

Analysis of imports of mobile telephony equipment to Peru, periods 2017-2021

Análisis de las importaciones de equipos de telefonía móvil al Perú, períodos 2017-2021

Análise das importações de equipamentos de telefonia móvel no Peru, períodos 2017-2021

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ABSTRACT

To maintain an optimal level of storage, organizations need to have different providers around the world, since this allows them to acquire equipment from the best brands and at more attractive prices that allow them to increase their profitability. The objective of this article was to analyze the impact of imports of mobile phone equipment on the national economy of Peru during the period 2017-2021, taking into consideration the four (04) main importing companies in this category. The methodology used was descriptive, with a non-experimental design, whose results have been favorable for the national economy through tax collection through SUNAT, which has allowed a better distribution of wealth within the country. In addition to promoting employment to various families dedicated to this area, concluding that it is important to manage the optimization of import costs, in addition to commercial innovation for a better distribution of mobile telephone equipment at the national level, maintaining and strengthening relationships bilateral and multilateral agreements with the nations that have signed free trade agreements.

Keywords: Import, FOB value; Ad Valoren.

RESUMEN

Para mantener un nivel óptimo de almacenamiento las organizaciones necesitan contar con diferentes proveedores en todo el mundo, puesto que esto les permite adquirir equipos de las mejores marcas y a precios más atractivos que les permita aumentar su rentabilidad. El objetivo del presente artículo consistió en analizar el impacto de las importaciones de equipos de telefonía móvil en la economía nacional del Perú durante el período 2017-2021, tomando en consideración a las cuatro (04) principales empresas importadoras de este rubro. La metodología utilizada fue de tipo descriptivo, con diseño no experimental, cuyos resultados han sido favorables para la economía nacional a través de la recaudación fiscal por medio de la SUNAT, lo que ha permitido una mejor distribución de la riqueza en el interior del país, además de propiciar el empleo a diversas familias dedicadas a este rubro, concluyéndose que es importante gestionar la optimización de los costos de importación, además de la innovación comercial para una mejor distribución de los equipos de telefonía móvil a nivel nacional, manteniendo y fortaleciendo las relaciones bilaterales y multilaterales con las naciones que se tienen suscritos los tratados de libre comercio.

Palabras clave: Importación, valor FOB; Ad Valoren.

RESUMO

Para manter um nível ótimo de armazenamento, as organizações precisam ter diferentes fornecedores em todo o mundo, pois isso lhes permite adquirir equipamentos das melhores marcas e a preços mais atraentes que permitem aumentar sua lucratividade. O objetivo deste artigo foi analisar o impacto das importações de equipamentos de telefonia móvel na economia nacional do Peru durante o período 2017-2021, levando em consideração as quatro (04) principais empresas importadoras desta categoria. A metodologia utilizada foi descritiva, com desenho não experimental, cujos resultados têm sido favoráveis para a economia nacional através da arrecadação de impostos através da SUNAT, o que tem permitido uma melhor distribuição da riqueza dentro do país, além de promover emprego a diversas famílias dedicadas à nessa área, concluindo que é importante gerenciar a otimização dos custos de importação, além da inovação comercial para uma melhor distribuição dos equipamentos de telefonia móvel em nível nacional, mantendo e fortalecendo as relações acordos bilaterais e multilaterais com as nações que assinaram o livre comércio acordos.

Palavras-chave: Importação, valor FOB; Ad Valoren.

I. INTRODUCTION

Imports and sales are economic activities of vital importance to achieve the growth of organizations, which depends on the type of management of strategic management, because that will provide the necessary technical support for the selection of reliable suppliers, who must have the necessary guarantees to be able to conclude the negotiations during the signing of the international sales contract, which will help companies to achieve their planned goals within the strategic map, allowing them to continue competing and gaining greater market share.

In the international environment, Guillin and Suarez (2022) point out that the telecommunications sector in Ecuador represents a business opportunity, especially with the importation of technological equipment such as cell phones, tablets and other electronic devices, which enable the communication system. However, the Ecuadorian cell phone manufacturing industry is still incipient, which is why most of these devices must be imported, thus affecting the country's trade balance. In this context, the importation of cell phones and other computer equipment has seen an increase in the final sale prices, discouraging the intention to buy in formal markets, since their costs were up to 50% and 70% higher than in neighboring countries such as Peru and Colombia. Similarly, Ulloa-Barre et al. (2021) mentions that the COVID-19 pandemic resulted in various obstacles such as delays in production and delivery of products in international trade, due to the fact that import activities were interrupted, where each of the countries established protocols for sanitary measures, such as quarantine in port facilities. According to the Inter-American Bank, Giordano (2021) reported that it is estimated that total imports in the region fell at an annual rate of 19.0% in 2020, which speaks of the growing contractions of the activity in different countries of Latin America and the Caribbean as a result of the sanitary emergency and the economic impact of the policies implemented to contain it. That is why it is reflected in the increase in the value of maritime freight is the so-called "container crisis", ie, an unusual shortage of space available to transport products from Asia to the West, delaying imports of goods and services in the various countries of Latin America.

