



**Economic impact of the introduction of new regulations: an analysis of construction and transportation SMEs in Ecuador**

Impacto econômico da inserção de novas regulamentações: uma análise das PMEs de construção e transporte no Equador

Impacto económico de la inserción de nuevas regulaciones: un análisis de PYMES del área de construcción y transporte en Ecuador

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[martha.velasquez@utm.edu.ec](mailto:martha.velasquez@utm.edu.ec)**ABSTRACT**

The general objective of this study is to analyze the economic impact of Resolution No. 009 - 2021 on small and medium-sized construction and heavy transport companies in the province of Manabí. The methodology was of quantitative approach, non-experimental longitudinal design, field typified, descriptive level and under the modality of a documentary study. The information was collected through the survey technique. The analysis sample consisted of 20 people, including owners and employees of small and medium-sized companies in the construction and heavy transport sector in the province of Manabí. Among the results found, 91.9% know about the management of tariffs; 56.8% liked making purchases after the implementation of the Resolution; 70.3% received training; 48.6% indicated that they always had the support of their company; 40.5% said that it generated an economic impact; 37.85% are satisfied with this reform; 89.2% indicated that they consider it to have a positive impact; 43.2% rated Resolution No. 009-2021 as very good. It is concluded that: after the application of the survey to determine the economic impact of Resolution No. 009-2021 on SMEs in the construction and heavy transport sector in the province of Manabí, they indicate that it was of great relevance and help, as it managed to reduce tariff costs.

**Keywords:** Tariff, Resolution, economic impact, SMEs, construction, heavy transportation.**RESUMO**

O objetivo geral deste estudo é analisar o impacto econômico da Resolução nº 009 - 2021 nas pequenas e médias empresas de construção e transporte pesado da província de Manabí. A metodologia foi de abordagem quantitativa, com desenho longitudinal não experimental, tipo campo, em nível descritivo e na forma de estudo documental. As informações foram coletadas por meio da técnica de levantamento. A amostra de análise foi composta por 20 pessoas, entre proprietários e empregados de pequenas e médias empresas do setor de construção e transporte pesado da província de Manabí. Dentre os resultados encontrados, 91,9% conhecem a gestão de tarifas; 56,8% gostaram de realizar compras após a implementação da Resolução; 70,3% realizaram o treinamento; 48,6% indicam que sempre tiveram o apoio da sua empresa; 40,5% disseram que gerou impacto econômico; 37,85% estão satisfeitos com esta reforma; 89,2% indicam que consideram um impacto positivo; 43,2% classificam a Resolução nº 009-2021 como muito boa. Conclui-se que: após a aplicação da pesquisa para determinar o impacto econômico da Resolução nº 009-2021 nas PMEs do setor de construção e transporte pesado da província de Manabí, indicam que foi de grande relevância e ajuda, ao reduzir custos tarifários.

**Palavras-chave:** Tarifas, impacto económico Resolução, PME, construção, transporte pesado.**RESUMEN**

El presente estudio tiene como objetivo general analizar el impacto económico de la Resolución No. 009 - 2021 en las pequeñas y medianas empresas de construcción y transporte pesado de la provincia de Manabí. La metodología fue de enfoque cuantitativo, de diseño no experimental longitudinal, tipificada de campo, de nivel descriptivo y bajo la modalidad de un estudio documental. La información se recabó mediante la técnica de la encuesta. La muestra de análisis quedó por 20 personas entre propietarios y empleados de las pequeñas y medianas empresas del sector de la construcción y transporte pesado de la provincia de Manabí. Dentro de los resultados encontrados, se tiene el 91,9% sabe sobre el manejo de aranceles; 56,8% le agrado hacer compras tras la implementación de la Resolución; un 70,3% contó con la capacitación; un 48,6% indica que siempre tuvo el apoyo de su empresa; un 40,5% dijo que genero un impacto económico; el 37,85% se encuentra satisfecho de esta reforma; un 89,2% indica que si considera un impacto positivo; el 43,2% califican la Resolución No. 009-2021 como muy buena. Se concluye que: tras la aplicación de la encuesta para determinar el impacto económico de la Resolución No. 009-2021 en las empresas PYMES del sector de la construcción y transporte pesado de la provincia de Manabí, indican que fue de gran relevancia y ayuda, al logara disminuir los costos arancelarios.

**Palabras clave:** Arancel, impacto económico Resolución, Pymes, construcción, transporte pesado.**ARTICLE HISTORY****Received:** 11-07-2023  
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**Main topic:**

Economic impact of regulations

**Main practical implications:**

The findings highlight the significance of Resolution No. 009-2021 in reducing tariff costs for small and medium-sized construction and transport companies in Manabí, offering practical benefits for their economic operations.

