

A Challenge of Services Management - Balancing the Price of Transportation

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Abstract

The purpose of this paper is to underline the difficulty of balancing prices in a dynamic environment, strongly connected to the technological evolution, political decisions, global events and macroeconomic trends. In order to be able to highlight the level of the challenge it represents, we will also analyse the impact of uncertainty upon the economic environment during the current crisis generated by the COVID-19 pandemic, which is an unprecedented situation. The global competition in the last two decades, adopted by more and more companies, represents the greatest challenge faced by the field of logistics, challenges which involve constant adaptation, innovation, externalisation and changing strategies in record time. In an increasingly global economy, logistics and the costs of logistics will be decisive factors for competitiveness and modernisation. Access to new outlets, raw materials and workforce depends on a single essential criterion: the existence of a functional transportation system.

Key words: transport, globalization, pandemic, technology

J.E.L. classification: L99, O08

1. Introduction

Due to its role in economy, logistics represents a distinct and vital industry, a component without which world economy would be blocked. We shall present in the following chapters the importance of this segment of economy, its connection to all the other branches of production and commerce and how it has evolved under the impact of the accomplishment of contemporary civilisation. Logistics is a stimulating factor of progress and development, involving human and material potential and with positive effects upon the fields with which it interferes. The continuous momentum of the progress of logistics, resulting in its rates of development, made globalisation become not only possible and accessible, but also – together with the technological and scientific revolution – one of the most astonishing phenomena of the millennium.

Contemporary consumers have become accustomed during the last century with more and more diversified merchandise of better quality. Producers have permanently been looking for places with cheaper, better qualified workforce, countries with a more permissive and predictable fiscal legislation, perhaps even areas with an abundance of resources and raw materials. For them, transportation and logistics have always represented a challenge.

2. Theoretical background

Literature studying transportation and logistics presents a multitude of concepts and approaches within the field which demonstrate the dynamics of the industry.

The progress of globalisation in the last two decades has been remarkable. With the help of technologies which facilitate the cooperation of economic operators, imports and exports have never been more permissive. In this context, both the economic operators, as well as the final beneficiaries, benefit from lower prices and superior quality for the products which they acquire or market. The

transport of goods has a considerable impact upon the economies and societies of different countries. Its role manifests itself on various levels, from the superior capitalization of natural and material resources to the improvement of living conditions and the stimulation of economic growth.

A major role which we will describe is played by transportation intermediaries, those economic operators who ensure the connection between beneficiary and carrier, who have a role of arbitrage in the transportation market and who are directly responsible for its effective operation.

In order to highlight the dynamics of international transportation we used world level statistical information, continental European statistical information and national level statistical information.

In a more and more globalised economy, transportation, logistics and logistics costs are increasingly important factors for competitiveness. If at the beginning the logistics segment of a business had a marginal influence on the global success of the company, it has gradually become one of the factors which ensure competitiveness on a global scale. Therefore, logistics has become a major component in the business plan of companies.

The objective of the paper is to highlight the economic development at a global level and to underline the importance of the evolution of transportation throughout this process.

3. Research methodology

This article presents statistical data regarding the transportation of goods and vessels traffic - port container vessels in particular – in ports in the European Union, Iceland, Norway, Montenegro and Turkey. At the same time, it covers the main trends in the road transport of goods in the European Union until 2020. It describes the trend before the emergence of the Covid pandemic and compares it with its impact on the transportation of goods. It analyses transportation at country level, international transportation, cross commercial transportation and cabotage. It must be mentioned that, following the development of the ICT technology, prices practiced by transporters from all segments – terrestrial, maritime, etc. – have dropped dramatically, but crises generated by external factors can generate an unprecedented recrudescence. Transportation at a global level represents a topic approached by many analysts who underlined the positive and negative aspects. The events that transpired in the last two years have created a new reality, as the importance of this segment increased. By analysing the existing data, in this article we presented the effects of the Covid 19 Pandemic on the transport and logistics industry at a global level.

