

IMPACT OF TRANSPORTATION ELASTICITY ON SUPPLY CHAIN EFFICIENCY AT MARITIME INDUSTRY IN THE UAE

Muhammad Turki Alshurideh¹, Barween Al Kurdi², Anwar S. Al-Gasaymeh³, Ahmad AlHamad⁴

¹ *Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo*

² *Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo*

³ *Applied Science Private University, Amman, Jordan, a_gasaymeh@asu.edu.jo*

⁴ *Department of Management, College of Business, University of Sharjah, Sharjah 27272, United Arab Emirates. aalhamad@sharjah.ac.ae*

ABSTRACT

This research aims to identify the factors affecting transportation elasticity and its impact on supply chain efficiency. Transportation sector requires specific attention to contribute in developing economies. The research from various resources helped to gather theoretical evidences which support our research model. In order to do deep review of prior researches transportation provides significant benefits to supply chains and logistics companies. To remain competitive in this sector, businesses rely on technological means and methods, as well as supply chain operations efficiently.

Keywords: *Transportation Elasticity, Supply Chain Efficiency, Maritime Industry UAE.*

1. INTRODUCTION

Over the past ten years, supply chain disruptions have drawn a lot of attention since they can negatively impact the operation of the supply chain [1]. Transportation creates significant role in economic growth of the countries in which all kind of transportation create the basic need of the business moving and get low investments on the people and goods [2], [3]. Transportation for trade and business goods helps to increase the easy and accessible transportation rather it can be used

for human potential [4], [5]. The ease of transportation increases the less timing and excessive growth of the economy [6], [7]. The transportation in more advance methods such as air and shipment increases the business productivity with more profitability. The cost of the per item movement decreases the chances of the margins [8]–[11].

The role of transportation in supply chain operations increases the sustainability of various sectors of industries and businesses where the moving of goods is essential for business provision [12]–[15]. Transportation is an advance mode of communication that helps to integrate the sectors and import export of the goods through several communication and transportation channels [16], [17]. The entire business and industrial infrastructure stability are depending on strong transportation methods that are increasing the stable economic growth through providing the goods and items that are essential for business and trade [18]–[21]. The transportation investment helps to industries to generate more opportunities to increase the business efficiency through less time taking option and increase the visibility of the import and export of the business. The entire business success is depending on transportation investment that create the economic growth in more progressive manners[22].

2. LITERATURE REVIEW

2.1. Transportation Elasticity and Maritime Industry

This is obvious, where entire global population is increasing, the role of shipment of the accessories is essential to fulfill the local and global trade and business [23]–[25]. The shipment is a process of business management that create the entire success [26], [27]. The manufacturing from the raw material is possible when on- time delivery of the goods placed for further business measures [28]–[30]. The benefits of the shipping of parcels and couriers in all kind of sizes and measures cannot be denied and the reason is that the entire global product shipment of food [31], electronics, vehicles, automotive parts, textile, medicine [32], consumer goods and memories the shipment has significant place in transportation method for global business objectives in maritime shipment is one of the basic strategies to move object from one place to other [7], [33]–[35].

Furthermore, the growth of sustainable business operations and low -cost efficient trading objectives is depending on maritime shipment where the huge items and goods delivery possible within the time limit in huge size of the couriers [36]–[38]. The safest mode of maritime shipment creates the importance of reliable shipment and low -cost effective transportation method increase

the economic growth through various channels [39], [40]. The maritime shipment in business industry increases the product availability for its further manufacturing processes that improves the sustainable growth of the businesses [41], [42]. The access of business and trade measures required huge responsibilities to maintain its shipment [43]–[45] and supply chain through strong mode of transportation and maritime industry is the only solution that increase the possibility of the trade in different and reliable manners [46], [47].

2.2. Economic Growth at Maritime Transportation Industry

[48], [49] evaluated that transportation head of maritime industry increases the business productivity and efficiency in less time taking procedures [50], [51]. The maritime transportation industry in which various ships are involved for transportation in all sizes according to courier or parcel requirements of the business industries [52], [53]. the role of maritime shipment in business productivity can be seen in various areas [54]. There are number of goods and items movements is possible only with sea shipment due to their size and volume and the sensitivity of the quality and its emerging delivery at the destination [55]–[57]. The role of maritime transportation in business world placing aggressively its position due to current period of trade and business [58]–[60]. The sea ports providing the best trading facilities to its customers rather business firms chose the air mail and road transportation heads for their hoods [61]–[63]. The air transportation has limited account of the product delivery while road transportation takes huge time-consuming method to delivery of the objects that cannot meet the required time frame limit [64], [65]. The maritime transportation is the only method that create the sufficient movement of the huge volume of the goods in specific time period within the low cost [66], [67]. There are number of industries like automotive, textile and medicine and food goods [68] and items that always consist in huge bulk for the export and import purposes and the shipment of the goods only possible through maritime transportation rather the industries chose the other transportation methods [69], [70]. The rapid growth of the industries is possible through their effective trade communication channels in which maritime industry creating the effective and active part of its presence [71]–[73]. The maritime transportation is one of the effective business parts of the industries that create the innovative business strategies for economic sustainability [74] and growth of the firms and countries at all levels [75]. it also helps to introduces the nation's presence in business and trade formation [76].