**Originality/value:**

This study contributes original insights into the positive impact of Resolution No. 009-2021 on SMEs in the construction and heavy transport sector in Manabí, emphasizing its value in reducing economic burdens through lowered tariff costs.

## INTRODUCTION

The contribution of international trade is invaluable in sustaining the world economy. Cultural, commercial and political development is a priority for every government; it is for this reason that international trade is attributed to the development of a country, since it allows to take advantage of the assets that are produced and at the same time to exchange them with other countries. International trade is at the core of economic growth. (Escobar, 2022).

International trade gives way to a dynamic of exchange of goods and services between countries, the circulation of which requires taxes or tariffs levied on such transit. According to Padin, (2019) customs duties applied to imports of goods are called tariffs. Multilateral trade negotiations enshrined tariffs as the only instrument admitted to regulate foreign trade. Their importance lies, especially in developing countries, is that they constitute an instrument of protection particularly sensitive productive sectors, boost the development of certain branches of production, or for the purpose of increasing the revenue (Padin, 2019).

According to Fernández (2000) cited by (Escobar, 2022) many countries establish a series of rules to maintain, modify and alter trade relations with other countries, which is why tariff barriers are laws or policies that are not usually included in a tariff that limit the import of certain goods either to balance the country's trade balance or to protect national production.

Tariff barriers are managed under the nomenclature of tariff and non-tariff barriers, whose purpose is to generate a kind of protectionism to domestic production and thus balance the country's trade balance, among these 2 types of barriers, the most commonly used are tariff barriers; these prevent the entry of certain goods into the country by incorporating a tariff on such goods that makes them more expensive compared to domestically produced goods. (Escobar, 2022).

Specifically, the document issued by the Foreign Trade Committee (COMEX) of the Republic of Ecuador states that the tariff in Ecuador is an instrument of economic policy, which should promote the development of productive activities in the country, in accordance with the government policy of increasing the competitiveness of the country's productive sectors. (COMEX, 2021).

In view of the above, Ecuador, through Executive Decree No. 68, declared the facilitation of international trade as a priority public policy. Consequently, through Resolution No. 009-2021, the Foreign Trade Committee (COMEX) resolved to reduce tariffs on 667 items of inputs, raw materials and capital goods imported by the productive sector. The purpose of this resolution is to set new tariff rates for imports in CKD (parts and pieces or set of parts and pieces imported for assembly) of vehicles, motorcycles, electric induction stoves and radios for vehicles; established in this instrument, for models and versions authorized for assembly by the Ministry of Industrial Policy. (COMEX, 2021).

With special mention to the sector related to the parts and pieces or set of parts and pieces imported for the assembly of vehicles, in recent times, one of the difficulties that surrounds the sector of assemblers of parts and pieces of vehicles in Ecuador is the deficit obtained in the trade balance, since the Ecuadorian businessmen and traders of the branch must access these goods via imports so that they can remain active in the market.

In this sense, according to Fabara, (2020) the automotive sector in recent years has had a series of complexities, mainly due to restrictions on the importation of vehicles, parts and pieces; and the establishment of tariffs for CBU (Complete Built Unit) and CKD (Complete Knock-down Kit) of cars. These processes are a consequence of the adjustment made in the external sector in order to balance the trade balance and stop the excessive outflow of foreign currency.

It is worth clarifying that according to the World Trade Organization (WTO), the acronym CBU refers to a finished motor vehicle, ready to roll, assembled in the country of origin or, in this particular case, in Ecuador, as the case may be. On the other hand, the CKD is the completely disassembled assembly, including its bodywork, which must be unwelded, delivered in parts ready to be assembled. It consists of the following basic groups, among others: engine, electrical system, transmission, steering, suspension, brakes and bodywork. (WTO, 1995)..

It is important to indicate that measures have been established to partially reverse the difficulties that the automotive sector has been going through in Ecuador, these changes in tariff matters have been undertaken in the country since 2017, in the interest of eliminating different tariff rates to try to reduce maintenance costs of both heavy machinery and vehicles.

Thus, in the estimation of author Tapia (2022), the elimination of the CKD tariff in 2019 helped lower costs in the domestic industry, however, manufacturers are asking the government to reduce the tax burden. Among them, there is the Tax on Foreign Exchange Outflows (ISD) on inputs and the Special Consumption Tax (ICE) on the final product.

Tariff reforms represent an alternative to protect national trade, encourage the growth of sectors and boost a country's economy, influencing markets and the balance of trade (Segarra, 2022). (Segarra, 2022).

Thus, the formulation of the tariff reforms seeks that they become a support for entrepreneurs, particularly in the

sector of small and medium-sized enterprises (SMEs) because of their contribution to the national economy. According to information derived from the Competitive Management Study of SMEs in Ecuador, they represent 95% of the productive units. (Rodríguez & Aviles, 2020). These business organizations are found in the market are presented in all forms and dimensions; they can exist with a single owner, with freedom to develop various activities of production, marketing or provision of services, always in order to achieve an economic utility. (Rodríguez & Aviles, 2020).

