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IMPACT OF THE EUROPEAN UNION- ECUADOR MULTIPARTY TRADE AGREEMENT ON THE EXPORT OF TARIFF SUBHEADING 6504.00.00.00

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DEDICATION

To Samael, my beloved son, with deep emotion and commitment, who, with his arrival, transformed my life completely and gave me an even more powerful reason to move forward, grow, and persevere. Each page of this work represents the love, dedication, and desire to leave you an example of effort and improvement. You are and will always be my greatest inspiration, the one who drives my every step.

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Impact of the European Union-Ecuador Multiparty Trade Agreement on the export of tariff subheading 6504.00.00.00

ABSTRACT

This study examined the impact of the Multiparty Trade Agreement between the European Union and Ecuador on exports classified under tariff subheading 6504.00.00.00, which includes the renowned Panama Hats, internationally known as Panama Hats. The research was conducted using a mixed-methods approach that combined documentary analysis of European Union regulations, requirements, and tariff and non-tariff barriers with an examination of export performance before and after the Agreement entered into force in 2017. To achieve this, official data from the Central Bank of Ecuador and other public institutions related to foreign trade were utilized. In addition to the descriptive analysis, a correlation analysis between FOB value and exported weight was applied for the main European markets, with the objective of assessing the coherence and stability of commercial performance. The findings indicate that the Multiparty Trade Agreement has had a positive impact on Ecuador's exports of Panama Hats, enhancing their competitiveness and strengthening their position in the European market.

Keywords: Multipart Agreement, Ecuador, exports, Panama hat, subheading 6504.00.00.00, European Union.

Impacto del Acuerdo Comercial Multipartes Unión Europea - Ecuador en la exportación de la subpartida arancelaria 6504.00.00.00

RESUMEN

Este estudio analizó el impacto del Acuerdo Comercial Multipartes entre la Unión Europea y Ecuador en las exportaciones de la subpartida arancelaria 6504.00.00.00, que incluyen a los reconocidos sombreros de paja toquilla o también conocido como Panama Hat. La investigación se desarrolló con un enfoque mixto, que combinó el análisis documental de normativa, requisitos y barreras arancelarias y no arancelarias de la Unión Europea con el estudio del comportamiento de las exportaciones antes y después de la entrada en vigor del acuerdo en 2017. Para ello, se utilizaron datos oficiales provenientes del Banco Central del Ecuador y de organismos públicos vinculados al comercio exterior. Además del análisis descriptivo, se aplicó un análisis de correlación entre el valor FOB y el peso exportado hacia los principales mercados europeos, con el fin de evaluar la coherencia y estabilidad del desempeño comercial. Los resultados permiten concluir que el Acuerdo Comercial Multipartes ha tenido un impacto positivo en las exportaciones de sombreros de paja toquilla, mejorando su competitividad y posicionamiento en el mercado europeo.

Palabras clave: Acuerdo Multipartes, Ecuador, exportaciones, sombrero de paja toquilla, subpartida 6504.00.00.00, Unión Europea.

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INTRODUCTION

The Multiparty Trade Agreement between Ecuador and the European Union (EU), signed on November 11, 2016, and a year later entered into force on January 1, 2017, has represented a fundamental pillar in the strengthening of trade ties between the two parties. Thanks to this Trade Agreement, Ecuadorian products have found a way to have more competitive access to the European market, benefiting from the elimination of tariff barriers and thus encouraging a more dynamic and efficient commercial exchange (Ministry of Production, Foreign Trade, Investments, and Fisheries, 2022).

Tariff subheading 6504.00.00.00, according to the National Customs Service of Ecuador (SENAE), includes "Hats and other headdresses, braided or manufactured by joining strips of any material, whether or not trimmed". These products not only represent the artisanal and cultural wealth of Ecuador but have also managed to consolidate themselves as an attractive offer at an international level and, as is of interest in this work, also within the European market. Throughout this work, each time reference is made to the aforementioned subheading, its meaning is implied without the need to constantly reiterate its definition.

Since the implementation of the Multiparty Trade Agreement between the European Union and Ecuador, non-oil trade has experienced significant growth. During the first five years of the aforementioned agreement, trade between the EU and Ecuador increased by 16%, achieving a favorable non-oil trade balance for Ecuador with a surplus of more than 1,100 million dollars. This boost has made it possible to diversify Ecuadorian exports and consolidate the presence of emblematic products in the European market (Ministry of Foreign Affairs and Human Mobility, 2022).

One of the sectors that has capitalized on this opportunity is hats and other headdresses. The elimination of tariffs has made it easier for traditional items such as toquilla straw hats, internationally known as "Panama Hats," to enter a highly competitive market. This preferential access has strengthened their presence in Europe, allowing them to differentiate themselves for their quality and prestige in the sectors of both crafts and fashion. However, trade liberalization has also brought significant challenges. Exporting companies face strict quality and sustainability standards imposed by the European Union, which require constant improvements in production processes (Van Steen & Saurenbach, 2017).

The objective of this paper is to analyze the impact of the Multiparty Trade Agreement between the European Union and Ecuador on the behavior of exports of tariff subheading 6504.00.00.00 to the European Union. With this, it will be possible to analyze tariff and non-tariff barriers, the evolution of exports before and after the aforementioned agreement, and the opportunities and challenges of the agreement. This will allow and serve as a reference for exporters since it provides information that could promote the competitiveness of the sector. Similarly, the findings of the research can contribute to the development of more effective commercial strategies to boost positioning in the European market and, as a final result of everything, contribute to the growth of Ecuadorian foreign trade.

CHAPTER 1

TRADE CONTEXT

1.1 Theoretical Framework

1.1.1 Trade and Theories

We are currently witnessing a globalization of the world on a large scale where generating the elimination of economic borders and the opening of markets has become a favoring factor in achieving the internationalization of the different industrial and business activities that are carried out throughout the world; it is also to mention that global connectivity has transformed how a country's products and services can position itself in international markets and thanks to that the development of business and the generation of wealth worldwide can be enhanced, all this has been obtained thanks to Information and Communication Technologies (ICT) (Axity, 2023).

Marketing is a fundamental activity that has promoted the development of societies since ancient times. Its beginnings date back to barter, a system in which producers exchanged goods and services without the intervention of a monetary unit, based solely on the physical value of the products (J. R. A. Rojas et al., 2017). Over time, this system evolved to give rise to foreign trade, a key economic activity that is handled every day, which allows the exchange of goods, capital, and services between different countries, strengthening their economies and expanding their markets (Quintana et al., 2021). Foreign trade not only promotes economic growth but also facilitates global integration, allowing products and services to meet complementary needs in international markets. Thanks to these trade relationships, nations can specialize in strategic sectors, improve their competitiveness, and generate new development opportunities. So, foreign trade is not just an economic transaction but an engine of progress that transforms industries and strengthens the world economy (Sada, 1995).

Within the framework of the Trade Agreement between the European Union and Ecuador, our country has a comparative advantage in subheading 6504.00.00.00, which covers "hats and other headdresses, braided or manufactured by joining strips of any material, whether or not trimmed". According to David Ricardo's theory of comparative advantage (1817), countries can maximize their economic benefits by specializing in the production of goods that they can manufacture at a lower opportunity cost, in other words, where they are relatively more efficient compared to other countries. In the case of Ecuador, the production of products under tariff subheading 6504.00.00.00, which includes toquilla

straw hats, represents a strategic opportunity in international trade as it is an artisanal production. The combination of tradition, quality, and cultural recognition gives this product an added value that strengthens its competitiveness in demanding markets such as the European Union. By specializing in this sector and taking advantage of the favorable conditions of the trade agreement, Ecuador not only boosts its exports but also generates employment, boosts the local economy, and reinforces its global positioning in the trade of artisanal goods. This theory also allows us to analyze and understand how an artisanal product can be transformed into a good with added value and export potential (Rivera & Solorzano, 2024).

Ecuador enjoys a clear comparative advantage in the production of toquilla straw hats, a product that is under subheading 6504.00.00.00. This advantage is due to several key factors, such as the artisanal skill and the specific natural resources that Ecuador has, mainly toquilla straw, a unique raw material that is not easily found in other countries. It is true that other countries also produce hats, but Ecuador is comparatively more efficient in its manufacture, thanks to the experience, tradition, and artisanal techniques it possesses, since all of this has been passed down from generation to generation by Ecuadorian producers. This specialization and efficiency give Ecuador a prominent position in international markets, especially under the framework of the Multiparty Trade Agreement with the European Union.

Countries around the world have become dependent on trade not only nationally but also internationally, due to the needs of the population of each country. Thanks to trade, countries develop their economies by exchanging products, resulting in the expansion of markets and increased income. However, countries cannot be self-sufficient and need to look for mechanisms to improve trade flows with different countries, such as establishing strategies or signing agreements that improve trade relations with other economies (Espinosa et al., 2019).

1.1.2 Trade Agreements

International trade agreements are strategic instruments that seek to optimize foreign trade by reducing or eliminating both tariff and non-tariff barriers, thus facilitating the flow of goods and services between different markets (Villagómez, 2018). Today's free trade shares many characteristics with the trade that developed in the past, because before the different empires intended that their colonies achieve development only through policies

supported by colonialist and nationalist ideas, but after the Second World War these ideas begin to vary, because economic development would also be born as a product of integration, taking into account very important characteristics of the past such as: seeking a free mobility of the factors of production and commodities (Ibarra et al., 2023).

Until 1947, trade agreements were mainly given to ensure their commercial interests between economic powers, such as the Europeans; however, after World War II, the General Agreement on Tariffs and Trade (GATT) was created, in which the idea of creating a broader multilateral agreement was emphasized. In the beginning, there were only 23 countries that agreed to such agreements, but gradually, this evolved towards the almost global constitution of what is now the World Trade Organization (WTO) (World Trade Organization, 2011).

According to the World Economic Forum (2023), the evolution of trade throughout history has been fundamental to global economic development. From the first barter systems in ancient times to the present day, where the exchange of goods and services has crossed borders thanks to digitalization, commercial transformation has been constant. This advancement has been driven by technological progress and the increasing interconnectedness of economies, which has allowed for greater efficiency and reach in markets. In this context, fostering innovation in trade has become an essential pillar to maintain competitiveness and take advantage of the opportunities of an increasingly globalized world.

1.1.3 Background of the Multiparty Trade Agreement

The process of negotiating a trade agreement between the European Union and Ecuador began in 2006. The process began between the European Union as a bloc with members of the Andean Community, such as Colombia, Peru, Bolivia, and Ecuador, within the framework of an "Association Agreement" in which three main axes were presented: political dialogue, cooperation, and one of the most importantly, the economic and commercial axis. Bolivia left the negotiation due to disagreements with the aforementioned regional bloc on intellectual property issues, so the so-called "Association Agreement" was put aside, and the European Union proposed to negotiate bilaterally through "Multiparty Agreements" (Jácome, 2012). In 2009, Ecuador abandoned the negotiations because the government of the day considered that these negotiations were not favorable for Ecuadorian

development. After that date, in 2013, new meetings began to discuss a new agreement. However, the only beneficiaries at that time were Colombia and Peru (Facuy et al., 2020).

It is worth mentioning that during the period 2006 – 2015, the so-called "Generalized System of Preferences Plus" (GSP+) was in force, which included new international instruments related to issues of human rights, labor issues, drugs, corruption, and the environment (Central Bank of Ecuador, 2016). In terms of the OAS Secretariat(2025), in these systems, zero or reduced tariffs are granted to the beneficiary countries. These countries are generally less developed, hence the preferential treatment for some goods.

On November 11, 2016, Ecuador and the European Union signed the Multiparty Trade Agreement, and it entered into force in January 2017, representing a great advance in both the public and private sectors (Guayaquil Chamber of Commerce, 2017). According to Marianne Van Steen (2017), ambassador of the European Union in Ecuador at the time, the agreement represented a "win-win" for everyone, as long as everyone is willing to overcome the challenges posed, making sure to comply with the administrative and legal part. Since the agreement came into force, trade flows have experienced remarkable growth, establishing the European Union as the main destination market for Ecuadorian non-oil exports. This dynamism has boosted the trade surplus that Ecuador has maintained in its trade with the EU, thus strengthening its position in international trade and expanding opportunities for national exporters (Guerrero & Nieto, 2021).

1.1.4 Added Value

Nowadays the different economic needs that the world is going through makes companies look for alternatives to survive, now, based on Ecuador, small and medium-sized enterprises (SMEs), consider it essential to strengthen the productive sectors, seeking in some way to create more value to products such as: support in digital marketing, in this way new strategies are created with which they can reach customers more easily (Baque et al., 2021).

The concept of added value is understood as the social, economic, and technological difference for society and companies; with this, there is an improvement in the quality provided to customers and an impact on the preference for the products or services that are offered (Tabone et al., 2021). In other words, added value represents the competitive differential that is incorporated into a good or service, giving it unique attributes that increase its attractiveness and perception of quality in the market. This strategy not only strengthens

business competitiveness but also favors customer segmentation and loyalty, generating a sustainable advantage over the competition. As a result, profit margins are optimized, demand growth is boosted, and the brand's positioning is strengthened, consolidating its presence in both national and international markets (Baque et al., 2021).