2.3. Transportation Elasticity and Supply Chain

[77], [78] estimated that the supply chain is one of the essential parts of the business industries in which there is no working efficiency of the business is possible without supply chain and distribution channels [79]–[82]. The successful economic growth also relays on countries trade that is increased through supply chain management [83], [84]. The supply chain management is only possible when transportation modes are effective associated with the trade of the business [85], [86]. The transportation industry of the business world creates the best business management solution to fulfill the needs [87], [88]. The supply chain has significant presence on business productivity and profitability at the same time [89][90]. The aim of effective growth of the supply chain to increase the growth of the business provision [91]. The transportation reliability in supply chain management is essential to manipulate the business tasks that is related to trade and moving the objects of the essentials for businesses [92]–[94]. The reliable supply chain helps to business firms to focus on their mandate with reliable and efficient manners [95], [96]. Supply chain and transportation are correlated to each other [97]. The global business industry increasing day by day thorough transportations especially it is enhancing due to maritime transport industry that has huge margin to manage the trade of the essentials on big level [98]–[100].

2.5. Transportation Elasticity and Maritime Industry

[101], [102] estimated that the maritime industry in global business trade management is the essential part of the entire business solutions around the world [103], [104]. there are number of local and global companies are providing the best logistics and supply chain movement services to business firms and domestic customers but when we talk about the biggest role of shipment in business and trade [105]–[107], the maritime transport is one of the solutions where everything is possible [108], [109]. The maritime transport has great margin to manage the huge volume and quantity of the goods and items delivery with safety measures [110], [111]. The reliable transportation method of the maritime industry is organized by the management of the country's sea ports where all decisions and strategic policies helps to create the strong infrastructure of the trade of global industry [112]–[114]. The maritime industry has strong contribution to build the effective supply chain of the business industries between the countries [115], [116]. the effective supply chain through maritime hold the entire efficiency of the business within the time limit [117]. The reliable transportation has significant role to create the business success in all kind of fields

of consumer, textile, automotive and medicine industries and for their reliable shipment towards the countries [118], [119].

2.6. Transportation Elasticity on Supply Chain Efficiency at Maritime Industry

[120], [121] evaluated that the role of supply chain is one of the essential tasks of business success that helps to industries to create the best potential of trade and business goods through transportation modes [122], [123]. The transportation is one of the essential and core part of the business where entire manufacturing [114], [124], [125], distribution is depending on supply chain and supply chain is possible through online delivery of the items through different transportation channels [126], [127]. The role of maritime transport industry in business needs is quite excessive in supply chain management [128]. The supply chain network completes when distribution of the goods and product safely delivered to their destinations and maritime playing important role in this respect [129]–[131]. The transportation is an easy and important part of the business supply chain that increase its efficiency through maritime transport industry through various sea ports of the countries [132]–[134]. the country’s economic growth highly depending on the maritime industrial and transportation where countries gain huge trade benefits along with strategic policies of the business and sustainable growth [135]–[137]. Maritime industry increases the efficiency of the supply chain through transportation reliability and trust of the business organizations and become the first choice for their goods and items delivery [138], [139].

3.1. General Research Model



Figure 1: Conceptual Research Model

3. DISCUSSION

On the basis of prior literature and researches, we can say utilizing elastic logistics in supply chain management entails cutting back on supply chain activities to maximize cost savings. This is accomplished by being able to scale back workload, delivery, and transportation operations to match the new level of demand, which results in no financial loss and actual cost savings. One of the key responsibilities of the supply chain is to assist businesses in maximizing the potential for commerce and the flow of commodities through transportation channels. The supply chain, which underpins all aspects of manufacturing and distribution and is made possible by online delivery of the goods via various transportation routes, is one of the most crucial and fundamental aspects of the business. In supply chain management, the maritime transport sector plays an excessively large part in meeting company needs. When products are distributed safely to their final locations, the supply chain network is complete, and shipping plays a significant role in overall business operations.

4. CONCLUSION

Businesses are compelled to keep up with technology improvements by the need to be competitive. Drivers must employ the most modern security measures and software due to the recent increase in vehicle technology (including automation and internet-connected sensors), which has made the industry more susceptible to new dangers like hacker cyberattacks. Therefore, global business requires more provisions for transportation since transportation modes are the only key for supporting business trade and maintaining the materials flow from upstream to downstream. Transportation elasticity is crucial; it can be said that supply chain managers should investigate transportation within their supply chains.

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