In Vietnam, Ngoc and Binh (2019) pointed out that at the level of the electronics industrial sector of generation 4.0, the country has an inconsistent structure, as well as dependence on imports for production, coupled with the lack of unified government control, among other reasons that affect competitiveness and efficiency, due to the low added value it generates, more so, considering that according to a study by the International Labour Organization (ILO), Vietnam is ranked 99th out of the top 100 electronics enterprises globally. According to the authors Nicolas et al. (2018) they mention that in most major U.S. cities, at least half of all robberies involve the theft of a cell phone. Nearly 60% of all robberies in San Francisco involved a smartphone in 2013. In neighboring Oakland, the numbers are even more dramatic. The Oakland Police Department estimated that 75% of street robberies in Oakland involved a cell phone. Cell phones have become so valuable that a whole underground economy has sprung up around them. It's a world hidden in plain sight where stolen phones are trafficked across borders like drugs and shipped to the far corners of the world. Smuggling therefore generates prices that are difficult to match and impacts the sales of companies in different sectors. The price differential between goods produced by domestic industry or formally imported versus those imported through smuggling is currently significant.

At the national level, border smuggling between Peru and Bolivia represents an illegal activity that many of the companies practice, because the import costs are very high and therefore seek faster access and lower cost, but with the risk that such goods are retained in customs and generate a lasting negative impact on the economy of the organization (Ruiz, 2020). On the other hand Reyes, (2020) states that currently due to the excess of requirements to be able to import established in the D/S 019-2019 in our country has caused companies to reduce imports of mobile devices which has generated a rise in prices in terms of these teams. According to the National Institute of Statistics and Informatics-INEI reported that in 2020 the total volume imported fell by 13.65% compared to 2019, being generated by the closure of production at the international level due to the pandemic, which caused companies to fail to achieve the projected sales in that economic period. It is also appreciated that in the country there is an inadequate port infrastructure in some strategic points, which causes risks of maritime cargo for several years, because it reduces efficiency in the logistics process, which causes importing companies to be affected in the delay of delivery times of purchased goods, according to (COMEXPERU, 2022).

According to Espinoza (2018) determined that the situation in many remote areas of the capital of Lima 75% of citizens still do not have any mobile service. Also, telecommunications operators do not focus

on bringing coverage to more populated centers, therefore cell phone importing companies are affected by the disinterest of telecommunications operators, also in the international purchase affected their sales and profits specially to importing companies that are newly incorporated in international markets. For this reason, it was considered as the main objective to determine the impact of imports on the sales of telecommunications companies in Peru, 2017-2021. For this reason, it was considered as research hypothesis: H_i : There is a significant impact of imports on the sales of telecommunications companies in Peru, 2017-2021. H_0 : There is no significant impact of imports on the sales of telecommunications companies in Peru, 2017-2021.

The present work is justified in four aspects: in social, practical, methodological and theoretical, since imports is fundamental in a country as it allows acquiring the products not made in the country of origin, with higher price attractiveness and superior quality; so that it contributes to the growth and welfare of a country (Quang 2016). The social justification Bjorn (2014) of the present work is imports, since this allows companies to increase their sales, which, will generate more employment for people, since in this way it contributes with the increase of their incomes and thus to solve their household expenses.

Likewise, there was the practical justification Timomms & Baisau. (2013), because through the results obtained in the study it is proposed to implement measures such as: comply with customs regulations, have sanitary protocols, among other measures to improve sales in international trade. In addition, we had the methodological justification, Basias & Pollalis (2018) where descriptive non-experimental research with a quantitative approach was used.

Likewise, data were collected through documentary analysis, Metzler, statistical reports extracted from the virtual platform of the tax administration, since this allowed measuring the importation of cell phones by Peruvian companies (2014). The data was also collected through documentary analysis, Metzler, of the statistical reports extracted from the virtual platform of the tax administration, since this allowed measuring the importation of cell phones by Peruvian companies. followed by the theoretical justification, since it was considered the classical theory of absolute advantage devised by Smith (1776) this allowed us to give greater objectivity to our variables, since it mentions that the countries that export and import one or another good depending on the productivity with which it generates it, highlighting the importance of free trade.

In addition we can mention that the Ricardian theories of comparative advantage that were developed by Ricardo (1821) reinforces the research, since this model or theory argues that an economy exports goods intensive in its most abundant factor of production, while importing goods intensive in its scarcest factor of production. In addition, Haberler's opportunity cost theory was also used (1936) because through this approach we can give the necessary importance to the comparative advantage within organizations, since it explains that the country that has a lower opportunity cost will increase its imports and thus, companies increase their sales and improve their profitability.

II. THEORETICAL FRAMEWORK

Within the international background, the contribution of Masabanda and Salazar has been considered. (2022)The objective of this research was to evaluate the socioeconomic impact of the restrictions imposed on the importation of mobile devices in Ecuador, for the development of this research they chose to work with a qualitative approach that allowed to detail the variables and the analysis of the specific characteristics found, obtaining as a result that the impact generated in the economy of the country, after the imposition of tariff restrictions, was negative, since the importation of cellular equipment decreased by 8% which meant the reduction of the supply of these goods. He concluded that the government should analyze the opening of the national market to more telephone companies to create a fair and equitable competition and design strategies to help minimize the economic impacts due to the restrictions imposed on free trade.

According to IndexBox (2021) aimed to analyze the market, trends and information about mobile phones according to digital and government sources, using media such as reports and statistical data, according to the results mentioned that in the first seven months of 2021, US mobile phone imports reached \$29 billion, 21% more than the figures for the same period in 2020. The U.S. is the world's leading importer of mobile phones. Last year, US imports fell by -9.5% year-on-year to \$49.5 billion. China remains the largest exporter of mobile phones to the US and provides 79% of US imports in value terms. I conclude that

in physical terms, China was the largest supplier of mobile phones to the US, with a 74% share of total imports in 2020.

