# Impact of COVID19 on Ports and Maritime Transport (Georgian Ports Response to COVID19)

Associate Professor George Gabedava<sub>a</sub>
Professor Parmen Khvedelidze<sub>b</sub>

<sub>a</sub>Batumi Navigation Teaching University, Batumi, 6000, Georgia

<sub>b</sub>Batumi Navigation Teaching University, Batumi, 6000, Georgia

<sub>ae-mail: g.gabedava@bntu.edu.ge</sub>

<sub>be-mail: p.khvedelidze@bntu.edu.ge</sub>

#### **Abstract**

The importance of maritime transport and ports to international trade and the world economy is invaluable. It is maritime transport and seaports that ensure the integrity of the supply chain, which ensures the success of world trade and economic activities. The importance of maritime transport is confirmed by the fact that 80% of the transported goods come from maritime transport. Consequently, maintaining a sustainable supply chain is a guarantee of sustainable development in the world.

However, the new coronavirus (COVID19) changed the world and affected the civilized world, causing a crisis and having a very large impact on maritime transport and trade. The impact of the pandemic on maritime transport has challenged various industries whose operation and production depended on the production of raw materials, the processing of semi-finished products and more. Restrictions introduced to prevent the spread of the pandemic have led to the closure of ports, reduced working hours and manpower in ports, and freight-forwarding opportunities. Countries also avoided the spread of COVID-19, and therefore refrained from importing and exporting products and goods during the quarantine period, which led to a decrease in import-export, which in turn reduced demand for cargo. In some cases, due to the imposed restrictions, the transportation time was increased and it became impossible to transport goods with a specific nature. It was these restrictions that led to the slowdown in trade flows and supply chain operations. It was difficult to navigate and trade in different regions. Despite so many difficulties, restrictions, and the impact of the pandemic, maritime transport and seaports continued to operate to ensure the delivery of personalized goods to countries, such as: food, energy, raw materials, medicines and medical supplies.

We think that this topic is very important, it needs to be well researched and analyzed, because if we understand what impact the pandemic has had on maritime transport and ports, we will be able to quickly and easily lay out ways to respond to challenges and get the industry back to normal. The spread of the coronavirus has once again confirmed that the backbone of international trade is precisely maritime transport. Georgian ports are a good example of this.

This article discusses the impact of the new pandemic on maritime transport and ports, as well as the impacts identified and solutions found. The article analyzes for example the cargo turnover of Georgian ports during the pandemic. Based on the discussion and analysis of each of the above issues, conclusions are drawn.

Keywords: Ports; Maritime Transport; Pandemic; Impact; Results

# **Main Text**

The global pandemic has had a major impact on the world, the economy and the industrial sector. The world has changed completely and the world has set other priorities. From a quiet peaceful everyday life, people were overwhelmed by sudden fear and chaos. Changed their daily routine: They had to work, study and do any activity without leaving home.

The economy and important sectors for the economy also stopped. The economic damage caused by the pandemic has been compared to the economic crisis of 2008, and experts say that the damage caused during the pandemic even exceeded the consequences of the crisis - figure №1. As in the rest of the sector, the pandemic has had a major impact on maritime transport, maritime shipping and the maritime industry as a whole. Maritime transport as one of the cargo carrier on which more than 80% of the world cargo is transported turned out to be important for the transportation of goods needed during a pandemic. Nevertheless, the pandemic caused great damage to the field.

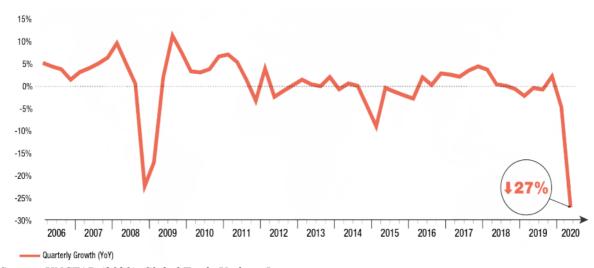


Figure №1 - Trends In Global Trade (Percentage Change)

Source: UNCTAD (2020). Global Trade Update. June

(https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2392)

In order to ensure the health of the workers in the field, the world's leading ports have decided to close the ports or not to work at full capacity, some of them have also imposed bans on the processing of imported and exported goods, They especially avoided loading / unloading cargo coming from or passing through China.

