

El Covid-19 y su impacto en la internacionalización de servicios de transporte de carga en Colombia

López-Rodríguez, Campo Elías; Rubiano-Calderón, Juan Sebastián;
Poveda-Aguja, Fernando Augusto; German-Martínez, Edgar;
Cabezas-Quintero, Jorge Luis

Campo Elías López-Rodríguez clopezr@eccci.edu.co
Universidad ECCI, Colombia

Juan Sebastián Rubiano-Calderón
juans.rubianoc@eccci.edu.co
Universidad ECCI, Colombia

Fernando Augusto Poveda-Aguja
fernando.poveda@uniminuto.edu
UNIMINUTO, Colombia

Edgar German-Martínez
edgarg.martinez@uniminuto.edu
UNIMINUTO, Colombia

Jorge Luis Cabezas-Quintero
luis.cabezas@correo.policia.gov.co
CENOP, Colombia

REVISTA INVESTIGACIÓN, DESARROLLO EDUCACIÓN, SERVICIO, TRABAJO

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Abstract: This article's main objective is to identify the incidence of Covid-19 in the processes of internationalization of freight transport services in Bogotá Colombia, this taking into account the importance of internationalization in the face of the challenges that globalization brings to the country in the new scenario that organizations must face regarding the pandemic. Through a descriptive approach and a documentary review, the behavior of the internationalization of this sector, which is so important for the country's economy, as is the transport service, is statistically reflected, showing that although there is a direct incidence of the current pandemic in the sector, it is also clear that this is due to the change in current consumption needs. It is concluded that only those companies that are willing to be in constant evolution are those that despite the difficulties manage to overcome this type of phenomenon successfully.

Keywords: Covid-19, internationalization of services, cargo transportation, international trade.

Resumen: Este artículo tiene como principal objetivo identificar la incidencia del Covid-19 en los procesos de internacionalización de servicios de transporte de carga en Bogotá Colombia, esto teniendo en cuenta la importancia de la internacionalización frente a los desafíos que trae consigo la globalización para el país en el nuevo escenario que deben afrontar las organizaciones respecto a la pandemia. A través de un enfoque descriptivo y de una revisión documental se plasma estadísticamente el comportamiento de la internacionalización de este sector tan importante para la economía del país, como lo es el servicio de transporte, evidenciando que si bien, existe una incidencia directa de la actual pandemia en el sector, también es claro que esto se debe al cambio de las necesidades de consumo actuales. Se concluye que solo aquellas empresas que están dispuestas a estar en constante evolución son las que a pesar de las dificultades logran sobrepasar este tipo de fenómenos de manera exitosa.

Palabras clave: Covid-19, internacionalización de servicios, transporte de carga, comercio internacional.

Introduction

With the process of global globalization and rapid economic growth, companies are constantly forced to seek various dynamics of market expansion, capital and collection of raw materials for their continuous supply, which leads to them being immersed in different processes of internationalization. For Ghauri, Strange & Cooke (2021) it is the way a company enters the reality of globalization, or the way it projects its activities in an international market, thus creating commercial, financial and knowledge chains between different countries.

Internationalization in Colombia has been a research topic of great importance over the years (López-Rodríguez, Ligarreto & Lombana, 2019; Castiblanco-Moreno, Castro-Castell & Gómez-Ramírez, 2017; Monsalve, 2016), basically for the interest of companies to globalize and get information that facilitates this process, as well as the interest of the national government to encourage companies to generate an international projection of their business. According to Sharma et al. (2020) internationalization has had profound effects on the development of multinational enterprises, as well as on the global economy, generating a growing interdependence of financial markets and national economies.

According to Figure 1, Colombia's imports and exports can be identified in the first period of 2018 and the first period of 2019, which reflects an increase in imports in 2019 compared to the previous year, and a small decrease in exports in the same periods; however, these figures allow them to be associated with the logistics involved in these operations that influence the infrastructure of transport and storage companies must be constantly improving to meet market demand.

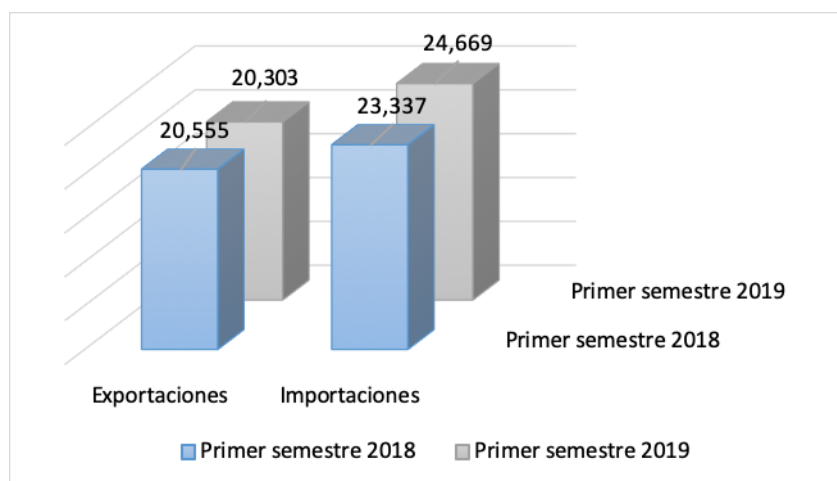


Figure 1
Importations and exportations Colombia 2018 – 2019 in millions of dollars

Figure 1. Importations and exportations Colombia 2018 – 2019 in millions of dollars.

Source: own elaboration based on DANE the National Administrative Department of Statistics (2020).

According to the customs statute, transporters are "persons who, with a contract of carriage, assume the obligation to move the goods from a point of

origin to a point of destination, in exchange for a payment called freight. They are responsible for the cargo they carry from the time it is delivered to the delivery at the agreed place and person" (Ministry of Finance and Public Credit, 2016).

In the health emergency that the world is going through in 2020 because of the virus called COVID-19, drastic measures have had to be taken in Colombia such as containment measures and restrictions on companies. The actions of the authorities in the country have sought to stop the spread of the virus, however, the economic effects that these actions have had over the months are important, so it is necessary that the decisions of the authorities can achieve a balance between the spread of the virus and the economy of the country which are essential for society and national trade (Jaén, Marín & Ortiz, 2020).

Figure 2 shows the impact that COVID-19 has had on different sectors of foreign trade; the transport of cargo, depleted inventories and the rise in response prices are the greatest difficulties for entrepreneurs in the acquisition of raw materials or the supply of goods (Chamber of Commerce of Bogotá, 2020). This is partly due to the restrictions that the national government and the mayor's office of Bogotá have had to impose to slow the spread of the virus, and because of this is the affectation of the logistics of transporting cargo of all types of goods, as well as the break that is clear in the trade of the capital.

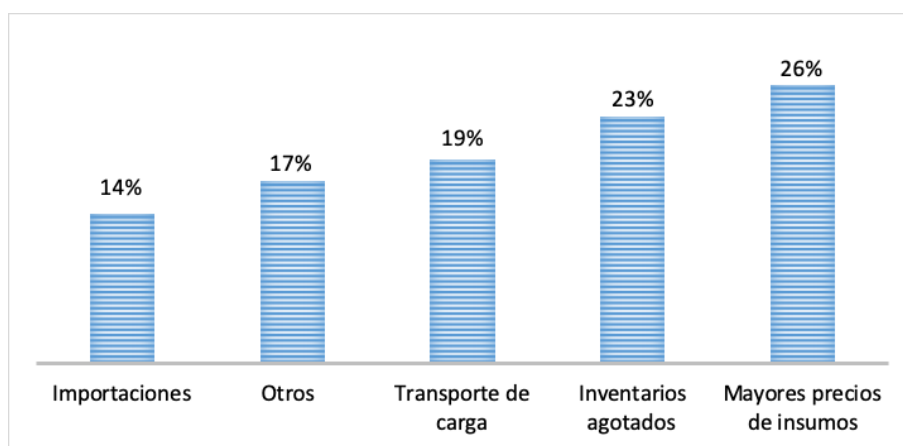


Figure 2

Employers' difficulties due to Covid19 Source own elaboration based on the national survey of Covid19 impact Chamber of Commerce of Bogotá 2020

Figure 2: Employers' difficulties due to Covid-19. Source: own elaboration based on the national survey of Covid-19 impact, Chamber of Commerce of Bogotá (2020).