According to Porter (1985), the value added to a good or service depends on the efficient integration of each process within the value chain. Through this approach, it is possible to identify key activities and their interconnections, allowing strategic differentiation in the market. In the same way, he emphasizes that optimization does not only lie in continuous improvement but also in the elimination of waste and activities that do not add value to either processes or customers. By focusing on these aspects, companies can increase their competitiveness, optimize their resources, and provide a stronger and more sustainable value proposition.

Now, based on the case of products under tariff subheading 6504.00.00.00, in which toquilla straw hats are found, the added value is not only limited to economic aspects but also includes cultural, patrimonial, and identity aspects and dimensions. This added value has been obtained thanks to the peculiar production process, which ranges from the specialized cultivation of palm to fine and detailed weaving techniques that require ancestral knowledge that has been transmitted from generation to generation. The insertion of this craft in international markets has allowed the toquilla straw hat to be recognized not only for its quality and durability, but also goes further, since each hat transmits the link with the cultural identity of Ecuador (UNESCO, 2010). This approach to added value has managed to position the toquilla straw hat beyond a simple artisanal product, positioning it as an emblem of Ecuador's cultural richness in the global market.

1.2 STATE OF THE ART

1.2.1 EU - Ecuador Multiparty Trade Agreement

Trade relations between the European Union and Ecuador have undergone significant evolution over the years, consolidating into a strategic agreement that has strengthened economic and trade ties between the two parties. In general terms, this Agreement has been highly beneficial for Ecuador; proof of this is the 40% growth in bilateral trade since its implementation in 2017. In addition, it has made it possible to maintain a sustained trade surplus, reflected in a positive balance of more than 8,000 million euros in the period 2017-

2023 (European External Action Service, 2021). These results confirm the positive impact of the agreement on the Ecuadorian economy, promoting preferential access to European markets and fostering the dynamism of national exports. The commercial relationship between the European Union and Ecuador dates back to the end of the nineteenth century, when the country began to establish commercial ties with European nations. At that time, cocoa and coffee were positioned as the main Ecuadorian export products, attracting the interest of European traders. They arrived at the port of Guayaquil to buy these products, thus promoting the development of the country's foreign trade (Anecacao, 2023). This exchange laid the foundation for a strategic business relationship with the European market that has evolved over time into far-reaching agreements, such as the Multiparty Trade Agreement.

1.2.2 Toquilla Straw Hat Evolution

The internationalization of the toquilla straw hat dates back to the eighteenth century, when its export from Ecuador to countries such as Peru, Chile, and Colombia marked the beginning of its international recognition and positioning. This export boom managed to generate a period of unprecedented economic tranquility, surpassing even cocoa in terms of exports. The promotion of the hat at international events, such as the Universal Exposition in Paris in 1855, helped strengthen its prestige and demand in European and American markets (Daschastyle, 2025).

The Ecuadorian toquilla straw hat, since December 5, 2012, was considered as Intangible Cultural Heritage of Humanity by the United Nations Educational, Scientific and Cultural Organization (UNESCO), it is a representative product of Ecuador that thanks to its symbol of cultural identity and great artisanal quality has allowed it to position itself in international markets (Ministry of Tourism, 2019). Thanks to the positioning of this product in international markets, it has been possible to maintain great relevance and demand for markets such as Europe and the United States (Armijos, 2021). Ecuador must continue to promote the artisanal sector, especially that of toquilla straw hats, since they represent a very valuable asset that must continue to grow and stand out in the different international markets (Rivera & Solorzano, 2024).

A study carried out years ago analyzed the export prospects of Ecuadorian toquilla straw hats to the Peruvian market in 2023. Through the research, it was possible to identify

challenges such as competition with other export markets and the need for competitive prices. With all this, it was concluded that, despite these challenges, there are significant opportunities to improve exports through strategies focused on market evolution and adaptation to the cultural trends of the neighboring country (Almache et al., 2024). Another analysis was based on the export capacity of the toquilla straw hat, highlighting its potential to promote the artisanal product in international markets. However, limitations in production and marketing were identified that must be addressed to take full advantage of these opportunities. The study recommended developing strategies that strengthen the production chain and optimize the competitiveness of the toquilla straw hat in the international market (Mera, 2022).

The Toquilla Straw Hat has achieved international prestige over time, largely due to the meticulous weaving technique used in its making. This highly specialized artisanal process not only reflects an invaluable cultural legacy but has also been recognized as an activity of high productive value, contributing significantly to the positioning of the hat in global markets (Díaz et al., 2023). The study of this process is essential since, from an economic perspective, the production chain allows the inhabitants of the region to generate sustainable income, promoting local development. From the cultural field, its relevance is even greater, as it represents the preservation and transmission of ancestral knowledge that constitutes a pillar of the historical and cultural heritage not only of Ecuador, but of all Latin America, its continuity not only guarantees the identity of the artisan communities, but also reinforces the global recognition of this millenary tradition (Herrera et al., 2021).

1.2.3 Study on the Impact of the Multiparty Trade Agreement on Non-Traditional and Artisanal Products

The Multiparty Trade Agreement between the European Union and Ecuador marked a turning point in the country's history of foreign trade. Since its entry into force in 2017, Ecuador has gradually shifted from being mainly a supplier of raw materials to becoming an actor with greater opportunities in the European market. However, the impact of this agreement has not been uniform: while some sectors have successfully taken advantage of tariff preferences, others continue to face structural obstacles that limit their capacity to internationalize.

Various studies support this divergence. According to Fundación Carolina (Reinoso, 2022), the agreement reduced by 20% the tariff gap between Ecuador and its closest

competitors in the European Union. This means that non-traditional goods — including artisanal products — are no longer at a disadvantage compared to those from countries with similar agreements. In simple terms, exporting became less costly and more attractive for Ecuadorian producers, especially those seeking to position themselves in market niches where cultural value and sustainability are appreciated.

The United States Department of Agriculture (USDA, 2018) reinforces this notion by reporting that, in the first year of the agreement, Ecuadorian exports to Europe grew by approximately 22%, with an agricultural trade surplus exceeding USD 2.6 billion. Although the report focuses on agri-food products, its conclusions also help explain how access to European markets improved conditions for sectors linked to fair-trade and artisanal production.

The research conducted by Verdugo and Andrade (2018) offers an additional perspective. Their analysis of traditional and non-traditional Ecuadorian products revealed that items such as the paja toquilla hat achieved stronger international positioning between 2013 and 2017, due to their symbolic value, artisanal quality, and an increasing global preference for sustainable goods. These findings indicate that when trade policy aligns with local cultural strengths, positive outcomes of trade liberalization can extend to artisanal communities.

Nonetheless, not all studies reflect optimism. Hazleton (2022), writing for the Institut Européen, argues that the agreement with Ecuador, Colombia, and Peru has tended to reinforce traditional export models — centered on raw materials — rather than promoting genuine productive transformation. According to this author, the benefits obtained have also deepened structural inequalities among sectors, which helps explain why high-value artisanal goods still struggle to compete on equal terms in the European market.

In addition, the report *The Climate Impact of the EU Trade Agreement with Colombia, Peru, and Ecuador*, published by Humundi (2025), highlights the need to consider the environmental implications of trade expansion. In the case of artisanal products, this observation is particularly relevant, as European consumers increasingly value traceability, ethical sourcing, and environmental responsibility. If Ecuador aims to consolidate its position in this marketplace, commercial advancement must be accompanied by sustainability strategies and certifications ensuring a balance between growth and ecological stewardship.

Institutional cooperation has also played a crucial role. According to the National Board of Trade of Sweden (Kommerskollegium, 2024), the implementation of the agreement has helped Ecuador strengthen its technical capabilities to comply with the EU's strict quality standards, preventing those regulations from becoming new non-tariff barriers. This technical assistance represents a valuable opportunity for small producers and artisans, who can now access information, training, and guidance to meet export requirements.

Taken together, the scientific evidence demonstrates that the Multiparty Trade Agreement, while not guaranteeing export success, has opened a tangible pathway toward diversification of Ecuador's export offer. For products under tariff subheading 6504.00.00.00 — such as paja toquilla hats — the challenge lies not only in leveraging tariff elimination, but also in strengthening local competencies to compete under European parameters: certified quality, sustainability, and strong cultural value.

Ultimately, the real measure of the agreement's impact is not reflected solely in the numbers, but in the possibility that a traditional product, handcrafted by Ecuadorian artisans, can remain relevant and valued in international markets.

CHAPTER 2

IDENTIFY THE MAIN DESTINATION MARKETS IN THE EUROPEAN UNION FOR EXPORTS OF THE PRODUCTS COVERED BY SUBHEADING 6504.00.00.00

In order to understand more precisely the behavior of Ecuadorian exports corresponding to tariff subheading 6504.00.00.00 to the different destination countries of the European Union, a differentiated review of the period analyzed will be carried out, dividing it into two key stages: on the one hand, a review of the stage prior to the signing of the Multiparty Trade Agreement between Ecuador and the European Union, and on the other hand, a review of the stage after the signing of the aforementioned agreement. With this segmentation, it will be possible to observe more clearly the changes in export values.

Table 1

Annual FOB values in thousands of dollars of Ecuadorian exports of subheading 6504.00.00.00 to the main countries of destination in the European Union

| | Germany | Spain | France | Italy | Other |
|--------------|-------------|-------------|-------------|-----------|-------------|
| 2010 | \$ 521,10 | \$ 355,60 | \$ 806,20 | \$ 102,50 | \$ 88,20 |
| 2011 | \$ 952,10 | \$ 580,90 | \$ 1.125,40 | \$ 66,10 | \$ 274,70 |
| 2012 | \$ 450,70 | \$ 527,80 | \$ 1.107,90 | \$ 96,30 | \$ 227,00 |
| 2013 | \$ 593,40 | \$ 383,40 | \$ 930,00 | \$ 58,00 | \$ 325,20 |
| 2014 | \$ 1.021,80 | \$ 639,10 | \$ 1.148,70 | \$ 64,10 | \$ 225,10 |
| 2015 | \$ 887,00 | \$ 524,90 | \$ 973,80 | \$ 90,10 | \$ 184,80 |
| 2016 | \$ 589,40 | \$ 466,30 | \$ 935,80 | \$ 189,90 | \$ 257,70 |
| TOTAL | \$ 5.015,50 | \$ 3.478,00 | \$ 7.027,80 | \$ 667,00 | \$ 1.582,70 |

Source: Central Bank of Ecuador 2025

Ecuador is a country with a rich artisanal tradition, highlighting among its most emblematic products the toquilla straw hats, which are within the 6504.00.00.00. The international recognition of these products not only responds to the rigorous compliance with the demands and regulations of global markets but also incorporates an unparalleled cultural and heritage value. Behind each hat is an ancestral heritage that has endured generation after generation,

consolidating its prestige in foreign trade and reaffirming the country's cultural identity in the international arena (Anchundia et al., 2016).

International markets in which the toquilla straw hat has achieved a significant presence include, mainly, the United States and European countries, including Germany, France, the United Kingdom, Italy, and Spain. Each of these destinations has experienced sustained growth in imports, which shows a constant demand for and progressive recognition of the product in the global arena. However, it is important to note that while some markets have shown faster development, others still maintain lower import levels. This phenomenon responds to factors such as consumption preferences, the trade strategies implemented, the economic conditions of each country, and, in one way or another, barriers to trade. In this sense, the positioning of the toquilla straw hat in international trade continues to consolidate, with opportunities for expansion and strengthening in various strategic regions (Rivera & Solorzano, 2024).

Table 1 shows the annual values of FOB exports, expressed in thousands of dollars, corresponding to the products classified under tariff subheading 6504.00.00.00, destined for various countries of the European Union. The data was obtained from information from the Central Bank of Ecuador, filtered by year from 2011 to 2016, in relation to exports, which is published on its website. Thanks to this reliable source, it has been possible to collect the necessary data to detail the information in the table, allowing me to carry out an accurate and updated analysis of exports during the period considered. The analysis covers the period between 2010 and 2016, the year in which the Multiparty Trade Agreement between Ecuador and the European Union was signed.

France, Germany, Italy, and Spain have been selected as the main destination countries for exports under subheading 6504.00.00.00 because they have the highest FOB value of exports compared to other destinations. This selection is based on the fact that these countries represent a significant portion of the foreign trade of this subheading, reflecting their relevance in the export context. On the other hand, it has been decided to group the other countries with a lower FOB value into a joint category called "other". Although their individual contribution is more limited, their inclusion in the analysis allows a more complete and precise view of the overall performance of exports under the subheading, providing a more detailed picture of the various markets to which these products are destined.

Throughout the period analyzed, exports have shown variations in their behavior, reflecting a dynamism influenced by multiple factors. Between 2010 and 2012, a fluctuating trend with recurrent ups and downs was observed, suggesting the impact of both internal and external conditions on the evolution of trade. A key event in this context was the declaration of the "Traditional Weaving of the Fine Toquilla Straw Hat" as an Intangible Cultural Heritage of Humanity by UNESCO in December 2012, a recognition that boosted the visibility of the product in international markets, enhancing its demand and positioning, or at least it should. (Jaramillo et al., 2012). This statement suggests that demand in international markets for Ecuadorian products classified under subheading 6504.00.00.00 experienced a significant boost. This growth is attributed to the greater recognition, visibility, and prestige achieved by toquilla straw hats in the global arena. However, despite these advances in terms of positioning and product differentiation, the impact was not immediately reflected in export figures.

