



Editorial

Sustainable Global Supply Chain Management from an International Perspective

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Over the last decade, sustainable supply chain management (SSCM) has become a very pronounced topic, receiving increasing attention from different communities. The implementation of SSCM is in line with the role of organizational factors in adopting economic, environmental, and social innovations. On the other hand, with the increasing globalization of markets and company operations, the relationships between various agents in supply chains have become more important for suppliers, and are crucial for the successful development of businesses. In fact, the growing interest in global supply chain management (GSCM) has been strongly stimulated by the potential competitive advantages of a global market. Today, GSCM forms a key pillar of the business strategy of companies that want to operate successfully in the foreign market. The academic and business community has a growing interest in studying how GSCM and SSCM approaches can help improve the performance of companies that act or want to be part of the global market. For different reasons, adoption of sustainable practices in the management of companies is a reality, and this requirement is increasingly becoming a priority for managing global supply chains. Many retail and manufacturing companies operating on a global scale have already started to modernize their supply chain activities by incorporating Industry 4.0 technologies, such as Internet of Things (IoT), artificial intelligence (AI), blockchain, and big data. These technologies will play a key role in the future of supply chain management.

Despite a variety of research studies in this field, critical factors affecting the provision of SSCM in a global environment, currently referred to as “sustainable global supply chain (SGSC)”, are still in an embryonic stage. Therefore, there is a need for new insight and research into the field that will allow practitioners, decision-makers, and policy-makers to improve decision-making in global and sustainable supply chains.

To address the above-mentioned requirements, this Special Issue presents 15 manuscripts. Most submissions encompass the aforementioned research topics of this Special Issue. In particular, six manuscripts were accepted for publication in *Sustainability* after providing requested revisions by the authors, where the average acceptance rate was 40%.

The published manuscripts thoroughly investigated the application of optimization and decision-making methods to bring together the current progress on the novel models and solution algorithms, which can contribute to a better understanding of the performances of GSCM and SSCM and provide useful practical strategies. The details of contributions are as follows:

- A useful systematic literature review was conducted by Jahani et al. [1] to address the application of Industry 4.0 in the procurement processes of supply chains;



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- BWM and VIKORSort methods were employed by Sabbagh et al. [2] to classify the risks of implementing blockchain in the drug supply chain. It was revealed that cyberattacks, double spending, and immutability are very dangerous risks for the implementation of blockchain technology in the drug supply chain;
- Torkayesh et al. [3] developed a novel multi-objective optimization model to empower companies in making optimized decisions in healthcare waste management, considering sustainability aspects. An improved multi-choice goal programming approach and goal attainment method were utilized to treat the model and multi-objectiveness;
- Another multi-objective optimization model was offered by Setiawan et al. [4] to design a closed-loop mask supply chain network. They used the fuzzy multi-objective programming method to tackle the model;
- Shabbir et al. [5] employed a whale optimization algorithm to design a closed-loop supply chain in competitive conditions. They took into account variable value for return products, and formulated the problem using a non-linear mathematical model;
- The relationships between impacts occurring at the different supply chain tiers during the pandemic were investigated by Prativiera et al. [6]. They explored which impacts could drive perceptions toward developing resilience strategies in the future, and employed partial least-square structural equation modeling (PLS–SEM) to analyze the data.

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Conflicts of Interest: The authors declare no conflict of interest.

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