A first perception of the effects of the pandemic on the internationalization processes can be identified through Figure 3, which shows the decrease in Colombian imports for the month of April 2020 compared to the same month last year; and where a variation of -31.6% is evidenced and that expressed in millions of dollars are -1431.7 US (National Administrative Department of Statistics, 2020). This same figure implies that this decrease is related to the pandemic, since from 2017 to 2019 the values were rising gradually.

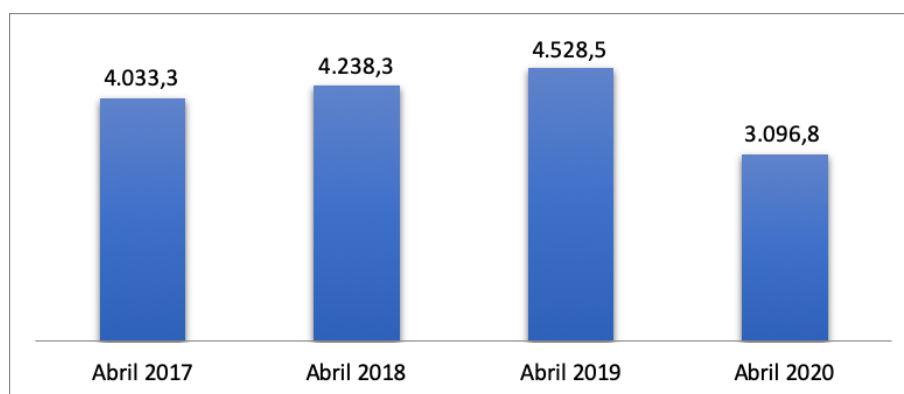


Figure 3

Imports per month in April in millions of dollars (CIF values). Souce: own elaboration based on the National Administrative Department of Statistics (2020).

Figure 3: Imports per month in April in millions of dollars (CIF values). Souce: own elaboration based on the National Administrative Department of Statistics (2020).

Based on the above, and to prepare this article, the following problem arises: What is the incidence of Covid-19 in the processes of internationalization of freight transport services in Bogotá, Colombia? To face this, it is intended to highlight the different theoretical references that arise from the processes of internationalization of transport services in Bogotá, characterize the current situation of freight transport services in Bogotá and its impact on internationalization, and finally show the impacts that Covid-19 has generated on the commercial development of freight transport in Bogotá.

Below are the theoretical references that support this article, highlighting the business internationalization and freight transport services, then the methodological structure of the study, the results of the behavior of the internationalization of freight transport services in Bogotá during the Covid-19 pandemic and finally the conclusions of the study.

Internationalization company-wide

In an increasingly globalized world, internationalization is a fundamental piece for the survival of companies, the objective is to expand markets when the national space is increasingly smaller and with more competitors (López-Rodríguez et al. 2021). That is why, Becerra (2010) affirms that the development of international trade over time has been thanks to the high mobility between countries, the globalization of markets and the innovation of new information technologies. It is possible to achieve this hand in hand with competitiveness and the internationalization of this (Botero Pinzón, 2014). According to Bahoo, Alon & Paltrinieri (2020) internationalization can be defined as a process by which the activities of a company are developed such as the sales of its products, purchase of supplies, production and others, in other countries other than the one of origin of the firm. However, internationalization can be analyzed differently from the traditional one, since this process can impact the development of companies in various areas such as: the transfer of technological knowledge, induction of new economic and financial strategies, among others (Pinzón, 2013). It should be noted that international trade developed since the industrial revolution and has been transformed with the advance of certain

aspects, such as production techniques, marketing, the means of transport and the growth of demand (Becerra, 2010).

Over time, borders were opened with which growth opportunities arose for emerging economies that managed to have a leading role in the world, as well as companies that saw an alternative to grow (Arroyave, 2012). As described by Muñoz-Cañavate & Fernández-Falero (2015) economic globalization has been developing and this generates changes in the actors operating in the markets a clear example of this is the alteration of economic borders, which makes companies compete internationally. Access to new markets generates greater growth based on an expansion strategy, and the competitive pressure in the domestic market decreases, as demand increases abroad (Giménez, 2010).

There are three main ways for the internationalization of companies which are imports, exports or investments abroad (Córdoba, Rodenes, & Rueda, 2016), and as mentioned by Gálvez-Albarracín, Reyes-Velasco & Rodríguez-Orejuela (2018). companies that have an acceptable level of international market orientation are inferred to have good potential to take advantage of the FTAs that the country has made with other countries. It is generally thought that the family business is outside the economy of any country, but they are fundamental in the economy thanks to the fact that they generate a high percentage of employment and economic development (Cavusgil et al. 2020).

For Muñoz-Cañavate & Fernández-Falero (2015) the processes of internationalization of companies must a very varied information as it is: the political and economic situation of the market, the risk of the country, competitors, among other important factors to succeed in the destination market. For this reason, Botero Pinzón (2014) affirms that the process of internationalization of any company starts in the first instance as an exercise of international projection of the organization, that is, the synchronization of all the variables related to its purpose. The entrepreneurial orientation (OE) through the calculations of risk increase made by managers and of innovation processes, energizes companies for the creation of products and the improvement of these (Gálvez-Albarracín, Reyes-Velasco & Rodríguez-Orejuela, 2018).

The internationalization activity involves studying and on different cultures and consumption habits, which requires changes in the products, packaging, or presentation of the company (Giménez, 2010). Following these guidelines, Pineda, Jerónimo & Carrasco (2012) propose that the selection of markets is crucial for companies when starting and enhancing their economic activity in other countries, however, this is not only an important reason for companies but also for official bodies.

Likewise, there are several aims that a company pursues through an international strategy, from potential demand to diversifying commercial risk, thanks to the support of different clients in certain economic environments that favor the company (Becerra, 2010).

The global born phenomenon consists of the internationalization of a company from the moment of its creation or during the first two years of its existence, this modality is mainly for technology companies (Arroyave, 2012), and to start in this process López-Rodríguez & Neme-Chaves (2021). tell that the internationalization of a company requires an investment that will be reflected positively in the long-term, which is why incurring in the export activity

must be analyzed financially and with business commitment. It should be clear that the exportable offer of a company is to secure certain volumes requested by a customer or have products that satisfy foreign markets, however, this term also integrates the financial, economic, and management capacity of the company (Córdoba, Rodenes & Rueda, 2016). There are different strategies to achieve the internationalization process such as alliances with other companies positioned in different markets, production capacity, innovation and mainly the adaptation of the dynamics of the global business environment (Bahoo, Alon & Paltrinieri, 2020). Another strategy is important is the issue of the selection of markets, where Pineda, Jerónimo, and Carrasco (2012) clarifies that the selection of markets is divided into 3 phases, the first refers to the valuation or preliminary review, consists of identifying the potential markets based on more important macro indicators to be able to meet their goals and for this, there are international organizations that issue information resources on which companies can be based to carry out your internationalization study and make a less risky decision for your business (Muñoz-Cañavate & Fernández-Falero, 2015).