According to Khrustalev and Slavyanov (2019) the research aimed to analyze the dependence of the Russian economy on imports. The methodology used in this research is a quantitative approach. The main types of negative factors that pose technological threats to the innovative development of the economy were obtained as a result, i.e. it was found that Russian machine-building due to some reasons, Russian manufacturers have not yet been able to offer high quality products to Russian consumers. We came to the conclusion that the import substitution program has not yet worked as it was supposed to. In some cases, the reproduction of foreign equipment even aggravates the situation, inhibiting technological development and advancement.

Rodriguez and Zuñiga (2018) had as main objective to analyze consumer behavior after the implementation of restrictions on the importation of mobile phones both warranty and import quotas of mobile phones existing since 2012; the methodology used was non-experimental design and with a quantitative approach. Obtaining as a result that the measures introduced by the government, affect not only the consumption or purchase of mobile devices, but also the consumption of telephone services and therefore the results of the companies that provide them. It was concluded that import duties and safeguard duties did not show a negative impact on Ecuadorian consumers, since the time series maintained the trend set historically, i.e., sales fell in January and recovered normal levels from February, reaching its peak in December.

Li (2018) aimed to determine the influence of global brands and the relationship between the intention to Import, using two countries of origin of brand between the Chinese and American block. For this, they used Correlational methodology and mixed quantitative-qualitative approach, they collected data from a sample of 759 consumers through questionnaires from three major cities in China, Beijing, Shanghai and Guangzhou. The results reveal that the construct of global brand factors is positively related to both perceived face and purchase intention The questionnaire survey in this study was conducted via the Internet in early September 2015 and the effective response rate was 57%, leaning on global mobile brands, being either domestic or imported brands. It concluded that Chinese consumers prefer foreign sounding brands to Chinese ones. This study introduced a global brand factor construct to test the effects of Chinese global brands. Consequently, they verified that Chinese consumers also prefer Chinese brands with globality. Therefore, not only foreign companies, but also Chinese companies should create global brands or high-quality brands to win consumers in China's competitive market.

Narea (2016) proposes in his research as a general objective to design a strategy to counteract the effects of the application of tariff safeguards on imports of cellular housings. The methodology used to develop the work is descriptive, with quantitative and qualitative analysis, product of information collected from official agencies and the company Carcasas S.A. The final result is that the company has not been affected with the application of safeguards because it applied a strategy that increased profitability in the flagship product. The final conclusion of this Special Title Work is that the company Carcasas S.A, is that sales decreased from 4.1 to 2.5 million, from 2013 to 2016 and costs decreased from 3.6 to 1.7 million from 2013 to 2016.

Garcés (2014), in his critical review of the postulates of international trade took as a reference the countries of Peru and Colombia, with the aim of carrying out a simple exercise of empirical validation of the classical theories of international trade: absolute and relative advantages, where both nations presented similar economic structures in terms of marketing homogeneous products, such as: oil, gold, chicken meat and oranges, obtaining comparative results on the varied productive capacity of each country, concluding that there is a theoretical support that reinforces such statistical information, being necessary to recognize that in parallel there is a conflict of interests in the government and direction of production, which does not necessarily obey the doctrine of international trade.

In the thesis of Choroco (2021), it was aimed to determine the evolution of this the variable of imports of consumer goods in the framework of free trade agreements of Peru with China, during the period of 2016 - 2020, obtaining statistical results that show a positive trend in imports of cell phones from China, registering in 2018 the largest amount of imports valued at \$ 1,003.00 million US dollars, thus concluding that Peru is demonstrating that it is a country with an economy that is growing and greater demand for non-durable goods.

Gutierrez and Sanchez (2021) aimed to analyze the behavior and opportunities of the mobile devices market. The methodology consisted of quantitative research, with a non-experimental design, conducted with a sample of the population based on information. Thus, it was obtained as a result that the global import market grew, 14.2%, between 2014 and 2019, reaching an average annual rate of 3.37%, an attractive rate for new investments. And concludes that the import market contributes to business in the city of Iquitos, as it helps to determine the countries from which the mobile device will be acquired and thus follows the entire import process to be studied, with its various commercial, financial and logistical aspects.

Reyes (2020) The objective of this study was to analyze how non-tariff barriers affect imports of mobile phones from China to Peru in 2019. An applied type study was used and was developed with a qualitative and descriptive approach. Obtaining as a result that, trade policies, such as customs and technical regulations, have an impact on importers at the time of nationalization of goods. Concluding that the rules imposed by the MTC have severely affected importers of mobile phones, through logistics costs, documentation and volume, creating a competitive disadvantage, limiting the scope of imports of mobile phones, causing a loss of import culture, resulting in the elimination of domestic companies and increased informal activity (smuggling).

Campos and Olaya (2020) had as objective to determine the proposal of importing basic cell phones from China for the company Casa Móvil EIRL, province of Sullana-Piura, they used a descriptive level of research, where the processes, costs and benefits of importing basic cell phones from China to Peru were described. The result was that CASA MOVIL EIRL must have technical specifications that describe the commercial name of the product, its composition, weight, packaging, cost of the equipment, the political/legal norms of importation and the applicable taxes and duties. It is concluded that the costs that will be incurred during the import process are customs and tax costs, material costs, customs payments and logistics costs. In this way, any timely payment made at the right time will ensure that the import of the goods arrives at destination or the importer's warehouse which is Casa Móvil EIRL.

