

Covid-19, India and the future of global development

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Abstract: The way we live and earn a living has changed as a result of globalization. As a result, trade and travel have been identified as important factors of disease dissemination. Furthermore, global connection has been helped by the development in urbanization and the tighter integration of the world economy. As a result, globalization has emerged as a critical disease transmission mechanism. The goal of this article is to look at the influence of COVID-19 on globalization and global health in terms of mobility, trade, travel, and the nations that will be most affected. The causal links between globalization and the changing international order are traced in this essay. It revisits some of globalization's assumptions and promises, arguing that the developments point to the breakdown of the liberal international order on which the world had been built for decades. The final section considers the future of global government.

This article explains the origins and distinguishing characteristics of India's development policies and vision, arguing that in a post-Covid world, these policies and vision may offer a compelling alternative to the US-led development paradigm for many developing countries.

IndexTerms – Globalization, Covid-19, Outsourcing, Operation research, Operations management

I. INTRODUCTION

Globalization has arisen as a means of ensuring individual economic and cultural growth [1]. Global connection has been enhanced by the development in urbanization and the increasing integration of the world economy [2]. Despite this, trade and travel, both important aspects of globalization, play a substantial role in the spread of infectious diseases. Pandemics have occurred in the past throughout the history of human travel and communication [3]. Yersinia pestis, which causes the bubonic plague, was spread from China to Europe via trade routes [4].

However, we are most likely witnessing a huge shift recently. The current reshaping of globalization is referred to as "Slowbalisation" by The Economist, a phrase coined by Dutch trend-watcher Adjedj Bakas in 2015. Between 2008 and 2018, global commerce fell from 61 percent to 58 percent of GDP. In the same time period, intermediate imports and Foreign Direct Investment (FDI) both fell by 2%. In 2018, 50 percent of FDI inflows into Asia originated from Asian countries, whereas 60 percent of FDI inflows into Europe came from the area (2019).

The COVID-19 epidemic, as well as the accompanying economic and financial problems, came on the heels of the dot-com bubble crash in 2000 and the financial crisis of 2007–09. It also arrived in a world marked by significant medium-term differences in development speed and direction. The convergence of these events, as well as a number of secular political and economic evolutions, will almost certainly result in a major turning point in global development: the end of the 'unipolar moment,' which began with the collapse of European Communism, and the final stages of the West's five-hundred-years of militarily and economically dominance from the 16th to 17th centuries.

A pandemic can also have an economic impact by slowing the growth of affected countries' economies, resulting in decreased commerce and increased poverty [5,6]. The 1918 influenza pandemic, for example, resulted in financial losses due to decreased schooling, greater impairments, and worse social status [7]. Another significant effect of pandemics is a decline in the workforce. The Hong Kong flu of the 1970s was thought to have had a direct economic impact on absenteeism in schools and the workforce [8]. Similarly, flu pandemics have resulted in a significant loss of human and economic capital, as demonstrated by the SARS pandemic, which cost East Asia an estimated \$18 billion [9].

The world was confronted at the end of 2019 with an epidemic of a novel coronavirus (SARS-CoV-2), which was initially detected in Wuhan, China [10]. COVID19, the disease induced by SARS-CoV 2, has a wide range of symptoms from moderate to severe, as well as an asymptomatic appearance [11]. The World Health Organization (WHO) proclaimed COVID-19 a pandemic on March 11, 2020, [12], and as of October 21, it was still going strong.[13]

COVID-19 has occurred at an unprecedented period, and the associated lockdown measures have altered economic growth uncertainties. The International Monetary Fund (IMF) forecasts a 3 percent drop in global growth uncertainty in 2020, and a 6.1 percent drop for advanced economies [14]. In addition, China, the world's second largest economy, recorded a 6.8% drop in the first quarter [15]. The lockdown has also resulted in a rise in telework and telecommuting, as well as the cancellation of operations and the restriction of supply and demand.

II. LITERATURE REVIEW

As stated in the introduction, a number of rigorous reviews of various sourcing decisions have been conducted. We have no plans to duplicate what has previously been done. Rather, we want to draw attention to the fragmentation in the literature, which highlights the need to collaborate across disciplines to better address sourcing and location decisions. We present papers from many domains in an integrated review in order to synthesise existing analytical models and call attention to new theological frameworks and viewpoints.

