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THE IMPACT OF COVID-19 ON LOGISTICS IN VIETNAM

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TRƯỜNG ĐẠI HỌC KINH TẾ QUỐC DÂN  
TRUNG TÂM NGHIÊN CỨU, TƯ VẤN KINH TẾ VÀ KINH DOANH

**UWE**  
**Bristol** University  
of the  
West of  
England

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Hanoi, November 2020



NHÀ XUẤT BẢN GIAO THÔNG VẬN TẢI



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# INTRODUCTION

COVID-19 and measures to prevent epidemics have severely impacted logistics operations, disrupting supply chains and trade flows, slowing business operations, and declining exports and imports. According to the Vietnam Association of Logistics Service Enterprises, because of COVID-19, about 15% of businesses reduce 50% of their revenue compared to 2019; more than 50% of businesses reduce the number of logistics services in domestic and international 10-30% compared to the same period last year.

On 12<sup>th</sup> November, the National Economics University in collaboration with the University of West of England organized an international scientific conference "The impact of COVID-19 on logistics activities in Vietnam" in order to update and exchange research results and experiences in coping with the COVID-19 pandemic and develop a network of logistics specialists.

At the beginning of the seminar, Assoc. Prof. Bui Duc Tho - Vice President of National Economics University shared that COVID-19 had a strong impact on the entire Vietnamese economy and the supply chain logistics. Logistics is part of the supply chain. Vietnam is currently deeply integrated into the supply chain, therefore it is directly affected by exports, imports, cross-border trade and domestic trade. Logistics activities such as transport decreased because customs clearance services at border gates were hindered. Warehouse services and freight rates were also severely affected. Many factories have to suspend operations, the

amount of goods to be transported is less, leading to the transportation and delivery of goods in the supply chain also decreases, greatly affecting the operation of logistics services enterprises.

The international scientific conference is an opportunity for experts and specialists to have a full assessment of the impact of the COVID-19 epidemic on logistics activities as well as to exchange and share experiences of controlling the effects of COVID-19. Assoc. Prof. Bui Duc Tho hoped that the workshop would offer valuable research and contribute to promote the development of Logistics services and reduce negative impacts from epidemics in the future.

# THE IMPACT OF DIGITAL TECHNOLOGIES ON SUPPLY CHAIN RESILIENCE IN THE CONTEXT OF COVID-19 OUTBREAK

*Yuying Bai<sup>1</sup> and Prof. Vikas Kumar<sup>2</sup>*

*<sup>1</sup> School of Economics, Finance and Management, University of Bristol, UK*

*<sup>2</sup> Bristol Business School, University of the West of England, UK*

## **Abstract**

*Digital technologies have developed rapidly and gradually play an important role in business activities and their supply chains in all walks of life. Supply chain resilience serving as an essential component of supply chain risk management contributes greatly to firms' ability to response and recovery after disruptions occurred, which attracted the attention of enterprises in recent years. Although the literature shows that digital technologies have a positive impact on the resilience building, the individual applications and their contributions are still worth further study. This study reviews the existing literature to analyse the impacts of digital technologies on supply chain resilience in the context of COVID 19. Through the inductive and qualitative research approach, this study finds that digital technologies could improve supply chain resilience through the interaction, from the perspectives of flexibility, redundancy, collaboration, and agility.*

**Keywords:** Digital Technologies; Supply Chains; Resilience; COVID-19



## **1. Introduction**

The ongoing COVID-19 crisis has significantly disrupted global supply chains on both upstream and downstream. The strict lockdown measures throughout the world and the closure of businesses have created severe disruptions affecting the supply of essential items. While some of the firms have to reduce capacity or even suspend businesses due to adverse impact on supply chains due to COVID-19 pandemic, while others have equipped themselves with smart technologies to maintain their operation or transform the original production lines for producing emergent medical supplies (Bragazzi, 2020). Chamola et al. (2020) point out the supporting role played by advanced digital technologies to the economy and people's life during COVID-19 pandemic.

The increasing level of globalization and the development of advanced digital technologies have brought significant changes to supply chains. The close collaboration on a global scale enhances the dependency between supply chain entities, increasing the complexity of the supply chain and therefore makes the supply chain more efficient under stable conditions (Kamalahmadi and Parast, 2016). However, the global spanning operations of supply chains such as global outsourcing have lengthened, and fragmented supply chains, while exposing supply chains to the great cost and uncertainties, and are vulnerable to risks and disruptions (Christopher and Peck, 2004;). Tukamuhabwa et al. (2015) indicate that natural disasters, human-made disasters (e.g., terrorism),



and the adjustment on business strategy (e.g., the implementation of lean concepts) for cost-saving, could all lead to supply chain disruptions.

Although investment in resilience building might be costly, Tukamuhabwa et al. (2015) believe that resilience building and cost-effectiveness are not conflicting but complementary. Supply chain resilience building should be considered along with the other practices, such as lean, which aims to reduce operational cost (Mensah and Merkurjev, 2014). On the other hand, due to the high interdependency within supply chain network, firms are expected to build up their resilience to avoid the ripple effect that may reduce the whole supply chain capacity (Craighead et al., 2007). Hence, how to build a resilient supply chain to deal with disruptions and emergencies has become a topic to which supply chain partners are gradually paying attention. As an important part of supply chain risk management, supply chain resilience focus on the adaptive capability of response when facing disruptions and recover to the original state, or even better than before the disruption (Tukamuhabwa et al., 2015).

As the continuous digitalization of global supply chains, disruptive innovations such as the Internet of Things, cloud computing, additive manufacturing, and Industry 4.0 is already changing manufacturing, logistics, and other processes of supply chains. The advanced technologies affect the way of managing supply chains and therefore affect the supply chain disruption management (Ivanov, Dolgui, and Sokolov, 2019). For example, additive manufacturing allows the components or even the products produced in any places within the supply chain, quickly and energy efficiently, which implies

the reduction of supplier layers and therefore shorten the supply chain (Ivanov, Dolgui, and Sokolov, 2019). Therefore, the impacts of digital technologies on supply chain resilience under COVID-19 context is worth exploring. This study there aims to understand the components of supply chain resilience and how digital technologies respond to supply chain disruptions by analyzing applications of digital technologies in supply chains when facing the disruptions due to COVID-19 pandemic. More specifically, this study seeks to answer the following research question;

How do digital technologies affect supply chain resilience and help supply chain respond to the disruptions such as COVID-19 outbreak?

Rest of the paper is organised as follows; Section 2 provides an overview of the existing literature. Section 3 discusses the methodology and section 4 presents the findings of the study. Finally, section 5 concludes this study.

## **2. Literature Review**

### ***Supply Chain Risk and Resilience***

Global Supply chains are always influenced by predictable or unforeseen events (e.g., globalization, enterprise transformation, outsourcing, terrorist) that threaten the continuity and profitability of supply chain, which attracts researchers' attention to mitigate the impact caused by risks. According to Baryannis et al. (2019), the effects of managing risks in the supply chain are usually stressed from both a

positive and negative perspective. Vulnerability is one of the negative consequences caused by supply chain risk, which will affect the ability to meet end-customer market needs (Jüttner, 2005). While Behzadi et al. (2018) point out that robustness and resilience are always related to the positive outcome of supply chain risks which regarded as the way to weaken vulnerability. Robustness is the extent of maintaining supply chain functioning when facing various possible future situation (Wilding et al., 2012). Resilience focuses more on the ability to adapt to emergencies and rapidly reinstating the operational continuity of the supply chain (Ponomarov and Holcomb, 2009). Therefore, Gottlieb, Ivanov, and Das (2019) develop the purpose of SCRM, which identifies and manages the potential disruptions in the supply chain to ensure the positive outcomes such as robustness, profitability, and existence, and decreasing the negative consequences of supply chain risks (i.e., vulnerability and disturbance). Melnyk et al. (2014) identify that supply chain resilience encompasses both resistance capacity and recovery capacity, which are the key components. The former is the ability of the system to reduce adverse impact from disruptions and the time between disruption onset and the start of recovery. The latter is the ability of the system to find recovery and maintain stability and functions after disruptions happen. They also distinguish between risk (i.e., predictable situations) and uncertainty (i.e., unpredictable events) and suggest that firms can invest in resistance to against risk while investing in recovery against uncertainty.

Supply chain resilience can be affected by several factors and improved when following the guidance of these factors, often known as

formative elements. Ponis and Koronis (2012) believe that the formative elements or main dimensions that compose supply chain resilience are significantly different, which all can contribute to the development of a resilient supply chain in such crisis-prone era. Sheffi and Rice (2005) identified three formative elements for developing resilience that is increasing redundancy, building flexibility by setting up concurrent processes rather than sequential ones and changing corporate culture. Christopher and Peck (2004) also believe that the establishment of supply chain culture and building an agile supply chain can respond to changes quickly, which is a great guide for building a resilient supply chain. They propose four principles for supply chain resilience: (1) supply chain reengineering, (2) collaboration, (3) agility, and (4) SCRM culture. Based on the four principles from Christopher and Peck (2004), Scholten et al. (2014) and Kamalahmadi & Parast (2016) develop knowledge management as fifth capabilities for building supply chain resilience. Falasca et al. (2008) look at the resilience from a different lens and conclude that supply chain resilience can be determined by three crucial factors, which are supply chain density, supply chain complexity, and supply chain node criticality. Jüttner and Maklan (2011) identified four key elements that are mentioned frequently in the literature of supply chain resilience, which are flexibility, velocity, visibility, and collaboration.

The importance of *flexibility* in supply chain resilience has been discussed in much of the relevant literature. As Lee (2004) defined, flexibility is the ability for firms to take different positions when disruptions occur and can react immediately to adapt the important

changes in supply chains. Kleindorfer & Saad (2005) stress the flexibility and mobility of supply chain resource that benefits the resilience effectively. To be more specific, Kamalahmadi and Parast (2016) identify the flexibility from two aspects. On the one hand, the applications of flexibility, such as postponement, flexible transportation system, flexible production facilities as well as dual sourcing, are the ways to improve supply chain resilience (Christopher and Holweg, 2011). On the other hand, the flexibility can be achieved by creating redundancies through supply chains. For example, multi-sourcing, having backup suppliers, maintaining low capacity utilization, and keeping excess inventory to make sure safety stock (Sheffi, 2005). However, Kamalahmadi and Parast (2016) also show that the relative importance or the priority of flexibility and redundancy remains unsolved.

As one of the approaches to establish supply chain resilience, *creating redundancy* is an expensive way to cope with a crisis such as supply shortages and demand surges. Redundancy in the supply chain can be regarded as spare capacity and inventory. In order to create redundancy, the geographical location should be well considered from the global perspective since the supplier who owns the redundancy and close to the disruption in supply chain network may also be influenced (Tukamuhabwa et al., 2015). Kamalahmadi and Parast (2016) conducted a review of the literature on the relationship between flexibility and redundancy and found that both of them plays an important role in responding to disruptions and building supply chain resilience. The discussion on the choice between flexibility and redundancy remains

ongoing and requires supply chain managers to make tradeoff based on the situation.

*Collaboration* involves efficient working with other supply chain entities to achieve win-win results among the areas such as forecasting and risk sharing, according to Pettit, Croxton, and Fiksel (2013). Collaboration also involves information exchange, which would highly impact the outcome of supply chain collaboration. Tukamuhabwa et al. (2015) propose that information exchange can increase supply chain transparency, reduce risk and uncertainty, and sharing the costs of building supply chain resilience and security with supply chain partners. When facing the disruptions, information exchange can contribute to the ensuring of recovery by sharing knowledge, resources, and skills with supply chain entities in downstream and upstream. Thus, the coordinated response can be developed, and the support between each part of the supply chain can be enhanced.

*Agility* can be defined as the supply chain's ability to rapidly respond to unforeseen changes or disruptions by adapting initial stable configuration (e.g. business processes and system) (Christopher and Peck, 2004). Ponis and Koronis (2012) summarized the existing literature and concluded that agility consists of visibility and velocity. Visibility is the ability to see through the entire supply chain, which can be the driver of agility (Kamalahmadi and Parast, 2016). Both Blackhurst et al. (2011) and Datta et al. (2007) indicate the importance of installing true sensors for regular monitoring individual nodes within the supply chain, which will not only help firms find the vulnerability of supply chain, but also benefit to the effective disruption response and recovery,

and thus enhancing resilience. Christopher and Peck (2004) propose three basic approaches to increase supply chain velocity, which are using streamlined process (i.e. doing activities parallelly and e based instead of in series and paper-based), eliminating the non-value-added time, and reducing lead time. By doing so, the supply chain can quickly respond to short term changes, increasing the flexibility and therefore improving resilience.

### ***Supply Chain and Digital Technologies***

The integrating of the digital world and industry processes, which called digital transformation (Kersten et al., 2018), provides both opportunities and challenges to the supply chain. The traditional supply chain can build up and maintain the transportation network between each part with the help of physical facilitates that are geographically dispersed. However, as the development of digital technologies, many of these organizational structures among supply chain are no longer self-sufficient, which contribute greatly to the industry transformation (Büyükoçkan and Göçer, 2018). Ivanov et al., (2019) review the current literature related to digital technologies applications in the supply chain, finding that digitalization technologies having a positive impact on supply chain disruption management and ripple effects. Nevertheless, it also brings new challenges and a mix influence on disruption management and resilience development.

The recent development of Internet Technology provides supply chains with a chance to be more transparent and collaborative, which not only links human beings and machines in a cyber-physical system



context but also provides a chance for the connections between machines (Tjahjono et al., 2017). The application of Industry 4.0 in the supply chain context mainly concentrate on the manufacturing process, where smart machines could exchange data with each other. This application not only achieving the automatic production lines with the collaboration between production machines, transport equipment, and tools but also understanding and solving a certain level of production problem with minimal human resources (Gottlieb, Ivanov and Das, 2019).

Ivanov, Dolgui and Sokolov (2019) support the view that the contributions of Industry 4.0 on supply chain processes are mainly reflected in the improvement of flexible manufacturing and customized production. Since the customized products always require different technologies chains through the production processes, industry 4.0 provides highly customized assembly systems with flexible manufacturing design, utilizing the cyber-physical system, making the new production strategy possible (Ivanov, Dolgui and Sokolov, 2019). Ivanov, Dolgui and Sokolov (2019) think that the topic of a collaborative cyber-physical system is crucial and timely, as most of the new smart factories share their attributes of smart networks. The interoperable global value chain with the use of new innovative digital technologies, shared by many companies from all over the world (Strozzi et al., 2017). Apart from increasing flexibility in manufacturing and product diversity, industry 4.0 also benefits other parts of the supply chain.

Wamba et al. (2017) propose five features of big data analytics, which are volume, variety, velocity, veracity and value. Ivanov et al. (2019) stress the importance of veracity and value since the data

analytics has already shown the real value of big data. There are several kinds of application of big data analytics in the supply chain in recent years. For example, managing inventory and predicting demand to increase revenue, optimizing price model to maximize profits in the retail industry, enhancing quality control in the manufacturing process, improving order picking and inventory management system in the warehouse, and developing the disaster resistance as well as supply chain risk management (Nguyen Levi and Wu, 2018; Ivanov et al., 2019).

To increase the transparency among different stage of the supply chain, some digital technologies have been implemented in Tracking and Tracing systems (T&T system), such as barcodes, radio frequency identification (RFID) tags, and global positioning systems (Gottlieb, Ivanov and Das, 2019). Sheffi (2015) believe that the capture and exchange of real-time information are extremely important for supply chain recovery and collaboration. Similarly, Meyer et al. (2014) generate that detecting the disruptions and the scope in the supply chain is one of the key issues.

Apart from the technologies mentioned above, the application of blockchain in the advanced T&T system also attracts people's eyes in recent years. The transactions on supply chain base on a blockchain will be validated by the consensus of all partners and in supply chain other parties, that is, all parties should be responsible for the information on the chain (Antonopoulos, 2014). Therefore, the visibility and efficiency of the supply chain can be enhanced.

By discussing different strategies of resilience-building among existing literature, Tukamuhabwa et al. (2015) indicate that most of the strategies must get digital technologies support. As the additive manufacturing contributes to the reduction of supply chain layers, the complexity of the supply chain would be reduced, which make the supply chain more flexible and have the potential to mitigate the spread of disruptions (Ivanov et al., 2019). As Tukamuhabwa et al. (2015) shown in their study the importance of proactive strategies rather than reactive ones since it possibly helps the supply chain maintain normal operation when disruption happened. However, proactive strategies might be expensive as disruptions may not happen, and measures such as risk mitigation inventory and capacity reservations are always applied in the supply chain to prevent disruptions. Therefore, blockchain technologies could help reduce these inefficiencies by recording activities and the recovery data of the contingency plan (Ivanov et al., 2019). Meanwhile, Industry 4.0 and additive can also help reduce the risk mitigations inventory and other structural redundancy by using the manufacturing flexibility.

### ***Summary***

In summary, supply chain resilience can be regarded as a key component of SCRM and provides a new concept for SCRM development. Compared with SCRM, supply chain resilience pays more attention to the ability of recovery and seek better stability than origin condition. Many elements could help to build up supply chain resilience. The most commonly mentioned elements are flexibility, redundancy,

collaboration, and agility. When improving these elements, it not only contributes to resilience but also has impacts on each other.

As the development of advanced digital technologies such as big data analysis, smart factory, 3D printing, and RFID technologies, the supply chain would be increased with the help of these technologies and mitigate the influences after disruptions occurred. Although the literature shows that digital technologies could support the resilience building, there still have a gap between the specific applications of technologies when facing the disruption and how they help supply chain reacting as well as improving resilience. Therefore, this study attempts to fill this research gap.

### **3. Methodology**

The study also follows the qualitative research method to seek a complex and detailed understanding of the research question. According to Saunders et al. (2019), a qualitative research method always generated by secondary data, content analysis or observation, which are all non-numerical. Besides, Creswell and Poth (2016) indicate that when the quantitative measures and statistical analyses do not fit the research question, it is a better choice to use the qualitative method. As this study aiming to understand how digital technologies help the supply chain respond disruptions, it seems the qualitative research approach would be the appropriate method to achieve the dissertation's aim and objectives. Since this study is library-based research, the collection of secondary materials is required to follow some criteria to address the research objectives.

Specifically, this study searches relevant sources such as journals, books, magazine articles through Science Direct digital library, Business Source Complete database, Google Scholar, and university library where can provide an authoritative and reliable academic source. The searching key-word is the terms with respect of research topic such as “supply chain resilience”, “supply chain disruptions management”, “supply chain risk management”, “digital technologies in the supply chain”, “supply chain COVID-19”, and the synonyms. The results of searching “digital technologies” and "supply chain resilience" are limited. Therefore, specific technologies such as "big data", "blockchain" are also served as the searching keywords. The time range for searching source focuses on the past decade to ensure the timeliness and results of the article are appropriate to the study.

Meanwhile, since the world is still struggling with coronavirus pandemic there were only a few articles available from the library as the much relevant journals still have not published. To make up for the shortage of literature, Google search engine was used to search for online news, business reports, and conferences that refer to the application of digital technologies on supply chain under the circumstance of coronavirus pandemic. The study also modifies the output setting of Google searching results to limit the post time starting from 2020. Although these kinds of sources are not necessarily reliable, this study tries to collect data and views from multiple sources to increase the overall validity of the data. Hence, the study only references the sources posted by heavily edited websites, media reports, and business official website, for example, The World Economic Forum, BBC, Forbes, and

China Daily. With the data collected, the available secondary data are gathered and analyzed by choosing the most relevant, reliable pieces of text. Information related to the digital technologies' applications is compared to find the similarities and differences on how they contribute to increasing supply chain resilience, which help the study to develop a compelling discussion and provide more insights for the construction of supply chain resilience under disruptions. The data collection followed the ethical guidelines carefully.

#### **4. Findings and Discussions**

##### ***The Background of Supply Chains under COVID-19 Outbreak***

After a series of cases of pneumonia appearing in Wuhan, China in January 2020, a novel coronavirus was discovered by Chinese health authorities and was named COVID-19. Due to being highly contagious, COVID-19 soon outbreak rapidly from a specific city to the whole world, which was declared by WHO as a pandemic on March 11<sup>th</sup> 2020 (Chamola et al., 2020). The main mode of transmission of COVID-19 is through close contact with infected persons, or the droplets when patients are sneezing and coughing or the droplets from saliva or nasal cavity (Lamprou, 2020). Therefore, various countries started imposing travel restrictions to avoid the transmission of COVID-19. The pandemic leads to the policy establishment related to quarantine, keeping social distance, travel ban, nationwide lockdown, and other restriction of the citizens' movement. As a result, supply chains have been significantly disrupted. Distribution centres become inaccessible, logistics service was

interrupted due to the limited movement and lockdown, and factories were shut down because of the labour shortage (Kumar et al., 2020).

Hence, the impact of COVID-19 coincides with the low-frequency high impact event, which causes extraordinary emergencies and a well-recognized ripple effect on supply chains (Ivanov and Das, 2020). For example, a survey from ISM proposing that their supplies in China are operating at 50% capacity with 56% of normal staff, which lead to 57% of participants extending the final products lead time and cause adverse influence on revenue. The production and distribution activities at the downstream of supply chains are interrupted and have to be stopped due to the COVID-19 outbreak. On the other hand, the unprecedented global public event breaks the demand and supply balance of some supply chains, especially the medical supply chain. Kumar et al. (2020) identify twelve challenges caused by COVID-19 outbreak, faced by supply chains and retail sectors, including lacking supply chain flexibility, communications issues, supply and demand imbalance, and workforce shortage. These challenges reveal the ability of the supply chain to be resilient when faced with disruptions and tests the efficiency of supply chain response and recovery, which still needs some improvement. In this case, it has accelerated the emergence and large scale application of digital technologies such as the Internet of Things, RFID, robotics, big data analytics, and 3D printing. These technologies are not only for epidemic prevention and control but also help the supply chain react rapidly to maintain or recover the operation of the supply chain.



## ***Big Data Analytics***

Big data analytics can be regarded as a foundation of many digital technologies, that means, it supports lots of applications such as drones, robotics, and IoT. As Kamalahmadi and Parast (2016) showed that flexibility of supply chain resilience is always closely related to the velocity of supply chain agility. Jüttner and Maklan (2011) believed that velocity enhances flexibility by increasing the adaptability of supply chains. JD is a Chinese e-commerce giant that owns a smart supply chain that contributed a lot to the supply chain recovery after COVID-19 outbreak. During coronavirus pandemic, big data analytics played an important role in building supply chain resilience through the improvement of efficiency on their sorting and delivery process. JD Logistics develops its intelligent schedule system to optimize the sorting process and make sure the product will be processed in the warehouse that is closest to the customer. When sorting in the warehouse, JD Logistics use the automated guided vehicles (AGVs) to handle parcels parallelly rather than using pure manpower (JD, 2020a). Staffs are no longer needed to walk around the warehouse to pick up the items. Instead, the target goods shelf will be transported by guide vehicle directly to the staffs, which significantly improve the accuracy and efficiency of the sorting process and building supply chain agility through improve velocity. Big data analytics can not only be applied in the warehousing but also for transport processes. By analyzing the dynamic real-time big data, JD Logistics can provide the appropriate transport route plan and delivery station as well as assign the dispatched task to the couriers. Thus, the nodes among the transport process are

connected to be a network that reduces the waste of non-value-added time, workforce, and other resources. After the road closure in Wuhan, JD Logistics activated the contingency plan in minutes by simulating and forecast the real conditions through the big data analytics model. The transport routes for different distinctions are processed rapidly: ensuring the emergency supplies arrive in Wuhan as soon as possible, while the parcels with other distinctions are detoured through other cities. The adverse effects caused by road closure are therefore minimized, which benefit to the flexibility of the supply chain. Big data also contribute to the information exchange within the supply chain by integrating the real-time products inventory information from different e-commerce organisations. Hence, big data analytics could strengthen the information flow within the supply chain, increasing the visibility from the customers perspective.

### ***Additive Manufacturing (3D Printing)***

The explosion demand for medical supplies caused by COVID-19 pandemic gives additive manufacturing technology (3D printing) a huge advantage. 3D printing showing the great value for responding emergency, providing solutions for the demand imbalance result from the disruptions in the supply chain, especially toward the healthcare industry. The contribution of 3D printing on building the emergency supply chain is mainly concentrated on flexibility. As the worldwide health care supply chains are suffering the global disruptions and the emerging demand, 3D printing shows high flexibility on producing necessary medical components and devices for a range of essential healthcare services on demand. For example, an Italian engineering

company 'Isinnova' has designed a 3D printable mask connector (or breathing valves) especially for the continuous positive airways pressure machine that can be the substitutes for the ventilator machine (Choong et al., 2020), which fill the gap in the supply of ventilator. Since the inputted digital files are CAD files, the output products can be quickly revised with less time and cost (Javaid et al., 2020). In addition, 3D printing also takes advantages of rapid manufacturing on nasopharyngeal swabs production to keep up with the demand of the coronavirus test (Choong et al., 2020). These applications not only increase the supply chain velocity by reduce leading time, but also make the emergency supply chain more flexible to response the disruption. In the meantime, according to Blackhurst et al. (2011), the redundancy (or the emergency inventory) should not only consider where it placed but also what form it will be held. The technology 3D printing enables the prototyping of the products rapidly, reducing the nodes in the supply chain, and shorten the length of the supply chain. Therefore, it seems that 3D printing can be served as a form of emergency inventory to help the supply chain responding the disruptions timely. With the collaboration of IoT, 3D printing enables the design shared and modified online throughout the world. Any individual who owns a 3D printer can be a part of the supply chain to produce the essential personal protective equipment (PPE). Larrañeta et al. (2020) regarded this as the “democratization” of 3D printing technology that leads to an unprecedented situation during the COVID-19 crisis. 3D printing engineers provides free support and access of PPE designs on the Internet to help to solve the shortage of health care equipment such as face shields and hands-free door openers, which

breaks the original supply and demand pattern of the supply chain by placing the responsibility of producer on the shoulders of the consumer. At the same time, the companies and organizations equipped with 3D printing equipment also transform their manufacturing to produce items to fight against COVID-19. For example, Airbus in Spain transformed their aerospace to the medical equipment product line by producing the healthcare personnel using more than twenty 3D printers and dispatch products to the nearby hospitals (Airbus, 2020), which shows the strong flexibility of manufacturing process in its supply chain. In other examples, China Aerospace Science and Industry Corporation also use additive manufacturing technology to aid to Italy by donating breathing valves. The inherent flexibility of additive manufacturing enhances the strain ability of supply chains and showing great social significance when traditional manufacturing cannot respond in time or is interrupted in major natural disasters.

### ***Advanced Tracking & Tracing Technologies***

In order to increase transparency and visibility, the Internet of Things (IoT) can be implemented to build the advanced T&T system of supply chains. By gathering the data transmitted by sensors installed at different supply chain nodes, IoT connects the networked devices through the Internet, be aware of the environment intuitively, and thus acquire the products information such as location and status. Manavalan and Manavalan (2019) regard the IoT as an intuitive, robust, and measurable technology that enables the digital transformation of the connected world through Internet and deliver the real-time information, which makes the connected devices easy to understand each other so that

greatly improve the visibility of supply chains. During the COVID-19 outbreak, IoT using drones were used for surveillance of the mask-wearing and helped to track the patients to ensure the quarantine is followed. The IoT technology applied in logistics activities of the supply chain can be regarded as the smart logistics, which is of great benefit to the agility. Smart logistics serving as a striking technology during the outbreak in two areas: the unmanned dispatching and fully automatic warehouse, which both contribute to the integrity of supply chains. In China, JD logistics using self-driving vehicles to dispatches medical sources for COVID-19 designated hospital and the quarantined communities, dealing with more than 50% orders on the first day (JD, 2020b). Through the remote deployment and operation from the development team in Beijing, the delivery vehicle will be disinfected and put in parcels by courier, and then complete the automatic driving of complex scenarios, including vehicle-pedestrian mixed traffic and traffic light intersections. With the self-driving vehicle connected to IoT, the track information can be controlled by managers in real-time. Hence, unmanned delivery contributes to both agility and flexibility of the supply chain logistics through the quick response in the face of different situations. To address the explosion of consumer demand in some supply chains during COVID-19 crisis, some companies apply IoT along with other digital technologies to build an intelligent warehouse. While it improves the efficiency, the operation of the warehouse become more standardized, and the traceability of warehouse items could be strengthened. For example, JD Logistics has developed IoT plastic bags (used for collecting multiple parcels in one place) to increase the sorting

accuracy up to 99.99% and contribute to the sorting process five times as efficient as before, which shorten the waste on none value-added time to improve the velocity of the supply chain (JD, 2020a).

In the medical supply chain, RFID is used to track and authenticate plasma, vaccine, PPE, and test kits during COVID-19 crisis. RFID tags provide tracking service for a blood centre in the US to achieve the real-time and whole-process visibility of convalescent plasma that is taken from patients recovering from COVID-19 and having the antibodies (Kaplan, 2020). When RFID and blockchain technology are utilized collaboratively, transparency, visibility as well as the information exchange of the medical supply chain can be promoted and strengthened again. COVID-19 test kits are tagged individually while PPE products are tagged at a box or carton level for most of the time (Kaplan, 2020), to ensure items are trackable as far as possible. RFID tags can provide the origin and price of the products for the supply chain downstream and upload the information to the blockchain. In terms of the IoT application at the end of supply chains, the electronic shelf label is worth developing to monitor the price and conduct stocktaking for necessities and healthcare products in retail sectors. With the information recorded on IoT, managers can adjust the price automatically at the same time, to maintain the consistency of online and offline products information as well as prevent price bidding up.

It is evident from the discussions above that the digital technologies help supply chain to respond to the disruption caused by COVID-19 outbreak and build supply chain resilience.

## 5. Conclusions

Supply chain resilience serving as a crucial component of supply chain risk management plays a vital role in managing disruption risks by helping supply chain entities responding, recovering, and even improving to a better condition after the disruptions. Although the resilient supply chain is not the lowest cost one, it still necessary for the firms on the supply chain to attach importance. To fully answer the research question, digital technologies such as big data analytics, additive manufacturing, and IoT could support the building of supply chain resilience by positively affecting four elements of resilience development, namely flexibility, redundancy, collaboration, and agility. Based on the study findings, flexibility is the element to which digital technologies contribute most, which can be increased through real-time optimizing, flexible manufacturing (e.g., transforming production lines), and the flexible transportation when a certain part of the supply chain being disrupted. Flexibility would also be affected by redundancy which could not be supported much by digital technologies and is more likely to be decided by business strategies. Although redundancy increases the cost, it still casts light for its performance in emergency and needs firms' tradeoffs when investing in supply chain resilience. Collaboration interacts visibility of supply chains since the monitor on the supply chain nodes could contribute to the information exchange within supply chain partners. Sensors provide real-time information from each process and achieve the ability to see through the supply chain, revealing the vulnerability for managers. With the help of digital technologies, the information can be spread throughout the entire supply chain,



transparentizing and enhancing information flow of the supply chain. Supply chain partners can therefore share resources to strengthen collaboration when facing disruptions.

The construction of supply chain resilience requires multiple perspectives as interactions are not only existing between resilience elements but also digital technologies. IoT provides data resource for big data analytics through gathering information from sensors installed on the supply chain nodes, such as RFID tags and the electronic shelf label. As a result, big data analytics can optimize processes, match the supply and demand, integrate the supply information, and therefore increase resilience. Industry 4.0 serving as a collection of digital technologies, not only enables information exchange between manufacturers and suppliers but also providing solutions for reengineering the supply chain in demand when emergencies occur. As an emerging manufacturing technology, 3D printing plays a vital role in implementing the plan from IoT system, making it possible to produce at any time any place of the supply chain. To review these applications during the COVID-19 outbreak, some technologies such as additive manufacturing and RFID tags are prominent in a certain supply chain process, while some technologies such as big data analytics and IoT support the continuous operation of the entire supply chain. the impact of digital technology is multifaceted, the challenges or the adverse influence raise from the application of digital technologies can be the direction for future research.

## References

1. Airbus, 2020. Airbus to produce 3D-printed hospital visors in fight against COVID-19 [online]. Available from: <https://www.airbus.com/newsroom/press-releases/en/2020/04/airbus-to-produce-3dprinted-hospital-visors-in-fight-against-covid19.html>
2. Antonopoulos, A. (2014). Bitcoin security model: trust by computation. O'Reilly Radar. Retrieved October, 4, 2015.
3. Baryannis, G., Validi, S., Dani, S. and Antoniou, G., (2019). Supply chain risk management and artificial intelligence: state of the art and future research directions. *International Journal of Production Research*, 57(7), 2179-2202.
4. Behzadi, G., O'Sullivan, M.J., Olsen, T.L. and Zhang, A., (2018). Agribusiness supply chain risk management: A review of quantitative decision models. *Omega*, 79, 21-42.
5. Blackhurst, J., Dunn, K.S. and Craighead, C.W., (2011). An empirically derived framework of global supply resiliency. *Journal of business logistics*, 32(4), 374-391.
6. Bragazzi, N. L. (2020). Digital technologies-enabled smart manufacturing and industry 4.0 in the post-COVID-19 era: lessons learnt from a pandemic, *Int. J. Environ. Res. Public Health* 2020, 17(13), 4785; <https://doi.org/10.3390/ijerph17134785>
7. Büyüközkan, G. and Göçer, F., (2018). Digital Supply Chain: Literature review and a proposed framework for future research. *Computers in Industry*, 97, 157-177.

8. Chamola, V., Hassija, V., Gupta, V., & Guizani, M. (2020). A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing its Impact. *IEEE Access*, 8, 90225-90265.
9. Choong, Y. Y. C., Tan, H. W., Patel, D. C., Choong, W. T. N., Chen, C. H., Low, H. Y., ... & Chua, C. K. (2020). The global rise of 3D printing during the COVID-19 pandemic. *Nature Reviews Materials*, 5(9), 637-639.
10. Christopher, M., & Peck, H. (2004). Building the resilient supply chain, *International Journal of Logistics Management*, 15 (2), 1-13
11. Colicchia, C. and Strozzi, F. (2012), Supply chain risk management: a new methodology for a systematic literature review, *Supply Chain Management*, 17 (4), 403-418.
12. Craighead, C.W., Blackhurst, J., Rungtusanatham, M.J. and Handfield, R.B., (2007). The severity of supply chain disruptions: design characteristics and mitigation capabilities. *Decision Sciences*, 38(1), pp.131-156.
13. Creswell, J.W. and Poth, C.N., (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
14. Datta, P.P., Christopher, M. and Allen, P., 2007. Agent-based modelling of complex production/distribution systems to improve resilience. *International Journal of Logistics Research and Applications*, 10(3), pp.187-203.

15. Falasca, M., Zobel, C. W., & Cook, D. (2008). A decision support framework to assess supply chain resilience. In Proceedings of the 5th International ISCRAM Conference, 596-605
16. Fosso Wamba, S., Ngai, E.W.T., Riggins, F. and Akter, S. (2017), "Guest editorial", International Journal of Operations & Production Management, 37 (1), 2-9.
17. Gottlieb, S., Ivanov, D., & Das, A. (2019). Case studies of the digital technology impacts on supply chain disruption risk management. In Logistik im Wandel der Zeit–Von der Produktionssteuerung zu vernetzten Supply Chains (pp. 23-52). Springer Gabler, Wiesbaden.
18. Ivanov, D. and Das, A., (2020). Coronavirus (COVID-19/SARS-CoV-2) and supply chain resilience: A research note. International Journal of Integrated Supply Management, 13(1), 90-102.
19. Ivanov, D., Dolgui, A. and Sokolov, B., 2019. The impact of digital technology and Industry 4.0 on the ripple effect and supply chain risk analytics. International Journal of Production Research, 57(3), pp.829-846.
20. JD, 2020a. In-depth Report: When Big Data and IoT Meet JD's Logistics [online]. Available from: <https://jdcorporateblog.com/in-depth-report-when-big-data-and-iot-meet-jds-logistics/>
21. JD, 2020b. JD's Robot Delivers First Order in Wuhan in Coronavirus Aid Support [online]. Available from: <https://jdcorporateblog.com/jds-robot-delivers-first-order-in-wuhan-in-coronavirus-aid-support/>

22. Jüttner, U., (2005). Supply Chain Risk Management: Understanding the Business Requirements from a Practitioner Perspective. *The International Journal of Logistics Management* 16(1), 120–141.
23. Kamalahmadi, M., & Parast, M. M. (2016). A review of the literature on the principles of enterprise and supply chain resilience: Major findings and directions for future research. *International Journal of Production Economics*, 171, 116-133.
24. Kaplan, D.A., 2020. 3 applications for RFID in the fight against COVID 19 [online]. Available from: <https://www.supplychaindive.com/news/coronavirus-rfid-sensor-tracking-hospital-supplychain/581066/>
25. Kersten, W., (2018). Geschäftsmodelle in der Industrie 4.0. *Handbuch Produktions-und Logistikmanagement in Wertschöpfungsnetzwerken*, 1286-1303.
26. Kleindorfer, P.R. and Saad, G.H., (2005). Managing disruption risks in supply chains. *Production and operations management*, 14(1), 53-68.
27. Kumar, M. S., Raut, R. D., Narwane, V. S., & Narkhede, B. E. (2020). Applications of industry 4.0 to overcome the COVID-19 operational challenges. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(5), 1283-1289.
28. Lamprou, D. A. (2020). Emerging technologies for diagnostics and drug delivery in the fight against COVID-19 and other pandemics. *Expert review of medical devices*, 1-6.
29. Larrañeta, E., Dominguez-Robles, J., & Lamprou, D. A. (2020). Additive Manufacturing Can Assist in the Fight Against COVID-19

- and Other Pandemics and Impact on the Global Supply Chain. *3D Printing and Additive Manufacturing*, 7 (3), 100-103.
30. Lee, H.L., (2004). The triple-A supply chain. *Harvard business review*, 82(10), 102-113.
31. Melnyk, S.A., Closs, D.J., Griffis, S.E., Zobel, C.W. and Macdonald, J.R., (2014). Understanding supply chain resilience. *Supply Chain Management Review*, 18(1), 34-41
32. Mensah, P., & Merkuryev, Y. (2014). Developing a resilient supply chain. *Procedia-Social and Behavioral Sciences*, 110, 309-319.
33. Meyer, G., Buijs, P., B. Szirbik, N. and (Hans) Wortmann, J.C. (2014), Intelligent products for enhancing the utilization of tracking technology in transportation, *International Journal of Operations & Production Management*, 34 (4), 422-446
34. Nguyen, T., Li, Z.H.O.U., Spiegler, V., Ieromonachou, P. and Lin, Y., (2018). Big data analytics in supply chain management: A state-of-the-art literature review. *Computers & Operations Research*, 98, 254-264
35. Pettit, Timothy J., K. Croxton, and J. Fiksel. (2013). Ensuring Supply Chain Resilience: Development and Implementation of an Assessment Tool. *Journal of Business Logistics* 34 (1), 46–76.
36. Ponis, S.T. and Koronis, E., (2012). Supply Chain Resilience? Definition of concept and its formative elements. *The Journal of Applied Business Research*, 28(5), 921-935.
37. Ponomarov, S.Y. and Holcomb, M.C. (2009), Understanding the concept of supply chain resilience, *The International Journal of Logistics Management*, 20 (1), 124-143.

38. Saunders, M.N.K., Lewis, P. and Thornhill, A., (2019). *Research Methods for Business Students* (8th edn.) Harlow.
39. Sheffi, Y., & Rice Jr, J. B. (2005). A supply chain view of the resilient enterprise. *MIT Sloan management review*, 47(1), 41.
40. Strozzi, F., Colicchia, C., Creazza, A. and Noè, C., (2017). Literature review on the 'Smart Factory' concept using bibliometric tools. *International Journal of Production Research*, 55(22), 6572-6591.
41. Tjahjono, B., Esplugues, C., Ares, E. and Pelaez, G., (2017). What does industry 4.0 mean to supply chain?. *Procedia Manufacturing*, 13, 1175-1182.
42. Tukamuhabwa, B.R., Stevenson, M., Busby, J. and Zorzini, M., 2015. Supply chain resilience: definition, review and theoretical foundations for further study. *International Journal of Production Research*, 53(18), pp.5592-5623.

# LOGISTICS SERVICE STANDARDIZATION

**PhD. Vu Tuan Anh**

*National Economics University*

## **Abstract**

*The cost of logistics service is high in Vietnam, and which accounted for about 25% of Vietnam's GDP. Standardization in logistics services reduce transaction cost, switching cost, opportunity cost, and promote international trade. Moreover, logistics service standardization reduces operational time and leverage productivity and quality of service, and hence enhances customer satisfaction. In addition to leverage the competitive advantage, logistics service standardization ensures the safeness and precision in healthcare service, and therefore, it minimizes the risk in case of a pandemic.*

**Keywords:** Logistics service standardization; pandemic; transaction cost; switching cost; opportunity cost.

## **1. Introduction**

In the year 2020, the world has been facing a global challenge due to the deadly transmitted disease, the COVID-19. This pandemic has been ceasing more than a million lives over the world, created a chaotic society, and pulled down the economic indicators. Three key global freight services: sea freight, road freight, air freight, and rail freight have experienced difficult times. Especially the air freight and sea freight have dropped their volumes in the past ten months. Logistics firms' operations



have been disrupted by the lockdown and social distancing. Different actions have been taken to control the spreading of the disease, such as new safety protocols; alternative modes of transport; adapting service offerings to current demand, and safety protocols. Many countries in the world have been surprised by the way the Vietnamese government effectively controlled the spread of the COVID-19 in society. Successful control of the spread has mitigated the impact of the pandemic on the economy and minimized the death toll to the minimum.