Freight transport services

Thanks to the growing importance of freight transport services in logistics processes, the global trend is now directed towards multimodal transport in all operations of the logistics chain (González, 2013); for a better explanation López-Rodríguez & Rincón (2019) present an example by mentioning that passenger transport has a relationship between the several trips per passenger and the several trips per vehicle; in freight transport, they take advantage of the economy of scale by transporting large quantities of goods in large vehicles; although the problem of cargo logistics is at the national level, since the country's governmental entities do not guarantee the proper management of the freight transport sector and there is no investment of the national budget directed to it (Sharma et al. 2020).

For Arbeláez & Marín (2012) there are four critical success factors in service companies such as transport in the country: i) Cost, ii) quality, iii) time, or ability to meet customer needs in a timely manner and, iv) innovation. And speaking of the social costs of transportation, they are divided into two groups: internal costs and external costs. Internal costs are those borne by users as operating costs, external costs refer to accident costs, infrastructure, etc. (Díaz & Maza, 2011); Another critical cause of external success is security, since the importance of this in the supply chain increases more and more, therefore, in Latin America efforts are constantly made so that companies understand the competitive effects that arise from this scourge (Gutiérrez, 2013).

The activities carried out by freight transport companies must variable and fixed resources; the first are resources such as fuel, tires, maintenance, among others, and the second refers to insurance, bearing taxes, among others (Arbeláez & Marín 2012). For this reason, it must be considered that when internal or external risks existing in the environment of the freight transport service, it is not possible to fulfill a delivery, normally the economic losses are much (López-Rodríguez, Moreno-Martin & Vidal-Cañas, 2018). And these risks increase more when faced with the disadvantages it is necessary to analyze the poor state of the infrastructure of Colombian roads, airports, and ports; they also have a

limited road network, and this leads to a negative impact on competitiveness (Angulo Reyes et al. 2018).

Materials and methods

This research has a descriptive scope, for Hernández, Fernández & Baptista (2014) consists of specifying the properties, characteristics, and profiles of people, groups, processes or other phenomena that are subjected to analysis, that is, they intend to measure or generate a search for information related to the concepts or variables that are the object of study. Likewise, according to Fernández (2016) descriptive research can also be called diagnostic or data collection research, and they are useful to show the dimensions or angles of a phenomenon since the researcher must be able to define or at least visualize what will be measured and on whom the information will be collected, which will be true and at the end you can give an interpretation and check the object under study.

The approach that will be developed will be of a qualitative nature, for Abreu (2012) consists mainly in the description of the qualities of a phenomenon, mainly manifested in the strategy that will allow knowing the facts, processes, structures, and people in their entirety, likewise, who makes qualitative research develops the central problems of his work during the process of this. On the other hand, this approach will allow the researcher to know deeply and with information of a documentary nature the object that is studied having a certain interest in accessing the experiences, the documents, the interactions about it; to the above, Cauas (2015) affirms that qualitative research is mainly based on using exclusively information that allows generating an analysis for achieving detailed descriptions of the phenomena studied.

The technique that will be used for the collection of information is documentary analysis, which focuses according to Peña Vera & Pirela Morillo (2007) on the analysis of data that are embodied in different documents and through these manage to extract their content, which is synthesized to create new documents that facilitate their recovery and dissemination. Likewise, documentary analysis or also called documentary treatment, is a characteristic activity of any library or information center, for identifying, describing and representing the content and the content of documents in a different way from the original, with the purpose of guaranteeing their selective and timely recovery, as well as enabling their exchange, diffusion and use (Dulzaides Iglesias & Molina Gómez, 2004). On the other hand, Batanero & Díaz (2015) affirm that there are two trends of documentary analysis, the first is that it comprises several phases and one of them is the bibliographic description, the second is that it should be considered only as a description of the content and not formal.

Results y discussion

Current situation of freight transport services without the incidence of Covid-19

This section corresponds to a collection of information that gives an account of the reality of freight transport and its impact on internationalization, as opposed to a comparison that expresses numerically the impacts generated by the Covid-19 pandemic in the face of it. That is why, below, Figure 5 presents how Colombia is facing the global competitiveness index in some infrastructure factors for international freight transport and that in accordance with what the Ministry of Transport establishes (2020). This Global Competitiveness Index (IGC) compares 141 countries, giving them scores and positions against various economic sections for the year 2019, and is carried out according to the perception of the World Economic Forum.

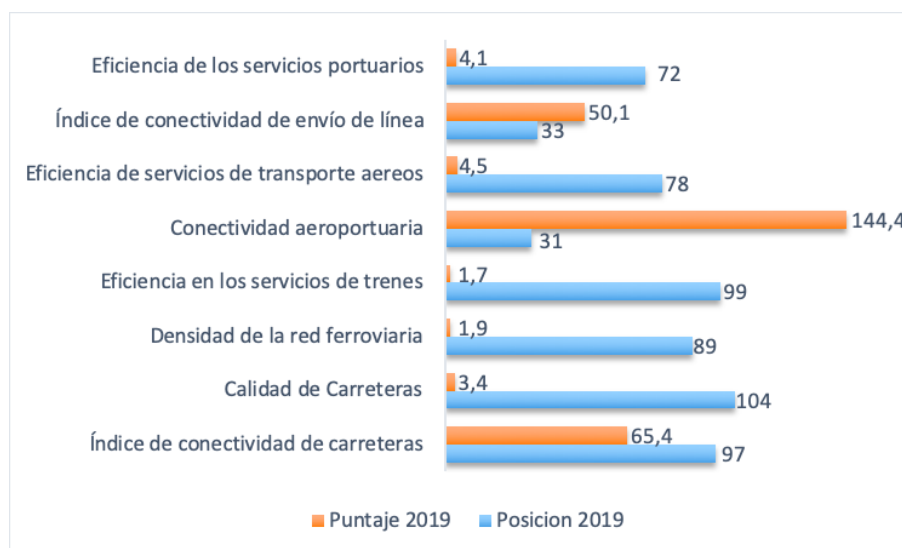


Figure 5

Competitiveness of Colombian infrastructure against the Global Competitiveness Index Source Own elaboration based on the Ministry of Transport 2020

Figure 5. Competitiveness of Colombian infrastructure against the Global Competitiveness Index. Source: Own elaboration based on the Ministry of Transport (2020).

In the face of these statistics, it is worth highlighting some important points; to begin with, port services are analyzed, where the connectivity index cause is a point of relevance and Colombia is in a good place (33) worldwide, but an important challenge is seen, in the efficiency of these same services, where positional it is at number 72; and exactly the same is the case for other forms of international cargo transport; in airport connectivity, it is located in the best place, but in service efficiency at number 78, for the mode of rail and road transport although the same thing happens, the reality is that the country is in a place quite far from the ranking of the first positions, with connectivity positions of 89 and 97 respectively and inefficiency of 99 and 104. There is another measurement variable of much importance worldwide and is the LPI logistics performance index, which according to the Ministry of Transport (2020) for the year 2019 Colombia had the largest variation with a percentage of 12.6% going from place 94 to 58 of 160 economies analyzed, this variable is measured from 1 to 5, where 5 is the highest score obtained and the list is headed by Germany with a score of 4.20. Below is presented in Figure 6, this index for some factors

of the freight transport sector and again there are challenges that the country has inefficiency, in this case of customs and infrastructure management, and that through the document CONPES 3982 of 2020, the national government seeks to improve its competitiveness.