Fratocchi et al. (2016) categories reshoring reasons based on the goal (value and cost efficiency) and the degree of analysis (internal or external). Then, based on 377 cases, they created a database of reshoring decisions/projects. They classified the reasons from the empirical study according to their home nation, host country, and industrial sector after identifying the cases by home country, host country, and industrial sector.

Kinkel and Maloca (2009) link the size and industry sector of a company to its decision to offshore. Their findings show that activities involving standardized manufacturing procedures and low-quality labor are more likely to be offshored. Capacity bottlenecks are mentioned as one of the reasons for offshore. They compare the back shoring decision to the previous offshoring decision as a solution to various problems.

Mauro et al. (2018) undertakes a multi-case research including four Italian textile, clothing, leather, and footwear (TCLF) manufacturers. It's worth noting that they all cited outsourcing as a result of their competitors' methods, which allowed them to maintain competitive rates. Another major distinction is that high-end products are not considered in the offshore decision, whereas low-end products are rarely considered in the back shoring decision. The "Made in" effect is the most common reshoring rationale cited by all of them.

Anon (2012) focuses on the rise in coastal China's worker wages. Although labor costs are lower in inland China, this is compensated by weak transportation infrastructure, which will result in longer lead times. Other Asian countries, such as Vietnam and Sri Lanka, are said to be less efficient and productive than China, although offering cheaper labor wages. According to the author, in order for China to become more internationally competitive, it is necessary to focus on product design rather than just manufacturing. Which takes us to one of the most crucial aspects of outsourcing: deciding which activities to outsource.

Kinkel (2014) examines German enterprises' reshoring decisions using data from the European Manufacturing Survey. According to the author, 20% of the back shoring choice in Germany is a reaction to the changing environment and the loss of geographical advantages, while the remaining 80% is a correction of the original offshoring decision.

By looking at the Italian situation, Talamo and Sabatino (2018) analyses reshoring and its relationship to resilience. Bosch, Sagem, NafNaf, Caroll, Nokia, Nathan, and Essilor are among the companies that have restored their operations. After that, they detail reshoring cases in Italy by area and industrial sector, after defining resilience as the ability to rebound after a disaster. They examine the different areas of Italy in three crisis periods (oil crisis in 1970–1973, devaluation of the Lira and political crisis in 1992–1995, and financial and economic crisis in 2008–2010) using a resistance index based on changes in employment.

III. METHODS

3.1. Mobility and travel resources

Individual mobility and its magnitude were determined using data from airlines and seaport trade and travel. The number of nations flown to and from by each airline in Asia, the Americas, and Europe was used to choose major airlines. To comprehend the scenario prior to the implementation of COVID-19 in January 2020 [16], thorough travel information is required. Similarly, significant cruise firms were chosen and their annual reports for the years 2018–2019 were examined [17]. Furthermore, the world shipping council website [18] was used to investigate large seaports and trade volumes in areas with major shipping routes. Following official announcements and websites of travel businesses, current replies to COVID-19 were investigated [19].

3.2. Economy and workforce

Based on the 2018–2019 datasets [20], the economic impact was investigated through trade volumes, event cancellation, and workforce impact. Additional data was gathered by comparing the workforce, stock market, and important industries since the implementation of COVID-19 in January 2020 to January 2019. Stocks were investigated to see if there was a difference in stock value over time.

3.3. Food and agriculture

The influence on food and agriculture was investigated in terms of supply, agricultural GDP, food expenditures, agricultural imports, global food chains, business closures, food insecurity, supply interruptions, and COVID-19 response [21].

3.4. Academic institutions

The impact on academic institutions was investigated by looking at how universities dealt with COVID-19. In addition, the impact of university reopening plans on future enrolment, particularly among overseas students, was investigated [22].

3.5. Healthcare capacity

The capacity of healthcare (diagnostic, ICU, and hospital beds) was investigated by looking at countries' healthcare systems and preparation. Following news articles, health department websites, WHO situation reports, and published peer-reviewed publications provided additional information on healthcare responses and workforce impact. Search engines such as PubMed, Google Scholar, the Ministry of Health's website, and the WHO's country office's website were employed [23]. By contacting with the WHO country representative, detailed information about healthcare responses was gathered. The reported cases were analysed using a variety of sources, including WHO situation bulletins, the John Hopkins University interactive dashboard, and the World Health Organization. The health indicators were gathered from the website of the Global Health Security Index [24]. In addition, the prevalence of COVID-19 disease, the impacted population, and other country-specific statistics were analysed and collected from the World Bank open data websites and Index Mundi [25].