For the last ten years, the export values of Vietnam have been increasingly grown by over 8%. The export value reached 194,7 billion USD in 2019 and China and the US have been the main markets. The COVID-19 globally stroke the economics of the world, causing many layoffs, bankruptcy, and halt production. In the first five months of 2020, the export value of Vietnam had been dropped down due to the cancellation of contracts or orders from partners over the world. However, Vietnam has shown the world that the country can maintain a stable economy and working environment. The export value of Vietnam for the last three quarters of 2020 has been grown impressively. Export value to the US has increased by 13.9% in comparison to the same period of 2019 (Custom Office, 2020).

Despite the success story, the cost of logistics service in Vietnam has been considering very high that tops up the cost of products or services to a higher price. Under the impact of the pandemic, the cost of logistics service has eventually risen higher. Poorly designed road networks, road conditions, discrete services, and lack of standardized

equipment, infrastructure, and processes add up to the cost of logistics services.

This paper is going to discuss the impact of logistics service standardization on the logistics cost, the beneficiary of import and export countries, and the mitigation of disease spread.

## **2. Standardization and its impacts on the cost of logistics services**

Wang & Hou (2007) found that standardization promotes foreign trade, market integration, and technological advancement and therefore leverage economic growth. More specifically, standardization helps to reduce transaction costs and increase the interchangeability of parts and therefore reduce the cost for replacement. The advantage of standardization has been well proved by economists, however, the level of standardization is still varied from country to country. There is a positive correlation between economic indicators and the level of standardization. The Logistics services standardization is a bridge to connect production and sales, supply and demand, making enterprise investment and production. Logistics service standardization improves the efficiency of firms through standardized processes and standardized equipment that make operations optimal.

The cost of logistics services in Vietnam is very high in comparison with other countries in the Asia region and other developed countries. The cost of logistics service is accounted for about 25% of Vietnam's GDP (Blancas L et al. 2014), which is fallen into the average amount of developing countries have been paid for the logistics cost

(Wang et al., 2018). This amount is about 3 times higher than the logistics cost of the US and also higher than the cost of most countries in the region. According to VITAS (Vietnam Textile and Apparel Association), the cost of logistics service for textile is about 6% higher than Thailand and 12% higher than Malaysia, and about 7% higher than China. The higher cost in logistics service has eliminated the labor competitive advantage. About 60% of the logistics service cost is accounted for the transportation cost, which is about 1.5 times higher than the transportation cost in the US. Besides a huge BOT cost of using road infrastructure, the cost of using unstandardized equipment and processes raises the cost of logistics services.

Most of the loading or unloading works in logistics service in Vietnam are labor-intensive. Workers have been provided unsuitable equipment or used conventional tools or procedures that are not suitably designed for their jobs. So their works are required a longer time, more effort, and more trials and errors to complete. Lau and Su (2016) pointed out that logistics service standardization is a key to lower logistics costs. Specifically, in the case of China, Xiongyuan W. and Jianhua T. (2019) concluded that the specialization of business logistics service standardization had enabled key enterprises to improve loading and unloading efficiency by more than three times; to reduce cargo damage rates by 20%–70%; to reduce overall logistics costs by 10% on average; to increase average logistics efficiency by 3.8%.

The average cost for logistics services in Asia is about 16% of GDP, if the cost of logistics services in Vietnam can be reduced to this average level, then Vietnam would save between 13-23 billion USD

annually. Furthermore, standardization helps speed up the application of advanced technology systematically at a lower cost.

### 3. Logistics Services Standardization and its impacts on the import and export countries

Standards and regulations top up the cost of products or services for entering a new foreign market. The domestic demands and supply function of the exporting countries (left side) and the importing countries (right side) are illustrated in the below figure. The exporting countries can produce products or services at a lower cost than the importing countries due to many factors. If we assume materials, labor cost, know-how, and public regulation are all the same between import and export countries. Then standardization is the main factor that creates a higher cost for importing countries. When the trading takes place between the two import and export countries, then both countries would benefit from this transaction. The area of OCB and OAB has represented the social benefit of the exporting country and importing country respectively.

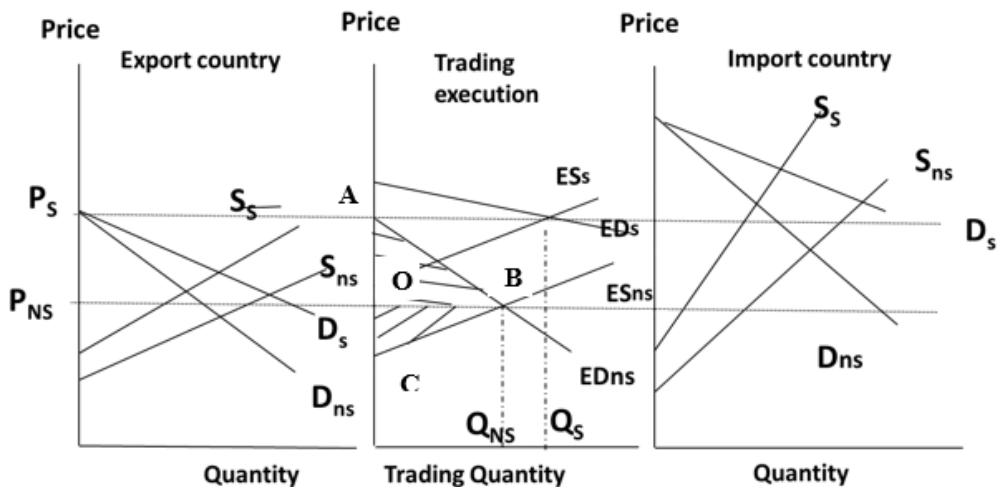


Figure 1. Benefit of standardization in trading Source:(APEC, 2010)

<i>P<sub>s</sub></i> :the price	<i>P<sub>ns</sub></i> :the equilibrium world price
<i>S<sub>s</sub></i> :the supply function	<i>S<sub>ns</sub></i> : the supply function
<i>D<sub>s</sub></i> :the demand function	<i>D<sub>ns</sub></i> : the demand function
<i>ES<sub>s</sub></i> :the supply function	<i>ES<sub>ns</sub></i> : the export supply function
<i>ED<sub>s</sub></i> :the demand function	<i>ED<sub>ns</sub></i> : the import demand function
<i>Q<sub>s</sub></i> : Quantity of product traded	<i>Q<sub>ns</sub></i> : Quantity

In the last decade, Vietnam has been well-known in the world for importing and exporting goods and services to many countries and regions. The value of importing and exporting goods to and from the US in 2019 reached above 500 billion USD. The importing and exporting activities encourage logistics firms to upgrade their technologies and standardize processes and equipment to reduce the unloading time and uploading time to 60% of the past operation time. Hence firms can enjoy more profits from cost saving.

#### **4. Logistics services standardization in healthcare**

Logistics service in the healthcare industry requires a very high level of safety, efficiency, and precision. Standardization is the key to keep the logistics service run smoothly and create a high level of coordination between multiple parties (doctors, nurses, technicians, pharmacists, medical equipment manufacturers, medical consumables manufacturers, etc.). In the case of COVID-19 pandemic, the standardization of logistics service is highly emphasized to minimize and eliminate the spreading. Not only, standardized processes help to reduce the time to operate and mitigate human errors, but also ensure the integrity of information passing and shorten tracking processes.

Standardized processes leverage the automation and robustness in a firm and hence reduce the chance for certain diseases transmitting

through human contacts. The logistics service standardization in healthcare service is essential to ensure all medical products or equipment are maintained at the right conditions and ready to be usable at any time.

## **5. Concluding remarks**

The cost of logistics service in Vietnam is on the top list of the most expensive country in the region. Standardization for processes, equipment, and tools is the key to lower the logistics cost and leverage the service capacity. With the notion of a digitalized economy, manufacturing and service companies need to standardize their operations to optimize their costs while maintaining the quality of services. Logistics service standardization reduces labor-intensive and human contact, which helps to mitigate the risk of exposure to potential diseases. In the macroeconomics view, standardization helps to facilitate international trade and create social benefits for both import and export countries. In conclusion, Vietnam should push up the level of standardization in all areas, especially the logistics service.

## **References**

1. Apec, 2010. Standardization: Fundamentals, Impact, and Business Strategy, Korean Agency for Technology and Standards.
2. Blancas, L. et al, 2014. Efficient Logistics - A Key to Vietnam's Competitiveness. The World Bank Publication.
3. Custom Office, 2020. [Hải Quan Việt Nam - General Department of Vietnam Customs](#)

4. JIAO, R.; ZHAO, G.; WANG, F. Logistics Service Standardization, Enterprise Operation Efficiency, and Economic Effects. *Transformations in Business and Economics*, [s.l.], v. 18, n.3, p. 168–190, 2019. DOI <http://www.transformations.khf.vu.lt/34>.
5. Lau and Su, 2016. China's e-commerce soft spot: logistics. *McKinsey Quarterly* (2), 24–25.
6. Xiongyuan Wang & Jianhua Tan (2019) Does logistics service standardization matter for corporate investment?, *China Journal of Accounting Studies*, 7:4, 504-523, DOI: [10.1080/21697213.2019.1745998](https://doi.org/10.1080/21697213.2019.1745998)

# THE IMPACT OF COVID-19 ON DANANG LOGISTICS AND SOME POLICY RESPONSES

**MSc. Le Duc Tho**

*Da Nang Vocational Training College, Viet Nam*

## **Abstract**

*The article uses the method of collecting secondary documents to study the current situation of the Danang Logistics industry in the context of the impact of the COVID-19 pandemic. Da Nang is a city with great potential in developing Logistics services, but due to the influence of COVID-19, production and business activities of Logistics services have many disadvantages. The COVID-19 pandemic forced many factories to close, reducing goods in circulation, and 15-20% of logistics enterprises to reduce the revenue of imports and exports from other countries. Thereby, the article proposes a number of solutions to cope with COVID-19 for logistics operations in Da Nang today.*

**Keywords:** COVID-19; Services of Logistics; logistics in Da Nang.

## **1. Introduction**

The COVID-19 epidemic caused by a new strain of the corona virus (SARS-CoV2) has seriously affected the tourism industry and is



likely to become a drag on the global economy. The COVID-19 epidemic has had impacts in all sectors from manufacturing, commerce, transportation, tourism, to healthcare and education,... Logistics is all intermediate activities, including packaging, packaging, warehousing, storage, goods rotation, customs clearance ... to deliver products and goods from suppliers to consumers optimally, so be sure to belong to the first affected group. The COVID-19 epidemic is a real shock to the socio-economic situation of Vietnam in general and the Logistics service sector of Da Nang city in particular. Therefore, studying the impacts of the COVID-19 epidemic on Danang Logistics industry and finding new directions for the City Logistics industry is essential.

## **2. The impact of the COVID-19 epidemic on the danang logistics industry**

COVID-19 is an infectious pandemic caused by the SARS-CoV-2 virus that is affecting more than 210 other countries and territories (as of 7 p.m. on April 29, 2020), beginning to break out in September. 12 years 2019 in Wuhan city in Hubei province in central China, when a group of people suffer from unexplained pneumonia, has been in major contact with traders working at the Hoa Nam seafood market, which sells live animals and is believed to be the first outbreak site. On February 11, 2020, the International Committee for Virus Classification (ICTV) officially named this new strain of corona virus as SARS-CoV-2. On the night of March 11, 2020 at Vietnam time, the World Health Organization (WHO) officially declared the COVID-19 epidemic a global epidemic. Through this data table we see that the rate of infection spreads very

quickly on a large scale, the death rate is high, this is not the final number while the epidemic is still complicated.

**Table 1. Data of the impact of COVID-19** (as of 7:00, 19-8- 2020)

<b>Infected countries and territories Covid 19</b>	<b>Number of cases (people)</b>	<b>Death case (people)</b>	<b>Recovery case (people)</b>	<b>Percentage of cases (people)</b>	<b>The rate of death (people)</b>	<b>Rate of recovery cases (people)</b>
213	24,328,980	829,540	16,870,724	29%	3,5%	67,5%

*Source: statistics of the World Health Organization (WHO)*

In Vietnam, from January 23 to August 27, 2020, 1,034 cases of COVID-19 were recorded, of which 29 were fatal, 632 were recovered. Up to the present time, Da Nang has 391 COVID-19 cases, of which 174 have been recovered and 25 deaths. Da Nang is an epidemic outbreak back from the beginning of July 2020 with an increasing number of cases. This has affected the socio-economic development of the city in general and the Logistics service sector in particular.

Logistics is an important service sector in the overall structure of the national economy, playing the role of supporting, connecting and promoting socio-economic development of the country as well as each locality, contributing to competitiveness of the economy. Danang is a city with great potential for the development of Logistics services, Resolution 43-NQ/TW of the Politburo on building and developing Da Nang city to 2030, with a vision to 2045 clearly states Da Nang's economic development mission and solution is "to become a marine

economic hub, forming a supply chain of logistics services in the Central of Vietnam with a central role in Danang” [1]. However, the COVID-19 translation has a strong impact on the global supply chain, causing the logistics industry to suffer quite heavily. According to Da Nang's Department of Statistics, the economy of the city is facing challenges, because key economic sectors, the main contributor to growth, are strongly affected by the COVID-19 epidemic.

### ***For import and export activities***

According to the Report of the People's Committee of Da Nang City [5], the city's import and export activities in the first quarter of 2020 were significantly influenced by the COVID-19 translation; strengthening disease control from countries and territories that are major trading partners of the city (Japan, Korea, China, EU ...) makes demand for goods in markets decrease, the import of raw materials and auxiliary materials for production is facing difficulties; besides, many manufacturing enterprises have difficulty due to lack of labor, some enterprises with Chinese specialists who have returned home have not come back, causing difficulties in operating production,... Export turnover of goods in March 2020 is estimated at 110 million USD, that of the first quarter of 2020 is estimated at 332.9 million USD, down 6.5% as compared to the same period in 2019 (the plan is to increase 7-8%). Import turnover in March 2020 is estimated at 85.9 million USD, that of the first quarter of 2020 is estimated at 256.7 million USD, down 14.7% over the same period in 2019. The import of raw materials from China also fell sharply (by air by 50-60%, by sea by 20-40% over the same period); cargo through Da Nang Port is expected to decrease by 30%.

### ***For transport activities***

Transport activities are affected by the COVID-19 epidemic, resulting in an impact in the first three months of 2020's performance. The volume of passenger rotation in March 2020 is estimated at 100.8 thousand Hk.km, down 30.43% over the same period in 2019, the accumulated first quarter of 2020 is estimated at 371.6 thousand Hk.km, a decrease of 14,0%. The volume of goods rotation in March 2020 was estimated at 305.5 thousand tons, down 6.2%, and that of the first quarter of 2020 was estimated at 997.5 million tons.km, up 2.8%. Transportation revenue in March 2020 was estimated at 1,114.8 billion, down 9.1% over the same period in 2019, that of the first quarter of 2020 was estimated at 3,641.1 billion dong, up 1.2%. The functional sector has intensified the inspection of transport business activities, ensured the technical safety of vehicles, and resolutely sanctioned strictly violations. At the same time, regularly rectify the situation of passenger transport business for passenger transport business units by bus, taxi,... the adjacent bus route Da Nang - Hue has been put into operation. Simultaneously during the month, the functional sector focused on implementing measures and solutions to strengthen prevention and control of Covid-2019 disease. Adding, putting into operation 01 parking lot (5,200 m<sup>2</sup>) and 07 parking bays (1,650m<sup>2</sup>).

### ***For aviation operations***

The COVID-19 epidemic has had a strong impact, causing unprecedented heavy damage to the aviation industry. After the "order" to stop international flights and reduce the frequency of domestic flights

to almost zero, hundreds of aircraft of the airlines have been "on the ground" for many days and the risk of bankruptcy gradually exists if lack of State supportive "hands" in time. With the suspension of all routes to / from Da Nang and social stretching in some localities to focus on zoning off epidemic, it is considered that the plans to exploit the summer market of the airline are almost destroyed. Surveying online ticketing channels of Vietnam Airlines, Vietjet, Bamboo Airways, passengers cannot currently book flights to / from Da Nang. This segment will only start showing on August 12 after the stop order for all passenger flights on domestic routes expires and it is not known when it will renew. In addition, after the stop order to / from Da Nang, about 80,000 tickets have to be refunded or canceled as of July 31, excluding the number of air tickets booked and flown by passengers in August. Currently, all airlines have to offer customer support policies, extending their flights until the end of October 2020 [2]. Due to the complicated development of the epidemic, international flights and ships to Vietnam in general and Da Nang in particular have stopped operating. In April, there were no more international tourists coming to Da Nang by air and sea; There are also no inland waterway tourists as the boat owners are currently shutting down. Currently, there are only 02 domestic routes from Hanoi, Ho Chi Minh City to Da Nang.

### ***For shipping activities***

Despite the impact of the COVID-19 pandemic, maritime activities in Danang still showed positive signs. Cargo throughput of Da Nang port in the first quarter of 2020 increased by 25.1% over the same period in 2019, of which container throughput increased by more than

33%. Revenue from selling goods and providing services increased 30.23%. The above results are thanks to the good implementation of measures to cope with the COVID-19 pandemic. The seaports in Da Nang are still actively coordinating with the authorities to tighten the updating of schedules, quarantine ships and boats arriving at seaports in accordance with the guidance of the Ministry of Health. For foreign ships traveling to Da Nang, before landing at the port, they must move to float number 0 so that the specialized agency can spray and disinfect the ship, and organize medical examination of the seafarers. If there is no unusual problem, the new vessel is allowed to dock at the port of loading. During the time when ships are anchored, loading and unloading goods, foreign seafarers must isolate themselves on board and must not go ashore to limit the risk of infection in the community.

*Thus*, Da Nang, with the majority of small and medium enterprises, will suffer more and more serious damage in the current context, because businesses are purely transport, just one of many areas of logistics, should change operations to withstand difficulties, stop the vehicle when there is a shortage of goods, while fees such as road maintenance, insurance, inspection still have to be paid, subject to interest pressure.

It can be seen that the COVID-19 epidemic has significantly affected socio-economic fields of Da Nang city, especially tourism, production, import - export, business activities and affecting large number of employees. In this situation, the city government is currently actively implementing many measures to reduce the impact of the

epidemic on indicators of economic development and social stability in the area.

The COVID-19 pandemic had a strong impact on the economies and social life of the whole world, upsetting the global supply chain, including logistics activities. Because many factories have to suspend operations, the amount of goods needs to be moved less, leading to the transportation and delivery of goods in the supply chain also decreases, greatly affecting the operation of logistics services. In addition, businesses also experienced a significant reduction in revenue from exports and imports from epidemic countries such as China, Korea, Japan, and Singapore,...

### **3. A number of policy proposals to cope with COVID-19 in current danang logistics operations**

*Firstly*, promote and call for high-tech, information technology and digital corporations to invest in the city, connect trade with big investors, calling on businesses from other countries are activities that are intensifying the People's Committee of Da Nang city right after the epidemic. In addition, although the COVID-19 epidemic has had a significant impact on the socio-economic development, investment attraction in Da Nang still has many positive signs. In the first 5 months of the year, the city issued investment policy decision for 4 domestic and foreign investment projects in industrial zones with a total investment capital of 10,815 billion VND, and 53 new foreign investment projects with a total registered capital of more than 78 million USD [4]. However, in the face of the second outbreak of COVID-19 outbreaks and Da Nang

becoming an epidemic, it is imperative that the city government take more active measures in efforts to prevent and control the epidemic and at the same time, creating a safe environment to appeal to investors.

*Second*, the state needs to have more supportive policies, especially proposing to access large-scale loans with 0 VND interest rates to overcome the difficulties caused by the pandemic. Continue to synchronously and effectively implement appropriate mechanisms and policies, especially on finance, currency, and social security to support people, businesses, and employees, especially small and medium-sized enterprises have overcome the difficulties of the COVID-19 pandemic, quickly recovering and developing socio-economic. Implementing the policy of exemption and reduction of a number of tax obligations for a number of sectors and subjects heavily damaged by the COVID-19 pandemic in 2020.

*Third*, with the support from the authorities, businesses are recommended to cut down on administrative spending, strengthen international cooperation, find new markets that are limited or not dependent on the market, traditional customers. In addition, businesses need to take advantage of the new generation FTAs, especially EVFTA because logistics services are services with notable commitments, in an open direction - significantly stronger than the International Trade Agreement (WTO) and brings many benefits to businesses.

*Fourthly*, the enterprise will firstly endeavor and have a sustainable development strategy; increase outsourcing for specialized workers, reduce operating costs but still have experience in management,



reduce risks; tightly managing costs, connecting businesses, strengthening international cooperation, expanding market share to replace niche markets, regardless of traditional markets; diversify services; apply management 4.0.

*Fifth*, businesses must quickly access online channels. This brings both difficulties and opportunities for businesses, because the competition in e-commerce is getting fiercer and fiercer than traditional commerce. In addition, branding for the company's products is also very important. Diversifying buyers and sellers, this is ideal, but it is a great lesson after the past crises. Another trend to pay attention to is order breakdown, the trend of trading, and online transactions getting smaller and smaller to better prevent risks. In the era of technology revolution 4.0 and the influence of COVID-19, the application of intelligent automatic classification solutions is an inevitable trend, helping to free up labor, improve productivity, improve the accuracy, thereby improving the management capacity for the distribution exploitation centers of the enterprises in the logistics industry.

*Sixthly*, for cold storage and cool storage companies, they need to receive incentives on electricity prices (currently the price is 25% -30% higher than the price of electricity produced). Tax incentives (such as tax reduction, no penalty for late tax payment ...) for chains of restaurants, hotels, food suppliers. Delaying the payment schedule, reducing land rent and production and business premises for enterprises affected by the epidemic.

#### **4. Conclusion**

Danang is a city with great potential to develop logistics services, however, under the impact of the COVID-19 epidemic, the logistics service sectors of Da Nang are heavily affected. Thereby, the article also proposes a number of policies to promote logistics development in Da Nang after the COVID-19 epidemic. It is important that in order to cope with the impacts of COVID-19, logistics enterprises need to be proactive in accessing online channels, promoting the application of digital technology in their operations.

## References

1. [1]. Politburo (2019), Politburo Resolution No. 43-NQ/TW dated January 24, 2019 on building and development of Da Nang city to 2030, with a vision to 2045, Hanoi, In Vietnamese, <http://tulieuvankien.dangcongsan.vn>.
2. [2]. Van Son (2020), "Aviation‘ exhausted ’before dual challenge”, In Vietnamese, <https://baotintuc.vn>.
3. [3]. Nguyen Tu (2020), "Attracting investment: solving difficulties for Logistics", In Vietnamese, <https://thanhnien.vn>.
4. [4]. Thuy Trang (2020), "Da Nang actively" looks for "foreign enterprises after the epidemic", In Vietnamese, [laodong.vn](http://laodong.vn)
5. [5]. People's Committee of Da Nang City (2020), *Socio-economic situation, national defense and security in the first quarter and some key tasks in the second quarter of 2020*, In Vietnamese, <https://www.danang.gov.vn>.



# CHALLENGES FOR LOGISTICS IN VIETNAM IN THE CONTEXT OF COVID-19

**Dr. David John Whitehead \***

*Chairman of Mavin Group*

*Vice-President of Auscham Vietnam.*

*(Speaker in the International Conference)*

## INTRODUCTION

The government of Vietnam's response to the COVID-19 pandemic has been world leading, with elements including fast recognition of the pandemic's threat to people and the economy, public education programs, promotion of the use of facemasks, hand sanitisers, body temperature checks, and social distancing; with localised isolation and quarantining to contain outbreaks. This has resulted in extremely low case numbers and an exceptionally low number of deaths compared to other nations with similar populations.

However, as with all nations, the COVID-19 pandemic crisis presents a major challenge to Vietnam's economy.

The country's heavy reliance on trade and investment, particularly Vietnam's move to inject itself into global value chains (GVCs), and on tourism, has made Vietnam extremely vulnerable to the economic crisis of the pandemic.

Vietnam has achieved significant GDP growth, and poverty reduction over the past 30 years. The International Finance Corporation

(IFC) has reported that the economy has expanded at an average annual rate of nearly 7% since 1988.

## **CHALLENGES FOR LOGISTICS IN VIETNAM IN THE CONTEXT OF COVID-19**

The IFC also recognises that the COVID-19 pandemic has affected Vietnam's economy with GDP growth of 3.8% in the first quarter of 2020 being the slowest since 2009. There are large numbers of bankruptcies and job losses across the country, and schools, skills development and education generally have been seriously affected.

Despite Vietnam's laudable performance in managing the pandemic from a public health perspective, the success in suppressing the healthcare crisis does not equal Vietnam's ability to resist an economic downturn. According to the International Monetary Fund (IMF) forecast, weaker domestic and international demand is expected to slow the economic growth significantly from 7% to around 2.7% in 2020. But that impact is still milder than in most countries in Southeast Asia.

This is why, despite the impact of COVID-19, the Asian Development Bank still forecasts Vietnam to be one of the fastest growing economies in Southeast Asia, while the World Bank observes that Vietnam's economy is resilient.

In the second quarter of 2020, Vietnam's international trade was significantly impacted by COVID-19. Total trade plummeted by 9.05% compared to the same quarter in 2019.

As with most other national economies, trade growth in Vietnam will continue to slow as global growth slows and supply chains are disrupted, putting a premium on regional integration through new trade agreements.

Until markets open again, technological changes are positively disrupting production and distribution processes, and the COVID-19 pandemic has increased the importance of digital technology in business operations, highlighting the critical importance of building digital skills, and strengthening data privacy.

Australia is a strong FDI investor in Vietnam. There is a special relationship between the two countries with **establishment of a Strategic Partnership between Australian and Vietnam**. Australian companies, like other companies around the world at this time, are re-assessing, re-evaluating and re-thinking their operations both at home in Australia, and abroad. Many companies in Australia are struggling to survive and are becoming leaner, more focused and considering diversification of their supply chains, particularly to Asia including Vietnam.

However, some Australian firms, particularly those with strong financing, smart management, and advanced technological support, will take advantage of the situation and push forward with investment and development in Vietnam and neighbouring countries.

Many Australian companies see an opportunity to be in place and operating as the pandemic declines and business returns to the “new normal”.

Australian businesses in Vietnam have continued to operate, albeit at a reduced rate of production, and consequently reduced revenues. The business environment over the last 9 months has been one of survival and frugality with regard to investment and spending. Of course, some companies have needed to lay off staff, reduce salaries, utilise periods of extended leave, and generally reduce business activity levels.

By mid 2021, there should be a business upturn, international markets will open and trade will return, of course with a new approach to business management, Global Supply Chain intervention, and international trade controls which will take into account the new normal environment living with COVID-19.

To ensure sustainable business in the long term, there is a clear need for new protocols to be implemented not only for employees' health and safety, but also in materials handling, packaging, transport and logistics. The companies that will survive the pandemic and thrive into the next decade will adopt advanced technology management and control systems minimizing people intervention and using digitized automated handling, management and delivery systems. And there must be shortened or diversified supply chains to minimise the risk of disruption to supply. The lessons of severe and long-term disruption to Global Supply Chains through the COVID-19 pandemic must be learnt and avoided, in case of similar events in the future.

Australian businesses are strongly interested in the hospitality and tourism sector in Vietnam where the lack of international visitors in

particular, has seriously affected operations. Reduction in levels of domestic travel and business travel are also concerning, and although domestic travel is currently supporting the hospitality and tourism sector, the ongoing effects on local trade have also affected businesses. Some operators have closed or reduced their services, some face financial difficulties or even bankruptcy. Hospitality and Tourism operators are awaiting the removal of travel restrictions, and the return to an environment where the foreign visitor in Vietnam is the norm, not the exception. Of course, the new normal for international travelers will see establishments continuing with disinfecting rooms, restaurants and facilities, personal temperature checks, use of face masks, hand sanitisers etc, to minimise the likelihood of disease infection and transmission, and to optimize traveler health and safety.

For Australian businesses operating in Vietnam, like all other Foreign invested enterprises, the challenges presented by the COVID-19 pandemic have been substantial and far-reaching. However, we believe the worst is likely behind us and we look to the future armed with the knowledge and experience of living and working in the pandemic environment.

The European-Vietnam FTA came into effect on 1 August 2020, could not have come at a better time, minimising tariffs and opening trade routes and opportunities for Vietnam in the European market.

EU businesses now have unprecedented market access to Vietnam's inland shipping services, which allows for more competition, as well as putting pressure on the local seaport infrastructure.



International container shipping companies can now expand their business activities in the Vietnamese maritime market on the back of the commitments in the EVFTA. Under the EVFTA, businesses from the Euro bloc are allowed to provide redistribution of empty containers and feeder transportation services.

Before the enforcement of the EVFTA, the empty container and feeder transportation services had for years been restricted to Vietnamese companies. Shipping lines operating in Vietnam are now also able to go on the offensive. With a large sea network of 45 ports, 286 berths, and 18 anchorage and ship-to-ship transfer areas, Vietnam's maritime market will attract foreign players.

The IFC reports that, currently, 39% of the traffic in sea ports is for domestically transported cargo; this traffic has increased faster than international traffic. The majority of this traffic is in bulk, as opposed to containerized. The containerization of cargo would foster multimodal transport and facilitate water ways shipping. However, this will require the development of adequate infrastructure for ports, and modification of vessels to handle containers. Inland waterways also lack proper landing stages with adequate access roads. Many bridges with low clearance also pose a challenge.

Recent World Bank analysis also indicates that in Vietnam it is important to develop alternative modes of transportation, such as inland and coastal waterways, along with supporting infrastructure such as river ports and Inland Container Depots.

Notably, before the COVID-19 pandemic crisis, shipping groups saw improvements, in comparison with previous years, due to an increase in cargo volume.

In the future, in addition to inland shipping services, under the EVFTA many other maritime transport services will also open to EU firms to invest or do business. And, bilateral trade is forecast to grow significantly, thus opening huge business opportunities in the months to come.

Until markets open again, technological changes are positively disrupting production and distribution processes, and the COVID-19 pandemic crisis has increased the importance of digital technology in business operations, underlining the critical importance of building digital skills, and strengthening data privacy.

In order to achieve the Vietnamese government's ambition of achieving high-income status by 2045, productivity needs to become the main driver of growth, with continued contribution from capital accumulation.

Specifically, with regard to **Logistics**, the cost of logistics as a percentage of GDP can be as high as 25% in some developing economies—compared to 6 to 8% in OECD countries. Better efficiency in the sector can, therefore, boost competitiveness and stimulate economic growth in emerging markets.

Vietnam has done a remarkable job in investing in infrastructure connectivity, which has contributed to its ability to integrate into Global Value Chains, but weaknesses remain.

The IFC reports that Vietnam's ranking on the Logistics Performance Index (LPI) improved from 53 in 2010 to 39 out of 160 economies in 2018. However, total logistics costs in Vietnam were estimated at around \$US 41 billion in 2016, accounting for about 21% of total GDP, compared to a global average of 12% and much lower figures in China (15.4%), US, and Singapore (8-9%). The main reason for this high proportion of logistics costs over GDP in Vietnam, is underdeveloped infrastructure and relatively low connectivity, resulting in congestion in road transport, airports and sea ports.

Inefficient logistics, particularly in trucking, also cause unnecessarily high emission of greenhouse gases.

Foreign companies tend to dominate the high value segments of the logistics market with experience and professional management, which local logistics companies find difficult to match.

Foreign investors are mostly large companies, typically with sales of more than \$US 100 million. Although there are only about 25 foreign companies participating in the logistics sector, they currently capture the majority of the market share, providing high value-add logistics services, such as supply chain management. They have brought with them higher service expectations and requirements.

**Road transport** accounted for 77% of the total transported freight volume in 2018. Transported volumes grew by an average of 10.6% per year (Compound Annual Growth Rate) between 2008 and 2019, and in 2020 road freight tonnage is expected to grow by 8.0%.

**Trucking services** are inefficient, as the industry is fragmented and lacks aggregators. Excessive fragmentation drives down margins and the sustainability of the trucking sector. Logistics costs per ton-km are lower with increases in the number of trucks owned and truck tonnage, and better truck utilization rates.

**Freight brokerage services** are under-developed and contribute to empty backhauling rates as high as 50% to 70%. Given the fragmentation of the trucking industry, aggregators could play a key role in increasing efficiency – notably reducing empty backhauling – and promoting transparency. There is a lack of freight brokerage services covering the whole country, which has resulted in limited use of technology to improve logistics efficiency. The use of advanced information technology to create digital freight aggregators has the potential to provide real-time matching of supply and demand and route optimization, contributing to increase the sector's efficiency. Inadequate non-road infrastructure stifles the development of multimodal networks. Notably, inadequate road surfaces and traffic controls, and the perpetuation of overloading, contributes to deterioration of the road traffic system.

**Inland Container Depots** are a key interface between road and ports, and can serve as points of road freight consolidation.

Unfortunately, truck operators currently avoid ICDs because of their long processing time and often inconvenient locations, far from industrial zones. Inadequate planning hinders the delivery of goods from distribution centres to consumers. Demand for these “last kilometre” services has boomed with e-commerce, as small parcels have multiplied. The main challenges for urban deliveries are linked to traffic rules, a lack of adequate infrastructure, and intense competition between the players.

Logistics providers often complain about insufficient road infrastructure, such as overpasses, underpasses and bridges. Rules limiting truck and van movements in Hanoi and HCMC during peak hours help regulate the traffic in congested city centres, but also stifle the development of needed services.

The IFC suggests that the demand for efficient logistic services in Vietnam is expected to increase substantially in the coming years. Rising incomes will increase the demand for consumer goods and safer food products, which will place greater emphasis on modern food distribution and retail chains. Preferences for remote purchases have increased in the wake of the COVID-19 pandemic, underlining the lack of adequate urban consolidation centres and cross-docking facilities to facilitate the aggregation/disaggregation of the traffic exiting and entering urban centres, and the organization of deliveries by clusters.

Vietnam’s efforts to move up the value chain in the agribusiness sector will increase the demand for cold supply chain facilities. And the rapid growth of the airfreight market will place increasing pressures on increasingly inadequate cargo facilities at airports.

The IFC notes that:

Defects in the regulatory framework, including the lack of a process for bonded warehouses to transfer goods for sale in the domestic market, inadequate food safety requirements and poor enforcement, a lack of transparency and consistency in rules and regulations, and the lack of documentation for e-commerce sellers, impair the efficiency of logistics, and;

That skills in the logistics sector are in short supply at all levels. There are difficulties attracting and retaining talent in the sector, especially top and mid-level managers. There are also difficulties in finding trained staff for lower skilled jobs, such as drivers or equipment operators.

So, with regard to the effect on logistics in Vietnam, the COVID-19 pandemic has required logistics service providers to find alternative ways and methods of working.

As reported in Vietnam Net Global on 28 June 2020, the Vietnamese logistics industry is amongst those hardest hit by COVID-19, as the unpredictability and duration of the pandemic have presented multiple challenges in both the short and long term, jeopardizing the viability of many businesses, especially small and medium-sized enterprises.

And according to a recent report released by the Logistics Industry Reference Council and the Vietnam Chamber of Commerce and Industry – HCMC branch, preventive measures have led to a sharp

decline in the demand for essential commodities in the country. Stagnant production and decreased business have caused a sharp rise in unemployment in the logistics and other sectors.

Logistics activities such as transport have declined due to closed borders, while warehousing services and freight rates have also been seriously affected.

Vietnamese border posts with China, which are normally busy and overcrowded, have been facing mounting backlogs due to the complicated and time-consuming vehicle and customs clearance processes. This has caused damage and other difficulties to goods and transport, jeopardizing consignors' finances and posing new challenges for logistics businesses.

Reports from the Ministry of Transport showed that Vietnam's logistics businesses have faced several problems while dealing with transport providers. From mid-January to mid-March this year, container shipping companies cut commercial routes by 23%.

In the first quarter of 2020, the number of vessels entering and leaving Vietnamese ports dropped by 15%, while international passenger vessels decreased by 30% compared to the same period last year.

Initial losses reported by Vietnamese Airlines due to the suspension of flight routes were estimated to be over 30 trillion VND.

Inland water transport declined by 10.7% in terms of cargo volume and by 2% in terms of passenger traffic.

Cargo and passenger transport decreased by between 40% and 80% compared to the same period last year.

More than 150 passenger trains were terminated, resulting in an 84 billion VND loss of revenue, while the revenue from rail cargo transport also decreased by 6 billion VND.

Moreover, the risk of mass bankruptcy among logistics businesses and disruptions to supply chains have seriously hurt the Vietnamese labor market.

The pressing need to respond to the spread of COVID-19 through social distancing has forced retail stores and trade centres to close, leading to a decline in productivity and a shift in the operating models of distribution systems and logistics supply chains.

To ensure a sustainable and long-term business, a shift is required in the long run involving advanced technologies and the diversification of supply chains. Businesses need to focus on flexible measures while ensuring the safety of workers. Industry 4.0 technologies should be introduced, taking advantage of lessons learned during the pandemic to devise long-term development and crisis management strategies.

In the first quarter of 2020, prior to the global spread of COVID-19, warehouses accommodated substantial goods and materials for production and business. In the second quarter, the quantity of goods in warehouses dropped significantly and may continue to worsen in the second half of 2020, so logistics businesses and related parties need to be prepared and take proactive measures to cope with the situation.



The economic recession will be a second demand shock. The full effect of the pandemic on global supply chains is not yet known.

As the IMF is predicting a 3% contraction for the global economy in 2020, the expected recession will deliver a second hit to demand and, thus, logistics companies, highlighting logistics' exposure to trade, manufacturing, and demand for goods.

Operational constraints are expected to lead to delivery delays, congestion, and higher freight rates. However, not all segments will be impacted equally - companies that serve e-commerce are seeing increased activity as consumers opt for online shopping of essentials, while those that serve other sectors (such as auto and consumer goods) will see a downturn. One positive outcome is record-low fuel prices which should provide some relief to transport operators. Overall, the uncertainty will exert downward pressure on revenues.

The impact is severe for small players: Small trucking businesses are being severely affected because they tend not to have any backup, recovery plan, or intermittent operation plan. Lack of technology, as well as tools to follow health guidelines (for example, disinfecting deliveries), further complicate their ability to respond.

***The larger players are experiencing a strong impact:***

In April 2020, both DHL and CEVA Logistics declared Force Majeure - a clause that allows contracts to be declared null and void due to "acts of God" or other unexpected circumstances - on all their contracts, due to COVID-19. Other companies' financials are likely to

deteriorate, triggering downgrades, as has already been seen in the sector.

## **INTERNATIONAL RESPONSE TO THE CRISIS**

For the most part, national governments have responded to the crisis by designating ports, shipping, and trucking services as essential—and thereby exempt from lockdown measures.

Although many airports around the world are closed to passenger flights, most are still open to cargo, which can be essential to the COVID-19 response (for example, to transport medical supplies). Closer collaboration between governments and third-party logistics companies has also been necessary to address supply chain bottlenecks and facilitate clearances.

Third-party logistics companies have adopted a range of responses to these uncertainties, including:

a. New safety protocols: To protect their staff's health, some companies have introduced new protocols on social distancing at warehouses, disinfecting work areas, or providing protective gear, while giving staff unlimited unpaid time off. However, these efforts, which come at a higher financial cost, cannot guarantee protection against outbreaks in confined warehouses.

b. Alternative modes of transport: Many companies are using creative alternatives to their normal transport modes. Since the reduction of passenger flights has reduced airplane belly cargo capacity,

companies such as DHL have used charter flights to transport shipments to and from China.

Airlines are also re-purposing passenger aircraft for cargo. Some observers are even forecasting a boom for the China-Europe rail as 60 % of the air freight capacity between China and Europe has vanished.

c. Adapting service offerings to current demand and safety protocols: Some larger players have been playing an important role in delivering medical supplies. For example, UPS provided free air transport for two million facemasks and protective gear to Wuhan in February 2020.

Companies are also adapting to demand. Warehouses and retailers are focusing on grocery deliveries since demand is high for essential products, while companies in the “last-kilometre” segment are offering no-contact delivery options (some of which include robots).

## **RECOVERY**

The recovery and long-term impact of the pandemic on logistics may be affected by adaptations and other factors, as follows:

- Increased dedicated air cargo capacity: The airline industry is already re-allocating fleet to exclusively serve air cargo demand.
- Increased cargo inspections and cross border control protocols: Governments have responded to the crisis with temporary trade embargoes and export restrictions for sensitive cargo (such as medical supplies, pharmaceuticals). In the longer term, logistics costs

may increase due to tighter cross-border processes and controls fueled by concerns regarding the transmission of diseases.

- **Technology and e-commerce rise:** Logistics has been in the midst of a tech-driven revolution. Companies with robust digital capabilities that allow them to provide cargo visibility/traceability and do business online are at an advantage.
- **Reconfiguration of global value chains:** The pandemic has exposed the vulnerability of extended and complex value chains to production disruptions, particularly in the East Asia Pacific region. As a reaction, many of these supply chains may shorten or diversify through reliance on alternative partners (for example, nearshoring) or intensified efforts to bring home (such as reshoring) strategic value chains. The shortening of supply chains may benefit countries with capable manufacturing sectors and beneficial exports' policy (for example, Colombia, India, and Mexico) to partially substitute China over the medium term. There may also be a trend towards placing additional warehousing capacity or dry ports near demand centres to shorten the time to get goods to market.
- **Recovery prospects:** As logistics is a diverse sector, recovery prospects will vary depending on the length of lockdowns and the duration of the subsequent economic crisis. Large companies with a diversified business (such as multiple clients, serving different sectors in various countries/states), high tech solutions, and strong financial and people management, will be better placed to weather the storm.