Chavez and Bautista (2018), aimed to determine the existence of information asymmetry in the price and quantity of imported Smartphone covers and protectors in the province of Cajamarca. The method used to develop their research is the deductive and analytical method, applying the survey to determine the existence of equality in the variances, they obtained as results the sales record of an average of 2.75 protectors per person per year, however, what a buyer on average acquires is 3.37 protectors per year. In terms of quantities of micas, the seller indicates that he sells 3.06 micas per person per year, while the buyer states that he acquires 4.31 micas per year. They concluded that there is an asymmetry of information in the quantity of micas and protectors for smartphones in the province of Cajamarca; and in the price of the micas there is also asymmetry of information, however, as for the price of the protectors there is no asymmetry of information, because the buyer is the one who manages the information thanks to the existing competition.

The "neoclassical synthesis of the theory of international trade", in which the author Smith (1776) argues that countries tend to specialize in the production of those goods in which they have absolute advantage, which happens mostly because of the efficient management of resources in production, through economies of scale. This approach shows that countries that do not promote the production or manufacture of certain products that are indispensable for the subsistence of their citizens are condemned to import goods in order to face the economic crisis.

Also in "The Theory of Opportunity Cost" the author Ricardo (1821) mentions that they are the fundamental relations existing between two trading entities. In a way, it is a branch of the theory of exchange, the labor factor in different countries and different classes, can be assumed similar, On the contrary, if the wages paid in different countries for the same classes of labor factor were different, this wage difference (being, for example, especially low in a country where there is an abundant unskilled labor) causes the production of certain goods at a lower cost in monetary terms than its competitors.

Therefore, competition directly benefits the consumers or users of the service, and consequently all the actors of the market especially the importing companies and that motivates the Peruvian state to regulate the market so that competition is created and there is no position of dominance on the part of one of the participants.

In relation to the concept of variables we have the variable Import that according to SUNAT (2017) defines imports as the entry of goods into the national territory from the foreign part legally in order to use or market them. The foreign trade dictionary of Argentina Mardelplata, (2022) defines it as the legal introduction of merchandise for use or consumption in a customs territory.

EAFIT University (2018) describes imports as the customs regime by which imported goods can enter into free circulation within the customs territory, upon payment of import duties and taxes and compliance with all necessary customs formalities.

With respect to the dimensions of the Import variable, we have the CIF Value, according to Villalobos (2022) There are 11 INCOTERM terms and one of them is this one, whose initials stand for Cost, Insurance and Freight, which means that the price agreed between seller and buyer must include the cost of the goods, the amount of international freight and the amount of the insurance premium.

Next we have the Ad Valorem that for the MEF (2022) *The ad-valorem* tariff is the one that is calculated as a percentage of the CIF import value, that is, of the CIF value of the import including cost, insurance and freight.

As a legal basis in our research work we have considered the World Trade Organization, as the only international organization that deals with global standards that regulate trade. In the same way we have considered Articles 12 and 63 of the Political Constitution of Peru of 1993, where it is mentioned that the State guarantees the freedom of foreign trade in Peru.

III. METHODOLOGICAL STRATEGIES

The approach used for this article was quantitative, because it facilitated the analysis of numerical characters containing statistical information from the sources consulted and analyzed, so that their variables can be measurable at the time of establishing financial indicators (Hernández and Mendoza, 2018).

In addition, it was considered as a type of applied research, because it was oriented to cover a specific need through the use of methodologies, protocols and technologies, with the purpose of determining the research tools that best fit the research objective. According to Baena (2017), it "concentrates its attention on the concrete possibilities of putting general theories into practice, and directs its efforts to solving the needs posed by society and men" (p,18).

The present research is of descriptive type, with non-experimental design, since it does not perform intentional manipulations of the variables, what is done is to observe the phenomena and describe or characterize them as it is present in reality. According to Hernández and Mendoza (2018) "is that study that does not intentionally vary the independent variable to determine its effect on other variables, it is only necessary to observe the phenomena as they occur in their natural context, in order to analyze them" (p. 174).

The population consisted of companies engaged in the importation of cell phones in Lima. Data and documents were taken based on statistical data of events elapsed between the years 2017-2021 from reliable sources such as SUNAT. For Hernandez and Mendoza (2018) the population is the universe of people, animals, objects or measures that make up the unit of research, the same that is composed of the same common characteristic elements that are observable and that are distributed in a place and at a given time (p, 198).

According to Ñaupas et al. (2014) the sample is the subset, or part of the universe or population, selected by various methods, but always taking into account the representativeness of the universe, which is why our sample is composed of the same data assigned in the population.

The technique used in this research was the documentary analysis technique, since postfactual data were analyzed, since they occurred before the elaboration of this work. According to Baena (2017) mentions that documentary analysis is a general research technique whose purpose is to obtain data and information from documentary sources in order to be used within the limits of a particular research, it was also decided to use as an instrument in this research the documentary guide, where Hernandez and Mendoza (2018) mentioned that the documentary guide offers a historical and bibliographical panorama of the subject under study that will allow a wide vision of the reality in terms of research areas.

At the beginning of the investigation, the process for the election of the topic was by the affinity that has with our professional career in international trade, specifically in the area of imports of mobile telephony, then, we proceeded to narrate the introduction and develop the theoretical framework, methodology and documentary analysis guide, based on information obtained from the SUNAT database, in addition to using some business intelligence applications such as TRADEMAP, among other commercial and academic sources, obtaining results that allowed us to reach the final conclusions of this work.

In this research, we complied with the truthful information of the statistical data obtained from the SUNAT website of the companies that have been analyzed in this study. Also, this information has only been used for academic purposes, and the guidelines given by the APA (American Psychological Association) were respected. Citing the authors at the time of writing in each paragraph, describing the introduction, results and discussion of the work until reaching the conclusions.