4. Findings

The rapid growth of the costs of maritime transport of goods is a clear sign of supply blockages. Starting with July 2020, the costs of the transport of goods at a global level have been recovering from the minimum levels reached mid-pandemic. During the last months, however, they have reached unprecedented levels, while growth rates have surpassed the ones observed since 2015. At the same time, transportation costs on maritime transport routes from Asia and China to Europe and the Mediterranean Sea, as well as to the United States, have seen a very strong increase in the second half of the year. They seem to have reached the highest point recently. Two factors are associated with the increase in the costs of transportation. On the one hand, the sharp increase in the demand for intermediary inputs due to a more substantial production activity has increased the demand for Chinese exports and the demand for container freight services. On the other hand, the shortage of containers in Asian ports has exacerbated the supply blockages and has increased the costs of transportation even more, because companies in Asia pay premium fees to recover the containers.

Ports are crowded due to logistics disruptions connected to the COVID-19 pandemic, while inactive containers remain in ports due to the uneven recovery of commerce. The available data indicate a decrease in the flow of port-container vessels in ports in Asia, the Asia – EU commercial route registering the greatest decrease.

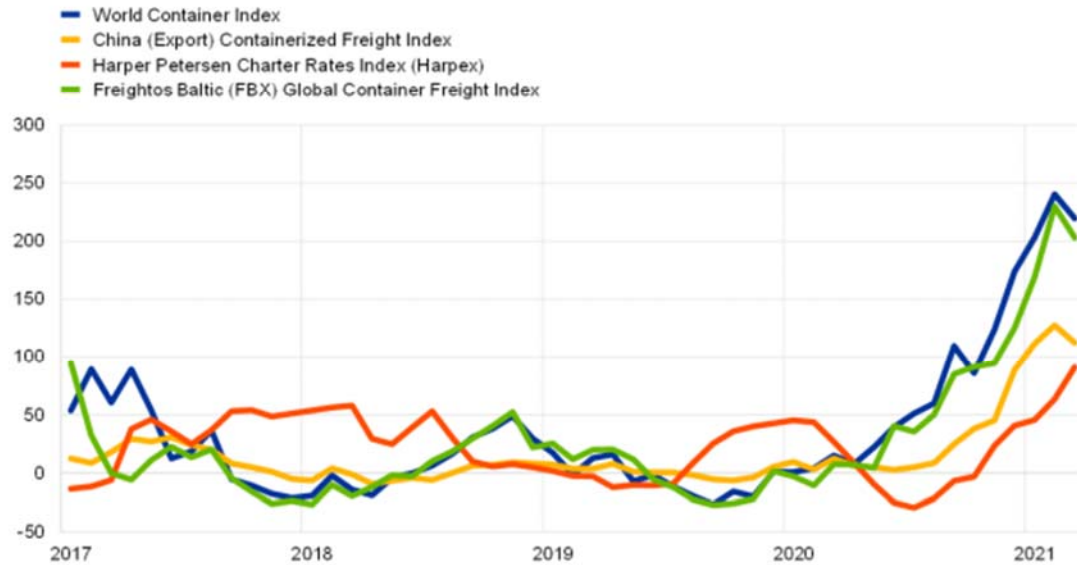
The increase in the costs of maritime transport has been even more influenced by the limited capacity of air cargo, since the number of international flights has decreased due to restrictions and flight cancellations.

Figure no. 1

Global and regional shipping costs

Global shipping costs

(year-on-year, percentage changes)