IV. RESULTS

4.1. Impact on mobility

4.1.1. Air Travel

In terms of passengers carried, ten major airlines serving more than 50 countries had extensive coverage. The majority of aeroplane countries have implemented international standards in response to COVID-19.

4.1.2. Sea travel and trade

The corporation responded to the COVID-19 pandemic by suspending cruises from March 13–April 9, 2020. This cruise line has observed over a 60% reduction in stock prices.

4.1.3. Travel restrictions

Almost all (99.7%) of the individuals in South America and 92.5% in North America are living under travel restrictions. Only 62% of individuals are living under travel restrictions in Africa.

4.2. Impact on major industries

4.2.1. Event cancellation

Since the outbreak of the pandemic, social distance has been applied, resulting in the cancellation of countless events around the world. The 2020 Summer Olympics in Japan, for example, have been delayed for 2021. Athletes, cyclists, soccer players, golfers, auto racers, tennis players, cricket players, badminton players, rugby players, and basketball players have all had their activities cancelled or postponed.

4.2.2. Impact on workforce

Lockdowns and travel restrictions have had a widespread impact on the workforce. Approximately 62 percent of worldwide employment is in the informal economy, which is defined by a lack of social security, benefits, healthcare access, income security, or the ability to work remotely, exposing the most vulnerable. The lockdown measures have a substantial influence on nearly 1.6 billion informal economy employees, who are among the most vulnerable in the labor market [26]. Manufacturing, lodging, food services, and retail are the industries most affected, accounting for 54 percent of global employers and 30 percent of annual GDP. It is expected that these sectors will require a significant amount of time and effort to recover [27]. Working hours are predicted to fall by 10.5 percent in the quarter following the epidemic, resulting in the loss of 305 million full-time jobs. Working hours are predicted to decrease significantly in the Americas, Europe, and Central Asia. Low-wage workers are anticipated to lose the most working hours.

4.3.3 Impact on the healthcare capacity

The unexpected outbreak has put the world's healthcare systems under strain. As evidenced by country-specific death rates, certain countries are impacted less than others. COVID-19 cases, recovery, and death rates in nations with developed healthcare. Surprisingly, these countries have little impact on COVID-19-induced demand shocks [28]. Bangladesh, a country with a greater agricultural GDP, has a low susceptibility to supply shocks but a high exposure to demand shocks [29]. In addition, the disruptions in the food industry were exacerbated by an initial drop in services and consumption at major food retailers. This has been related to the several lockdowns that have occurred. Despite the fact that only minor supply interruptions have been recorded, some franchises in European markets have shuttered.

4.4.1. Academic institutions

Significant upheavals in academic institutions have occurred, similar to changes in other major industries. The majority of schools have resorted to transferring in-person classes online and cancelling them [30]. Many logistical issues arose as a result of the switch to online programmers. According to a report, over 10% of universities lack the necessary equipment and infrastructure to conduct online courses. Furthermore, the majority of institutions have reported a considerable impact on new international and domestic student enrollment, with unfavorable financial consequences.

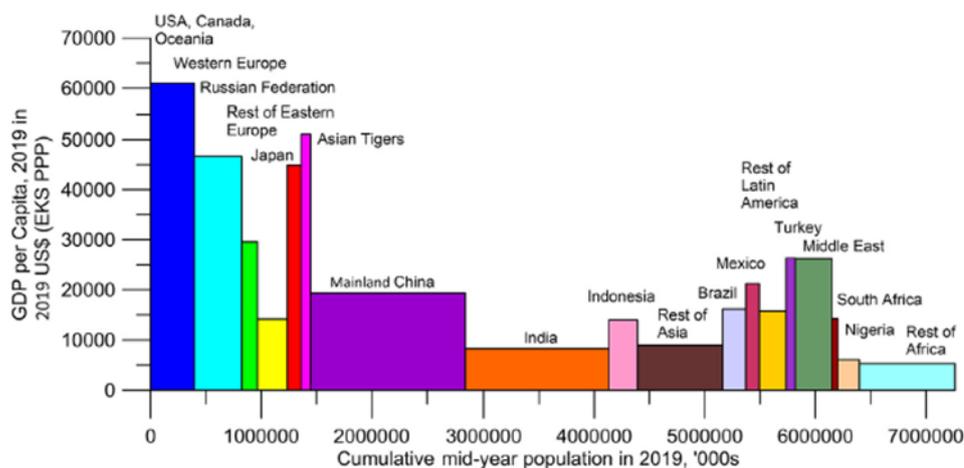


Fig. 1. Global GDP, GDP per head and population in 2019. Source: elaborated from The Conference Board (2020).