Currently, according to the Association of Automotive Companies of Ecuador (AEADE, 2019), the automotive sector in Ecuador is made up of five major segments: assemblers (4); auto parts companies (92); traders and importers (1,271); bodywork companies (81); and companies engaged in other activities in the sector such as maintenance, sale of parts and repairs (3,126). Among this group of companies (autoparts), they generate around 29,923 jobs and present an annual sales volume of around USD 11,000 million. (Fabara, 2020).

All this economic dynamics generated by the sector is distributed among 3,745 formal companies, 60% of which are dedicated to the auto parts trade and a large part of which is concentrated in small and medium-sized companies. (AEADE, 2022). The general objective of this study is to analyze the economic impact of Resolution No. 009 - 2021 on small and medium-sized construction and heavy transportation companies in the province of Manabí, Ecuador.

## **LITERATURE REVIEW**

### **Tariffs**

The World Trade Organization (WTO) emphasizes, customs duties applied to imports of goods are called tariffs. Tariffs give domestically produced goods a price advantage over similar imported goods and are a source of revenue for governments. (WTO, n.d.). According to the technical bulletin of the Inter-American Institute for Cooperation on Agriculture (IICA) the Tariff (Tariff duty) is the financial burden in the form of a tax applied to goods being transported from one customs territory to another (often from one country to another). Tariffs are applied to imports of goods and may also be applied to exports (IICA, 2012).

Customs duties levied on imports of goods are called tariffs. Tariffs provide domestically produced goods with a price advantage over similar imported goods, and are a source of revenue for governments (Padin, 2019).

The imposition of tariffs is known as tariff barriers, which are defined as the tariffs charged to importers and exporters for the entry or exit of goods. (Escobar, 2022). Tariff barriers can be considered as economic barriers estimated as trade policy measures that hinder free trade between countries. They can be tariff measures (tariffs) or non-tariff measures (tariffs). (IICA, 2012).. Non-tariff barriers are trade policy measures different from the common measures called tariffs that have the potential to affect the international exchange of goods (Escobar, 2022)..

Non-tariff measures are sometimes used as a means of circumventing free trade rules and domestic industries are favored at the expense of foreign competition. In this case, they are called non-tariff barriers. It is very difficult, sometimes impossible, to distinguish between a legitimate non-tariff measure and a protectionist one, especially when the same measure can be used for different objectives. (Escobar, 2022).

### **Tariffs and their impact on trade**

Trade barriers, such as tariffs, can have a significant impact on global trade (Serna, 2023). According to the Institute for International Economics (IEI) the tariff is one of the basic instruments of regulation of international trade and takes, on the one hand, a collecting character, but more importantly if possible, it is an enforcement instrument in the trade policy of economic zones (IEI, 2019). This same organization has indicated that among the most common effects of tariff taxation are: 1.) Revenue for the Treasury from taxation; 2. (IEI, 2019).

When a country imposes tariffs on imported goods, the price of those goods increases, which can affect consumers' ability to purchase them. This can limit business opportunities for companies that export these goods and reduce the volume of international trade. (Serna, 2023).

Some of the possible effects of tariffs on international trade are the following: a.) They can increase the prices of goods and services; b.) affect the competitiveness of companies and limit business opportunities; c.) can affect the efficiency of global supply chains; and d.) cause retaliation and volatility in markets. (Serna, 2023).

### **Economic impact**

Economic impact is the contribution that an activity produces in the economy of a region. (Rivera & Molina, 2006). The economic impact is one of the most important factors at the time of carrying out an economic evaluation of any project, prior to its implementation. This concept is also related to that of social impact, which are the consignments that are

produced by an action in a certain community (Esquivel, 2020).

The idea of economic impact, in this context, refers to the effect that a measure, an action or an announcement has on the economy. When something has an economic impact, it has consequences on the economic situation of a person, a community, a region, a country or the world. (Bonet Morón, et al., 2020)..

The domino effect, as indicated by Prades & Tello, (2020) that a movement in the business environment can have is really dangerous. During the planning process, therefore, we must ask ourselves questions about the positive and negative consequences that we can cause in each individual, in the community and, depending on the size of the company, nationally or internationally.

### Resolution No. 009 - 2021

The Foreign Trade Committee (COMEX), in execution of Executive Decree No. 68, through Resolution No. 009-2021, resolved to reform the Tariff of Ecuador; and also established a variable tariff rate for imports in CKD of vehicles, motorcycles, electric induction stoves and radios for vehicles, for models and versions authorized for assembly by the Ministry of Production, Foreign Trade, Investment and Fisheries, provided that they access the support document called "Authorization to import products for assembly" and they are imports for consumption. (COMEX, 2021).

