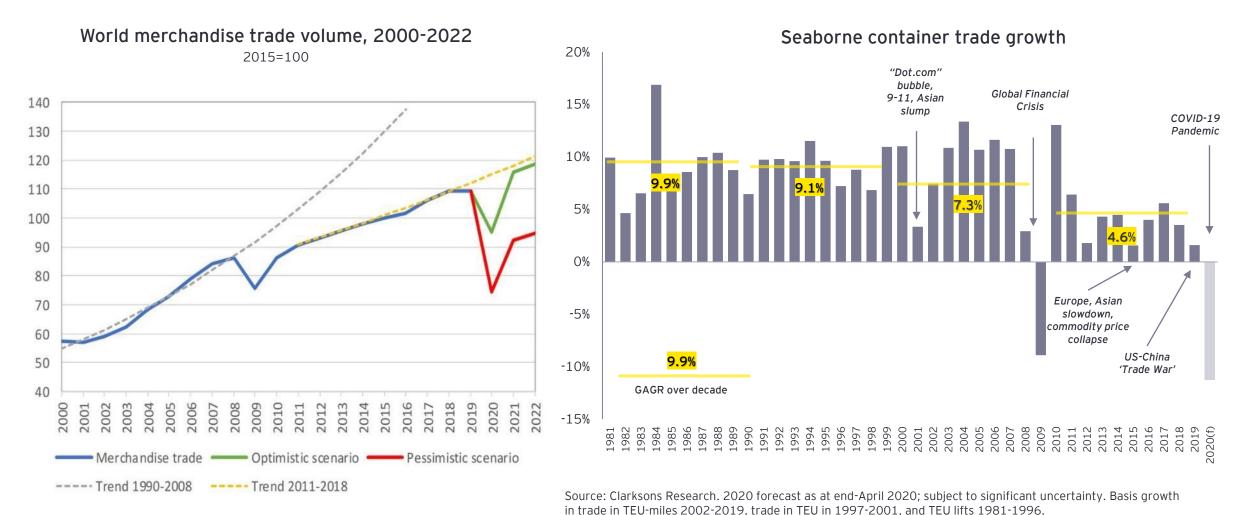


COVID-19 is driving an *unprecedented* decline in global trade – impacts for port investment? Trade already slowing 2019 before virus struck, weighed down by trade tensions and slowing economic growth

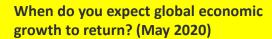
▶ Impact projected to be of greater magnitude than the global financial crisis; growth rate set to be lowest on record



Source: WTO Secretariat



When trade growth returns will it be 'Business as Usual' or significantly more **diversification**, **near-shoring** and / or **re-shoring**?



12% By the end of 2020

32% In the first half of 2021

41% In the second half of 2021

15% Only in 2022

EY Webcast NextWave Global Trade Survey ~1,700 respondents

How do you expect global supply chains to restructure? (May 2020)

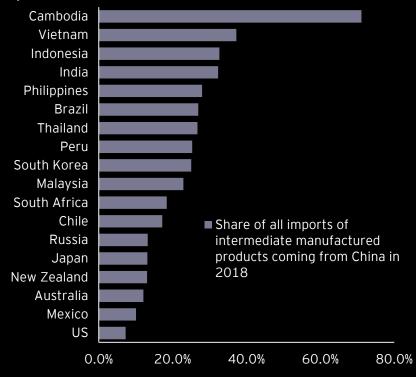
14% No significant geographical restructuring

52% Significant geographical restructuring, with increased near-shoring and multi-sourcing

34% Significant geographical restructuring, with re-shoring and multi-sourcing

EY Webcast NextWave Global Trade Survey ~1,700 respondents

Asian factories are especially dependant on PRC production



Source: World Integrated Trade Solutions, World Bank

64% of North American manufacturers say reshoring is likely following Pandemic

28% of manufacturers *extremely* likely to bring more production and sourcing back to North America

April 20 Survey of 878 North American manufacturing and industrial sector professionals (Thomas Survey)

China's production base plays a critical role in global supply chains - how easily can this be replaced?

- ► Pre COVID-19, the pace of globalisation and trade liberalisation was slowing
- ► US-China trade 'war' has introduced further threats...and opportunities (for certain countries, e.g. Vietnam)
- "Industry 4.0" and advances in robotics (e.g. "sewbots", etc) have driven some re-shoring and nearshoring
- ▶ Will this become widespread and / or will supply chains become more diversified (i.e. more Asia sourcing outside PRC)?
- ► China's scale and quality of logistics infrastructure cannot be easily supplanted.
- ▶ Since Q3 2019, PRC focus on Blockchain and other digital technologies to enhance security, visibility and resilience of its supply chains demonstrate best in class.
- ► What are the cost implications of supply chain restructuring and are consumers willing to pay?