Fig 1 defines how Indian economy stands in the world before impact of Covid-19 pandemic and their competitions countries, soon after the pandemic the economy changes occurs drastically. This change in economy results in price hikes and increase in price of commodities. Furthermore, the majority of institutions have reported a considerable impact on new international and domestic student enrollment, with unfavorable financial consequences.

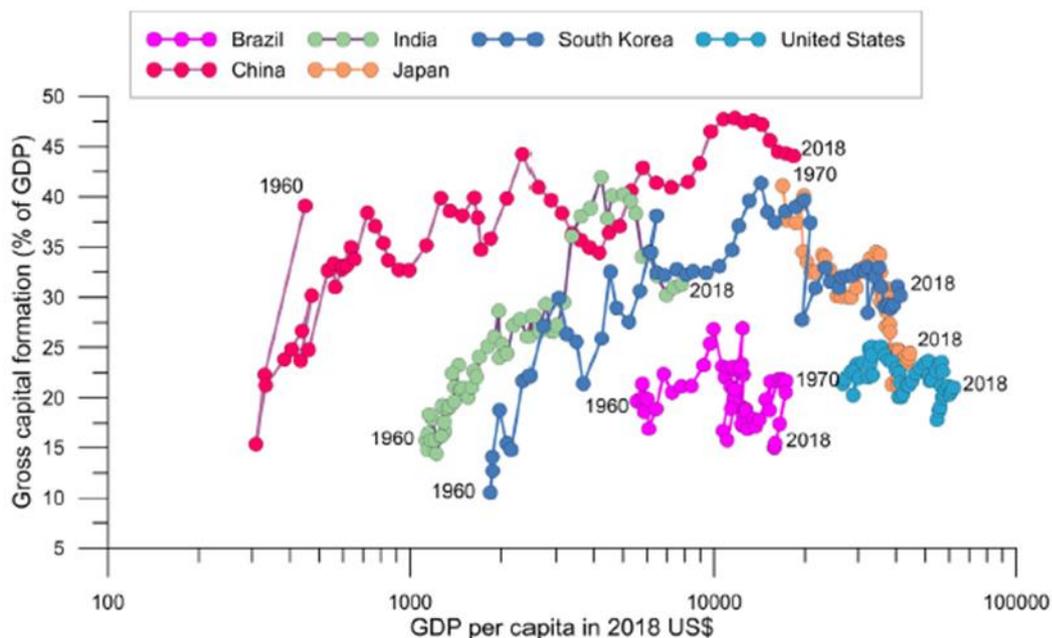


Fig 2: GDP per capital of India and other Covid-19 affected countries

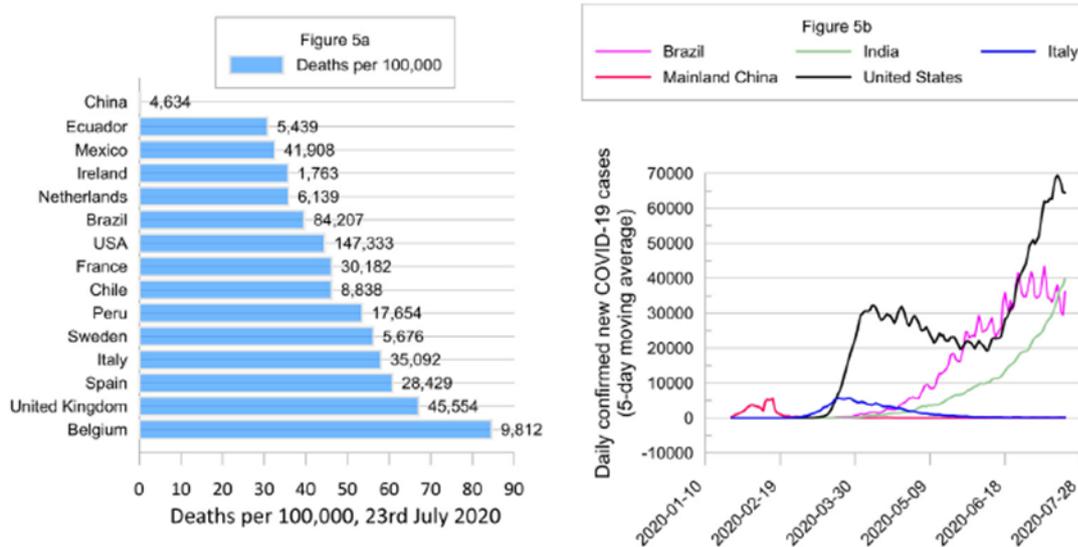


Fig. 3. COVID-19 deaths per inhabitant (and total deaths) in countries with the fourteen highest death rates and China by 23rd July 2020 and daily confirmed cases for selected countries up to 22nd July 2020.

Source: elaborated from <https://www.worldometers.info/coronavirus/> and <https://datahub.io/core/covid-19#data>.

V. DISCUSSIONS

As can be seen from the GDP impact of covid-19, it is expected to have a significant impact on both national and global GDP. A clear and uniform description of the various sourcing strategies, such as insourcing, outsourcing, offshoring, and reshoring, is also required. This will be critical in determining who is responsible for emissions and negative social repercussions across the supply chain. To effectively assess the supply chain's environmental and social implications, appropriate analytical models should integrate multiple SC operations such as manufacturing, inventory, and transportation.

VI. CONCLUSIONS

As previously argued, the evolving liberal order is fraught with uncertainty. Aside from the current boom of commemorative and critical writings on liberalism by academics and non-academics, numerous basic features of the liberal system can be considered to have become illusions as a result of recent changes. As a result, the liberal Western initiatives that have been widely embraced around the world are now under jeopardy. By the end of 2016, the real challenge to globalisation was mostly due to a shift in America's worldwide policy push and strategic focus. For decades, America's critical role in keeping global insecurity (and peace) in check has shattered. Will the rise of protectionism, new nationalism, and trade war result in a safer and more inclusive world order? Is it possible for the current developments to bring about more new integration and globalisation? According to the reasons presented in this article, the changing order appears to be non-inclusive and instead undermines the globalising globe. This has led to the complicated and paradoxical argument of new anarchy in the international order ushered in by the contradictions of the neoliberal system (Cerny & Prichard, 2017).