Freightos Baltic Index

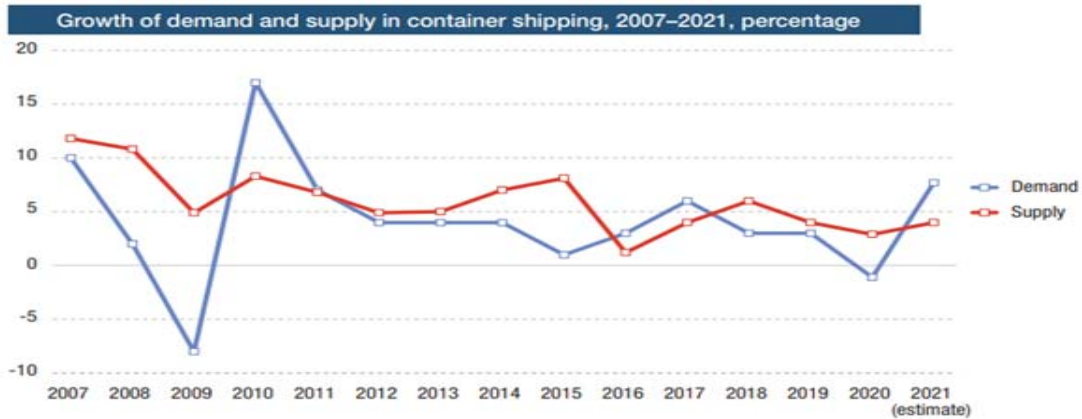
Source:

https://www.ecb.europa.eu/pub/economic-bulletin/focus/2021/html/ecb.ebbox202103_01~8ecbf2b17c.en.html

In 2020, restrictions and other measures taken to prevent the spread of COVID-19 have suddenly reduced the demand for containers. April and May 2020 were the lowest months; by then end of May 2020, 12% of the total container transport capacity was inactive, specifically 2,7 million TEU (according to Clarksons Research, BIMCO, 2020). Maritime transport companies tried several measures to lower the costs and manage the transport capacity, but in the second half of the year 2020, the situation reversed. The sudden increase in demand practically blocked the ports which have a limited capacity to manage, unload and stock. 1.

Mid 2020, the increased demand for containers and the limited operating capacity resulted in an exponential increase in transportation fees. In the second half of 2020, the demand for container transport started to increase again. Vessel capacity remained limited, but the number of inactive containers started to decrease in relation to the increasing demand. By the end of June 2020, dry-running reached 9 percent, subsequently starting to recover until it decreased to 6 percent in July and 4 percent in August. At the end of September 2020, it decreased below the 2019 average level of idling of 4,1%, reaching 3,5 percent. In 2020, the global container fleet extended its capacity by almost 3%, more precisely 281.784.000 dwt, while the container transportation market contracted by 1,1%, reaching 149 million TEU/year.

Figure no. 2



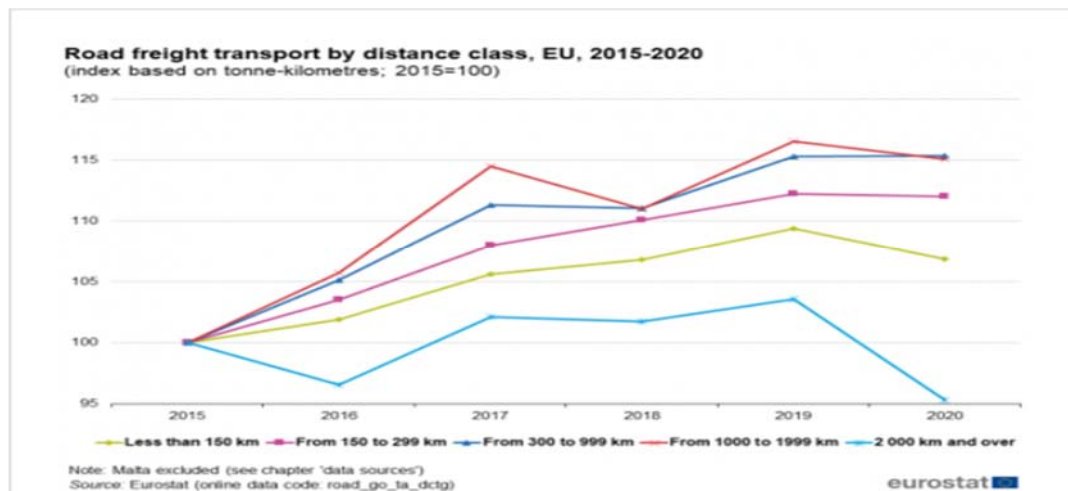
Source: https://unctad.org/system/files/official-document/rmt2021ch3_en.pdf

If the demand for maritime transport had a spectacular recovery, road transport for distances longer than 2 000 km dropped suddenly in 2020.