For this purpose, Annexes I and II were issued, the first one, which reforms the tariff rates for 667 subheadings, will be effective as of August 1, 2021; and the second one, on the variable tariff rate, will be effective as of October 1, 2021. (COMEX, 2021).

### Economic Indicators Resolution No. 009 - 2021

According to the document issued by the Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP), the tariff reform proposed in Executive Decree No. 68, through Resolution No. 009-2021, of the Foreign Trade Committee (COMEX) Article 8, will have an effect on the reduction of production costs that will boost the country's economic reactivation, since of the 667 tariff items that are contemplated, 590 will have zero tariff; 30 will have a 5% tariff; 20 will pay 10%; and the remaining 27, between 15% and 25% (MPCEIP, 2021). (MPCEIP, 2021).

**Table 1.** Some Economic Indicators after the Application of Resolution No. 009 - 2021 and Other Taxes

Indicator	Advances
Import Tariffs	USD 1,207.1, higher (27.8%) than in 2020 (Central Bank of Ecuador, 2022).
Revenues from vehicle tax and other taxes	USD 109.6 million (17.2%) higher than in 2020 (Central Bank of Ecuador, 2022).
Imports of capital goods (transportation equipment, consumer durables and raw materials for construction).	Increases of more than 27.3% to 27.3% (Ministry of Economy and Finance of Ecuador, 2023).
Payment of taxes and duties on the importation of vehicles, auto parts and other related activities.	In Ecuador, in 2021, companies in the sector paid USD 1,432 million, which exceeded by 19% the amount collected in 2020 (AEADE, 2022).
Reduction of the tax burden on the automotive business	The Ecuadorian automotive market grew 17 % in 2022 compared to 2021, and 6 % more than in 2019 (AEADE, 2023).

**Note:** Prepared by the authors. Source: Central Bank of Ecuador (2022); (Ministry of Economy and Finance of Ecuador (2023); AEADE (2022) and (AEADE, 2023).

### Indicator:

**Import Tariffs:** Import Tariffs presented a collection of USD 1,207.1 million, higher by USD 262.7 million (27.8%), with respect to 2020. Despite the tariff reduction in 667 items of inputs, raw materials and capital goods (Resolution No. 009 - 2021 of the Plenary Trade Committee). (Central Bank of Ecuador, 2022, p. 39)..

### Revenues from vehicle and other taxes:

Within the Other Taxes account, the revenues of the General State Budget (PGE) corresponding to the Tax on Foreign Exchange Outflows (ISD) are quantified; this item contains revenues from the tax on vehicles and other taxes, in which an increase of USD 109.6 million (17.2%) with respect to 2020, due to an increase in the collection of the tax on motor vehicles, royalties, patents and mining conservation utilities, and the single and temporary contribution (Organic Law on Tax

Simplification and Progressivity). (Central Bank of Ecuador, 2022, p. 39).

### **Imports of capital goods (transportation equipment, consumer durables and raw materials for construction)**

The value of imports of capital goods increased by 21.7%, consumer goods by 21.2% and raw materials increased by 37.6% during the period analyzed. Transportation equipment, consumer durables and raw materials for construction marked the result with increases of more than 27.3% (Ministry of Economy and Finance of Ecuador). (Ministry of Economy and Finance of Ecuador, 2023, p. 33)..

### **Payment of taxes and duties on the import of vehicles, auto parts and other related activities.**

The automotive sector contributes significantly to tax collection through the payment of taxes and tariffs on the importation of vehicles, auto parts and other related activities. In Ecuador, in 2021, companies in the sector paid USD 1,432 million, which exceeded by 19% the amount collected in 2020. (AEADE, 2022)..

In Manabí, vehicle sales in units and % share in 2020 represented 3,380 (3.9%) and in 2021 there was a significant increase in the volume of vehicle sales, which reached 5,140 (4.3%).

In 2021, the automotive sector provided job opportunities to 155,943 employees, which represents 1.8% of the economically active population in percentage terms. The automotive activity with the highest labor demand is the maintenance and repair of vehicles, which employs about 87,000 people, followed by the commercial activities of auto parts sales (33,143 jobs) and vehicles (22,095 jobs). (AEADE, 2022).

### **Reduction of the Tax Burden on Automobile Commerce**

The reduction of the tax burden on the automotive trade has been one of the main measures that have contributed to the dynamization of the Ecuadorian automotive market. (AEADE, 2023). In 2022, the Ecuadorian automotive sector led the country's economic reactivation, considering the 139,517 units sold (AEADE, 2023). (AEADE, 2023). The Ecuadorian automotive market grew 17 % in 2022 compared to 2021, and 6 % more than in 2019. Auto parts imports, on annual average, reach USD 359 million FOF between 2016 and 2022. In 2022, the highest auto parts import volume was registered in the wear segment, with 65 %. (AEADE, 2023).

