Ship Happens: Ever Given and Forgotten

The MV Ever Given, a container ship a quarter of a mile long, has been wedged diagonally across the Suez Canal since Tuesday 23⁻⁻ March 2021. The blockage to one of the arteries of ocean trade has already stopped more than 300 vessels trying to access the canal. Around 90% of the world's trade is transported by sea, largely unnoticed by consumers. This highly-publicised incident has exposed the fragility of global supply chains to many.

When the Suez Canal opened in 1869, it revolutionised trade. It reduced travel distance from Asia to Europe by about 6,000 km / 3,750 miles. The distance from Shanghai to London was shortened by around a third. As a result, Asia became much more commercially accessible.

Nowadays, about 12% of global trade passes through the Suez Canal, from Middle Eastern oil to consumer goods from China. In 2019, an average of 52 ships traversed it per day, carrying up to \$9bn worth of cargo between them.

Shipping companies are now evaluating their options. Waiting in the maritime traffic jam causes significant losses. But going around the Cape of Good Hope adds a week or two of travel time, as well as security risks.

Supply Chain Disruptions

Fears are growing about the knock-on effects of the delay on supply chains. Nearly 1.5 million barrels of crude oil pass through the Suez Canal each day. Many fuel tankers are currently sitting in the queue, raising questions of oil price increases. While current oil inventory is high in most countries, Syria has had to ration fuel due to a vital tanker from Iran being delayed.

The majority of traffic through the Suez Canal consists of dry bulk and container vessels. Containers are the Easter eggs of shipping: They could contain anything. This makes it much harder to assess the potential impact on manufacturers and consumers.

The Ever Given alone is carrying more than 20,000 containers. They might contain electronics, clothing, medical devices, or any number of other goods. Manufacturers operating on a just-in-time system of frequent deliveries will be particularly affected. For example, European bicycle manufacturers have raised concerns as they already struggle to meet heightened demand. Online retailers have notified customers of product delays.

These delays will be exacerbated by already congested ports struggling to handle the additional volume once the blockage has been cleared. However, the timing of the incident is positive. March is not a particularly busy month for maritime trade. In March 2019, 97,796 net tons passed through the Suez Canal, far less than the 108,919 net tons during October as businesses prepare for Christmas.

Container Shortage

Many Western companies have outsourced manufacturing to Asia. Most goods are then transported on container vessels to consumers in Europe or North America. This model depends on the supply of containers, especially on containers being sent back to Asia. However, strong trade imbalances exist. For every 100 containers imported to North America from China, only 40 are exported.

The shortage of shipping containers is more pressing than a goods shortage. In a pre-COVID-19 world, mother vessels like the Ever Given were sent on a circular rotation around the world to overcome such imbalances. This has become more difficult due to congested ports and COVID-19 restrictions.

Demand for shipping has been very high during the pandemic, but operations are challenging. Ports operating on skeleton staff under COVID-19 restrictions take longer to empty containers and make them available to be filled again. Many containers remain stacked in inland depots or port container yards.

While there is a lack of empty containers around the world, the situation is worse in key exporting hubs across Asia. In January 2021, container freight rates from Asia to Europe reached \$10,000 for a 40ft container for the first time. Companies such as fashion retailer Next have highlighted the difficulty of getting goods into containers in Asia. With hundreds of thousands of containers stuck at Suez, this crisis is exacerbated.

Infrastructure Concerns

The fate of the Ever Given may seem like a freak accident. 114 ships of a similar size have already traveled north through the canal in 2021 without any incidents. However, the winds in the Suez canal are known to be a potential risk.

Only further investigation will show to what extent technical or human errors are to blame. With the increasing size of vessels, the margin for error for passing through "choke-points" is very small. In 2016, the similarly sized CSCL Indian Ocean was stuck near the port of Hamburg for six days. Vessels may simply be outgrowing the maritime infrastructure.

In 1980, 102 million metric tons of goods were carried by container. This rose to 1.83 billion metric tons in 2017. Since 2012, container shipping volume has increased by nearly 25%. What has not grown at a similar speed is the infrastructure. Some of the largest vessels are already too big to be able to navigate the Panama canal.

Both of the great canals were originally constructed for much smaller vessels. The Northern part of the Suez canal has been expanded and now consists of two channels. To remain able to satisfy demand for ocean freight, investment in global infrastructure needs to follow the developments in the size of vessels.

All parts of the infrastructure in global supply chains are affected by the large container ships. Ports need to invest in berths and container cranes capable of handling them. The increased number of trucks that approach ports to pick up containers puts pressure on inland infrastructure. Increased rail connectivity of ports could be a solution to this issue. Investment in IT systems that regulate the approach of trucks to ports is also important.

Risk and Resilience

When supply chains are running smoothly, consumers rarely notice them. But the prospect of shortages will remind consumers and manufacturers of where the products they buy come from and how they reach them. The blockage of the Suez Canal highlights the vulnerability of global trade.

Technological advances and trade liberalisations have enabled the off-shoring of production in search of cost efficiencies. The COVID-19 pandemic and now the Ever Given incident have exposed the amount of risk that manufacturers added to their supply chains by increasing the

distance between production and consumption. Maybe it is time to question the suitability of lean, efficient supply chains in a vulnerable, uncertain, complex, and ambiguous world.

Digitisation, automation, and a growing awareness of environmental consequences were already heralding shrinking global supply chains. But recent major disruptions have made the general public realise the inherent "dangers" and have brought the need for resilience to the forefront. As a result, the pace of global supply chain shrinkage could accelerate.

This is further supported by the known relationship between world GDP and seaborne trade, when the world economy flourishes, the demand for seaborne trade increases and vice versa. The economic crisis that is expected after COVID-19 will decrease the demand for seaborne trade and will reshape global supply chains.

This might be for the better, as the current model has proven to be problematic and risk intense. Shorter supply chains will benefit the rejuvenation of local economies. They will have a reduced environmental footprint, greater resilience and flexibility. Reduced risk will be reflected in lower insurance cost.

Going forward we need to re-evaluate our demand and supply patterns, and use incidents like this as opportunities for reflection. There are lessons to be learned on resilience and adaptation of transport infrastructure, as well as global trade. However, as public attention shifts and the Ever Given memes disappear, supply chains will eventually return to more regular patterns. Instead of being an important wake up call, the blockage might soon be forgiven and forgotten. Until the next incident.