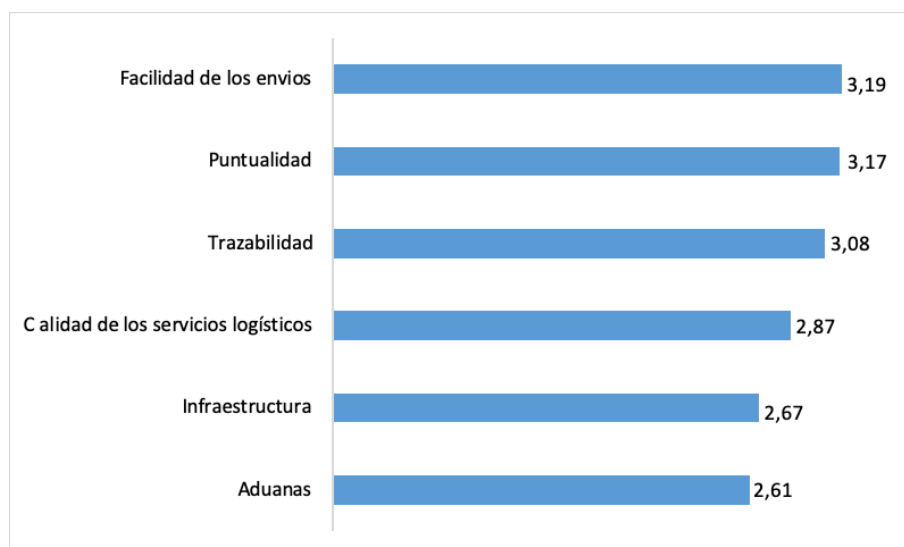


Figure 6

Logistics Performance Index Source Own elaboration based on the Ministry of Transport 2020

Figure 6. Logistics Performance Index. Source: Own elaboration based on the Ministry of Transport (2020).

Talking about the current situation of freight transport services and their impact on internationalization in the city of Bogotá allows us to analyze more specific figures such as those granted by the Ministry of Transport (2020), where it indicates that for the year 2019 a total of 246'989,600 tons were mobilized by road transport, of which 35'004,333 trips were distributed and this is at the national level; if we analyze only those trips whose origin was the city of Bogotá, it is found that in total there are 6'890,569 which indicates that it is 19% of the total loads, to analyze this percentage to the other cities of origin, such as Barranquilla, Medellín, Cali, among others, figure 7 is presented below.

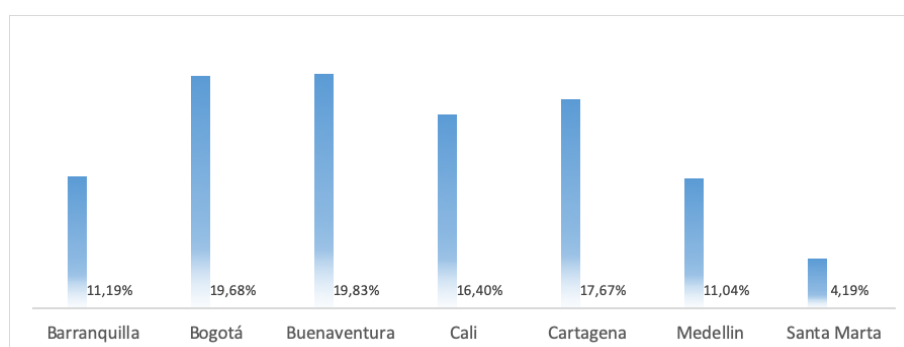


Figure 7

Percentage's cities of the origin year 2019. Source: own elaboration base on transport Minister (2020).

Figure 7. Percentage's cities of the origin year 2019. Source. own elaboration base on transport Minister (2020).

The percentage variable changes a lot if we go from talking about the road mode to the air mode, where according to the figures obtained by the Ministry of Transport (2020), Bogotá assumes the largest transport operators in the country with a total of 724 thousand tons representing 70.1%, followed by Rionegro with 11% and 115 thousand tons transported which immediately gives a perception of the importance of el Dorado airport in cargo transport services; Cali has a representation of 4% Barranquilla of 3% San Andrés of 2%; among others. However, although the percentages are high, the reality is that the totality of air cargo transport or even by road is insignificant to what represents the maritime cargo which transports 97.8% of the country and that is when the city of Bogotá could not be competitively strong in relation to cities with open seas (Directorate of Taxes and National Customs, 2018).

The transport of air thing over the last few years has become an essential axis for internationalization in Colombia and in the world, thanks to its efficiency in operations and its speed to interconnect all countries unlike other modes of transport as reported by López-Rodríguez et al. (2021). this in Colombia is because in the city of Bogotá, logistical, administrative, and structural initiatives have been generated to be able to meet the demand that today has the El Dorado airport since it is now the reference port in Latin America.

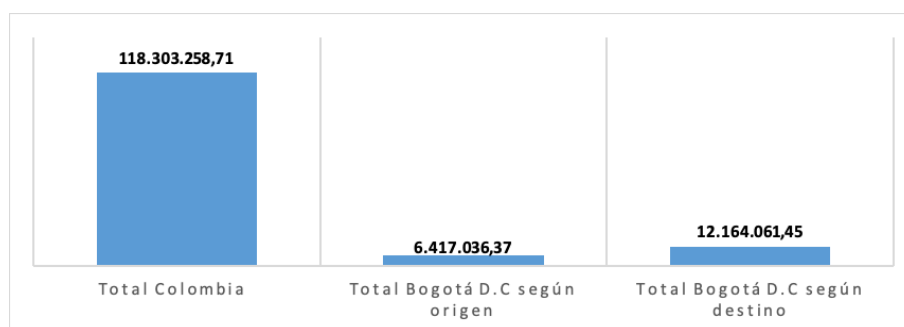


Figure 8

Tons mobilized by the road year 2019 Source own elaboration base on transport Minister 2020

Figure 8. Tons mobilized by the road year 2019. Source: own elaboration base on transport Minister (2020).

Figure 8 provides an understanding of the number of tons moved by road; according to the Ministry of Transport (2020), the total of Colombia was 118'303,258.71, likewise, it allows to see the participation of the city of Bogotá D.C divided into two values: one of them refers to the total of tons mobilized via highway dispatched from the city to different destinations which were 6'417,036.37, and the other value refers to the number of tons that were entered into the city, which recorded 12,164,061.45, managing to find the percentage share that the city of Bogotá D.C had in the total tons mobilized by road in the country, which was 15.70%.

Current situation of freight transport services in Bogotá D.C with the incidence of Covid-19

At the end of 2019 a virus called COVID 19 came to the fore, with which, according to the Ministry of Transport (2020) all countries began to face a situation without precedent, which generated a sudden stop to the economy and all social activities, likewise, it has been evidenced the existence of global threats

and the role that the human being plays in them. Therefore, the government of each country has had to take measures of restriction and prevention, thus generating an impact on commercial transactions and their logistics services, making the global economic recession worrying. In the case of Colombia, both local and national quarantine measures were taken in the same week, an aspect that did not give organizations time to consider changes in the work dynamics of their collaborators (Rodríguez-Rojas, 2020).

In Colombia due to the emergency that is presented, it was decided to create the logistics and transport center which is composed of the Minister of Transport, the Minister of Agriculture, the Minister of Trade, Industry and Tourism, and a delegate of the presidency, this to take measures for the supply of basic necessities; according to the Ministry of Transport (2020) one of the first measures that were implemented was the non-collection of tolls on the concessions and non-concession roads of the country, seeking to make sure that logistics chains such as production, the supply of basic foodstuffs, imports of basic necessities or agricultural inputs so that they could transport them from the different ports of the country to the production centers of Colombia.

