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Impact of Terminal Handling Charges on the Performance of Non-Vessel Operating Common Carriers with Special Reference to the 2013 Government Regulation

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Abstract
Before the imposition of the regulation, terminal handling charges for containerized cargo were included in the all-inclusive freight listed in the bill of lading and were recovered from consumers at discharging ports. Since the regulation's implementation in 2013, terminal handling charges for containerized cargo can only be recovered from the contractually obligated party to pay them, not from the consumers. In this study, the researchers argue that the former is easier to execute because even though the government has implemented these regulations to secure the consignees and shippers, there are many negative impacts of the regulations on the non-Vessel operating common carriers, as well as indirect impact on the whole shipping industry and the economy of the country. Thematic analysis was used to analyze the data gathered through semi-structured interviews, and thirteen initial codes were identified under three themes during the analysis. Through the findings, the researchers have examined the impact of terminal handling charges in the Colombo port on the non-Vessel operating common carriers after enforcing the 2013 government regulations, analyzed the functions of non-Vessel operating common carriers and their relationship with the major shipping lines, and last suggested the strategies to overcome the negative impact on non-Vessel operating common carriers after enforcing 2013 government regulations. This study can guide future researchers and business sectors to construct their plans and processes to ensure that organizations run smoothly and consistently.

Keywords: Government regulations, Non-Vessel operating common carriers, Seaport, Terminal handling charges.

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Introduction

The shipping market in Sri Lanka has fluctuated significantly in recent years due to unpredictable global economic development. As a result, because they provide handling services to shipping businesses, the terminal would face the brunt of market swings as a crucial logistics point. As a result, in the shifting market climate, developing acceptable and workable Terminal Handling Charges (THC) is a critical strategy for freight forwarders and Non-Vessel Operating Common Carrier (NVOCC) to maximize revenue. In the logistics of importing and exporting, transportation intermediaries play an important role in arranging cargo movement. Two intermediaries operating in Sri Lanka are the foreign freight forwarders and the NVOCC companies.

The main aims of cargo forwarders are to move cargo out of their nation of origin for shippers (Export freight agents) or exporters and bring goods into a country for importers (Import freight agents). The complete service, however, may differ significantly. Simply Freight Forwarders are the companies with their own vessels for loading and unloading goods (Major shipping lines).

An NVOCC is a corporation that transports products but does not serve as an ocean-going vessel (companies that do not own vessels). In general, they are known as Minor Shipping Companies. NVOCCs provide ocean transportation services without operating ships by employing the vessels of steamship lines. The NVOCC thus acts as a wholesaler for the shipping lines, having both responsibilities for filling containers and shipping. NVOCCs provide a variety of services for point-to-point shipment of goods: arranging for space on vessels through prior bookings; providing pickup and delivery services for shippers and consignees.

The Colombo port is a significant location because it is vital to the country's economy. The Colombo port is a free port utilized for commercial and trade activities such as cargo loading, unloading, and other revenue-generating activities. On the other hand, the terminal functions as a "checkpoint" at the port, where incoming and exiting shipments are thoroughly inspected and documented. The Sri Lankan government imposed a new regulation in 2013, which stated the THCs of shipments in Colombo port should be borne by the shipping line and should not be included in the freight charges they are collecting from the consignees. This regulation was imposed intending to encourage the importers in the country. Still, the NVOCC companies failed to compete with the Freight Forwarders anymore as they could not pay an extra charge for terminal handling in addition to the slot rental charges of the vessels owned by the major lines. Most of the NVOCC companies were bankrupted and laid off, while others hardly survived in the industry. This regulation is still enforced, and we hope to discuss this through our research.

Numerous studies have been undertaken on how freight rates are determined in the shipping business. For example, Fung Cheng and Qiu (2003) find that THCs impact overall shipping prices in Hong Kong. Lei and Bachmann (2020) used data from Canada to examine the effect of port efficiency on maritime transportation costs.

The objective of this study is to examine the impact of THCs in Colombo port on the NVOCCs. The content of this article is structured in the following manner. The next part reviews prior models of port efficiency and maritime transport costs and the data and methodologies employed in this study. Then there's a quick rundown of the apparent conflicts of interest between Sri Lankan shippers, shipping lines, and port operators. The fourth segment looks at how THCs affect the Colombo port. Finally, in the concluding section, conclusions are drawn, including a review of significant findings and policy implications for the government and policymakers.