40% of Americans say they won't buy "Made in China"

78% of Americans say they are willing to pay more for products if companies that make those goods move their manufacturing plants out of China

FTI Communications Survey, **May 20** Online, 1,012 respondents





Do you believe that the impact of COVID-19 will cause a rethink around mega-vessels?

68% YES

32% NO

EY Webcast NextWave Global Trade Survey May 20: ~1,700 respondents

Will COVID-19 increase the drive of ports and shipping to reduce their environmental footprint?

51% YES

34% NO CHANGE

15% NO

EY Webcast NextWave Global Trade Survey May 20: ~1,700 respondents

"NOW", "NEXT" & "BEYOND" - Port & Terminal Operators



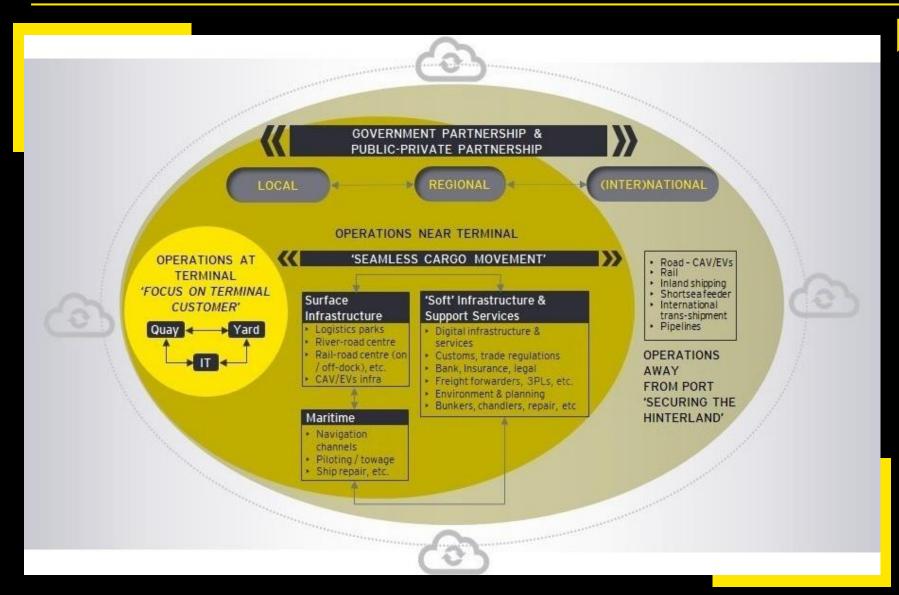
- COVID-19 has pushed governments to impose preventive measures leading to sharp falls in cargo demand
- Strict containment measures, screenings, increased documentation, reduced workforce capacity, etc have heavily impacted port operations
- Impact more severely on terminal operations where there is greater dependence on labour and limited automation
- Fully automated terminals are less exposed to the health impacts and may also have more flexibility in capacity management
- Build up of import boxes at certain terminals, with beneficial cargo owners facing a collapse in demand

- As demand recovers, delays in returning empty containers to exporters may lead to a shortage of containers for stuffing
- Many ports may defer expansion plans until demand risk is eased
- Conversely, for certain congested ports, a temporary easing of demand could provide an opportunity to bring forward upgrade plans or capacity enhancements, without disrupting operations or losing market share
- Some territories may accelerate privatisations / port asset disposals due to COVID-19 pressure on government finances
- Will COVID-19 accelerate digitalization, especially around "Smart Port Ecosystems" that reduce person-to-person interface & enhance supply chain sustainability and resiliency?
- Capex constraints may slow the pace of investment and change



'Smart Port Ecosystems'

Requires collaboration & co-operation across diverse ecosystem stakeholders



"Digitalizing the Port Call Process"
United Nations Conference on Trade and
Development (UNCTAD). Jan '20

It is essential for ports to be connected to the global supply chain and this can be enabled through the introduction of digitalisation and enhanced procedures of collaboration and data sharing.

The challenge is the absence of bodies that can strongly influence standardisation.

June '20, a coalition of 10 maritime groups, led by International Association of Ports and Harbors (IAPH) noted that;

"While some port communities seized the opportunities of the fourth industrial revolution and developed into full-fledged 'smart' ports, many others have barely grasped the essentials of digitalization and continue to struggle with larger reliance on personal interaction and paper-based transactions..."

"Exchanging paper by hand and relying on person-to-person interaction simply doesn't cut the mustard anymore, neither from a safety nor efficiency standpoint."



Thank You



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NextWave Global Trade
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75687778001



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