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Road freight transport companies facing the COVID-19 pandemic

Przedsiębiorstwa transportu drogowego towarów w obliczu pandemii COVID-19

Abstract

The purpose of this article is to present the results of research on the impact of the COVID-19 pandemic on the activity of road freight transport companies. Moreover, it outlines the main corrective actions that have been taken by road carriers to eliminate the effects of the crisis. The source basis are the results of studies, which were conducted on a purposively selected sample of 100 enterprises representing the sector. What emerges from the research carried out is a destructive impact of the pandemic on the activities carried out in the field of road transport. Consequences of the epidemic can be seen both in the reduction for transport services' demand and in poorer financial condition of the companies surveyed. In response to the crisis, transport companies have taken numerous cost-cutting measures.

Keywords:
road carriers, COVID-19 pandemic, corrective measures, road freight transport

Streszczenie

Celem artykułu jest przedstawienie wyników badań dotyczących wpływu pandemii COVID-19 na działalność przedsiębiorstw transportu drogowego towarów z jednoczesnym nakreśleniem głównych działań naprawczych, które zostały podjęte przez przewoźników w celu eliminacji skutków kryzysu. Podstawę źródłową stanowią wyniki badań bezpośrednich, które przeprowadzono na celowo dobranej próbie 100 przedsiębiorstw reprezentujących ten sektor. Z przeprowadzonych badań wyłania się destrukcyjny wpływ pandemii na działalność realizowaną w obszarze transportu drogowego. Skutki epidemii widoczne są zarówno w spadku zapotrzebowania na usługi przewozowe, jak i w gorszej kondycji finansowej badanych przedsiębiorstw. W odpowiedzi na ten kryzys przewoźnicy drogowi podjęli liczne działania zmierzające do redukcji kosztów.

Słowa kluczowe:
przewoźnicy drogowi, pandemia COVID-19, działania naprawcze, przewóz drogowy towarów

JEL: L1, N7

Introduction

The global crisis caused by the COVID-19 pandemic has had a significant impact on the activities of almost all sections and sectors of the national economy. Transport activities responsible for the movement of goods in supply chains have not been spared either. Service providers specialising in road transport appear to be particularly hard hit. They were the ones who were forced to operate under extremely difficult conditions due to the suspension or significant reduction of supplies in most sectors of industrial production, especially in the first months of the pandemic, as well as due to various restrictions on traffic and border crossings. The difficulties for freight transport companies to optimise their loads and vehicle routes in the supply chain, in addition to the need for them to take a number of protective measures ensuring the security of their supplies and staff are illustrative of the current situation. Worth of noting is that professional drivers are a group of workers at the high risk of coronavirus infection.

In recent months, many studies have been conducted on the impact of the Covid-19 pandemic on various areas of the socio-economic life of our country. The work carried out, mostly in an empirical way, has tried to determine, among other things, the impact of the pandemic on the geographical diversification of foreign trade (Wilczewski & Bryk, 2020), functioning of domestic enterprises (Ligaj & Pawlos, 2021), human resource management (Dolot, 2020), consumer behaviour (Samuk & Sidorowicz, 2020), or supply chain management (Dąbrowska *et al.*, 2020). When analysing the effects of the pandemic on transport activities, the main focus of the researchers was on passenger transport and related mobility (*i.e.* Betkier, 2020; Borkowski *et al.*, 2021; Plac & Danielczyk, 2020), and to a lesser extent on freight transport activities. The results of research diagnosing the situation in road transport, including the outlining of possible scenarios of change, are worth noting here (Paprocki & Letkiewicz, 2020), as well as the results of a study on the impact of a pandemic on the domestic logistics services sector (DGC/Eurologistics, 2020).

Considering the above, the following article is an attempt to look at the activities of road transport companies carried out in pandemic circumstances. In order to determine the impact of the epidemic on the national transport services sector, including the decrease in demand for the services provided, as well as the adaptation measures taken by road carriers, the survey was conducted on a sample of 100 representatives of the sector. The results presented in this paper were collected at the turn of the first and second quarter of 2020, *i.e.* during the so-called first wave of illnesses and the shock caused by the lockdown. That, in turn, has translated into a particularly difficult situation for road carriers providing services to industrial sectors.