This uncertainty can be mentioned to have been due to several factors, since 2013 witnessed an economic crisis where the challenges they faced were very relevant. The economic policies that were implemented decreased the purchasing power of consumers; this had strong repercussions on the demand for non-essential products, such as toquilla straw hats (Páez et al., 2013). Likewise, this drop is attributed to factors such as international competition, since the European Union market not only receives products, such as hats, only from Ecuador, because, according to the European Statistics page (EUROSTAT), there are countries in Asia, such as Vietnam and China, that also offer products such as hats, but at more affordable prices. This could have been a factor in affecting Ecuadorian exports of products under subheading 6504.00.00.00.

In 2014, Ecuadorian exports corresponding to tariff subheading 6504.00.00.00 showed a significant recovery, reaching levels higher than those recorded in previous years. This upturn may be closely linked to the positive and progressive impact generated by the declaration, in 2012, of the traditional weaving of the toquilla straw hat as an Intangible Cultural Heritage of Humanity by UNESCO.

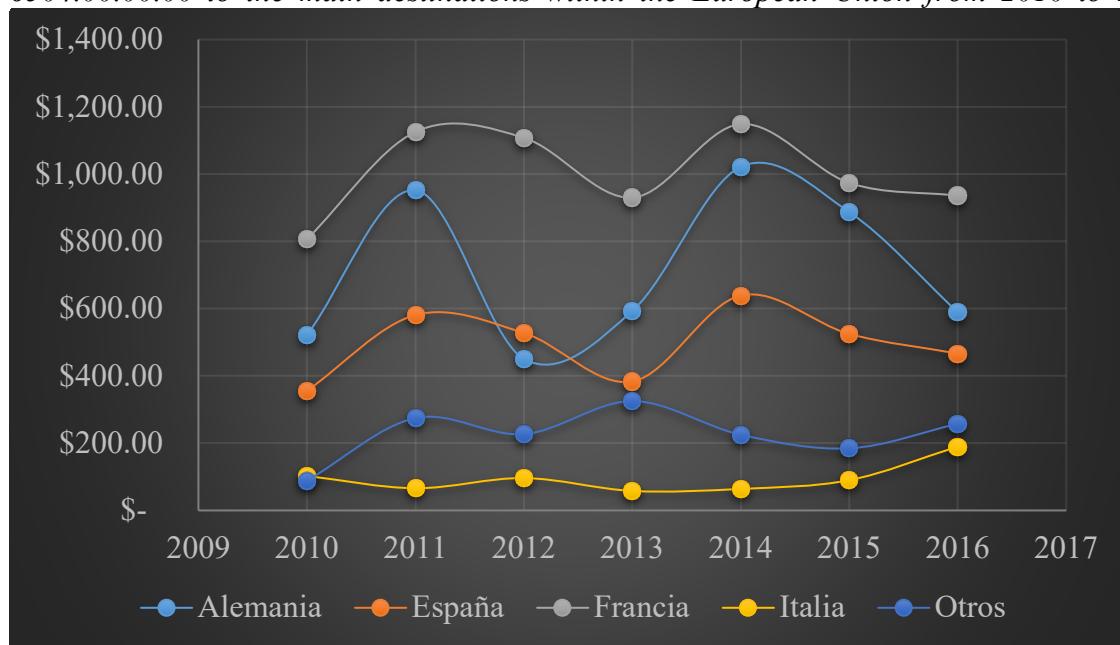
Although this designation represented an important international recognition of the quality, tradition, and cultural value of the product, its effect on exports was not immediate. This is largely explained by the macroeconomic context that Europe was going through in 2013, characterized by a prolonged recession and a prioritization of policies aimed at domestic economic stability. As a result, European markets were unable to immediately

capitalize on the trade opportunities arising from the declaration because the attention of importing countries was focused on containing the economic crisis, to the detriment of the promotion of foreign trade. However, once the region began to show signs of economic stabilization, especially from 2014 onwards, it was possible to observe a greater interest in products with cultural and artisanal added value, such as toquilla straw hats. This favored a more promising environment for their insertion and positioning in markets that are closely linked to design, sustainable fashion, and ethical trade, which obviously resulted in a notable increase in the volumes exported to the main destinations of the European Union.

Finally, in 2015 and 2016, exports experienced a sustained downward trend, despite the progress made in the negotiations of the Multiparty Trade Agreement between Ecuador and the EU. One of the most determining factors of this contraction was the appreciation of the US dollar against the euro, which made Ecuadorian products more expensive in the European market by reducing their competitiveness in terms of price. This situation was worsened by the fact that Ecuador, having a dollarized economy, could not apply exchange rate policies to counteract this effect (Rogel, 2014). Added to this was greater international competition, especially from Asian and Latin American countries with lower production costs or preferential trade conditions. Although the signing of the agreement with the EU was already coming by then, its positive effect was not immediately reflected, as the European market continued to be cautious and demanding. In this context, the loss of competitiveness, the lack of a favorable trade framework, and external pressure together had an impact on the decrease in exports.

Figure 1

Evolution of Ecuadorian exports determined by the FOB export value of subheading 6504.00.00.00 to the main destinations within the European Union from 2010 to 2016



Source: Central Bank of Ecuador 2025

Figure 1 shows a line graph to illustrate the evolution of Ecuadorian exports under tariff subheading 6504.00.00.00 to the main destinations within the European Union between 2010 and 2016, one year before the Multiparty Trade Agreement entered into force. In this type of chart, data is represented by points connected by line segments, making it easier to identify variations or behaviors over a given period. This type of representation is particularly useful when you want to analyze the evolution of variables over time, as it provides a clear view of fluctuations and can highlight short-term, medium-term, or long-term trends (Rodó, 2022). This type of graph is ideal as it can show clear trends, allowing you to easily observe how exports to each country have fluctuated over time, identifying increases, decreases, and periods of stability.

In the same way, in this type of graph, multiple series are compared, as it facilitates the direct comparison of the performance of exports to different destinations in the European Union such as: Germany, Spain, France, Italy and other EU countries, in the same period, we can also see which markets have been more important or have experienced greater growth or decline. In the graph, a plan has been made in which the horizontal axis represents time in years, and the vertical axis represents the FOB value of exports. This can provide a better understanding of the export trajectory for each destination. The graph was made as a result

of the data in Table 1, data that were extracted from the website of the Central Bank of Ecuador.

Now, in relation to the graph, it has been determined that there are several interesting trends in Ecuadorian exports of subheading 6504.00.00.00 to the European Union, and the following is concluded:

- **Germany** is shown as a very relevant destination country for Ecuador in relation to subheading 6504.00.00.00, but it is important to mention that there have been certain fluctuations throughout the period since, in 2011, there was a peak and then a general downward trend until 2016.
- **Spain**, on the other hand, shows significant volatility, with increases in the first year, followed by a decrease in the following years, showing a certain recovery towards the end of the given period.
- **France** has remained in an intermediate range of export value, showing its relatively stable trends with their respective ups and downs.
- **Italy** consistently shows the lowest export values during the period analyzed.
- The group of "**Other**" EU countries also shows variations, although they generally remain at lower values in relation to Spain and Germany.

In summary, Figure 1 shows that the dynamics of exports under subheading 6504.00.00.00 have been quite diverse, as over the years, several destination markets have experienced greater growth or volatility than others.

Table 2

Annual FOB values in thousands of dollars of Ecuadorian exports of subheading 6504.00.00.00 to the main countries of destination in the European Union

| | Germany | Spain | France | Italy | Other |
|--------------|----------------|--------------|---------------|--------------|--------------|
| 2017 | \$ 1.266,30 | \$ 562,10 | \$ 881,50 | \$ 57,20 | \$ 298,00 |
| 2018 | \$ 1.073,60 | \$ 681,00 | \$ 890,90 | \$ 128,40 | \$ 238,00 |
| 2019 | \$ 1.718,60 | \$ 605,20 | \$ 768,00 | \$ 86,10 | \$ 318,80 |
| 2020 | \$ 1.127,80 | \$ 282,40 | \$ 442,60 | \$ 31,80 | \$ 190,60 |
| 2021 | \$ 772,60 | \$ 144,60 | \$ 387,90 | \$ 69,80 | \$ 167,30 |
| 2022 | \$ 1.951,50 | \$ 408,10 | \$ 695,00 | \$ 76,90 | \$ 312,70 |
| 2023 | \$ 2.083,80 | \$ 567,00 | \$ 851,50 | \$ 182,60 | \$ 346,30 |
| 2024 | \$ 2.299,40 | \$ 762,10 | \$ 523,10 | \$ 181,20 | \$ 253,50 |
| TOTAL | \$ 12.293,60 | \$ 4.012,50 | \$ 5.440,50 | \$ 814,00 | \$ 2.125,20 |

Source: Central Bank of Ecuador 2025

It took Ecuador almost 10 years to sign the Multi-Party Trade Agreement with the European Union. In 2016, 11 days before November, Ecuador's Protocol of Accession to the trade agreement with Europe was signed, and in the following year, a milestone was marked for Ecuadorian trade, since the Agreement entered into force on January 1, 2017. (Andrade & Meza, 2017).

Table 2 shows the annual values of FOB exports, expressed in thousands of dollars, corresponding to the products classified under tariff subheading 6504.00.00.00, destined for various countries of the European Union. The data was obtained from information from the Central Bank of Ecuador, filtered by year from 2017 in relation to exports until 2024, which is published on its website. Thanks to this reliable source, it has been possible to collect the necessary data to detail the information in the table, allowing me to carry out an accurate and updated analysis of exports during the period considered. The analysis covers the period between 2017, the year in which the Multiparty Trade Agreement between Ecuador and the European Union came into force, and 2024.

With the entry into force of the Agreement in 2017, regarding the conditions of access to the European market for Ecuadorian products, an improvement was expected. This agreement allowed for a gradual reduction of tariffs for some products and the immediate elimination of tariffs for various products from Ecuador, thus facilitating an increase in exports during that year. Likewise, in general, a growth in exports of the aforementioned subheading was observed; this was also due to a positive reception of the European market towards Ecuadorian products. In the same way, in 2018, the trend was maintained.

For the year 2019, exports of subheading 6504.00.00.00 were relatively stable. This stability is attributed to the Multiparty Trade Agreement since the demand from European countries was higher in contrast to years before the Agreement. Although all destination countries increased their imports of the aforementioned subheading, Italy showed a different picture, since exports to that market fell significantly.

In 2020, Ecuadorian exports in general had very significant repercussions due to the COVID-19 pandemic, as restrictive measures worldwide, such as border closures and the limitation of logistics processes, affected supply chains and reduced demand in several sectors. According to the Central Bank, the Ecuadorian economy had a decrease of 7.8% in 2020. Several products were affected, plus agricultural products such as bananas and cocoa

witnessed a significant reduction due to low international demand and different logistical difficulties at that time.

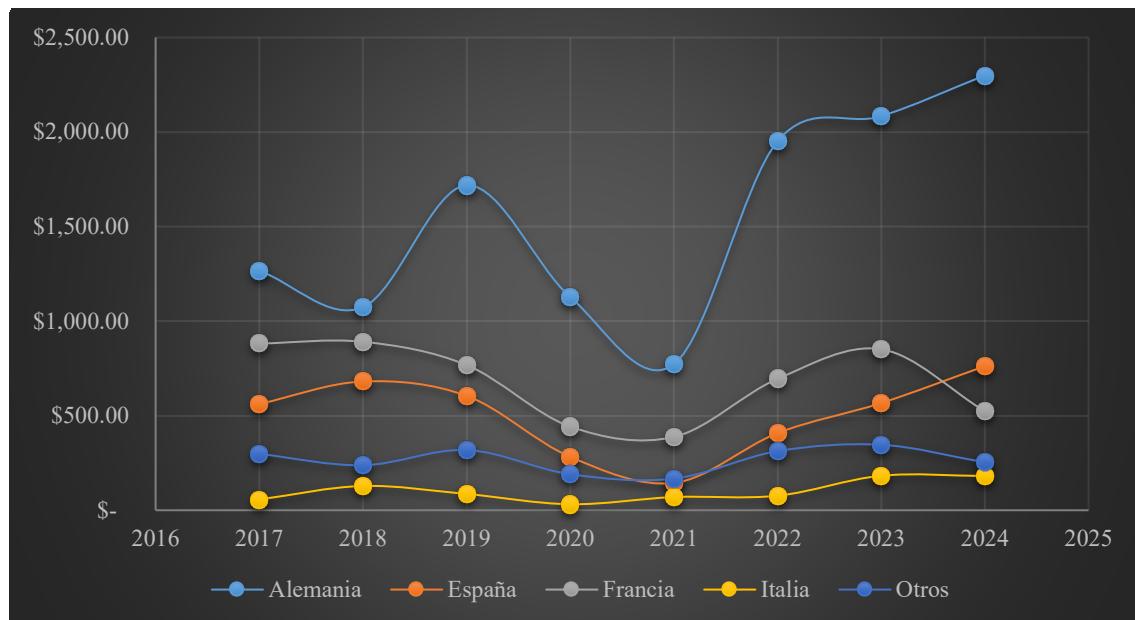
In contrast, in 2021, the recovery of international trade was gradual; thanks to the implementation of vaccination and the easing of sanitary restrictions, trade began to recover. In this way, Ecuadorian exports to the EU experienced an improvement, not immediately but gradually, due to the evolution of the health situation at that time.