IV. RESULTS AND DISCUSSION

4.1. Results

Table 1

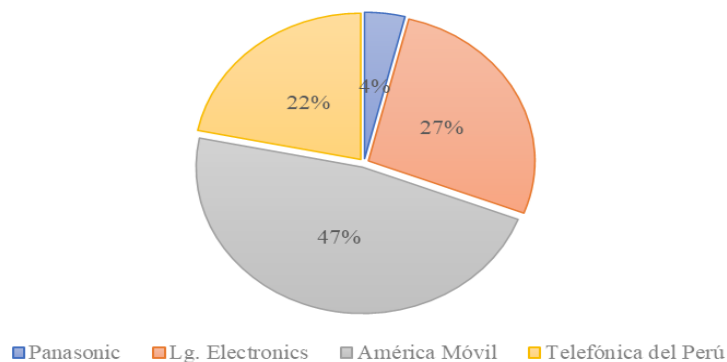
Imports of mobile telephony equipment by the main importing companies in Peru expressed in CIF value of millions of US dollars for the period 2017 - 2021

Company	CIF	AD Valoren
Panasonic	\$9,709,222,378.00	\$567,718,220.59
Lg. Electronics	\$66,765,982,790.98	\$121,414,141.00
América Móvil	\$117,621,046,196.00	\$248,902,694.00
Telefónica del Perú	\$54,140,154,577.00	\$431,113.00

Note: *The table contains information on imports with CIF value.*

Figure 1

Percentage representation of imports of mobile telephony equipment in CIF value by the main importing companies in Peru for the period 2017 - 2021.



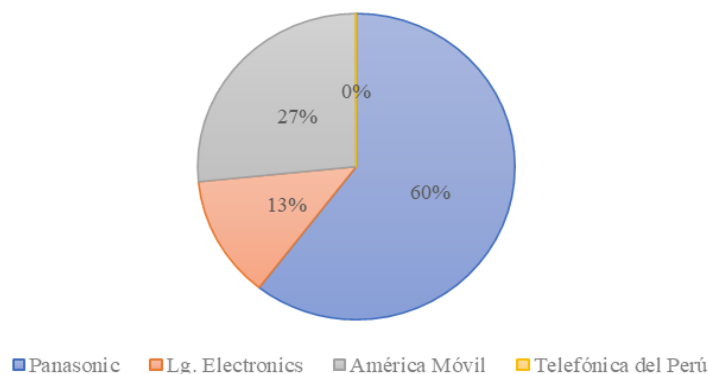
Note: *The graph shows percentage information of imports made by the main importing companies in Peru for the period 2017 - 2021.*

Description: According to the database consulted to SUNAT and the trade intelligence system VERITRADE, data was obtained in CIF value expressed in millions of US dollars on imports made in mobile phone equipment to Peru during the period 2017 to 2021, where the four (04) main importing companies most prominent in the aforementioned item were considered, being the following: América Móvil, LG Electronics, Telefónica del Perú and Panasonic. Taking into consideration the period covered, the total sum of accumulated imports during the five (05) years of activity of each of the importing companies with their various international suppliers was made, obtaining the CIF values shown in Table 1, then, the data were processed in the Microsoft Excel office application and subsequently converted into percentage amounts. The data were then processed in Microsoft Excel and then converted into percentage amounts, in order to know statistically which companies achieved greater imports, obtaining as a result the values

represented in Figure 1, where the company América Móvil manages to impose itself with 47%, while the company that achieved lower proportions was Panasonic, reaching 4%.

Figure 2

Percentage representation of the Ad Valorem tax generated by the importation of mobile telephony equipment to Peru during the period 2017 - 2021.



Note: The graph shows percentage information of the Ad Valorem tax generated in the period 2017 - 2021.

Description: Based on the values in Table 1, the Ad Valorem tax data was processed to transform it into percentage information, where the importing company Panasonic is the company that has generated the most taxes at the tax collection level, registering 60%, while the company that presented the lowest collection was Telefónica del Perú, whose information was taken from the tax base of the CIF value expressed in millions of US dollars during the five (05) of the aforementioned period of analysis.

Table 2

Main supplier countries of Peru for the import of mobile telephone equipment, with CIF values expressed in millions of U.S. dollars for the period 2017 - 2021

Country	2017	2018	2019	2020	2021
Malaysia	\$1,378,060,917.00	\$1,509,761,975.00	\$1,244,341,837.00	\$394,904,809.00	\$418,335,254.00
China	\$45,437,958,963.98	\$50,267,594,316.00	\$45,817,063,907.00	\$25,906,067,559.00	\$35,508,181,372.00
Mexico	\$16,045,649,872.00	\$3,309,087,892.00	\$2,142,364,167.00	\$785,676,793.00	\$425,496,624.00
South Korea	\$3,275,662,565.00	\$2,742,328,676.00	\$2,299,605,069.00	\$1,572,904,727.00	\$1,851,194,382.00
USA	\$261,099,389.00	\$430,972,138.00	\$219,584,149.00	\$204,355,537.00	\$2,570,462,747.00
Thailand	\$189,643,858.00	\$0.00	\$921,889.00	\$0.00	\$712,070,289.00
Vietnam	\$0.00	\$1,258,367,251.00	\$892,917,912.00	\$910,834,928.00	\$1,224,469,191.00

Note: The table contains information on the main import markets.

