


The impact of COVID-19 on the transport and logistics management: Lessons learnt and future imperatives

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The coronavirus disease 2019 (COVID-19) pandemic resulted in significant disruptions in supply chains, international trade and in transport utilisation. To this end, the *Journal of Transport and Supply Chain Management* published its first special collection in 2022 focusing on the impact of the pandemic on the transport, supply chain and related sectors. The articles published to date in the special issue highlight the importance of investment in supply chain competitiveness and the need for responsiveness both from businesses and government in order to survive the impact of any downturn or disruption. Below is an overview of the articles published in the special collection.

Heyns and Kilbourn (2022) investigated the 'Online shopping behaviour and service quality perceptions of young people in South Africa: A COVID-19 perspective'. The study found that COVID-19 resulted in slight increases in online shopping and that order fulfilment was the most important determinant of online shopping among young online shoppers. Similarly, Omoruyi, Dakora and Oluwagbemi (2022) explored the insights into the impacts of and responses to COVID-19 pandemic from the perspective of South African food retail supply chains. The study findings highlight the importance of local supply development and investment in technology in supply chain responsiveness. This was particularly true for large retailers. Given that the COVID-19 pandemic was a humanitarian crisis, Ittman (2022) explored the 'Impact of COVID-19 on informal humanitarian supply chain in Zimbabwe'. Data was collected through face to face interviews, humanitarian reports and other related reports. The results of the study showed that the impact of the pandemic was severe as the humanitarian aid (food and other necessities) could not be sent to Zimbabwe with the boarder closures resulting from the hard lockdowns in South Africa.

In terms of recovery strategies to deal with the supply chain disruptions resulting from the pandemic, Van der Westhuizen and Niemann (2022) explored the role of third party logistics (3PLs) service providers in strategic supply chain alignment during supply chain disruption recovery using data collected from five logistics triads. Using a generic qualitative approach, findings suggest that 3PLs play varying roles ranging from transactional to more advanced roles as well as implementing a range of approaches (including collaborative planning and supply chain visibility among others) to ensure supply chain alignment. Likewise, in an article titled 'Small and medium enterprises' adoption of 4IR technologies for supply chain resilience during the COVID-19 pandemic', Munongo and Poee (2022) collected data using an online survey from 318 small and medium-sized enterprises (SME) owners or managers in Zimbabwe. The study found a positive association between 4IR adoption and supply chain resilience. However, the adoption of 4IR technologies as a supply chain resilience strategy was low among Zimbabwean SMEs due to various confounding factors.

In an article titled 'A toolkit to aid in the education and training of supply chain members for the efficient distribution of the COVID-19 vaccine: A South African case', Stofberg-Müller, Goedhals-Gerber and Eeden (2022) focused on understanding the COVID-19 vaccine supply chain particularly the handling, storage, and transportation requirements. The study successfully developed tools can be used as a basis when educating and/or training COVID-19 vaccine supply chain employees on different levels and stages.

With regard to international trade, Grater and Chasomeris (2022) analysed the impact of COVID-19 trade disruptions on port authority pricing and container shipping in South Africa and found sharp increases in freight rates resulting from significant freight volume decreases during the COVID-19 lockdowns. The study concluded that South African trade competitiveness

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could be improved by decreasing the NPA-weighted average tariff by 20%. Likewise, Matthee, Saville, Flowerday and Bezuidenhout (2022) assessed the impact of COVID-19 on South African exporters using data from 1023 firms. In particular the study explored various firm characteristics including firm size, firm age and nature of export relationships, among others to determine export resilience using a regression model. The finding highlighted the vulnerability of exporting firms to external factors and the importance of government support and policies to assist exporting firms during times of economic uncertainty. Pretorius et al. (2022) investigated the association between impact of COVID-19 pandemic (measured by deviation of trade volumes from pre-COVID-19 levels), supply chain efficiency and merchandise trade volumes using UNCTAD and World Bank datasets. The study found supply chain efficiency to be associated with the impact of COVID-19 and recommended targeted improvements in infrastructure (physical and non-physical) to support the development of efficient and resilient supply chains.

Regarding travel behaviour, Behrens and Newlands (2022) used big data and Delphi panel survey data to identify the revealed and future travel impacts of the pandemic. The results of the study revealed that the COVID-19 pandemic resulted in trip substitution particularly for low-income households and emphasised the need for robust transport planning practices to address uncertainty.

Lastly, Raza et al. (2022) used the service quality (SERVQUAL) model to infer the service quality of Gautrain services among its users during the COVID-19 pandemic. The study found that Gautrain users were dissatisfied with four of the five

service quality elements of the Gautrain services during the COVID-19 pandemic.

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