Things, cloud computing, digitalization of documents, autonomous transport, platforms, etc.
- Digital technology responsible for continuous and strong globalization?
- A positive effect on deepsea trade & port volumes



Venezuela erupts



Decarbonization

- The greening of port industry is not the end of industrial ports or deepsea bulk transport but complex and risky...
- Strong investment wave in seaports for the transition towards (offshore) wind, solar, hydrogen/electrolysers, biomass, CCS, circular economy, etc. resulting in a new energy- en feedstock-mix.
- Many European Seaports are large CO₂producers: ports have the key potential
 for decarbonization.
- New trade corridors—for hydrogen e.g.
- In addition: impact EU-ETS, carbon taxes, etc.

ENERGY TRANSITION NEWS 21 December 202

Study in Germany into hydrogen import options from Australia

In Germany, a feasibility study has started under the name HySupply into the possibilities and conditions under which hydrogen from renewable sources can be supplied from Australia to Germany. The Port of Rotterdam Authority is involved in the project from the point of view of possible new trade corridors for hydrogen, in this case via Rotterdam to Germany.



Diversification of economic base

- Ports as innovation-ecosystems
- Ports as maritime capitals: advanced maritime services
- Ports as maritime maker districts: equipment for offshore wind/solar, deepsea-mining, (ecological) coastal development
- Ports as digital powerhouses
- Ports having attractive waterfronts and traditional port districts
- Port cities at the crossroads of new economic potential related to the different transitions!





Desirable places to live and work

- Ports still have diverse types of risks but European ports are heavily investing in:
- Clean air, no noise or smell, no port-related congestion:
 - Shore based power supply
 - LNG
 - Intermodal hinterland transport, etc.
- Attractive environment for working, living and recreation:
- Important quality of ports for attracting new business







Conclusion: economic outlook for ports is mixed but includes strong economic potential

- Disruptions: ports are very vulnerable
- Deglobalisation: regionalisation?
- Digitalization: Superglobalisation?
- Decarbonization: ports have strong potential
- Diversification: new growth directions
- Desirable places for living and working: basic location factor.
- Did I present a complete picture? No...
 - Detours via the Arctic, BRI, geopolitics...
 - Decoupling of supply chains, etc...