During the following two years, 2022 and 2023, significant challenges were faced, this is in relation to logistics issues, because after the pandemic it can be said that there was a global crisis in the supply chain, since transport costs were high, while trying to couple the new logistics costs, delays in the deliveries of goods were witnessed (ECLAC, 2020). In relation to the logistics issue, the problems of international transport were very relevant obstacles, in addition to the different restrictions on logistics chains, in such a way that the scenario in the field of international trade was unfavorable. Something always has to be taken advantage of complex situations, which is why the pandemic has served as a catalyst for the digitalization processes of commercial logistics, accelerating a process that was already under development and that today is part of the new logistics reality to which the export sector has adapted in a way that maintains sustained growth(Capurro, 2020).

Finally, in 2024, projections indicated a stabilization of Ecuadorian exports to the EU, in relation to Italy, according to the figures obtained from the Central Bank of Ecuador. A notable growth and recovery are shown, since in previous years exports to that market fell significantly. This shows that factors such as product innovation and improved competitiveness were important in maintaining and expanding the presence of Ecuadorian products in the European market.

Figure 2

Evolution of Ecuadorian exports determined by the FOB export value of subheading 6504.00.00.00 to the main destinations within the European Union from 2017 to 2024



Source: Central Bank of Ecuador 2025

Figure 2 shows a line graph to illustrate the evolution of Ecuadorian exports under tariff subheading 6504.00.00.00 to the main destinations within the European Union between 2017, which was the year the Multiparty Trade Agreement entered into force, and 2024. The graph was made as a result of the data in Table 2, data that were extracted from the website of the Central Bank of Ecuador.

Several interesting trends in Ecuadorian exports of subheading 6504.00.00.00 to the European Union have been analyzed based on the different scenarios from 2017 to 2024, and the following is concluded:

- **Germany** continues to be a very important country for Ecuadorian exports, even more so for the products of subheading 6504.00.00.00. In 2017, it shows an increasing trend in relation to 2016, with a value of USD 1,266.30 thousand. In 2018, a significant part decreased, but it recovered immediately in 2019. For the year 2020, there is a notable decrease in exports of the aforementioned subheading, which is due to the health crisis caused by COVID-19 that the whole world was going through at that time. In the following 3 years, corresponding to 2022, 2023, and 2024, Ecuadorian exports of products under subheading 6504.00.00.00 recover and increase again, strengthening considerably, reaching in 2024 the highest peak with an FOB value of USD 2,299.40 thousand.

- **Spain**, on the other hand, shows a fluctuating behavior, despite having the Multiparty Trade Agreement already in force. In the first year, it does not represent a significant growth, since the FOB value of Ecuadorian exports of subheading 6504.00.00.00 to that market was USD 562.10 thousand. The following two years, which are 2018 and 2019, increase significantly and remain stable during that period until 2020, where a very noticeable decrease is observed, since the FOB value of exports of subheading 6504.00.00.00 was USD 282.40 thousand, which was one of the lowest figures. In the period between 2021-2024, exports recover very substantially, reaching a peak in 2024 with an FOB value of USD 762.10 thousand, this peak can be attributed to a very important factor such as fashion, since in Spain in the spring and summer seasons it is very common to wear this hat, setting a fashion trend, with this it is understood that in Spain there is a very significant appreciation for fashion for Ecuadorian toquilla straw hats (Ministry of Foreign Affairs and Human Mobility, 2021).
- **France** exhibits a stable behavior with slight variations. It began in 2017 with USD 881.50 thousand and maintained similar values until 2019, but registered an abrupt drop in 2020 to USD 442 thousand, also due to COVID-19 restrictions. Since 2022, there has been a slight recovery, reaching USD 851.50 thousand in 2023, but in 2024 it falls significantly again to USD 523 thousand. In fact, analyzing all the figures since 2010, in 2024 it is the third lowest figure that has been taken as the value of FOB exports of the subheading 6504.00.00.00.
- **Italy** remains one of the lowest destinations throughout the period. It started at USD 57.20 thousand in 2017, reached its lowest point in 2020 at only USD 31 thousand, and rose slightly to USD 182 thousand in 2023 and 2024. These relatively low figures compared to other destination countries can be attributed to the fact that Italy is a very demanding market since it has a well-known hat industry, which implies competition between products (Cullen, 2024).
- The group of "Others" also presents variations, having its relatively stable trends with a direction of increase. These factors are related to participation in international fairs where products such as toquilla straw hats are exhibited and are aimed at new European markets.

In summary, Figure 2 shows that the dynamics of exports under subheading 6504.00.00.00 have been quite diverse, since over the years analyzed, several destination

markets have experienced greater growth or volatility than others. It is important to mention in a general way that in 2020, in addition to the COVID-19 pandemic, in Ecuador hat producers in Ecuador went through a shortage of raw material for the manufacture of the toquilla straw hat, which also occurred due to COVID, since many artisans temporarily ended their activities to comply with the sanitary measures proposed (Vélez & Erazo, 2022). This had a direct impact on exports to the European Union, causing a notable decrease.

Table 3

Total FOB values in thousands of dollars of Ecuadorian exports of subheading 6504.00.00.00 to the main destination countries in the European Union from 2010 to 2024

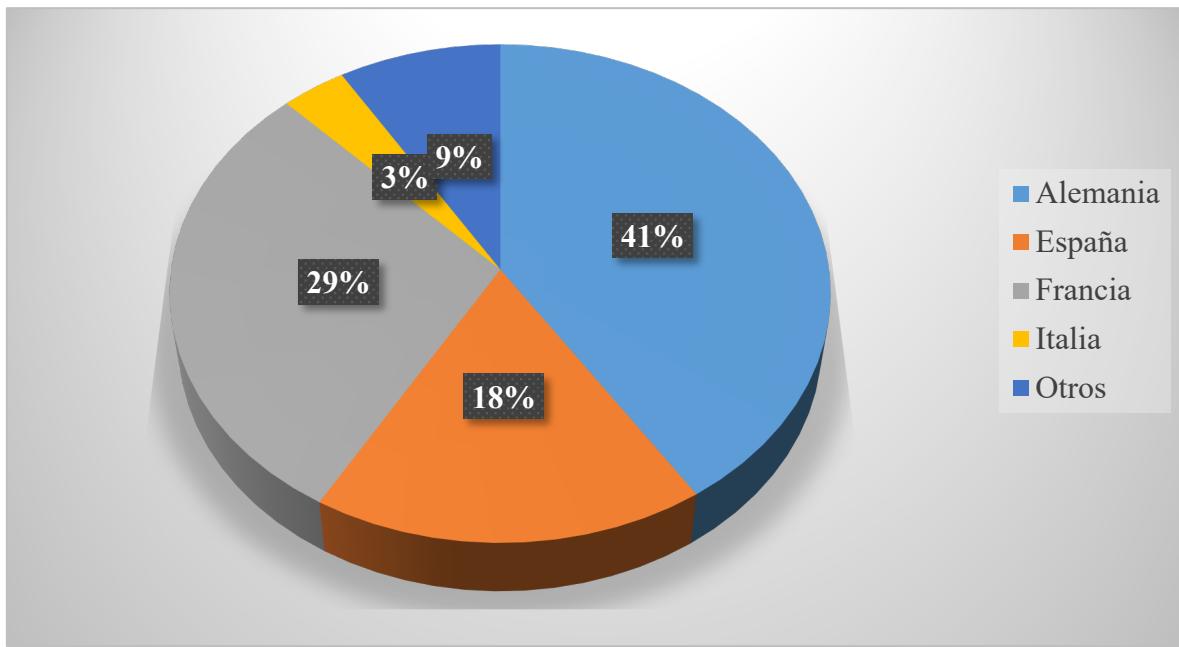
| | Germany | Spain | France | Italy | Other |
|--------------|----------------|--------------|---------------|--------------|--------------|
| TOTAL | \$ 17,309.10 | \$7,490.50 | \$12,468.30 | \$1,481.00 | \$3,707.90 |

Source: Own elaboration

Based on the analysis of the annual FOB values in thousands of dollars of Ecuadorian exports of subheading 6504.00.00.00 to the main destination countries in the European Union, both in Table 1 and Table 2, it has been determined that the main destination countries during the period between 2010 and 2024 are Germany, Spain, France, and Italy. These markets represent the most significant destinations for these products, reflecting a commercial concentration in these four countries. For a better visualization of this distribution, a pie chart was produced illustrating the percentage of participation of each country. In addition, a group called "Others" has been included, which groups the rest of the member countries of the European Union that have also admitted Ecuadorian exports, but whose participation is less representative individually. The graph represented as Figure 3 was constructed from Table 3, which represents the total values by country obtained from Tables 1 and 2, which allows the relative proportion of exports to each destination to be evidenced. This graphical representation facilitates the interpretation of the data and justifies the choice of the countries considered as the main trading partners within the European bloc in the scenario of this research.

Figure 3

Total FOB value pie expressed as a percentage of Ecuadorian exports of subheading 6504.00.00.00 to the main destinations within the European Union from 2010 to 2024.



Source: Own elaboration

CHAPTER 3 **IDENTIFY THE MAIN TARIFF AND NON-TARIFF BARRIERS IMPOSED BY THE EUROPEAN MARKET FOR PRODUCTS UNDER SUBHEADING 6504.00.00.00**

Tariff subheading 6504.00.00.00, according to the Tariff Nomenclature of the Andean Community (NANDINA), corresponds specifically to "Hats and other headdresses, braided or manufactured by joining strips of any material, whether or not trimmed. This category mainly includes Ecuadorian toquilla straw hats, also known internationally as "Panama hats", made from the fiber of the Carludovica Palmata palm. These hats were declared Intangible Cultural Heritage of Humanity by UNESCO in December 2012, recognizing the traditional weaving of the Ecuadorian toquilla straw hat as a significant cultural expression (UNESCO, 2012).

The main producing areas in the Ecuadorian territory are located in the provinces of Manabí, particularly in the cantons of Montecristi and Jipijapa; on the other hand, in Azuay, in the cantons of Cuenca and Sígsig, places that constitute the traditional nuclei of production of toquilla straw hats. In these territories, weaving techniques have been preserved and transmitted from generation to generation, consolidating themselves as part of the country's intangible cultural heritage. It should be noted that these techniques vary according to the

region of origin, which has a direct impact on the structural, aesthetic, and quality particularities of the final product, giving it a distinctive character in the international market (Ministry of Tourism, 2014).

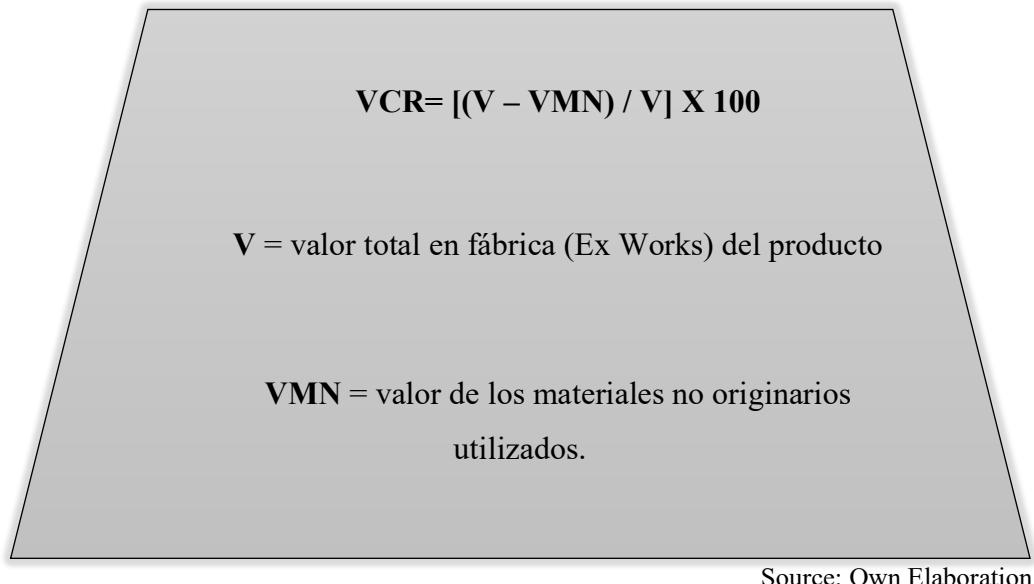
3.1 Barriers to Tariff

According to the text of the Multi-Party Trade Agreement between the European Union and Ecuador, in force since January 1, 2017, as well as information available on the official website of the European Commission on the Access2Markets portal, Ecuadorian products classified under tariff subheading 6504.00.00.00 benefited from a significant tariff reduction. Prior to the entry into force of the agreement, the European Union applied tariffs ranging from 2.7% to 6.3%, depending on the type of hat and the materials used in its manufacture. These tariffs were applied on the basis of Ecuador's Most Favored Nation status. Now, with the entry into force of the Agreement, this product was classified within the category "relief 0", which means a total elimination of tariffs immediately; thus, toquilla straw hats, covered under subheading 6504.00.00.000, benefited immediately (SENAE, 2016).