# TWO-WAY IMPACT OF THE COVID-19 PANDEMIC TO LOGISTICS ACTIVITIES IN VIETNAM

**Dr. Nguyen Thi Truc Phuong**

*Ho Chi Minh City*

*University of Food Industry, Vietnam*

## **Abstract**

*The COVID-19 epidemic, which has taken place very suddenly from the beginning of 2020 up to now, is having a very serious impact on the global economy and has not shown signs of stopping. Many major economies and populous countries in the world are still facing many new challenges of this epidemic. As of September 10, 2020, more than 27.7 million people have been infected with COVID-19 worldwide, with more than 900,000 deaths. In particular, the US and Brazil are the two countries with the highest number of infections and deaths. India's COVID-19 epidemic is also complicated. There are many concerns that the 2nd COVID-19 epidemic is in danger of breaking out again in many European countries. Global tourism, travel services, logistics, and aviation activities have been delayed and broken. However, in reality, the COVID-19 epidemic has two-way effects: positively and negatively to Vietnam's logistics operations.*

**Keywords:** impact, two-way, COVID-19, logistics, Vietnam

## **1. Some of the positive effects of the COVID-19 pandemic on Logistics activities of Vietnam**

Firstly, the COVID-19 pandemic has changed the way of consumption, mode of operation and trade exchange on the bridge as well as in Vietnam. Vietnam's E-Commerce (E-Commerce) has strongly developed, especially food, food, and some other consumer goods, leading to many exciting logistics activities. Express delivery services for goods, documents, vehicles, equipment, ... to increase the number of jobs and revenue, especially in the peak months of the epidemic, must implement social disparities according to regulations. government. During the pandemic, Vietnam's demand for online goods for consumption increased by 25%. The operation of technology motorbike drivers in April and May 2020 increased by 1.4 - 1.6 times compared to the months of 2019. In August and the first half of September 2020, the operating frequency The motivations of motorbike drivers are still exciting, with more jobs than the same period in 2020. Express delivery companies are very busy with the need to receive and deliver and express different goods. [*Gso (2019-2020)*]

Secondly, to speed up the project of applying digital technology to Vietnam's logistics operations.

According to a study by McKinsey Global Strategic Consulting, the digital transformation that should have taken 5 years to apply to businesses and due consumers, currently takes only 8 weeks to the impact of the COVID-19 pandemic. Also because of the impact of this pandemic, the competitiveness of the supply chain and logistics such as

cost, quality and delivery are at the forefront. The above issues will strongly affect the development of Vietnam's logistics service industry in the coming time. *[Vla (2020)]*

Currently, many projects developing digital platforms for logistics services in Vietnam are speeding up due to practical requirements. A typical example is that, at Saigon New Port, Maesk Lines has successfully implemented e-DO - Electronic Delivery Order (FCL) and is continuing to apply. in Hai Phong Port. Vietnam Association of Logistics Enterprises (VLA) is an e-DO with Block-chain technology for odd shipments (LCL). Calculated, when this project comes into full operation, each year it can save hundreds of billions of VND for Vietnamese businesses. *[Vla (2020)]*

Third, during the COVID-19 pandemic, new logistics activities appeared in Vietnam, such as international intermodal reefer rail transport to transport full-package goods to China, opening up the direction of official export. Frozen fruit and agricultural products were transported by rail to China and from there to Central Asia and Europe. For export fresh litchi, previously only transported by air, now it is transported by sea with the first fresh litchi shipments to Singapore, USA and Japan in June 2020 with freight rates. The load is only 1/3 of the freight by air. *[Moit (2019- 2020)]*

In the future, the development of the North-South high-speed railway will facilitate strong domestic and international transport to Europe, reducing transportation costs at a high level. , to facilitate logistics service provision activities.

Fourth, the COVID-19 pandemic, along with the ongoing and new implementation of 13 bilateral and multilateral Free Trade Agreements with countries, international and regional organizations globally, especially As EVFTA, at the same time with accelerating the digital application, Vietnam's logistics service industry is under pressure and efforts to develop high-quality human resources. It is necessary to improve the quality of human resources in terms of professional expertise, techniques, technology, and the number of human resources, to meet the requirements of developing logistics services, taking advantage of development opportunities provided by the Associations. other new-generation FTAs, including EVFTA, CPTPP and RCEPT. These are challenges, but also opportunities for Vietnamese enterprises to develop production, trade and investment, especially in the field of Logistics. The above factors will create great opportunities for the logistics service industry to develop both in terms of business scale and service delivery quality. Enterprises providing logistics services in Vietnam need to urgently increase investment in training both at home and abroad, renew the recruitment process, review salary and income policies, and other relevant policies. to develop human resources and operational capacity to thrive after the pandemic created by the above opportunities. *[Moit (2019- 2020)]*

Fifth, during the COVID-19 epidemic is also an environment to filter businesses in the Logistics industry. Businesses with financial potential, experience, strategic strategy, support from partners, bank restructuring, debt rescheduling, even freezing, or mending with the market,... can overcome difficulties. In contrast, some businesses face



the risk of having to sell or merge. Competitive pressure, the trend of "takeover" of the market and merging businesses from foreign competitors is a reality for Vietnam's logistics service enterprises in the current period. Therefore, in the immediate and long term, Vietnam needs to have a strategy to develop the supply chain of logistics services in a methodical manner, helping businesses improve their competitiveness and participate equally with the world. [*Moit (2019-2020)*]

## **2. Negative impacts**

Entering 2020, the effects of the COVID-19 epidemic stalled trade with China. Following that, when the pandemic spread to the world, this negative influence increased exponentially, causing Vietnam's economy to slow down, leading to the production, import and export activities of Most businesses declined, logistics services were also affected greatly.

If in previous years, the official import-export turnover, cross-border trade on the mainland, reached an average increase of 14-15% / year, even higher, leading to a similar increase in logistics services. corresponding, or higher. However, from the beginning of 2020 up to now, Vietnam's international trade and services have increased slightly, some international tourism sectors have declined sharply, logistics has also been affected by transmission lines. According to the General Department of Customs, the total value of goods import and export of Vietnam in the first 8 months of 2020 was estimated at 337.28 billion USD, up 0.02% over the same period in 2019; of which the total export

value was estimated at 174.1 billion USD, up 1.6% and the total import value was estimated at 163.17 billion USD, down 1.6% over the same period in 2019. *[Moit (2019- 2020)]*

The market and service demand has decreased significantly, making it difficult for enterprises providing logistics services. VLA's survey shows that 20-50% of members' activities suffer in terms of revenue. Aviation, road and railway logistics services are most affected, especially during the implementation of social gap. Up to 80% of VLA members are small and medium enterprises, so many businesses have delayed production and some may have to dissolve if the pandemic lasts. *[Vla (2020)]*

According to the Report on Vietnam Logistics in 2019 carried out by the Ministry of Industry and Trade, the industrial revolution 4.0 is beginning to change the entire outlook of warehousing and distribution services around the world. The connection of non-traditional equipment such as pallets, crane trucks, even freight trailers to the internet is increasingly expanding. Logistics companies around the world are rapidly improving technology to catch up with this trend and improve profitability through the equipment of modern, automated tools.

Meanwhile, most of Vietnam's logistics enterprises are still small and medium enterprises in terms of capital, labor and technology. Financial potential is still modest (80% of established businesses have registered capital of 1.5-2 billion dong). Besides capital problems, Vietnam's logistics are inexperienced, limited in competitiveness, so there is no opportunity to reach a market with great demand. *[Vla (2020)]*

In addition, there is a lack of synchronous linkage between businesses, between different stages of logistics activities. The outsourced logistics services of manufacturing companies (3PL service, 4PL service) are present and have great potentials for development in Vietnam. Therefore, if only providing simple, pure logistics services ... without integrating them into a process, service chain, it is difficult for service providers to satisfy customers in terms of cost. such as the quick response of import and export demand. [Vla (2020)]

The capacity of Vietnamese logistics enterprises is still limited because the quality of human resources does not meet demand. Among domestic enterprises, up to 93-95% of workers are not trained in logistics, mainly doing services in small supply chains such as forwarding, warehousing, bill of lading processing ... The size of logistics enterprises in Vietnam is quite small, with less than 50 employees, accounting for 32.4% and large-scale enterprises (over 1 thousand employees) account for a small proportion of only about 10.8%. [Vla (2020)]

Customs procedures, the connection problem of domestic enterprises is lacking and weak. "Only one enterprise with foreign investment, the size is many times higher than Vietnamese enterprises. Both small and fragmented, these enterprises compete with each other on direct prices, but not many units pay attention to develop synchronously, so it is even more difficult "- Mr. Diem commented.

In the context that Vietnam has been participating in many free trade agreements with major powers and key economic regions in the

world, the pressure on the logistics service industry will increase over time. In which, 2 agreements: Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and Vietnam - EU Free Trade Agreement (EVFTA) have included most of the economic growth countries. *[Moit (2019- 2020)]*

Only with the EVFTA Agreement, Vietnam commits to open the market for air transport, road, railway, sea freight, inland waterway transport and a number of services to support all modes of transport. This will open up business opportunities and protect the European Union's (EU) logistics service providers and investments when entering Vietnam's potential market. The EU is again an area with leading enterprises and corporations in the world in this field, creating great pressure for domestic logistics services. *[Moit (2019- 2020)]*

The situation is due to the inventory of aquatic products for export, so the existing cold storage capacity cannot meet the demand, so it is necessary to have solutions to support interest rates for long-term loans to invest in building cold storage. Currently, the price of electricity for cold storage is 25-30% higher than the price of electricity to produce, which makes logistics costs for frozen storage high, reducing the competitiveness of goods. Under these conditions, consider reducing the price of electricity used for cold storage because this is an extension of the production of frozen seafood in this commodity export chain. *[Moit (2019- 2020)]*

## **Conclusion and recommendation**

The challenge is huge, but in the opposite direction, economic integration brings many opportunities to upgrade logistics services in Vietnam. Vietnam logistics service enterprises to recover, the remaining 3 months of 2020 and 2021 need to focus on 4 main issues: finance, business operations, digital technology and human resources.

In the long term, Vietnam should have a policy to develop seaport infrastructure because 90% of our country's exports and imports are by sea. “To rapidly develop deep-sea ports to serve domestic and regional needs. Vietnam is gradually becoming a center of production and export.

The trend of moving factories out of China, one of the priority destinations is Vietnam. It is necessary to choose a number of reputable enterprises in sea transport and logistics services and create policies to help them have a long-distance strategy, thereby influencing and building a team of more powerful enterprises.

On the part of each enterprise, it is especially necessary to cooperate and learn from major partners in the world to improve their internal strengths. Storage and transport of frozen goods is one of the solutions to improve the export capacity of agricultural and aquatic products and reduce logistics costs for businesses operating in Vietnam and other countries in Southeast Asia. The cooperation with a 100-year-old corporation will help ASL Corp to learn the experience and management technology to step by step reach out to the world. In Dong Nai, ASL Corp has a branch and service area right at Bien Hoa I Industrial Park, so it is very convenient for local businesses to use the service. *[Vla (2020)]*

To improve the efficiency of corporate governance, build a methodical development plan. Prepare a "long-term" plan to anticipate and take advantage of the open import and export market. In the context of increasing international integration, logistics activities from production to consumption are increasingly playing a particularly important role in the competitiveness of the manufacturing and service industries in particular and of the whole economy in general.

Facing the strong development trend of science and technology and the Industrial Revolution 4.0, in addition to the great opportunities that bring, Vietnam's Logistics industry will face many difficulties, challenges, requiring agencies Management, associations and logistics businesses must understand clearly to have solutions to adjust appropriately to the new situation.

Logistics service is a highly international industry with rapid application of scientific and technological advances in activities. Currently, developed countries are gradually implementing E-Logistics, green logistics, E-Documents ... and applying cloud computing technology, Blockchain technology ... apply artificial intelligence or robotics to perform a number of services, such as packing and unloading services, loading and unloading goods in warehouses, yards ...

### **Reference:**

1. Gso (2019-2020): "*Monthly socio-economic information*" published by the General Statistics Office, accessed at relevant sections: [www.gso.gov.vn](http://www.gso.gov.vn); Access time, from September 3 to September 9, 2020.

2. Moit (2019- 2020); accessed at relevant sections:

<https://www.moit.gov.vn/web/guest/hoat-dong>; “*Operation Information*”,; Access time, from September 2 to September 4, 2020.

3. Vla (2020): Accessed at: <https://www.vla.com.vn/tin-nganh.html>;  
<https://www.vla.com.vn/hiep-hoi-doanh-nghiep-dich-vu-logistics-15-doanh-nghiep-mat-50-doanh-thu-50-companies-enterprises-to-workers-with-the-number-service-with-also-ky.html> services, accessed date: September 8, 2020

# **SOLUTIONS AND INTERNATIONAL EXPERIENCE IN DEALING WITH THE COVID-19 PANDEMIC IN LOGISTICS ACTIVITIES AND VIETNAM'S BORDER TRADE**

**Mr. Bui Ba Nghiem**

*Ministry of Industry and Trade, Vietnam*

## **Abstract**

*The COVID-19 pandemic has put a lot of pressure on global production capabilities and supply chains. Supply chains have been broken and turned upside down, causing a strong impact on logistics activities. The biggest direct impact on the logistics industry is air transportation, and then road, rail, and sea due to social isolation and isolation measures. This also leads to a significant impact on import and export activities in general and border trade in particular. By aggregating method with secondary data, the article examines the impact of COVID-19 on logistics activities and border trade, thereby proposing solutions to cope with COVID-19 in logistics activities and marginal trade border.*

**Keywords:** Responding to the COVID-19 pandemic in Vietnam's logistics activities and border trade.

## **1. Overview of logistics activities and border trade in the context of the COVID-19 pandemic**

### ***1.1 The general situation***



The COVID-19 epidemic broke out at the end of January 2020, affecting more than 200 countries and territories around the globe, with complicated developments and rapid infection on a global scale. The pandemic has created a comprehensive impact on all aspects from health, transportation, tourism, education, trade..., causing great damage to economic, social and human life.

The COVID-19 outbreak has put a lot of pressure on global production capabilities and supply chains. Supply chains have been broken and turned upside down, causing a strong impact on logistics. The biggest direct impact on the logistics industry is air transportation, and then road, rail and water due to social isolation measures. This also leads to a significant impact on import and export activities in general and border trade in particular.

Crude oil prices plummeted, falling to the lowest level in history (for the first time, futures prices fell to a negative level), heavily affecting commodity production activities of all countries.

The trade war between the US and China still shows signs of tension, the trend of protectionism increases, in addition to political upheaval that can lead to negative impacts on the international and regional economies.

Vietnam's economy in the first half of 2020 faces great difficulties due to the impact of the COVID-19 pandemic, causing the decline in production, import - export, border trade, investment and consumption.

On average, in the first 9 months of 2020, GDP only increased by 2.62%, which is the lowest growth rate of the third quarter of the years in the period 2011 - 2020. COVID-19 pandemic is strictly controlled, the economy is gradually re-operating, returning to “the new normal” conditions, so GDP in the third quarter of 2020 grew prosperously compared to the second quarter of 2020, of which the agriculture, forestry and fishery sector increased by 2.93%; industry and construction by 2.95%; service sector by 2.75%; product tax minus product subsidies by 0.70%. Regarding the use of GDP in the third quarter of this year, the final consumption increased by 1.19% compared to the same period last year; asset accumulation increased by 5.79%; exports of goods and services rose by 2.86%; import of goods and services by 1.88%.

Total foreign investment capital into Vietnam as of September 20, 2020 reached USD 21.2 billion, decreased by 18.9% compared to the same period last year.

In the context of the COVID-19 pandemic with complicated developments in the world disrupting international trade, Vietnam's merchandise exports maintained a positive growth, in which the role of the domestic economic sector has emerged since export and import turnover in 9 months both increased over the same period last year. Total export and import turnover in the first 9 months of 2020 has reached USD 388.73 billion, rose by 1.8%, of which export's reached USD 202.86 billion, increased by 4.2% and import's reached 185.87 billion USD, decreased by 0.8%. The domestic economic sector has a high increase of 20.2% in 9-month export turnover value and 4.7% increase

in import turnover value. Vietnam in the first 9 months of 2020 continues to have a trade surplus, reaching 16.99 billion USD.

### ***1.2 The impact of the COVID-19 pandemic on logistics and border trade:***

Imported raw materials sources were limited, the number of orders from Europe and the US declined, making large manufacturing industries such as textiles, footwear, electronics, and automobiles reduced, leading to a decline in logistics demand.

Import-export and border trade activities at Vietnam's land border crossings with China, Laos and Cambodia have been congested for a while, especially during the social distancing period, making logistics operation and transportation is interrupted and congested. The situation of import and export activities through Vietnam's land border checkpoints with countries sharing the same border in the first 9 months of 2020:

- (i) Vietnam with China had reached 6.94 billion USD, increased by 3.8% over the same period in 2019, of which exports reached 1.95 billion USD, decreased by 7%; imports reached 4.99 billion USD, increased by 8.8%;
- (ii) Vietnam with Laos had reached 688.78 million USD, increased by 16.8% as compared to the same period in 2019, of which exports reached 364.8 million USD, decreased by 18.8%; imports reached 303.98 million USD, decreased 14.3%;
- (iii) Vietnam with Cambodia reached 2.42 billion USD, increased by 8.7% as compared to the same period in 2019, of which, exports

reached 1.67 billion USD, increased by 11.3%; import reached 744.89 million USD, increased by 3.3%).

So far, the COVID-19 pandemic is still complicated in markets that are the main trading partners of Vietnam, negatively affecting export, import and logistics activities. Particularly, difficulties resulting from the COVID-19 pandemic clearly show the negative impact on the border trade with China, since it is a large export market for agricultural products of Vietnam with seasonal items such as vegetables, fresh fruits. However, current trading with China are mainly temporary. Traders do not have sales contracts with Chinese partners, massively supply agricultural products when the season comes while prices are unstable, causing the temporary customs clearance capacity could not satisfy in the context of COVID-19 pandemic. This then lead to backlog and congestion in the border areas, causing damage to businesses, farmers as well as the consumption of goods and agricultural products.

According to the report of the Vietnam Association of Logistics Services and the Vietnam Association of Business Traders, logistics and border trade enterprises are affected both in terms of operations and revenue, which varies depending on its type:

- Small and medium-sized enterprises providing logistics services and border trade are the most affected owing to limited resources.
- Increasing costs and decreasing revenue due to a large reduction in cross-border freight, tractors change, drivers change... to meet the requirements of the importer and regulations of the two countries.

- Highly dependent on foreign businesses, including more than 30 transnational logistics providers that have close relations with the world's major shippers and shipping lines. Therefore, the decline in international demand led to a drop in export orders, which forced many companies to let their workers quit the jobs, cut wages, and logistics service businesses and border trade were affected as a result.

## **2. Solutions to cope with the COVID-19 pandemic in logistics and border trade in vietnam**

In order to achieve the double goal: to prevent the COVID-19 pandemic while maintaining economic growth, avoiding excessive disruption to import and export activities, border trade, recovering logistics supply chain, facilitating goods clearance to ensure international trade circulation, all levels and industries from central to local Vietnam need to actively cooperate, focus on the following 09 groups of solutions:

*Firstly*, it is recommended that logistics associations and enterprises take a number of supportive measures such as: reducing storage costs, reducing transportation fees, loading and unloading goods so as to promote distribution enterprises, trade centers, supermarkets to increasingly purchase agricultural products for farmers.

*Secondly*, the Vietnam Maritime Administration and the port management companies are requested to review the service fees collected directly or indirectly from import-export enterprises to take some supportive measures on the reduction of fees during the period

when containers staying at the port, in particular: (i) 50% reduction of charge for plugging in reefer containers at the port; (ii) reduction of service fees charged directly by the Port. At the same time, it is suggested that shipping lines consider reducing fees for import-export businesses with a reduction corresponding to the reduction that the port management companies have reduced for import-export enterprises.

*Thirdly*, allow the opening and additional opening of a number of secondary border gates, border entrances, and border markets which are important for export of goods and border trade to fully satisfy the provisions of Decree No. 112/2014/ND-CP dated November 21, 2014 of the Government on the management of the land border crossings such as Tan Thanh – Coc Nam sub-border gate, a pair of Tan Thanh – Po Chai border markets (Lang Son province), to open Km3 + 4 in Hai Yen ward, Mong Cai city (Quang Ninh province), Lao Cai - Ha Khau, Chi Ma - Ai Diem international border crossings...

*Fourthly*, agree with bordering countries on the time of closing and opening the pairs of border crossings to increase the capacity of goods clearance through the border crossings, specifically: Morning clearance time from 9:00 AM to 12:00 PM, Afternoon clearance time from 1:00 PM to 5:00 PM; or from 7:00 AM to 10:00 PM, depending on each pair of border crossings. Customs clearance on holidays and weekends has also been resumed.

*Fifthly*, agree with bordering countries to strictly implement the process of controlling and preventing COVID-19 pandemic for people

and means of transport directly participating in export - import and border trade activities at the border crossings.

- (i) Regularly updating developments in the customs clearance of goods and means of transportation at border crossings in order to proactively create appropriate production, logistics, import-export and cross-border trade plan;
- (ii) Implementing import and export, border trade activities according to international practices, absolutely not bringing goods to the border for sale only at markets, with unknown buyers and recipients of goods without complying with regulations on quarantine, packaging...
- (iii) Continuing to strictly comply with the regulations on traceability, declaration of growing areas, packaging facilities, labeling of goods... as well as other relevant requirements to ensure the quality of goods to meet the rules and regulations of the two countries, facilitating logistics and customs clearance activities at border crossings.

*Seventhly*, comprehensively renovate trade promotion in the direction of increasing the proportion of activities that bring long-term effects such as skills training as well as reducing the proportion of activities that bring temporary effects such as fairs and exhibitions. Also, focus on medium and long-term trade promotion programs targeting one product until a/ a number of specific result(s) is/ are achieved; besides, enhance online promotion and trade connection. Simultaneously, continue to work closely with relevant agencies of the other country to prepare programs for cross-border trade promotion, trade connections

between businesses of the two countries, on regional and global scale so that they can be done as soon as the COVID-19 pandemic is controlled.

*Eighthly*, encourage and call on logistics service businesses to support businesses in agricultural, aquatic and fruit businesses through prioritizing fruit preservation, reducing costs of storing, transporting, loading and unloading goods.

*Ninth*, the People's Committees of border provinces provide instructions for the local functional forces to prioritize the allocation of appropriate resources to implement the above contents to ensure the prevention of COVID-19 pandemic in accordance with regulations.

### **3. Practical experience in exceptional legislation application in international commitments coping with the COVID-19 pandemic**

In the context of the COVID-19 epidemic, which is having a negative impact on production, import and export activities, especially logistics activities of countries around the world, the application of exceptions in the international commitments aiming at minimizing the damage caused by epidemics and stabilizing the socio-political situation is becoming a trend applied by many countries around the world.

Through a review of measures notified by countries around the world to the WTO Agreements on exceptional legislation application during the COVID-19 period, most notifications apply the provisions of the Agreement on Plant and Plant Quarantine Measures (SPS) and Technical Barriers to Trade Agreement (TBT) related to a medical



emergency caused by a pandemic. In this case, the WTO member countries can directly apply and notify the WTO, without waiting for the 60-day comment period (and the six-month transition period before the measure takes effect).

However, urgent measures still need to comply with other rules of the SPS and TBT Agreements, such as avoiding discriminatory or unnecessary barriers in trading, and ensuring a scientific basis for measures. and harmonized with international standards.

The above measures are applicable to a wide range of items, including: personal protective equipment (PPE), food, live animals, medical equipment, drugs (pharmaceuticals), plant products...

### ***3.1. International experience of adopting regulatory review exception***

Recently, WTO member countries have informed applicable exceptions in international treaties, focusing on nine primary groups, particularly<sup>1</sup>:

#### **(1) Simplified approval process and associated procedures**

A number of interim measures have been announced by member countries to simplify processes of approval, authorization, and others applicable to medical products. The purpose is to facilitate its market penetration while satisfying health and safety requirements.

Brazil is adopting a number of interim measures, particularly: Suspension of usual approval process and quality requirements for

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protection equipment (including surgical mask, N95 and PFF 2 respirators, or similar face masks, protection goggles, face shields, disposable gowns, breathing & respiratory equipment, etc.) and other associated medical equipment. Mandatory certification is suspended for surgical gloves. Expansion of antiseptic and disinfectant production is encouraged. The country also facilitates approval process for first applicable or registry for changes of medicines and biological products.

In Canada, antimicrobial solution, antiseptic and PPE can be imported without satisfying language and labeling requirements on a temporary basis.

Ukraine has announced interim procedures and especially supported the import of PPE and medical equipment which are considered necessary for health protection against the epidemics even if they have not fully met with national statutory specifications.

Thailand has issued a process of registration approval on a temporary basis for PPE, medical equipment and pharmaceutical products.

## (2) Remote / electronic procedures

- Considering difficulties encountered during performance of administrative procedures owing to COVID-19, some countries have promulgated alternative procedures for compliance due diligence by deploying electronic devices or remote control.

Brazil has informed interim and urgent changes to compliance due diligence procedures that allows remote control (through

technologies of video conferencing and data transmission) and verification using data analysis, covering the manufacturing process of both pharmaceuticals and medical equipment.

The United Arab Emirates has agreed to initiate visualization technology (video conferencing) instead of on-site inspection, for example, in certification renewal.

Ecuador has developed online tools for verifying commercial certifications.

- Regarding SPS requirements, some countries have temporarily reduced certification requirements and are moving towards process digitalization.

Specifically, the European Union has officially allowed the use of alternative measures for verification and other purposes, including the use of electronic copies and other electronic formats of certification and authentication. These procedures also allow authorizing any designated laboratories to perform analyses, tests, or diagnoses.

The United Arab Emirates has agreed to develop such alternatives as digital health certificates and accepted paperless certificate verification to reduce the use of paper health certificate.

### (3) Legal cooperation

Some WTO member countries are considering their selection based on legal cooperation with other member countries to clear the way for approval process and facilitate the imports of essential medical equipment.

Brazil decided to accept information directly sent from other managing agencies who join Pharmaceutical Inspection Co-operation Scheme (PIC/S) and Medical Device Single Audit Program (MDSAP) so that the country does not need to audit manufacturers itself. Besides, Brazil will directly accept ventilator and other medical devices certification under the MDSAP. At the same time, it will also accept new medical devices and PPE which are not regulated in Brazil but authorized in the jurisdiction of other members of the International Medical Device Management Forum (IMDRF).

Canada has allowed importing hand sanitizers, disinfectants and PPE produced through authorization in other jurisdictions with similar regulatory frameworks.

#### (4) Ensuring safety of medical supplies

Some WTO member countries have endorsed new rules on health, safety or quality of medical supplies to respond with the epidemic.

Kuwait has endorsed a number of new standards for respirators, sanitizers, disinfectants, medical equipment, and PPE.

Meanwhile, Namibia, Jamaica and Peru have lowered requirements towards hand sanitizers and face masks for community. The adoption of these new standards makes it easier to produce essential medical products within the country.

The United States has revised regulatory requirements for the testing and approval of air purifying respirators and established a new

system of performance standards to cope with current increasing demand for respirators in emergency medical care facilities.

Brazil has adopted new import rules for products used for vitro diagnosis of COVID-19.

#### (5) Increasing food supply by loosening technical requirements

Some WTO member countries have issued temporary rules to loosen technical requirements for a few of food products while remaining health benefits.

Indonesia is suspending requirements on supplements and quality for staple foods (i.e. flour, cooking oil, sugar) to secure food availability.

Switzerland has been loosening food labeling requirements for period of 6 months to respond to shortages of some foods and packaging materials owing to pandemic outbreaks.

#### (6) Addressing COVID-19 risks from international trade of live animals

In the early stages of the pandemic, within the framework of the SPS Agreement, a number of WTO member countries have imposed temporary restrictions on the import and transit of live animals and animal products, or towards certain animals, such as exotic and ornamental animals, including insects, arthropods, amphibians, reptiles, and amphibians.

At the beginning, some of these measures were directed at imports from China, but were later expanded to other affected regions, including Italy, Iran, South Korea, Switzerland, La Réunion and EU member

countries. Few WTO member countries have also announced COVID-19 related certification requirements for any import or transport of mammals and domestic animals from Hong Kong, China or for all products subject to veterinary and phytosanitary control.

## **References**

1. Relevant directing, administering and legal documents of the Government, ministries and branches of Vietnam, 2020.
2. Vietnam Logistics Report of the Ministry of Industry and Trade at the 7th Session of the National Steering Committee on National Single Window, ASEAN Single Window, Reform of Specialized Inspection and Facilitation commercial, 2020.
3. Report on Vietnam's logistics activities by the Vietnam Association of Logistics Service Enterprises, 2020.
4. Report on Vietnam's border trade activities by the Vietnam Association of Traders doing Border Trade, 2020.
5. Report on Vietnam's socio-economic situation in the third quarter and the first nine months of 2020 of the Ministry of Planning and Investment, 2020.

# THE IMPACT OF THE COVID-19 PANDEMIC ON LOGISTICS AND BANKING ACTIVITIES

Assoc., PhD. Nguyen Dac Hung

*Faculty of Economics*

*Hung Yen University of Technology and Education*

## Abstract

*Commercial bank (commercial bank) is a type of financial intermediary organization, credit operations, currency trading and providing other convenient banking services in the economy. Banking operations and businesses in the Logistics system have a direct relationship on six angles: i) the same ecosystem between Logistics infrastructure and digital banking technology, or e-banking; electronic commerce, or electronic supply of goods and services; ii) capital investment through purchasing corporate bonds and providing credit loans to businesses in the logistics system; provision of guarantee services, opening L/C, factoring, cross-border money transfers and other international trade finance, import and export financing;... Consequently, the COVID-19 pandemic affected Positive and negative impacts on Logistics activities also directly affect banking operations.*

*Research articles on practice, through qualitative methods, synthesize secondary documents, data of different authorities, analyze,*

*compare, evaluate, clarify the above situation, propose recommendations.*

**Keywords:** *Logistics, Banking Activities, Impact, COVID-19*

## **Introduction**

COVID-19 epidemic broke out at the end of January 2020 in Wuhan - China, and then appeared globally, including Vietnam, which has caused heavy socio-economic losses. world. By the beginning of September 2020, more than 27 million people got sick and more than 883 thousand people died. The pandemic has put heavy pressure on global production and supply chains, and it is also the pandemic that opens new avenues for logistics services, e-commerce, and digital banking to develop.

### **1. The concept of logistics**

English terminology: Logistics has been mentioned more often in Vietnam over the past 10 years. Up to now, there has not been a full definition or concept expressed in Vietnamese about the meaning of this term. Some of the following concepts can be mentioned:

Logistics is the part of supply chain management that encompasses the planning, implementation, and control of the efficient transportation and storage of goods and services, as well as related information from origin to consumer. meet customers' requirements.

Logistics can be the general flow management of the transfer and storage of raw materials, manufacturing processes, finished products and the processing of related information ..... from origin to final



consumption as required. of customer. More broadly, it includes waste collection and treatment.

Logistics is the process of planning, applying and controlling the movement of goods or information related to raw materials, input materials and output final products from the origin to the point of consumption.

Logistics from supply chain, to transportation, warehousing, port, factory, assembly, processing, follow-up transport, warehouse, transport operations, channels distribution and consumption.

The above diagram only outlines the basic stages of Logistics operations, because in practice, loading, unloading, packing, sorting, ... may be in the enterprises shown in the diagram and the enterprises. industry independent, specialized.

Logistics can be roughly translated as "logistics", but perhaps Vietnamese does not have an equivalent term. We can accept the word logistics as a Vietnamese word, similar to many other words in fact accepted such as container, marketing...

## **2. Negative impacts logistics and banking performance**

### ***2.1. Declining sales and employment of multiple firms in the supply chain analyzed by published statistics.***

Due to the COVID-19 epidemic taking place around the world as well as in Vietnam, it is very complicated and prolonged, making the global supply chain, of a country, a territory, a locality, or an industry. occupations, a broken and reversed business set, including logistics

operations, is considered the backbone of the supply chain. Air, road, sea, water and rail transport services were the hardest hit. Shipping is less affected, with freight rates unchanged despite declining transport requirements and procedural difficulties due to pandemic. These features of the world logistics service and supply chain are fully demonstrated in the Vietnamese logistics service industry. Based on published data of the General Statistics Office, the quantitative impacts can be seen as follows:

Generally in the eight months of 2020, the total retail sales of consumer goods and services reached 3,225.1 trillion dong, down 0.02% from the same period last year, if excluding the price factor, it would decrease by 4.5. % (the same period in 2019 increased by 9.5%). Apparently, the transport, packing, handling and distribution services involved are also reduced to different degrees. Turnover of those businesses did not appear or decrease, the jobs of workers in those stages were reduced or lost. [Gso (2020)]

Revenue from accommodation and catering services in the first eight months of 2020 was estimated at 322.5 trillion dong, accounting for 10% of the total and down 16.4% from the same period last year (it was up 9.8 in the same period in 2019. %). Revenue from accommodation and catering services in 8 months of this year compared with the same period last year of some localities: Khanh Hoa decreased 59.2%; Quang Nam decreased 53.3%; Ba Ria - Vung Tau down 42.7%; Ho Chi Minh city down 41.7%; Da Nang decreased by 31.7%; Can Tho decreased by 26%; Thanh Hoa decreased by 20.6%; Hanoi decreased by 17.9%; Quang Ninh down 10.5%; Hai Phong decreased 10.1%. Thus, the supply chains directly related to the above mentioned

accommodation and catering services are also reduced when considered qualitatively, while quantitatively it is difficult to determine accurately. Therefore, similarly, the revenue of those enterprises has not been or decreased, the jobs of workers in those stages are reduced or lost. [Gso (2020)]

Travel tourism revenue in the first eight months of 2020 was estimated at 13.1 trillion dong, accounting for 0.4% of the total and down 54.4% over the same period last year (up 10% in the same period in 2019) due to COVID-19 translation. Some localities have a sharp decrease in tourism revenue of 8 months of 2020 compared to the same period last year, typically: Khanh Hoa, down 76.6%; in Ho Chi Minh city by 72.1%; Ba Ria - Vung Tau down 67.2%; Quang Nam decreased 66.5%; Kien Giang decreased 64.7%; Da Nang decreased by 63.6%; Can Tho decreased 55.4%; Quang Ninh decreased by 54.9%; Hanoi decreased 42.2%; Binh Dinh decreased 41.9%; Thanh Hoa decreased by 40%; Hai Phong decreased by 38%. Thus, it is clear that the services in the supply chain involved, from road transportation by car, to other related services also decrease to different degrees. Similar to the two areas above, the revenue of enterprises in this sector has not been or decreased, the employment of workers in those sectors is reduced or lost. [Gso (2020)]

Other service revenue in 8 months of 2020 was estimated at 335.9 trillion VND, accounting for 10.4% of the total and a decrease of 5.7% over the same period in 2019, of which Khanh Hoa's revenue decreased by 69, 8%; Da Nang decreased by 17.5%; Binh Dinh decreased by 12.9%; Thanh Hoa down 12.3%; Ba Ria - Vung Tau down 9.7%; Ho Chi

Minh city down 8.4%; Hanoi decreased by 5.8%; Can Tho decreased 5.1%; Hai Phong decreased by 2.7%. These services in the statistics major not only indicate what businesses are related to Logistics, but also qualitatively suffer greatly. Accordingly, the turnover of enterprises in this industry has not been or decreased, the employment of workers in those stages is reduced or lost. [Gso (2020)]

Generally for 8 months of 2020, export turnover of goods was estimated at 174.11 billion USD, up 1.6% over the same period last year, of which the domestic economic sector with export turnover reached 60, 80 billion USD, up 15.3%; foreign investment sector (including crude oil) reached 113.31 billion USD (accounting for 65.1% of total export turnover), down 4.5%. This figure is not fully said to affect Logistics businesses, because the decline is also influenced by the fall in crude oil prices.

But the export turnover only increased by 1.6%, compared with the average increase in the past 10 years of 15%, it is clear that warehouse services, ports, loading and unloading, transportation, packaging, ..., yes In terms of quantity, the average export turnover in previous years increased by over 15%, but in the past 8 months it increased only 1.6%, a decline This clearly affects businesses and Logistics operations in the entire economy. [Gso (2020)]

Generally for the eight months of 2020, import turnover of goods was estimated at USD 162.21 billion, down 2.2% over the same period last year, of which the domestic economic sector reached \$ 72.05 billion, up 2.9%; foreign investment sector reached 90.16 billion USD, down

6.0%. Similar to the export perspective, there is no exact figure of the influence of the sectors concerned. However, it is clear that the transport, loading, unloading, warehousing, and distribution businesses that are directly involved have a major impact on workers' employment, equipment usage and storage capacity, etc. Quantitative, average import turnover increased by 14-16% in previous years, but in the past 8 months such decline clearly affects revenue, employment, capacity utilization of vehicles and machines. equipment, warehouses, factories of enterprises in the logistics supply chain. [Gso (2020)]

For Vietnam, since the outbreak of the pandemic, this crisis has had a strong impact on the transport, logistics and strategic sourcing sectors. According to a survey by the Vietnam Logistics Business Association (VLA), in the first quarter of 2020, up to 15-50% of the activities of member enterprises are affected, reducing activity, revenue, and employment. The decrease in workers depends on the type of service provided. Approximately 97% of enterprises providing logistics services are small and medium, so they are severely affected. Since the end of May 2020, logistics activities have been recovered according to the economy, but by the end of July 2020, the COVID-19 epidemic broke out for the second time in Vietnam, so the socio-economic situation continued to be affected. . By the end of August 2020, about 20% of logistics service enterprises still experienced a decline in their operations. Compared to before the pandemic, the amount of goods transported across the border has decreased significantly, changing drivers, changing tractors are existing difficulties for businesses providing logistics services. [Vla (2020)]

The Vietnamese economy is an expansive economy, dependent on exports and FDI, with more than 70% of total exports coming from this sector. Accordingly, Vietnam's logistics service industry is also affected by more than 30 transnational logistics providers that have close relations with the world's major shippers and shipping lines. [Vla (2020)]

The decline in international demand led to a drop in export orders, many companies had to let their workers quit their jobs. Logistics service enterprises are affected and affected. The recovery and development of an economy after the cessation of the COVID-19 epidemic depend on the vitality of other economies, especially developed economies. This is a prominent feature that the world and Vietnam logistics service industries have been affected by.

## ***2.2. The impact on the relationship of Commercial Banks and Logistics Enterprises***

### ***2.2.1. Commercial banks to restructure debts for logistics enterprises***

Up to now, there are no published exact data on Logistics enterprises that have been restructured by commercial banks according to Circular 01 of the State Bank of Vietnam. [SBV (2020)]. But through direct discussions with many commercial bank branch managers, credit bureaus and transaction managers of many commercial banks, many transportation, loading and unloading, cranes, packing and distributing enterprises, warehouse, port, ... debt restructuring. Estimating total debt of Logistics enterprises, including those doing business in transporting passenger cars, trucks, cranes, refrigerated vehicles, private households, goods transportation groups, households a family of warehouse,

wharves, and restaurants serving tourists, accommodation establishments, ... about 22,000 billion VND. Enterprises in this field in all provinces and cities, most concentrated are Hai Phong, Quang Ninh, Lang Son, Lao Cai, TP. HCM, Hanoi, Da Nang, Can Tho, Ba Ria Vung Tau, Quy Nhon, Pin Duong, Dong Nai, ... The forms of debt restructuring for Logistics enterprises in localities are debt rescheduling, adjusting period debt term, even interest reduction, ... to help businesses overcome difficulties.

Due to the impact of the COVID-19 epidemic on logistics businesses, it is leading to a situation of outstanding payments between transportation companies, loading and unloading companies, port companies, and warehouse service companies. yard, packaging and distribution company. Because the supply chain is broken, the parties involved do not have the revenue to pay the other party. Even a number of companies belonging to Logistics enterprises have taken advantage of the difficulties of COVID-19 that have appropriated capital and did not pay for partners in the supply chain, so many Logistics enterprises do not have a source of debt repayment. Borrowing from commercial banks to invest in the procurement of trucks, containers, packaging, cranes, barges, river ships and ships, building warehouses, ... had to negotiate with commercial banks on financial options in the future. Similarly, households doing business in transporting passenger cars, trucks, cranes, refrigerated vehicles, private households, cargo transportation groups, households doing warehouse and parking services. . also outstanding payment of installment payments for businesses selling machinery and equipment, loans from banks, ... Even many cases of selling passenger

cars, frozen cars, trucks. other types,... Logistics enterprises have mutual debts and stagnant debts of other import-export production and business enterprises in the chain; supermarkets and payment arrears between households transporting tourist cars, trucks, cranes, refrigerated vehicles, private households, cargo transportation groups, households making warehouse services, yards, ... causing high debt in the economy, debt from commercial banks, wages and insurance debts of workers directly and indirectly in the logistics industry.

### ***2.2.2. Logistics enterprises have no need to borrow new capital for investment in business development by COVID-19 translation***

Up to now, the banking system has no official data on Logistics enterprises that do not have a need to borrow loans from commercial banks for investment in service development and business development. However, statistics of the entire banking industry by the end of July 2020 show that the total outstanding credit for the economy reached 8.5 million billion VND, only 3.7% higher than the beginning of the year, only equal to half compared with the 7.5% increase in the same period in 2019 and the lowest level in the past 7 years. [SBV (2020)]. Among them, the credit balance of Logistics enterprises is 0%. Through surveys in the form of interviews and discussions with directors of many commercial banks, directors of commercial bank transaction offices showed that Logistics enterprises do not have the need to borrow new capital for investment in purchasing vehicles and building warehouses. for the following reasons:



i) Many foreign importers cancel the purchase contract, even though the commercial banks open their L / C in their commitment to open L / C to import goods from Vietnam. Some foreign importers requested to extend the delivery time, adjust the purchase volume of Vietnamese exporters, and request commercial banks to amend the L / C to guarantee the import of goods. That situation leads to Logistics enterprises in Vietnam also affected.

ii) Many enterprises that consume raw materials, raw materials, input goods, or finished products retailing for domestic consumers also terminate the contract, or request to adjust the delivery time, purchase scale, translated by COVID-19. Accordingly, Logistics businesses are also shrinking sales, jobs, mobilization of vehicles and capacity to use warehouses.

iii) Many projects that are implementing the construction of warehouses, ports and vehicles of Logistics enterprises have to be halted due to the COVID-19 epidemic and it is not known when the operations of related enterprises will be restored, photo Effect on investment efficiency, capital recovery time.

iv) Enterprises in manufacturing sectors such as textiles, footwear, book bags, building materials, interior decoration, ... rely mainly on importing raw materials from China, where COVID-19 epidemic occurred- The 19th most affected during the period from February to May 2020, production had been stopped due to the pandemic. Many localities of China have to socialize, traffic stops, factories are not working. The campaign to rescue goods congested on

the border with China in the early stages of the pandemic and especially the period of social isolation in April 2020 caused production, logistics and transportation to be disrupted. passage, congestion. From May 2020, the economy started to recover, but the COVID-19 pandemic continued to develop complicatedly in markets that are Vietnam's main trading partners, negatively affecting import and export activities. and logistics.

