

D. SUMMARY AND POLICY CONSIDERATIONS

The recovery is likely to vary with differences in the disruption caused by the pandemic, countries' levels of development and capacity to support economic growth, while providing social safety nets. International support and cooperation will be of paramount importance for developing countries, especially the least developed countries and small island developing States. Trade is a key component of recovery, and the maritime transport industry, which carries much of it, has a major role to play.

1. Maritime transport remains pivotal in an interdependent world

The COVID-19 outbreak revealed the high levels of global interdependency and is setting in motion new trends that will reshape maritime transport and trade. The sector is at a pivotal moment, as it needs to face the immediate concerns raised by the pandemic. However, longer-term considerations are also necessary: potential shifts in supply-chain design, globalization patterns, consumption and spending habits and, in general, a growing focus on risk assessment and vulnerability reduction. Further, the sector will need to continue mitigating the impact of inward-looking policies on trade and protectionism and to carry forward the sustainability and low-carbon agenda.

Various trends are likely to unfold and affect maritime transport and trade. In the post-COVID-19 pandemic world, there will probably be an element of shortened

supply chains (near shoring, reshoring) and redundancy (maintaining excess inventory) (Flock Freight, 2020). The pandemic and its fallout will probably accelerate the transformation of supply chains that started in recent years (see *Review of Maritime Transport 2019*). Many aspects of supply chains, such as sourcing, inventory and transport, will be reassessed with a view to strengthening resilience and optimizing robustness in the event of future disruptions.

Investing in warehousing and storage, and therefore space, will become more important to ensure the sufficiency of safety stocks and inventories. The established just-in-time supply-chain model will be reassessed to include considerations such as resilience and robustness, for example, stocks and buffers, especially for strategic and necessary goods and commodities. Diversification in sourcing, routing and distribution channels will grow in importance. Moving away from a single country to multiple-location sourcing that is not only focused on cutting costs and delays but also on risk management and resilience will further evolve (JOC.com, 2020i). While the pandemic has brought into focus the notion of self-sufficiency, which is often equated with reshoring or near shoring, this approach is also not without vulnerabilities in case of localized disruptions. Decisions to uproot supply chains depend on more than labour costs and could be difficult to readily achieve.

2. Aftermath of the pandemic: Some potential implications

The pandemic will have a lasting impact on maritime transport and trade. The following five key trends in maritime transport and trade will be part of the pandemic's legacy:

- An accelerated shift in globalization patterns and supply-chain designs. While outright deglobalization may not occur because of the complexity and costs involved in uprooting and reshuffling highly integrated supply chains, the slower wave of globalization that started during the post-2008 financial crisis may decelerate further and the regionalization of trade is likely to gain momentum.
- A swifter uptake of technology and digitalization, with technology increasingly permeating supply chains and their distribution networks, including transport and logistics. Adopting technological solutions and keeping abreast of the most recent advances in the field will become a requisite, no longer an option. The pandemic and its disruptions have shown that first movers in terms of technological uptake are better able to weather the storm, for example, e-commerce and online platforms, blockchain solutions and information technology-enabled third-party logistics.



- Continued shifts in consumer spending and behaviour and evolving tastes that may change production and transport requirements.
 Examples include a further rise in online shopping in the post-COVID-19 era and a requirement for more customized goods. These trends are likely to emphasize the last-mile transport leg and promote shorter supply chains though the use of three-dimensional printing and robotics. These trends will trigger more demand for warehousing and space for stocks.
- Heightened importance of new criteria and metrics such as risk assessment and management on relevant policy agendas and industry's business plans and strategies. Risk assessments are likely to integrate considerations such as global interlinkages and interdependencies, including those underpinned by intertwined supply chains and financial channels.
- Adjustments in maritime transport to allow adaptation and change in line with the changing operating landscape. Industry stakeholders will probably continue to tap new business opportunities. Authorities at international maritime passages such as the Panama Canal are already assessing options on how to ensure preparedness in case of the reconfiguration of supply chains prompted by the pandemic (JOC.com, 2020j). The tapping of new business opportunities is a trend that had started before the pandemic. For instance, some shipping lines such as Maersk and port operators such as DP World, have been taking greater interest in business opportunities that may lie further down the supply chain through inland logistics. The aim is to be closer to shippers and emerge as reliable end-to-end logistics service providers (Riviera Maritime Media, 2019).