According to the president's regulations enacted according to section 10 of the Licensing of Shipping Agents, Freight Forwarders, NVOCCs, and Container Operators Act, No. 10 of 1972, read in conjunction with article 44 (2) of the democratic socialist republic's constitution, THCs for a containerized cargo shall be included in the all-inclusive freight specified in the Bill of Lading (BL) and recovered exclusively from the shipper. This regulation was imposed intending to encourage the importers and exporters in the country and control the dollar outflow of Sri Lanka. But the NVOCC companies failed to compete with the major shipping lines anymore as they could not pay an extra charge for terminal handling in addition to the slot rental charges for the vessels owned by the major shipping lines. Even though the THCs are included in the freight, major shipping lines can still negotiate with the port, as they move bulk of containers at once and can provide lower freight rates to the customers compared to the freight rates of NVOCCs. At the same time, the port provides major shipping lines credit facilities and flexible periods to settle the payment as they own the vessels and directly deal with the port. Before 2013, the THCs and freight charges were collected separately, and the equality of THCs of NVOCCs and major lines was visible to the customers. But with the enforcement of the regulation mentioned above in 2013, all the charges were included in the freight. Once a discount is granted, it is obvious to the customers, giving a huge plus point to major shipping lines when attracting customers. As a result, Most of the NVOCC companies were bankrupted and laid off.

The research objective of this study is to examine the impact of THCs on the performance of NVOCCs with special reference to the 2013 Government Regulation discussed in this section. Under that, its research objective is to examine the impact of THCs on the performance of NVOCCs with special reference to the 2013 Government Regulation discussed in this section.

Only a few research articles were found on the Sri Lankan aspect compared to the evidence seen in other developing countries in the world, with a significant amount of literature evidence presented in several sections, such as the impact of THCs, NVOCCs, and the Colombo Sea Port.

The shipping industry has dramatically fluctuated over the past few years due to the unsteady world economy. As a result, the terminal, considered an important logistic hub, is affected due to market changes in the global economy. This dynamic pricing study is premised on anticipating a particular shipping group's requirement on cargo operations to optimize terminal earnings and manage THCs in a dynamic economy. Moreover, Bichou and Gray (2004) have suggested several pricing objectives from the different standpoints of various pricing parties, such as the standpoints of port managers, which is to maximize terminal profits. Ports have multi-pricing structures that demonstrate that they are sophisticated service centers that provide various services. The main related expenses are port-calling charges, THCs, and concession pricing. THCs cover all services required to move cargo through the port and the supply chain, including loading and unloading, repacking, customs clearance, storage, and forwarding. The costs of collecting a specific terminal are known as terminal concession charges (Meersman Strandenes and Van de Voorde, 2014).

Quality is crucial in acquiring and maintaining clients within the container terminal handling industry. And, customer requirements must be met, and good quality must be delivered at reasonable prices enabling terminals to be effective. Furthermore, researchers revealed that efficiency, speed, and dependability are critical in container handling firms. Because the duration a ship or barge spends within a port should be limited, hence, container handling process should always be completed quickly and reliably (Wiegmans et al., 2002). Becker et al. (2013) analyzed that before 2008, the shipping trade reached its pinnacle, having orders for newly constructed vessels totaling $ 800 billion. Shipping firms began to fill their logistics, with new-build boats scheduled to arrive over the following years. Despite the economic recession, product demand decreased sharply as world trade plummeted. These new carriers were massive, effective, and highly costly, resulting in industry excess capacity and a fall in freight prices, resulting in a much more unpredictable and problematic market environment. According to Jingjing and Dong (2012), terminal handling is an essential part of the supply chain system in seaports. It connects transportation, handling, packaging, processing, circulation, and distribution. Because of this, container terminal handling is an important link. It's important to improve logistics because it helps the economy and society, and it's also important to improve efficiency and lower the cost of handling. It's important to use queueing theory to set up a handling queueing model and figure out how to make handling work best.

Based on the research study conducted by Passas and Jones (2007), NVOCC functions are purchasing transportation services from vessel-operating common carriers to resell them, paying fees for port-to-port or multimodal transit, affreightment contracts backed by shippers, documents such as BL and other associated paperwork, inland transportation must be planned and paid for, legal compensation is paid to ocean freight forwarders, leasing and renting containers, negotiating with agents in both the origin and destination countries. Not only is the import and export industry sometimes complex and challenging to track, but most existing prohibitions are made ineffective due to regulatory gaps. Pope and Thomchick (2014) demonstrate how recent transportation regulation reforms in the United States (US) are expected to boost the competitiveness of freight forwarders and NVOCCs. They say that recent legislation allows for organizational changes, such as new entrants into the forwarding and NVOCC companies. Considering recent developments affecting local and international logistics, this research examines the role of the foreign freight forwarder and its interaction with the NVOCC. Although the researcher did not anticipate the study's design, and thus not directly addressed in this report, the practice of co-loading emerged throughout the study as essential to the NVOCC and forwarding businesses. The term "co-loading" refers to transporting goods booked with one NVOCC on a BL issued by another NVOCC, typically at a preferential rate in the latter's tariff, available only to other NVOCCs. Co-loading is when two or more carriers work together to fill a container and then tender it to a steamship line for transport. Rajeswari Sugapriya and Nagarajan (2021) have explained how to save money on NVOCCs by shipping safely and efficiently with returnable containers. NVOCCs will benefit immensely from using Empty Container Repositioning (ECR) and leasing options outlined in this article instead of acquiring new containers. According to this study, cargo imports are predicted to be lower than exports, resulting in a container deficit. As a result, this model incorporates ECR and leasing possibilities instead of acquiring new containers for shortfall units made up of scarce and recovered containers.