The provinces with the highest growth in vehicle sales were Azuay and Manabí, with 31% and 26%, respectively. (AEADE, 2023). The volume of vehicle sales in Manabí in 2022 reached 6,451 (4.6%). Heavy transport (trucks) sales in Manabí in 2022 were 419 units, representing a 6.5% share (AEADE, 2023). (AEADE, 2023).

Productive activities such as construction, agriculture, industry, commerce, among others, which require vehicles to transport goods, materials and people, were boosted, thus boosting sales. Other actions that contributed significantly to this increase can be attributed to the exoneration of the Special Consumption Tax (ICE) on trucks, among others. (AEADE, 2023)..

### **SMEs in Ecuador**

The Internal Revenue Service of Ecuador (SRI), recognizes as SMEs the group of small and medium-sized companies that, according to their sales volume, social capital, number of workers, and their level of production or assets present characteristics typical of this type of economic entity (Chávez, Campuzano, & Betancourt, 2018).. Generally in the country, small and medium-sized enterprises that have been formed perform different types of economic activities among which the following stand out: a) Wholesale and retail trade; b) Agriculture, forestry and fishing; c) Manufacturing industries; d) Construction; e) Transportation, storage, and communications; f) Real estate and services provided to businesses and g) Communal, social and personal services. (Chávez, Campuzano, & Betancourt, 2018)..

Small and medium-sized enterprises (SMEs) are indispensable actors for the growth of any economy. They make up more than 90% of the companies in the world, and their participation in Latin America is even higher, at 97%. Due to their characteristics they present a great contribution to the generation of employment, which contributes to the development of a country's national productive apparatus and contributes to the change of the productive matrix (Carranco, 2017). Ecuadorian SMEs contribute greatly to the country's productivity. These are mostly found within the trade and services sectors, it should be emphasized that the most common company structure is the microenterprise. Also, the main provinces where SMEs are located are: Pichincha, Guayas, Manabí, Azuay and Tungurahua, highlighting a high growth in the whole country. (Carranco, 2017).

Focusing attention on Manabí, the context of this research, according to the SME Observatory, the main sectors of economic activity are grouped into: a) Commerce, automotive and motorcycle repair; b) Agriculture, livestock, forestry and fishing; c) Transportation and storage; d) Manufacturing industries; and e) Accommodation and food service activities. (Observatorio de la PyME, 2015).. Manabí's SMEs are mainly located in the commerce, automotive and motorcycle repair sector (45.2%); followed by services (34%); agriculture, livestock, forestry and fishing (10%); construction (6%) and manufacturing industries (5%). (SME Observatory, 2015).

It is important to note that in Manabí, there are different construction and heavy transportation companies, since the latter requires maintaining vehicles and heavy machinery in the best conditions to carry out their work, with engines, parts and pieces that are generally imported. It should also be noted that the transportation of heavy machinery is a fundamental input for construction companies, hence the need to analyze the economic impact that Resolution No. 009 - 2021 will have on small and medium-sized construction and transportation companies.

## **METHODS**

This research assumes a quantitative approach, with a non-experimental-longitudinal design, because there will be no manipulation of the variables and it will be analyzed in different periods, at least in the last 3 months after the resolution. According to Hernández, Fernández, & Baptista, (2014) in the non-experimental type research design, the variables are not intentionally manipulated, but only the phenomenon is observed and analyzed as it is in its natural context. They also explain that longitudinal designs, are those that represent data over time in points or periods, to make inferences regarding change, its determinants and consequences (Hernández, Fernández, & Baptista, 2014)..

Likewise, it is typified as field research, descriptive in scope and supported by documentary research. In this sense, Hurtado, (2010) refers that the research is field research if they are living sources, and the information is collected in their natural environment (p. 143). It is considered a field research because information was collected directly through a survey applied to owners and employees of SMEs in the construction and heavy transport sector in the province of Manabi, the instrument used for this purpose corresponded to an online questionnaire to obtain data; which were subsequently processed to obtain the results and conclusions of rigor.

In field research, secondary data are also used, especially those from bibliographic sources from which the theoretical framework is constructed. According to Hernández, Fernández, & Baptista, (2014) documentary research depends fundamentally on the information obtained or consulted in documents, understanding by this all material that can be used as a reference source, without altering its nature or meaning, which provide information or bear witness to a reality or an event. In this case, access was gained to digital pages of an academic nature to consult documentary sources such as articles/thesis/electronic books/reports, among others.

The level of this research is considered descriptive, since it describes the current situation of the economic impact of Resolution No. 009 - 2021 on small and medium-sized construction and heavy transport companies in the province of Manabí. In the same way Hernández, Fernández, & Baptista, (2014), consider that descriptive studies seek to specify the important properties of people, groups, communities or any other phenomenon that is subjected to analysis.