### ***2.3. Opportunities for Logistics businesses and Commercial Banks***

The biggest opportunity in the months separating from society is to deliver goods, other courier, because customers buy goods online. Accordingly, e-payment turnover increased thanks to high growth in e-commerce and online purchases nationwide.

Statistics from the State Bank of Vietnam show that by the end of the second quarter of 2020, domestic payment transactions had a very strong growth rate. It can be mentioned as, the number of transactions via bank cards (Not including: international payment transactions, card transactions issued by overseas banks; deposits, withdrawals or money transfers of which the sender and receiver are one; and payments between credit institutions and customers (such as loans, repayment of principal / interest, or fees, ...), reaching 171,116,815 items, with a transaction value of 399,356.24 billion VND, up sharply from the number of 88,257,048,00 items and 194,715 billion VND in the second quarter of 2019. These transactions are associated with e-commerce. Customers sitting at home order goods via home delivery network and pay electronically through e-wallets, digital banking technology. [SBV (2020)]

Or other payment methods, such as: draft, bill of money, domestic letter of credit, SMS Banking, Mobile Banking, Internet Banking, Bank transfer from CA-Current Account, ...) reached 31,886 .522 items and VND 2,651,935.99 billion, a very strong increase compared to the number of 11,505,025 and VND 1,375,924 billion in the second quarter of 2019. These transactions associated with e-commerce increased highly during the time of social gap caused by the COVID-19 epidemic. [SBV (2020)]

The number of bank cards issued cumulatively decreased slightly in the fourth quarter of 2019 but rebounded in the first quarter of 2020, because the demand for e-commerce transactions and non-cash payments increased due to the epidemic. COVID-19 with home delivery operations. Personal current accounts also recorded a slight increase in both quantity and balance in the first months of 2020. [SBV (2020)]

COVID-19 epidemic broke out, making payment methods via ATM, POS / EFTPOS / EDC slightly reduced, because people also limited contact with people. Data from the State Bank also demonstrated this, when the transaction value decreased sharply in the first and second quarter of 2020. The need to limit direct contact when dealing with a series of strong mobile application innovation activities of banks has boosted online payment in the first 6 months of 2020, associated with e-commerce. Accordingly, logistics activities in the country are also developing thanks to the need to buy food, beverages, other everyday items, ... delivered at home, contactless electronic payments ...

Data from the State Bank shows that, in the first 6 months of 2020, the number of transactions via mobile phone channels "explodes" more than 472 million transactions, with a value of 4.9 million dong, up correspondingly. 178% and 177% over the same period last year. [SBV (2020)]

Only in the first 6 months of 2020, the unprecedented crisis caused by COVID-19 has profoundly affected the socio-economic life. The need to limit contact in crowded places has made Vietnamese consumers' consumption habits change significantly and at the same time create a boost for online payment channels, especially via mobile phones, associated with shopping services. online, home delivery, home delivery. This is a convenient payment method and suitable for a large number of people thanks to mobile devices, Internets, especially during times of social gap, customers can access vopwis to buy and sell online, home delivery, the demand for online payment increases and gradually understands the benefits that this way brings.

Want to pay utility bills or recharge phone cards but are afraid to go to the street because of the translation, so families pay via mobile banking applications, in less than a minute, they have successfully transacted without going anywhere.

The survey by Nielsen Vietnam shows that more than 50% of surveyed people say that they have reduced frequency of going to supermarkets, traditional markets, 25% increase online shopping.

Vietnamese people nowadays spend more time online and shop more online. The trend of favoring e-commerce will continue in the

future even when COVID-19 is over, promoting the development of Logistics activities. [Nielsenvn (2020)]

In addition to the direct influence from COVID-19, the impressive growth of nearly three times in both quantity and value of transactions via mobile phones also comes from the initiative of online payment service providers. In general and mobile payment in particular, businesses and individuals conduct e-commerce transactions, leading to an increase in Logistics demand. Most of the e-wallet applications and most notably the mobile banking applications today provide almost full features and basic transaction utilities such as money transfer inside and outside the system 24/7, pay bills for electricity, water, Internet, insurance, top up phone cards or open online savings, an ecosystem formed of businesses and individuals conducting e-commerce transactions, businesses and individuals. Logistics activities. A few banks and e-wallets that focus on developing this product platform also bring more "advanced" benefits such as payment via QR codes, buying train tickets, cars, and airplanes, hotel booking, online lucky money sending, household shopping, "virtual" credit card feature and dozens to hundreds of other utilities associated with the daily life of users, based on e-commerce platforms Logistics operations.

## **Conclusion and recommendation**

Until mid September 2020, the Covi-19 epidemic in Vietnam was gradually settling down. The localities: Quang Nam, Da Nang, Ly So Island, Hai Duong City, ... have basically widened the social gap. Some international routes to Japan, Korea, Taiwan, ... are being proposed to be

reiterated. However, international trade and tourism activities, labor export, ... are still quite a while back to normal as in the period of 2019.

Within an article, the author does not form a separate comment and rating section. But the analysis, comments, opinions above and the following recommendations imply the author's assessment.

*Firstly*, commercial banks need to continue to restructure their debts for Logistics businesses and households and individuals operating in the Logistics sector who are borrowing credit. These customers need to continue to reduce loan interest rates, extend the loan term at least 6 months to 1 year under the direction of the Prime Minister at the Government meeting in September 2020. In case of difficulties, there is a need for new loans, commercial banks should continue to lend to Logistics enterprises and households and individuals operating in the field of Logistics to operate their business activities. payment of debt repayment partners, salaries for workers.

*Second*, the Government, the Ministry of Finance, consider continuing to extend the tax payment deadline, extend the time of tax debt, insurance debt, and owe some fees of the state budget to Logistics enterprises and households. individuals working in the field of Logistics, as well as personal income taxes of workers working in the field.

*Third*, the Government continues to urge the disbursement of strong public investment in the field of logistics and projects directly related to Logistics businesses and households and individuals operating in the Logistics sector. VBSP offers preferential loans from the Government for salary payment and job creation for workers in Logistics

enterprises and households and individuals operating in the field of Logistics.

*Fourth*, the Government needs to accelerate the construction of Long Thanh Airport, renovate and expand other airports, seaport projects, waterway and road traffic routes, ... which have been approved by the National Assembly, government approval.

*Fifth*, the Ministry of Industry and Trade, the Ministry of Transport and the State Bank have specific programs and measures to promote the ecosystem: e-commerce, logistics infrastructure and digital banking technology develop. The State Bank and commercial banks promote e-wallets, electronic payments, ... to develop, create conditions for the business operations of Logistics enterprises and households and individuals operating in the field of Logistics to develop.

## **Reference**

1. Gso (2020): "Monthly socio-economic information" published by the General Statistics Office, accessed at relevant sections: [www.gso.gov.vn](http://www.gso.gov.vn); Access time, from September 3 to September 6, 2020.
2. The State Bank of Vietnam – SBV (2020): "Banking Operation Information", published by the State Bank of Vietnam, accessed at News - Events and relevant sections, at [www.sbv.gov.vn](http://www.sbv.gov.vn); Access time, from September 3 to September 6, 2020.
3. Nielsenvn (2020): Available at:

<https://www.nielsen.com/wp-content/uploads/sites/3/2020/06/VI-PR-Life-beyond-COVID-19-1.pdf> ? cid = socSprinklr-Nielsen + Vietnam;  
Date accessed: September 6, 2020

4. Vnexpress.net (2020) :, Accessed at: <https://vnexpress.net/hon-27-trieu-nguoi-nhiem-ncov-toan-cau-4157544.html>, access date: September 6 / 2020

5. Vla (2020): Accessed at: <https://www.vla.com.vn/hiep-hoi-doanh-nghiep-dich-vu-logistics-15-doanh-nghiep-mat-50-doanh-thu-50-companies-enterprises-to-workers-with-the-number-service-with-also-ky.html> services, accessed date: September 6, 2020



# THE IMPACT OF THE COVID-19 PANDEMIC TO COPING CAPACITIES OF VIETNAMESE LOGISTICS ENTERPRISES TO THE COVID -19 PANDEMIC

**PhD. Nguyen Mau Hung**

*University of Sciences, Hue University, Vietnam*

## **Abstract**

*Based on analysis results of different sources by qualitative and quantitative methods, the paper shows that the COVID-19 pandemic made a strong impact on almost all basic areas of Vietnam' economy, but one of the sectors most heavily affected is logistics activities. The most obvious manifestation of this phenomenon is the disruption and a significant decline in logistics activities between Vietnam and other countries as well as among localities within Vietnam. In such a context, all Vietnamese logistics enterprises have been affected by different forms and degrees. Logistics enterprises that have been most negatively affected have often been forced to choose the path of bankruptcy, while a lot of logistics enterprises have also had to accept the solution of suspending their operation in a certain period of time and specific conditions. However, most of the enterprises capable of coping well with the COVID-19 pandemic have chosen to operate moderately to wait for the opportunity of recovery after the COVID-19 pandemic. Although each logistics enterprise has chosen different responding solutions to the*

*COVID-19 pandemic, the adaptive capacity of most of these firms is in general still relatively limited. Therefore, proactively coping with unusual developments of the pandemic and quickly adapting to state responding measures are considered as urgent tasks of logistics businesses. Nevertheless, raising stakeholders' awareness and increasing the utilization of modern technology equipment to prevent the effects of the COVID-19 pandemic more effectively will be long-term solutions of logistics enterprises in the new normal context.*

**Keywords:** coping capacity, logistics enterprise, COVID-19 pandemic, Vietnam

## **1. Introduction**

Logistics activities are an indispensable part and play an increasingly important role in all national economies. That role in Vietnam is currently in the hands of more than 4,000 transportation companies and logistics businesses. Of these, 88% are domestic firms, 10% are joint venture businesses, and 2% are foreign firms. Most of Vietnam's logistics enterprises are located in Hanoi and Ho Chi Minh City (M. Hong, 2020). Along with the prosperity of the national economy, Vietnam's logistics industry has often achieved a growth rate of 14-16% (Anh Hoa, 2020) and contributed around 4-5% of GDP to the country's economy in recent years (Le Minh, 2019). The simplification of customs procedures and the constant upgradation of the infrastructure have brought Vietnam's logistics industry to the 39<sup>th</sup> out of 160 in the world in 2018 (M. Hong, 2020). Logistics is currently not only an

investment-prioritized economic sector in the national development strategy, but also an important knot in many of Vietnam's manufacturing industries and global service supply chains. Nevertheless, Vietnam's logistics costs are still higher than the world's average ones and account for nearly 20.9% of the country's GDP (Anh Hoa, 2020). In 2019, the logistics cost of 1 kg of shrimp from the South to the North of Vietnam was even higher than that from Ecuador to Vietnam. High logistics costs are one of the main reasons why Vietnamese goods become less attractive to fastidious markets. However, the COVID-19 pandemic has been a real challenge and a fatal punch for Vietnam's logistics industry. Although logistics is one of the heaviest lost industries and the viability of many logistics enterprises is seriously threatened (Australian Aid *et al.*, 2020, 3), some essential logistics activities still needed to be maintained even in the period of social distancing. How has the COVID-19 pandemic affected Vietnam's logistics industry? How have Vietnamese logistics enterprises responded to the challenges of the COVID-19 pandemic? What solutions can help Vietnam's logistics activities overcome this global crisis? This issue has been attempted to explain by both researchers and stakeholders in different forms and degrees, but there are many mixed opinions on Vietnamese logistics enterprises' coping capacities and practical efficiencies of coping measures against the COVID-19 pandemic. It is therefore based on analysis results of different sources of material, the paper not only analyzes the impacts of the COVID-19 pandemic on Vietnamese logistics enterprises' activities and coping abilities, but also proposes

some solutions to help Vietnam's logistics industry develop stronger in the coming time.

## **2. Literature review and database**

Although logistics activities have appeared in Vietnam for a long time, logistics (logistics services) have often been seen as intermediary activities. Many issues of Vietnam's logistics industry have hence not been given sufficient attention and the number of studies in this field is not really plentiful. However, the COVID-19 pandemic has contributed to changing a lot of people's perceptions of the role and position of logistics activities in the production chain of the entire national economy. Researches on the impacts of the COVID-19 pandemic on logistics enterprises have become more urgent. They all focus on two main groups of opinion. *The first* ones of documents believe that logistics is one of the most suffered industries from the paralysis of the economy due to the COVID-19 pandemic (Ha An, 2020). All the documents, namely *The passenger transport businesses were miserable because of Corona* (Bao Giao thong, 2020), *The logistics industry faced many challenges* (Dao Le, 2020), and *Naming the new 'victims' of the COVID-19 pandemic* (H. Thuy, 2020), support this view. However, many experts affirm that the COVID-19 pandemic has also opened up new avenues and horizons so that the logistics industry can develop further in the coming time (Tap chi GTVT, 2020). Documents such as *The bright-dark picture of logistics enterprises* (Hang Nga, 2020), *Logistics enterprises are seeking opportunities for digital transformation in the context of "supply breakdown, demand breakage"* (Doanh nghiệp logistics tìm cơ hội

*chuyển đổi số trong bối cảnh “đứt cung, gãy cầu, 2020), and “post-Covid” Vietnamese enterprises: Challenges go hand in hand with opportunities (Vo Huy Hung, 2020) follows this point of view. However, no aforementioned documents have analyzed coping capacities of Vietnam’s logistics enterprises to the COVID-19 pandemic over the past few months.*

Therefore, this study contributes to answering these questions with three main sources of documents. The *first* one is statistics of authorities and reflections of logistics enterprises on the performance of this economic sector during the outbreak of COVID-19 pandemic. The number of this type of documents is not fruitful, but *The Report on the impact of the COVID-19 epidemic on the situation of labor and employment in the third quarter of 2020 (GSO, 2020), 90% of logistics enterprises have total capitals less than 10 billion VND (Le Minh, 2019), and 9 months’ trade surplus is nearly 17 billion USD, the bright spot of the economy (Vu Ha, 2020) can be mentioned here. The second* are some initial studies on the impacts of the COVID-19 pandemic on Vietnam’s logistics activities over the past few months. The most noteworthy of these is *the Short report on the impacts of the COVID-19 pandemic on the needs, skills of workers and human resource training activities for Vietnam’s logistics industry (Australian Aid et al., 2020, 4), 4 possibilities of COVID-19 impacts (Lan Ngoc, 2020), and How have Vietnamese logistics enterprises been affected by COVID-19? (Quang Anh, 2020). The third* is the system of updated information from news agencies about the influences of the COVID-19 pandemic on Vietnam’s logistics activities. The most frequently used in this study are *Update on*

*the impacts of the COVID-19 pandemic on Vietnam's economic sectors* (Can Van Luc et al., 2020), *Vietnam's logistics services industry during the COVID-19 pandemic* (Tap chi GTVT, 2020), and *COVID-19 - the strong catalyst to reposition the logistics businesses* (Xuan Thao, 2020).

### **3. Methodology and research methods**

The term *logistics* can be understood in different forms and degrees and very few Vietnamese words can fully describe all the contents of this concept, but logistics can basically be temporarily seen as a system of services to transport goods from starting points (usually place of production) to the destination (usually place of consumption) by forms and under agreements of involved parties (Le Minh, 2019). This responsibility in Vietnam is being assigned to more than 4,000 logistics enterprises (Anh Hoa, 2020) and can be divided into 3 main groups. The *first* one is the transnational logistics enterprises (around 12%) (M. Hong, 2020). Approximately 3,000 domestic transportation and logistics enterprises account for about 88% (M. Hong, 2020). Of these, only around 10.8% of Vietnamese logistics enterprises are large-scale (over 1 thousand employees) (Dao Le, 2020) and belongs to the *second* group. Around 90% of the remaining logistics enterprises have the registered capital to operate less than 10 billion VND (Le Minh, 2019). The *third* is roughly 80% (Dao Le, 2020) of micro, small, and medium-sized logistics business (Hai Nhi, 2020) with the registered capital of 1.5-2 billion VND (Dao Le, 2020). Coping capacities of each of these types of logistics enterprises are relatively different depending on the actual conditions of each business.

The aforementioned methodological principle is the scientific basis for the use of qualitative and quantitative methods as well as the interdisciplinary and specialized approach of the paper. While all the findings of this study are supported by a system of related figures, databases, and facts of quantitative method, many claims of the paper are supplemented by published research results and widely recognized conclusions in practice. For example, all arguments on the impacts of the COVID-19 pandemic on Vietnam's logistics activities over the past few months have been concretized by very accurate data. However, the assumption that the suffering capacities of most Vietnam's logistics enterprises are relatively weak is based on verified factual experiences of experts in this field. Additionally, this study is also conducted by several different interdisciplinary and specialized research methods, but the most used are analytical, synthesized, comparative, logic, and historic ones. While Vietnamese logistics enterprises' responses to the effects of the COVID-19 pandemic are arranged in chronological order of historical logic, many domestic logistics enterprises' activities have been compared with those of transnational enterprises. All of them contribute to confirming that although the COVID-19 pandemic is a global challenge, coping capacities of each type of logistics enterprise in Vietnam is relatively different and directly affects the operational quality of Vietnam's logistics industry in the coming time.

#### **4. Research results**

Vietnam is a small, open, and highly dependent economy on partner countries as well as on international trade environment

(Australian Aid *et al.*, 2020, 5). The COVID-19 pandemic devastated the world economy (H. Thuy, 2020) and disrupted a number of global supply chains. Vietnam's logistics service industry has of course also been negatively affected (TTXVN, 2020). In such a situation, each logistics business has offered different responding solutions to the COVID-19 pandemic.

#### ***4.1. A large part of Vietnam's logistics enterprises have chosen the option of temporary suspension of their operations or permanent bankruptcies***

The COVID-19 pandemic has not been a disaster for all businesses, but business results of many enterprises have not really been positive (Hang Nga, 2020). Most Vietnamese firms are medium-sized, small, and micro ones. The COVID-19 pandemic made the operations of these businesses at least interrupted in the short-term and a large part of them had even to close or dissolve (PV, 2020). In the first 4 months of 2020, around 22,700 Vietnamese enterprises suspended their business temporarily. This figure increases by 33.6% compared to that of the same period of last year. Nearly 14,000 businesses officially stopped operating. 5,277 enterprises announced plans of dissolution. 5,776 businesses are dealing dissolution procedures with the authorities. 5,100 businesses officially disappeared from Vietnam's economic map (Thai Phuong, 2020). The most critical is enterprises of tourism, transportation, and logistics (PV, 2020). Many passenger transport enterprises and logistics businesses in Vietnam have had to fight against the epidemics and deal with the risk of bankruptcy (Van Ngan, 2020).



Vietnam has temporarily suspended issuing visas to foreigners from March 18, 2020 (N. An, 2020). Air and road transport services have been the hardest hit (Ha An, 2020), but the number of goods of inland waterway transport decreased 10.7% in the first quarter of 2020 and the number of passengers went down 2% in January 2020. The total number of goods and passengers decreased by 40-80% compared to that of the same period of last year and prior to the COVID-19 pandemic (Australian Aid *et al.*, 2020, 5). Demand for road transport decreased by about 30% (Quang Anh, 2020). Around 15-50% of Vietnam's logistics enterprises narrowed their scope of operations and reduced their revenue by an average of 10-30% compared to that of the same period in 2019. Many small and medium-sized logistics enterprises are on the brink of bankruptcy (TTXVN, 2020).

Many passenger transport enterprises have been in trouble because their vehicles had to stop operating and if running, they were unable to cover losses. The volume of passenger transportation decreased around 50% in February and March 2020, 100% in April 2020, and about 50% from May to July 2020 (Nguyen Tuan, 2020). A logistics enterprise had to pay 6.3 VND billion for land rent in 2019, but this figure skyrocketed to more than 20 billion VND in 2020 due to the sharp increase in the land rental framework and the changes of method of calculating the rent of the premises (an increase of around 1.5-2.1 times) (Chi Cong and Minh Trang, 2020). That means under normal conditions around 80% of Vietnam's micro and small logistics enterprises have faced fierce competitive challenges (Ha An, 2020), the COVID-19 pandemic has made about 90% of Vietnam's logistics businesses of less

than 10 billion VND (Pham Trung Hai, 2020) become more miserable. This fact shows that approximately 80% of Vietnam's logistics enterprises (small and micro less than 2 billion VND of total operating capital) are facing the greatest risk of bankruptcy due to the negative impacts of the COVID-19 pandemic. Around 10% of logistics enterprises that can be classified as medium-sized ones are facing the risk of temporary shutting down in different forms and degrees.

Although all logistics enterprises in Vietnam had to suspend their operations during the period of nationwide social distancing, essential logistics activities for daily life had to be maintained. Therefore, a number of Vietnamese logistics enterprises have actively participated in transporting goods for the domestic market and serving commercial activities during the social distancing (Tap chi GTVT, 2020). However, small and medium-sized logistics businesses that had not yet recovered from the first phase of COVID-19 pandemic faced new storms in August and September 2020 and are very easy to be knocked down in the current context (Chi Cong and Minh Trang, 2020). The first phase of the COVID-19 pandemic was devastating many passenger transportation companies. A series of passenger transport companies went bankrupt or fell into debt because of their loans for investments in infrastructure and business. After Vietnam had controlled the second phase of the COVID-19 pandemic, logistics activities in general and transport businesses in particular had just recovered for a short while, the fact that the COVID-19 pandemic spread into communities in the third period made many logistics businesses fear for bankruptcy (Van Ngan, 2020).

Out of more than 400 car transport companies operating in Nghe An, only more than 200 were difficultly operating in moderation. The number of non-working vehicles was increasing and financial burdens on logistics businesses were even heavier. This bankrupt risk was also evident for many passenger transportation companies in Hai Phong. As long as one driver of the enterprises is suspected of being infected with COVID-19, the entire business must be shut down. Several logistics enterprises in Ho Chi Minh City had to reduce their operating and marketing costs to cope with the COVID-19 pandemic. Some logistics businesses had to temporarily shut down and were in a hibernation stage to get through this difficult period. When the COVID-19 pandemic broke out again in Da Nang on July 25, 2020, the number of passengers of the Corporation for Transport, Trade and Services decreased by 80%. Around 70%-80% of the company's trips have been cut (Dang Tien, 2020). Ha Tinh Automobile Transport Joint Stock Company has nearly 90 buses, but the number of passengers decreased by about 40% compared to that of the last year's period. Many passenger transportation companies admit that if the COVID-19 pandemic continued and the situation was not improved, most of them can only choose the option of bankruptcy.

Likewise, the COVID-19 epidemic has forced many businesses to reduce their scope of production. Several domestic logistics enterprises were also affected significantly. The COVID-19 pandemic entered Vietnam from January 29, 2020, but the daily life only returned to normality under new conditions on April 24, 2020. That means the majority of logistics businesses were inactive for four months.

Theoretically, very few small and medium-sized logistics enterprises can make profits after such a long rest (Thai Phuong, 2020). My Dinh bus station usually welcomed around 10,000 passengers per day, but the number of passengers decreased to a half in the social distancing period. The number of passenger some of passenger transport enterprises also reduced by approximately 15-20% compared to that of the time prior to the COVID-19 pandemic. The number of passengers at the bus stations of Dien Bien, Ha Tinh, Nghe An, Đak Lak, Lam Dong also decreased by 30-50%. Many transport enterprises had not recovered from the first phase of the pandemic, the second one gave them a fatal blow within just half a year. Many of them are facing the dangers of bankruptcy and do not know when they could return to the market.

Most of the micro, small, and medium-sized Vietnamese logistics enterprises have not overcome the COVID-19 pandemic, but they are facing the risk of market acquisitions and business mergers from foreign competitors. This threats had inherently been worrying before the COVID-19 pandemic, but has become more frightening (Dao Le, 2020), because while the weak domestic small logistics firms often suffered heavy losses over the past few months, several international logistics firms have proven their coping abilities in the COVID-19 pandemic. The competitive pressure of the logistics industry will increase with the new generation trade agreements that Vietnam signed. The competitive pressure and the purification process are in practice making many logistics businesses weakened (Vo Huy Hung, 2020). Approximately 80% of micro, small, and medium-sized logistics enterprises may have

to stop working (Ha An, 2020). It is hence the time to buy businesses as the cheapest (Anh Hoa, 2020).

In summary, the COVID-19 pandemic has caused many difficulties for Vietnamese logistics enterprises (Dao Le, 2020). Of these, air, road, and rail transport services were most impacted. Around 97% of Vietnam's small and medium-sized logistics enterprises were severely affected by the COVID-19 pandemic in the first quarter of 2020 (Tap chi GTVT, 2020). Approximately 20-50% of Vietnam's logistics enterprises experienced a serious decrease in revenue (Dao Le, 2020). A number of small and medium-sized domestic logistics enterprises have had to accept the solutions of dissolution. Some of them are choosing the options of temporarily suspending their operations to wait for recovery opportunities in the future. Business operations of most of the 80% of small and medium-sized logistics enterprises in Vietnam have been delayed (Dao Le, 2020). This fact shows that most of Vietnam's small and medium-sized logistics enterprises' suffering capacities are very weak. The first phase of the pandemic left domestic logistics operations almost paralyzed. The majority of small and medium-sized logistics enterprises have been exhausted and unable to find more effective coping solutions other than reducing output costs. If the COVID-19 pandemic continues to expand or temporarily suspends and then reappears, the majority of small and medium logistics enterprises (Chi Cong and Minh Trang, 2020) have to choose the option of dissolution (Dao Le, 2020).

***4.2. Some logistics businesses have operated in moderation to wait for new opportunities***

The growth rate of Vietnam's logistics industry has reached around 14-16% in recent years. Vietnam's logistics market often earns about 40-42 billion USD per year (Pham Trung Hai, 2020). Vietnam is currently home to approximately 4,000 logistics enterprises. Around 70% of these are located in Ho Chi Minh City and surrounding areas. However, only 1% of Vietnam's logistics enterprises have the capital of over 100 billion VND, 1% (50-100 billion VND), 3% (20-50 billion VND), and 5% (10-20 billion VND) (Le Minh, 2019). Although less than 10% of Vietnamese logistics businesses join the Vietnam Logistics Association (VLA), they account for over 60% of the national market share. Most of them are the country's leading logistics enterprises. The most notable are SNP, Gemadept, Transimex, IndoTrans, TBS Logistics, Tan Cang Saigon, Delta, U&I Logistics, Sotrans, Minh Phuong Logistics... (Le Minh, 2019).

Vietnam's logistics market has officially been opened completely to foreign businesses since the 1<sup>st</sup> January 2014. About 25 leading logistics groups of the world and 30 transnational logistics enterprises are operating in Vietnam (Pham Trung Hai, 2020). Although the number of foreign logistics enterprises accounts for only 2%, the number of joint venture logistics enterprises accounts for 10% of the total number of logistics enterprises in Vietnam (M. Hong, 2020), and they only mainly operate in two sectors of ocean transport and freight transportation, foreign businesses account for nearly 80% of Vietnam's logistics market share. Of these, around 30 enterprises provide transnational logistics services. The most prominent are DHL, FedEx, Maersk Logistics, APL Logistics, CJ Logistics, KMTC Logistics... (Anh Hoa, 2020).

Approximately 70% of Vietnam's exports depend on export enterprises and FDI enterprises. Of these, more than 30 transnational logistics enterprises play the central role. Some professional logistics centers such as Samsung, Unilever, P&G, Vinamilk, Masan... have automated almost all of their operations. Most of Vietnam's current largest logistics centers are located in Hai Phong, Dong Nai, and Binh Duong. Most businesses such as Gemadept, TBS, Saigon Newport Corporation, Transimex, Mapletree, Damco, DHL, Kerry Express, Viettel Post... have applied very modern management technology systems (Le Minh, 2019). These are the leading transporters in logistics activities between Vietnam and external markets. Most of Vietnam's logistics enterprises have been affected by the COVID-19 pandemic (Quang Anh, 2020), but theoretically the larger the size of the enterprises is, the higher the rate of negative impacts from the COVID-19 epidemic is (Vo Huy Hung, 2020).

In the aviation sector, the revenue of around 15-50% of logistics businesses was reduced. Of these, air and road transport companies have often most affected (Hai Nhi, 2020). Vietnam has temporarily suspended entries to all foreigners from March 22, 2020 (Pham Thao, 2020). Vietnam's last international commercial flight took place on 25<sup>th</sup> March 2020. Although domestic flights have still been being exploited, Vietnam's aviation industry has been experiencing the most difficult period ever with an initial loss of more than 30,000 billion VND (Anh Minh, 2020). Vietjet Air is the first Vietnamese airline to operate cargo on board since April 2020, but all Vietnamese airlines suffered losses in the first 6 months of 2020. Vietnam Airlines suffered a loss of more than

6,500 billion VND, while Vietjet Air's loss was over 2,100 billion VND. Vietnamese airlines' risk of bankruptcy is increasingly obvious as the COVID-19 pandemic reappeared in Da Nang on the 25<sup>th</sup> July 2020. All the domestic flights to Da Nang were cancelled from July 28, 2020. The number of domestic flights decreased by around 12% and passengers by more than 30% (Dang Nhat, 2020). After two international commercial flights of Vietnam Airlines from Seoul (Korea) to Hanoi on September 25, 2020 (Minh Trang, 2020) and Vietjet Air from Seoul (Korea) to Ho Chi Minh City on September 30, 2020, Vietnamese airlines have had to suspend their international commercial flights carrying passengers into Vietnam for the authorities to issue more specific isolation procedure instructions (Tuan Phung, 2020).

In the road sector, the demand for road transport decreased by about 30% (Ha An, 2020). In spite of 16 years of experience in logistics, the COVID-19 pandemic affected Hung Think Phat Co., Ltd. quite seriously. Many activities of this business have still being taking place in moderation (around 50%) (Dao Le, 2020). Only a few vehicles of Long Hien Travel and Trade Service Co., Ltd. (Da Nang) are operating in moderation in small contracted projects as a temporary solution to limit losses. Dien Bien Transporting Customers and Services Cooperative has also been suffering losses to maintain market share. The fixed routes of this enterprise are losing approximately 7-10 million VND per trip. Prior to the COVID-19 epidemic, customers had had to call for seat reservation, but a 41-bed bus from Dien Bien to Hanoi had only around 5-6 passengers in the COVID-19 pandemic. The revenue of Thang Long Taxi decreased by 40%. Approximately 5% of the



company's cars stopped operations. If this situation continued longer, the business would be in danger of bankruptcy. In June 2020, Vietnam's export activities to major markets such as the US, EU, Japan, South Korea and ASEAN faced many difficulties, but only China has controlled the pandemic well. Vietnam's logistics enterprises have thus been increasing road trades with the Asian central market (Can Van Luc et al., 2020) accounting for 12% of the global trade (Australian Aid *et al.*, 2020, 4). The logistics service industry has actively supported enterprises to export agricultural and sea products to the Chinese market. Logistics operations on the Northern border have been partially restored, but those in the West and Southwest are still closed.

Although more than 90% of Vietnam's goods are transported by sea and Vietnam has temporarily suspended entries of foreigners on March 22, 2020 (N. An, 2020), marine shipping activities have been the least negatively affected by the COVID-19 pandemic compared to other logistics activities. A number of international ships to Vietnam have been reduced or delayed (Quang Anh, 2020). The number of ships operating at Vietnamese seaports decreased by 15% in the first quarter of 2020. The number of cruise ships carrying international passengers decreased by 30% over the same period last year (Australian Aid *et al.*, 2020, 5). The number of international cruise ships to Vietnam decreased by approximately 30% compared to that of the last year's same period (PV, 2020). In the first 6 months of 2020, the number of passengers on ships is only 49.04% compared to those of the same period of last year (Dang Tien, 2020). The railway industry had to stop operating 152 passenger train lines, its revenue decreased 84 billion VND, and the

freight transport revenue of the railway industry decreased 6 billion VND (Australian Aid *et al.*, 2020, 53). The income of railway workers decreased 26% (Dang Tien, 2020).

Although logistics businesses have never faced such a lot of difficulties, this has also been the golden period for Vietnam's logistics. It is the COVID-19 pandemic that has opened up new opportunities for international transport activities by railway. Freight trains full of frozen containers according to the mode of package freight transportation to China appeared for the first time. This route of official export of frozen fruits and agricultural products by rail is a new mode of operation for Vietnamese logistics enterprises to China, Central Asia, and Europe (Tap chi GTVT, 2020). Most of the exported fresh litchis were previously only transported by air, but have recently been exported by sea. Vietnam's first fresh litchi shipments were shipped to Singapore, the US and Japan by sea in June 2020, but the shipping cost is only equal to one third of that of air freight (Tap chi GTVT, 2020). Concurrently, although China is a key market for Vietnamese exports, Vietnamese firms are often subject to fierce competition from Chinese partners. The COVID-19 pandemic can also be seen as a new opportunity for Vietnamese exporters to find new customers in the context of the US-China trade war. Therefore, even though the COVID-19 pandemic has caused serious harms, Vietnam's logistics industry still expects to achieve an average growth rate of 16.56% per year until 2022 and reach a turnover of 113.32 billion USD by 2022 (Anh Hoa, 2020).

To summarize, Vietnam's logistics market has been expanding and providing more development opportunities for large logistics

enterprises (M. Hong, 2020), but the COVID-19 pandemic has also made many of them awakened. The COVID-19 pandemic has led to a decline in revenue of many logistics enterprises by around 10% -30% compared to that of the last year's same period (Xuan Thao, 2020). Approximately 20% of logistics enterprises have still been experiencing revenue decline and operation reduction. A number of logistics enterprises have been facing risks of bankruptcy (Australian Aid *et al.*, 2020, 7). In such a circumstance, around 10% of foreign logistics enterprises and large logistics enterprises in Vietnam have often chosen to operate in moderation to wait for new opportunities. Although all logistics enterprises in Vietnam have suffered a certain number of impacts from the COVID-19 pandemic, domestic commercial activities have still been maintained in many different ways and degrees. Simultaneously, the total value of Vietnam's import-export turnover in 2020 decreased compared to that of 2019 it still increased steadily (Dao Le, 2020) and did not completely reduced. This fact shows that the majority of transnational logistics enterprises and large logistics enterprises of Vietnam have operated relatively well in the context of the COVID-19 pandemic, while a large part of small and micro domestic logistics enterprises have often suffered more losses.

#### ***4.3. Some solutions to improve the adaptive capacity of Vietnamese logistics enterprises to unpredictable developments of the COVID-19 pandemic and international situation***

In the context of the highly complicated COVID-19 pandemic, although Vietnamese logistics companies have made great efforts to gradually adapt to the new situation and still believed in the recovery of

the national economy in the coming time, but in the recovery and adaptation to the new circumstance, logistics businesses also need more support measures (TTXVN, 2020) from the government and the cooperation of all stakeholders in addition to their own efforts. This is shown in detail as follows:

*Firstly*, Vietnam has been successful in minimizing the negative effects of the COVID-19 pandemic and the situation has fundamentally been under control. However, once a staff is infected with COVID-19, all operations of the businesses must be stopped. In addition, due to the operational characteristics of logistics enterprises taking place on a large scale in a short period of time, the risk of disease spread to other participating parties is very fast and the consequences to the whole society is very serious. For this reason, although Vietnam has controlled the domestic COVID-19 pandemic, the risk of epidemic return is not absolutely eliminated and the possibility of infection in logistics activities with the outsiders is still very high. That fact requires each business to be fully aware of the serious and long-term effects of the COVID-19 pandemic on its own survival and the safety of society as a whole in order to propose positively and proactively coping measures to unusual and unpredictable developments of the epidemic situation.

*Secondly*, the COVID-19 pandemic is not only a permanent threat to individuals and businesses, but also an unpredictable danger to all nations. Based on the characteristics of the epidemic situation, the government offers different coping measures. In such a context, all people and logistics businesses are required to fully comply with state regulations and the COVID-19 pandemic prevention measures of the

authorities. Logistics enterprises were banned from operating completely, but logistics activities were also partially interrupted in many cases depending on the developments of the COVID-19 pandemic. For this reason, logistics businesses need to actively grasp information, update the epidemic situation, and proactively come up with the most suitable adaptation solutions possible to epidemic prevention policies of the state.

*Thirdly*, the COVID-19 pandemic is very formidable enemies for all of humanity. The risk of infection comes from anywhere and the possibility of infection does not rule out anyone. The risk of COVID-19 infection of unknown origin and the possibility of spreading the COVID-19 pandemic out of the control of logistics and passenger transport activities is enormous. In the current background, the risk of infection and outbreaks of the COVID-19 pandemic within and between Vietnamese logistics enterprises has been theoretically eliminated, but the possibility of infection and outbreaks of the COVID-19 pandemic from logistics operations and passenger transport to the outsiders is still very clear. Therefore, raising awareness of stakeholders in their participation in logistics activities from the starting points to the transportation and destination plays a crucial role in avoiding the risk of infection and the return of the COVID-19 pandemic.

*Furthermore*, the emergence of the COVID-19 pandemic to a certain extent is also a necessary catalyst for the digital transformation and the application of information technology in Vietnam's logistics service sector to take place faster. However, if logistics enterprises have actively invested in technological solutions to combat the pandemic

COVID-19, but the infrastructure system for transport activities will not be upgraded synchronously and consumers' adaptive capacities are not compatible, the ability to apply technology solutions in the operation of logistics businesses is also not guaranteed. This means that the logistics infrastructure system needs to be improved more, while the administrative procedures in the logistics sector should also be minimized to the maximum extent possible. The digital transformation should have taken five years to apply for businesses and consumers, but it only takes eight weeks thanks to innovative pressures of the COVID-19 pandemic. The potential of Vietnam's e-logistics is bright (Australian Aid *et al.*, 2020, 9) for e-commerce businesses, logistics companies, and consumers (Van Toan, 2019), but the compatibility and synchronization between the accompanying elements is still a big challenge.

*Finally*, although Vietnam has managed to control the COVID-19 epidemic, many essential external logistics are still in progress and the Vietnamese market cannot be closed forever (Pham Trung Hai, 2020). By the end of May 2020, most countries have enacted strict quarantine regulations (TTXVN, 2020). The Government of Vietnam is recommended to put in place effective measures for the prevention of the COVID-19 pandemic and to promulgate clear regulations to minimize the risks of epidemic transmission in ongoing logistics activities, especially logistics activities related to the complicated epidemic markets, and soon open Vietnam's passenger transport market to outsiders.

## **5. Conclusion**

Vietnam's logistics market has been having impressive growth indexes for many years and the opportunity to develop a sharing economy in logistics is very wide open in the coming time. However, over 70% of the total number of around 4,000 logistics enterprises in Vietnam have small and medium-sized scale of capital and only 7% have the capital of over 1,000 billion VND. The majority of these are multinational enterprises. Only approximately 10.8% of Vietnam's logistics enterprises have the scale of over 1,000 employees, around 32.4% have less than 50 employees, and about 2,000 businesses (50%) are one-member limited liability companies (TTXVN, 2020). In such a context, the COVID-19 epidemic has caused heavy financial losses to logistics enterprises (Anh Hoa, 2020). Domestic passengers have decreased by around 50% over the past few months. Businesses have been forced to choose between *survival for growth* or *closing for bankruptcy* (Nguyen Hoang, 2020). Although each logistics enterprise has chosen different coping solutions to the COVID-19 pandemic, adaptive capacities of most of these firms is in general still relatively limited. That fact forces Vietnamese logistics enterprises to merge or link together to exist in the new context (Pham Trung Hai, 2020), but improving the quality of logistics human resources is an urgent requirement (Australian Aid *et al.*, 2020, 3). Concurrently, enhancing cooperation and learning from major international partners to upgrade internal strengths is also particularly necessary (Dao Le, 2020). However, no available model can be applied to all logistics businesses simultaneously. Instead, each business must choose its own direction of development. The more precisely this direction is quantified by accurate

data systems, the greater the successful chances of coping measures to the COVID-19 pandemic.