Services at the ports were delayed due to the fact that ships, goods and crews entering the port were properly disinfected to prevent the spread of the virus, Consequently, all this hindered the fast and smooth operation of the logistics chain. In addition it all increased the cost of servicing ships and ports.

Also, the uncertainty caused by the pandemic caused fear among the population, there was no longer a high demand for household goods. Mostly medical products and food / groceries were in demand, hence all this led to a decrease in the import and export of goods.

Relatively smaller shipping companies have crashed and gone bankrupt and can no longer meet the challenges posed by the pandemic in the industry.

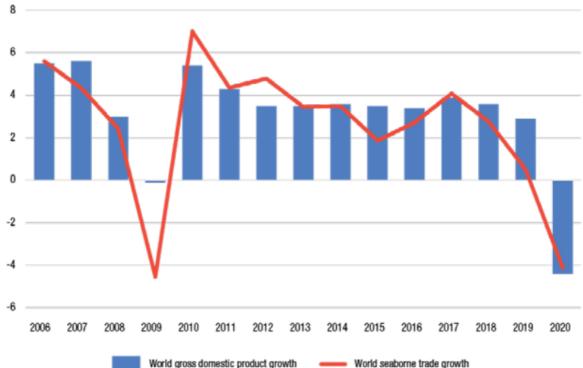


Figure №2 - Development Of International Maritime Trade And Global Output, 2006–2020

Source: UNCTAD calculations, based on the Review of Maritime Transport https://unctad.org/system/files/official-document/rmt2020\_en.pdf

As can be seen from the diagram, the decline in world maritime trade volume starts from the beginning of 2019 and drastically decreases at the end of 2020, and if we look at the chart we will see that the 2020 world maritime trade volume is almost equal to 2008, when the global economic crisis was the main challenge. If we look at the data of the ship calls worldwide we

will see that here we have decreasing trend too. Figure №3 shows the date of ship calls worldwide for 2019-2020 years.

575586

537746
536567

480380

Q1
Q2

2019 2020

Figure №3 - Total Number Of Ship Calls Worldwide (2019-2020)

Source: UNCTAD COVID-19 and Maritime Transport

https://unctad.org/system/files/official-document/dtltlb2021d1\_en.pdf

Just like all over the world, the pandemic has affected Georgia's maritime transport and seaports. Currently, there are two ports in the country: Batumi Seaport and Poti Seaport. Also, the following terminals: Batumi International Container Terminal; Poti APM Terminal; Kulevi Black Sea Terminal and Supsa Oil Terminal.

**Poti Seaport** is the largest port in the country. Its management is carried out by APM Terminals, a subsidiary of the Danish AP Moller-Maersk Group. It is located east of the Black Sea and covers 28.9 hectares of land. The annual capacity of the port is about 10 million tons. It has 15 berths and a total length of berths of 2.9 kilometers. Out of which 11 berths are equipped with portable cranes for 6-40 tons. Table 1 presents the technical characteristics of the port berths.

Table №1 - Technical characteristics of Poti Seaport

Poti Seaport				
Berths	Туре	Depth (m)		
Berth 1	Liquid cargo	12.5		
Berth 2	Railway ferry	12.5		

Berth 3,4,5,6,8,9,10,11	General-bulk cargo	8.5; 8.5; 8.5; 9.75; 9.75; 8; 8; 8
Berth 7,14	Containers	8.25; 8.4
Berth 12	Passenger	6.1
Berth 13	Ro-Ro	6.5
Berth 15	Wheat	8.5

Source: https://www.apmterminals.com/ka/poti

**Batumi Seaport** is the second largest port in the country. Today the port is located on a 22 hectare plot of land and is located southeast of the Black Sea. Annual capacity of the port - 15 million. Tons of oil, 2 million. Tons of dry cargo, 100,000 TEU containers and 180,000 passengers. Currently, the management of the Batumi Seaport is carried out by the subsidiary company of JSC "KazTransOil" - "Batumi Industrial Holding", The port mainly handles liquid, dry, bulk cargoes and containers.

