Global Effects of Congestion

Trade liberalization and globalization are the main drivers of the growth experienced by international trade in goods last three decades. This development would not be achieved without a developed network of transportation that can satisfy the different demands and requirements of exporters and importers around the world. Increasingly, the increase of imports at lower prices has forced manufacturers to seek competitive advantages and restructure their operations if necessary. By doing this, some companies have modified their business model and extending it geographically to maximize the firm's economies of scale; others looked at the product, production, productivity or the relationship with consumers or a combination of some or all of these different aspects. As supply chains have become more global, with inputs and products moving among nations and trading partners, executives became increasingly aware of the inherent risks associated with managing global supply chains. This increased risk of the uncertainty and vulnerability of the global supply chain has been further exacerbated by recent trends and practices in managing supply chains including (1) increased complexity due to global sourcing; (2) the large number of supply chain partners who are separated by distance, culture, customs, language, and business practices; (3) the need to coordinate many tiers of supply chains and long lead times; (4) and increased unforeseen disruptions caused by strikes, socio-political, terrorism, natural catastrophes, and pandemics and epidemic outbreak. Certainly, the increase outsourcing of manufacturing to lower cost has brought enormous economic benefits to billions of people. This process of globalization has increased container shipments between countries. However, the rapid growth in container flows has created more pressure on the transportation network and, increasingly, escalates congestion at many ports and canals in the world. The recent Suez Canal blockage led shippers during the occasional congestion to increasingly seek alternative routes and shift volumes to European ports by sailing around the Cape of Good Hope at the southern tip of Africa.

Intercontinental supply chains are inherently longer (5,000-8,000 miles) and more complex than domestic supply chains. Moreover, intercontinental supply chains typically involve multiple independent transportation and logistics providers to complete door-to-door transport. In fact, delays and costs are the most obvious effects of congestion. However, since the transportation system is governed, for most of the time, by "Just in Time" deliveries, delays are considered the

more harmful. Consequently, all operators in the supply chain are affected because of the 'domino effect". Arguably, any congestion in the global intermodal transportation system will induce higher levels of uncertainty to the world economy and to the business considerations. Any disruption of container supply chain has significant implications on economic activity and world trade. According to Lloyd's estimate, the massive 20,000 TEU containership that has run aground in the Suez Canal costs $400 million per hour in delayed goods (Vlamis, 2021).

References:

Vlamis, K. (2021, March 26). *The giant ship stuck in the Suez Canal is costing the global economy an estimated $400 million per hour*. Business Insider. https://www.businessinsider.in/thelife/news/the-giant-ship-stuck-in-the-suez-canal-is-costing-the-global-economy-an-estimated-400-million-per-hour/articleshow/81699751.cms