



Realities and Perspectives of European Maritime Trade

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Abstract: European maritime trade continues to be primarily driven by the evolution of the European and world economy and business. Although the relationship between economic output and trade in goods appears to be changing, with a marked decline in trade in the total value of Gross Domestic Product in recent years, the demand for maritime transport services remains dependent on the performance of the world economy. While industrial activity, economic production, the number of goods, trade and maritime trade may increase at different rates, these variables remain positively correlated. In the conditions of interdependence and globalization, seaborne trade, with efficiency and profitability, is the engine of economic development and prosperity. The European market for the transport of general goods is determined by the need for such goods worldwide, the world economy, the demographic situation, industrialization, and the surplus and deficit of industrialized goods.

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1. Introduction

Seaborne trade and transport, the most complex global human activity, is vital to the supply chain of the world economy. Shipping is the most efficient and reliable means of transportation, especially for keeping the supply chain of resources and goods open. So that needed goods can be delivered worldwide every day, which is of particular importance, both in good times for humanity and especially in difficult times such as the profound global crisis created by the Covid-19 pandemic that has entered its third year. Approximately 90% of world trade is transported by ship, with the maritime transport sector acting as a vital facilitator of the global economy. Consequently, the shipping industry is at the forefront of the worldwide supply chain and a driving force for multiple sectors of the economy, such as trade, tourism, fisheries. It is also a vital service provider with a prominent social dimension as it connects people and regions and is a resilient sector, offering employment and opportunities to millions of people (European Maritime Safety Agency - EMSA, 2022).

The European Union is the world's most significant trading entity. Although it contains just 5% of the world's population, it contributes 14.9% of global GDP (2020). Hundreds of millions of euros worth of goods are imported and exported in and out of the EU-27. Approximately three-quarters of all international trade in and out of the EU is carried by sea, making maritime transport the driver and facilitator of the EU's economic engine. Seaborne transportation of goods by volume far exceeds any other method of transport, although the overall value of goods transported by ship is slightly less than that of goods moved by other means (EMSA, 2022).

EU ports handle billions of tonnes of goods every year, provide employment for thousands of people, and serve as vital links in the European and international supply chains. Without ports, there would be no maritime transport sector (EMSA, 2022).

Global shipping is underpinned by a merchant fleet of 99,800 vessels, with a displacement of 100 tonnes and above, with an equivalent carrying capacity of 2.13 billion deadweight tonnes (Revue of Maritime Transport, 2021) served by nearly two million certificated and medium-qualified seafarers worldwide.

Like almost all other global and local businesses, the shipping industry has been hit hard by restrictions due to the global covid-19 pandemic. Despite these impediments, the response of the entire maritime sector to the pandemic has been exceptional. The shipping industry has come together and reorganized and developed new arrangements to lift barriers to safe voyages and crew exchanges on time and in place. The International Maritime Organisation IMO has endorsed a series of protocols developed by a broad group of associations from various shipping industry

sectors containing general measures and procedures designed to ensure that crew exchanges can be carried out safely and during the pandemic.

Shipping companies, governments and relevant national authorities are requested to comply with the applicable measures and to do their utmost to allow crew exchanges. These recommendations apply to maritime and port administrations, other relevant national authorities such as health, customs, immigration, border control and civil aviation authorities.

2. Materials and Methods

The COVID-19 pandemic is still having a negative impact on global shipping, affecting all sectors from passenger transport to container and oil products. Many countries have responded to the problems caused by the pandemic by imposing blockades or restricting the movement of people and goods. The European Union has responded to the COVID-19 pandemic crisis and its aftermath by adopting various measures in many areas (public health, economy, research, etc.). Since the beginning of the COVID19 crisis, significant players in the shipping industry have taken measures to ensure continuity of operations and thus the security of supply.

How transport will look in the pandemic period is still unclear; however, the data and tools needed to analyze the impact of the pandemic on certain shipping activities are available to provide the necessary information to help define recovery and de-risking policies for the near and medium future of this activity at European level. This analysis should benefit all parties involved: the EU, maritime administrations, and the shipping industry, establishing a recovery strategy to overcome Europe's economic crisis.

. Using data, mainly from the European Union's Maritime Information and Exchange System and in some cases combined with LRIT and MARINFO data, EMSA issues a report providing figures on the impact of COVID-19 on shipping traffic.

An analysis of shipping in EU ports showed that the number of ships calling at EU ports decreased in 2021 by 10.2% compared to 2020. For example, the number of oil tanker calls in January 2021 decreased by 6% compared to January 2019. The most significant sectors affected were cruise ships, passenger ships, refrigerated cargo ships and vehicle carriers. The most affected European countries were Cyprus, Germany and Lithuania. Processing MARINFO data for 2019 and 2020 shows a significant drop in mid-March 2020 due to anti-covid measures across Europe, which forced many EU and the non-EU Member States to put in place measures to block ships' access to ports.

As the COVID-19 pandemic continued to spread, ports were faced with an unprecedented number of ships at anchor and ships waiting for a place to unload

cargo. Since the beginning of 2020, there has been an increase in the number of ships at anchor compared to 2019.