The data collection technique was the survey and the instrument used was a dichotomous questionnaire with Yes or No response options administered online to collect the information necessary to analyze the impacts generated by Resolution No. 009 - 2021 on small and medium-sized construction and heavy transport companies in the province of Manabí. According to Zapata, (2006), the survey can be defined as a set of techniques aimed at gathering, in a systematic way, data on a certain topic or topics related to a population, through direct or indirect contacts with the individuals or group of individuals that make up the population under study (p. 189). The web-type survey modality is a collection method that is presented as a methodological alternative to the classic face-to-face or telephone surveys, whose results can be imported directly into spreadsheets or statistical programs (Rocco & Oliari, 2007).

Regarding the population, it is defined by the authors Hernández, Fernández, & Baptista, (2014) as "the set of all cases that match certain specifications" (p.174). For its part, the sample according to Tamayo & Tamayo, (2006) "is the set of operations that are carried out to study the distribution of certain characters in an entire population universe, or collective, starting from the observation of a fraction of the population considered" (p.176).

In this regard, the population for this study corresponds to the owners and employees of small and medium-sized construction and heavy transportation companies in the province of Manabí. According to the Observatorio de la PyME de la Universidad Andina Simón Bolívar, Sede Ecuador, the transportation and storage sector represents 10% and the construction sector represents 3.5% of the companies in Manabí. It should be noted that this Ecuadorian province has a total of 2,920 companies by type and economic sector, 32% of which are SMEs. (Aucancela, Suasti, & Vásquez, 2023).

According to Castro (2003), in the purposive sample, the subjects are chosen to be part of the sample with a specific objective. With purposive sampling, the researcher believes that some subjects are more suitable for the research than others). For this purpose, the study sample consisted of 20 people, including owners and employees of small and medium-sized companies in the construction and heavy transport sector in the province of Manabí, which are mentioned below:

**Table 2.** Sample of companies in this study

Company name	Code
COMPANY PC LITORAL S.A.	1391803281001
TRANSBAHIA S. A.	1391795513001
TRANSISABEL S.A.	1391816251001
TRANSANTOS S. A.	1391801335001
TRANSTABABELA S. A.	1391822073001
PHT CONSTRUCTORES S. A.	1391736029001
MARPENSA S. A.	1391790384001
L&L CONSTRUCCIONES S. A.	1391740719001
EDICON S. A.	1391739648001
CONSTRUCCIONES Y CONSULTORES ASOCIADOS, S. A. CCACONSULTSA	1391808763001

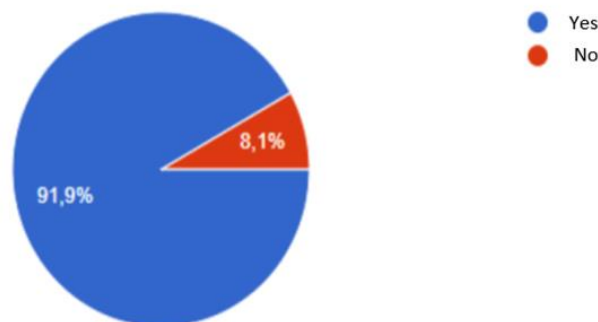
**Note:** Prepared by the authors

For data processing, the data were stored in Excel tables; then were transferred to the respective analysis program for data cleaning, interpretation and statistical analysis.

## RESULTS AND DISCUSSION

This section presents the results obtained from the surveys conducted with 20 workers and owners of SMEs in the construction and heavy transport sector in the province of Manabí, and based on these results, the respective discussion is broken down and the necessary conclusions are drawn.

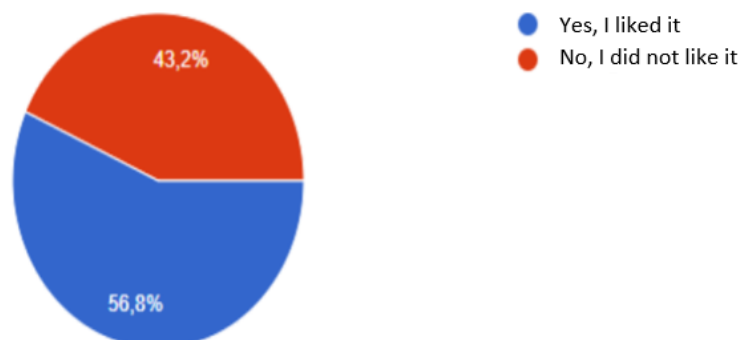
**Figure 1.** Question 1: Have you worked in the company with purchasing and tariff management?



**Note:** Prepared by the authors. Survey application data

According to the results of the survey, the majority of employees and owners (91.9%) have worked with tariff management, while 8.1% indicated the option "No".