Priority action areas in preparation for a post-COVID-19 pandemic world

There are several priority action areas that can help address the ongoing challenges affecting the maritime transport and trade of developing countries, as well new challenges arising from the pandemic and its fallout. These are as follows:

 Fostering economic recovery. It is necessary to support economies on their path to recovery, especially developing countries that are more fiscally constrained, and to help them respond to the multiple shocks triggered by the crisis. Existing pledges and support packages are falling short of expectations. UNCTAD has called for a massive liquidity injection through extraordinary special drawing rights tailored to developing country needs and for re-scheduling

- and restructuring their external debt. Further, UNCTAD proposes that a \$500 billion Marshall Plan be instituted for health care in developing countries to support their medical and social response to the pandemic.
- Allowing trade to support growth and development effectively. Trade tensions, protectionism and export restrictions, particularly for essential goods in times of a crisis, entail economic and social costs. These should be limited, to the extent possible. Further, non-tariff measures and other trade barriers should be addressed, including by stepping up trade-facilitation measures and customs automation.
- Helping reshape globalization for sustainability and resilience. It will be important to carefully assess all options regarding changes in supplychain design to ensure the best economic, social and environmental outcomes, in line with the Sustainable Development Goals and the 2030 Agenda for Sustainable Development. For example, a shortening of supply chains through re-shoring or near shoring may reduce transport costs and fuel consumption, but it does not necessarily future-proof supply chains against disruptions that could occur anywhere, whatever the location. Multiple-sourcing approaches could prove more effective in resilience-building than concentrating all production in one location, whether at home or abroad. Strategies should aim to find ways in which unsustainable globalization patterns can be mitigated to generate more value to a wider range of economies.
- Strengthening international cooperation.
 The pandemic is a litmus test not only for globalization but for global solidarity as well (United Nations, 2020b). Addressing the impacts of the pandemic on global supply chains will require strengthened and coordinated global cooperation and action.
- Assisting shipping and ports in preparing for and adapting to the supply chains of the future. Maritime transport will need to adapt and ensure that it is prepared to support changes in supply chains that promote greater resilience and robustness. Shipping and ports will need to reassess business strategies and investment plans, including in terms of port capacity, shipping network configuration, vessels and capacity deployment. For example, investment in vessel capacity should take into account the shortening of some supply chains (for example, in critical and essential goods such as pharmaceuticals) and further regionalization in trade flows. Port and logistics capacity in countries receiving new businesses that have moved out of China should be upgraded and expanded as needed. More importantly, a key lesson drawn from



the pandemic experience is that cooperation, information sharing and the use of technology to support transport and coordinated action are crucial.

- Promoting resilience-building, including through investment in risk assessment and preparedness. It will be necessary to expand the visibility of supply chains through, among others, control towers and tools that allow for supply-chain disruptions to be predicted and analysed (Aylor et al., 2020). Plans should provide for how to respond to crises, as well as how to ensure business continuity through a set actions and protocols to be followed at different stages of a crisis (Knizek, 2020). For shipping, this may mean establishing priority lanes for handling critical cargo (for example, food, medicine or medical equipment) or limiting restrictions that affect labour such as crew changes and leave. Lessons learned from the pandemic should serve as guidance for informing preparedness and future-proofing maritime transport to allow for more resilient supply chains (see chapters 2, 4 and 5). Relevant actions could also include collecting and sharing information on potential concentration and bottlenecks, developing stress tests for essential supply chains and fostering an enabling regulatory framework that ensures greater certainty (OECD, 2020b). For example, following the 2008-2009 financial crisis, Governments developed stress tests for specific supply chains. These tests could be carried out in the context of policies related to the creation of strategic stockpiles to correctly assess the inventories and buffer stocks needed to prevent shortages in the future.
- Getting the priorities right and avoiding shortsighted policies. While the pandemic has been an overriding theme throughout 2020 and probably for years or decades to come, other important and potentially disruptive global issues should not

- be overlooked. For example, climate change is at risk of being pushed to the back burner, given the need to address the immediate concerns raised by the pandemic. Momentum on current efforts to address carbon emissions from shipping and the ongoing energy transition away from fossil fuels should be maintained. Governments could potentially direct the stimulus packages to support recovery while promoting other priorities at the same time, including climate-change mitigation and adaptation. Thus, policies adopted with a view to preparing for a world beyond the pandemic should support further progress in the shipping industry's transition to greening and sustainability. In particular, sustainability concerns such as the connectivity of small island developing States and progress made by the least developed countries towards the realization of Sustainable Development Goal 8.1 are ever more important in building their resilience to cope with future disruptions.
- Enabling greater uptake of technology while minding the digital divide. This means promoting efforts to accelerate the digital transformation to improve and build the resilience of supply chains and the supporting transportation networks. Digitalization efforts should enable enhanced efficiencies and productivity in transport, such as smart ports and shipping, but should also help countries to tap e-commerce capabilities and transport facilitation benefits that boost trade. Developing countries will need support to minimize the divide and ensure that they can also exploit the advantages of digitalization to build their resilience. For maritime transport to play its role in linking global economies and supply chains, it should leverage the crisis by investing in technology and adopting solutions that meet the needs of the supply chains of the future while supporting resilience-building efforts (Egloff, 2020).