This to take measures for the supply of basic necessities; according to the Ministry of Transport (2020), one of the first measures that were implemented was the non-collection of tolls on the concessions and non-commissioned roads of the country, seeking to make sure that logistics chains such as production, the supply of basic foodstuffs, imports of basic necessities or agricultural inputs so that they could transport them from the different ports of the country to the production centers in Colombia. and although the city of Bogotá is the main air cargo carrier in Colombia as shown in Figure 8, it was also affected by the decrease in demand for goods nationally and internationally, as reported by Díaz-Olariaga (2021) air cargo transport in Bogotá and in the country, in general, did not collapse completely thanks to the distribution of medical and basic necessities, however, the 75% capacity restrictions had to be applied and aligned with the number of domestic and international flights imposed by the regulatory bodies.

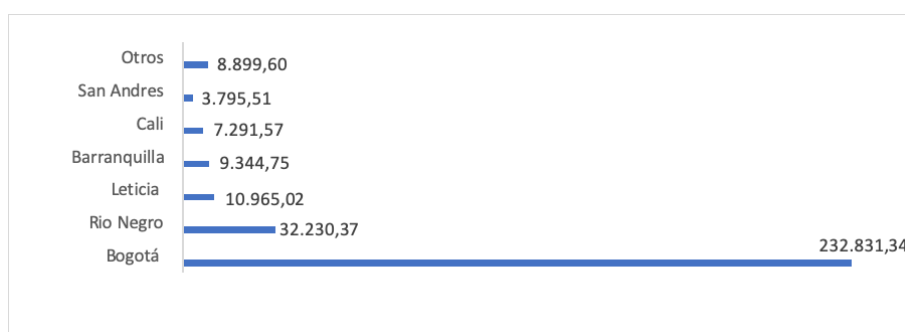


Figure 9

Tons transported by air by 2020 by city Source Own elaboration based on data from the Civil Aeronautics control board 2020

Figure 9: Tons transported by air by 2020 by city Source: Own elaboration based on data from the Civil Aeronautics control board (2020).

Figure 9 shows the number of tons that were transported in the air mode, of which the total is 305,358, from March 19, 2020, which was the date on which confinement began in Colombia, until December 31, 2020. As can be showed,

Bogotá was the largest air cargo carrier with 76%, which indicates that the impact it had on the sector was not as significant at the regional level compared to the other cities (Civil Aeronautics, 2020). The amount of cargo mentioned above, and which is evidenced in Figure 9, refers to only necessities at the international level and at the national level, this is due to restrictions on cargo flights imposed by the national government, Civil Aeronautics and El Dorado Airport.

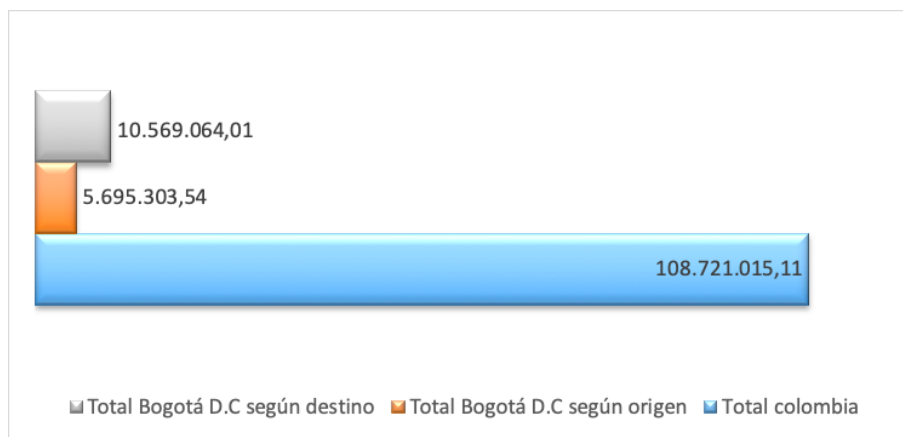


Figure 10

Tons mobilized by the road year 2020 Source Own elaboration based on the Ministry of Transport 2021

Figure 10. Tons mobilized by the road year 2020. Source: Own elaboration based on the Ministry of Transport (2021).

Figure 10 evidence the number of tons mobilized by road in 2020, the country in total mobilized 108'721,015.11 having a decrease of 9'582,243.60 tons with respect to 2019, recorded in Figure 8; the city of Bogotá D.C mobilized 5,695,303.54 tons dispatched to different destinations registering 721,732.83 tons less than the immediately previous year and mobilized 10,569,064.01 tons entered the city, 1,594,997.44 tons less than in 2019 (Ministry of Transport, 2021). Likewise, the city of Bogotá D.C in 2020 reduced its share to 14.95% with respect to the total cargo mobilized via road in the country. In these values, it is possible to see a little clearer the effects that the health emergency that is being experienced around the world, is leaving in the economy and in the different economic sectors of the country and in the different economic sectors.

2020 was a year of varied events and resounding uncertainties, so analyzing the cargo transport services in the city of Bogotá of some exported products implies that through the Bank of the Republic (2021) some economic figures are looked at by quarters, where it is possible to analyze the growth or deterioration of eleven export products according to the incidence of what was experienced during the year and for this purpose two figures number 11 "Export products by quarter 2019 Bogotá" and number 12 "Export products by quarter 2020 Bogotá" are presented below with them a comparison is made between the years described above, according to the needs of the sectors so exports rise or fall.

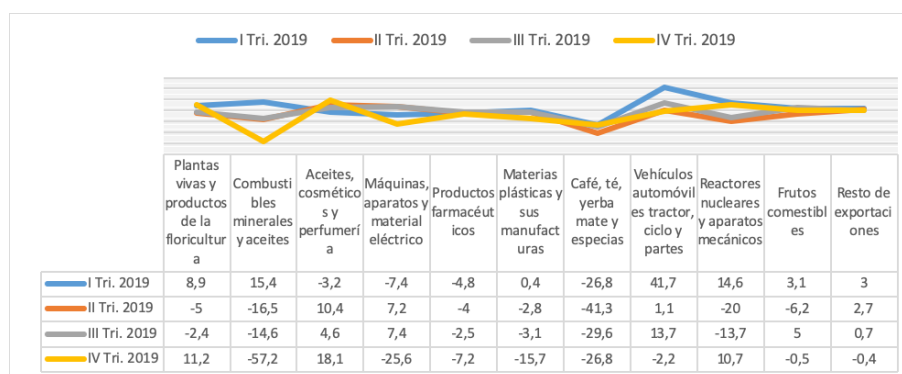


Figure 11

"Export products per quarter 2019 Bogotá" Source: Own elaboration based on figures taken from the Bank of the Republic (2021).

Figure 11. "Export products per quarter 2019 Bogotá" Source: Own elaboration based on figures taken from the Bank of the Republic (2021).

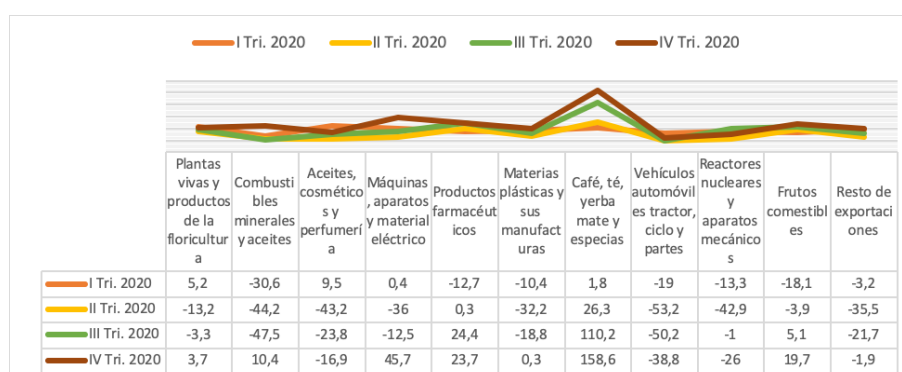


Figure 12

"Export of products by quarter, 2020 Bogotá" Source: Own elaboration based on figures taken from the Bank of the Republic (2021).