REFERENCES

- [1] G. Berlinguer, Globalization and global health, *Int. J. Health Serv.* 29 (3) (1999) 579–595.
- [2] T. Wu, C. Perrings, A. Kinzig, J.P. Collins, B.A. Minter, P. Daszak, Economic growth, urbanization, globalization, and the risks of emerging infectious diseases in China: a review, *Ambio.* 46 (1) (2017) 18–29.
- [3] Zu, Y., Chen, L., & Fan, Y. (2018). Research on low-carbon strategies in supply chain with environmental regulations based on differential game. *Journal of Cleaner Production*, 177, 527–546. doi: 10.1016/j.jclepro.2018.02.152 .
- [4] Globalizations, 9(4), 503–516. <https://doi.org/10.1080/14747731.2012.699921>. Wallis, V., & Zhuo, M. (2020). Socialism, capitalism, and the COVID-19 epidemic: Interview with Victor Wallis. *International Critical Thought*. <https://doi.org/10.1080/21598282.2020.1783920>.
- [5] O.P. Baume, A. Gebhardt, C. Gebhardt, G.B.M. Heuvelink, J. Pilz, Network optimization algorithms and scenarios in the context of automatic mapping, *Comput. Geosci.* 37 (3) (2011) 289–294
- [6] K. Ganesan, M.J. Mendki, M.V. Suryanarayana, S. Prakash, R.C. Malhotra, Studies of *Aedes aegypti* (Diptera: Culicidae) ovipositional responses to newly identified semiochemicals from conspecific eggs, *Aust. J. Entomol.* 45 (1) (2006) 75–80.
- [7] Rosenberg, J., & Boyle, C. (2019). Understanding 2016: China, Brexit and Trump in the history of uneven and combined development. *Journal of Historical Sociology*, 32(1), E32–E58. <https://doi.org/10.1111/johs.12217>.
- [8] R. Reeves, J. Rothwell, Class and COVID: How the Less Affluent Face Double Risks, 2020. Available at [<https://www.brookings.edu/blog/up-front/2020/03/27/class-and-covid-how-the-less-affluent-face-double-risks/>], last accessed 04.30.2020.
- [9] J. Whitehorn, S. Yacoub, Global warming and arboviral infections, *Clin. Med.(Lond).* 19 (2) (2019) 149–152.
- [10] Kaur, H., Singh, S. P., & Majumdar, A. (2018). Modelling joint outsourcing and off-shoring decisions. *International Journal of Production Research*, 57 (13), 4278–4309. doi: 10.1080/00207543.2018.1471245 .
- [11] Kinkel, S., & Maloca, S. (2009). Drivers and antecedents of manufacturing offshoring and backshoring a German perspective. *Journal of Purchasing and Supply Management*, 15 (3), 154–165. doi: 10.1016/j.pursup.2009.05.007.
- [12] Lau, K. H., & Zhang, J. (2006). Drivers and obstacles of outsourcing practices in China. *International Journal of Physical Distribution & Logistics Management*, 36, 776–792. doi: 10.1108/0960030610714599.
- [13] Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. doi: 10.1016/j.jbusres.2019.07.039 .