The research paper carried out by Wanniarachchi and Rathnayake (2015) explained that Colombo has emerged as an important marine hub in international trade because of Sri Lanka's favorable geographic location. It was created with a focus on Sri Lanka's Colombo port complex to identify the most important characteristics that influence a shipping line's terminal preference. The importance of the study has grown to encompass recruiting foreign capital, increasing productivity, and sharpening trade by making terminals more attractive. Consider how an inbound container is managed. Ports are vast, complex areas where various operations occur to assist in the movement of products to and from remote locations (Lei and Bachmann, 2020). Using direct and disaggregated data such as average truck turnaround time, vessel turnaround time, and berth utilization, their research aims to assess the impact of port efficiency on estimating a port's associated marine transport costs. The port of Colombo is strategically placed on the main East-West maritime route, making it a key transshipment hub in South Asia.

Despite its advantageous position, Colombo is currently fighting for transshipment market share outside regional borders with Southeast Asian essential ports such as Tanjung Pelepas, Singapore, and Klang. Furthermore, Colombo is exceptionally vulnerable because it primarily relies on the Indian subcontinent feeder market and plays no substantial part in the relay network's transshipment (Kavirathna Kawasaki and Hanaoka, 2018). Park and Dossani (2020) examined the impact of port infrastructure on the South Asian garment industry's supply chain integration through a case study of Colombo Port. The case study demonstrates how the Colombo Port transshipment hub and its multi-country consolidation services have improved supply chain integration in these critical sectors. Nonetheless, there is a need to strengthen internal logistics and port and logistical facilities throughout South Asia. Their paper aimed to assess the local and regional effects of port infrastructure development on South Asia's garment supply chain integration. The researchers have shown that port infrastructure has a substantial role in determining the sophistication of a country's supply chain. Better quality ports shorten manufacturing lead times, allowing for product diversification and supply chain integration with more possibilities from international sources, allowing nations to manufacture higher-end items. Because of the economic importance of clothes to the regional economy and the critical placement of the Colombo Port within the area, the Colombo port and the South Asian garment supply chain were explored as a case study. Colombo Port is the most efficient logistic hub in South Asia and the only deep-sea port capable of handling feeder port transshipment services between East and West. Colombo Port also offers multi-country consolidation services for Less Container Load (LCL), lowering shipping costs for smaller industrial units and providing value-added services in warehouses for final packing and sorting. Despite international transshipment competitors, a long-standing customs burden, and a lack of automation, Colombo Port is expected to contribute to regional supply chain integration significantly and to lead Sri Lanka's 'Mega Plan' to improve connectivity between the port, roads, and airports, as well as the Colombo Port City Project, which Chinese FDI funds. Non-cost elements of supply chain integration, such as regional trade agreements, local industrial rules, and social compliance, should be coordinated by the South Asian community.

Only a few research studies have been conducted locally based on the information available. This indicates an empirical gap in the Sri Lankan context. In addition, no comprehensive study of regulation enforcement in 2013 has been conducted.

The scope of the study is to examine the impact of THCs in Colombo port on the NVOCCs after enforcing the 2013 government regulation, to analyze the functions of NVOCCs and their relationship with major shipping lines, and to suggest strategies to overcome negative impact on NVOCCs after enforcing the 2013 government regulation. Through the objective, the importance of the NVOCCs to the economy and the difficulties they have faced since this regulation's enforcement in 2013 will be discussed. However, few comprehensive studies have been intentionally linked to the Sri Lankan aspect. The information from this study would be helpful for the Colombo port authority, NVOCCs, freight forwarders, and government in determining how government regulations would affect the organizational performance of the Colombo port and NVOCCs, as well as in making management decisions.

The findings of this study can be used to get a comprehensive understanding of the impact of the regulation, to identify the strategies that can be used to overcome the losses that the NVOCCs have been facing and this would be an approach for the government to quickly identify the gaps in the regulations to take necessary actions as well as for the decision making.

Methodology

The research exclusively targeted NVOCCs. The population included all active NVOCCs In Sri Lanka. In this study, the population is 300+ NVOCCs.

In this study, the purposive sampling method was used. The participants were chosen based on the researcher's opinion, which included information about the characteristics and classifications of micro and small-scale NVOCCs.

Thematic analysis will be used to examine the data in this study since it is a good tool for interpreting experiences, behaviors, or thoughts through a set of data. It's a versatile and powerful tool for evaluating qualitative data that may be used with a wide range of epistemological approaches. This strategy suits a wide range of research objectives, designs, and sample sizes (Terry et al., 2017). As this study aims to answer specific research questions and determine the impact of THCs in Colombo port on the NVOCCs after the enforcement of 2013 government regulations, this method will be more appropriate for analyzing data in the study.