In order for Ecuadorian products classified under tariff subheading 6504.00.00.00 to be eligible for the tariff benefits established in the Multiparty Trade Agreement with the European Union, certain specific requirements must be met. Among them, one of the most relevant is the compliance with the rules of origin, which allow verifying that the product actually has Ecuadorian origin, a necessary condition to benefit from the tariff preferences. Alternatively, products may qualify as originating if they comply with a Regional Value Content (RVC) with a minimum of 50%, calculated according to the formula established in Article 5 of Annex II.

Figure 4

Formula to calculate the Regional Content Value of a product according to Article 5 of Annex II of the Multiparty Trade Agreement between the European Union and Ecuador.



Here is an example. An Ecuadorian company X manufactures a hat unit that obviously falls under subheading 6504.00.00.00, whose total value is \$120 USD. Of this total value, \$40 USD corresponds to materials that have been imported from countries not belonging to the European Union or originating in Ecuador.

$$VCR = \left(\frac{120 - 40}{120} \right) \times 100 = 66,67\%$$

With the formula applied, it can be determined that the Regional Content Value is 66.67%, which applies is sufficient as required by the Agreement; in this case, it complies with the regional content to apply to the tariff preference.

The accreditation of origin is done through the Exporters Registration System (REX), which is administered by the Ministry of Production, Foreign Trade, Investment, and Fisheries (MPCEIP). Through this system, authorized exporters can issue the declaration of origin directly on the commercial invoice, which is an essential requirement for the importer in the European Union to apply for tariff exemption (Ministry of Production, Foreign Trade, Investment and Fisheries, 2023).

Similarly, if this requirement of the rules of origin is not met, the EU will apply the standard Most Favored Nation (MFN) tariff, which ranges from 2.7% to 6.3%. In addition

to that, depending on the country of the European Union, there may be penalties in case of misrepresentation in the declaration. (SENAE, 2016).

3.2 Foreign Trade and Trade Barriers

In the area of foreign trade, it is essential to analyze various regulatory aspects in order to gain a clearer and deeper understanding of their operation and dynamics. In this context, regulations can sometimes be perceived as restrictive; however, their application must be interpreted from a strategic perspective. Countries implement various measures to regulate the flow of goods across borders in order to safeguard their economic interests.

Trade barriers are found within the activities of foreign trade, where each country is responsible for analyzing the measures to be taken within the commercial exchange. (Huamán-Zevallos et al., 2021). Countries are responsible for applying trade barriers, depending on where the products and goods are destined. That is why, when talking about a specific sector, it is necessary to analyze the requirements that are necessary to establish the respective measures, this of course in coordination with the different related entities. (Kühn & Viegelahn, 2019). Free trade treaties or agreements have promoted the trade of products and services between different countries, but each of these instruments is always subject to the different conditions of each country, which include issues such as the elimination of trade barriers, sanitary measures, labor issues, and environmental issues. (Huamán-Zevallos et al., 2021). That is why it is essential to understand the restrictions or measures that apply to each product in the import process.

When importing and exporting goods, the different points that are within the whole process are analyzed, such as tariff and non-tariff barriers, which are those that allow or limit the entry of goods from other countries, with the purpose of safeguarding national production or commercialization. (Silva & Silva, 2019). Many companies are affected by barriers, specifically tariff barriers. For example, one of the most common is the Ad Valorem tariff. In the framework of trade policies, it is crucial to analyze the operability and application of trade barriers as they are key instruments or measures for the regulation of international trade (Baena, 2018).

These measures include tariff barriers, which, although restrictive in appearance, fulfill the fundamental function of protecting domestic production from external competition, promoting the development of the different strategic sectors, and maintaining trade equilibrium (Martínez, 2021). Therefore, these policies should not be understood solely as

obstacles, but as regulatory tools that allow countries to preserve the stability of their domestic economy in an increasingly competitive global environment.

One of these rules, as already mentioned, are the tariff barriers that in the beginning could be considered as obstacles to the trade of goods and services to access different markets worldwide, but today this definition has been left aside and has been modified, since the different agreements and economic integrations have reduced the tariff preferences as a purpose of obtaining benefits between both countries, this of course in relation to certain products.(Huamán-Zevallos et al., 2021). It is also worth mentioning that tariff barriers have been in place since the GATT, which practically preceded the configuration of the multilateral trade system. (Rojas et al., 2017).

3.3 Types of Tariff Barriers

Tariff barriers are fiscal instruments applied by governments to imported products, whose main purpose is to safeguard domestic production against foreign competition. The imposition of tariffs increases the cost of foreign products, which helps strengthen the competitiveness of local industry, promotes the consumption of domestic products, and contributes to guaranteeing quality standards in the domestic market. Likewise, these tariffs represent a significant source of tax revenue for the state, which helps it to finance public policies and promote economic development. (Esic, 2024). There are certain types of Tariff Barriers, such as AD Valorem, specific, and mixed.

3.3.1 Ad Valorem Tariff

According to the World Trade Organization (WTO), the Ad Valorem tariff is a customs duty that is applied to different imported goods. This tariff is one of the most common types of tariffs used in international trade. This tariff is known as a tax that is applied on the value of an imported good, in other words a percentage of value is added, for example: if an Ad Valorem tariff of 12% is applied to a product with a value of \$1000 USD, this value to be paid is an additional \$120 USD of tariff (World Trade Organization, 2025). In the case of Ecuador, thanks to the Multi-Party Trade Agreement between the EU and Ecuador, an Ad Valorem tariff of 0% is paid for products under subheading 6504.00.00.00.

The World Trade Organization (WTO) recognizes the ad valorem tariff as one of the most widely used instruments in international trade, and highlights three fundamental characteristics that define it: transparency, predictability, and relative equity. However,

although these aspects have obvious advantages, it is also important to analyze them critically in order to better understand both their potential and their limitations.

First, transparency. This type of tariff is considered the clearest and easiest to interpret, since it is applied as a percentage of the customs value of the product. However, this apparent transparency does not always guarantee fairness, since in practice it can be subject to manipulation. Some importers under-declare values in order to reduce the amount of duty payable, which distorts the system and undermines the objective of tax fairness in trade (World Trade Organization, 2010).

Second, predictability. One of the great contributions of the Ad Valorem tariff is its ability to generate confidence among international trade players. By binding to multilateral commitments, countries commit themselves not to raise tariffs above levels agreed among members. This provides a more stable trading environment and facilitates the planning of exporting and importing companies. Thus, this feature not only favors trade flows but also promotes investment and economic growth (World Trade Organization, 2025).

Finally, relative equity. This principle is based on the logic that those who import higher value products should pay a higher tariff, which introduces a criterion of proportionality in the collection. In this way, the Ad Valorem tariff acts as a tool that distributes the tax burden more fairly, adapting to the economic value of each commercial operation (World Trade Organization, 2010).

3.3.2 Specific Tariff

Specific tariffs are a type of tax applied to imports of different goods. This is done by calculating a fixed amount per unit of average, either by weight, volume, quantity, etc. It is important to mention that it does not depend at all on the value of the product. An example can be applied to better understand how this tariff is applied. A rate of \$3.00 USD per kg is applied, or it could be \$4.00 USD per unit. In the system, this tariff differs from Ad Valorem tariffs, where they are calculated as a percentage of the value of the product (World Trade Organization, 2025).

In the Multiparty Trade Agreement between the European Union and Ecuador, a progressive liberalization of trade in goods is established; however, in the case of goods under subheading 6504.00.00.00, an immediate liberalization of tariffs is established. The mentioned Agreement benefits toquilla straw hats, which are one of the products under the

mentioned subheading, both for Ad Valorem and specific tariffs, as long as the requirements established in the Agreement are complied with (SENAE, 2016).

3.3.3 Mixed Tariff

Mixed tariffs are a type of tariff that combines two tariff elements in a single tariff: on the one hand, the ad valorem tariff that represents the value of the merchandise, and, on the other hand, a specific tariff that represents the amount per unit of measurement in volume, weight, and quantity. This combined structure allows countries to implement a more complex tariff protection (World Trade Organization, 2025).

Within the context of the Multi-Party Trade Agreement between the European Union and Ecuador, Ecuadorian products classified under subheading 6504.00.00.00, such as straw hats, are exempt from paying tariffs when entering the European market. This exoneration includes the mixed tariff, which combines the “Ad Valorem” tariff and the “Specific” tariff, which is interpreted as a significant advantage for Ecuadorian exporters. It is important to point out that this preference has been granted thanks to the special treatment granted to Ecuador as a developing country within the agreement (SENAE, 2016).

3.4 Value-added tax (VAT)

VAT refers to an amount of money that is added to the amount of the price of a product or service (Sandoya et al., 2021). VAT moves high values in the economy, as it directly influences the goods and services consumed within countries. VAT values vary according to the region or country, for example, in Latin America, in general the average value of VAT is 15%, although obviously there are countries that have much higher values such as Uruguay, with 22%, on the other hand, we have Panama with a value of 7%, for its part Cuba is one of the countries that does not charge VAT, on the side of Ecuador, it is 15%, and the others vary according to the country (Almeida et al., 2019).

Now, although the Multiparty Trade Agreement between the European Union and Ecuador establishes the progressive elimination of import tariffs for certain products, or in the case of products under subheading 6504.00.00.00, which was the immediate elimination, it is essential to clarify that such tariff liberalization does not entail an absolute exoneration of all tax burdens. In this sense, the Value Added Tax (VAT) remains in force as an internal tax, the application of which is not subject to the commitments acquired within the framework of the agreement. Therefore, even when a product enters free of tariffs as agreed in the agreement, it will continue to be taxed with VAT according to the national tax

legislation of each member country of the European Union (Baena, 2018). It is very important to mention this distinction as it helps to avoid misinterpretations about the tax structure applicable to imports under preferential regimes.

3.3 Types of Non-Tariff Barriers

Non-tariff barriers are a set of measures and policies that, without being a direct tax on the import value, restrict or hinder the access of foreign products to domestic markets. Within the context of trade between Ecuador and the European Union, specifically for Ecuadorian products under subheading 6504.00.00.00, these measures acquire certain relevance despite the existence of the Multiparty Trade Agreement that has been in force since January 01, 2017. This commercial milestone, although it has facilitated commercial exchange, has not completely excluded the technical, sanitary, phytosanitary, and other procedures that affect the Ecuadorian artisanal products mentioned above (Roca, 2017).

Non-tariff barriers represent very relevant challenges for Ecuadorian exporters, specifically for the small and medium-sized enterprises that make up a large part of the country's artisanal sector. In contrast to tariff barriers, which are quantifiable and transparent, non-tariff barriers are generally more complex, less visible, and, in some cases, much more restrictive than tariffs. This is because the identification, understanding, and overcoming of these barriers are determining factors for the success of the internationalization of Ecuadorian products in the mentioned market, which is the European market, which, in addition to having a high purchasing power, is very competitive (International Trade Center, 2018).

Non-tariff barriers (NTBs) are measures other than tariffs that countries generally use to restrict or regulate international trade. These NTBs include sanitary and phytosanitary measures, technical barriers to trade such as technical and quality standards, import licenses, quotas, price controls, labeling requirements, and the rules of origin explained at the beginning of this chapter. As a historical context, non-tariff barriers date back to the middle of the 20th century, specifically after the negotiation rounds of the General Agreement on Tariffs and Trade (GATT) in 1947, when the progressive reduction of tariffs led many countries to apply non-tariff restrictions as a new way of protecting their national industries (World Trade Organization, 2025).

In the context of the Multipartes trade agreement between the European Union and Ecuador, although preferential access for products such as toquilla straw hats, a product that falls under tariff subheading 6504.00.00.00, eliminates tariffs, there are still non-tariff

barriers such as technical requirements in relation to labeling, certifications of origin, sustainability of production and compliance with sanitary and phytosanitary regulations that have been imposed by the EU within the framework of the Trade Agreement. These measures require Ecuadorian producers to comply with specific standards in order to enter the European market, which represents a major challenge, especially for small-scale artisanal exporters (European Commission, 2025).

3.3.1 Phytosanitary Measures

According to the page of Montecuador (Montecuador, 2024), toquilla straw hats are products that fall under subheading 6504.00.00.00; these hats are made from plant materials such as toquilla straw or its scientific name (Carludovica Palmata). Therefore, these products are subject to the provisions of Regulation (EU) 2016/2031 of the European Parliament and of the Council of 26 October 2016 on protective measures against plant pests, specifically Article 72 which requires that "plant products", defined as "unprocessed materials of plant origin and processed products which, by their nature or by their processing, may create a risk of spreading quarantine pests", comply with specific requirements (European Union, 2016). On the other hand, Implementing Regulation (EU) 2019/2072 establishes in its Annex XI that products based on braided vegetable fibers must be "free from signs of relevant quarantine pests" (European Union, 2019).