Figure 12. "Export of products by quarter, 2020 Bogotá" Source: Own elaboration based on figures taken from the Bank of the Republic (2021).

Compared to Figures 11 and 12, it is essential to compare the information on growth and deterioration of some products of greater incidence; the first are pharmaceutical products that for the year 2019, always presented negative variables reaching in the last quarter a decrease of -7.2% and although for the first quarter of 2020 it reached -12.5%, it begins to show that for the following quarters it has a recovery, increasing external requests for medicines for human use and veterinary use (Banco de la República, 2021) and ensured the growth of 24.4% for the third quarter of 2020, the incidence of the increase in the current year is more than clear because the situation is focused on an epidemic.

The peak of greatest affectation that was shown was in the group of coffee, tea, yerba mate, and spices, which for 2019 only had negative variations reaching -41.3% and for 2020 there is evidence of a dazzling rise to 158.6% and in the face of this situation, the International Coffee Organization (2020) says that since mid-March when the global pandemic COVID – 19 was declared the virus reached all countries creating a global shock and this causes three points of importance in coffee prices, the first is in the stock markets and the volatility of

the same increasing, compared to the tranquility of the export of the product in comparison to other markets that would not suffer the same fate; another aspect is the quality and availability of Colombian coffee in comparison, such as, to the Brazilian product where it had a negative impact because of the pandemic on its production stage and the exchange rate between the Colombian peso and the dollar.

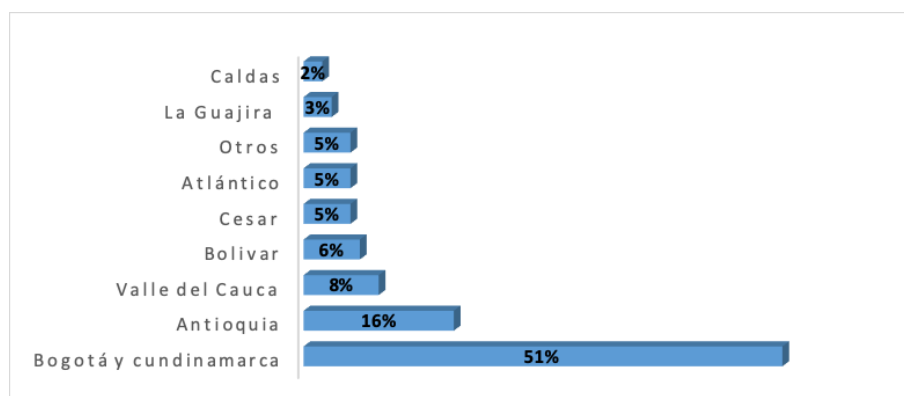


Figure 13

Participation of regions in foreign trade (exports + imports) December 2020. Source: Own elaboration based on data from the observatory of the Chamber of Commerce of Bogotá (2020)

Figure 13: Participation of regions in foreign trade (exports + imports) December 2020. Source: Own elaboration based on data from the observatory of the Chamber of Commerce of Bogotá (2020)

Figure 13 shows the participation of different regions of the country in foreign trade, such as the city of Bogotá and the department of Cundinamarca have the largest participation with 51%, according to data from the Chamber of Commerce of Bogotá (2020), this region turns out to have higher values in foreign trade transactions, since from January 2020 to September of the same year were 21,360 million dollars, however, it was 20% less compared to the same period in 2019, which happened as a result of COVID 19 since restrictions were implemented globally and border closures around the world.

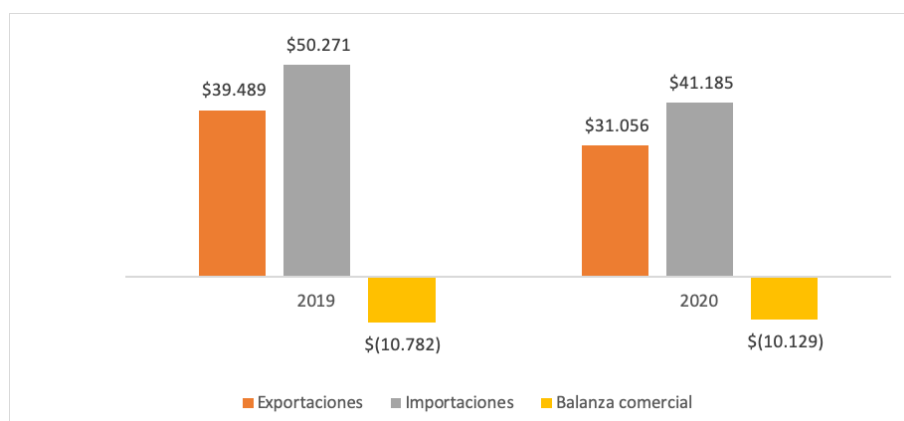


Figure 14

Annual trade balance in USD FOB millions. Source: Own elaboration based on data from the trade balance report issued by the National Administrative Department of Statistics (2021).

Figure 14: Annual trade balance in USD FOB millions. Source: Own elaboration based on data from the trade balance report issued by the National Administrative Department of Statistics (2021).

In Figure 14, Colombia's trade balance can be showed, making a comparison of the year 2019 that was -\$10,782 million FOB dollars, and of the year 2020 that was -\$10,129 million FOB dollars, showing negative values in both years, which according to data from the National Administrative Department of Statistics (2021) shows that Colombia's trade balance has been in deficit since the last 7 consecutive years; although it is true that in 2020 it decreased by 6.1% compared to the immediately previous year, exports and imports of the country also fell much, this is due to the impact of COVID 19 as has been mentioned throughout the research, leaving an uninspiring picture for companies dedicated to foreign trade and to the logistics chain, hitting hard the sectors that are part of it, such as the freight transport sector.

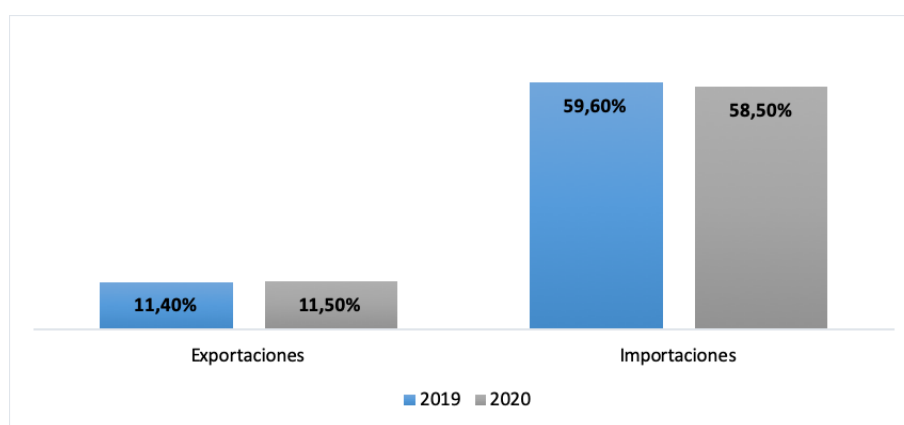


Figure 15

The percentage share of the Bogotá D.C.-Cundinamarca region in the country's exports and imports. Source: Own elaboration based on data in the information: Regional Economic Profiles issued by the Ministry of Commerce, Industry, and Tourism (2021).

Figure 15: The percentage share of the Bogotá D.C.-Cundinamarca region in the country's exports and imports. Source: Own elaboration based on data in the information: Regional Economic Profiles issued by the Ministry of Commerce, Industry, and Tourism (2021).