Description: According to the values processed in Table 2, it was determined that China is the main international market for the import of mobile telephony equipment, registering 81% of the dominance in this

item, however, Thailand is the country where it was imported in smaller quantities during the period of analysis.

4.2. Discussion

The results achieved revealed data in CIF value expressed in millions of US dollars on imports made in mobile telephony equipment to Peru during the period 2017 to 2021, where the four (04) main importing companies most prominent in the mentioned item were considered, being the following: América Móvil, LG Electronics, Telefónica del Perú and Panasonic. Taking into consideration the period covered, the total sum of accumulated imports during the five (05) years of activity of each of the importing companies with their various international suppliers was made, obtaining the CIF values shown in Table 1, then, the data were processed in the Microsoft Excel office application and subsequently converted into percentage amounts, in order to know statistically which companies achieved higher imports, obtaining as a result the values represented in Figure 1, where the company America Movil manages to impose with 47%, while the company that achieved lower proportions was Panasonic, reaching 4%. The findings obtained on the Ad Valorem tax data to transform it into percentage information, where the importing company Panasonic is the one that has generated more taxes at tax collection level, registering 60%, while the company that presented a lower collection was Telefónica del Perú, whose information was taken from the tax base of the CIF value expressed in millions of U.S. dollars during the five (05) of the mentioned periods of analysis. In addition, it was determined that China is the main international market for the import of mobile telephony equipment, registering 81% of the dominance in this item, however, Thailand is the country where it was imported in smaller quantities during the period of analysis.

The data is covered by the IndexBox study (2021) as according to the results mentioned that in the first seven months of 2021, US mobile phone imports reached \$29 billion, 21% more than the figures for the same period in 2020. The U.S. is the world's leading importer of mobile phones. Last year, US imports fell by -9.5% year-on-year to \$49.5 billion. China remains the largest exporter of mobile phones to the US and provides 79% of US imports in value terms. I conclude that in physical terms, China was the largest supplier of mobile phones to the US, with a 74% share of total imports in 2020. Similarly, Khurstalev and Slavyanov, (2019) since they obtained as a result the main types of negative factors that pose technological threats to the innovative development of the economy i.e. it was found that Russian machine building due to some reasons, Russian manufacturers have not yet been able to offer high quality products to Russian consumers. We came to the conclusion that the import substitution program has not yet worked as it was supposed to. In some cases, the reproduction of foreign equipment even aggravates the situation, inhibiting technological development and advancement.

This is supported by the opportunity cost theory of Ricardo (1821) because having products at the right time can substantially increase part of the market impacting positively on the profitability of entities, but for issues of bad decisions have not been able to take advantage of the impact of the pandemic, which has resulted in massive layoffs of employees by the partial reduction of sales due to lack of technological equipment in the warehouses of mobile telephony organizations.

It can be seen that the organizations expect to sell the products they have in stock before acquiring new products being a practice that before the pandemic has brought them good results, but with the arrival of the pandemic everything changed, they were harmed because the factories paralyzed their production generating that they cannot import and thus do not have the necessary products to continue operating in the market.

Conclusions

It is concluded that, the elaboration of this case of Imports of mobile phone equipment in the Peruvian market, has allowed us to have a greater clarity regarding the impact generated by these economic movements in the tax collection during the period of analysis, where we note the importance of the CIF value and the Ad valorem tax in the behavior of the economy. Due to the high international competitiveness of the cell phone market, there is a great opportunity for Peruvian imports in goods that are not produced in the country, which means the possibility of accessing products with more attractive prices and models according to the different consumption profiles. Therefore, it is necessary that importing companies can differentiate

themselves from their competitors, maintaining and strengthening the business relationship with their suppliers. The suggestion to mobile phone importing companies is that they should look for supplier countries that have treaties or trade agreements with the Peruvian state, since they reduce and in many cases eliminate tariff and non-tariff barriers to trade; they contribute to improve competitiveness. In addition, technology companies must allocate a percentage of their budget to technological promotion in order to make inroads and achieve a good market share in this case of mobile telephony.

Imports generate Tariff Rates (Foreign Exchange), this benefits in terms of competition to the domestic industry. That is to say, to the companies that operate in the nation. In addition, the revenue effect: where the government of the country that imposes the tariff receives revenue from the tariff, therefore, the fiscal revenue of the state increases. It can be affirmed that the mobile telephony imports market during the period studied has evolved favorably for the stakeholders that are part of this area. The Ministry of Transport and Telecommunications (MTC) and the Supervisory Body of Private Investment in Telecommunications (OSIPTEL) will have to continue to generate the necessary conditions to continue boosting the market, through policies and regulatory tools that promote more importing commercial offers that benefit users. It is suggested to companies to modify their optimal inventory level policies since it has been observed that in times of pandemic several companies have run out of products to offer to their customers being generated because they expected to sell some products that did not have higher rotation in 2019, generating that at the beginning of the pandemic they could not acquire new products negatively impacting the cash flow of mobile telephony organizations since sales decreased due to lack of products.

