Editorial

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The Belt and Road Initiative (BRI) topic has not only gained significance in academic research but also among industry practitioners, commentators, and policymakers across many countries (Lee et al., 2018). Nevertheless, the literature is yet to have an effective impact in the important areas of transport infrastructure and specifically on structural changes in maritime transport, global supply chains, and international logistics, considering national and regional differences. This special issue publishes articles on these structural changes in global transport and logistics in the context of the BRI.

In 2013, the BRI was initiated by the Chinese Government to primarily address and bridge the infrastructure gap in the Asian region and enhance trade transport connections with Europe through Central Asia and Africa (Lee et al., 2020). The project involves a commitment by the Chinese Government to invest large sums of money in the development of key transport infrastructure, including ports, railways and roads, along the Maritime Silk Road (MSR) (Lee et al., 2018; Michael, 2019; Gekara and Nguyen, 2020). The BRI comprises a redefinition of the 19th century land-based Silk Road Economic Belt (the belt), which includes a maritime aspect – the 21st century MSR (the road). The ultimate policy objective the BRI (see NDRC, 2015) is to boost regional economic cooperation through infrastructure development and enhance trade partnerships and transport connectivity between China and the rest of the world, particularly with those identified as participating regions and countries.

The potential for the BRI to have significant influence on the future of global trade transportation is illustrated in the projected commitment of USD 1 trillion, by the Chinese Government, and the involvement of at least 138 participating countries, representing over 60% of the total world population (Huang, 2016). In this respect, since its inception, the BRI has been associated with the launching of 695 projects in 98 countries (CFR, 2020), among which 217 are transport infrastructure projects such as roads and rail, airports and seaports.

Although it is early days in the life of the project, and the full impact will take many years to manifest, it has generated great international academic and policy debate, mostly focusing on the potential benefits and possible social and geo-political implications (see Tei and Ferrari, 2020). A growing number of studies have been dedicated to assessing, modelling, and predicting the potential impact at national, regional and global levels. Lee et al. (2020) present a systematic review of all major studies conducted in the context of BRI since 2013 and find that a wide range of studies conducted covering a variety of aspects, including, maritime and intermodal transportation in association with the MSR, railway transportation in association with sustainability, supply chain management and cross-border issues, the role of infrastructure in economic and transportation corridors, port, and railway for promoting trade and regional economy, and energy supply chain development and carbon emission. The wide range of methodologies applied in these studies, both qualitative and quantitative also point to the great and academic interest on the topic. Suffice to say that, when fully implemented, the BRI will transform the global supply chain landscape. It will only open up and link remote and landlocked countries in developing regions like the Indian sub-continent (Palit, 2017), South-East Asia (Wang, 2014) and Africa (Lee, 2016; Brewster, 2016) but also increase overall regional and international trade. Tei and Ferrari (2020, p.15) point out that "the estimated amount of investment has the capability of reshaping most of the current transport infrastructure in both Asia and Europe" (see also Ye and Haasis, 2018).

In their review of BRI studies so far, Lee et al. (2020, p.539) conclude that a lot more research is required to extend our understanding of the nature and potential impact of

BRI-related projects and initiatives on national, regional and global trade logistics. In this regard, they note that one of the two greatest challenges for researchers is that shortage of extensive literature on the topic makes it difficult to effectively "… observe and generalise consistent and meaningful research trends", and that "…most BRI information and data are [mainly] available in Chinese, which is an obstacle for researchers who cannot understand Chinese." These findings also resonate with those by Thürer et al. (2019), who conducted a similar earlier systematic review of China's BRI in relation to the implications for global supply chain management.

To contribute towards building a rich body of literature and fill the knowledge gap identified in these influential reviews, as well as towards the important debates around BRI and its impact, actual and anticipated, this special issue brings together five papers which examine the structural changes in global transport and logistics since the inception of the BRI initiative. The five choice papers were selected both from the 5th BRI Conference held in Sri Lanka, which was organised by Chartered Institute of Logistics and Transport, Sri Lanka and from the 3rd Yangtze-River Research Innovation and Belt held in Ningbo, China, which was organised by Ningbo University, China.