The most generally used way for conducting thematic analysis is the six-step approach. Familiarize yourself with the data, creating initial codes, searching for themes, reviewing themes, defining and identifying themes, and producing the report are all steps in the process (Javadi and Zarea, 2016). Themes are purposely formed patterns derived from a data set to meet a research issue instead of coding categorizations. Codes, the most fundamental components of original information that may be used to investigate an event meaningfully has been identified from the interviewed data. To avoid overlapping with other codes, a code has been precisely defined and delimited. The codes were collected into broader themes that captures interesting data of the interview and reviewed those themes. Lastly, the themes were named and produced the report.

Results

In this study, 10 NVOCCs currently operating in Sri Lanka have been selected as the sample size from the population of 300+ NVOCCs registered under merchant shipping in Sri Lanka. With the selected 10 NVOCCs, semi-structured interviews have been conducted to gather data to achieve the objectives of the study. A senior shipping person from each NVOCC has been selected for the interviews, and below is the list of the interviewees of the study.

Table 1: Sample Profile

Participant	Job role	Experience in the shipping industry
01	Senior manager	10
02	Manager	13
03	Head of Department	12
04	Senior manager	15
05	Executive	12
06	Manager	08
07	Executive	09
08	Senior manager	12
09	Senior Executive	07
10	Managing director	08

Source: Authors' Compilation

The thematic analysis method was applied to transcribed data gathered through interviews. After assigning the codes for interviewed data, researchers further identified their associated extracts and generated the thirteen initial codes (below table). Further, three themes were identified for the primary objective of examining the impact of THCs in Colombo port on the NVOCCs after enforcing the 2013 government regulation.

Table 2: Summary of Themes and Codes

Theme	Code	Frequency of code identified in specific questions
Overview of NVOCCs	Establishment of an NVOCC	08
	Destination charges and profit margins	03
	Contribution to the shipping industry	02
	Government involvement	01
Relationship with major shipping lines	Contracts with shipping lines	11
	Differences in freight rates	04
	Foreign trade	05
	Collaborations to reach different destinations	11
Negative impact of regulation	Effects on the cash flow	03
	Decreased annual income	07
	Increased customer frauds	17
	The dominants of major shipping lines	05
	Decreased number of shipments	06

Source: Authors' Compilation

Background of NVOCCs

It is essential to study the background of the NVOCCs to understand their role, importance, and challenges. In this section, the starting process of an NVOCC, the importance of destination charges, how the profit margins are calculated, what are the contributions of NVOCCs to the shipping industry, and the government involvement in the existence and development of NVOCCs will be discussed.

Establishment of an NVOCC

Establishing an NVOCC is a simple process that does not require much capital, employees, and complex procedures for registration. Any person interested in shipping can start their own NVOCC company. When registering an NVOCC, company shipping personnel should have knowledge and experience in the shipping industry. Previously there was a requirement for a shipping diploma to be certified. By using that diploma, a shipping company can get registered and start a business as a forwarder. If anyone has an international connection to find a principal willing to do business with them, they can start their NVOCC agency. The NVOCC companies should be registered under the merchant shipping of Sri Lanka. Participant 01 mentioned that "starting an NVOCC is very simple because it doesn't need much capital, and even one or two people can get together and start a company. Also, you don't have to register with certain authorities. For example, if you register with the port authority, you must deposit some money or need a bank guarantee. But for an NVOCC, none of these are required, and you easily start your own business."

Destination Charges and Profit Margins

There are many different charges associated with the movement of cargo. They are known as terminal, destination, or local charges. One of the primary incomes of the NVOCCs is collecting these destination charges. These charges should be paid at the destination port of the relevant cargo and are not considered freight charges directly.

Despite the freight charges, there are different costs associated with tasks and the services provided at the destination. This includes unloading, cargo movements, clearing, inspection, container washing, and other administrative charges. Destination charges help NVOCCs to maintain their cash flow to continue their business operations. Also, NVOCCs construct their profit margins according to these charges. Before 2013, NVOCCs could collect these charges separately from the customers. But with the enforcement of 2013 government regulations, they must include all the charges in the ocean freight and cannot collect separately from the customers. Participant 05 mentioned that "Destination charges are like the sole income of the NVOCCs. That is where they recover the costs of slot rental charges and other charges, they must pay to the shipping lines and feeder operators. Otherwise, they will not be able to survive in the competitive industry."