Although the Multiparty Trade Agreement between the European Union and Ecuador does not explicitly detail the quaternary pests of interest to the European phytosanitary authorities, it is important to consider that certain harmful organisms could be associated with products such as toquilla straw hats, given that these products are made from natural plant fibers, which means that they can be carriers of specific pests, justifying the implementation of rigorous phytosanitary controls by the EU to preserve health in its territory. For its part, Ecuador, in order not to generate any setbacks when exporting its products, grants phytosanitary certification for countries that require it, since there is an exemption for "highly processed plant products" according to Article 74 of Regulation (EU) 2016/2031, the interpretation varies by member country. Countries such as Germany, France, and Spain generally request these phytosanitary certificates for the entry of products such as those under subheading 6504.00.00.00; in contrast, countries such as Belgium and the Netherlands apply the exemption (Agrocalidad, 2020).

3.3.1 Labeling and Technical Requirements

The specific regulation governing the labeling of toquilla straw hats in the EU is Regulation (EU) No 1007/2011 of the European Parliament and of the Council of 27 September 2011, which refers to textile fiber names and the labeling of textile products. This regulation sets out detailed requirements for exported hats. In relation to the composition of the fibers, it has to be according to as stipulated in Article 5, the nature of the fibers must be precisely indicated. In the case of toquilla straw hats, it must be specified that the raw material is 100% toquilla straw (Carludovica Palmata). In relation to languages, according to Article 16.3, the label must be in the official language of the member country where the product will be marketed, for example, if it is in the Italian market, the label and information must be in Italian. Likewise, the same regulation establishes that the exact composition and the presence of any element that could generate allergies or affect the consumer's health in the worst case must be indicated. If distributed in several countries, it must include all the corresponding languages. According to Article 15, the label must include:

- Full name of manufacturer or importer
- Tax identification number
- Country of origin: "Made in Ecuador".
- Care and preservation instructions
- Recycling symbols and other relevant pictograms

An important point, although not enforceable within the framework of the aforementioned Agreement, there are certain countries that value artisanal textile products for the way they are manufactured, but they are valued even more when they are aligned with sustainability, as is the case in Germany. The German government has implemented the "Grüner Knopf" label, which in Spanish translates as "Green Button", which is a certification that guarantees that textile products comply with social and environmental standards, and that in Germany more than 40% of consumers have adopted to promote such practices and obviously prefer products with this label, in the same way it happens in France (Messe Frankfurt, 2024). In a theoretical context, this certification is an ecological and social label that is awarded by the German government to textile products that meet social and environmental criteria, in addition to due diligence requirements that have been based on standards of the United Nations and the Organization for Economic Cooperation and Development (OECD) (Mohorte, 2019).

The "Green Button" certification within the framework of the Multiparty Trade Agreement between the EU and Ecuador represents a strategic opportunity for Ecuadorian exporters of products under subheading 6504.00.00.00, such as toquilla straw hats, as it demonstrates compliance with high environmental and social standards required by European consumers and institutions. This label, recognized by German consumers, adds value to the product by guaranteeing sustainable practices in its production (OECD, 2022). It also facilitates access to new market segments that include public institutions and companies that prioritize sustainability in their purchases. In this way, having this certification strengthens the reputation of the product as a culturally valuable and environmentally responsible handicraft in a European market that is becoming increasingly aware, and exported products will be better positioned as they will have a very notable competitive advantage (Federal Ministry for Economic Cooperation and Development, 2023).

3.3.2 Restrictions on chemical substances

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) establishes strict limits on certain chemical substances in certain products that are marketed in the European market. For subheading 6504.00.00.00, which includes toquilla straw hats, they must comply with restrictions on dyes, colorants, preservatives, and other chemical substances that have been used during the production process (Your Europe, 2025)

3.3.3 Packaging standards

Wooden packaging used to transport hats must comply with the International Standard for Phytosanitary Measures (ISPM), because although there is an agreement that eliminates tariffs between the parties mentioned, there are other obstacles to consider, such as packaging standards. In the European market, incoming products must comply with specific standards regarding packaging materials, packaging strength, labeling, and the use of treated wood when used with pallets or crates. The most applicable regulation within these packaging standards is the "International Standard for Phytosanitary Measures No. 15 (ISPM 15), regulation that requires all wood used in packaging to be heat treated where the wood packaging is subjected to high temperatures eliminating any fungus or insects, likewise thanks to this increases its durability and resistance, on the other hand, it also raises the possibility of being treated with methyl bromide, the way it is done must be its corresponding certification (FAO, 2019).

Along the same lines, although not required, it is recommended that the European market promote the European Green Pact, which implies the use of biodegradable and recyclable materials. This sub-theme is linked to Sustainable Development Goal (SDG) 12, which relates to responsible production and consumption, as it promotes sustainable packaging practices that reduce environmental impact. Similarly, this is also related to SDG 8, which relates to decent work and economic growth, as this can highlight compliance with international standards that will improve competitiveness and open new opportunities for Ecuadorian products (UN, 2018).

CHAPTER 4

DETERMINE THE EXPORT PERFORMANCE OF SUBHEADING 6504.00.00.00 TO THE EUROPEAN UNION BEFORE AND AFTER THE IMPLEMENTATION OF THE MULTIPARTY TRADE AGREEMENT

This chapter specifically analyzes the behavior of Ecuadorian exports of tariff subheading 6504.00.00.00 to the European Union during the period 2010-2024. With an analysis, it will be possible to demonstrate and analyze the real impact of the Multi-Party Trade Agreement in this specific sector, comparing trade trends before and after its implementation.

The objective of this chapter is to determine whether the Multiparty Trade Agreement has had a significant impact on the behavior of exports of Ecuadorian products under subheading 6504.00.00.00 to the European Union. For this purpose, export trends in the period 2010-2016, where there was no agreement, and 2017-2024, which is the period from the implementation of the agreement to the present, identity patterns, variations, and possible external factors that have influenced such exports are evaluated.

For the analysis of Figure 5, it is important to mention that the Multi-Party Trade Agreement established favorable tariff conditions for Ecuadorian exports to the EU. In the specific case of subheading 6504.00.00.00, the agreement stipulated in the pre-agreement situation an applied tariff of 2.7% under the Generalized System of Preferences (GSP+). On the other hand, the post-agreement situation provides for an immediate elimination of the tariff (0%) from the entry into force of the agreement on January 1, 2017.

At this point, it is important to mention the relationship between the EU and Ecuador, where the EU represents the second most important destination for Ecuador's non-oil exports, after the United States. According to data from the Central Bank(2023), total exports to the EU represented approximately 24% of total Ecuadorian exports in 2022.

With the entry into force of the Multi-Party Trade Agreement in 2017, it marked a turning point in trade relations, since in the first year of implementation, non-oil exports to the EU grew by 12% over the previous year (Nieto & Guerrero, 2019). This increase is specifically attributed to the immediate elimination mentioned in the agreement for 99.7% of agricultural products and 100% of Ecuadorian industrial and fishing products. Table 4 is presented in this way.

Table 4

Total values of Ecuadorian exports of products under subheading 6504.00.00.00 to the European Union, by time interval in pre-agreement and post-agreement, determined by FOB value expressed in millions of dollars.

| Years | Total |
|------------------|--------------|
| 2010-2016 | \$ 17.771,00 |
| 2017-2024 | \$ 24.685,80 |

Source: Own elaboration

To make the table, the total values have been taken in a general way and not by country; in other words, the values represent the total exports of subheading 6504.00.00.00 to the European Union as a block. First the totals per country were added up and a general value per country was obtained, then each total value was added up starting from the pre-agreement approach that includes the years 2010-2016 and post agreement that includes the years 2017-2024, in this way the results can be optimally analyzed and interpreted in bars to analyze the real behavior that the exports of Ecuadorian products under subheading 6504.00.00.00 have had. With this information, Figure 5 can be plotted.

Figure 5

Behavior of Ecuadorian exports of subheading 6504.00.00.00 to the European Union from 2010 to 2024.



Source: Own elaboration

The figure shows a clear comparison of the behavior of Ecuadorian exports corresponding to tariff subheading 6504.00.00.00 to the European Union in two periods: 2010-2016, the period before the Agreement, and on the other hand, 2017-2024, the period from the implementation of the agreement to the present. There is a remarkable growth in

the value exported, going from \$17,771.00 USD value that corresponds to the first period to \$24,685.80, which corresponds to the second period. In percentage terms, this represents an approximate growth of 38.9%, which shows a positive trend in exports of these products after the implementation of the trade agreement. This behavior suggests that the Multiparty Trade Agreement has had a favorable effect on the insertion of these products in the European market, possibly due to the elimination of certain tariff barriers, which has generated a greater commercial openness.

Now, it is important not only to analyze it from a general point of view. In order to perform a clear and optimal analysis of the graph, it is important to situate it from a descriptive analysis. So, with the data in Table 2, we have been able to obtain the following data that will serve to generate a better analysis of the behavior of exports of Ecuadorian products under subheading 6504.00.00.00 to the European Union.

Table 5
Total FOB values of exports of Ecuadorian products of subheading 6504.00.00.00 to the European Union expressed in thousands of dollars.

| Year | Overall total FOB value |
|------|-------------------------|
| 2010 | \$ 1.873,60 |
| 2011 | \$ 2.999,20 |
| 2012 | \$ 2.409,70 |
| 2013 | \$ 2.290,00 |
| 2014 | \$ 3.098,80 |
| 2015 | \$ 2.660,60 |
| 2016 | \$ 2.439,10 |
| 2017 | \$ 3.065,10 |
| 2018 | \$ 3.011,90 |
| 2019 | \$ 3.496,70 |
| 2020 | \$ 2.075,20 |
| 2021 | \$ 1.542,20 |
| 2022 | \$ 3.444,20 |
| 2023 | \$ 4.031,20 |
| 2024 | \$ 4.019,30 |

Source: Own elaboration

Thanks to these overall total values, a more in-depth analysis can be made, as detailed in the following table, which not only shows the values, but also the annual variation they have had.

Table 6

Annual evolution of the FOB value and its annual percentage change of Ecuadorian exports of subheading 6504.00.00.00 to the European Union (2010-2024)

| Year | FOB Value | Annual Variation |
|------|-------------|------------------|
| 2010 | \$ 1.873,60 | ----- |
| 2011 | \$ 2.999,20 | 60,07% |
| 2012 | \$ 2.409,70 | -19,66% |
| 2013 | \$ 2.290,00 | -4,97% |
| 2014 | \$ 3.098,80 | 35,32% |
| 2015 | \$ 2.660,60 | -14,14% |
| 2016 | \$ 2.439,10 | -8,32% |
| 2017 | \$ 3.065,10 | 25,66% |
| 2018 | \$ 3.011,90 | -1,74% |
| 2019 | \$ 3.496,70 | 16,10% |
| 2020 | \$ 2.075,20 | -40,65% |
| 2021 | \$ 1.542,20 | -25,68% |
| 2022 | \$ 3.444,20 | 123,33% |
| 2023 | \$ 4.031,20 | 17,04% |
| 2024 | \$ 4.019,30 | -0,30% |

Source: Own elaboration

Several characteristics can be identified from these data, which are detailed below:

- **Volatility:** Volatility, understood as the variability or fluctuation of an economic variable over time, makes it possible to identify how stable or unstable exports have been during a given period. With this definition, it can be analyzed that, throughout the period analyzed, exports show considerable volatility, with inter-annual variations ranging from -40.65% with its year corresponding to 2020, the year of the COVID-19 pandemic, to 123.33% with its year corresponding to 2022. This event suggests instability in export dynamics that can be attributed to multiple factors, such as the sector's sensitivity to changes in external demand, variations in international prices, logistical conditions, and trade policies both domestically and in the European bloc.
- **General growing trend:** despite the volatility, a growing trend is observed when comparing the beginning of the period with a value of \$1,873.60 USD in 2010 and a final value of \$4,019.30 USD in 2024, which in 14 years represents an accumulated increase of 114.52%. This growth suggests that beyond the ups and downs, there is a progressive consolidation of the presence of these

products in the European market. This trend may be related to factors such as the strengthening of productive capacity, improvement of quality standards, as well as a better adaptation to the technical and regulatory requirements demanded by the European Union. From the economic point of view, this behavior allows inferring a positive evolution in the international insertion of the analyzed subheading, especially when linked to the framework of cooperation and commercial opening generated from the Multiparty Trade Agreement.