REFERENCES

- Baena, P. G. (2017). *Metodología de la Investigación* (3ra Edición ed.). Grupo editorial patria.
- Basias, N., & Pollalis, Y. (2018). Quantitative and Qualitative Research in Business & Technology: Justifying a Suitable Research Methodology. *Review of Integrative Business & Economics Research*, 7(1). https://sibresearch.org/uploads/3/4/0/9/34097180/riber_7-s1_sp_h17-083_91-105.pdf
- Bautista, R. E. J., & Chávez, E. E. Y. (2018). *Asimetrías de Información en Precio y Cantidad de Micas y Protectores Importados Para Smartphones, Provincia de Cajamarca [Tesis para optar el Título Profesional de Licenciado en Administración y Negocios Internacionales]*. Universidad Privada Antonio Guillermo Urrel.
- Bich Ngoc, T., & Thanh Binh, D. (2019). Vietnam's Electronics Industry: The Rise and Problems of Further Development. *Gyandhara International Scholarly Publishing: Journals*, 7(4), 1-12. <https://doi.org/https://doi.org/10.18510/hssr.2019.741>
- Bjorn G, G. (2014). Social impact and the justification of action research knowledge. *Sage Journals*, 12(4), 339-356. <https://doi.org/10.1177/1476750314534455>
- Campos, S., W. J., & Yacila, O. M. R. (2020). *Propuesta de Importación de Celulares Básicos desde China para la Empresa Casa Móvil E.I.R.L. provincia de Sullana-Piura 2019 [Tesis de pregrado, Universidad César Vallejo]*. <https://repositorio.ucv.edu.pe/handle/20.500.12692/48892>
- Choroco, P. H. E. (2021). *Importación de bienes de consumo en el contexto del Tratado de Libre Comercio Perú – China, 2016 - 2020 [Tesis de pregrado, Universidad César Vallejo]*. <https://hdl.handle.net/20.500.12692/80951>
- COMEXPERU. (07 de Enero de 2022). *comexperu.org.pe*. <https://www.comexperu.org.pe/articulo/importaciones-superan-niveles-previos-a-la-pandemia#:~:text=Las%20importaciones%20registraron%20una%20fuerte,recuperaci%C3%B3n%20de%20las%20importaciones%20peruanas.>
- EAFIT. (2018). *eafit.edu.co*. <https://www.eafit.edu.co/>
- Espinoza S, A. R. (2018). *Líneas Móviles en Servicio y las Importaciones Peruanas de Celulares Durante el Periodo 2013-2017 [Tesis de pregrado, Universidad César Vallejo]*. https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/32648/Espinoza_SAR.pdf?sequence=4&isAllowed=y
- Garcés C, J. E. (2014). Revisión crítica de los postulados clásicos del comercio internacional: un ejercicio empírico sobre Colombia y Perú. *Finanz. polit. econ*, 7(1), 147-168. <https://doi.org/http://dx.doi.org/10.14718/revfinanzpolitoecon.2015.7.1>
- Giordano, P. (2021). *Trade Trends Estimates Latin América and The Caribbean*. Word Express. <https://publications.iadb.org/publications/english/document/Trade-Trends-Estimates-Latin-America-and-the-Caribbean---2021-Edition.pdf>
- Guillin, E. A., & Suárez, M. J. (2022). *Resolucion 025-2019 del COMEX y su Impacto en la Importacion de Celulares [Tesis de pregrado, Universidad Laica Vicente Rocafuerte de Guayaquil]*. <http://repositorio.ulvr.edu.ec/bitstream/44000/5181/1/T-ULVR-4177.pdf>
- Gutiérrez, V. S. M., & Sánchez, C. M. L. (2021). *La Actividad De Aparatos De Telefonía Móvil Y Su Contribución A Los Negocios En La Ciudad De Iquitos, Año 2019 [Tesis de pregrado, Universidad Científica del Perú]*. <http://repositorio.ucp.edu.pe/handle/UCP/1314>
- Haberler, G. (1936). *Teoría del Costo de Oportunidad*.
- Hernández, S. R., & Mendoza, T. C. P. (2018). *Metodología de la Investigación: las rutas cuantitativas, cualitativas y mixta* (1ra Edición ed.). McGRAW-Hill Interamérica Editores. <http://ebookcentral.proquest.com>
- INDECOPI. (2017). *INDECOPI*. <https://www.indecopi.gob.pe/libro-de-reclamaciones>