## References

1. Ha An (2020, 22 April, 07:33 AM), Doanh nghiệp logistics: Làm sao để vượt “bão” COVID-19? Available at: <https://nhandan.com.vn/chuyen-lam-an/doanh-nghiep-logistics-lam-sao-de-vuot-bao-COVID-19-456058> (accessed 8 October 2020).
2. Quang Anh (2020, 6 March, 14:03 PM), Doanh nghiệp logistics Việt ảnh hưởng thế nào từ dịch COVID-19? trong: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/doanh-nghiep-logistics-viet-anh-huong-the-nao-tu-dich-covid19-319785.html> (accessed 8 October 2020).
3. Australian Aid, LIRC, and VCCI (2020), Báo cáo ngắn về tác động của dịch cúm Covid19 tới nhu cầu, kỹ năng cho người lao động và hoạt động đào tạo nguồn nhân lực cho ngành logistics Việt Nam, available at: <https://vcci-hcm.org.vn/wp-content/uploads/2020/06/Final-TAC-DONG-CUA-DICH-CUM-COVID19-TOI-NHU-CAU-KY-NANG-CHO-NGUOI-LAO-DONG-VA-HOAT-DONG-DAO-TAO-NGUON-NHAN-LUC-CHO-NGANH-LOGISTICS-VIETNAM.pdf> (accessed 7 October 2020).
4. Chi Cong và Minh Trang (2020, 13 August, 03:35 APM), Hỗ trợ doanh nghiệp tiếp tục chống chọi dịch COVID-19, available at: <https://nhandan.com.vn/nhan-dinh/ho-tro-doanh-nghiep-tiep-tuc-chong-choi-dich-COVID-19-612662/> (accessed 8 October 2020).
5. H. Thuy (2020, 18 August, 21:53 PM), Điểm tên các 'nạn nhân' mới của đại dịch COVID-19, available at: <https://baotintuc.vn/kinh-te/diem-ten-cac-nan-nhanmoi-cua-dai-dich-covid19-20200818215158886.htm> (accessed 8 October 2020).
6. Vu Ha (2020, 5 October, 17:05 PM), 9 tháng xuất siêu gần 17 tỷ USD, điểm sáng của nền kinh tế, available at: <https://www.gso.gov.vn/default.aspx?tabid=382&idmid=2&ItemID=19778> (accessed 8 October 2020).
7. Phạm Trung Hải (2020, 24 January, 10:30 AM), Xu hướng mua bán và sáp nhập doanh nghiệp trong ngành logistics Việt Nam, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/xu-huong-mua->



- [ban-va-sap-nhap-doanh-nghiep-trong-nganh-logistics-viet-nam-318066.html](http://ban-va-sap-nhap-doanh-nghiep-trong-nganh-logistics-viet-nam-318066.html) (accessed 8 October 2020).
8. Anh Hoa (2020, 2 June, 09:04 AM), Thị trường logistics xác lập cuộc chơi mới, available at: <https://baodautu.vn/thi-truong-logistics-xac-lap-cuoc-choi-moi-d123303.html> (accessed 8 October 2020).
  9. Nguyen Hoang (2020, 16 April, 07:38 PM), Bài 01: Vật lộn để tồn tại, available at: <https://viettimes.vn/bai-01-vat-lon-de-ton-tai-386964.html> (accessed 8 October 2020).
  10. Vo Huy Hung (2020, 15 May, 16:15 PM), Doanh nghiệp Việt Nam "hậu Covid": Thách thức song hành cùng cơ hội, available at: <https://dangkykinhdoanh.gov.vn/vn/tin-tuc/597/5096/doanh-nghiep-viet-nam-hau-covid--thach-thuc-song-hanh-cung-co-hoi.aspx> (accessed 8 October 2020).
  11. Dao Le (2020, 25 May, 03:25 PM), Ngành logistics trước nhiều thách thức, available at: <http://www.baodongnai.com.vn/tieu-diem/202005/nganh-logistics-truoc-nhieu-thach-thuc-3005004/> (accessed 8 October 2020).
  12. Can Van Luc et al. (2020, 24 July, 11:45 AM), Cập nhật tác động của đại dịch COVID-19 đối với các ngành kinh tế Việt Nam, available at: <https://thitruongtaichinhntiente.vn/cap-nhat-tac-dong-cua-dai-dich-COVID-19-doi-voi-cac-nganh-kinh-te-viet-nam-28398.html> (accessed 8 October 2020).
  13. M. Hong (2020, 25 December, 12:00 PM), Logistics Việt: 4 xu hướng, 5 thách thức và những lưu ý, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/logistics-viet-4-xu-huong-5-thach-thuc-va-nhung-luu-y-317027.html> (accessed 8 October 2020).
  14. Anh Minh (2020, 23 March, 16:02 PM), Hàng không Việt Nam tạm dừng khai thác tất cả đường bay thương mại quốc tế, available at: <https://baodautu.vn/hang-khong-viet-nam-tam-dung-khai-thac-tat-ca-duong-bay-thuong-mai-quoc-te-d118654.html> (accessed 8 October 2020).
  15. Le Minh (2019, 23 August, 13:16 PM), 90% doanh nghiệp logistics vốn dưới 10 tỷ đồng, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/90-doanh-nghiep-logistics-von-duoi-10-ty-dong-311800.html> (accessed 8 October 2020).
  16. N. An (2020, 21 March, 20:22 PM), 0h ngày 22-3: Tạm dừng nhập cảnh với người nước ngoài, người gốc Việt có giấy miễn thị thực, available at: <https://tuoitre.vn/0h-ngay-22-3-tam-dung-nhap-can>

- [voi-nguoi-nuoc-ngoai-nguoi-goc-viet-co-giay-mien-thi-thuc-20200321195111337.htm](http://voi-nguoi-nuoc-ngoai-nguoi-goc-viet-co-giay-mien-thi-thuc-20200321195111337.htm) (accessed 8 October 2020).
17. Hang Nga (2020, 4 March, 16:29 PM), Sáng - tối bức tranh doanh nghiệp logistics, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/sang-toi-buc-tranh-doanh-nghiep-logistics-319679.html> (accessed 8 October 2020).
  18. Van Ngan (2020, 30 July, 04:09 AM), Dịch COVID-19 phức tạp, doanh nghiệp vận tải hành khách lo phá sản, trong : <https://cafebiz.vn/dich-COVID-19-phuc-tap-doanh-nghiep-van-tai-hanh-khach-lo-pha-san-2020073016091083.chn> (accessed 8 October 2020).
  19. Lan Ngoc (2020, 8 March, 13:31 PM), 4 kịch bản tác động của dịch COVID-19, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/4-kich-ban-tac-dong-cua-dich-covid19-321216.html> (accessed 8 October 2020).
  20. Dang Nhat (2020, 4 August, 14:47 PM), Vận tải hành khách lại... lao đao vì COVID-19, available at: <http://baoquangninh.com.vn/an-toan-giao-thong/202008/van-tai-hanh-khach-lai-lao-dao-vi-COVID-19-2494489/> (accessed 8 October 2020).
  21. Hai Nhi (2020, 9 June, 06:34 APM), Doanh nghiệp Việt vực dậy sau COVID-19, available at: <https://thanhtra.com.vn/toan-canh-ncov/doanh-nghiep-viet-vuc-day-sau-COVID-19-166518.html> (accessed 8 October 2020).
  22. Tuan Phung (2020, 7 October, 20: 28 PM), Tạm dừng các chuyến bay quốc tế chở khách vào Việt Nam, chờ quy trình chuẩn, available at: <https://dulich.tuoiitre.vn/tam-dung-cac-chuyen-bay-quoc-te-cho-khach-vao-viet-nam-cho-quy-trinh-chuan-20201007202039724.htm> (accessed 8 October 2020).
  23. Thai Phuong (2020, 1 May, 22:33 PM), Doanh nghiệp có thể tạm ngừng kinh doanh trước khi phá sản, available at: <https://cafef.vn/doanh-nghiep-co-the-tam-ngung-kinh-doanh-truoc-khi-pha-san-20200501205741216.chn> (accessed 8 October 2020).
  24. PV (2020, 25 March, 16:09 PM), Rủi ro phá sản đối với doanh nghiệp đang gia tăng vì dịch COVID-19, available at: <https://www.baogiaothong.vn/rui-ro-pha-san-doi-voi-doanh-nghiep-dang-gia-tang-vi-dich-COVID-19-d458140.html> (accessed 8 October 2020).
  25. Tạp chí GTVT (2020, 3 August, 10:43 AM), Ngành dịch vụ logistics Việt Nam trong đại dịch COVID-19, available at:

<http://www.ptscdinhvu.com.vn/bv-373--Nganh-dich-vu-logistics-Viet-Nam-trong-dai-dich-COVID-19.htm#.X36EUow3vIU>

(accessed 8 October 2020).

26. Pham Thao (2020, 25 March, 10:32 AM), Tạm dừng nhập cảnh với người nước ngoài, người gốc Việt có giấy miễn thị thực, available at: <https://xuatnhapcanh.gov.vn/vi/tin-tuc/t%E1%BA%A1m-d%E1%BB%ABng-nh%E1%BA%ADp-c%E1%BA%A3nh-v%E1%BB%9Bi-ng%C6%B0%E1%BB%9Di-n%C6%B0%E1%BB%9Bc-ngo%C3%A0i-ng%C6%B0%E1%BB%9Di-g%E1%BB%91c-vi%E1%BB%87t-c%C3%B3-gi%E1%BA%A5y-mi%E1%BB%85n-th%E1%BB%8B-th%E1%BB%B1c> (accessed 8 October 2020).
27. Xuan Thao (2020, 24 September, 09:13 AM), COVID-19 - Chất xúc tác mạnh để doanh nghiệp logistics định vị lại, available at: <https://haiquanonline.com.vn/COVID-19-chat-xuc-tac-manh-de-doanh-nghiep-logistics-dinh-vi-lai-133918-133918.html> (accessed 8 October 2020).
28. Dang Tien (2020, 10 August, 10:32 AM), Dịch COVID-19 tái bùng phát: Doanh nghiệp vận tải trước nguy cơ phá sản, available at: <http://www.congdoan.vn/tin-tuc/thoi-su-487/dich-covid19-tai-bung-phat-doanh-nghiep-van-tai-truoc-nguy-co-pha-san-514292.tld> (accessed 8 October 2020).
29. Van Toan (2019, 10 December, 22:00 PM), Xu hướng thương mại điện tử đối với logistics, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/xu-huong-thuong-mai-dien-tu-doi-voi-logistics-316408.html> (accessed 8 October 2020).
30. GSO (2020, 6 October, 09:30 AM), Báo cáo tác động của dịch COVID-19 đến tình hình lao động, việc làm quý III năm 2020, available at: <https://www.gso.gov.vn/default.aspx?tabid=382&idmid=2&ItemID=19781> (accessed 8 October 2020).
31. Minh Trang (2020, 25 September, 15:02 PM), Chuyến bay thương mại quốc tế đầu tiên về Việt Nam, available at: <https://nhandan.com.vn/tin-tuc-xa-hoi/chuyen-bay-thuong-mai-quoc-te-dau-tien-ve-viet-nam--618060/> (accessed 8 October 2020).
32. TTXVN (2020, 25 May, 11:11 APM), Doanh nghiệp logistics thích nghi với tình hình mới (Bài 1): Gián đoạn chuỗi logistics, available at: <https://vovgiaothong.vn/doanh-nghiep-logistics-thich-nghi-voi->

[tinh-hinh-moi-bai-1-gian-doan-chuoi-logistics](#) (accessed 8 October 2020).

33. Nguyen Tuan (2020, 5 July, 07:30 AM), Sau dịch COVID-19, DN vận tải lao đao, nhiều nhà xe phá sản, available at: <https://infonet.vietnamnet.vn/thi-truong/24h/doi-hanh-nghiiep-van-tai-lao-dao-vi-COVID-19-257749.html> (accessed 8 October 2020).

# THE IMPACT OF THE COVID-19 PANDEMIC TO LOGISTICS ACTIVITIES IN VIETNAM

**Dr. Le Van Hai**

*Banking University of Ho Chi Minh City*

## **Abstract**

*Logistics is one of the sectors most affected by the COVID-19 pandemic. Until mid-September 2020, 27 million people worldwide were infected with COVID-19 and over 883,000 people died from the epidemic. Up to this point, the COVID-19 epidemic is still complicated in the world, continuing to have a strong impact on Logistics services. Also in Vietnam, up to this point, the control of the second COVID-19 wave has had a positive change. However, due to the influence of COVID-19 in the world and the fault of Logistics in the world, it continues to have a strong and lasting impact on the Vietnamese economy in general and Logistics in our country in particular.*

**Keywords:** impact, COVID-19, logistics

## **1. Introduction to research**

COVID-19 epidemic broke out in January 2020 in Wuhan city, Hubei province of China, then appeared in many EU countries and then spread globally, including Vietnam, was and are causing heavy socio-economic losses worldwide. Pandemic has caused disruption of the logistics service industry.

### ***Theoretical basis***

Articles about practice, the author does not build theoretical basis. In the limit of the number of words and pages of an article, this content the article's author shows in the content some concepts in the research content section.

### ***Research Methods***

The article does not have the conditions to use quantitative research methods, build theoretical bases, make research assumptions, build research reviews and clarify research gaps. The article also does not have the condition to build research functions and variables, to calculate the impact of the factors. Research articles on practice, through qualitative methods, review of secondary documents, analysis and comparison of secondary data of different authorities: General Statistics Office (GSO), Bank The State of Vietnam (SBV), Vietnam Association of Logistics Enterprises (VLA) ,...conducted an assessment, clarifying the above situation, and proposed recommendations.

## **2. Research content**

### ***Actual situation of the impact of the COVID-19 epidemic on Logistics***

At the beginning of May 2020, when the Vietnamese economy was strongly affected by the peak of COVID-19, the Association of Business Logistics Services (VLA), released a survey report for the sector. The members of the Association affected by COVID-19 showed that 15% of businesses lost 50% of their revenue, 50% of businesses

decreased dramatically the number of services over the same period. Accordingly, employment and income of employees also decreased. But the impact of the COVID-19 epidemic on the Logistics sector in Vietnam is not only that. Because in practice, there are hundreds of thousands of households and individuals doing logistics services, such as: transporting conventional and frozen goods, fresh or processed food for wholesale and retail markets, for shopping malls, medium and mini supermarkets, nationwide merchandise stores and dealers; business of family yards, family warehouses, sorting and packing of goods within the family, even motorbike drivers as delivery services for goods manufacturing and distribution enterprises. Therefore, quantitatively, there has not been a relatively complete survey or calculation on the impact of COVID-19 on Logistics, but qualitatively, we need to see the scope of impact on Logistics is very large. [Vla (2020)]

However, the biggest impact of the COVID-19 epidemic is employment and income of workers working in the logistics sector. In 2019, the number of people working in the railway, road and pipeline transport sector accounts for 60.1% of the total number of employees in the Logistics industry; working in warehousing, loading and unloading, transport support 32.51%, waterway transport 5.06% and 2.31% post delivery, 0.02% aviation. Thus, due to the COVID-19 epidemic it had a great impact on workers in the Logistics industry. [Gso (2019-2020)]

According to the VLA report, the impact of the COVID-19 Epidemic until the end of April 2020, caused about 15% of businesses to reduce their revenue by 50% compared to 2019 and more than 50% of logistics businesses to reduce the number of services. domestic and

international logistics from 10-30% over the same period in 2019. [Vla (2020)]

Because many factories have to suspend operations, the amount of goods needs to be moved less, leading to the transportation and delivery of goods in the supply chain also decreases, greatly affecting the operation of logistics services. logistics load. In addition, businesses also have a significant reduction in revenue for exports and imports from epidemic countries.

In addition, in the current epidemic situation, enterprises lack raw materials for production and find it difficult to find output for their products in Asia and some other regions, causing overproduction, cannot export.

The early period against the COVID-19 epidemic, logistics activities such as transport decreased due to hindered customs clearance. Warehouse and freight services are also severely affected. Many of the border crossings connecting Vietnam and China have been frequently overloaded, but now due to the COVID-19 epidemic, traffic has arisen, the import and export at the border gates become complicated and lost. more time.

From there, leading to the deterioration of perishable goods, the driver does not want to be troubled, delayed, so often refuses to transport, affecting the delivery schedule. Some other problems arise such as some Chinese customers having financial difficulties, leading to the inability to repay debts to the owners, and the Vietnamese suppliers, leading to the delay of payment by the owners to the logistics enterprises.



### **3. Measures of the Logistics industry to support related businesses**

During the anti-COVID-19 epidemic the past, logistics has shown itself to be an important service sector in the economy. The logistics service industry has actively participated in general activities such as: supporting enterprises to export agricultural and marine products to the Chinese market, warehouse businesses have actively reduced 10-20% cold storage rental rates; actively participating in transporting goods for the domestic market outside for import and export, especially goods for production and consumption during the social gap. To solve business difficulties, businesses have done well in social criticism, promptly reflecting the opinions of enterprises through associations and associations for the Government and state management agencies to support the solution. to reduce the cost of logistics services as the Government's and the Prime Minister's goals, propose solutions and initiatives to overcome difficulties, promote production and business, and rebuild the economy to cope with COVID-19 translation. [*Gso (2019-2020)*]

Enterprises are making efforts to carry out business activities, taking advantage of the limited opening of neighboring countries in the region to maintain operations while the country sharing the border with Vietnam has not banned transport trucks. goods for production and anti-epidemic.

Compared to the early period of anti-epidemic, by early September 2020, customs clearance and transport activities across many

border gates with China have improved, but there are still congestion. In addition, due to the thorough anti-epidemic strengthening, the implementation of Directive 16 of the Prime Minister was not smoothly consistent with the Directive's requirements in some localities, so the transport of goods by truck in weeks. In early September 2020, there were still difficulties in a certain number of points, greatly affecting the logistics operations of businesses.

#### **4. Actual state policies supporting the Logistics industry**

The National Assembly has passed a resolution to reduce income tax by 30% in 2020 for enterprises with turnover below VND 200 billion. Enterprises will benefit from this decision along with other support measures of the Government, contributing to solving a part of difficulties for enterprises providing logistics services in production and business. Besides, auditing and inspection activities for enterprises were also halted. With the tax exemption or delay measures introduced by the Government, logistics enterprises will be subject to: "Railway transportation; passenger transport by bus; other road transport; waterway transport; transportation; air freight; warehouse and transport support activities;" [*Vla (2020)*]

According to the Government's regulations, enterprises providing logistics services have access to the preferential credit package of the Social Policy Bank to pay salaries for their employees with specific conditions. The State Bank of Vietnam (SBV) issued Circular 01/2020 / TT-NHNN, according to which, enterprises providing logistics services are also restructured by commercial banks (commercial banks), adjusted

debt term, interest rate exemption or reduction. New loans from logistics service enterprises are also offered at lower interest rates by commercial banks compared to the pre-COVID-19 epidemic. During the COVID-19 translation, logistics service enterprises and employees are entitled to a reduction of fees for electronic payments, fees for payments via banks, and money transfers. [*The State Bank of Vietnam –SBV (2019-2020)*]

## **5. Conclusion and recommendation**

The growth rate of Vietnam's logistics industry in recent years has reached the growth rate of 14-16% / year. Vietnam's logistics costs relative to GDP are at a relatively high level compared to the world, accounting for nearly 20.9% of the country's GDP. The logistics market is attracting over 4,000 businesses, mainly concentrated in Hanoi and Ho Chi Minh City. In which, there are about 30 transnational logistics service providers operating in Vietnam, with big names such as DHL, FedEx, Maersk Logistics, APL Logistics, CJ Logistics, KMTC Logistics ... The logistics industry in Vietnam is became a field with hot growth momentum, especially when COVID-19 broke out. This makes traditional logistics businesses really innovative, supported by the state by the COVID-19 pandemic. Therefore, this is an industry that plays an important role in the socio-economic development strategy. In order for logistics industry to continue to overcome difficulties caused by the COVID-19 pandemic, the article would like to have the following recommendations: [*Vla (2020)*]

**First**, in order to support logistics businesses, as well as maintain socio-economic development, the National Assembly, the Government

should continue to consider extending, delaying, and definite reduction of taxes and fees payable by businesses. industries in the affected industries, such as: corporate income tax, value added tax, customs fees, In addition, the Government reviews taxes and fees, has support solutions to reduce transport costs such as reducing tolls, parking fees, vehicle storage fees, taxes with flying fuel ..., at the same time to issue specialized permits, reduce the time for customs clearance and inspection at the port to quickly release goods, avoid storage fees.

The Government, the Ministry of Finance, consider continuing to extend tax payment time limit, extend tax debts, insurance debts, and owe a number of state budget fees for logistics enterprises and households and individuals. Logistics, as well as the personal income tax of workers working in the sector.

In order for the logistics service industry to continue to grow in the current conditions, the Government needs to pay attention to invest more strongly in developing logistics infrastructure in parallel with the improvement of administrative procedures, first of all, seaports. Lach Huyen and Ba Ria - Vung Tau areas because more than 90% of import and export goods of Vietnam are via sea. In addition, it is necessary to focus on developing inland waterway transport, especially with a channel for ships of 20,000 DWT to conveniently enter and exit the Mekong River Delta - where over 60% of agricultural and marine products are exported. of the country. Along with that, the development of a logistics center in Can Tho will definitely help reduce logistics costs for the region and the country. [Vla (2020)]

Provinces, consider policies to reserve land funds for planning logistics infrastructure development, avoid converting agricultural land into real estate to narrow the operational space of logistics infrastructure.

*Second*, the state needs to improve the legal framework for digital transformation, especially security, anti-sabotage cooperation, digital governance ... The State should have policies to encourage transformation. support for loans and preferential interest rates for digital transformation businesses and support for digital technology solutions for start-ups. On that basis, if there is not enough financial capacity, the logistics business can buy a solution or hire a solution from software providers.

*Third*, commercial banks need to continue to restructure their debts for Logistics businesses and households and individuals operating in the logistics sector who are borrowing credit. These customers need to continue to reduce loan interest rates, extend the loan term at least 6 months to 1 year as directed by the Prime Minister at the Government meeting in September 2020. In case of difficulties, there is a need for new loans, commercial banks should continue to lend to Logistics enterprises and households and individuals operating in the field of Logistics to operate their business activities. payment of debt repayment of partners, salary of workers.

Fourthly, the COVID-19 pandemic is a catalyst that accelerates the digital transformation and application of information technology in the logistics service industry in the context of the industrial revolution 4.0. Therefore, enterprises providing logistics services in Vietnam need

to speed up progress, actively transform digital to change the stagnation, create a breakthrough to improve competitiveness, reduce logistics costs, growth, have more customers and outperform the maximum profit before the transition, aiming to the goal as the Government set out in Decision No. 200/2017 is to reduce high logistics costs.

In a fiercely competitive environment of the service market and the need for more and more human resources in the conditions of the upcoming Industry 4.0, the Logistics industry of Vietnam needs to have high quality human resources in terms of real skills, logistics, professional knowledge and English proficiency. It is forecasted that logistics service providers from now to 2030 will need to train about 250,000 new and methodical personnel to not only meet domestic requirements but also work abroad, especially in the country. ASEAN Economic Co. In order for training methods to meet the requirements of Industry 4.0, in addition to strengthening on-site training and E-learning, it is necessary to focus training resources of universities and vocational secondary schools. Training at schools combined with practical training, bringing high-tech science and logistics programs to training at universities ... *[Vla (2020)]*

## Reference

1. Gso (2019-2020): "*Monthly socio-economic information*" published by the General Statistics Office, accessed at relevant sections: [www.gso.gov.vn](http://www.gso.gov.vn); Access time, from September 1 to September 5, 2020.
2. The State Bank of Vietnam –SBV (2019-2020): "*Banking Operation Information*", published by the State Bank of Vietnam, accessed at News - Events and relevant sections, at [www.sbv.gov.vn](http://www.sbv.gov.vn); Access time, from September 2 to September 4, 2020.
3. Vla (2020): Accessed at: <https://www.vla.com.vn/hiep-hoi-doanh-nghiep-dich-vu-logistics-15-doanh-nghiep-mat-50-doanh-thu-50-companies-enterprises-to-workers-with-the-number-service-with-also-ky.html> services, accessed date: September 5, 2020

# LESSONS FOR LOGISTICS ENTERPRISES IN VIETNAM IN THE CONTEXT OF THE COVID-19

**PhD. Tran Thi Mai Huong,**

**Ms. Nguyen Thi Minh Chau**

*National Economics University*

## **Abstract**

*The COVID-19 epidemics broke the supply chain and affected logistics activities – the backbone of the supply chain. Vietnam’s logistics activities are also heavily affected by the pandemic: declining the volume of goods circulating, reducing revenue, reducing labor and employment, and enterprises’ operations stalled and facing many difficulties in payment. The article uses the method of collecting secondary documents to study the impact of the COVID-19 epidemic on the operation of logistics enterprises in Vietnam, thereby identifying lessons for these enterprises in the pandemic context.*

**Keywords:** COVID-19; Services of Logistics; logistics enterprises

## **INTRODUCTION**

COVID-19 epidemics appeared in Vietnam with the second wave of case on 6th March, the risk of spreading to the community officially was warned from March 20th and the following days. The outbreak of



the COVID-19 epidemic had a tremendous impact all over the world, and Vietnam is no exception in suffering that influence in terms of economy, society, and human health. By the end of August 2020, the number of COVID-19 infected people in the world reached nearly 25 million and killed more than 812,000 people (according to the Ministry of Health, Vietnam). The COVID-19 pandemic has broken and reversed the global supply system, including logistics activities; therefore, logistics businesses in Vietnam were also severely affected. The paper examines the impact of COVID-19 on the operations of logistic enterprises in Vietnam, thereby identifying lessons for logistics firms in the pandemic context. The article uses traditional qualitative research methods, collecting, synthesizing, and analyzing from the sources and official data of agencies, organizations, and research works of authors to perform research purposes thereby identifying lessons for these enterprises in the pandemic context.

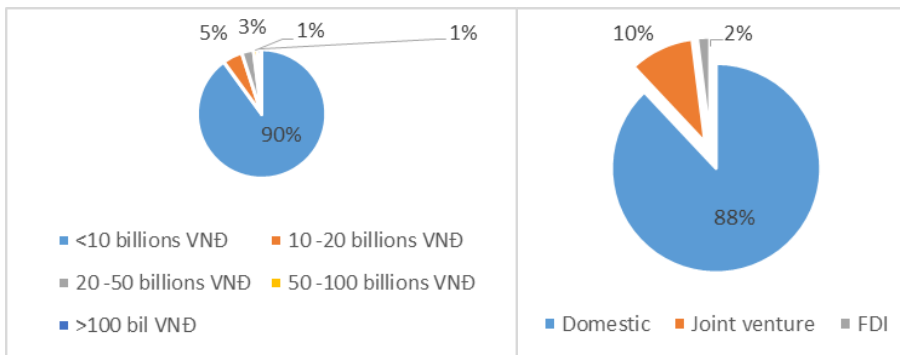
## **1. An overview of Vietnam's logistics enterprises**

Vietnam is considered as a market with great potential for the development of logistic activities. In the context of international economic integration, many countries in the world, including Vietnam, are oriented to develop the Logistics industry to increase their competitiveness in the world market. Currently, Vietnam ranks 64 out of 160 countries and is in the middle top of ASEAN in the Logistics ranking index (LPI) (according to the World Bank Report). Considered as one of the potential industries in Vietnam with an increasing scale, but

currently, Vietnam's logistics enterprises only meet less than 25% of the demand and have not fully exploited the potential of the industry.

***Business size and structure***

Currently, in Vietnam, there are more than 4,000 enterprises operating in the field of logistics concentrated in two big cities, Ho Chi Minh and Hanoi. Vietnam logistics enterprises are mainly small scale, accounting for more than 90%, providing customers with basic services or providing individual services, mainly price competition, with little added value. Of which 88% are domestic enterprises, 10% are joint ventures and 2% are FDI enterprises, the competitiveness of domestic logistics enterprises is still low compared to FDI enterprises. FDI enterprises are only 2% in quantity but account for 70% - 80% of the market share.



**Chart 1: Business size and structure of logictics enterprises in Vietnam**  
*Source: General Statistics Office, Vietnam Logistics Business Association (VLA)*

Vietnam has about 30 companies providing multinational logistics services. The current leading logistics companies are SNP, Gemadept, Transimex, IndoTrans, TBS Logistics, Saigon Tan Cang, Delta, U&I Logistics, Sotrans, Minh Phuong Logistics ... are all

members of VLA, providing services to all both strategic markets of Vietnam.

### ***Networking***

Among the logistics enterprises in Vietnam, only nearly 1/10 of them join the Vietnam Association of Logistics Services (VLA) but account for over 60% of the domestic market share, including many leading enterprises in the industry. This shows large enterprises with good market share tend to focus on networking more than small enterprises.

### ***Service structure***

In the field of logistics in Vietnam, transport activities account for the largest proportion of the revenue structure of the entire logistics industry. Cargo transportation accounts for more than 90% (In 2018, freight transportation reached 1,634.7 million tons and 306.4 billion tons.km, of which domestic transport accounted for 97.95%), of which road transport contributed the largest proportion of revenue. Revenue from warehouse operations and loading and unloading of goods tends to increase continuously in the period 2010 - 2017 with 18.3% and 11.8%, respectively. Domestic businesses act as subcontractors or agents for foreign companies such as warehouse services, freight transportation, freight forwarding, loading and unloading, sorting, and packaging services, storage ... There are other services in the logistics service chain, although there are a number of suppliers, the quantity is not much.

### ***Human resources***

With about 4000 logistics businesses, human resources are still limited, especially in foreign languages as well as management capacity. Besides, the application of information technology in enterprises' operations is still at very modest level, mainly focusing on serving customs declaration and vehicle tracking and supervision.

## **2. The impact of COVID-19 on the operation of Vietnamese logistics enterprises**

### ***Impact on import and export***

The COVID-19 epidemic still has complicated developments globally, disrupting the supply chain of raw materials and significantly narrowing the consumption market. Many countries have taken measures to close borders and only import some essential commodities, so the value of Vietnam's exports decreased. According to a survey by the Vietnam Logistics Business Association (VLA), in the first three months of 2020, 20-50% of logistics businesses will be affected depending on the type of service provided. Given the current status of Vietnam's logistics enterprises, which are mainly small-scale enterprises, when a pandemic occurs, these businesses are greatly affected. Compared to the pre-occurrence of the pandemic, the number of goods transported across the border has decreased significantly.

Vietnam's import and export activities were strongly affected in the second quarter of 2020 after the COVID-19 epidemic strongly spread globally, including Vietnam's major trading partners such as the US, EU, Japan, ASEAN ... export turnover in the second quarter of 2020 decreased by 8.3% compared to the first quarter of 2020 and decreased

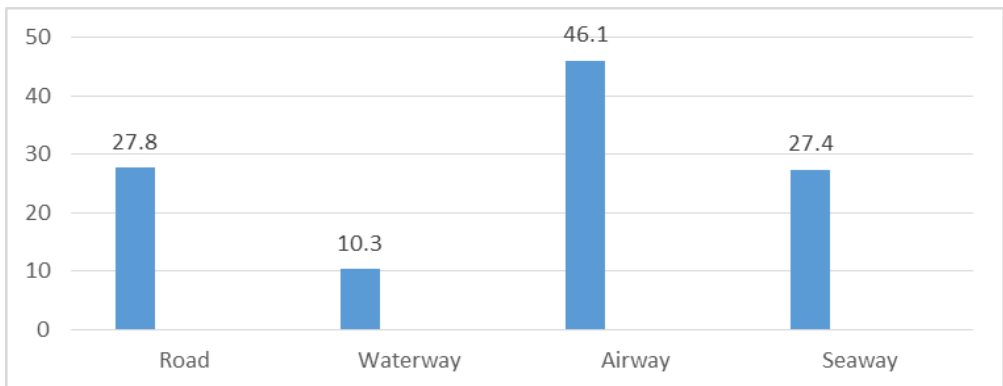
by 9% compared to the second quarter of 2019. Generally, in the first 6 months of 2020, the country's exports were estimated at 121.2 billion USD, down 1.1% from the same period last year (According to the Ministry of Industry and Trade), of which Vietnam's exports to ASEAN decreased by 14%., to the EU market down by 8.8% while exports to Japan decreased by 2.3% over the same period in 2019. Groups of agricultural, forestry and fishery products decreased by 4.4% over the same period; processing industrial products fell 0.7% and mineral fuel products fell 35.8% over the same period last year. Vietnam's exports to ASEAN decreased by 14% over the same period in 2019. In addition, exports to the EU market decreased by 8.8% while exports to Japan decreased by 2.3%. Aviation, road, and railway logistics services are particularly severely affected during times of social isolation.

### ***Impact on transport activities***

The COVID-19 translation has had a heavy impact on the transport of passengers and goods. According to the General Statistics Office, for the first 6 months of 2020, passenger transportation reached 1,812.6 million passengers, down by 27.3%, freight transportation down by 8.1% over the same period in 2019. Of which, transportation domestic transport decreased by 27.2% and foreign transport decreased 68.6% compared to the same period in 2019. The foreign transport of airlines still faced many difficulties due to the widespread of COVID-19 in the countries in the region and around the world.

As of June 2020, according to the International Air Transport Association (IATA), global air damage has reached \$ 200 billion.

Vietnamese airlines are also very heavily affected by the existing 250 aircrafts, in the COVID-19 service only exploiting 1-2% of the fleet. According to the Ministry of Transport, the initial damage from stopping flights of Vietnamese airlines is about VND 30 trillion in revenue (equivalent to a decrease of 60% over the same period.)



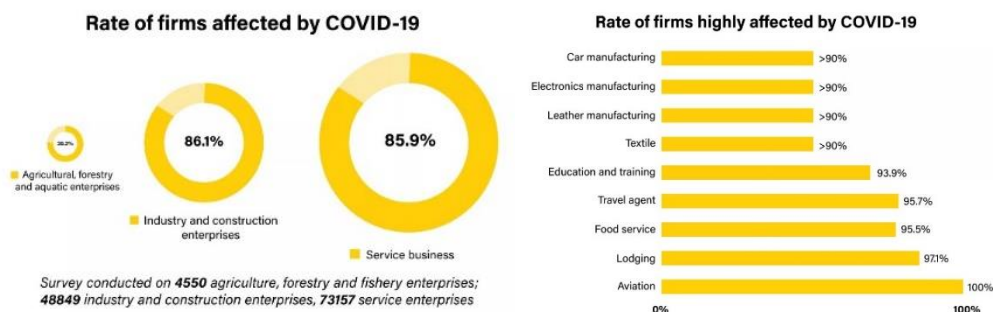
**Chart 2: The level of transport decline in Vietnam in the 6 months of 2020 compared to the same period in 2019**

*Source: Vietnam Logistics Business Association (VLA)*

### ***Impact on sales reduction***

According to the industry survey of the General Statistics Office, during the first social gap due to the epidemic, more than 80% of enterprises were negatively affected by the pandemic. The revenue of logistics enterprises also decreased significantly. According to the VLA report, about 15% of businesses have a reduction of 50% in sales compared to 2019 and more than 50% of businesses reduce the number of domestic and international logistics services by 10% - 30% over the same period last year. The share price of the transportation and warehouse group decreased sharply (-32.8%) compared to the beginning of the year; and the number of transport - warehouse enterprises

suspended from operation in the first quarter of 2020 increased 29.3% over the same period in 2019.



**Chart 3: Proportion of firms affected by COVID-19 in Vietnam**

Source: GSO, PSI

### *The impact on labor and employment cuts*

As of June 2020, Vietnam has 30.8 million people aged 15 and over that were negatively affected by the COVID-19 epidemic, including those suffer job losses and take time off alternate leave hours of work, income reduction ... The impact of income reduction accounts for the highest proportion with 57.3% of the total number of affected people (equivalent to 17.6 million people). The number of unemployed people at the working-age in the first 6 months of 2020 is nearly 1.2 million people, an increase of 123.9 thousand people over the same period last year. The unemployment rate at the working age in the first 6 months of 2020 is 2.47%, 1.14 times higher than the same period last year. The logistics sector is also strongly affected. The most direct and obvious affected industry is the transportation and warehousing industry. According to the Ministry of Transport, the initial damage from stopping flights of Vietnamese airlines is about VND 30 trillion in revenue (equivalent to a decrease of 60% over the same period), revenue from

the railway and road industry. over 20% off set. The share price of the transportation and warehouse group decreased sharply (-32.8%) compared to the beginning of the year; and the number of transport - warehouse enterprises suspending operations in the first quarter of 2020 increased 29.3% over the same period in 2019. According to research by the authors of the BIDV Research and Training Institute (2020) and PhD. Can Van Luc assess the impact of COVID-19 on Vietnam's economic sectors in 2020, in which the transport and warehousing sector is negatively affected by the decrease in demand, and the degree of influence is greatly appreciated.

### **3. Lessons for logistics businesses in the context of the COVID-19 pandemic**

Facing the serious effects of the COVID-19 pandemic, Vietnamese logistics enterprises are able to sustain and develop the need to identify necessary and valuable lessons.

Firstly, logistics enterprises should not be too dependent on some of the world's leading economies in the supply chain. The risk of a second outbreak of COVID-19 infection with the risks of aggregate demand blockade and supply chain breakdown is still present in many major economies around the world. Therefore, over-reliance on a few economies will entail many consequences when there are force majeure risks that may occur.

Secondly, with more than 90% of Vietnam's small and medium-sized logistics enterprises, lack of network connectivity, when a pandemic breaks out, many businesses delay operations, some



businesses are at risk of dissolution. Enterprises need to review their operational strategies, diversify service delivery markets, reform their operating apparatus to make appropriate adjustments, adapt to strong shocks. So logistics enterprises need to grasp opportunities to find a way to cooperate, recover effectively, and overcome the crisis.

Thirdly, improving the quality of human resources to meet the requirements of the new situation, especially developing high-quality human resources with expertise, language skills, and management capabilities. In the period 2015-2030, Vietnam needs 200,000 employees in the logistics sector. Along with the training support from associations, organizations, universities, and logistics enterprises, it is necessary to have a policy of training and building staff, promoting the strength of human resources, optimizing and helping businesses develop sustainably and adapting to abrupt changes in the long term. Fourthly, increase the application of science and technology to improve competitiveness and cut costs to maximize business performance. Currently, the application of information technology in the logistics of Vietnamese enterprises is still at a very modest level, mainly focusing on serving customs declaration and vehicle tracking and supervision. Enterprises and logistics centers need to make efforts to renovate operations. In addition to the main functions of preservation, labeling, packaging, separation, and handling of goods, order preparation, logistics centers are turning to the application of information technology in goods management and tracking, retrieve location. COVID-19 forced firms to re-position logistics by digital transformation. Implementation will help logistics businesses solve problems related to operations, optimize the ability to

transport goods, reduce delivery and receipt times, minimize risks during operation ... The number of more than 4000 logistics enterprises has about 30 enterprises providing multinational logistics services, so to urge businesses to restructure, take advantage of digital technology to make big changes in production. energy and productivity. The application of digital technology helps to cut costs when the ratio of logistics costs in Vietnam is 18% compared to GDP while this figure in developed countries is 9-14% (According to VLA). Digital transformation helps businesses participate in larger supply chains.

## **CONCLUSION**

Facing force major risks during the occurrence of the COVID-19 pandemic, Vietnamese logistics enterprises had suffered heavy losses. The article has analyzed the effects of the COVID-19 translation on the operation of Vietnam's logistics enterprises with the combined qualitative approach and analysis from the secondary information. Based on the research of the current state of Vietnam's logistics enterprises together with the analysis of the impact of COVID-19, the article also helps businesses identify necessary lessons from which businesses can have response measures and appropriate immediate and long-term adjustments to be able to withstand and thrive in the most unfavorable conditions.

## Reference

1. GSO (2019-2020): "Monthly socio-economic information" published by the General Statistics Office, accessed at relevant sections: [www.gso.gov.vn](http://www.gso.gov.vn); Access time, from September 1 to September 5, 2020.
2. Vla (2020): Accessed at: <https://www.vla.com.vn/hiep-hoi-doanh-nghiep-dich-vu-logistics-15-doanh-nghiep-mat-50-doanh-thu-50-companies-enterprises-to-workers-with-the-number-service-with-also-ky.html> services, accessed date: September 5, 2020
3. Vnexpress.net (2020): Accessed at: <https://vnexpress.net/hon-27-trieu-nguoi-nhiem-ncov-toan-cau-4157544.html>, access date: September 6 / 2020
4. Can Van Luc et al (2020), the COVID-19 pandemic having a strong impact on Vietnam's economic sector, can be accessed at: <https://trungtamwto.vn/chuyen-de/15243-translation-COVID-19-dong-manh-dong-to-economic-region-of-Vietnam>, access date September 19, 2020
5. General Statistics Office (2020a), Labor survey report for Quarter 2, 2020, available at: <https://www.gso.gov.vn/Default.aspx?tabid=512>, accessible at September 19, 2020.
6. Le Minh (2019, 23 August, 13:16 PM), 90% doanh nghiệp logistics vốn dưới 10 tỷ đồng, available at: <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/90-doanh-nghiep-logistics-von-duoi-10-ty-dong-311800.html> (accessed 8 October 2020).

# VIETNAM LOGISTICS ACTIVITIES IN THE CONTEXT OF COVID-19: OPPORTUNITIES AND CHALLENGES

**Dr. Nguyen Van Ha**

*Banking Academy of Vietnam*

## **Abstract**

*In term of 2020, effects of COVID-19 epidemic stalled trade with China. Moreover, when pandemic spread to rest of the world, this negative impact increased exponentially, causing Vietnam's economy to slow down, leading production, import and export of most enterprise to decline. Competitive pressure and trend of "takeover" from market and merging enterprises (DN) from foreign competitors are which logistics service industry is worried about. Therefore, in the short term and long term, Vietnam needs to have strategy to develop supply chain of logistics services in a methodical manner, helping businesses to improve their competitiveness and participate equally with the world. This study outlined impact of COVID-19 epidemic on Logistics activities in two context: short term & long term. Author also analyze opportunities and challenges of Logistics activities in Vietnam in the context of COVID-19 outbreak. Opportunity comes from new direction consistent with needs of market and advantage in the switch from original. Challenges from competition pressure and post-COVID recovery. Since then, author also*

*gives some specific recommendations on policies and measures to deal with COVID-19 situation in business.*

**Keywords:** transformation, competition, infrastructure

## **1. Impact of COVID-19 epidemic on Logistics activities in Vietnam**

### ***1.1 Short-term impact***

COVID-19 epidemic has had a wide and obvious impact on the entire Vietnamese economy and logistics service supply chain here. The disruption supply of raw materials from China in the first 2 months of 2020 has a direct impact on value chain and disrupts production in Vietnam. China is regional hub for 12% of all-time trade in components. The epidemic outbreak in China lead to high costs of disruption due to lack of raw materials.