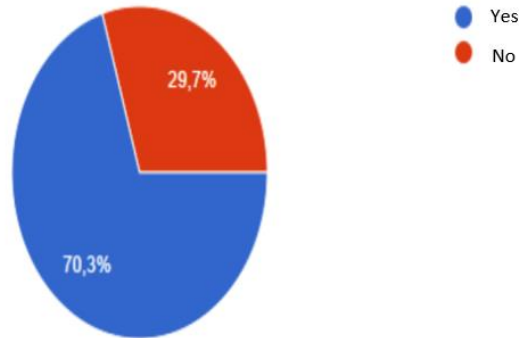
**Figure 2.** Question 2: Did you like the experience of working in purchasing with the new prices according to Resolution No. 009-2021?



**Note:** Prepared by the authors. Survey application data

The data indicate that 56.8% said that they liked the shopping experience after the implementation of Resolution No. 009-2021; while 43.2% indicated that they did not like the shopping experience.

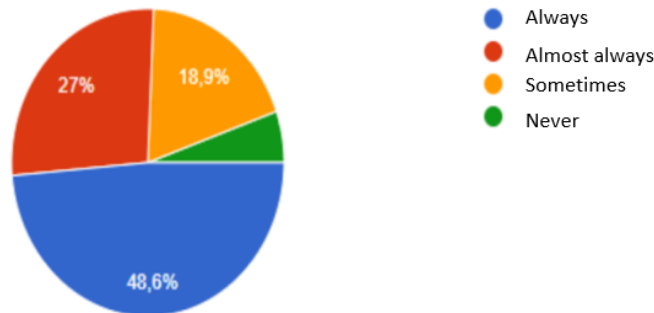
**Figure 3.** Question 3: Did you have adequate training or knowledge of Resolution No. 009-2021?



**Note:** Prepared by the authors. Survey application data

It can be seen that 70.3% responded positively that they did have the appropriate training or knowledge to comply with the requirements, while a minority of 29.7% responded that they did not have the knowledge. It is clear from this response that the necessary socialization was provided in order to be aware of Resolution No. 009-2021 and thus be able to make purchases. However, the group that said that they did not have the required knowledge of this new resolution is of concern.

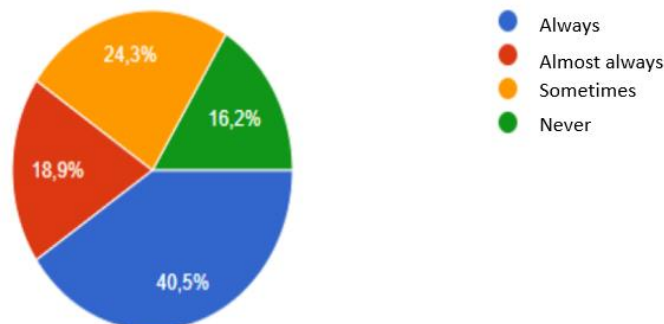
**Figure 4.** Question 4: Did you receive support from your company for the knowledge of Resolution No. 009-2021?



**Note:** Prepared by the authors. Survey application data

The results obtained show that 48.6% indicated that they always had the support of their company to know about this resolution; while 27% responded that they almost always, 18.9% sometimes, and 2% declared that they had never had the support of their company. It can be inferred from the answers obtained that a group was neglected directly or indirectly, which may indicate poor performance of their work and therefore low productivity, which could generate a negative economic impact.

**Figure 5.** Question 5: Do you believe that Resolution No. 009-2021 generated an economic impact?

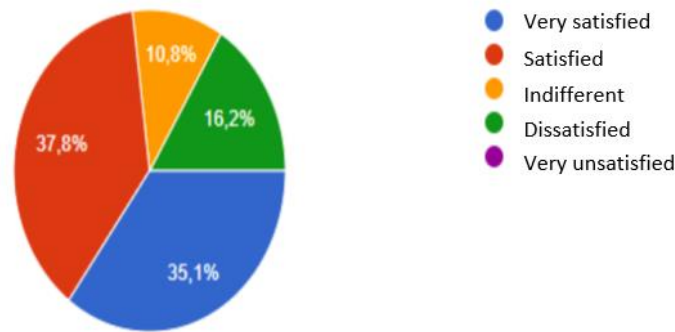


**Note:** Source: Prepared by the authors. Survey application data



According to the data obtained, the option Always was the predominant answer with 40.5%, however, 18.9% indicated that it almost always generates an economic impact, 24.3% responded that it almost always does, but 16.2% responded that it never does. This item is of great relevance since the companies surveyed indicate that Resolution No. 009-2021 mostly generates a significant economic impact.