Contribution to the Shipping Industry

There is a significant contribution of NVOCCs to the shipping industry by creating shipping personnel. When someone joins a major shipping line, they need academic qualifications and experience. Even though many institutes in Sri Lanka provide academic knowledge for the shipping community, previously, there were fewer opportunities to get academic qualifications in shipping. The only way for a fresher to join the industry was by joining NVOCCs and getting experience. Due to that, most of the previous shipping community were not academically qualified, but they had many experiences and were practically conducting the business well. Without NVOCCs the shipping industry will not be able to survive only with the major shipping lines because major shipping lines do not have many employees, and most of their processes are running systematically. Also, some of their departments, such as the customer service department, are operating overseas. When it comes to the NVOCCs, they hire freshers, train them, and release them to the shipping community in Sri Lanka and the shipping industry worldwide. Participant 7 mentioned, "NVOCCs are like the shipping universities in Sri Lanka. They recruit freshers, train them, and educate them about the industry to provide knowledgeable and skillful people to the shipping industry. This is the best advantage that the shipping community gets from NVOCCs."

Government Involvement

With the development of the shipping industry, government involvement in the industry has increased as shipping plays a major role in the country's economy. The government has enforced several regulations and rules regarding shipping practices, intending to secure the consignees and maintain the dollar flows of the country. Most of these rules and regulations have positively impacted the industry, while others impacted negatively as some parties were not getting the expected results. The government needs to involve in these practices and manage them. Otherwise, the shipping lines and NVOCC will start to act according to their own will, resulting in the customers' losses and discouraging them. Participant 06 mentioned, "As much as any other industry needs government involvement, the shipping industry also needs that to maintain standards and consistency." Merchant shipping is the institution that governs the shipping industry. All shipping-related issues should be reported to this institution, and all the NVOCCs should be registered.

Relationship with Major Shipping Lines

Fierce competition and continuously changing variables in macro and micro surroundings impel anchorages to revitalize themselves and seek ways to gain a competitive advantage. One way to do so is to gain and retain pious guests by creating strong bonds and client satisfaction. NVOCCs need to maintain a good relationship with major shipping lines for the continuity of their businesses and to pass the advantages to the customers they are gaining through a good relationship with shipping lines. As NVOCCs do not own ships, they ultimately depend on the major shipping lines and the feeders when transporting goods from one port to another. When acting as an intermediary between the customers and the shippers, it is necessary to maintain a good relationship with both parties to get the maximum advantages. This study helps to understand the importance of a good relationship with shipping lines and the strategies that NVOCCs use to maintain such a relationship through the experiences of experts in the industry.

Contracts with Shipping Lines

The major function of an NVOCC is buying spaces from the carriers, also known as the shipping lines, and selling them to the customers. To make this objective a success, they need to build a good relationship with the relevant shipping line and make contracts with them. These contracts should benefit both parties. Participant 07 mentioned that "NVOCCs can't exist without major shipping lines. At the same time, shipping lines can attract more customers through NVOCCs, and they can easily sell bulk spaces to the NVOCCs rather than selling them to individual customers. So, it is a win-win situation for both parties." In this case, most of the NVOCCs contract with shipping lines to buy a certain number of spaces and shipping-related services. This can help set their targets and minimize the risk of being unable to buy spaces for customers. Also, through these contracts, sometimes NVOCCs get discounts when they buy bulk spaces, which will help them earn more profit and be competitive in the market. Some NVOCCs act as agents for some shipping lines as well. They can get many businesses and attract customers by taking such actions as they can handle all the operations coming under the relevant shipping line.

Differences in Freight Rates

As mentioned in the above paragraph, NVOCCs get discounts for the spaces when buying bulk spaces from the shipping lines when they have contracts or a good relationship with the carrier. Most of the time, they take it as an opportunity to attract more customers and pass on the advantage of those discounts received to the customers by providing lower freight rates. In such a scenario, they use this as a competitive advantage to outperform the competitors by providing the lowest rates in the market. Sometimes they provide even lower freight rates than the freight rates of major shipping lines. But usually, the freight rates of shipping lines are lower than those of NVOCCs'. When considering the abovementioned value-added services that NVOCCs provide, most customers choose NVOCCs as their intermediary. Sometimes, NVOCCs hide their destination charges from the freight and collect them from the consignee at the destination. They do this to gain more business by showing lower freight rates. Participant 01 mentioned, "Even though it is not a simple or ethical thing to do, most of the NVOCCs in the market hides the destination charges from their inclusive freight to attract more customers. This is not fair for the customers, but they do it anyway because business is business."

Foreign Trade

Imports and exports take an important place in a country's economy and also dramatically impact on the country's development. Businesses in the country, whether large, medium, or minor, need raw materials for production and to meet their customers in the global market for the continuity of their businesses. Participant 08 said, "Even small business owners can enter the shipping industry through an NVOCC. So, there is a huge impact of NVOCCs to the development of the shipping industry." Without shipping lines and NVOCCs, they will be unable to continue their business processes. Also, in this case, the relationship between shipping lines and NVOCCs is an important factor, as NVOCCs do not have their ships and must depend on the shipping lines. A good relationship between them also benefits the customers because good communication and management improve the services that NVOCCs provide. The existence of the NVOCCs is essential for the market; otherwise, the shipping lines start to dominate the shipping market, creating a monopoly that creates higher freight rates that small and medium size businesses cannot bear. It reduces emerging businesses and negatively impact the country's economy as imports and exports decrease. NVOCCs make the import and export process much easier and more affordable by making contracts with shipping lines.