According to the Ministry of Agriculture and Rural Development, total export value of agricultural, forestry and medical products in the first 2 months of 2020 is estimated at 5.34 billion USD, down 2.8% compared to same period in 2019. Four markets - the main export markets for Vietnam's agricultural, forestry and fishery products include China (accounting for 38.8% market share, value down 15.3%); US (23.8% market share, value increased by 15.8%); EU (12.2% market share, 11.7% value decrease); ASEAN (9.7% market share, 0.3% value decrease); Japan (8.2% market share, value decreased 7.1%) and South Korea (accounted for 5.8% market share, value decreased 10.1%).

According to statistics from Vietnam Association of Logistics Services, about 15% of businesses have a 50% decrease in turnover and 50% of businesses have 15-30% reduction in the number of services compared to same period last year.

Logistics activities such as transport decreased due to obstructed customs clearance services at border gates, warehouse services, and freight rates were also severely affected. The border crossings with China, which are often overloaded, are now affected by epidemic. The clearance becomes complicated and takes time. Thereby leading to damaged goods, transport becomes more difficult causing financial problems for logistics enterprises.

### ***1.2 Long term impact***

According to IMF's analysis, world economy is facing an unprecedented severe loss caused by the COVID-19 pandemic and is facing negative growth in near future. We can call this as global economic downturn compared to 2009

Vietnam is a small, open economy, heavily dependent on partner countries and international trade environment. These countries not only act as partners but also output markets and suppliers of raw materials to economy.

Therefore, serious financial and economic consequences caused by the COVID-19 pandemic for countries in US, Asia (Korea, Japan) and Europe will be long-term impacts on Vietnamese economy. Besides, as a small economy, mainly outsourcing, processing and exporting to

partner countries, our economic recovery is also highly dependent on recovery of global economy especially Chinese economy. Currently, government of Vietnam is mastered very well. If having economic support from government not to happen mass bankruptcy, particularly in medium and small enterprise, this is certainly a prerequisite for country's economy to recover from pandemic.

## **2. Opportunities and challenges for Logistics activities in Vietnam in the context of COVID-19 epidemic**

### ***2.1 Opportunity***

#### ***2.1.1 Setting new direction to match with needs of market***

Despite being affected by epidemic, this is also an opportunity for businesses to renew themselves, find new directions in accordance with market needs to survive and grow stronger. The reason is that risks are always along with opportunity. Sensitive businesses will change state from "freezing" to immediately seizing new opportunities for development. This is the basis to promote capacity to build of economy, as a premise for a more sustainable development.

Currently, Vietnam's prestige and position are highly appreciated by international community through successes gained from the prevention and control of COVID-19 epidemic. This is "golden" opportunity for the world to know about Vietnam with a special advantage of "strategic trust", a safe investment destination and ready to welcome capital flows transferred to Vietnam. In the context that the COVID-19 epidemic is still having complicated developments in many

countries around the world, good control of epidemic in Vietnam has created a great advantage to be able to be one step ahead in recovery economy, establish new positions in international arena.

Impact of COVID-19 creates new awareness, a shifting trend in consumer tastes, new online commercial transactions; emerging new online business lines based on digital economy, It also creates changes in demand for some essential products and services such as food processing; medical, pharmaceutical chemistry, digital transformation, e-logistics. Therefore, it provides new market opportunities for Vietnamese enterprises to take advantage of restructuring production, forming new value chains and develop breakthroughs. This is opportunity for Vietnamese businesses to recognize and re-examine their true capacity, resilience, adaptation to market events, non-traditional security. It helps them to review, evaluate, restructure raw material sources, customers and find new directions to be more proactive. It is opportunity to build a plan to renovate production models, new business strategies to quickly grasp signals and demand.

This time is also an opportunity for Vietnamese businesses to focus on renovating equipment and technology at cheaper costs. At the same time, promoting linkages, domestic supply networks, reducing dependence on foreign countries, improving quality, reducing product and service prices to take advantage of opportunities to dominate and consolidate market share. At the same time, a number of international integration policies such as newly signed and officially free trade agreements will create advantages for Vietnamese enterprises to participate in the global value chain.



In addition, during recent difficult times, Vietnamese business community has been promoting the spirit of overcoming difficulties, self-reliance and efforts to maintain production and business for employees. Vietnam has been very proactive with solutions to save themselves. Initiatives have been implemented to overcome negative effects of epidemic, such as applying flexible working hours; reduce production costs; checking and searching for sources of alternative raw materials. We improve to look for markets to consume products especially exploiting domestic market, quickly seizing new business opportunities; applying digital technology in production and business. These are bases to believe that Vietnam's economy in general and businesses will have strong recovery steps in coming time.

### ***2.1.2 The transition from zero is an advantage***

When supply chain has been interrupted recently, operations of logistics enterprises have been affected significantly. VLA recently conducted a survey in the middle of March, 50% of businesses have a decrease of 10-30% in revenue, and a 30 to 50% decrease in revenue for businesses. COVID-19 was a surprising global event. Difficulties brought by COVID-19 are indeed very difficult to deal with immediately.

This is time when we have a chance to look back service platforms of logistics businesses and look at opportunities for improvement. We can see how business can respond to unexpected situations during operation of business, service that has a floating

opportunity such as logistics for e-commerce. This is not only a temporary solution but also a development trend of the logistics.

Digital transformation helps businesses participate in a larger supply chain, but in order to succeed, there must be a commitment and determination from leaders to build a corporate culture. Logistics enterprises have many different service segments, so they have different approaches. Now many businesses are applying independent applications, for each service segment.

We should have a roadmap from the beginning and have to implement a long-term vision, choose the right process, right supplier and right finance to create a seamless system.

## ***2.2 Challenges***

The increasing pressure of competition and purification combined with economic shock caused by COVID-19 has caused many businesses to "wobble". Enterprises in groups of industries directly affected such as tourism, aviation, restaurants, hotels, education have fallen into a state of "hibernation" in the past 3 months . Sales revenue of business in the first quarter 2020 and 2020 full-year forecast to fall sharply, even a loss. Trade promotion activities, investment stalled, images affect business operations of the quarter and the year to follow. Many businesses had to suspend operations, revenue down production, especially businesses small and medium.

According to a survey of nearly 130,000 enterprises conducted by Ministry of Planning and Investment in April, it was found that: About

86% of enterprises were negatively affected by the COVID-19 epidemic. Turnover in the first quarter of 2020 of businesses fell sharply to 74.1 % over the same period last year. Although sales revenues were significantly reduced compared to target, enterprise has incurred expenses of daily pay salaries, interest expense, rent,...Difficulties in market, revenue, cash flow have forced many businesses to use labor-related measures: nearly 30% of businesses apply labor reduction; over 21% of businesses give workers unpaid leave and nearly 19% of businesses reduce their labor wages.

With increasingly complicated developments of COVID-19 epidemic and resonance effects from other factors, the number of newly established enterprises in the first four months of 2020 decreased for the same period 2015-2020 (down 13.2% over same period in 2019). Average registered capital per enterprise in the first 4 months of 2020 reached 11.8 billion VND (down 17.9% compared to the same period in 2019) ; business size is narrowed; number of enterprises registered to suspend business with a definite period increased sharply (up 33.6% over the same period in 2019).

Although at present, disease situation in the country has begun to show positive signs, but in the world, the epidemic is still progressing in a very complicated and prolonged period, especially in market partners such as the US, Japan, Europe, ... Therefore, supply chain and value chain failures cannot be overcome in the near future, will continue to cause a great impact on businesses. Industry, especially those businesses with inputs and outputs depends on market internationally, are deeply involved in production networks,

value chains globally as textiles, footwear, tourism, airlines, restaurants, hotel, logistics ... At the same time, due to the influence of the COVID-19 epidemic, countries are trying to reduce their dependence on one market, leading to changes in global trade flows, reducing new markets. After COVID-19, large FDI enterprises tend to restructure business system supplying raw materials to be more active, choosing new investment locations to satisfy conditions of science, technology and biological environment

Besides, if the disease situation continues complicated world, phenomenon of purchase, merger business in the future will place more robust. Risk of business potential of Vietnam (now medium and large, have a certain market share, with the leading role some important economic sectors) can be acquired by investors abroad cheaply.

### **3. Some specific recommendations**

#### ***3.1 Policy for developing port infrastructure***

In the long term, Vietnam should have a policy to develop seaport infrastructure because 90% of our country's exports and imports are by sea. It is essential to rapidly develop deep-sea ports to serve domestic and regional needs. Vietnam is gradually becoming a center of production and export. Trend of moving factories out of China, one of the priority destinations is Vietnam. It is necessary to choose a number of reputable enterprises in sea transport and logistics services and create policies to help them have a long-distance strategy, thereby impacting and building a team of more powerful enterprises

### ***3.2 For businesses operating in the Logistics industry:***

#### ***3.2.1 Reassessment of supplies***

COVID-19 has exposed weaknesses in many of the company's sourcing strategies. Whether it is currently looking for new supply or looking to minimize risks for the future, the company always wants to diversify its supply network.

#### ***3.2.2 Focus on what can be done quickly***

Due to the severity of the pandemic and government-imposed regulations, the company does: Turn the business around as quickly as possible. Shorten the duration of the process of collecting purchase, warehousing - delivery. Start by looking at what the company has today and determine if it can get the company the most out of what it needs.

#### ***3.2.3 Re-balance the car shipping***

Pandemic is creating extreme delivery imbalances, with some businesses facing severe lack of delivery capacity and others facing serious operational slowdowns. For some companies, the challenge is significantly improved productivity and bring new capacity and for others, the challenge is to minimize the cost side car transport. Applying technology to create Route Optimization solutions to execute delivery scenarios.

## **Conclusion**

The disease situation changes rapidly and has a negative impact on economic growth rate of country and region. Negative impacts and damage to logistics / logistics services, maritime, air, railway, and road services have not yet stopped. The study outlined impact of COVID-19 epidemic on Logistics activities in Vietnam in two contexts: short term and long term. From there, analyze opportunities and challenges of Logistics activities in Vietnam in the context of COVID-19 epidemic. Opportunities come from building a new direction in accordance with the needs of the market, advantages in transition from the beginning. Challenges from competitive pressure and post-COVID-19 recovery

In order to ensure sustainable and long-term business operations, there is a need for a transformation in thinking, utilizing 4.0 technology and diversifying the supply chain. Another important factor for enterprises that ensure the supply of workers skilled high, especially after the pandemic. This requires the cooperation of all stakeholders as well as the efforts of the three parties, the school - the state - the business.

## **References**

1. Short report on “The impact of COVID 19 flu on workers' needs and skills and human resource training activities for the logistics industry in Vietnam , VCCI, April 2020
2. Thy Hang (2020), " Logistics industry overcomes internal barriers", Journal of Finance, October 2020

3. Vo Huy Hung (2020), " Vietnamese enterprise" post-COVID ": Challenges in parallel with opportunities, National Business Registration Portal
4. Quang Huy (2020), "Responding to COVID 19 for logistics operations in Vietnam", Vietnam Financial Times, 10/2020
5. ‘Solutions to recover economy of Vietnam’, Report of World Bank in 04.2020
6. Nguyen Duong (2020), Vietnam Logistics in COVID-19, Vietnam Registry Department, Mar.2020

# THE IMPACT OF COVID-19 PANDEMIC ON LOGISTICS: OPPORTUNITIES AND CHALLENGES

**MSc. Pham Thu Van**

*National Economics University*

## **Abstract**

*The COVID-19 pandemic has had a serious impact on all sectors including logistics. Logistics which includes packaging, warehousing, storage, goods rotation, customs clearance to deliver products and goods from suppliers to consumers in the most optimal way, should be in the group to be hit first. The pandemic has put heavy pressure on global production and supply chains. However, it cannot be denied that the pandemic opens new avenues for the logistics service industry to develop. This article studied the situation of Vietnam Logistics industry in the context of COVID-19 and proposes a number of solutions to cope with COVID-19.*

**Keywords:** COVID-19, Logistics enterprises, supply chains.



## **1. The impact of COVID-19 on logistics enterprises**

### *Affect to the world*

The COVID-19 pandemic broke out from the end of January 2020, causing serious economic, cultural, social and human losses in the world. By the beginning of July 2020, more than 10 million people have been contracted with COVID-19 and more than half a million people died. Despite the early evidence to show that the human-to-human transmission of rates of COVID-19 is lower than SARS (Casella et al., 2020), compared with its respiratory disease family, SARS and MERS, Peeri et al. (2020) show that COVID-19 has spread more rapidly, due in part to increased globalization and the first epicentre's (Wuhan) accessibility. Wu, J.T. et al. (2020) argue that the abundance of connecting flights, the timing of the outbreak during the Chinese New Year, and the extraordinary rail accessibility of Wuhan to the rest of China has enabled the virus to spread throughout the country, and eventually, globally, in a very short time.

The COVID-19 epidemic has had an impact on all sectors from manufacturing, commerce, transportation, tourism, to healthcare, education, etc. Logistics which includes packaging, warehousing, storage, goods rotation, customs clearance ... to deliver products and goods from suppliers to consumers in the most optimal way, should be in the group to be hit first. The pandemic has put heavy pressure on global production and supply chains. However, it cannot be denied that the pandemic opens new avenues for the logistics service industry to develop.

Esben Poulsson, Chairman of The International Chamber of Shipping said that warehouses are holding too much cargo, such as refrigerators and washing machines, that retailers are asking shipping companies to push back deliveries. This could decrease global container shipments by about 30% over the next few months.

“Shipments are likely to drop by about 15% in 2020 amid the COVID-19 pandemic. The decline in the second quarter of 2020 depends on how much governments reopen their economies ” he said.

"Inventory of a wide range of goods such as garments, textiles, refrigerated goods, has been filled with containers. The consignee is asking shipping lines if they can store these goods for a while, this means delaying deliveries."

The decline will be an obstacle for shipping giants like Cosco Shipping Holdings Co. and Ocean Network Express Holdings Ltd . In early 2020, when the volume of trade increases, the industry did very well with high growth potential. But that optimism has now vanished as COVID-19 forced shoppers to stay at home, reducing retail sales in the largest consumer markets.

### ***Affect to Vietnam***

The research team of the Institute of Vietnam Economic and Policy Research (VEPR), National Economics University, has just released a report on assessment of the impact of COVID-19 on the economy and recommendations on response policies, through a survey of 510 enterprises and giving three scenarios. It is forecasted that the

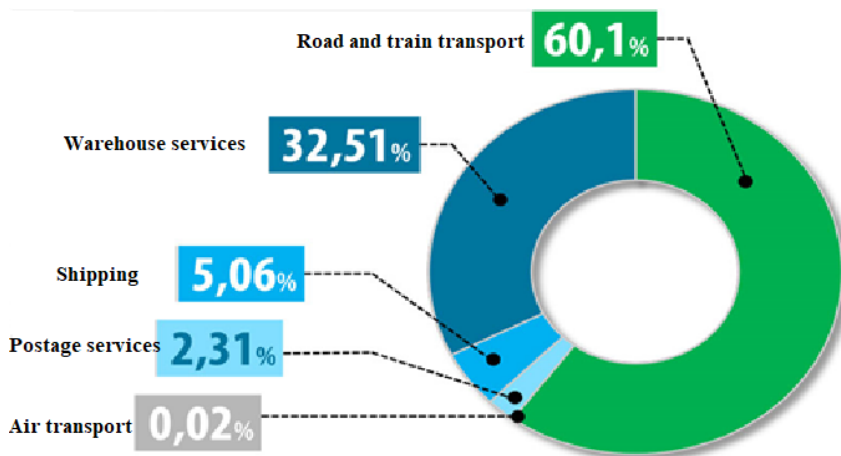
second quarter of this year, regardless of the scenario, will see negative growth. If the pandemic was completely controlled in mid-May and economic activities gradually returned to normal, GDP growth in the second quarter would remain - 3.3%. In the other two scenarios, the worst impact of COVID-19 on the economy will appear in the second and third quarters, the second quarter GDP growth will be - 4.9% - 5.1%.

According to the research team, the transportation - warehousing sector was one of the most affected one with an estimated growth rate less than 25% - 70% compared with the last estimation. At the end of June 2020, Vietnam's export value is estimated to decrease by 25% in the second quarter and 15% in the following quarters of 2020. Similarly, trade value domestic market also decreased by 30%. The tourism and hotel sectors will be affected greatly when it is expected to decrease by 30% - 40% in the number of tourists, revenue is also estimated to decrease by 40%, the number of jobs will decrease by 30% - 40%. The commercial and service sectors will witness a change when medical and essential services grow 25% - 40%, while ancillary services will decrease by 20% - 40%. Those forecasts lead to a 20% - 30% decline in the transport services and logistics industries.

In fact, since the end of February 2020, shipping companies have started to suffer from a drop in orders. Difficult consumption of goods, which are stored in warehouses for a long time, inevitably caused losses for the transportation and logistics industries. According to a report of the Vietnam Digital Agriculture Association in early April 2020, the enterprises in agricultural production, processing and export trade sectors was in stock 48,200 tons of goods and 10,000 tons of fertilizer.

The largest inventory was coffee, pepper, and cashew with 43,000 tons, worth 50 billion dong. Timber and commercial products were the most damaging industry when the contract was delayed lead to more than 260 billion VND of inventories.

The Vietnam logistics market attracts more than 4,000 businesses, mainly concentrated in Hanoi and Ho Chi Minh City. There are about 30 transnational logistics service providers operating in Vietnam, with big groups such as DHL, FedEx, Maersk Logistics, APL Logistics, CJ Logistics, KMTC Logistics ... The logistics industry expects to achieve an average growth rate of 16.56% per year from now to 2022, reaches a turnover of 113.32 billion USD by 2022. The growth rate of Vietnam's logistics industry in recent years has reached the rate of 14-16% / year. Vietnam's logistics costs compared to GDP are at a relatively high level compared to the world, accounting for nearly 20.9% of the country's GDP.



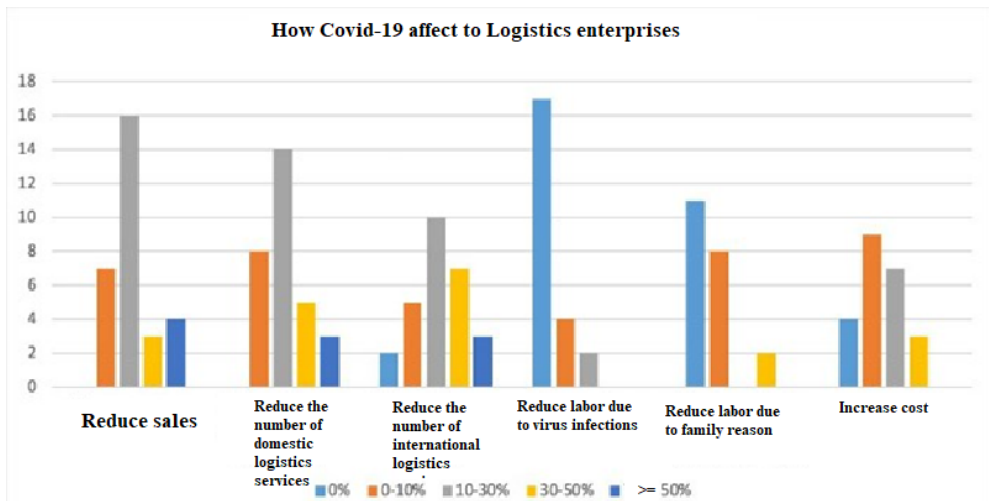
Due to the pandemic, the supply chain has been broken and turned upside down, including logistics activities - the backbone of the supply

chain. Air, road and rail transport services were the hardest hit. Shipping was less affected, with freight rates unchanged despite declining transport demands and procedural difficulties due to pandemic. These features of the global logistics service and supply chain are fully demonstrated in the Vietnamese logistics service industry. COVID-19 had a strong impact on the global supply chain, causing the logistics industry suffer quite a lot. In Vietnam, the revenue of the enterprises in this industry decreased on average by 10% - 30% compared with the same period in 2019.

For Vietnam, since the outbreak of the pandemic, this crisis has had a strong impact on the transport, logistics industries. Manufacturing industries such as textiles depend heavily on imports of raw materials from China - where the epidemic was most affected, have stalled production due to the pandemic. The campaign to rescue goods congested on the border with China in the early stages of the pandemic and especially the period of social isolation in April 2020 caused production, logistics and transportation to be disrupted. passage, congestion. From May 2020, the economy started to recover, but the COVID-19 pandemic continued to affect complicatedly to world markets that are Vietnam's main trading partners, negatively affecting import, export and logistics activities.

The majority of enterprises working in the logistics sector said that because many factories had to suspend operations, the amount of goods produced less, leading to the transportation and delivery of goods in the supply chain also decreased, affecting to the operation of companies providing warehouse services, transportation, and customs

services. In addition, many businesses also experienced a significant reduction in revenue from services for goods exported and imported from epidemic countries such as China, Korea, Japan, Singapore ...



survey on the difficulties and damages that businesses have to face due to the COVID-19 epidemic showed that the average revenue decreased from 10% to 30 % compared to the same period in 2019. In which, about 15% of enterprises have a decrease of 50% in revenue compared to 2019 and more than 50% of enterprises reduce the number of domestic and international logistics services by 10% - 30% compared to same period last year. About 97% of enterprises providing logistics services are small and medium, so they are severely affected. Air and road transport services were the hardest hit. “About 80% of the Association's members are micro, small and medium enterprises, so many businesses are in danger of bankrupt; Many workers will be lose their jobs if the pandemic prolongs”, according to VLA. Since May 2020, logistics activities have been recovered according to the economy, but now generally about 20%

of logistics enterprises are still declining in performance. Compared to the pre-pandemic, the amount of goods transported across the border has been much reduced.

### ***Shipping***

Maritime activities in shipping industries are also not better. In the first quarter of 2020, the port was estimated at more than 16.6 million tons, equaling 96% over the same period last year. In particular compared to the same period in 2019, some key ports faced a sharp decline in output such as Hai Phong port only reached 75%, Saigon port reached 85%. Vinalines' shipping output also decreased significantly when it only reached 4.7 million tons, equaling 84% over the same period in 2019. North-South domestic container cargo of Vietnam Shipping Joint Stock Company (Vosco) fell sharply with a decrease of 20% - 30%. In the second quarter of 2020, maritime service activities were strongly affected while the main goods such as clothing, leather shoes and wooden products currently contribute about 60% - 70% of export volume of long-haul transportation decreased. There will be a sharp decline of 30% - 50% due to the reduction of demand in Europe and America. Consolidated goods from other ports to Cai Mep - Thi Vai port for export to the US and Europe markets was down about 30% - 40%, causing a series of feeder vessels to be empty.

For shipping, the main routes are from China, Korea, Japan, shipping lines such as ONE, HMM and some other shipping lines all reduced ships connecting all routes, affecting shipment schedules. and service quality. Most of the goods imported on routes back to Vietnam

fell sharply, and some other markets were strictly quarantined. The operating procedures in the Asian market and some other regions are later than usual.

### ***Air transport***

For airlines, according to VLA survey, routes to China, Korea, Hong Kong was all cancelled or minimizes flights. In addition, freight rates increased. Meanwhile, it is difficult to find shipping suppliers. The drop in cargo volume resulted in a 30% decrease in the demand for road transport. In China alone, the suspension of all flights between Vietnam and China since the afternoon of 1 February has resulted in over 80 flights per day being canceled. Air transport support services such as flight management and airport services will also be affected.

### ***Road and rail transport***

Road and rail transport also declined due to the impact of passenger traffic. From April 2020, implementing Directive 16 of the Prime Minister on social distancing, Hanoi – Ho Chi Minh railway only has a couple of SE3 / SE4 passenger trains operating, the railway industry switches to freight trains and online ordering. While the drop in cargo volume has resulted in a 30% decline in demand for road transport, cross-border overland transports have found it difficult to find a carrier. The Chinese border gate is often overloaded, now due to the epidemic, traffic has arisen, customs services are hindered, import and export procedures are more complicated and time consuming.



The Vietnamese economy is an expansive one, dependent on exports and FDI with more than 70% of export turnover in this sector. Accordingly, Vietnam's logistics service industry is also affected by more than 30 transnational logistics providers that have close relationships with the world's major shippers and shipping companies. The decline in international demand led to a drop in export orders, many companies had to restructure. Logistics service enterprises are affected. Vietnam's GDP in the first 6 months of 2020 was estimated to increase by 1.81% over the same period in 2019, import-export turnover reached \$ 238.4 billion, down 2.1% over the same period last year. The recovery and development of an economy after the COVID-19 epidemic depend on the vitality of other economies, especially developed economies. This is a prominent feature that the world and Vietnam logistics service industries have been affected by.

## **2. Policy proposals to deal with COVID-19**

### ***Solutions for government***

Facing these complicated problems, VLA has made a number of recommendations and proposals to support logistics businesses, as well as maintain socio-economic development. Specifically, delay, exemption or reduction proposal of taxes and fees for enterprises in affected sectors (corporate income tax, value added tax, and social insurance, Unemployment Insurance and Health Insurance Funds).

In addition, VLA also proposed the Government to provide timely and accurate information on disease and the Government's economic scenarios; Provide free masks for businesses if the epidemic is more

complicated. In addition, the Government should work with carriers and shipping lines to reduce freight rates and port service charges to reduce cargo transportation costs, contributing to supporting logistics businesses.

Relevant agencies shall carry out anti-epidemic work at road and seaports in the direction of creating favorable conditions for businesses in order to create favorable conditions for the best circulation of goods and vehicles.

The State Bank should consider reducing the basic interest rate. Commercial banks need to freeze debt, reschedule loans, reduce lending rates, expand lending limits, and restructure loans for businesses in sectors strongly affected by COVID-19 such as tourist, agricultural exports, transportation, textiles, footwear ...

If the disease situation persists, the Government can consider boosting public investment for the entire economy, investing in infrastructure and equipment for the Customs sector.

- Unify the list of goods, HS codes to suit other countries, especially EU. This helps businesses avoid embarrassment when applying tax codes. In addition, state management agencies can control the uniform declaration.

- Have a mechanism, create more open conditions for import and export procedures in accordance with the actual conditions for each short and long term, shorten the clearance time for goods. Support factories to speed up goods circulation to save costs for businesses and society.

- Increase the progress and time of specialized licensing, reduce the time for customs clearance and inspection at the port to release goods to avoid storage fees.

- The Government reviews taxes and fees, has solutions to reduce transport costs such as BOT prices, tolls, vehicle storage fees, fuel ...

- Create favorable conditions for businesses in the issue of CO so that businesses could qualify for tax incentives when exporting to the EU and India markets under the EVFTA agreement. Review and approve for C / O debt after 30 days because of disease situation.

- The government supports businesses through trade promotion channels. Strengthen e-commerce, online transaction floors, and online payment.

### **3. Solutions for logistics enterprises**

Along with the support from the authorities, businesses are recommended to cut down on administrative spending, strengthen international cooperation, find new markets, do not depend much on traditional markets, customers. Besides, businesses need to take advantage of new FTAs, especially EVFTA because logistics services have notable commitments in EVFTA, in an open direction - significantly stronger than the International Trade Agreement (WTO) and brings many benefits to businesses.

The pandemic is a catalyst to accelerate digital transformation, the application of information technology in the logistics service industry in the context of the industrial revolution 4.0. Therefore, enterprises

providing logistics services in Vietnam are actively transforming digital to change the stagnation, create a breakthrough to improve competitiveness, reduce logistics costs, have more customers and maximum profit compared to before the transformation, aiming to reduce logistics costs.

Currently, VLA is actively researching the project of developing a digital platform for logistics services. At Saigon New Port, Maesk Lines has successfully implemented e-DO - Electronic Delivery Order (FCL). This system is continuing to apply in Hai Phong Port. VLA is promoting the implementation of e-DO with Block-chain technology for odd shipments (LCL), which can save hundreds of billions of VND each year. Along with the digital application, the logistics service industry need to make efforts to develop high-quality human resources to meet the requirements of service development, taking advantage of the development opportunities brought by FTAs. FTAs including EVFTA, CPTPP and RCEPT are an opportunity for Vietnam to develop production, trade and investment. The above factors will create great opportunities for the logistics service industry to develop in both business scale and service delivery quality. Enterprises providing logistics services in Vietnam need to prepare their human resources and operational capacity to thrive after the pandemic.

The pandemic has changed the way of consumption, mode of operation and trade exchange. Vietnames e-commerce has developed strongly, leading to logistics activities. According to Nielsen Market Research Company, during a pandemic, Vietnam's demand for online goods increased by 25%. Also according to a study by McKinsey Global

Strategic Consulting, the digital transformation that should have taken 5 years to apply to businesses and consumers, now takes only 8 weeks thanks to the "push" from the pandemic. The issue of improving the competitiveness of the supply chain and logistics such as cost, quality and delivery is at the forefront. The above issues will strongly affect the development of Vietnam's logistics service industry in the coming time that businesses need to grasp.

During the pandemic, new logistics activities appeared such as international intermodal reefer rail transport to transport full-package goods to China, opening up the direction of official export of frozen fruits and agricultural products by road transport to China and from there to Central Asia and Europe. In addition to accessing potential markets through new agreements and proactively grasping the shifting trend of factories from China, Vietnamese businesses need to quickly adapt, create and transform digitally.

Global supply chain shifts have begun. Along with the trend of finding alternative sources from domestic and regional to reduce dependence, the logistics market is undergoing many changes. In particular, the Economic Prosperity Network is being considered to establish by the US, including Japan, Korea, New Zealand, India and Vietnam. These new market requirements include trustworthy supply chains, innovative product innovations, and origin transparency requirements.

## References

- [1].Ptscdinhvu.com.vn, (2020). [online] available at [http://www.ptscdinhvu.com.vn/bv-373--Nganh-dich-vu-logistics-Viet-Nam-trong-dai-dich-COVID-19.htm#.X2lTez\\_ivIV](http://www.ptscdinhvu.com.vn/bv-373--Nganh-dich-vu-logistics-Viet-Nam-trong-dai-dich-COVID-19.htm#.X2lTez_ivIV) (Accessed 03. Aug 2020)
- [2].Ptscdinhvu.com.vn, (2020). [online] available at [http://www.ptscdinhvu.com.vn/bv-362-Nganh-logistics-truoc-suc-ep-cua-dich-COVID-19.htm#.X4K7Wj\\_ivIV](http://www.ptscdinhvu.com.vn/bv-362-Nganh-logistics-truoc-suc-ep-cua-dich-COVID-19.htm#.X4K7Wj_ivIV) (Accessed 04. May 2020)
- [3].Ptscdinhvu.com.vn, (2020). [online] available at [http://www.ptscdinhvu.com.vn/bv-361-Bloomberg--Nganh-logistics-tham-don-COVID-19--cac-lo-hang-container-tren-toan-cau-se-giam-30--trong-vai-thang-toi.htm#.X4K7tj\\_ivIV](http://www.ptscdinhvu.com.vn/bv-361-Bloomberg--Nganh-logistics-tham-don-COVID-19--cac-lo-hang-container-tren-toan-cau-se-giam-30--trong-vai-thang-toi.htm#.X4K7tj_ivIV) (Accessed 04. May 2020)
- [4]. Hà Anh (2020), “Doanh nghiệp Logistic làm sao để vượt bão COVID-19”. [online]. Available at <https://nhandan.com.vn/chuyen-lam-an/doanh-nghiep-logistics-lam-sao-de-vuot-bao-COVID-19-456058/> (Accessed 22. Apr 2020)
- [5]. Đào Lê (2020), “Ngành Logistics trước nhiều thử thách”. [online]. Available at <http://www.baodongnai.com.vn/tieu-diem/202005/nganh-logistics-truoc-nhieu-thach-thuc-3005004/> (Accessed 25. May 2020)
- [6]. Quang Anh (2020), “Doanh nghiệp Logistics Việt ảnh hưởng thế nào từ dịch COVID-19”. [online]. Available at <http://tapchitaichinh.vn/tai-chinh-kinh-doanh/doanh-nghiep-logistics-viet-anh-huong-the-nao-tu-dich-COVID19-319785.html> (Accessed 06. Mar 2020)
- [7]. Anh Hoa (2020), “Thị trường Logistics xác lập cuộc chơi mới”. [online]. Available at <https://baodautu.vn/thi-truong-logistics-xac-lap-cuoc-choi-moi-d123303.html> (Accessed 02. Jun 2020)

- [8]. Thị Hồng (2020), “15% doanh nghiệp Logistics bị giảm 50% doanh thu so với năm ngoái”. [online]. Available at <https://baodautu.vn/15-doanh-nghiep-logistics-bi-giam-50-doanh-thu-so-voi-nam-ngoai-d117180.html> (Accessed 04. Mar 2020)
- [9]. Văn Danh, Bùi (2020), “COVID-19 và ngành Logistics”. [online]. Available at <http://vlr.vn/thoi-su/COVID-19-nganh-logistics--6145.vlr> (Accessed 13. May 2020)
- [10]. Loske, Dominic (2020), “The impact of COVID-19 on transport volume and freight capacity dynamics: An empirical analysis in German food retail logistics”, *Transportation Research Interdisciplinary Perspectives*, Volume 6, July 2020
- [11]. Musselwhite, Charles (2020), “The Coronavirus Disease COVID-19 and implications for transport and health”, *J Transp Health*. 2020 Mar

# **LOGISTICS ACTIVITIES OF SAIGON NEWPORT CORPORATION - OPPORTUNITIES, CHALLENGES AND SOLUTIONS IN THE CONTEXT OF COVID-19**

**Dr. Nguyen Thi Thuy Hong**

## **Abstract**

*The "Great Blockade" by COVID-19 left the world facing considerable uncertainties and challenges, which could lead to a massive global recession. The COVID-19 pandemic fractured some global supply chains, so when countries closed, restrictions on circulation, manufacturing sectors stalled, consumer demand declined, etc. Saigon Newport Corporation, one of the largest logistics service business units in Vietnam, also suffered many impacts affecting business activities. The study of opportunities and challenges of Saigon Newport Corporation (SNC) to propose some solutions to disassembly in the context of COVID-19 still complex developments is necessary.*

**Keywords:** Logistics, Saigon Newport, COVID-19

## **1. The impacts of COVID-19 on logistics activities:**

Logistics is an important service sector in the overall structure of the national economy, playing the role of supporting, connecting and



promoting socio-economic development of the country as well as each locality. In the past, logistics acted as a supporting factor for the main functions of the production process. Currently, the scope of logistics has expanded beyond the traditional framework of logistics, freight forwarding, covering areas from production planning, arrangement, management of the flow of materials, materials, goods from the place of supply to the place of production, and the rotation of finished products to the end consumer. Logistics creates communication throughout society according to the optimal options, reducing the cost of rotation and warehousing.

The COVID-19 pandemic fractured some global supply chains, so when countries closed, restrictions on circulation, manufacturing sectors stalled, consumer demand declined... Vietnam's logistics industry is negatively impacted. According to the survey conducted in October 2020 by the Vietnam Association of Logistics Service Enterprises (VLA), 15-50% of logistics enterprises suffered a decrease in operations and average revenue reached from 10-30% compared to the same period of 2019; in which, air and road transport services were most severely affected. Many small and medium-sized logistics businesses are on the brink of bankruptcy; many workers are diluted and lose their jobs if the epidemic lasts a little longer. The biggest difficulty faced by logistics enterprises today is solving the problem of financial liquidity and solving jobs for workers, while production and import and export activities are deeply reduced. By the end of October 2020, most countries have issued strict quarantine regulations, customs procedures, operation from the markets are delayed than usual. Carriers reduce flights and lines, increase

freight, issue a series of surcharges. Airlines also cancel, minimize flights from epidemic zones, increase freight. Meanwhile, border lines are difficult to find shipping providers so have affected the shipping schedule, the number of freight and the cost of logistics services. Not to mention, some Chinese customers have financial difficulties, leading to inability to repay the goods owner dragged by the customer delayed payment to the logistics business. According to some logistics enterprises, the state management agencies issued documents to recalculate the value and collect taxes, the increase in loading and unloading prices at seaports, cutting, not opening toll locations using infrastructure in the local seaport area ... has caused many difficulties for businesses.

Logistics market is attracting more than 4,000 enterprises, concentrated mainly in Hanoi and Ho Chi Minh City. In particular, there are about 30 enterprises providing transnational logistics services operating in Vietnam. To survive, businesses are forced to restructure, take advantage of digital technology to make a big change in output and productivity.

A VLA study showed that the ratio of logistics costs to Vietnam's national GDP is 18%, while this figure in developed countries is only 9-14%. Of the total logistics costs, transportation costs account for 60%, loading and unloading costs account for 21%, warehousing costs account for 12%... Vietnam's logistics costs are still quite high compared to countries such as China, Thailand, Japan and the EU due to restrictions on seaport infrastructure associated with post-port services; logistics infrastructure planning, including seaports, shallow ports, logistics

centers, depots, truck parking lots, container trucks ... ineffective. Therefore, the application of digital technology is necessary to cut costs. This is a one-way street that businesses cannot choose otherwise if they want to survive and develop.

According to the news posted in November 11 2020 of Vietnamnet, COVID-19 had spread globally with more than 53 million infections and approximately 1.29 million people die. The "Great Blockade" caused by COVID-19 could cause global economic growth in 2020 to plunge at -5.2% and is likely to be the fourth serious recession in more than 150 years. The world is facing enormous uncertainty, GEPU (global economic policy uncertainty) statistics as of September 2020 peaked at 412.05 compared to the time of the 2008–2009 financial crisis of 197.64 and the rate of economies facing recession was 92.9%, which are all the highest levels ever.

## **2. Challenges in logistics activities of Saigon Newport Corporation in the context of COVID-19**

The COVID-19, since March 2020, has greatly affected the operation of SNP Logistics (Tan Cang Logistics Service Center) - one of the 3 business pillars of Saigon Newport Corporation (SNC). SNC is always interested in building, preserving and promoting its prestige and brand in all areas of operation, always striving to maintain the no.1 position in Vietnam in container port operation; ranked in the top 20 container terminal clusters with the largest output in the world, group of 10 leading logistics service enterprises in Vietnam.

The logistics business of SNC serves 25% of the total import and export turnover of the country, contributing about 38% of the total import and export tax revenue, accounting for 8% of the total national budget revenue; The ports of Saigon Newport account for over 50% of the container market share through the national port system, in the Top 20 largest container terminal clusters in the world, Top 10 logistics service enterprises in Vietnam, play an important role in connecting domestic goods circulation and promoting cross-border logistics services , sustainable development of the marine economy.

The difficulties and challenges faced by Saigon Newport Corporation due to the COVID-19 outbreak is expressed through:

Firstly: orders from major markets such as China, Europe, and the United States has decreased sharply, leading to a decrease in the output of both imports and exports. Due to the influence of COVID-19 epidemic, the production and business activities of SNC's traditional partners and customers are difficult because of orders from major markets such as China, Europe and the United States... has fallen sharply, leading to a decrease in the output of both imports and exports... Due to the pandemic, the supply chain has been broken and turned upside down, including logistics activities – the backbone of the supply chain. Air, road and rail transport services were most severely affected. Sea freight is less affected with rates still standing despite declining transport requirements and difficult procedures. These characteristics of the world supply chains and logistics services have been fully expressed in the logistics industry in Vietnam.

For Vietnam, since the outbreak of the epidemic, this crisis has had a strong impact on the transportation, logistics and strategically important supply sectors. Manufacturing sectors such as textiles, which rely heavily on imports of raw materials from China, where the epidemic was most affected, have halted production due to the epidemic. The operation to rescue goods jammed at the border with China in the early stages of the epidemic and especially the period of social isolation in April 2020 has caused production, logistics, transportation disrupted, congestion. From May, the economy began to recover but the COVID-19 epidemic continued to be complicated in the markets that are Vietnam's main trading partners, negatively affecting exports, imports and logistics.

According to a survey by the Vietnam Logistics Business Association (VLA), in the first quarter of 2020, 15-50% of members' activities were affected (decreased in terms of operations and revenue) depending on the type of service provided. About 97% of enterprises providing logistics services are small and medium-sized, so they are severely affected. From May 2020, logistics activities are restored according to the economy but by October 2020, about 20% of logistics enterprises still have a decline in operations. Compared to before the epidemic, the amount of goods transported across the border decreased much, had to change drivers, change tractors are existing difficulties.

Vietnam's economy is a deeply expanding economy, dependent on exports and FDI investment with more than 70% of exports being in this region. Accordingly, Vietnam logistics service industry is also affected by more than 30 transnational logistics enterprises with close

relationships with the world's major cargo owners and carriers. Declining international demand led to declining export orders, with many companies having to let workers quit their jobs. Logistics service enterprises are affected, affected accordingly. Vietnam's GDP in the first 6 months of 2020 increased by 1.81% compared to the same period of 2019, import and export turnover of goods reached USD 238.4 billion, down 2.1% over the same period last year. The recovery and development of an economy after the outbreak of COVID-19 depends on the vitality of other economies, especially developed economies. This is a prominent feature that the world logistics service industry and Vietnam have been affected.

Secondly, a sharp decrease in the amount of transport of goods exported from factories through the port: Difficulties of partners, customers have directly affected the service provision activities of units in the TCSG logistics system. In particular, Nhon Trach port (ICD) sharply reduced the amount of transport of goods exported from factories through the port. The demand for logistics and freight services, especially container goods of Tan Cang Central Corporation also decreased. The output of exported/imported goods in Que Vo ICD (Bac Ninh) has increased but the container container perient is high, the empty rotation is being applied high fees when lifting at ICD. The output of the main customers of Cat Lai Marketing Corporation decreased so the company mainly exploited noodles from Hoa Lu border gate. The output of SNC decreased compared to the same period of 2019 but compared to October, there was a slight growth.