- **Initial impact of the Multiparty Trade Agreement:** in 2017, the first year of implementation of the agreement, an increase of 25.66% in FOB value is observed with respect to 2016, which could indicate an immediate positive result. This growth is particularly important considering the previous years, where a decreasing trend was shown with its negative variations in 2015 and 2016. The elimination of tariffs and other non-tariff barriers after the signing of the agreement possibly facilitated access to new buyers and improved the competitiveness of Ecuadorian products in general, not only those of subheading 6504.00.00.00. In addition, preferential and stable access to the European market provided exporters with an environment of greater certainty, thus stimulating an increase in the volume of trade operations.
- **Drop during the pandemic:** a significant decrease is recorded in 2020 with an annual variation of -40.65% and 2021 with an annual variation of -25.68%, coinciding with the COVID-19 pandemic and its effects on global supply chains, international mobility, and consumption in importing countries. In the case of Ecuador, there were also logistical limitations, a reduction of working hours, and even the partial closure of production activities, which affected production and exports. This drop reflects the vulnerability of international trade to global and extraordinary events, and highlights the need to strengthen resilience strategies in exporting sectors (Ochoa et al., 2021) .
- **Post-pandemic recovery:** According to the table, an extraordinary increase of 123.33% is observed in 2022, exceeding pre-pandemic levels, followed by an additional growth of 17.04% in 2023. This recovery can be attributed to the reopening of European markets, a stronger than expected global economic recovery, and high pent-up demand from European consumers and distributors.

In 2023, the positive trend continues with growth of 17.04%, confirming that the sector has managed to stabilize after the health crisis. This capacity for adaptation and sustained growth is a favorable indicator of the resilience of the Ecuadorian export sector and suggests that the structural conditions fostered by the Multiparty Agreement have helped sustain trade even in complex situations.

Now, the annual percentage variation shown in the table is calculated using a standard formula of percentage growth or decrease between two consecutive periods. The formula was developed by the author with reference to the guidelines mentioned by Martin (Martin, 2000).

Figure 6
Formula for calculating the annual variation

$$\text{Annual Change (\%)} = \left(\frac{\text{Current Year Value} - \text{Previous Year Value}}{\text{Previous Year Value}} \right) \times 100$$

Source: Own elaboration

METODOLOGY

This research employed a mixed-methods approach, integrating quantitative and qualitative techniques to comprehensively assess the impact of the Multiparty Trade Agreement on Ecuadorian exports classified under subheading 6504.00.00.00 to the European Union.

From a quantitative standpoint, a comparative analysis was conducted on the behavior of FOB values between the periods 2010–2016 (before the agreement) and 2017–2024 (after its implementation), using official data from the Central Bank of Ecuador. An annual series of FOB value and exported weight was organized into tables and figures to identify trends, variations, and significant shifts linked to the agreement's entry into force. Additionally, Pearson's correlation coefficient was applied to measure the strength and direction of the linear relationship between FOB value (in millions of USD) and exported weight (in metric tons) in the main European markets. This statistical analysis allowed for assessing the coherence of trade performance and determining whether the agreement contributed to greater stability and consistency between the two variables.

From a qualitative perspective, the study employed documentary analysis, reviewing regulatory, academic, and institutional sources, including the text of the Multiparty Trade Agreement, sectoral studies, foreign trade reports, and specialized scientific literature. The analysis also examined tariff and non-tariff barriers, technical requirements, rules of origin, and the European Union's health and sustainability standards.

The methodological procedure comprised defining the scope of the study, collecting and cleaning secondary data, establishing the temporal framework (pre- and post-agreement), conducting descriptive and correlational analyses, interpreting the results, and systematically drafting the report. Each stage was designed to ensure the validity, coherence, and reliability of the findings.

RESULTS

Ecuadorian exports of products classified under tariff subheading 6504.00.00.00 to the European Union showed an overall upward trend following the entry into force of the Multiparty Trade Agreement in 2017. The agreement facilitated preferential access to the European market, encouraging the production and commercialization of traditional hats such as toquilla straw hats, which are renowned for their artisanal quality.

Germany consolidated its position as the main export destination within the European bloc, exhibiting sustained growth in the FOB value of imports. The country not only maintained steady demand but also reached its historical peak in 2024, demonstrating a strengthening of bilateral trade relations in this specific segment. This growth is attributed both to the elimination of tariff barriers and to the recognition of the cultural and sustainable value of these products—as well as their aesthetic appeal—in markets with high purchasing power.

Spain, meanwhile, showed a more irregular performance. Despite certain declines in export values during intermediate years, a significant recovery began in 2022, associated with the revival of tourism, the strengthening of commercial distribution channels, and increased participation in international trade fairs. This upturn highlights the potential for consolidating the Spanish market if commercial strategies focused on product promotion and differentiation are effectively implemented.

France, on the other hand, exhibited relative stability throughout the period analyzed, although a significant decline in export value occurred in 2024. This drop may be linked to factors such as the temporary tightening of technical regulations, shifts in domestic demand, or variations in commercial logistics. Despite this, the country remained a stable market, indicating that conditions exist for a future recovery if the restrictive factors are adequately addressed.

Italy, although historically representing the destination with the lowest export volume within the group analyzed, has shown signs of moderate recovery in the last two years. This suggests a possible revival of interest in high-end artisanal products, although it is still necessary to strengthen commercial and promotional presence in this country to achieve higher volumes.

The elimination of tariffs, especially ad valorem tariffs, has significantly improved the competitiveness of Ecuadorian hats in the European market. However, this commercial

advantage has been limited by the persistence of non-tariff barriers. Among the most relevant are phytosanitary measures related to pest control in plant materials, technical requirements for labeling in local languages, and compliance with the Regional Content Value (RCV) required by the agreement, which conditions access to tariff preferences based on the proportion of inputs originating in the region.

It should be noted that the impact of the COVID-19 pandemic in 2020 caused a sharp decline in exports, due to multiple factors, including health restrictions, disruptions in logistics chains, and shortages of raw materials resulting from lockdowns and the global economic slowdown. However, since 2021, there has been a sustained recovery driven by the revival of international demand, participation in trade events, and the strengthening of the productive capacities of national exporters.

In general terms, the Multiparty Trade Agreement can be considered a favorable instrument for the diversification and expansion of the European market for Ecuadorian products classified under subheading 6504.00.00.00. Preferential access has facilitated the positioning of these traditional products in new markets, increased exporters' revenues, and promoted international recognition of Ecuador's cultural heritage. However, additional efforts are required to overcome technical barriers and enhance the sector's systemic competitiveness to fully capture the benefits of the agreement.

In order to complement the descriptive analysis of exports and empirically verify the relationship between the physical volume and economic value of toquilla straw hats exported to the European Union, a Pearson correlation analysis was conducted. This method measures the degree of linear association between two quantitative variables—in this case, FOB value (millions of USD) and exported weight (metric tons)—which is essential for evaluating whether the Multiparty Trade Agreement has influenced the consistency, stability, and overall behavior of international trade in the Ecuadorian handicraft sector.

The analysis was carried out considering the main export destinations within the European bloc: Germany, Spain, France, and Italy, which together account for the majority of Ecuador's exports of products classified under tariff subheading 6504.00.00.00.

Three observation periods were established for each country:

- Before the Agreement (2010–2016),
- After the Agreement (2017–2024), The total period (2010–2024),

which made it possible to comparatively identify structural changes in the relationship between the two variables following the entry into force of the Multiparty Trade Agreement in 2017.

The results of the correlation analysis by country are presented below, accompanied by the respective scatter plots and their economic and statistical interpretation. This procedure seeks to provide quantitative evidence of the Agreement's impact on the export performance of products classified under subheading 6504.00.00.00, contributing to a more accurate understanding of the extent to which this trade instrument has supported the competitiveness of Ecuador's handicraft sector in the European market.

First, the analysis corresponding to the German market is presented, as it is considered the main destination for Ecuadorian exports of toquilla straw hats within the European Union. Germany has maintained steady and stable demand over time, making it a key reference point for assessing the impact of the Multiparty Trade Agreement.

Table 7

Annual values of FOB value and exported weight of products under subheading 6504.00.00.00 to Germany, 2010–2024

| YEAR | FOB VALUE (MILLIONS USD) | WEIGH (TM) |
|------|--------------------------|------------|
| 2010 | 0,52 | 6,5 |
| 2011 | 0,95 | 8,7 |
| 2012 | 0,45 | 3,9 |
| 2013 | 0,59 | 4,1 |
| 2014 | 1,02 | 19,9 |
| 2015 | 0,89 | 5,4 |
| 2016 | 0,59 | 4,4 |
| 2017 | 1,27 | 6,4 |
| 2018 | 1,07 | 5,9 |
| 2019 | 1,72 | 9,8 |
| 2020 | 1,13 | 6,6 |
| 2021 | 0,77 | 4,2 |
| 2022 | 1,95 | 9,8 |
| 2023 | 2,08 | 10,9 |
| 2024 | 2,30 | 9,8 |

Source: Own elaboration

Table 8*Correlation between FOB value and exported weight to Germany*

| PERIOD | r (PEARSON) | p - Value | Statistical Interpretation |
|-------------|-------------|-----------|--|
| 2010 - 2016 | 0.719 | 0.0689 | Strong positive correlation, although not significant ($p>0.05$). |
| 2017 -2024 | 0.950 | 0.0003 | Very strong and significant positive correlation ($p<0.001$). |
| 2010 - 2024 | 0.458 | 0.0858 | Moderate positive correlation, without overall statistical significance. |

Source: Own elaboration

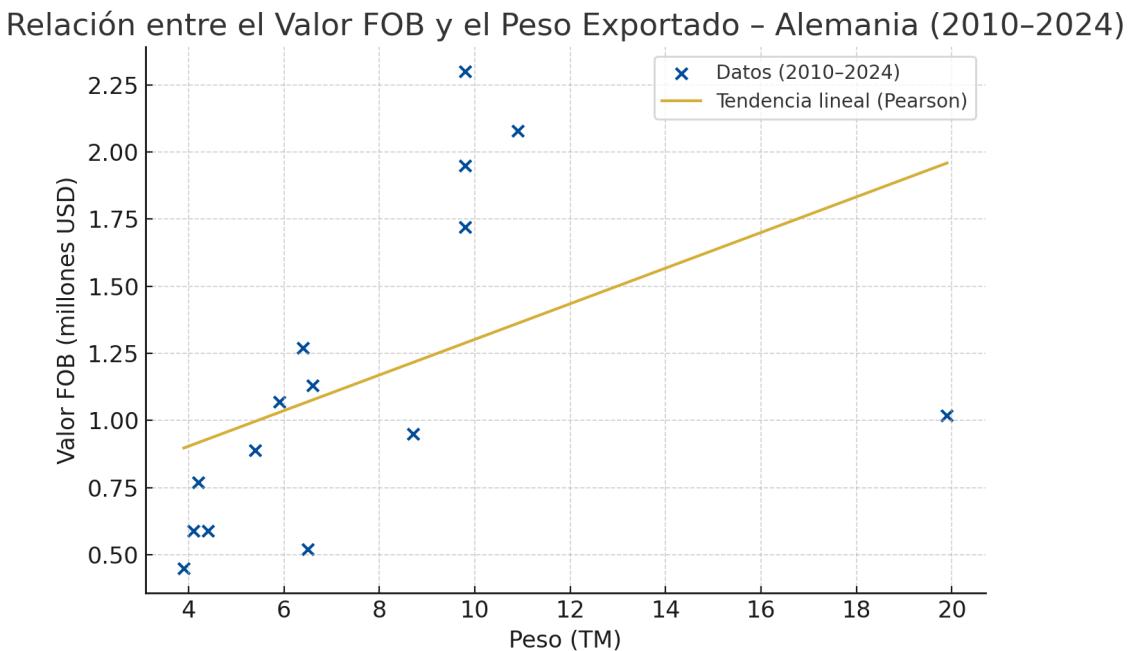
During the period prior to the Multiparty Agreement (2010–2016), the relationship between the FOB value and the weight of hats exported to Germany had a coefficient of $r = 0.72$, showing a strong positive association, although not significant ($p = 0.0689$). This suggests that, prior to the signing of the agreement, variations in the quantity exported did not translate proportionally into variations in economic value, probably due to unstable market conditions or low export volumes.

In contrast, after the agreement came into force (2017–2024), the correlation increased dramatically ($r = 0.95$; $p = 0.0003$), indicating a very strong and statistically significant association between the two indicators. This result reflects greater consistency between physical weight and FOB value, which may be linked to better trade management, greater sustained demand, and consolidation of the German market as a key destination following the agreement with the European Union.

In the overall analysis (2010–2024), the correlation remains positive ($r = 0.46$; $p = 0.0858$), although not significant, suggesting that the strength of the relationship emerges mainly after 2017, consolidating a more stable and efficient growth trend in terms of value generated per ton exported.

Figure 7

Linear relationship interpreted by Pearson's correlation coefficient between the FOB value and the exported weight of products under subheading 6504.00.00.00 to Germany during the period 2010–2024.



Source: Own elaboration

For a better understanding of the graph created from Table 8, it is important to take the following into account:

According to the article published by (Schober et al., 2018), it states that: r (Pearson's correlation coefficient): Measures the strength and direction of the relationship between two variables.

- If $r > 0 \rightarrow$ positive relationship (both rise or fall together).
- If $r < 0 \rightarrow$ negative relationship (one rises, the other falls).
- If $r \approx 0 \rightarrow$ no linear relationship.

In this case, the values are positive, indicating that the greater the weight exported, the higher the FOB value.

p (p-value): Evaluates whether the observed relationship is statistically significant or whether it could be due to chance.