Collaborations to reach Different Destinations

There are several trade routes worldwide in the shipping industry, and some shipping lines are only specialized in one or few trade routes. So, when a local business chooses a shipping line for importing or exporting goods from or to a certain country, there might be only a few options for them to choose from the pool of shipping lines. Also, that can be more costly as they are the only party operating on that route. This is where the NVOCCs step in. They usually make contracts with several shipping lines that operate in different trade routes and areas. This enables customers to get all the work done in one place and have many options. Customers can select the most cost-effective shipper by comparing it with the rates of others. The other most important thing is that NVOCCs arrange trans-shipment services to their customers. Participant 04 mentioned, "Trans-shipment is like you taking a bus ride to somewhere rural that cannot go by only one bus. You must take the bus on the main route and get off at some point to take another local bus to your final destination." NVOCCs provide this service by making contracts with feeder operators, who own the ships but are not the main line. This encourages foreign trade in the country, and customers can have many cost-effective options according to the destination that they are focusing on.

Negative Impact of Regulation

In 2013, the Sri Lankan government enforced new regulations through a gazette for the shipping industry regarding THCs and a few other processes. The government has taken this action to secure the consignees as the shippers were looting money from their customers through various charges. According to the 2013 regulations, all the charges, including THCs for containerized cargo, should be included in all-inclusive freight, and not be collected separately from the customers. Even though the government has enforced these regulations with good intentions, it has been negatively affecting the NVOCCs, indirectly affecting the economy of the country as well. This section will discuss the negative impact of the 2013 government regulation on the NVOCCs and their performance.

Effects on the Cash Flow

There are two types of ocean freight payment methods in the shipping industry: freight collection and prepaid. Freight collection is when the buyer pays for the cargo at the destination. In this method, the exporter is not responsible for the payments. Freight prepaid is when the exporter pays for the freight in advance. In this method, the buyer is not responsible for the payments. Most shipments come under freight prepaid, and all the charges for the shipment are paid at the port of loading by the exporter. With the enforcement of 2013 government regulations, all the charges, including THCs, should be paid at the loading port. The agents at the discharge port will not receive any payment except the DO fee. Even though most of the NVOCCs act as the agents of shipping lines, they do not have a massive cash flow or capital as they could manage the businesses with the local charges before 2013. But with the enforcement of the regulations in 2013, they had to face many difficulties due to the disruptions in the cash flow as they were bound to pay the relevant charges to the discharging port even though they were not receiving them from the customers directly. Participant 10 mentioned, "If it is one or two shipments, NVOCCs can manage that. But think, what would happen if they received 20 containers in one vessel? They will not be able to manage that as they have to pay the THC and other charges from his pocket until they receive them from the principal office or overseas agent after one or two months."

Decreased Annual Income

Major shipping lines can quote ocean freight very competitively as they have all the infrastructure. When it comes to the NVOCCs, they don't have those infrastructures, and they always must depend on major shipping lines or feeder operators. Participant 03 mentioned, "Most of the time, NVOCCs depend on the feeder operators. If the feeder operators are helping them, they can survive, but their rates are higher than the major shipping lines." Before 2013, NVOCCs could manage their businesses with the destination charges they received from the customers. But with the enforcement of 2013 regulations, their initial income dramatically decreased. Even though the income decreased, they had a lot of overheads to pay, such as THC to the Colombo port, charges involved with the vessel operators, wages for their employees, etc. Based on the gazette, merchant shipping has introduced one circular. The maximum Delivery Order (DO) fee that should be paid to the consignee importer is Rs.11 000, which is the sole income for the NVOCC agent in Sri Lanka. From that, they must pay all the overheads. Also, they receive an import commission of 2.5% of the whole freight. Participant 03 said, "If the freight is 1000 dollars, we get a commission of only 25 dollars. How can a company survive with that?"

LCL collection is one of the major services that NVOCCs provide. They attract many customers because it is a convenient method for importing and exporting to anyone despite the size of their business. NVOCCs were able to collect THC separately from each customer in an LCL container before 2013, and they could earn huge profits out of it. Participant 07 mentioned, "For example, if the THC for a single container is 100 dollars and if they have ten customers for an LCL container, they charge 30 dollars from each customer. Through this process, they earn 200 dollars in profit from a single container." They could not continue this process without enforcing the regulations in 2013. Due to these reasons, the annual income of the NVOCCs started to decrease, and many NVOCCs were laid off from the shipping industry as they could not continue their business processes anymore.