Thirdly, the fierce competitive pressure comes from EU service providers: The European–Vietnam Free Trade Agreement (EVFTA) has been signed and implemented from August 1, 2020 in the context of the COVID-19 epidemic is still very complex, this Agreement also opens up many opportunities, natural, challenges that EVFTA poses are also very large. First of all, the fierce competitive pressure comes from EU service providers which are very strong in the field of logistics (corporations, modern EU fleets occupy a significant market share in the world logistics market). In addition, the EU market is very large but requires very high quality of service and strict legal requirements.

### **3. Opportunities in logistics activities of Saigon Newport Corporation in the context of COVID-19**

But with many practical measures, SNC Logistics and its units system have been striving to overcome difficulties, achieving remarkable results, especially in the last 3 quarters of 2020. Under any circumstances, Saigon Newport Corporation also thoroughly implements the party's directives and resolutions, especially the 8th Central Resolution, the XII course on "Vietnam's marine economic sustainable development strategy to 2030, *vision to 2045*" with the goal of becoming the leading economic - defense group in Vietnam in the field of marine economy and logistics services, dynamic and modern

Firstly, SNC Logistics has strongly promoted the role of the governance chair unit, connecting member companies throughout the logistics system; effectively implementing the system management, production management, ensuring the operation of the base system of the

port smoothly and safely. The member units in the system also continue to strive to maintain the output of the existing customer group with stable service quality and actively look for potential partners and customers to increase output and revenue. As a result, SNC Logistics' output in March alone increased by nearly 2%, in the first quarter increased by 2.4% compared to the same period of 2019.

Production and business results of member units in March are also very encouraging. Container shipping revenue has increased higher than in February; the operation of the barge system reaches an average fill rate of about 80-85%; revenue of shipping also had slight growth; operating in warehouses, yards ... keep steady.

Secondly, SNC Logistics promotes market development, SNC Logistics has signed and deployed services with many new customers: To get remarkable results during COVID-19 complex developments, SNC Logistics has regularly reviewed, grasped market developments, customers, promoted market development, achieved many positive results. SNC Logistics has signed and deployed services with many new customers, such as Panasonic Life Solution and signed 9 contracts, providing 4PL service solutions for new Master Sofa customers in Binh Duong area; deploying C/O service package for 2 Danu Saigon, Gain Lucky customers. Delivery and delivery of good quality assurance services for customers.

**Hai Phong International Container Terminal welcomes its mother ship directly connecting Hai Phong with California (USA)**



On April 27, The Newport of Hai Phong International Container Terminal (TC-HICT) successfully welcomed the mother ship CSCL BOHAI SEA of COSCO operating on the new service line ACCI, directly connecting Hai Phong with the state of California, USA. The mother ship CSCL BOHAI SEA with a ton of 121,824 DWT with a capacity of 10,036 TEU is one of 12 vessels operating on the trans-Pacific weekly service line.

CSCL BOHAI SEA at Hai Phong International Container Terminal: This new ACCI service line connects TC-HICT - Shanghai - Ningbo - Long Beach - Oakland - Lianyungang - Shanghai - Ningbo - Shekou - Nansha - Singapore - Port Kelang - Nhava Sheva - Karachi - Colombo - Laem Chabang - TC-HICT. With this service line, goods from Northern Vietnam shipped directly to the West Coast of the United States do not need to be transferred at foreign ports as before. This not only helps customers significantly reduce logistics costs, be more proactive in shipping, but also minimize risks at hubs.

In the morning of October 26, 2020, Margrethe Maersk began loading and unloading containers at Cai Mep - Thi Vai International Port (CMIT Ba Ria - Vung Tau). It is one of the largest container ships in the world today, nearly the length of four football pitches. On the afternoon of 25 October, the Margrethe Maersk (Danish nationality) docked at CMIT. The ship is nearly 400m long, 59m wide, has a ton of 214,121 tons, with a capacity of up to 18,340 TEU (a TEU equivalent to the volume of a 20-foot container).

This is the second time this ship has docked at CMIT port but the last time (February 2017) went unloaded, this time on the ship was quite full of containers. Docked this time, the Margrethe Maersk loaded about 6,500 containers, then resumed its course for the United States on the afternoon of October 26. Speaking at the welcome ceremony, Deputy Minister of Transport Nguyen Van Cong affirmed that the return of Margrethe Maersk to Cai Mep - Thi Vai is a very meaningful event, marking the mark of Vietnam's maritime industry on the world maritime map when becoming one of about 20 ports in the world that can catch super ships on.

In the context of the complex COVID-19 epidemic, seriously affecting the domestic and international economy, Hai Phong Newport International Container Terminal and COSCO shipping line continue to deploy new service lines that are really levers to promote the increasingly prosperous trade relationship between Vietnam. , India, China and the United States.

*Thirdly:* SNC Logistics is ready to **welcome EVFTA:** After 9 years of negotiations, the EU-Vietnam Free Trade Agreement (EVFTA) was adopted and officially came into force on August 1, which is considered a great motivation for economic development, improving Vietnam's position in the global supply chain. According to research by the Ministry of Planning and Investment, the EVFTA agreement will help Vietnam's exports to the EU increase by about 20% by 2020; 42.7% in 2025 and 44.37% in 2030 compared to no Agreement. At the same time, imports from the EU also increased but at a lower rate than exports, namely about 15.28% by 2020; 33.06% in 2025 and 36.7% in 2030. Each

year, ports in the EU unload about 4 billion tons of cargo. In particular, the biggest profit is from major seaports, transportation accounts for 46% of the total market value of logistics, warehousing 11%, other logistics services 43%. EVFTA implementation has the opportunity to increase the size of the import and export market, leading to great demand for logistics activities. Import and export activities between the two sides are more bustling, the market for logistics services is expanding, especially international logistics services. EVFTA takes effect in the context of epidemics and market fluctuations are complex and unpredictable, is expected to bring great opportunities for both the EU and Vietnam, creating new motivation for exports, economic growth, promoting trade cooperation, investment going into depth, towards sustainable development.

In fact, the economic losses and social instability caused by the COVID-19 epidemic are enormous, businesses need to change their mindset, promote the application of modern technology, actively improve in-house production capacity to seize opportunities, take advantage of the advantages that EVFTA brings to develop the market, deep into the international value chain.

With the volume of goods through the seaport system operated by Saigon Newport Corporation (SNC), especially Cat Lai port, accounting for more than 50% of the country's cargo traffic, the SNC has applied many effective electronic programs.

Fourthly, SNC Logistics also actively does a good job of traditional customer care while strengthening effective coordination with

SNC's Marketing Department in implementing 6 major activities to develop the market, PR; actively implement loyalty policy; complete the centralized yard operating process for ICD Long Binh; actively cooperate with The Customs Department of Ho Chi Minh City and related customs departments in implementing the project "Customs procedures in logistics and anti-congestion of import and export goods at Cat Lai port". In the coming time, COVID-19 epidemic is forecasted to continue to be complicated and unpredictable, to improve the operational efficiency of the whole system, SNP Logistics determined that it is necessary to enhance interaction and transactions with modern and online technology utilities; encourage cadres and employees to be proactive and creative when working independently and dealing with situations. SNP Logistics also actively updated and supplemented production and business plans and plans to adapt to different directions of the COVID-19 epidemic; ensure minimizing negative impacts, taking advantage of opportunities to complete, further improve processes and ensure service quality for customers; focus on promoting domestic goods; looking for customers using warehouse services, logistics service contracts ...

The Corporation regularly successfully completes production and business tasks, aiming to build *"green port"*, *"smart port"*, *"smart warehouse"*, *"smart transportation service"*. The Corporation always develops well the facilities operating in the areas of standing units in the area of Ho Chi Minh City, Ba Ria - Vung Tau Province, Hai Phong, Bac Ninh, Binh Duong, Dong Nai, the provinces of the Mekong Delta ...

The Corporation also creates jobs and stable incomes for more than 8,400 employees of the unit and over 10,000 employees of satellite units in the provinces, contributing to socio-economic construction, improving people's lives, ensuring social security in the place where the unit stands.

#### **4. Logistics service development solution for SNC in the context of COVID-19**

In the face of the widespread COVID-19 virus epidemic, Saigon Newport Corporation constantly applies innovation solutions in production and business along with the enacting of many policies to support and share difficulties for import and export enterprises, carriers, and organize the strict implementation of disease prevention measures among staff, employees and customers.

**Firstly, proactively and actively propagating regulations and policies on COVID-19 epidemic prevention:** Not stopping at stabilizing service activities, recently, Saigon Newport has actively accompanied the authorities to propagate regulations and policies on COVID-19 epidemic prevention to all employees, customers and partners. The medical survey, health check for domestic and foreign delegations to work in Saigon Newport is carried out regularly and seriously, thereby creating a professional image, peace of mind for customers.

**Secondly, actively apply technology to production and business activities.** With the market share of import and export containers accounting for over 90% of the southern region and more than

50% market share nationwide, Saigon Newport Corporation is always proactive and pioneering in applying technology to production and business activities. Not until the epidemic, but before that, in 2018, Saigon Newport has completed the project to modernize the delivery procedure at Tan Cang Cat Lai port through the deployment of smart port system (ePort), connected to NAPAS payment gateway, allowing customers to check in and pay online with all container delivery options at the port. Currently, the ePort system has been deployed simultaneously at ports under the system such as Tan Cang port - Hiep Phuoc TCIT, TCTT. Currently, 100% of domestic and foreign carriers are using port services of Saigon Newport Corporation applying electronic delivery order (eDO) with cargo loading and unloading at the port... These platforms have created peace of mind, convenience for customers and helped to operate at the Port uninterrupted even during the time affected by the COVID-19 epidemic.

It is known that before the impacts of COVID-19 pandemic, Saigon Newport quickly launched online information connection mode via Email, Viber, and Zalo; online meetings with customers, carriers through online platforms; implementing maximum procedures for delivery and delivery of goods and payment online; deploying digital signatures, synchronizing with the application of flexible support policy packages, suitable for each customer and carrier as a result, we have maintained stable, safe and smooth operation. The output of import and export containers through ports under the Saigon Newport Corporation system in the first 7 months of the year reached a record high, up 9.2%

over the same period in 2019 and accounting for 62% of the total import and export container output nationwide.

Application of technology 4.0 in the transport and logistics industry is an urgent requirement set for businesses in the industry before and while the COVID-19 epidemic occurs with complex, unexpected developments. Saigon Newport Corporation - the leading port operator and logistics service provider in Vietnam has pioneered the application of information technology (IT) to modernize the process and procedures for delivery at the port.

The COVID-19 epidemic has been having a strong impact, severely affecting the fields of socio-economic life as well as production and trade activities in many countries around the world in general and Vietnam in particular. Responding to the COVID-19 epidemic and the aftermath of the epidemic is one of the biggest challenges for businesses.

In light of this situation, the SNC sees this as the right stage to undertake and accelerate digital transformation, enhance interaction with online customers and implement labor safety measures to protect staff and strategies around remote work and automation such as ensuring safety during the epidemic season; sustainable and responsible development of the community; care, share with customers' difficulties and adapt flexibly quickly to the new situation; enhance digital marketing with a simple, transparent, community-oriented message.

One of the specific effective measures to prevent COVID-19 epidemic is its application, encouraging customers to register for service

procedures on ePort and deploy online payment via eDO restricting the move in and out of seasonal port facilities.

On the other side, the application of 4.0 technology in the transport and logistics industry is an urgent requirement for businesses in the industry before and while the COVID-19 epidemic occurs with complex developments. With that goal, the electronic port system - ePort is invested in effective application. E-port helps customers proactively declare delivery information for shipments and especially connects online payment services flexibly through Napas portal 24/24 with banking systems.

Efficiency when deploying ePort and eDO: E-port helps customers and carriers reduce the stages of transportation of documents, manage paperwork manually; electronicize working processes, strictly control documents, delivery documents as well as payment, reduce traffic congestion when the output of delivery goods increases as well as save costs for customers, shipping lines and ports and especially reduce direct contact during work. Following the success of ePort, the implementation of eDO electronic delivery orders makes the process of receiving goods faster and more convenient for businesses. This can be said to be a process that helps the SNP improve the quality of its service with customers. The implementation of digitalization of transport documents, specifically eDO quickly, securely with shipping lines, import and export customers, online data connection, smoothly between the SNP's ePort and the eDO of the carriers has created a huge change, saving time, labor and especially avoiding many risks in the delivery and control of transactions. The initial scope of application for Cat Lai New



Port, so far has been implemented for port facilities in the port system of the SNP, including: Cai Mep Thi Vai Newport, Cai Mep International Port, Tan Cang International Port - HICT in Hai Phong.

The success of ePort, eDO in Saigon Newport contributes positively to the implementation of technology platform solutions for logistics services to effectively serve the data exchange between stakeholders, minimize the amount of paper used in delivery, contributing greatly in the environmental protection, accelerating the roadmap to build Vietnam's digital economy and digital society, towards sustainable development for the logistics industry in Vietnam and the world.

Welcoming the Industrial Revolution 4.0, Saigon Newport Corporation has pioneered the implementation of modern technology solutions. Accordingly, Saigon Newport is operating advanced production management and operation programs to reduce 55% of the time the ship is docked; 3/4 reduction in delivery time; 60% reduction in cases of labor insecurity, traffic safety ...

Thirdly, SNP Logistics promotes the application of customers to register for service procedures and online payment on ePort electronic port system and Electronic Delivery Order (eDO), this solution aims to limit the risk of COVID-19 infection, practically improve service quality and economic efficiency. Improving the quality of information technology (IT) applications in logistics service provision and in system management; strengthening applications and connecting information to international logistics networks. Since 2008, Saigon Newport

Corporation and SNPL have successfully applied many advanced software in the world such as OTM, TOPX system, TOPOVN, E-port ... contributing to making Saigon Newport become the largest and most modern port operator in Vietnam. The units continue to follow the development of epidemic situation and market situation, production of customers to focus on implementing 2 dual objectives: Doing well the prevention and control of epidemics, not to penetrate the unit; promoting market work, having basic solutions and appropriate directions in the short, medium and long term, ensuring good service quality at competitive prices, contributing to maintaining output, increasing revenue and maintaining development orientation in the future.

In the coming time, SNC Logistics needs to continue to promote the construction of a digital ecosystem, helping to eliminate the traditional craft trading practice between the parties, electronicizing processes, in line with the sharing economy trend in the industrial revolution 4.0.

With drastic solutions in operating production and business, in the first 8 months of 2020, although strongly affected by the COVID-19 epidemic, the total container output through the ports of the Corporation still increased by 8.8% over the same period, reaching 6,118,663 TEU and reaching 66.1% of the plan in 2020; total logistics output reached 164,593, up 2.7% over the same period.

Although there are many difficulties, the efforts to maintain production and business of each enterprise during this period are very important in the recovery and development of the country's economy.

Moreover, port services play an important role in the global supply chain, helping to rotate goods so that they cannot be stalled or interrupted. From the first days when COVID-19 epidemic appeared in Vietnam, Saigon Newport Corporation has actively applied many solutions to ensure the safety of workers, share difficulties with customers, join hands to support the community but at the same time maintain stable production and business activities"

Fourthly, the Corporation should be proactively ready to "welcome" EVFTA: On June 18, the Ministry of Foreign Affairs of Vietnam and other ministries and sectors awarded the notices of Vietnam's ratification of the Vietnam-EU Free Trade Agreement (EVFTA) and the Investment Protection Agreement (EVIPA) to the Delegation of the European Union (EU) in Hanoi. The EVFTA came into effect on August 1, the EVIPA will take effect after being ratified by the National Assembly of all EU Member States. The implementation of EVFTA will open up new opportunities for the development of the economy and create pressures and challenges for Vietnamese enterprises, including the system of logistics service providers of Saigon Newport Corporation. Before that fact, units throughout the system have identified a number of key solutions to take advantage of opportunities and advantages; limit and minimize the risk of impact from EVFTA. EVFTA is a new generation free trade agreement with the widest scope of commitment and the highest level of commitment of Vietnam ever. EVFTA is likened to a "highway" for import and export goods between Vietnam and 28 EU member states. EVFTA is signed and implemented will strongly impact the development prospects of Vietnam logistics

industry, expressed in the commitment to open markets of Vietnam and the EU in the field of transportation services, transportation services, areas affecting the logistics services market.

Saigon Newport Corporation is the leading port operator in Vietnam. The Corporation has been investing in the development of logistics services - one of the 3 business pillars, in which, SNPL is the unit that performs the function of connecting and optimizing the advantages of the entire seaport system, ICD and depot of the Corporation.

Through the capacity of the Corporation in water transport, ministry transport, top modern management technology, real-time TOPO, and experienced human resources SNPL provides customers with a wide range of logistics services from river, sea, road, rail, air and multi-method transport; provide customers with high value-added logistics solutions, help save costs, increase the competitiveness of Vietnamese goods in domestic and foreign markets. As the "connection conductor", managing the logistics system of the Corporation, to take advantage of the opportunities, advantages as well as limitations and mitigation due to the impact from EVFTA, SNPL identifies people as the determining factor of success. SNC is focusing on building a civilized, modern working environment and remuneration mechanisms to attract logistics talents.

SNPL has well organized integration training courses, specialized training annually. Training topics related to job requirements such as negotiation skills, negotiation, conflict resolution, customer service, C/O

implementation, bidding, logistics, consulting and customs tax declaration ... At the same time, SNPL periodically bachelors of personnel to participate in training courses abroad (Netherlands, Germany, Canada ...) to improve the quality and professional qualifications for staff.

Fifthly, SNC will also strengthen links with logistics businesses at home and abroad; expanding international market connections through forums, international agency systems to promote SNC's image and brand; developing branches or representative offices abroad, in important markets such as North America, EU, and Asia to support customer care, develop the chain of services provided to customers.

In order to take advantage of EVFTA's impacts, SNC and other units in its logistics system have been striving to build a fast-growing, strong, efficient and sustainable logistics business pillar.

Bottom line: Right now, Vietnam's economy is a bright point, with positive growth in the second and third quarters. In September, the ADB forecasts that Vietnam's economic growth will be positive 1.8% in 2020, the corresponding figure of Asia is -0.7%. Vietnam's economy will benefit from the ongoing shift in production from China to Vietnam; the recovery of the Chinese economy, and the implementation of the Free Trade Agreement with the European Union. Similar to the forecasts of ADB, organizations such as IMF, Fitch also have figures that show a positive expectation, a V-shaped recovery for Vietnam's economy in 2020 - 2021. Vietnam is facing a new opportunity.

## References

1. Bass B.M, "*Handbook of Leadership*", New York: Free Press, 1990.
2. Ministry of Industry and Trade. (2019), Vietnam Logistics Report 2019: Logistics increases the value of agricultural products. Industry and Trade Publishing House.
3. Dang Dinh Dao (2012), "Logistics services in Vietnam in the process of international integration", National Political Publishing House
4. Dang Dinh Dao, Nguyen Dinh Hien (2013), "Some issues of sustainable development of *logistics systems* in our country in international integration", Social Labor Publishing House
5. Year-end of the International Conference on Bilateral Science and Technology (2018): *Development of logistics human resources* in Vietnam, Labor and Social Development
6. Nguyen Thi Thuy Hong, (2020), " Management of Productivity *Limitations (TOC) of Saigon Newport Corporation*", state-level branch 2019-2021

# EXPERIENCES IN CONTROLLING THE EFFECT OF COVID-19 PANDEMIC

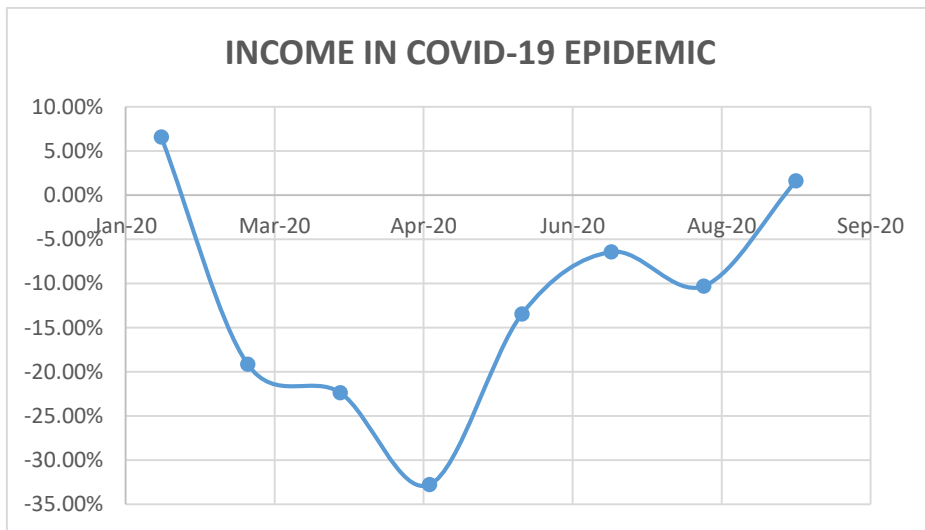
**Tran Duc Nghia \***

*Delta International Company*

(Speaker in the International Conference)

Trucking of goods by road is one of the sectors most affected by the COVID-19 epidemic. Immediately after an outbreak on a worldwide scale, the demand for road freight was reduced due to the decline in both supply and demand for production and business activities. Vietnam's economy is among the top in the world with an import-export turnover equal to about 200% of GDP, demonstrating deep integration with the world economy. When the global economy grows, this is a positive factor that promotes domestic growth, but when an epidemic occurs, it becomes a detrimental factor. This is the reason why Vietnam's logistics industry is negatively affected by the epidemic.

In particular, Delta International Company is a nationwide logistics service provider with 76% of its revenue coming from car transportation, facing a decline in revenue. Transport during the first epidemic outbreak in 2020 as described in the following graph:

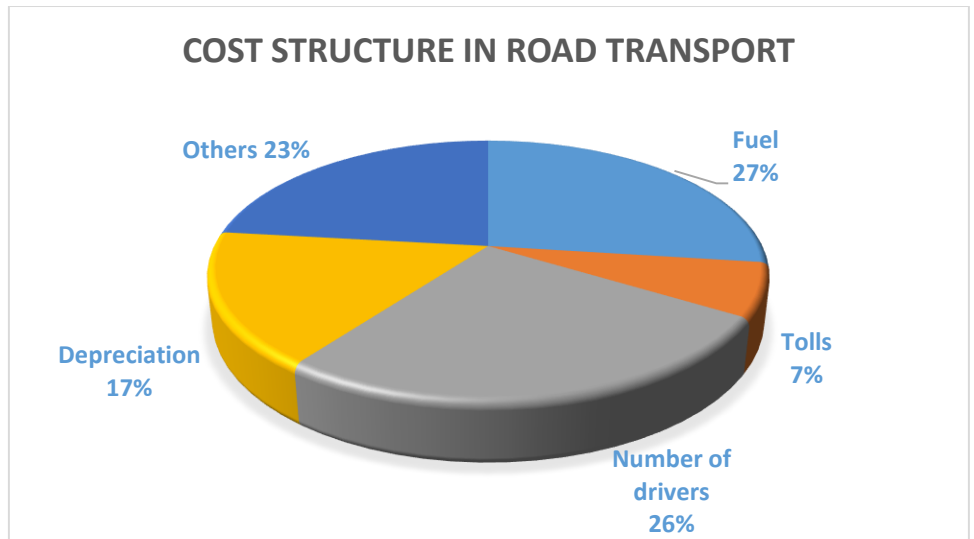


*Source: Tax report 2019/2020 - Delta International Company*

Not only declining revenue, businesses also face unusual compliance costs when social outlays are implemented to prevent the spread of disease. One of these measures is the regulation of driving in the buffer zone for CBT (cross-border) cargo, which is increasing the cost very high, about USD300 / truck transit through the territory of Vietnam. Sometimes, the implementation of the social distance policies in localities has caused a disruption in logistics activities that April 2020 in Hai Phong is an example. Although Hai Phong is the largest seaport in the North and an important gateway for import and export goods, the Hai Phong government has on behalf of the implementation of Directive 16 / CT-TTg dated March 31, 2020 of the Prime Minister. The government banned driving from outside to inside Hai Phong, causing a strong reaction from the Vietnamese logistics community at that time.



To assess the impact of the revenue decline caused by the epidemic as shown in the chart above on road transport, we consider the cost structure of trucking operations as Graph below:



*Source: Accounting Report 2019 - Delta International Company*

In the cost structure of road transport, depreciation cost accounts for 16.59%, which is the prepayment cost of the business used to repay bank loans for investments in vehicles. The decline in revenue during the first COVID-19 outbreak in Vietnam (from March 2020 to August 2020) was 17.39%, surpassing depreciation costs, leaving businesses no longer have resources to repaying bank loans. It can be said that the epidemic has caused logistics enterprises to decline, even lose the ability to pay financial obligations including repayment of loans, paying taxes and deductions for social insurance, health insurance ... If this difficulty cannot be solved, serious problems will arise with businesses, commercial banks and social security.

To help businesses overcome the epidemic, the Government has come up with many solutions, including fiscal policy and monetary policy. In terms of fiscal policy, the Government has been very aggressive in promoting public investment in ministries, sectors and localities, deferring and deferring payable taxes and offering subsidies to businesses. In terms of monetary policy, the State Bank has issued Circular 01/2020 / TT-NHNN with the most important contents such as reducing lending interest rates, restructuring principal repayment terms, keeping the debt group. .... In recent years, the State Bank has also continuously lowered the operating interest rates in order to reduce loan interest rates. Although the policies introduced by the Government are absolutely correct, due to many barriers, these policies are not implemented in a timely and effective manner to support businesses. Therefore, businesses are forced to rely on internal resources to overcome the difficulties caused by the epidemic. These are objective difficulties, but enterprises need to realize that their responsibility to deal with them is their responsibility.

As mentioned above, the biggest problem of logistics enterprises when the epidemic occurs is the decline in cash flow due to a sudden decrease in revenue, causing a decrease and even insolvency. Therefore, all efforts must be directed to consolidating cash flow through cost control, service portfolio restructuring, investment restructuring and, finally, debt restructuring.

Cutting unnecessary costs is the first step. When implementing social gap, expenses such as meetings and per diem are almost no longer available. To reduce the risk of infection, measures to limit exposure in

the workplace such as online meetings also contribute to reducing these costs. However, because the logistics and trucking businesses have to use a lot of labor, the biggest costs are staff salaries and social insurance costs. Enterprises cannot arbitrarily impose a reduction in employee wages because this is an employment agreement. Instead of imposing, businesses need to share difficulties with employees and call for the consent of employees to support the company's solvency. At Delta International Co., Ltd., we recommend to borrow employees a part of the salary, from 10% -20% during the epidemic period and will refund the staff after the company has finished handling the disease problems caused. After 4 months of implementing this solution, we have stopped reducing staff salaries since September 2020

Operational restructuring is an important measure to focus maximum resources for the maintenance of core business services. The essence of this process is to cut down on current unprofitable or low-profit business operations to optimize the use of company resources during a crisis and suspend business development plans. joint. Activities such as sales, marketing must also be collapsed or halted to give resources to consolidate cash flows and create necessary financial provisions while the business environment has uncertain and unpredictable elements. Newspaper.

However, restructuring investment to reduce debt and restructuring bank loans to reduce capital costs is the most important solution. The ultimate goal of this process is to reduce liabilities and capital costs for businesses, helping to increase solvency. To do this process, businesses are required to liquidate assets that do not generate

cash flow in the present. This is the most difficult solution to implement for all businesses and when implementing this solution, it will be detrimental to the business in the long term, so it is necessary to consider carefully before making a decision.

The difficulties caused by the COVID-19 epidemic are objective difficulties for businesses and the whole society. However, it is the enterprise's responsibility to actively find solutions to stabilize the business situation of enterprises and contribute to the Government's social security objectives. In order to comply with the Government's recommendations on achieving a "New Normal" state, businesses must be proactive in preventing the negative effects of diseases by controlling well costs and improving efficiency. restructuring of products and services and investment to increase resistance during the difficult period that lies ahead.

# **RESEARCH ON EFFECTS OF LEADERSHIP TRAITS AND STYLE OF MIDDLE MANAGERS ON WORK ENGAGEMENT OF SUBORDINATES IN ECONOMIC – DEFENSE ENTERPRISES OF VIETNAM**

**Associate Professor. Hoang Van Cuong<sup>1</sup>**

*National Economics University, Vietnam*

**Researcher. Nguyen Huu Ngoc<sup>2</sup>**

*Ministry of Defense, Vietnam*

## **Abstract**

*The purpose of this study is to research on effects of leadership traits and style of middle managers on work engagement of subordinates in Viet Nam economic and defense enterprises. Data of the study was collected from questionnaire survey of 15 economic and defense enterprises, preceded by in-depth interviews with respondents who are subordinates of the departments/divisions of these enterprises. The research used logistic regression estimator to address econometric issues and to improve the accuracy of the regression coefficients. Our results show that the traits and elements of leadership style of middle managers positively affected work engagement of subordinates*

*including: Understanding, Individual consideration, Justice, Contingent Reward, Inspirational motivational motivation, Intellectual stimulation, Problem Detection and Solving for Subordinates, Idealized influence, Assertiveness, Courage; point out the strong and weak influences of each factor on work engagement of subordinates; as well as point out differences in levels of these personal qualities and style based on the characteristics of middle managers, thereby it is recommended for middle managers to adjust, practice, train, foster and perfect the personal qualities and leadership style. The research result also established the bases for making Contingent Rewards on the management and executive viewpoints; Contingent Rewards on promotion, appointment and evaluation policies, middle manager planning, Contingent Rewards on officer training and retraining policies, policies to motivate, preserve and attract staff in economic - defense enterprises of Vietnam.*

**Keywords:** Leadership, leadership traits, leadership style, middle managers, economic-defense enterprises, Vietnam.

## **1. Introduction**

Research on leadership is a research topic that has been done by many scholars and researchers for many years. However, research on the influence of leadership quality and style of middle managers on work engagement of subordinates in economic - defense enterprises is the

research subject that has not been conducted in previous studies. The research appropriately applied and developed the theory of personal qualities of a leader, leadership style theory to form a theoretical framework suitable with the research purposes of the thesis, suitable with the research context of Vietnam's economic - defense enterprise - a unit performing dual tasks, both doing business in accordance with the applicable law and organizing military's force to ensure the readiness to switch to state when there is any situation. The middle managers are required to have both political and ethical qualities, have the quality of military commander as well as professional capacity and capacity of organizing and deploying production and business activities as ordinary civil enterprises.

## **2. Theoretical Framework**

### ***2.1. Determinants of leadership traits***

In recent years, capacity research has attracted increasing attention and interest. Many attempts have been made by scholars to study the capacity (Boyatzis, 1982; McClelland, 1973; McLagan, 1989; Prahalad and Hamel, 1990). Capacity models, in addition to being seen as a focal point for planning, organizing, integrating and improving all aspects of the human resource management system (McLagan, 1980), are also considered as a way of an approach focused on improving organizational performance (Rothwell and Lindholm, 1999). There are many different studies on individual traits/characteristics/qualities of leaders. In this study, the author has chosen the approach and

classification of Peterson and Seligman (2004) as the basis for the approach of individual points/qualities of leaders; at the same time through qualitative research to develop the characteristics/personal qualities of middle managers to suit the context of defense economy in Vietnam. The traits/characteristics/qualities studied by the study included 5 qualities/characteristics, which are:

#### (1) Understanding

Understanding is assessed through creative thinking, curiosity, readiness to absorb new things, consideration of perspectives different from ones of self, learning and never stop learning, at the same time the leader has a deep understanding will be able to assess, cover the situation, cover the work but do not overlook important details. Understanding also manifests itself in the ability to predict and predict situations, to be flexible in handling situations and in giving ideas for quick and effective work settlement. Understanding is evident in everyday work behaviors (Judge et al., 2002) as well as in the way they deal with organizational changes.

#### (2) Courage

According to Peterson and Seligman (2004), courage shows courage willing to face difficulties, challenges and dangers; persevere in pursuing and getting things done despite many difficulties and obstacles. Courage does not mean fearlessness, courage is to do what one is afraid to do. It is the ability to leave behind what is familiar, and enter a new land. Courage is the right work, the honesty, integrity - what makes the



trust between leaders and subordinates. Courage is also expressed by the willingness to face difficulties, challenges and dangers; unreliability, giving in to difficulties, hardships, deprivation and a willingness to accept, withstand pressure and be able to overcome the pressure of work. The basic measure for assessing a person is not in the times when they live in joy and comfort, but in times when they struggle with challenges.

### (3) Assertiveness

Assertiveness shows an initiative in deciding all the jobs; it is the ability to make decisions on an action plan against a situation with many different opinions as well as a lack of hesitation in situations and opportunities to quickly make its decision. Assertiveness is always defending the leadership's beliefs but not ignoring the rights of others.

### (4) Justice

According to Peterson and Seligman (2004), Justice is Justice, Justice in seeing and evaluating others, not allowing prejudices to influence decision making, giving every fair opportunity to show and prove yourself. Also according to these two authors, righteousness is also expressed in the spirit of collective, good cooperation with others, caring more about the collective than the individual, understanding and well performing their duties as a be a member of an organization; know how to gather, motivate ... team members to complete the work. Equity also manifests itself in the generosity, acceptance of employees' faults, and the willingness to give them other opportunities to improve.

### (5) Compliance

Compliance with the law is reflected in the good leadership by the leader in observing the principles, regulations and regimes of the Party, the army and the unit; comply with, and abide by duties assigned by superiors; always in the right time, in the military style. Compliance leaders are also the leaders in the implementation of all duties and regulations, who let people follow. Compliance is to keep and comply with the rules set out to ensure Justice, professionalism, team-work spirit and enhance the image of the company. Compliance can be roughly divided into three levels. Level 1 is to be performed due to mandatory. Level 2 is done voluntarily and even higher is voluntary (level 3) In an enterprise, workers are on time at the office because they know if they are late, for any reason, will affect my work and my colleagues.

Thus, it can be seen that the leader's traits/ characteristics/ qualities are the essential personal characteristics necessary to create conditions for an individual to be able to attract, influence, make others listen and follow. The leadership traits and characteristics are considered as the characteristics that make up the leadership ability as well as the success of the leader.

## ***2.2. Leadership styles***

### **(1) The transforming leadership style**

The transforming leadership style has evolved over the years and is one of the most influential leadership style models (Burns, 1978). It is applied in virtually every field including in the military (Bradley and Charbonneau, 2004).

Transformation leaders are willing to sacrifice their interests in return for the organization's common goals and values. The leadership of transformation is an exemplary model of working ethic towards the interests of groups, organizations and communities (Burns, 1978). The theory of empowering subordinates can develop themselves and improve unexpected performance (Taly et al., 2002). This has also been argued by some other recent scholars (i.e. Nguyen, Mai and Huynh, 2019; Suong, Thanh and Dao, 2019; Doan, Nguyen and Nguyen, 2020; Do, Nguyen, Nguyen, Ha and Le, 2020 and Tran, Lee, Nguyen and Srisittiratkul, 2020) that “transformation leaders have a charismatic leadership style, in which they try to inspire their subordinates to receive their trust and respect. They are also well aware of the mission to try to convey to their followers. It is further demonstrated that such leaders tend to have superior debate skills, technical expertise and persuasive competence. Bass and Avolio (1994) point out four key characteristics of transition leadership: Individual consideration, Intellectual stimulation, Inspirational motivation and Idealized influence. Each concept focuses on the ways in which a leader can influence and influence others to change himself.

*Individual consideration* is paying special attention to the needs of the group members (Bass & Avolio, 1994). This helps leaders gain credibility from the pillars, providing encouragement and support to individuals in the organization in the form of training and mentoring (Gumusluoglu & Ilsev, 2009). A leader who cares about an individual is someone who actively listens to others, accepts differences, and treats

each member of the organization as a special individual rather than just an employee or colleague (Bass & Avolio, 1994). This type of behavior is important when leading to changes in the working environment where a number of influential pillar groups exist.

*Intellectual stimulation* is the ability to inspire, stimulate employees to analyze and handle problems in novel and different ways. In an intellectual stimulating environment, people are not only allowed but also encouraged to devise creative approaches to problem solving (Stewart, 2006). As businesses face increasingly complex challenges, this creativity becomes very important. Fullan (2007) argues that leadership is about mobilizing resources from everyone to solve complex backlog. This approach requires creativity and risk taking, and must be supported and encouraged by the leader. The ultimate meaning of transformational leadership is to improve the members' ability to solve complex organizational problems (Leithwood et al., 1994), and the intellectual stimulation that allows the organization realize this goal by creating an environment where creative, innovative and even risky ideas are created.

*Inspirational motivation* is the ability with the help of members to create vision and mission for the organization (Bass & Avolio, 1994). Conversion leaders have a clear vision, they also want to pass this vision on to their subordinates to help achieve their goals. They motivate and inspire others by setting high standards, clear expectations and encouraging members to believe that they can achieve those goals and visions (Gumusluoglu & Ilsev, 2009). In an increasingly complex

competitive environment and with more and more competitors joining each year, it is important for leaders to understand the organization's goals and missions in that competitive market.

*Idealized influence*, also called charismatic leadership. It is the level where leaders behave in an admirable way, showing trust and taking a position that makes subordinates engage with leaders who have clear value trends and act as role models for subordinates. The Idealized influence is the ability to model the kind of behavior that leaders expect to see in their subordinates, namely the strong commitment to the organization's values, missions, and goals (Stewart, 2006). Team members want to emulate conversion leaders because they are people who always prioritize the needs of others, they do not abuse their power for personal gain, they share risks with their members in the organization and they have a humane and ethical behavior (Bass & Avolio, 1994).

## (2) Transactional leadership style

Burns (1978)'s view of transactional leadership states that rewards and punishments motivate people, and clear orders and subordinates must follow the direction of managers. Accordingly, the leader of a transaction is more inclined to work instead of building relationships with members. They will assign their subordinates with specific instructions, then negotiate with them about the compensation and punishment during work. As a result, subordinates are motivated to increase productivity, while trying to get more trust from the head.

According to Davies and Brighouse (2008), trading leaders are built from the need to get things done. Leaders present a style of transactional leadership that takes over power and position, politics and rewards. With this style of leadership, superiors will put employees into a working machine instead of letting them be self-conscious. By clearly dividing tasks and assigning them with tight control, leaders will motivate employees to work hard to get the job done. In the military, transfer leadership is a style in which commanders use rewards and penalties to keep soldiers (military personnel) obeying orders (Odumeru & Ogbonna, 2013).

The elements of transactional leadership include (1) *Contingent Reward* and (2) *Management-by-Exception (Active)* or Detecting and Solving problems for subordinates (Bass & Avolio, 2003). Transaction leaders tend to exhibit behaviors related to corrective and building styles (Bass & Avolio, 2003). Construction style involves Contingent Reward elements. A random reward leader clarifies expectations for employees and gives recognition when they reach their goals (Bass & Avolio, 2003). Leaders demonstrate Contingent Reward behavior that clarifies goals and recognizes achievements to drive increased performance from individuals and teams. The remedy style is related to the leadership's "exceptional governance - initiative". Leaders who show this style always define standards, distinguish what constitutes inefficiency, and punish those who do not comply with these standards (Bass & Avolio, 2003). This style is characterized by close supervision of deviations, mistakes, and prompt corrective actions.

### (3) Laissez-faire

With this leadership style, the leader will allow employees the right to make decisions, but the leader is still responsible for the decisions made. Laissez-faire is characterized by: Few guidelines from leadership, complete freedom for subordinates to make decisions, leaders provide the tools and resources needed, team members are expected to self-addressing issues, power is given to followers, but leaders are still responsible for the group's decisions and actions. Freelance leadership can be effective in situations where team members are highly skilled, motivated and able to work on their own (Cherry, 2012). In other words, when team members have the skills to succeed, when team members are experts, when independence is valued. On the contrary, this style is not ideal in situations where team members lack the knowledge or experience they need to complete tasks and make decisions (Judge&Piccolo, 2004). This leadership style is associated with negative outcomes including poor job performance, low leadership performance and low group satisfaction. Some people are not good at setting their own deadlines, managing their own projects and solving problems on their own. In such situations, projects may go in the wrong direction and deadlines may be missed when team members do not receive sufficient guidance or feedback from the leaders.

### ***2.3. The work engagement of subordinates***

Leadership is a social interaction process, where the ability of a leader to strongly influence the behavior of subordinates, employees and performance (Humphrey, 2002).

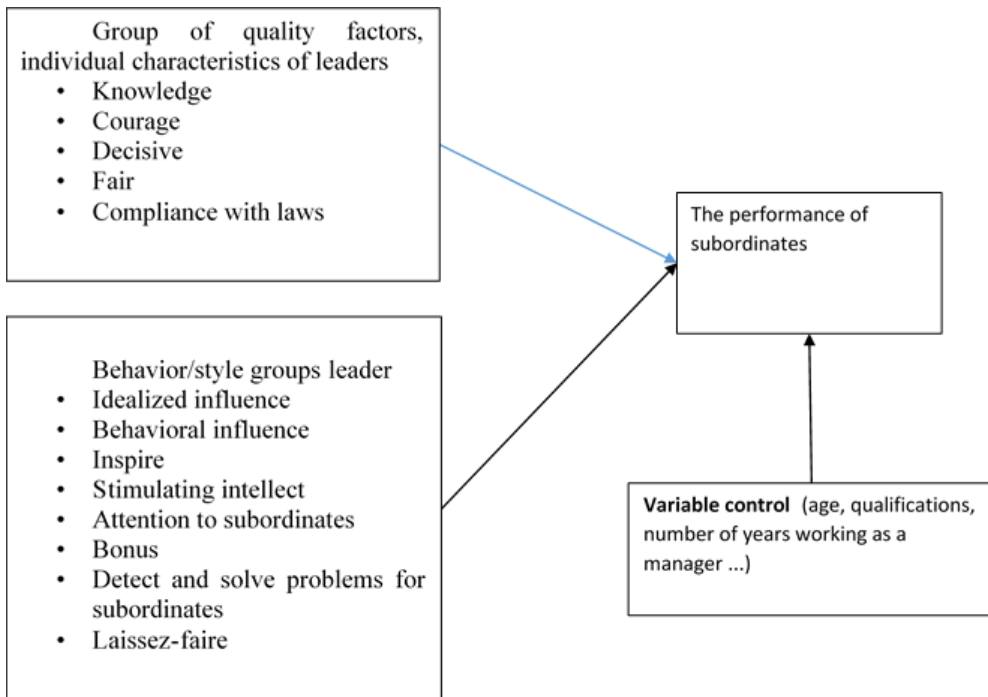
Job satisfaction is an important factor contributing to improving the health and morale of workers; thus significantly influencing workers' related behaviors at work such as productivity, absenteeism, turnover and colleague relationships (Becker and Glascoff, 2014). Job satisfaction plays an important role in improving the financial status of organizations. Therefore, understanding employee satisfaction is an important goal of the organization (Aronson et al., 2006).