Figure 15 represents the percentage share of the region of Bogotá D.C.-Cundinamarca in the exports and imports of Colombia, this shows the importance that it has in the foreign trade transactions of the country. As can be seen, Bogotá D.C and Cundinamarca have a greater share in imports than in exports, which indicates that the trade balance of the region is also in deficit and this turns out to have negative economic effects for it, however, the freight transport sector turns out to be benefited due to the demand that is generated by its participation in these two activities of the country.

The pandemic has generated strong negative impacts on the economy of the country and on logistics and freight transport, according to figures from the Ministry of Commerce, Industry and Tourism (2021) land transport is the one that has had the greatest impacts, as it had a reduction of 28% for May 2020 in terms of mobilization of cargo via road. The different economic sectors of the country have had to change the dynamics of their businesses due to the

difficult social and economic situation that is being experienced worldwide due to the pandemic. The freight transport sector has had to work on overcoming the barriers that this phenomenon has imposed on it, emphasizing the high costs of services and the limited supply of operators dedicated to logistics and transport.

Conclusions

Carrying out this study leaves some fundamental points to discuss and analyze, which have been classified into two main sections, the first refers to the correlation between the information obtained by authors who have studied the subject in question versus the reality experienced and/or the application of it in work and professional environment; the second section is conclusions obtained from the results of this article that open inquiries and proposals to future studies and research, understanding that the topic is quite broad and it will be modified given the new technologies and ways of carrying out international commercial transactions, forms of communication and alliances between countries.

To analyze the first section of the correlation between the information of the theoretical framework and the reality of foreign trade in Bogotá, it is essential to remember Giménez (2010) and Pineda, Jerónimo and Carrasco (2012), for whom the activity of internationalization depends on key aspects such as culture and consumption habits, and thus the selection of markets ends up being of utmost importance when exercising this commercial activity, these claims turn out to be valid, if they are taken into the context of the consumption need of the year 2020 worldwide generated by the Covid-19 pandemic and as shown in the results for that year, specifically it was internationalized with pharmaceutical products which had a percentage increase of 36.9% in just three-quarters from 2019 to 2020, which did not happen with technological or leisure objects for the home which showed decreases.

Another clear example of the issue is the exuberant rise in exports of coffee, tea, yerba mate with figures that seem unrealistic, and the drop in automobile sales, which clearly express the need for purchase to remedy the issues of teleworking worldwide; in view of this issue, it is important to mention that data and results were obtained that were totally different from those expected at the time of carrying out the research, since the first impression of the direct impacts of a global pandemic, and with the total closure of many countries, it was expected that the economy and international trade would also end their activities altogether, but this was not the case. , simply foreign trade varied, and the products to be exported or imported were the ones that were altered.

It was also explained that, for Arbeláez & Marín (2012) there are four critical success factors in service companies: i) cost, ii) quality, iii) time and iv) the ability to meet the needs of the client on time; and which if analyzed from the perspective of the incidence of COVID versus logistics in Bogotá. It is established then, that at the beginning of the pandemic all the entrances and exits of the trade were automatically closed so that the capacity to attend timely shipments was affected and although in Bogotá as at the national level the first solution to mitigate the damages, were actions such as exemption from tolls, even so, the cost and delivery times of the products that automatically affected the quality of the same was affected, so in the end, with these four aspects it can be concluded that

they are interconnected and their situation is so strong that the damage in one makes the entire logistics chain not work.

For the second section in which general conclusions and proposals for future studies will be given, note that as shown in the results, now in the cargo and transport services it was found that Colombia has excellent connectivity opportunities regarding internationalization and foreign trade activities. However, extensive work must be done on the issues of efficiency and effectiveness of shipments and quality of infrastructure to make a greater competitiveness index worldwide, and with regard to the pandemic experienced in 2020, in this area, the logistics of freight transport was forced to make a significant change in its rules; which leaves as a possible topic of research in the future to know if this change helped to favor or disadvantage this work, as well as it is important in the future to know what are the possible failures for the low scores in the matter of question. Y como el tema clave de esta investigación es la logística del transporte de carga en Bogotá D.C, it is important to close in turn how over the years the capital has grown and gained great importance within the logistics chain of companies for the distribution and internationalization of their products. And while it is true that the city of Bogotá moves the largest amount of air cargo because it has the largest airport nationwide and the port of reference in Latin America, it should also be taken into account that being the city that receives more imported products at the national level, this must be complemented by good land transport and already turns out to be a multimodal transport operation, it is important to analyze why the conditions of the roads, the high costs of tolls and the restrictions imposed by government entities end up decreasing efficiency and increasing the prices of the service, resulting in low competitiveness in the national and international market.

To end with this investigative work, it is intended to lead the reader to believe that although it is true that although there is already some ways labor speaking in the logistics chain of the internationalization process, this episode worldwide showed that everything can change or very and although no one expected this event that generated havoc in the global economy and in general in many aspects of the trade, the truth is that only those who are constantly evolving and changing are the ones who manage in the end to overcome any type of situation, such as the Covid-19 pandemic.

References

- Aeronáutica Civil (2020). Tablero de control operacional aeronáutico COVID-19. Recuperado de <https://www.aerocivil.gov.co/prensa/Pages/Tablero-de-Control-Operacional-Aeron%C3%A1utico-COVID-19.aspx?PagePreview=true>
- Abreu, J. (2012). Hipótesis, método & diseño de investigación (hypothesis, method & research design). *Daena: International Journal of Good Conscience*, 7(2), 187-197.
- Angulo Reyes, L., Figueroa Jiménez, A., Gambin García, C., & Jiménez Chávez, A. (2018). Impacto del transporte internacional en el desarrollo económico de Colombia. *Liderazgo Estratégico*, 8(1), 3-17.
- Arbeláez, L., & Marín, F. (2012). Sistema de costeo ABC aplicado al transporte de carga. *Revista Universidad EAFIT*, 37(124), 10-20.