The first paper ('Negative impact of Sino-US trade friction on shipping demand of the Pacific route and its mitigation by interoperability with the Belt and Road Initiative' by Feng Lian, Yuzhi Guo and Zhongzhen Yang) examines the impacts of Sino-US trade friction on the shipping demand of the Pacific route and China's export trade and develops a bilateral trade gravity model which considers GDPs, trade distance and logistics performance. In the paper, the authors identify four new dimensions of trade distance factors, namely, geographic, economic, cultural, and political distances, and combine them to determine an integrated indicator for bilateral trade distances between China and other countries. To quantity the results, the paper uses an analytical gravity model and develops an equation to determine the exporting amount that estimates China's export to the USA could be reduced by 3.13% but increased by an average of 2.19% to other 19 countries with a maximum of 25.88% with Vietnam and minimum of –6.75% with Russia.

The second paper ('Has the Belt and Road Initiative promoted railway logistics efficiency? – An application of three-stage DEA' by Yaokun Zhang and Junyong Xiang) evaluate the logistics efficiency of the BRI countries and analyse each country's logistics efficiency, technological efficiency, and scale efficiency in the context of the BRI. Their analysis also includes consideration of the possible environmental factors in the implementation and outcomes of the BRI. The impacts of external environmental variables, namely digitalisation level, economic openness, and industry structure on logistics efficiencies are also analysed. This paper makes important contribution to the literature in relation international logistics efficiency, particularly in applying the three-stage data envelopment analysis (DEA) method as a new application. The paper develops an integrated DEA and stochastic frontier analysis to analyse the results and finds that the China-Central Asia-West Asia Economic Corridor performed better than New Asia-Europe Continental Bridge in terms of railway transport performance, industry outputs, timeliness and quality.

With a slightly different but closely related view, the third paper ('Impact of the COVID-19 pandemic on global value chain and implications for the Belt and Road Initiative' by Inkyo Cheong, Jeong Ho Yoo, Kyoungseo Hong and Paul Tae-Woo Lee) quantitatively estimates the impact of the coronavirus pandemic (COVID-19) on global value chain (GVC) adjustment by region and industry. This paper contributes to the

literature by investigating the negative effects of the COVID-19 pandemic on productivity, logistics efficiency, and household demand in the context of BRI. It estimates that, in the worst case scenario, productivity, logistics efficiency, and household demand could go down by 10%, 15% and 15%, respectively. To analyse the results, this paper employs a decomposition methodology, including value-added (VA) and vertical specialisation (VS) trade and simulation approach. The authors observe that the negative impacts of the COVID-19 pandemic will ultimately shrink the GVC by 10%–34% in terms of VS trade based on various scenarios.

The fourth paper ('Key factors that influence the performance of China Railway express operations: case studies of ten lines in China' by Zhaolin Cheng, Laijun Zhao and Huiyong Li) examines the key factors that influence the performance of China Railway (CR) express operations and proposes a theoretical framework based on key factors. This paper contributes to the literature by exploring a new research problem for CR express operations and by investigating its performance influence factors. The underpinning study considers ten cities from coastal, central, and new border regions and utilises a case study approach. It finds that local market demand, government incentives, central government policy, infrastructure at the CR express departure stations, and matching of the geographical location to the operational mode are the key factors in successful CR express operations. The findings of this paper could help the local and central Chinese Government to identify their factors to improve the performance of CR express operations and to overcome various shortcomings and restrictions.

The fifth paper ('Study on evaluation of transport routes between China and Myanmar in the context of Belt and Road Initiative by fuzzy AHP-TOPSIS' by Lixin Shen, Zin Chaw Su, Yang Xu, Cong Wang and Ke Jing) develops an approach to selecting intermodal transport routes between Chongqing in China and Yangon in Myanmar and proposes the MCDM method to solve the transport route selection problem using expert knowledge with the integration of qualitative and quantitative factors. The paper's significant contribution to the literature is in its proposed approach to solving an important transport route selection problem involving the application of experts' knowledge. The underpinning study applied integrated fuzzy AHP and TOPSIS methods to analyse the results and finalise seven important criteria, namely, cost, time, reliability, capacity, security, intermodal mode connectivity efficiency, geopolitics and environment, to evaluate transport routes between China and Myanmar. In this study, the authors identify seven possible intermodal routes and rank them based on their optimal weights. The route Chongqing-Road-Shanghai Port-Ocean-Yangon (with road and ocean modes) is ranked top among the seven possible routes. The findings can help the logistics decision-makers to decide on the criteria to select intermodal routes and ultimately, to select the best route for transporting goods between China and Myanmar.

In summary, the five papers published in this special issue represent a range of perspectives and methodologies and will, therefore, make a significant contribution to the national and regional policies and practice relating to the BRI, its implementation and outcomes. They enhance our understanding of how global trade logistics are likely to transform as a result of the BRI.

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