- IndexBox. (13 de Noviembre de 2021). *Aceleran las importaciones de telefonos moviles estadounidenses*. https://www-globaltrademag-com.translate.google.american-mobile-phone-imports-accelerate/?_x_tr_sl=auto&_x_tr_tl=es&_x_tr_hl=es-419&_x_tr_pto=wapp
- Khrustalev , E. Y., & Slavyanov, A. S. (2019). Dependence on Imports as a Threat to Innovative Development of the Russian Manufacturing Sector. *Digest Finance*, 24(2), 124-134. <https://doi.org/https://doi.org/10.24891/df.24.2.124>
- Li, I. (2018). The Relationship between Global Brand and Face in the Chinese Market: A Comparative Study of Chinese and American Global Cell Phone Brands. *Kwansei Gakuin University Repository*. <https://core.ac.uk/reader/143635090>
- Manualdecomercioexterior. (2019). *manualdecomercioexterior.com/*. <https://www.manualdecomercioexterior.com/2019/03/costos-de-importacion.html>
- Mardelplata. (2022). *Mardelplata.gob.ar*. <https://www.mardelplata.gob.ar/documentos/exportar/glosario.pdf>
- Masabanda, Ch, C. J., & Salazar, B, M. F. (2022). *Efecto de las restricciones a las importaciones de equipos celulares en Ecuador [Tesis de pregrado, Pontificia Universidad Católica del Ecuador]*. <https://repositorio.pucesa.edu.ec/handle/123456789/3566>
- Metzler, K. (2014). *The SAGE Handbook of Qualitative Data Analysis*. Arrangement Uwe Flick. https://books.google.com.pe/books?hl=es&lr=&id=R-6GAwAAQBAJ&oi=fnd&pg=PA217&dq=documentary+analysis+direct+observation&ots=L66iX0t4Nj&sig=WNrHURahjZukNHItLbUpaYL2OU&redir_esc=y#v=onepage&q=documentary%20analysis%20direct%20observation&f=false
- Ministerio de Economía y Finanzas. (2022). *mef.gob.pe*. https://www.mef.gob.pe/es/?option=com_content&language=es-ES&Itemid=100852&lang=es-ES&view=article&id=287
- Narea Mendieta, B. L. (2016). *“Estrategía Para Reducir El Impacto De Las Salvaguardias Arancelarias A La Importación De Carcasas Celulares” [Tesis de maestría, Universidad De Guayaquil]*. <http://repositorio.ug.edu.ec/bitstream/redug/14057/1/BLANCA%20LETICIA%20NAREA%20MENDIETA%20TRABAJO%20DE%20TITULACION.pdf>
- Nicolás , J., Garretón , A., & Schodt, C. (2018). Wiped, Flashed, and Re-kitted: The International Black Market of Stolen Cell Phones. . *UC Berkeley Journalism*, 1-10. <https://escholarship.org/content/qt14b2493b/qt14b2493b.pdf>
- Ñaupas, P, H., Mejía, M, E., Novoa, R, E., & Villagómez, P, A. (2014). *Metodología de la investigación cuantitativa-cualitativa y redacción de la tesis* (4ta Edición ed.). Ediciones de la U. ISBN 978-958-188-4
- Onecore. (04 de Octubre de 2018). *blog.onecore.mx*. <https://blog.onecore.mx/que-es-valor-fob#:~:text=El%20valor%20FOB%20es%20el,bienes%20y%20derechos%20de%20exportaci%C3%B3n>
- Quang D, M. (2016). Determinants of the Relative Importance of Imports in the Economy: An Empirical Assessment. *Ssicedomain International*, 15(4), 1-18. <https://doi.org/10.9734/BJEMT/2016/30839>
- Reyes F, K. M. (2020). *“Las barreras no arancelarias en la importación de celulares de China al Perú en el año 2019” [Tesis de pregrado, Universidad Cesar Vallejo]*. https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/53800/Reyes%20_FKM%20-%20SD.pdf?sequence=1&isAllowed=y
- Reyes Fernández, K. M. (2020). *“Las barreras no arancelarias en la importación de celulares de China*. https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/61939/Reyes_FKM-SD.pdf?sequence=1&isAllowed=y
- Ricardo, D. (1821). *On the Principles of Political Economy and Taxation*. Batoche Books. <https://socialsciences.mcmaster.ca/econ/ugcm/3ll3/ricardo/Principles.pdf>
- Rodriguez, M, G, J., & Zuñiga, P, M. L. (2018). *Análisis del comportamiento del consumidor frente a las medidas restrictivas de la importación de celulares en el Ecuador, período 2013 -2016 [Tesis de pregrado, Universidad Laica Vicente]* <http://repositorio.ulvr.edu.ec/handle/44000/2321>
- Ruiz R, C. D. (2020). *Impacto de la gestión aduanera en el contrabando frontera Perú – Bolivia, 2020 [Tesis de maestría, Universidad Cesar Vallejo]*. https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/57279/Ruiz_RCD-SD.pdf?sequence=1&isAllowed=y
- Smith , A. (1776). *La Riqueza de las Naciones*. Economía y Empresa. https://books.google.com.pe/books?id=dGLyCwAAQBAJ&printsec=frontcover&dq=adam+smith&hl=es&sa=X&redir_esc=y#v=onepage&q=adam%20smith&f=false
- SUNAT. (2016). *sunat.gob.pe*. [https://www.sunat.gob.pe/orientacionaduanera/importaFacil/index.html#:~:text=\(2\)%20FOB%20Se%20refiere,internacional%20y%20el%20seguro%20contratado](https://www.sunat.gob.pe/orientacionaduanera/importaFacil/index.html#:~:text=(2)%20FOB%20Se%20refiere,internacional%20y%20el%20seguro%20contratado)
- SUNAT. (2017). *sunat.gob.pe*. <https://www.sunat.gob.pe/orientacionaduanera/importacion/index.html#:~:text=Es%20el%20r%C3%A9gimen%20aduanero%20que,las%20formalidades%20y%20otras%20obligaciones>
- Timomms , M., & Baisau, S. (2013). *Kant on Practical Justification: Interpretive Essays*. Oxford University Press. https://books.google.com.pe/books?hl=es&lr=&id=27MPO3VvJzkC&oi=fnd&pg=PP1&dq=practical+justification+Project&ots=4yL1M49kUe&sig=E_GtneUQpt854vUcg_Y2s5EMKXo&redir_esc=y#v=onepage&q=practical%20justification%20Project&f=false
- Ulloa-Barre,, N. M., Fajardo-Loayza, V. A., Gonzales-Illescas, M. L., & Solórzano-Solórzano, S. S. (2021). Estrategias post COVID-19: Desafíos para las empresas exportadoras de productos tradicionales. *Innova Research Journal*, 6(2), 180-195. <https://doi.org/https://doi.org/10.33890/innova.v6.n2.2021.1636>
- Villalobos, D. (2022). *Deloitte*. <https://www2.deloitte.com/cr/es/pages/tax/articles/sabia-usted-que-el-valor-en-aduana-no-siempre-coincide-con-el-valor-cif.html>