Olsen (1993) defines job satisfaction as the positive emotional response of employees to work when the value from work brings as expected. George and Jones (1996) suggest that satisfaction with an individual's job is a collection of his or her feelings and beliefs with his current job. Robbins (2000), the satisfaction of an individual's work is expressed through his attitude towards his job. When individuals who are satisfied with their work often have a positive attitude, and when they are dissatisfied with their job, they will have a negative attitude towards the job. Ivancevich and Mattson (2005) perceive that job satisfaction is expressed through an individual's attitude toward work and from that person's perception / perception of work that leads to his or her attitude towards work.

Consistent with previous studies, Fu et al. (2001) found a positive correlation between managerial behavior and employee job satisfaction



in mainland China. Managers with transformational leadership roles show greater interest in the feelings of others, leading to positive work-related outcomes. In a leadership study conducted in China, USA, Netherlands, Singapore, UK and Japan. Bass (1997) shows that transformational leadership is positively related to leadership performance and employee satisfaction. Other scholars also suggest that transformation leadership is positively and significantly associated with employee job satisfaction (Ross and Offermann, 1997). Studies have found that transformational leadership enhances employee commitment (Barling et al., 2000). Furthermore, transformation leadership can have a causal effect on employee performance, job satisfaction and organizational commitment (Bono and Judge, 2003) (see Figure 1).



**Figure 1. Research framework**

## **Research methodology**

We reviews the concepts and scales for variables in the research model, combined with qualitative research to select, offering a scale that best suits the research goals. Next, the author has consulted experts about the downstream translation of the scales to make corrections and give the first survey; Conducting a pilot survey of 20 subordinates (employees) at 3 Corporations under the Ministry of Defense for the purpose of reassessing which questions are difficult to answer or which terms are difficult to understand, then the author corrected the second time survey; Finally, the author consulted with 3 experts about the 2nd revised survey questionnaire. According to this method, the author conducted a survey at 15 defense economic enterprises. The questionnaire is sent directly to the respondents who are subordinates (subject to the survey) of the departments / divisions of defense economic enterprises. After collecting, conduct review to remove the remaining substandard votes 1181 votes from 15 defense economic enterprises. In terms of sample size, according to Hair et al. (1998), for EFA discovery factor analysis, the sample size must be at least 5 times the clauses in the scale. In the research model of the thesis, there are 71 observations used in factor analysis, so the minimum sample size to achieve is:  $71 \times 5 = 355$  observations. After receiving the questionnaires, the author has cleaned the information, filtered the questionnaire and coded the necessary information in the questionnaire, inputting and analyzing SPSS software table data. Next, the author conducts statistics to describe the collected data. Then, take the following steps: (1) assess

the reliability of the scale by Cronbach alpha reliability coefficient; (2) EFA discovery factor analysis; (3) Testing multivariate regression models.

After performing correlation analysis, the subsequent regression analysis aims to determine the linear relationship between the independent variables and the dependent variable KQ (see Table 1).

**Table 1: First regression analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	P	VIF
	B	Std. Error	Beta		
(Constant)	-1.087	0.166		0.000	
HB	0.243	0.021	0.263	0.000	1.206
CD	0.061	0.022	0.059	0.006	1.109
QD	0.068	0.018	0.079	0.000	1.026
CB	0.185	0.020	0.215	0.000	1.268
CH	0.038	0.024	0.033	0.126	1.125
PCHV	0.042	0.018	0.051	0.020	1.161
TCH	0.160	0.021	0.173	0.000	1.216
TT	0.059	0.017	0.074	0.000	1.039
QT	0.240	0.020	0.262	0.000	1.160
KT	0.113	0.020	0.117	0.000	1.077
PH	0.071	0.017	0.084	0.000	1.053
TD	0.024	0.014	0.035	0.086	1.033
R square: 0.516					
P(Anova): 0.000					
Durbin – Watson: 1.980					

As can be seen from Table 1, the results of the first regression analysis show that there is no clear link between the compliance of middle managers and free leaders with the results of subordinates' work ( $p > 0.05$ ). Proceed to remove these two factors from the model and run the second regression analysis.

**Table 2: Second regression analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	P	VIF
	B	Std. Error	Beta		
(Constant)	-0.940	0.153		0.000	
HB	0.249	0.020	0.269	0.000	1.187
CD	0.066	0.022	0.065	0.002	1.087
QD	0.067	0.018	0.077	0.000	1.025
CB	0.188	0.020	0.218	0.000	1.262
PCHV	0.043	0.018	0.053	0.015	1.159
TCH	0.161	0.021	0.174	0.000	1.216
TT	0.061	0.017	0.075	0.000	1.036
QT	0.242	0.020	0.265	0.000	1.156
KT	0.115	0.020	0.120	0.000	1.069
PH	0.072	0.017	0.085	0.000	1.045
R square: 0.514					
P(Anova): 0.000					
Durbin – Watson: 1.972					

As can be seen from Table 2, testing assumptions about autocorrelation, variance of constant error, standard distribution of residuals, multi-plus checks are all required. The coefficient R is squared: The square root coefficient R helps to measure the relevance of the model with the meaning that the independent variables explain how much the variation of the dependent variable can be explained. Here the coefficient of R squared corrected in the results of the second regression analysis is 0.514 satisfactory. Thus, the independent variables explain 51.4% (> 50%) of the variation of the dependent variable

The regression equation has the form:

$$Y = b + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 X_5 + a_6 X_6 + a_7 X_7 + a_8 X_8 + a_9 X_9 + a_{10} X_{10}$$

Of which:

$Y = KQ$ ;  $X1 = HB$ ,  $X2 = CD$ ;  $X3 = QD$ ;  $X4 = CB$ ;  $X5 = PCHV$ ;  
 $X6 = TCH$ ,  $X7 = TT$ ;  $X8 = QT$ ;  $X9 = KT$ ;  $X10 = PH$

Standardized regression model:

$Y = 0.269 X1 + 0.065 X2 + 0.077 X3 + 0.218 X4 + 0.053 X5 +$   
 $0.174 X6 + 0.075 X7 + 0.265 X8 + 0.120 X9 + 0.085 X10$

ANOVA analysis result for  $\text{sig} = 0.000 < 0.05$ . Thus the multivariate regression model is consistent with the surveyed data. Through the regression model we see:

Firstly, the knowledge of middle managers has the strongest influence on the performance of subordinates (standardized Beta is 0.269). Secondly, the interest of middle managers is the second most powerful influence on the performance of subordinates (standardized Beta is 0.265). Thirdly, along with understanding the strengths and weaknesses of subordinates, believing in assigning subordinates, the justice in the assessment of middle managers plays an important role in improving efficiency, work results and satisfaction of subordinates. This is the third most powerful factor affecting the performance of subordinates (standardized Beta coefficient is 0.218). Fourthly, accompanying the Justice in the evaluation is the reward of the middle managers to improve the work results and the satisfaction of the subordinates (standardized Beta coefficient is 0.12). Fifthly, in addition to understanding and caring for subordinates, trusting subordinates to work, showing Justice and reward, for subordinates to perform well their

assigned tasks, middle managers still need to inspire subordinates to work. The Inspirational motivation of middle managers has a positive influence on the performance of the work as well as the satisfaction of subordinates (standardized Beta coefficient is 0.174). Sixthly, the research results show a positive relationship between the intellectual stimulation of middle managers and The work engagement of subordinates (standardized Beta coefficient is 0.061). Seventhly, detecting and solving problems for subordinates of mid-level managers is also a positive factor affecting The work engagement of subordinates (standardized Beta coefficient is 0.085). Eighthly, the research results also show that the assertiveness of middle managers affects the performance of subordinates (standardized Beta is 0.077). Ninthly, courage is also the outstanding quality of the commander in the army and is also a factor that has a positive effect on the work of his subordinates (standardized Beta is 0.065). Finally, the research results show that this Idealized influence has a positive relationship to The work engagement of subordinates (standardized Beta is 0.053).

### **3. Conclusion and Policy implication**

#### ***3.1. Improvement of leadership capacity of middle managers towards developing personal qualities***

The research result shows that in the military business environment, the personal traits of middle managers that affect the work engagement of subordinates are as follows: understanding, justice, assertiveness and courage. Therefore, the completion, training, self-

training and improvement of the above qualities of middle managers are the base or foundation for the development of effective and appropriate leadership behaviors with leadership situations and subjects of leadership, improving leadership result, work engagement of subordinates.

In order to improve the understanding of middle managers in economic - defense enterprises, first of all, middle managers have to constantly study and regularly foster their knowledge to improve their qualifications, meet the requirements of the job, at the same time be an example of the desire to learn and self-train for subordinates. Good leaders often feel that their knowledge is not enough, hence they always have a sense and aspiration for learning.

In addition to understanding - synthesis of job-solving knowledge and skills, middle managers in Vietnam's economic - defense enterprises need to continue to build up other qualities, within the framework of this study, such as practice of courage, assertiveness and especially Justice in assessing work with subordinates. These are also factors that positively affect the work engagement of subordinates. The research sample showed that the courage and assertiveness of middle managers in economic - defense enterprises are rated high by subordinates compared to other qualities and behaviors (3.8/ 5). In the coming period, these qualities of middle managers should continue to be tempered and promoted.

In parallel, it is necessary to establish a fair, non-prejudicial and unbiased evaluation mechanism for subordinates, create opportunities and treat without prejudice; be altruistic, willing to give them other opportunities to work and show their competence and accept shortcomings of employees. In particular, it is necessary to have a fair evaluation of the performance of subordinates, avoid prejudice in both a positive or negative direction. This is beneficial even when subordinates achieve the desired or unexpected results. In the first case, the subordinates are recognized for their contributions and efforts, on the contrary, the subordinates also see lower-than-expected results and make efforts to improve themselves.

### ***3.2. Enhancement of leadership capacity of middle managers towards leadership style***

The research result shows that behaviors of middle managers in transactional leadership style including *Contingent Reward*, *Management-by-Exception (Active)* have a positive effect on Job Engagement of subordinates. Thus, in Vietnam's economic - defense enterprises, if clear criteria for job completion and rewards are given, they will improve job performance as well as job satisfaction of subordinates. It is necessary to maintain and improve policies to promptly encourage and reward individuals with achievements in their work, focus on unexpected rewards if an individual makes outstanding achievements. In order to clearly reward the right person with the right job, middle managers must first of all provide their subordinates with the necessary support tools so that their subordinates complete the



assigned work, and at the same time clearly define the responsibilities of each person when performing work; clearly tell subordinates the standards so that they know how to do a good job. If the subordinates complete the work as set by the original target, the superiors must show their recognition, give encouragement and timely apply the encouraging rewards.

Along with rewards, middle managers in military enterprises need to focus on *Contingent Reward, Management-by-Exception (Active)*/ proactively detecting and solving problems for their subordinates during the work performance. In order to do that, middle managers cum direct managers of the executive staff must always closely manage the entire work and duties assigned by their superiors to proactively notify subordinates of errors, shortcomings, deviations that may occur in the working process, promptly solve the problems of their subordinates right from the time when they arise, instruct subordinates to correct mistakes if any and clearly explain to subordinates when they haven't finished, fail to finish the work before apply disciplinary sanctions.

The research result also shows that the behaviors in transformational leadership style also have a positive effect on the job performance and the job satisfaction of the subordinates. Such behaviors are *Individual consideration, Inspirational motivation, Intellectual stimulation, Idealized influence*.

Middle managers - direct leadership level need to pay attention to their subordinates. First of all, this attention is to understand their subordinates, understand the differences in abilities, needs and aspirations of members, understand that each person has their own different advantages and strengths, find way to structure, arrange and assign clear and suitable tasks for each person's conditions and abilities, best combine the qualities, capacities and skills of each person to achieve high work performance, promote their strengths and help them develop themselves at work and have a pleasant psychological atmosphere of the collective. In addition, middle managers also need to spend time on instructing and training their subordinates, even paying attention to issues in daily life of subordinates but not just in terms of work.

In addition to the attention to the subordinates, in order for the subordinates to perform the assigned work well, middle managers also needs to inspire the subordinates to work. Inspiration and motivation of subordinates are important factors in the work performance and the success of the organization. In order to inspire, first of all, middle managers must be optimistic, conveys in a manner that makes the subordinates see a bright, future, convince and show a firm confidence that the objectives will be achieved, thereby describe work to subordinates in an attractive way, helping subordinates find meaning in their work, and at the same time building a united team to create a comfortable working spirit for everyone. An attractive manager is an example for his/here subordinates to follow; willing to sacrifice personal

interests for the better things of the organization, always give priority to the interests of the organization; always emphasizes the importance of having a sense of collective responsibility when assigning tasks to subordinates; consider ethical aspects and ethical consequences before making any decision.

As a middle manager, to be effective at work, he/she must arouse the creative potential of each subordinate. The leader needs to create conditions and opportunities for people to assert themselves and show their talents; Encourage and value all initiatives of everyone and outside the organization to find the best ideas; and managers themselves must be creative, always looking for different perspectives when solving problems as well as giving new approaches to getting things done; Regularly communicate, cooperate, learn from experiences and knowledge of others to create a healthy competitive and talent-showing environment.

In order to improve the work engagement of subordinates, middle managers in economic - defense enterprises need to continually lead with leadership behaviors/ styles that are appropriate for each situation and subordinate subject. That means middle managers need to demonstrate task-oriented behaviors, assigning, controlling and urging the work to comply with the rules and deadlines and need to have employee-oriented behavior, caring, inspiring, building good relationships with subordinates. The behaviors of these two groups are complementary and frequently used by managers to promote the

organization's objectives and at the same time satisfy the legitimate needs of subordinates and partners in the organization.

## References

1. Aronson, Z. H., Reilly, R. R., & Lynn, G. S. (2006). The impact of leader personality on new product development teamwork and performance: The moderating role of uncertainty. *Journal of Engineering and Technology Management*, 23(3), 221-247.
2. Barling, J., Slater, F., & Kelloway, E. K. (2000). Transformational leadership and emotional intelligence: An exploratory study. *Leadership & Organization Development Journal*.
3. Barnes, J., Bessant, J., Dunne, N., & Morris, M. (2001). Developing manufacturing competitiveness within South African industry: the role of middle management. *Technovation*, 21(5), 293-309.
4. Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public administration quarterly*, 112-121.
5. Becker, C. M., & Glascoff, M. A. (2014). Process measures: A leadership tool for management. *The TQM Journal*.
6. Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of personality*, 17(S1), S5-S18.
7. Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. John Wiley & Sons.

8. Bradley, P., & Charbonneau, D. (2004). Transformational leadership: Something new, something old. *Canadian Military Journal*, 5(1), 7-14.
9. Davies, B., & Brighouse, T. (Eds.). (2008). *Passionate leadership in education*. Sage.
10. Evans, A. L., & Evans, V. (2002). Leadership workshop. *Education*, 123(1), 18-31.
11. Floyd, S. W., & Wooldridge, B. (1994). Dinosaurs or dynamos? Recognizing middle management's strategic role. *Academy of Management Perspectives*, 8(4), 47-57.
12. Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765.
13. Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of applied psychology*, 89(5), 755.
14. Lam, C. S., & O'Higgins, E. R. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organization Development Journal*, 33(2), 149-174.
15. Leithwood, K., Begley, P. T., & Cousins, J. B. (1994). Performance appraisal and selection of school leaders: Selection processes and measurement issues. *Developing expert leadership for future schools*, 228-252.
16. McClelland, D. C. (1973). Testing for competence rather than for "intelligence.". *American psychologist*, 28(1), 1.

17. Northouse, P. G. (1999). *Leadership: Theory and practice* (p. xxiii). E-Content Generic Vendor..
18. Odumeru, J. A., & Ogbonna, I. G. (2013). Transformational vs. transactional leadership theories: Evidence in literature. *International Review of Management and Business Research*, 2(2), 355.
19. Olsen, D. (1993). Work satisfaction and stress in the first and third year of academic appointment. *The Journal of Higher Education*, 64(4), 453-471.
20. Ross, S. M., & Offermann, L. R. (1997). Transformational leaders: Measurement of personality attributes and work group performance. *Personality and Social Psychology Bulletin*, 23(10), 1078-1086.

# **THE IMPACT OF COVID-19 ON LOGISTICS IN ASEAN COUNTRIES**

**Anh Le Tuan. MA**

*School of Trade and International Economics.*

*National Economics University*

## **Abstract**

The COVID-19 pandemic has made a huge impact on every aspects of the world economy. The logistics and logistics in the ASEAN region has been heavily damaged. The first and foremost issue is the disruption in logistics activities in the region. However, in order to overcome this severe conditions, the investment in basic and green infrastructure, digital transformation in companies and reskilling the human resource are among short-term solutions.

**Keywords:** logistics, COVID-19, ASEAN

## **1. The impact of COVID-19 in the world and the ASEAN region**

The impact of COVID-19 was first felt in China due to the role it plays in global manufacturing (with Wuhan, the epicenter of the pandemic, playing a particularly significant role—more than 200 of Fortune Global 500 Firms have a presence there). China is also a major consumer of global commodities and agricultural products. Disruptions

to manufacturing in China rippled through global supply chains. Cargo was backlogged at China's major container ports, travel restrictions led to a shortage of truck drivers to pick up containers, and ocean carriers canceled (or blanked) sailings. The resulting shortage of components from China impacted manufacturing operations overseas. Major industries around the world, including automotive, electronics, pharmaceuticals, medical equipment and supplies, as well as consumer goods, were affected.

Although manufacturing picked back up—by end-February, about 70 percent of large industry had restarted operations—a return to full production capacity is unlikely in the short term because of the spread of the pandemic to China's trading partners.

The long-haul trucking sector—which carries more than 80 percent of the country's goods—illustrates the effects of the lockdown on Chinese logistics. Between January 24 to February 26, 2020, the volume for long-haul trucking fell below 15 percent of 2019 levels before recovering to 50 percent by the end of February and 92 percent in March (see Figure 2). The rapid recovery was driven by the ability to contain the virus quickly and the government's policy towards trucking (such as waiving national highway tolls and quarantine requirements for trucks shipping essential goods).

The pandemic spread to the rest of the world, leading to lockdowns and border closures that restricted the movement of goods. Additional protocols (such as social distancing at warehouses)



introduced to ensure the safety of workers contributed to bottlenecks for freight. For example, in the European Union, trucks formed 37-mile-long lines on the A4 highway after Poland closed its border with Germany in mid-March. In India, the lockdown created a shortage of truck drivers, which resulted in over 50,000 containers piling up in the ports of Chennai, Kamajarar, and Kattupalli.

We can observe the impacts on freight capacity in three key global transportation segments— ocean, land, and air.

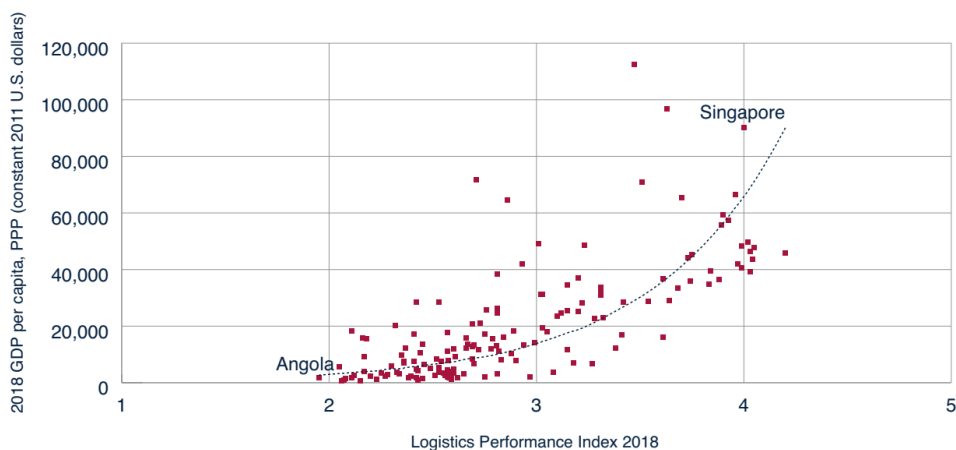
- **Ocean freight:** Total container volumes handled at Chinese ports dropped by 10.1 percent in the first months of 2020. Agility Logistics reports considerable constraints to ocean freight around the world, impacting both key exporters, like Brazil, China, India, and Mexico, as well as importers like the European Union. According to DHL, weak demand will continue to affect routes between Asia and Europe, the United States, and Latin America. Consequently, additional blank sailings are expected in the coming weeks.

- **Land freight:** Unlike ocean and air transport, land transport has generally remained partially available globally as roads have remained in operation, except in countries under severe lockdowns, according to Agility Logistics' tracking tool. Trucking capacity is strained because of additional demand for their services—especially food and medical supply transportation— under lockdown, combined with reduced employee availability (due to COVID-19-related restrictions), leading to higher rates. Other economic sectors that require land transport, such

as manufacturing, are generally not at full capacity because of lockdowns. As a result, spot road freight rates have fallen in some markets. Demand for rail services has grown because of higher air cargo freight rates, blank sailings, and longer transit time for trucks.

- **Air freight:** Volumes fell by 19 percent in March 2020 due to a sharp reduction in passenger flights (which carry freight as belly cargo) and the drop in manufacturing in China. However, as shippers and governments turn to air cargo for essential goods, air freight rates have increased—some carriers are seeing delays with increased congestion at airports. Mid-April saw an increase in capacity, as well as a recovery in volumes transported (although they are still down, year-on-year). The overall reduction in capacity is greater than the net reduction in demand, which supports higher air freight rates.

FIGURE 1. LOGISTICS PERFORMANCE AND GDP, SELECTED COUNTRIES



Source: World Bank, LPI, 2018.

The full effect of the pandemic on global supply chains is not yet known. As the IMF is predicting a 3 percent contraction for the global

economy in 2020, the expected recession will deliver a second hit to demand and, thus, logistics companies, highlighting logistics' exposure to trade, manufacturing, and demand for goods.

The impact of COVID-19 on ASEAN region: When COVID-19 emerged in early 2020, South East Asia was already not on track to achieve the Sustainable Development Goals (SDGs) by 2030, lagging behind in all but two of the 17 Goals. Despite strong economic growth, the sub region is characterized by high levels of inequality, low levels of social protection and a large informal sector,<sup>3</sup> as well as a regression in peace, justice and strong institutions, and worrying levels of ecosystem damage, biodiversity loss, greenhouse gas emissions and air quality.

At the same time, most South-East Asian countries had developed good capabilities in responding to public health emergencies, with capacities in early detection and reporting of epidemics comparable to those in developed countries. This reflects the sub-region's strong commitment to improving national health-care capacity and adherence to international health norms.

Yet, South-East Asia's health-care sector exhibits varying degrees of preparedness. The World Health Organization's universal health coverage index of service coverage reported a median index of 61 out of 100, suggesting that much more progress is needed. More than half of the sub-region's countries are vulnerable because of weak health systems, including Myanmar, Cambodia, Indonesia, Lao PDR, the Philippines and

Timor Leste. Among the 11 countries, the situation is particularly concerning for Myanmar and the Philippines, which have pre-existing humanitarian caseloads, and have therefore been incorporated in the

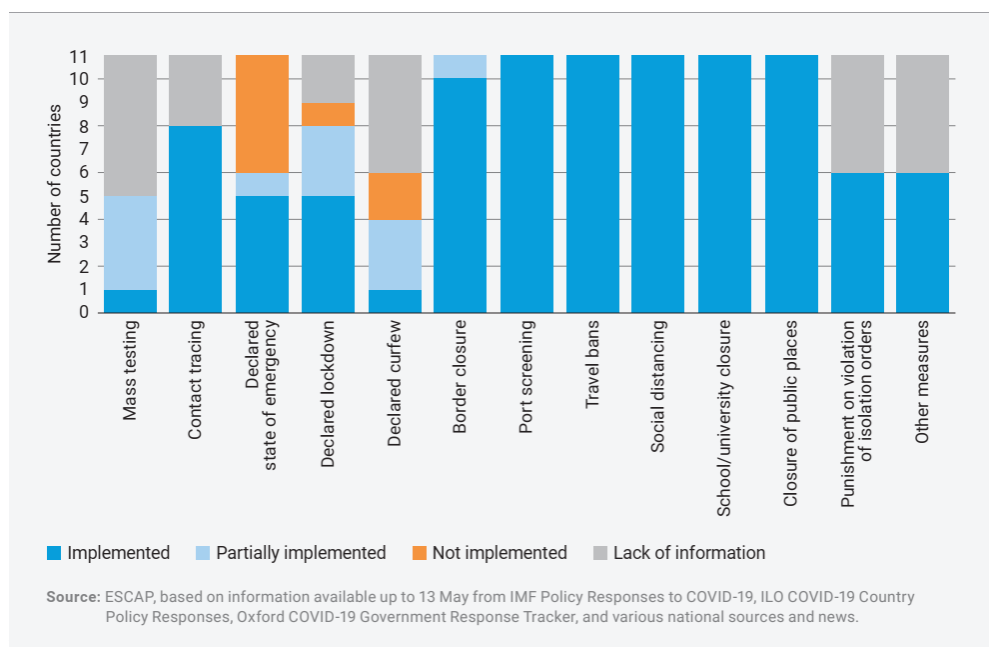
Low to high	Human Development			Health System			Connectivity		
	Human development index (HDI)	Inequality-adjusted HDI (IHDI)	Inequality in HDI	Physicians	Nurses and midwives	Hospital beds	Health expenditure	Mobile phone subscriptions	Fixed broadband subscriptions
	(index)	(IHDI)	(percentage)	(per 10,000 people)	(per 10,000 people)	(per 10,000 people)	(% of GDP)	(per 100 people)	(per 100 people)
	2018	2018	2018	2010-2018	2010-2018	2010-2018	2016	2017-2018	2017-2018
Singapore	0.935	0.810	13.3	23.1	72	24	4.5	145.7	28.0
Brunei Darussalam	0.845	..	..	17.7	66	27	2.3	131.9	11.5
Malaysia	0.804	..	..	15.1	41	19	3.8	134.5	8.6
Thailand	0.765	0.635	17.0	8.1	30	21	3.7	180.2	13.2
Philippines	0.712	0.582	18.2	12.8	2	10	4.4	110.1	3.7
Indonesia	0.707	0.583	17.5	3.8	21	12	3.1	119.8	3.3
Viet Nam	0.693	0.580	16.3	8.2	14	26	5.7	147.2	13.6
Timor-Leste	0.626	0.450	28.0	7.2	17	59	4.0	103.2	0.0
Lao People's Dem. Rep.	0.604	0.454	24.9	5.0	10	15	2.4	51.9	0.6
Myanmar	0.584	0.448	23.2	8.6	10	9	5.1	113.8	0.2
Cambodia	0.581	0.465	20.1	1.7	10	8	6.1	119.5	1.0

Source: Adapted from the Human Development Index.

**Figure 2. HDI in ASEAN region in 2018**

The pandemic has exposed the challenges faced by vulnerable communities, groups and individuals that often lack access to health services and are left out of formal policy and social protection measures. These include migrants, refugees, stateless persons and displaced persons, indigenous populations, people living in poverty, those without access to water and sanitation or adequate housing, persons with disabilities, women, older persons, children, and people in detention or other institutions. Non-nationals are at particular risk of exclusion from public health responses due to legal or practical barriers. This creates a systemic vulnerability for disease

control in the sub-region. Hence, several countries, including Cambodia, Malaysia, Singapore and Thailand, have extended free COVID-19 testing and treatment to all non-citizens, and provided them information on containment measures in their own languages. NGOs and civil society organizations are also supporting these efforts. Despite this, Singapore had a second wave of infections attributed to poor living conditions among more than 300,000 migrant workers. Persons deprived of their liberty are also more vulnerable, particularly in overcrowded prisons and detention centers. Some governments have taken steps to reduce overcrowding through early release schemes and other alternatives to detention.



## East Asia

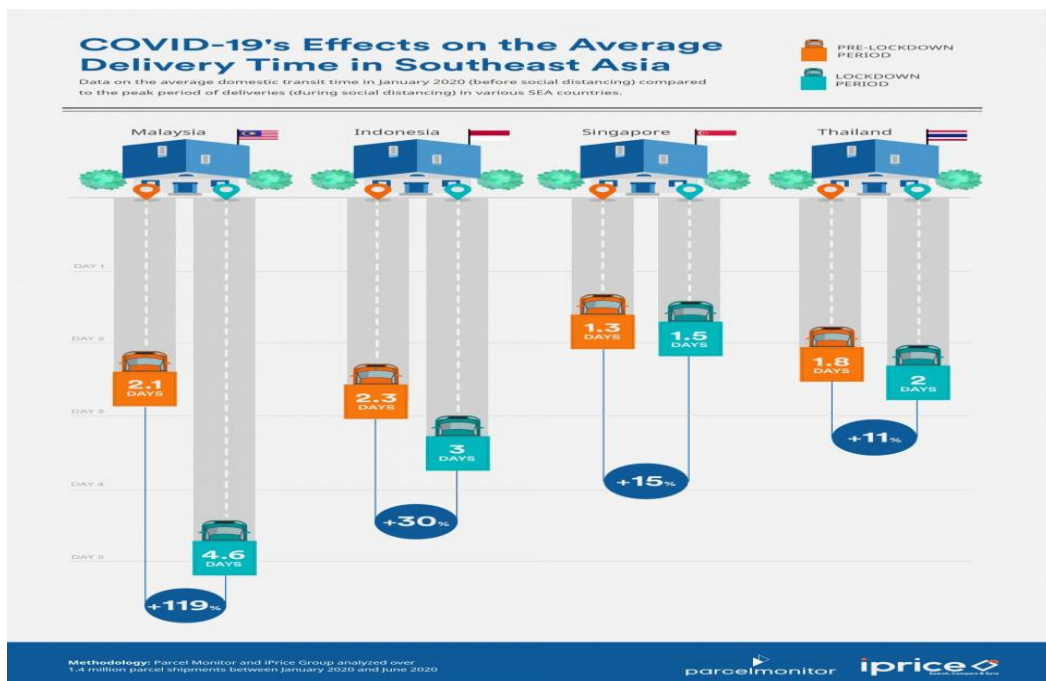
Countries in conflict are particularly at risk. In Myanmar, approximately 130,000 internally displaced persons from different communities are confined in camps in Rakhine State, while more than

800,000 – mostly Rohingya who were forced to flee in 2017 – are refugees in Bangladesh. Ongoing hostilities continue to displace communities, inflict casualties and reduce humanitarian access. COVID-19 restrictions have also impacted the movement of aid workers and humanitarian assistance. For example, vaccination campaigns were halted in the Philippines, where outbreaks of measles, dengue and polio are still ongoing. Two million children below the age of two might not be protected from preventable diseases this year.

## **2. The impact of COVID-19 on logistics in Southeast Asia**

When COVID-19 first reared its ugly head, it was Asian nations that suffered from the get-go. In fact, the first reported cases and subsequent social distancing measures were in ASEAN countries, back in February. It was at this point that ecommerce delivery companies suddenly became an essential service provider. They were already used daily across the globe, as a choice, but suddenly entire populations were dependent on the logistical network to get products from supplier to the front door.

As you know, the majority of the global population turned to ecommerce and online shopping for everyday essentials when the pandemic was at its height. It was better safe than sorry, and, of course, incredibly convenient. At the time, ecommerce aggregator, iPrice Group and Parcelmonitor chose to team up and see the impact of COVID-19 on the ASEAN logistics industry. In April, iPrice reported that health supplements, face masks, and canned goods were among the most sought-after products on regional ecommerce websites.



**Figure 4. COVID-19 effect on the average delivery time in Southeast Asia**

McKinsey's research on emerging ASEAN countries explored a series of trends that the pandemic has caused or accelerated. Within these trends lie the potential recipe for recovery, but stakeholders must be prepared to reimagine their country's economy. Five key levers—manufacturing hubs, green infrastructure, investments in digital, talent reskilling, and high-value food industries—could not only speed up the economic recovery in these countries but also lay the foundation for extended growth.

### 3. Short-term solutions to overcome COVID-19

#### 3.1. Investing in basic and green infrastructure

The green energy revolution has been a long time in the making, but the past few months have seen a spike in interest. Climate action remains critical over the next decade, and investments in green infrastructure and the transition to a lower-carbon future could spur significant near-term job creation. And with near-zero interest rates for the foreseeable future, there is no better time than the present for such investments.

The proportion of renewable energy generated as a percentage of total energy in China, the European Union, and the United States grew from 18 percent in 2005 to 27 percent in 2020 as the cost efficiency of these technologies improved. In the wake of the pandemic, countries are investing in green infrastructure to spur economic recovery and create jobs. The European Union, for example, unveiled an \$825 billion COVID-19 relief package that includes boosting clean energy and transport, with the goal of carbon neutrality by 2050. Likewise, China has announced its intent to attract \$500 billion in investment for “new infrastructure,” including electric-vehicle charging stations.

Emerging ASEAN has an opportunity to unlock economic growth by doubling down on green infrastructure as well as addressing basic infrastructure gaps. For example, in Indonesia, 47 percent of households have no internet access, 6 and 11 percent do not have access to clean water. <sup>7</sup> In a fiscally constrained environment, policy makers could consider regulatory models that offer fair returns to encourage investment in these sectors.

In addition, building out green infrastructure such as renewable and energy efficiency technologies could accelerate economic growth.



According to 2017 research by Heidi Garrett-Peltier, these technologies have nearly three times the job-creating impact of investment in fossil fuels. 8 Current share of renewables in power capacity stands at 11 percent in Indonesia, 22 percent in Malaysia, and 22 percent in Thailand, compared with an Asia average of 34 percent, leaving ample room for investment and expansion. Governments can accelerate penetration of renewables and energy-efficient technology in a few ways:

Build capabilities that enable climate-risk modeling and assessment of climate change economics. This creates a fact base to inform recovery programs, develop improved infrastructure planning, and enable climate stress-testing in funding programs.

Invest in a broad range of sustainability levers. These levers include building renewable-energy infrastructure, expanding the capacity of the power grid and increasing its resiliency to support increased electrification, retrofitting buildings, and developing and deploying technologies to decarbonize heavy industries.

Enhanced financial incentives that encourage consumer and business investment. Policy makers could expand incentives to invest in distributed renewable generation (for example, solar panels) on commercial and residential premises and energy-efficiency technologies. They could employ schemes that allow consumers to sell energy back to the grid by introducing loans and grants that defray initial infrastructure investment costs.

Coordinate complicated and interdependent infrastructure rollout. Large-scale infrastructure investment, such as electric-vehicle charging networks and floating solar technology, requires coordination across

multiple private and public sector entities to execute successfully. Governments can help address dependencies by taking on an explicit coordination role to facilitate communication between players, laying out frameworks that make clear how investors will be remunerated, and establishing regional rollout timelines.

Accelerating public sector uptake. Governments are the owners of a vast amount of infrastructure in many countries, ranging from schools to offices. They could adopt energy-efficiency solutions across these premises, positioning themselves as leading consumers of green energy.

### ***3.2 Preparing companies for a digital future***

In the wake of the pandemic, digital technologies moved quickly from a strategic priority to an operational imperative—both to accommodate remote workers and serve consumers as they flocked to e-commerce channels. Lockdowns caused sharp increases in the adoption of digital channels across the world and within Asia, especially for spending on essential items. According to McKinsey’s COVID-19 consumer pulse surveys, users of the online grocery channel grew by as much as 60 percent in the United States. Some 20 to 40 percent of customers in India, Japan, South Korea, the United Kingdom, and the United States also tried ordering food online for pick-up at grocery stores for the first time, and 50 to 80 percent of new customers in these countries have indicated they will continue using these channels once lockdowns lift.

The risk that these developments could leave small- and medium-sized enterprises (SMEs) behind could be managed through government support and programs. According to a McKinsey survey in 2018, 60 to 95 percent of digital revenue accrues to the largest 10 percent of companies in a sector. Yet SMEs account for a significant share of the region's economic activity, meaning that enhanced digital capabilities could translate to additional revenue. Increasing digital adoption to levels seen in developed markets could boost GDP growth by one percent in Malaysia; and technology transformations could add \$2.8 trillion to Indonesia's economy by 2040.

Capturing this opportunity requires three actions beyond building internet infrastructure:

+ *Develop digital capabilities in companies.* While SMEs are often aware of the imperative to go digital, many are challenged to do so in practice. Southeast Asian countries could consider redirecting SME support toward digital capability-building programs. For example, Singapore offers the Industry 4.0 Human Capital Initiative, which helps 300 SMEs implement digital use cases and redesigns jobs to support them. In addition, the government's Scale-Up program supports local champions on a two-year growth journey with modules such as digital transformation and new business building.

+ *Digitalize government processes to encourage adoption by companies and citizens.* To encourage wider use of digital tools by businesses and citizens, governments can digitalize their processes.

Much of government procurement and invoicing in the region is still done by paper, offering the possibility of a shift to digitalization of business processes and channels. For example, the Indonesian government has partnered with Bukalapak, an Indonesian e-commerce company, to facilitate e-government services such as tax and utilities payments.

+ *Provide financial incentives to boost digital adoption.* Introducing tax incentives, grants, and loans could encourage the adoption of digital tools. For example, in the aftermath of the pandemic, Singapore provided \$350 million in digital transformation grants for businesses to support e-payments and advanced digital-solution adoption.

### ***3.3 Facilitating reskilling and redeployment at scale***

For the past several years, business leaders have been preparing for the impact of automation and digital technologies on their workforce. The economic downturn is accelerating job displacement. In the A1 (virus recurs, leading to a second round of lockdowns) scenario, jobs at risk could increase by up to 878,000 in Malaysia, 4.5 million in the Philippines, 9.2 million in Indonesia, and 2.4 million in Thailand. Some 40 to 70 percent of jobs at risk from COVID-19 in Europe and the United States are already automatable under current technology, suggesting the possibility of long-term displacement even after the economy recovers.

With job displacement may come opportunity. For example, the pandemic has moved society in the direction of contactless commerce,

a development that could spur demand in the region for more skilled workers in digital fields. Increased demand for healthcare and related services may also lead to job creation.

Countries should consider making reskilling and redeployment support available at an unprecedented scale to address job disruptions from COVID-19. Such an effort could comprise three elements:

+ *Facilitate a sufficient supply of reskilling and redeployment services.* Reskilling is most effectively undertaken in partnership with employers, but too often this task is managed by siloed training institutions. Facilitating partnerships across the corporate world to provide training can boost the volume and effectiveness of reskilling; for example, in New Zealand a coalition of companies made public commitments to double their on-the-job training and reskilling hours by 2025.

+ *Provide funding to support demand for training.* During an economic downturn and mounting job losses, job seekers and employers alike may struggle to finance training. Providing government support to pay for a portion or all of these training programs could help. For example, as part of COVID-19 stimulus, Singapore is offering a six- to 12-month training program, including a monthly allowance of S\$1,200 per participant for living expenses.

+ *Match supply and demand using data.* The jobs that disappear during the COVID-19 downturn may not be the same ones that return as the economy recovers. To encourage thoughtful reskilling, countries

could analyze likely sources of economic growth and job opportunities, categories at risk from COVID-19 and automation, and feasible pathways for job seekers to transition into new opportunities. Talent Exchange, a platform set up by US-based eightfold.ai, is an example of a one such platform launched to match individuals displaced from work by COVID-19 with job opportunities.

## Reference

1. ASEAN (2020), *ASEAN Policy Brief, Economic Impact of COVID-19 Outbreak on ASEAN*, access from link:  
[https://aseand.Org.A%2F%2Fasean.org%2Fstorage%2F2020%2F04%2FASEAN-Policy-Brief-April-2020\\_FINAL.pdf&usg=AOvVaw1qy5ML-XVJfCz1CaKcYvcc](https://aseand.Org.A%2F%2Fasean.org%2Fstorage%2F2020%2F04%2FASEAN-Policy-Brief-April-2020_FINAL.pdf&usg=AOvVaw1qy5ML-XVJfCz1CaKcYvcc)
2. Cassey Lee et al (2020), *COVID-19's economic reckoning in Southeast Asia*, ISEAS Perspective 2020 No.107.
3. Sube Singh et al (2020), *Impact of COVID-19 on logistics system and supply chains*, International Journal of Production Reasearch
4. Paolo Nguyen (2020), *Southeast Asian Economies Experience Major Downturn Amid COVID-19 Pandemic*, access from link  
<https://www.irinsider.org/southeast-asia-oceania-1/2020/10/4/southeast-asian-economies-experience-major-downturn-amid-COVID-19-pandemic>
5. UNICEF (2020), *Supply assessment and outlook on non-specific COVID-19 supplies*, access from the link:  
<https://www.unicef.org/supply/COVID-19-impact-assessment-supplies-and-logistics-sourced-unicef-supply-division>