The passenger and cruise sectors are most strongly affected by COVID-19 in 2019, 2021. Other sectors were also affected, but overall, trade did not stop. Despite the difficulties, merchant vessel operations, ports and other shipping sectors continued to operate, ensuring the movement of goods and proving the strategic importance of shipping.

The impact on EU ports has been influential. Statistical data using ship call information provided by the Member States to the *SafeSeaNet* system in 2019, 2020 and 2021.

For example, in January 2019, there were 53,035 ports of call in EU ports, in January 2021, the number of calls decreased to 49,908, and the number of calls decreased by 6% compared to 2019 (Table 1 and Figures 1 and 2)

Table 1. Evolution of the Number of the Port of Calls in EU Ports in the Period 2019 – 2020

Month	2019	2020	% 2019/2020
January	53053	57854	9
February	50823	50969	0
March	57952	51806	-11
April	62041	43331	-30
May	70013	49535	-29
June	73395	58043	-21
July	79456	70142	-12
August	78524	72558	-8
September	71457	65841	-8
October	67203	62708	-7
November	59626	57562	-3
December	52898	57908	9

Source: <http://www.emsa.europa.eu/>

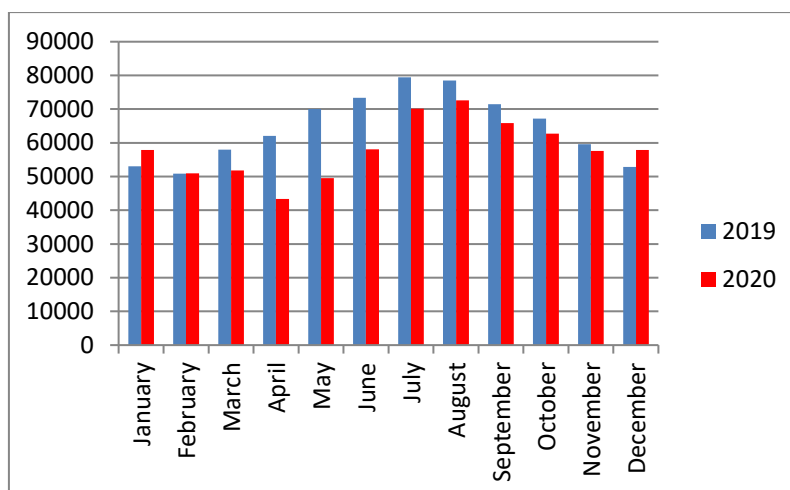


Figure 1. Evolution of the Number of the Port of Calls in EU Ports in the period 2019 - 2020

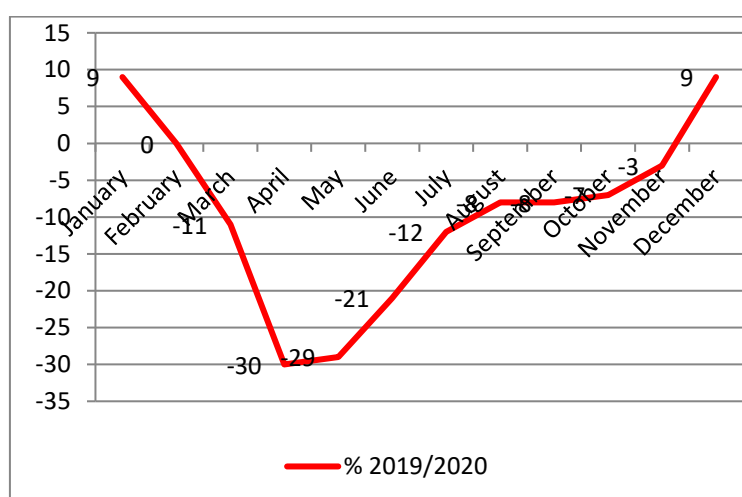


Figure 2. Evolution of the Number of the Port of Calls in EU Ports in the period 2019 - 2020 in %.

Source: <http://www.emsa.europa.eu/>

The significant decrease in the number of ports of call started in week 12 (16-22 March 2020). The week after, the WHO declared the COVID-19 outbreak a pandemic (12 March 2020).

The COVID-19 pandemic affected shipping traffic through limitations on the movement of passengers and crew members, and lock-outs in the various Member States, reducing international trade (Table 2 and Figure 3).

Table 2. Number of the Monthly Port of Calls in European Ports by Type of Ship

Ship type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bulk Carrier	9	7	-2	-9	-6	-1	-2	-1	-3	-4	-3	-6
Chemical tanker	19	4	43	7	19	20	0	-18	-24	-34	-27	-14
Container ship	6	-1	-5	-10	-10	-8	-7	-4	-3	-8	-3	1
Cruise	-1	-3	-58	-94	-97	-96	-93	-89	-85	-86	-83	-57
General cargo	3	-7	-4	-8	-9	-6	-6	-3	-1	-1	3	10
Liquified gas tanker	12	3	1	-7	0	-2	-1	1	-1	-8	-4	5
Oil tanker	12	3	1	-7	0	-2	-1	1	-1	-8	-4	5
Passenger ships	11	10	-55	-92	-94	-70	-28	-24	-31	-20	-10	-5
Refrigerated ships	-2	-14	-18	-25	-19	-11	-30	-19	-33	-33	-11	-15
Rotax	14	4	-18	-46	-32	-12	1	4	4	5	0	19
Ro-Ro cargo	3	-1	-4	-19	-14	-11	-3	1	1	-2	1	19
Vehicle carriers	4	-6	-17	-58	-58	-35	-24	-21	-15	-15	-7	-2