The article consists of three parts. The first one is a theoretical approach to the problem. The second part presents the research methodology and describes the research sample. The third part contains an analysis and discussion of the research findings relating to: the scope of services provided, the impact of the pandemic on the performance of transport service providers, and the identification of actions to mitigate the negative effects of the pandemic, successively. The summary presents the principal conclusions, focusing mainly on the research findings.

Background

A new coronavirus called SARS-CoV-2, which was first identified in Wuhan, China, in late 2019, has spread rapidly. Hypermobility and the numerous links of the global transportation network have led to its rapid global transmission. By the end of May 2020, the virus had spread to most countries, and by June 1, 2020, there were more than 6 million cases and more than 371.000 deaths worldwide (WHO, 2020). Currently, as of 7 March 2021, the number of confirmed cases has increased to 115.478.709 infections and 2.568.720 deaths (WHO, 2021).

With the COVID-19 pandemic crisis, most countries in the world have been forced to explicitly subordinate the day-to-day functioning of the economy to the need to preserve the health security of the population (Dantas *et al.*, 2020; Le Quéré *et al.*, 2020; Męcina & Potocki, 2020; Sharma *et al.*, 2020). Restrictions introduced among others: social distance, mobility restrictions, closure of many sectors of the economy, including the catering and hospitality industry, have had an impact on the deterioration of national economies of many countries, and consequently on the scale of transport services, both in the domestic market and international transportation. Taking into account only commercial transport activities, including services provided by road transport companies, *i.e.* entities for which transport services are the main activity, it is worth emphasising their dominant role in road transport. Data show that nearly 63% of all freight in Poland was handled via commercial transport in 2019. In turn, transportation carried out by Polish carriers accounted for almost 77% of all services provided against payment (Świtała *et al.*, 2020).

Considering the foregoing, one may be tempted to state that the impact of the pandemic on the condition of road transport service providers reflects the condition of the entire TSL (Transport, Forwarding, Logistics) sector. It is worth emphasizing that in the current situation, ensuring optimal conditions for the performance of transport activities has become an extremely difficult and complicated task, often requiring decisions with unforeseeable consequences.

While the performance of commercial transport operations for 2020 is not yet known, data on the socio-economic situation in the country, in the first year of the pandemic show 8% decline in freight transport, using the branch with a negative overall business outlook index of –7.8% for the transport and storage section (GUS, 2021). Interesting data are also provided by the forecasts of the International Road Transport Union, which show that last year alone, global losses in freight transport exceeded USD 670 billion, with annual turnover decreases ranging from 11% to 22%. More broadly, in Europe, the nominal rate of decline is sharper than in most other regions (Figure 1), with estimated losses of USD 125 billion (IRU, 2020).

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Dr Agnieszka Łukasiewicz

Ph.D. Assistant Professor at the Division of Management Systems and Telematics of the Road and Bridge Research Institute, with extensive international experience. She has participated in a number of international research projects under the sixth and seventh Framework Programmes, HORIZON 2020 and COST (European Cooperation in Science and Technology), including management of planning and implementation of large infrastructure projects, sustainable transport, road safety and travel studies, as well as social aspects of transport sector. She is currently actively involved in the From Sharing to Caring: Examining Socio-Technical Aspects of the Collaborative Economy project and the European Partnership for the new budgetary perspective Horizon Europe, in the area of Connected, Cooperative and Automated Mobility. She was also a participant in numerous national research projects.

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Adiunkt w Zakładzie Ekonomiki Instytutu Badawczego Dróg i Mostów. Pełni także funkcję lidera obszaru badawczego związanego z mobilnością, transportem oraz infrastrukturą drogową w międzynarodowej organizacji FEHRL. W swojej pracy naukowej podejmuje zagadnienia związane z oddziaływaniem inwestycji drogowych na otoczenie gospodarcze, ze szczególnym uwzględnieniem powiązań łączących inwestycje drogowe z działalnością przedsiębiorstw transportu drogowego towaru. W ostatnich latach głównym przedmiotem jego zainteresowań badawczych były zachowania adaptacyjne i współpraca przedsiębiorstw w łańcuchach i sieciach dostaw.

Dr Agnieszka Łukasiewicz

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