- Arroyave, S. T. (2012). Internacionalización de la PYME Latinoamericana: Referente para el éxito empresarial en Colombia. *Revista Ciencias Estratégicas*, 20(27), 119-132.
- Bahoo, S., Alon, I., & Paltrinieri, A. (2020). Corruption in international business: A review and research agenda. *International Business Review*, 29(4), 101660.
- Banco de la República. (2021). Boletín Económico Regional: Bogotá, IV trimestre de 2020. Recuperado de <https://www.banrep.gov.co/es/boletin-economico-regional-bogota-iv-trimestre-2020>
- Batanero, C. & Díaz, C. (2015). Aproximación informal al contraste de hipótesis. *Didáctica de la Estadística, Probabilidad y Combinatoria*, 2, 207-214.
- Becerra, D. P. (2010). La globalización y el crecimiento empresarial a través de estrategias de internacionalización. *Pensamiento & gestión*, (28), 171-195.
- Botero Pinzón, L. D. (2014). Internacionalización y competitividad. *Revista Ciencias Estratégicas*, 22(32), 187-196.
- Cámara de Comercio de Bogotá (2020). Impacto del Covid-19. Recuperado de: <https://www.ccb.org.co/observatorio/Economia/Economia-dinamica-incluyente-e-innovadora/Impacto-del-COVID-19>
- Castiblanco-Moreno, S. E., Castro-Castell, O. P., & Gómez-Ramírez, A. P. (2017). Sector servicios en Colombia: La relación entre Innovación e Internacionalización. *Dimensión Empresarial*, 15(2), 117-139.
- Cauas, D. (2015). Definición de las variables, enfoque y tipo de investigación. *Bogotá: biblioteca electrónica de la universidad Nacional de Colombia*, 2, 1-11.
- Cavusgil, S. T., Deligonul, S., Ghauri, P. N., Bamiatzi, V., Park, B. I., & Mellahi, K. (2020). Risk in international business and its mitigation. *Journal of World Business*, 55(2), 101078.
- Córdoba, G. M., Rodenes, M., & Rueda, G. E. (2016). La internacionalización de las empresas exportadoras. Estado de la cuestión. *Revista Lebret*, (8), 127-147.
- Díaz-Olariaga, O. (2021). Contribución del transporte aéreo a la conectividad territorial. El caso de Colombia. *EURE (Santiago)*, 47(140), 117-141.
- Dirección de Impuestos y Aduanas Nacionales (2018). Estadísticas de Carga de las Importaciones y Exportaciones en Colombia Enero – junio 2018/2017. Recuperado de: <https://www.dian.gov.co/dian/cifras/CargaImpExp/Estad%C3%ADsticas%20de%20Carga%20de%20las%20Importaciones%20y%20Exportaciones%20en%20Colombia%20Enero%20-Jun%202018.pdf>
- Departamento Administrativo Nacional de Estadística (2021). Balanza comercial anual. Recuperado de <https://www.dane.gov.co/index.php/estadisticas-por-tema/comercio-internacional/balanza-comercial>
- Departamento Administrativo Nacional de Estadística (2020). Boletín técnico importaciones (IMPO) abril 2020. Recuperado de: https://www.dane.gov.co/files/investigaciones/boletines/importaciones/bol_impo_abr20.pdf
- Díaz, L. G. M., & Maza, V. M. (2011). Evaluación de los parámetros de las funciones de costo en la red estratégica de transporte de carga para Colombia. *Ingeniería y Desarrollo*, 29(2), 286-307.
- Dulzaides Iglesias, M. E., & Molina Gómez, A. M. (2004). Análisis documental y de información: dos componentes de un mismo proceso. *Acimed*, 12(2), 1-1.
- Fernández, P. (2016). Acerca de los enfoques cuantitativo y cualitativo en la investigación educativa cubana actual. *Atenas*, 2(34), 1-15.

- Gálvez-Albarracín, E., Reyes-Velasco, M., & Rodríguez-Orejuela, A. (2018). Efecto de la orientación emprendedora en las exportaciones de las empresas colombianas. *Revista Económicas CUC*, 39 (1), 27-40.
- Ghuri, P., Strange, R., & Cooke, F. L. (2021). Research on international business: The new realities. *International Business Review*, 30(2), 101794.
- Giménez, A. O. (2010). La internacionalización de la empresa española y la decisión de exportar como solución a la crisis. *Revista de Sociales y Jurídicas*, 1(6), 88-111.
- González, L. R. (2013). Las vías fluviales, infraestructuras y puertos: la industria del contenedor, sus aportes al transporte multimodal, visión en Colombia. *RHS-Revista Humanismo y Sociedad*, 1(2), 162-167.
- Gutiérrez, O. (2013). El ciclo económico del transporte de carga terrestre carretero en Colombia. *Criterio Libre*, 11 (18), 125-154.
- Hernández, R., Fernández, C. y Baptista, P. (2014). Metodología de la investigación. Ciudad de México: McGraw Hill.
- Jaén, J. M., Marín, M. T. & Ortiz, M. D. (2020). Repercusiones sobre las empresas de sus actuaciones socialmente responsables ante la pandemia generada por el COVID-19. *Revista hispanoamericana de Historia de las Ideas*, (46), 1-11.
- López-Rodríguez, C. E., Ligarreto, J., & Lombana, E. (2019). Realidades y determinantes de la internacionalización de servicios: una mirada a las organizaciones de Bogotá, Colombia. *Espacios* 40(4), 29-41.
- López-Rodríguez, C. E., & Neme-Chaves, S. R. (2021). El employer branding en las organizaciones que internacionalizan servicios de operación logística en Bogotá Colombia. *Contaduría y Administración*, 66(2), 1-22.
- López-Rodríguez, C. E., Moreno-Martin, D. V., & Vidal-Cañas, J. X. (2018). Las agencias de carga y los servicios de transporte en el comercio internacional de Bogotá. *Ensayos de economía*, 28(53), 141-164.
- López-Rodríguez, C. E., & Rincón, S. D. (2019). El transporte de carga terrestre en el comercio internacional. Análisis comparativo entre Bogotá, Colombia y Santa Cruz de la Sierra, Bolivia. *Ensayos de Economía*, 29(54), 89
- López-Rodríguez, C. E., Tique-Muñoz, L. D., Sánchez-Méndez, J. V., Ramírez-Duque, L. F., & Mosquera-Martinez, D. A. (2021). Realidades del transporte de carga aérea en Bogotá y su incidencia en el comercio internacional. *Revista Investigación, Desarrollo, Educación, Servicio y Trabajo*, 1(1), 74-92.
- Ministerios de Comercio, Industria y Turismo (2021). Perfiles económicos y comerciales por departamentos. Recuperado de <https://www.mincit.gov.co/estudios-economicos/perfiles-economicos-por-departamentos>
- Ministerio de Hacienda y Crédito Público (2016). Decreto 390 de 2016, Título III, Capítulo II, sección II, Artículo 68, pág. 45. Recuperado de https://www.dian.gov.co/atencionciudadano/infoconsulta/Estatuto%20Aduanero/Decreto_390_del_07de_Marzo_de_2016.pdf
- Ministerio de Transporte (2021). Registro Nacional de Despachos de Carga por carretera (RNDC). Carga movilizada por carretera. Recuperado de: <https://plc.mintransporte.gov.co/Estad%C3%ADsticas/Carga-Modo-Terrestre/Carga-Movilizada-Carretera-RNDC>
- Ministerio de Transporte (2020). Transporte en cifras vigencia 2019. Recuperado de: <file:///C:/Users/ASUS/Downloads/TransporteEnCifras-Estadisticas2019.pdf>.
- Monsalve, N. E. (2016). La internacionalización de las empresas de servicios informáticos en Colombia. *Revista Conciencia Empresarial*, 2(5), 75-92.

- Muñoz-Cañavate, A., & Fernández-Falero, R. (2015). La Inteligencia Competitiva en los procesos de internacionalización empresarial. Una guía de recursos de información para la empresa española y el periodismo económico. *Documentación de las Ciencias de la Información*, 38, 39.
- Organización Internacional del Café. (2020). Precios volátiles del Café: Covid-19 y factores fundamentales del mercado. Recuperado de: <http://www.ico.org/documents/cy2019-20/coffee-break-series-2c.pdf>
- Peña Vera, T., & Pirela Morillo, J. (2007). La complejidad del análisis documental. *Información, cultura y sociedad*, (16), 55-81.
- Pinzón, L. D. (2013). La internacionalización más allá de la exportación: Necesidad de instrumentos de evaluación y gestión internacional en la empresa. *Revista Ciencias Estratégicas*, 21(29), 7-11.
- Pineda, J. M., Jerónimo, M. R., & Carrasco, R. V. (2012). La Selección de Mercados Preferentes como Clave en la Internacionalización Empresarial (The selection of preferential markets as a key for business internationalization). *Tec empresarial*, 6(1), ág-21.
- Rodríguez-Rojas, Y. L. (2020). COVID-19 (coronavirus): un peligro emergente que requiere abordaje en las organizaciones. *SIGNOS-Investigación en sistemas de gestión*, 12(2), 9-11.
- Sharma, P., Leung, T. Y., Kingshott, R. P., Davcik, N. S., & Cardinali, S. (2020). Managing uncertainty during a global pandemic: An international business perspective. *Journal of business research*, 116, 188-192.