- [14] Xu, X., He, P., Xu, H., & Zhan, Q. (2017). Supply chain coordination with green technology under cap-and-trade regulation. *International Journal Production Economics*, 183, 433–442. doi: 10.1016/j.ijpe.2016.08.029.
- [15] Yang, L., Zhang, Q., & Ji, J. (2017b). Pricing and carbon emission reduction decisions in supply chains with vertical and horizontal cooperation. *International Journal of Production Economics*, 191, 286–297. doi: 10.1016/j.ijpe.2017.06.021 ..
- [16] Zhang, L., Wang, J., & You, J. (2015). Consumer environmental awareness and channel coordination with two substitutable products. *European Journal of Operational Research*, 241 (1), 63–73. doi: 10.1016/j.ejor.2014.07.04 ..
- [17] Gertler, J. (2009). A macro-economic analysis of the effect of offshoring and rehiring on the US economy. *Annual Reviews in Control*, 33 (1), 94–111. doi: 10.1016/j.arcontrol.2009.02.002.
- [18] Ghosh, D., & Shah, J. (2015). Supply chain analysis under green sensitive consumer demand and cost sharing contract. *International Journal of Production Economics*, 164, 319–329. doi: 10.1016/j.ijpe.2014.11.005 .
- [19] Hansen, C., Mena, C., & Aktas, E. (2018). The role of political risk in service offshoring entry mode decisions. *International Journal of Production Research*, 57 (13), 4244–4260. doi: 10.1080/00207543.2018.1518601 ..
- [20] Ancarani, A., Mauro, C. D., Fratocchi, L., Orzes, G., & Sartor, M. (2015). Prior to reshoring: A duration analysis of foreign manufacturing ventures. *International Journal of Production Economics*, 169, 141–155. doi: 10.1016/j.ijpe.2015.07.031 ..
- [21] Bals, L., Kirchoff, J. F., & Foerstl, K. (2016). Exploring the reshoring and insourcing decision making process: Toward an agenda for future research. *Operations Management Research*, 9, 102–116. doi: 10.1007/s12063-016-0113-0 ..
- [22] Fratocchi, L., Mauro, C. D., Barbieri, P., Nassimbeni, G., & Zanoni, A. (2014). When manufacturing moves back: Concepts and questions. *Journal of Purchasing and Supply Management*, 20 (1), 54–59. doi: 10.1016/j.pursup.2014.01.004.
- [23] Foerstl, K., Kirchoff, J. F., & Bals, L. (2016). Reshoring and insourcing: Drivers and future research directions. *International Journal of Physical Distribution and Logistics Management*, 46 (5), 492–515. doi: 10.1108/IJPDLM-02-2015-0045.
- [24] Ma, P., Zhang, C., Hong, X., & Xuc, H. (2018). Pricing decisions for substitutable products with green manufacturing in a competitive supply chain. *Journal of Cleaner Production*, 183, 618–640. doi: 10.1016/j.jclepro.2018.02.152.
- [25] Johansson, M., & Olhager, J. (2018). Comparing offshoring and backshoring: The role of manufacturing site location factors and their impact on post-relocation performance. *International Journal of Production Economics*, 205, 37–46. doi: 10.1016/j.ijpe.2018.08.027.