Increased Customer Frauds

Due to the high competition in the shipping industry, NVOCCs use different strategies to earn profits. Some of them are not ethical and negatively impact the customers. As the major shipping lines dominate the shipping industry, some NVOCCs use undercutting methods to attract customers. Participant 02 mentioned that "some of them hide destination charges from the freight to provide competitive freight rates. But when the cargo reaches the destination, customers must pay additional charges from the destination. At the end of the day, customers end up paying more than they were willing to pay for the freight." With the enforcement of 2013 government regulations, NVOCCs could not do this anymore as all the charges, including THC, should be included in the ocean freight and should not collect any charges from the customers at the destinations according to the regulations. Due to a lack of knowledge about the regulation or the intentions of earning money to survive in the highly competitive market, some NVOCCs still use unethical and illegal methods in their shipping practices. Participant 02 further mentioned, "As per my personal experiences, if you are working as an import executive, you can charge DO fee as your own. You can change the washing charges. You can charge any extra charges. If you invoice these charges to 20 people, a maximum of 5-6 people will come back with the regulation and argue with you. Most others will say the charges are high, but they don't know what actions they can take." Such unethical and illegal practices can be informed to the merchant shipping, and they can cancel the license of those NVOCCs.

The Dominance of Major Shipping Lines

According to the experts in the industry, due to the situation that occurred after the enforcement of 2013 regulations, the freight rates were also affected because NVOCC lines were disappearing from the market. To fill that void, major shipping lines were merging into the industry. As they do not have competitors, they have a monopoly in the market. They can decide the freight rates, and as a result, they will increase the freight rates due to the lack of strong competitors. So, the government's intentions of securing the consignees will be wasted.

Shipping lines have their own vessels, containers, and all the infrastructure needed. Also, they have some agreements and contracts with port terminals in the world. Through these facilities, they can dominate the shipping industry. Participant 01 mentioned, "There is one major shipping line that dominates the Colombo port. If that shipping line is not calling the Colombo port, Colombo port will be bankrupt. During the past Covid situation, that shipping line had to omit some vessels from the Colombo port. It affected the Colombo port, and even the port personnel feared that. Because that shipping line goes to another location, it will affect the nation." When major shipping lines dominate the industry, NVOCCs will not have any chance to attract customers as they must hire slots from the vessels of major shipping lines. After paying enormous amounts for the slot rental charges, they will not be able to provide competitive freight rates to the customers. As a result, customers will tend to choose major shipping lines, and NVOCCs will have to close their business.

Decreased Number of Shipments

After enforcing 2013 regulations, the charges of the Colombo port became very high. As a result, many NVOCCs principals dislike dealing with the Colombo port. So, Colombo has become a negative port for NVOCCs. Once an import reaches Colombo, most containers are not loading as exports as the charges are very high. Only empty reps are moving from Colombo to some other locations. Participant 01 mentioned that "NVOCC operators are suffering because if they load containers to Colombo, they don't have much strength to load back containers as empty repos, unlike major shipping lines. So, they do not like doing business in this environment." As a result of this matter, the number of shipments that NVOCCs handle in Colombo port has decreased dramatically. With this situation, most small and medium size NVOCCs had to quit the industry. Participant 04 mentioned, "even though our company is a large one and handles more operations compared to others, it was hard for us to survive in the market after this regulation was implemented. I know several NVOCCs shut down their operations due to this matter."

Discussion

Before 2013, NVOCCs could sustain their operations through consumer destination costs. However, after laws passed in 2013, their basic salary was drastically cut. THC to the Colombo Seaport charges involved with the shipping operators, payments for their staff, and so on all had to be paid even though income was down.

NVOCCs could not continue doing this after the government regulations in 2013 came into effect. According to the regulations, all the charges, including THC, should have been part of the ocean freight, and NVOCCs should not have collected any charges from customers once they arrived at their destinations. There are still some NVOCCs that engage in shipping operations that are immoral and unlawful. This may result from a lack of regulation information or a purpose to generate money to stay in the competitive marketplace. Competition among shipping companies is high. Thus, NVOCCs must come up with innovative ways to make a profit. A few of them are unethical and have a detrimental effect on consumers.

In conclusion, our analysis using the thematic analysis method has proven that we have achieved the general objective: "To examine the impact of THCs in Colombo port on the NVOCCs after enforcing the 2013 government regulation". And there is a negative impact on the NVOCCs after this 2013 government regulation.

Table 3: Quotes on the negative impact

Negative Impact	Participant	Quotes
Effects on the cash flow	1,2,5,7,10	Participant 1 - "Only income the NVOCC agent receives from an import is the DO fee." Participant 2 – "Previously, NVOCCs managed to maintain the cash flow with destination charges." Participant 5 – "Even though we do not receive any payment, we have to pay a lot of overheads."