The port has 11 berths including: Oil terminal, container and ferry, dry cargo and passenger. Table  $N_2$  2 presents the technical characteristics of the berths of the port.

Table №2 - Technical characteristics of Batumi Seaport

Batumi Seaport			
Berths	Туре	Depth (m)	
Berth 1, 2, 3	Oil Terminal	12.4; 10.20; 10.20	
Berth 4,5	Container and ferry	12	
Berth 6,7,8,9	Dry cargo	8.24; 11.5; 10.75; 10.24	
Berth 10,11	Passenger	12.20; 8.60	

Source: www.batumiport.com

**Kulevi Black Sea Oil Terminal** is managed by the State Oil Company of Azerbaijan "Socar". The terminal occupies 96 hectares of land and has 2 berths. Its throughput - up to 10 million tons per year - allows it to overload oil products, out of which: 3 million tons of oil, 3 million tons of diesel and 4 million tons of fuel oil.

The Supsa terminal, located east of the Black Sea, is owned by British Petroleum and has a capacity of 4 million tonnes.

During the pandemic, Georgian ports went into continuous operation instead of being closed. The ports operated 24/7 to avoid any disruption to the logistics chain. With the great support of the Government of Georgia and the Maritime Transport Agency of Georgia, Georgian ports were able to work smoothly and in a coordinated manner during the pandemic, as a result, the volume of cargo transported in the transport corridor of Georgia increased during the pandemic. In addition, green corridors were set up in Georgian ports to rotate sailors.

As for the working regime and procedures of the port, all citizens on foreign ships and entering the ports were met by the quarantine service of the Customs Department of the Revenue Service of Georgia, who was checking the condition of the crew members and if there were any suspicious symptoms they were taken to the quarantine zone, they also were making decisions about opening / closing the border for ships. Accordingly, the incoming cargo was disinfected and then cargo operations were carried out.

Like the rest of the world, we have a small decrease of ship calls in Georgian ports. The picture has changed dramatically as countries, including Georgia, have begun imposing restrictions and lockdowns, this is confirmed by the data presented in the Figure №4.

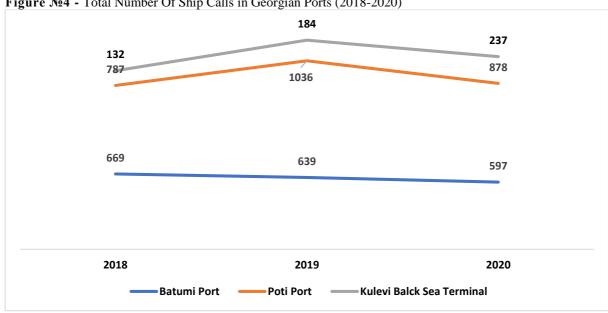


Figure №4 - Total Number Of Ship Calls in Georgian Ports (2018-2020)

Source: Annual Report – 2020 of Maritime Transport Agency of Georgia http://mta.gov.ge/uploads/2020 1.pdf

If we look at the statistics of cargo turnover of Georgian ports during the last 3 years, we will see that despite the pandemic, Georgian ports have maintained the volume of cargo they processed before the pandemic.