In 2020, 6,5 percent of expeditions in the EU were for distances shorter than 50 km, while only 4,2 % were for distances over 2 000 km. However, the greatest part of road freight transport activity (89.3%) took place on distances ranging between 50 and 2000 km, most (59,6 %) taking place for distances longer than 300 km.

The chart below presents trends in road freight transport per each distance class from 2015 until 2019. We can notice that all the distance classes below 2 000 km increased, with the only exception of 2018, when transport between 300-999 km saw a slight decrease and the one between 1 000 - 1 999 km had a sudden decrease. We can notice that long haul transport of goods had a considerable fluctuation between 2015-2019, but with an increasing trend. However, the restrictions and traffic blockages at border checkpoints in several countries imposed in 2020 to counteract the Covid pandemic had considerable effects on the trends in the transportation market. Transportation on distances longer than 2 000 km saw a sudden drop (8,0 %) in 2020, a trend which was propagated in shorter distance categories, such as the ones below 150 km which saw a 2,3 percent decrease and the ones between 1 000 and 2 000km, which saw a 1,2 percent decrease. For the other two categories of average distance, the changes were insignificant. More precisely, for the ones between 150-299 km we have a 0,2 % decrease and for the ones between 300-999 km we notice an increase of 0,1 %.

Figure no. 3



Source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Road_freight_transport_statistics#Long_distance_road_transport_over_2_000_km_was_sharply_down_in_2020

It is estimated that the use of freight transport will increase by 80 % until 2050, while passenger transportation in Europe will increase by more than 50 %. Considering a significant increase in the use of transportation services, it is very important that prices be constantly monitored to ensure that users are properly stimulated to use more ecological means of transport. The fluctuations in transportation prices affect all the decisions taken by individuals, as well as economic operators regarding the means of transport, which is why it is imperative to intervene on the transportation market by means of incentives, subventions, taxes or regulations.

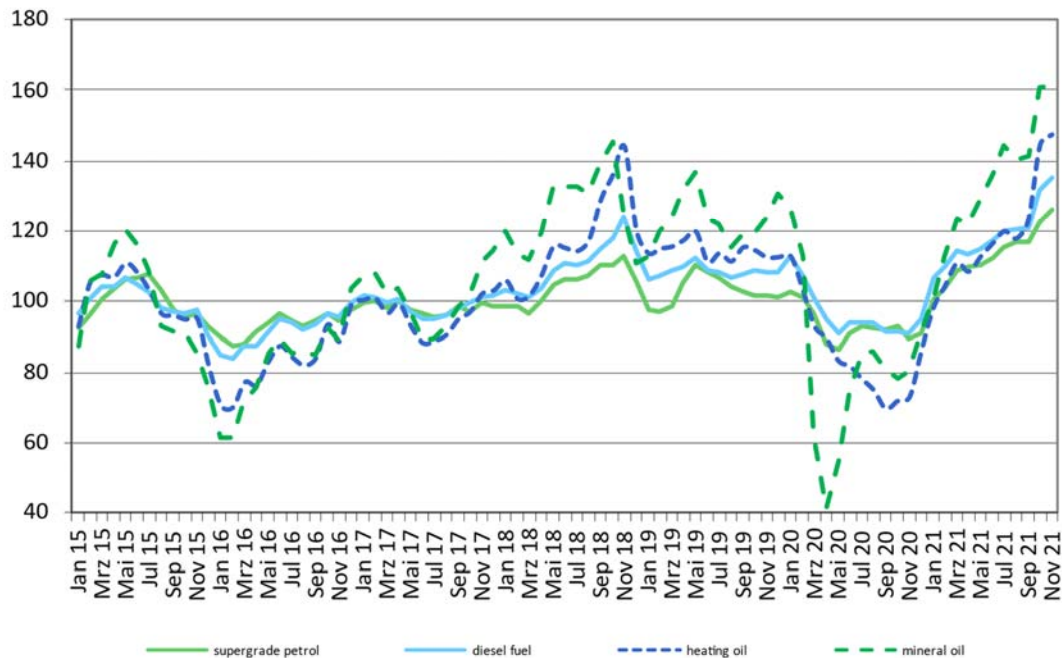
The price of transport reflects the major market changes, such as the evolution of international energy and fuel prices, the evolution of vehicle technology and last, but not least, the government interventions by means of subventions, regulations and taxation.