Negative Impact	Participant	Quotes
		Participant 7 – "Most of the NVOCCs got bankrupted as they could not maintain their cash flow."
Decreased annual income	1,3,5,8	Participant 1 – "NVOCCs cannot do their operations alone because they do not have vessels and have to depend on those who have vessels." Participant 5 – "Losing the profit from the LCL was one of the major reasons for the downfall of NVOCCs." Participant 8- "As I have mentioned, the shipments to the Colombo port has decreased because most of the time the empty containers are loading at the Colombo port as the exporters are discouraged due the regulation"
Increased customer frauds	2,3,5,8	Participant 3 – "Even though the government has implemented new regulations, most people engaged in the shipping industry don't have good knowledge about that. Participant 5- "As the customers are not aware about the regulation, most of the time they had to pay the THC at the discharging port as well." Participant 6- "I personally know few NVOCCs who are still charging destination charges from the consignees because most of the new customers do not have a good knowledge about shipping practices and the rules and regulations"

Negative Impact	Participant	Quotes
		Participant 8 – "NVOCCs and customers face many difficulties and confusion due to this regulation."
The dominance of major shipping lines	1,3,6,7	Participant 3 – "Major shipping lines have many advantages compared to the NVOCCs." Participant 6 – "Government implemented this regulation to secure the customers, but main lines are the ones who got the advantage." Participant 7 – "when main lines dominate the shipping industry, they decide freight rates and margins."
Decreased number of shipments	1,3,4,9	Participant 3- "As the Colombo port has become a negative port for principals, their interest in Colombo port has decreased and as a result the number of shipments has decreased significantly." Participant 9 – "As the charges are high, Colombo port has become a negative port among NVOCC principals."

Source: Authors' Compilation

Conclusion

The study has been carried out to identify the performance of NVOCCs with special reference to the 2013 Government Regulation. Due to a lack of relevant literature in the port management sector of Sri Lanka, the study aims to identify the impact of THC on the performance of NVOCCs and to fill the gap between issues related to NVOCCs and their impact on their performance. Furthermore, no systematic analysis of regulatory enforcement has been done after 2013. This research presents a paradigm for understanding container terminal service requirements from the perspective of NVOCCs.

The Sri Lankan government's 2013 implementation of a new THC policy gave researchers a fresh perspective. According to the analysis, all these NVOCC operations have a negative impact on the performance of the port organization, freight forwarders, the port process, the government, and the port supply chain system. The effect on port authority and its actions is a new notion introduced by the 2013 regulation. Therefore, it was beneficial to analyze the port's performance.

The study's main findings were concluded by aligning them with the primary objective. As a result, the empirical findings of this research study indicate that the introduction of the 2013 government regulation has contributed to an increase in the cost of shipping a container and losses for shipping lines, but to the benefit of shippers. The number of NVOCCs in the market has been declining, and their negotiation leverage with container terminal operators and other providers of additional services has increased proportionally.

By analyzing the study results, executives and the Sri Lankan shipping company managers have demanded the need for the current excessive restrictions banning shore-based cost recovery. The inability to collect THC in Sri Lanka has placed a substantial burden on the NVOCC operating model and led to a decline in the number of NVOCC operating containers to/from Sri Lanka. In addition to primary port locations, the NVOCC principles cover many inland locations to offer Sri Lankan exporters access to challenging-to-reach destinations. As more NVOCC principals lose interest in Sri Lanka and depart from the country, exporters from Sri Lanka have encountered difficulties in shipping their cargo to these markets. Sri Lanka's shipping policy should be consistent with the policies of other regional hub ports, such as Singapore and Dubai, particularly concerning THC. These excessive regulations violate the principles of the free market and limit the options available to exporters and importers. Considering these characteristics, policymakers must focus on regulatory frameworks to participate in the current worldwide competitive sector.

Through this study, researchers could provide crucial data on NVOCC's desired and undesirable activities and port organizational performance among shipping line activities, as well as how this influenced the Colombo port and NVOCC's performance in Sri Lanka. The information would assist the Colombo port authority, NVOCCs, freight forwarders, and government in determining how government regulations will impact the organizational performance of the Colombo port and the NVOCCs, as well as in management decisions.

Revising this regulation would increase the performance of the NVOCCs which indirectly affects the economy of the country. Further, this reduces the monopoly of the shipping lines in the shipping industry and encourages the foreign traders in the country.

As research is an academic discipline, there is always scope for expanding conceptual understanding of any issue. This inductive investigation can serve as a foundation for subsequent studies. Using innovative approaches, additional research may be undertaken from the standpoint of customers and major shipping lines, observations can be made on an extensive scale, and a broader perspective can be taken on this subject. Expanding research into the performance of NVOCCs is advised since quantitative analysis can be carried out in a more practical setting and would produce quick, dependable, and even more consistent results. These insights can also be a resource for the business community, which can use them to improve the efficiency and consistency of business operations by incorporating them into plans and processes.

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