Figure №1 – Volume (Million Tons) Of Cargo Processed At Georgian Seaports And Terminals (Total)



Source: Ministry of Economy and Sustainable Development of Georgia <a href="http://www.economy.ge/index.php?page=ecoreview&s=26">http://www.economy.ge/index.php?page=ecoreview&s=26</a>

Figure №1 shows the total amount of cargo processed in Georgian seaports and sea terminals (million tons). If we look at the number of processed cargoes and compare the data for 2018, 2019 and 2020, we will see that in fact the change between the volumes of processed cargoes is minimal and Compared to the 2019 data with the 2018 data we will see that on the contrary the volume has slightly increased in 2019. The figures also show that, despite the pandemic, there was no significant drop in this regard in 2020 (16.9 million tonnes) - we processed less cargo in 2017 (16.2 million tonnes) and 2018 (15.1 million tonnes).

As for container shipping in the country, we have literally the same picture here, figure №2 presents data on the total number of containers (TEU) processed in Georgian seaports.

Figure №2 - Total Number Of Containers (TEU) Processed In Georgian Seaports

647,816

453,935

I-XII/18

I-XII/20

Source: Ministry of Economy and Sustainable Development of Georgia <a href="http://www.economy.ge/index.php?page=ecoreview&s=26">http://www.economy.ge/index.php?page=ecoreview&s=26</a>

In this case, too, the 2019 data show a 30% increase compared to 2018. And we have a 25% decrease in 2020 compared to the same 2019 data. However the overall picture to assess the situation is stable. In 2020, compared to the previous year, the number of processed containers decreased in both Batumi and Poti seaports. In summary, we had the largest increase in this area in 2019 - 647,816 TEU. However, if we exclude this exceptional year, we will see that the total number of processed containers in seaports in 2018-2020 is steadily growing.

# **Conclusion**

In view of all the above, international practice shows that the global world, including the global maritime sector, was not prepared for similar force majeure situations caused by the sudden appearance of a pandemic. Nevertheless, many ports around the world, including Georgian ports, have faced the challenge of a pandemic. But this is not enough, we should take the experience gained from the current situation as an example and start taking care of preparing ports and their workforce for unexpected force majeure situations.

For this, the management needs to work in the following directions:

- Introduction and use of more technologies and innovations in the work process;
- Ensuring continuity of cargo flows;
- Crisis situation strategy and action plan;
- Raising staff awareness about actions in similar situations;

By paying more attention to the issues listed, we will be able to respond to similar situations more effectively.

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## **Cover Letter**

The article "Impact of COVID19 on Ports and Maritime Transport (Georgian Ports Response to COVID19)" prepared by the academic personnel (Associate Professor George Gabedava and Professor Parmen Khvedelidze) of the Batumi Navigation Teaching University was prepared to submit to AGA21 which will be conducting 26-28 October 2020 in Alexandria, Egypt. The article is submitted for publication in the Conference proceedings.

**Signature:** Assoc. Prof. George Gabedava

## **Presenting Author**

Associate Professor George Gabedava holds a PhD in Business Administration, Georgian Technical University, Georgia, 2017, M.Sc. in Transport and Maritime Management, Antwerp University – Institute of Transport and Maritime Management (ITMMA), Belgium, 2013, and a B.Sc. in Nautical Sciences, Batumi State Maritime Academy, Georgia, 2011.

He is a member of the International Maritime Lecturers Association and is also a member of the editorial boards of several International Research-Scientific Journals. He has extensive teaching experience in Maritime Transport, Maritime Transport Economic and Maritime Cargo Handling at undergraduate and graduate levels. He has supervised undergraduate and graduate research students at the Batumi Navigation Teaching University since 2018. He lectured at the several Georgian university as a guest lecturer. He arrived at BNTU in 2017 when he was appointed as Assistant-Professor in the University's Logistics Faculty. He also currently holds the position of Head of the International Relations Service of the University.

He has published over 15 scientific articles and over 10 conference papers. He has also presented at workshops, trainings, webinars and symposiums including the International Workshop. Assoc. Prof. George Gabedava has chaired conference sessions, collaborated with other scholars on research and presented at numerous regional, national and international conference meetings.