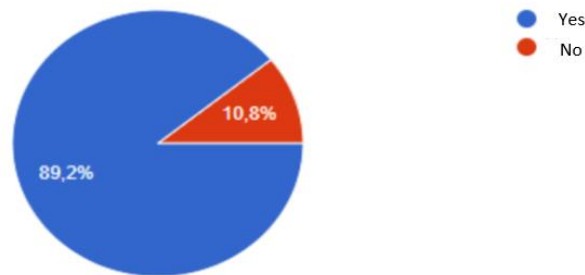
**Figure 6.** Question 6: How satisfied are you with the development of the economic impact on tariffs with Resolution No. 009-2021?



**Note:** Prepared by the authors. Survey application data

It is observed that 37.85% are satisfied with this reform, 35.1% are very satisfied, 16.2% are dissatisfied, and 10.8% are indifferent to the issue. Although the majority of those surveyed are satisfied, indicating that an impact has been generated, there is also a population that is indifferent to this type of change.

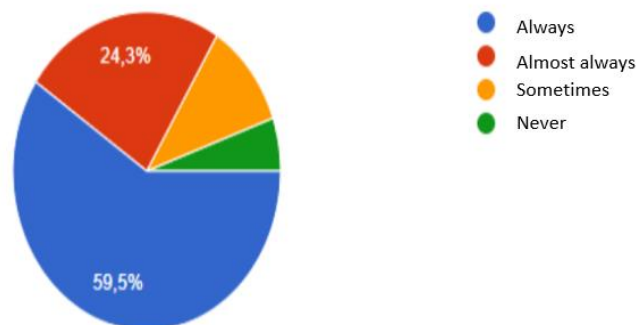
**Figure 7.** Question 7: Do you consider that a positive economic impact was generated with Resolution No. 009-2021?



**Note:** Prepared by the authors. Survey application data

The results reflect that 89.2% indicate that they consider it to have a positive impact, and a minority of 10.8% respond that it does not. It is encouraging to note that the majority of respondents indicated that the application of Resolution No. 009-2021 on tariffs had a positive impact.

**Figure 8.** Question 8: Do you think that this resolution was successful in supporting companies?

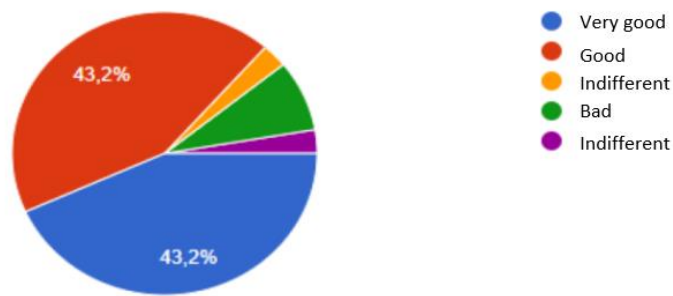


**Note:** Prepared by the authors. Survey application data

A majority (59.5%) responded that support was always provided to companies, 24.3% responded almost always, 10.8% responded sometimes and 5.4% responded never. With this result, it can be assumed that Resolution No. 009-2021

had a positive economic impact on the respondents.

**Figure 9.** Question 9: How would you rate Resolution No. 009-2021? From your point of view



Note: Source: Prepared by the authors. Survey application data

It is observed that 43.2% rate Resolution No. 009-2021 as very good, the same percentage (43.2%) said it was good, 8.1% said it was bad, and 2.7% said it was very bad. Resolution No. 009-2021 has had a positive impact on small and medium-sized construction and heavy transportation companies, as evidenced by the majority of positive responses

## FINAL CONSIDERATIONS

One of the objectives of Resolution No. 009-2021 is to reform Ecuador's Tariff, and also to establish a variable tariff rate for CKD imports of vehicles, among other items, authorized for assembly by the Ministry of Production, Foreign Trade, Investment and Fishing.

Resolution No. 009-2021 is broad and was formulated due to the need to support companies, particularly the SME sector because of its relevance in the Ecuadorian business fabric, thus its application has been favorable to reduce the negative economic impact generated by the high taxes for the acquisition of automotive parts and pieces for the maintenance in optimal conditions of heavy transport, which is a preponderant element for the construction sector in the province of Manabí.

The results obtained after the application of the survey to determine the economic impact of Resolution No. 009-2021 on SMEs in the construction and heavy transport sector in the province of Manabí, indicate that it was of great relevance and help, as it managed to reduce tariff costs. In this regard, sales of heavy vehicles (trucks) increased significantly in Manabí in 2022, reaching 419 units, which represents a 6.5% share.

The analysis of the total number of companies surveyed gives way to a more in-depth research work where it is possible to study the percentages of profits and growth of small and medium-sized enterprises (SMEs) in construction and heavy transport and other economic activities, not only in the province of Manabí but also at the national level.

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**Contribution of each author to the manuscript:**

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B. data research and statistical analysis:	50%	50%
C. elaboration of figures and tables:	50%	50%
D. drafting, reviewing and writing of the text:	50%	50%
E. selection of bibliographical references	50%	50%
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