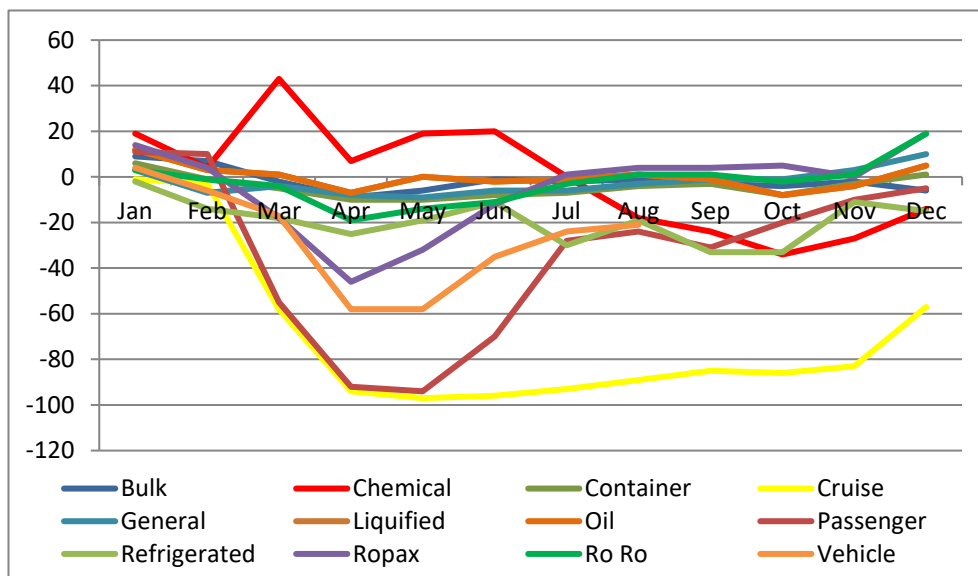


Figure 3. Number of the Monthly Port of Calls in European Ports by Type of Ship

Since 2008, the port of call has increased both in Europe and worldwide, so the beginning of 2020 is still higher in number compared to 2019. However, it can be seen that the pandemic hit Europe in March 2020. In fact, for some ship types, the number of the port of call in European ports increased in the early months of 2020

compared to 2019 (this is one of them due to the natural trend of increased activity or due to other effects of the pandemic that placed a higher demand for some commodities and some ship types, especially from China in early 2020).

Imports from China to the EU are slightly lower in March and April 2020, but the real impact of Covid-19 on imports is only realized in May, with only 36% of the usual volume of port calls coming into the EU from China. By May 2020, the values are in line with previous values in 2019.

As for exports from Europe to China, the first significant decline occurred in March, with the number of port calls originating in the EU destined for China accounting for only 58% of their volume compared to the same month in 2019. However, the most significant decline occurred in May, when the number of port calls from China to Europe dropped to the lowest level, 28%, of their number in the same month in 2019.

The number of the port of call of ships between the EU and the US is much lower than the equivalent demands for the EU and China. The Covid-19 impact on imports from the US to the EU, even though 2020 starts with a higher number of port calls in this direction than 2019, happened in April 2020, with a first decline of 48% of these calls compared to the same month in 2019. Again, a more severe decline occurred in May, with only 22% of US ports to the EU compared to the same month in 2019. The lowest level seen throughout 2020 was in December 2020.

The situation is similar for exports from Europe to the US, with a first significant drop in the number of ports of call from Europe to the US in April of 66% compared to April 2019 and a sharper decline of 34% in May 2020 compared to April to May 2019.

It is also clear that in the summer months, June - to September, there has been some recovery in traffic, port calls for some vessel types, particularly bulk carriers and vehicle carriers (for trade with China) and container and vehicle transport (for trade with the US).

Conclusions

Any disruption to global shipping networks can have far-reaching implications for a highly globalized world economy. When crises such as the COVID-19 pandemic occur, allowing continued port access to merchant ships ensures that the world continues to function persistently with maritime trade delivering the world's food, energy and raw materials, and manufactured goods and components - including vital medical products. However, as the pandemic spread sequentially across regions, keeping shipping moving and trade flowing during the disruption was a challenge. The following section examines the immediate impact of the pandemic and related disorders on maritime trade flows and port calls, focusing on developing countries

and SIDS. The COVID-19 pandemic affected global trade flows at an unprecedented speed and scale. During the pandemic, access to essential goods and medical items was ensured mainly by the ability of the maritime supply chain to adapt quickly. We estimate that the global merchandise trade has fallen in 2020, with a deeper contraction of 27% in the second quarter.

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