The most recent example is the phenomenon registered between June and September 2021, when the prices of freight transport in Europe saw the fifth successive quarterly increase, the reasons being the increase in demand, geopolitical events, as well as the increase in costs. There was an explosive increase in demand in the context of a shortage of drivers, a series of imposed restrictions and an over 30% increase in the price of fuels.

This trend is, first of all, the result of the dynamics of demand, which is continuously increasing both in the processing industry and retail and which is, obviously, the main reason for the increase in transportation fees. But the road transport sector is also facing a severe problem, a capacity deficit. The deficit of drivers is becoming the main problem in all the countries of the European Union. The Ti/Uply, IRU report mentions that in Spain the deficit is expected to reach 10,2% in 2021 compared to 7% in 2020. Germany and France are also affected, while in Great Britain the phenomenon was severely impacted by the Brexit.

The costs increase suddenly. At the same time, road freight transporters are confronted with significant increases in many essential costs. Aside from the lack of workforce, transporters are also confronted with a very significant increase in fuel costs. According to destatis.de data, the prices of Diesel in Germany have increased by 38,5% in the third trimester of 2021 compared to the third trimester in 2020.

Figure no. 4 Evolution of gas prices in Europe in 2021



Source: https://www.fuelseurope.eu/wp-content/uploads/SR_FuelsEurope-2021_-6.pdf

Eventually, road freight transport is also facing the restrictions or blockages which currently disrupt all the logistics chains at a global level.

All of these uncertainties represent a real challenge for balancing prices considering that all the external factors lead to a potential increase in exploitation costs, in a sector in which profit margins are not usually big.

In this context, transporters make an effort to transfer at least a part of the additional costs which they are forced to support.

Considering everything presented, keeping margins will represent a real challenge for transport managers in the average and near future. The pandemic context keeps making economic perspectives very uncertain, especially considering the hypothesis of the following pandemic waves, and at this point the anticipation or measurement of consequences is impossible.

5. Conclusions

The coronavirus pandemic, an unprecedented event, put global supply chains in a situation which managers could not have anticipated. Nevertheless, many showed signs of adaptability, resilience and endurance. Lately, most economic operators have outsourced and extended more and more production segments and other activities, resulting in a great dependence on global suppliers and a degree of complexity, which makes them extremely vulnerable to interruptions or delays. Disruptions to the distribution chain can be caused by various phenomena which are beyond the control of the company, like natural disasters (such as the COVID-19 pandemic).

Bigger hubs managed to recover earlier, increasing the demand in storage capacity, while smaller ports continue at the same pace as in 2020. The prices of transportation and logistics represented the greatest challenge for exporters and importers. It is difficult, if not impossible, to say exactly when the pandemic will stop, when the travel and transportation restrictions will be lifted or when the global economy will recover. Nevertheless, we see that the commercial model from China has enormous potential in terms of maritime connectivity between countries and ports. With the updates of data reported to the number of COVID-19 cases and the information about the market and cross-border commerce dynamics, especially the maritime one between China, Russia, Europe and Asia, estimations could become more precise, but they will probably continue to represent the greatest challenge faced by service management and they will keep on making the balancing of transportation prices impossible in the current context.

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