- If $p < 0.05$, the relationship is significant, so there is strong evidence.
- If $p > 0.05$, the relationship is not significant, although there may be a visible trend.

In this regard, in Germany, prior to 2017, the correlation was strong ($r = 0.72$) but not statistically significant ($p = 0.0689$), due to high variability and the limited number of observations. After 2017, the correlation became very strong and statistically significant, reflecting a real and consolidated trend.

The scatter plot illustrates the relationship between the exported physical weight in metric tons and the FOB value in millions of USD for products classified under subheading 6504.00.00.00, which include toquilla straw hats. Each blue dot represents the actual value corresponding to a specific year:

- The X-axis shows the exported weight, i.e., the quantity of product shipped.
- The Y-axis shows the FOB value, which represents the economic income generated by these exports.

The gold line represents a linear trend calculated using Pearson's correlation method. This line illustrates the average relationship between the two variables: when the points are closely aligned with the line, it indicates a strong and consistent association between exported weight and FOB value.

In the case of Germany, most of the points after 2017 lie closer to the gold line, indicating that, following the entry into force of the Multiparty Agreement, FOB value and exported weight moved in a more coordinated and proportional manner, reflecting a more stable and profitable trade relationship. In contrast, before 2017, the points were more dispersed, suggesting a more irregular relationship between tons exported and the value obtained—that is, higher weights did not always generate a proportional FOB value.

Table 9

Annual values of FOB value and exported weight of products under subheading 6504.00.00.00 to Spain, 2010–2024

| YEAR | FOB VALUE (MILLIONS USD) | WEIGH (TM) |
|------|--------------------------|------------|
| 2010 | 0,36 | 5 |
| 2011 | 0,58 | 5,1 |
| 2012 | 0,53 | 3,6 |
| 2013 | 0,38 | 3,7 |
| 2014 | 0,64 | 4,5 |
| 2015 | 0,52 | 3,5 |
| 2016 | 0,47 | 3,2 |
| 2017 | 0,56 | 3,6 |
| 2018 | 0,68 | 4,2 |
| 2019 | 0,61 | 4 |
| 2020 | 0,28 | 2 |
| 2021 | 0,14 | 1,1 |
| 2022 | 0,41 | 2,6 |
| 2023 | 0,57 | 3 |
| 2024 | 0,76 | 4 |

Source: Own elaboration

Table 10

Correlation between FOB value and weight exported to Spain

| PERIOD | r (PEARSON) | p - Value | Statistical Interpretation |
|-------------|-------------|-----------|--|
| 2010 - 2016 | 0.123 | 0.7929 | Very weak positive correlation and not significant ($p>0.05$). |
| 2017 -2024 | 0.965 | 0.0001 | Very strong and highly significant correlation ($p<0.001$). |
| 2010 - 2024 | 0.660 | 0.0074 | Moderately strong and significant correlation ($p<0.05$). |

Fuente: Elaboración propia

The correlation coefficient of $r = 0.965$ for the period 2017–2024 indicates an almost perfect linear relationship between physical export volume and FOB value. The p-value of 0.0001 (< 0.05) shows that this relationship is highly significant, meaning it is not due to chance.

This suggests that Ecuadorian producers and exporters successfully aligned their production with Spanish demand, maintaining stable prices and making optimal use of the post-agreement trade conditions.

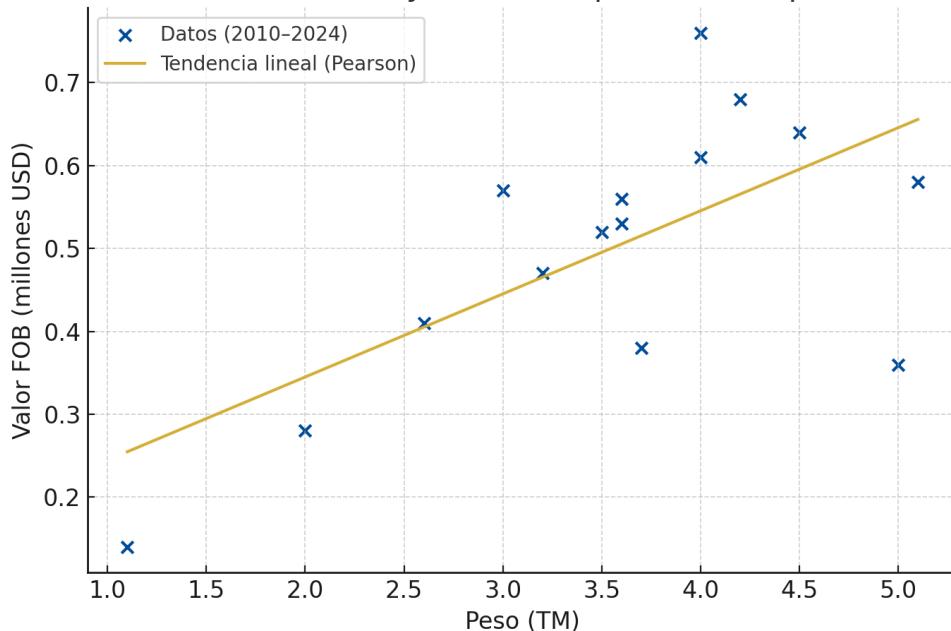
The fact that the previous period (2010–2016) shows a low coefficient ($r = 0.12$; $p = 0.79$) demonstrates the structural improvement in trade with Spain following the agreement.

In the overall analysis of the full period ($r = 0.66$; $p = 0.0074$), a generally positive and significant trend is confirmed, driven primarily by the post-agreement years.

Figure 8

Linear relationship interpreted by Pearson's correlation coefficient between the FOB value and the exported weight of products under subheading 6504.00.00.00 to Spain during the period 2010–2024.

Relación entre el Valor FOB y el Peso Exportado - España (2010-2024)



Source: Own elaboration

Before 2017, the points appear scattered and lack a defined pattern, suggesting that increases or decreases in exported weight did not have a proportional effect on the FOB value. This reflects an unstable trade relationship dependent on external factors such as logistics costs, limited access to international trade fairs, or insufficient coordination with European buyers.

However, from 2017 onward, the points begin to align clearly with the gold line, showing a very strong correlation: as the exported weight increases, the FOB value rises almost proportionally. This behavior confirms a significant improvement in export efficiency following the entry into force of the Multiparty Agreement with the European Union, which facilitated preferential access to the European market, reduced tariffs, and stimulated demand for Ecuadorian products in Spain.

Table 11

Annual values of FOB value and exported weight of products under subheading 6504.00.00.00 to France, 2010–2024

| YEAR | FOB VALUE (MILLIONS USD) | WEIGH (TM) |
|------|--------------------------|------------|
| 2010 | 0,81 | 11,9 |
| 2011 | 1,13 | 11,8 |
| 2012 | 1,11 | 9,2 |
| 2013 | 0,93 | 5,9 |
| 2014 | 1,15 | 7,3 |
| 2015 | 0,97 | 6,3 |
| 2016 | 0,94 | 5,7 |
| 2017 | 0,88 | 6 |
| 2018 | 0,89 | 5,7 |
| 2019 | 0,77 | 5,4 |
| 2020 | 0,44 | 3,5 |
| 2021 | 0,39 | 2,4 |
| 2022 | 0,70 | 4,4 |
| 2023 | 0,85 | 4,7 |
| 2024 | 0,52 | 2,8 |

Source: Own elaboration

Table 12

Correlation between FOB value and weight exported to Francia

| PERIOD | r (PEARSON) | p - Value | Statistical Interpretation |
|-------------|-------------|-----------|---|
| 2010 - 2016 | 0.051 | 0.914 | Very weak positive correlation, not significant (p>0.05). |
| 2017 -2024 | 0.933 | 0.0007 | Very strong and significant correlation (p<0.001). |
| 2010 - 2024 | 0.707 | 0.0032 | Strong and significant correlation (p<0.01). |

Source: Own elaboration

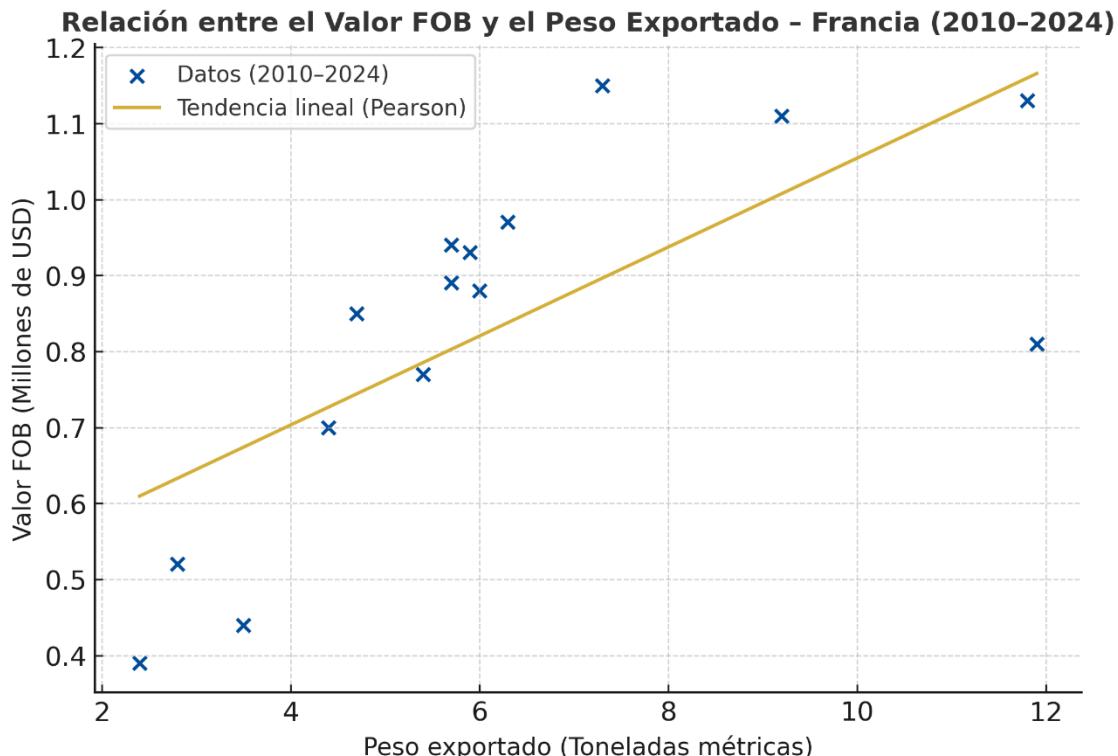
The result of $r = 0.933$ with $p = 0.0007$ for the period 2017–2024 indicates a very strong and statistically significant correlation, meaning that there is a solid relationship between the quantity exported and the economic value received. This behavior reflects the increased competitiveness of Ecuadorian products in the French market, driven by the advantages of the trade agreement, tariff reductions, and the consolidation of logistics and distribution networks within the European Union.

Before the agreement (2010–2016), the coefficient of $r = 0.05$ with $p = 0.91$ shows that there was virtually no relationship between the two variables, confirming the previous

commercial irregularity. Over the entire period (2010–2024), the correlation of $r = 0.707$ ($p = 0.0032$) confirms a positive and significant overall trend, which became particularly consolidated during the post-agreement years.

Figure 9

Linear relationship interpreted by Pearson's correlation coefficient between the FOB value and the exported weight of products under subheading 6504.00.00.00 to France during the period 2010–2024.



Source: Own elaboration

During the period 2010–2016, the points are widely dispersed and lack a clear direction, showing that increases in export weight did not always translate into higher FOB values. This behavior can be explained by price fluctuations, transportation costs, and irregularities in shipments prior to the agreement.

In contrast, from 2017 onward, the points cluster along the gold line, indicating a strong linear relationship: when the exported weight increases, the FOB value rises in an almost proportional manner. This demonstrates that, following the EU–Ecuador Multiparty Agreement, trade with France became more consolidated, with exports showing greater stability and consistency in both value and volume.

Table 13

Annual values of FOB value and exported weight of products under subheading 6504.00.00.00 to Italy, 2010–2024

| YEAR | FOB VALUE (MILLIONS USD) | WEIGH (TM) |
|------|--------------------------|------------|
| 2010 | 0,10 | 0,9 |
| 2011 | 0,07 | 0,3 |
| 2012 | 0,10 | 0,8 |
| 2013 | 0,06 | 0,4 |
| 2014 | 0,06 | 0,3 |
| 2015 | 0,09 | 0,3 |
| 2016 | 0,19 | 1 |
| 2017 | 0,06 | 0,2 |
| 2018 | 0,13 | 0,4 |
| 2019 | 0,09 | 0,4 |
| 2020 | 0,03 | 0,2 |
| 2021 | 0,07 | 0,3 |
| 2022 | 0,08 | 0,5 |
| 2023 | 0,18 | 1 |
| 2024 | 0,18 | 0,7 |

Source: Own elaboration

Table 14

Correlation between FOB value and weight exported to Italy

| PERIOD | r (PEARSON) | p - Value | Statistical Interpretation |
|-------------|-------------|-----------|---|
| 2010 - 2016 | 0.789 | 0.0347 | Strong and significant correlation (p<0.05). Very strong and significant correlation |
| 2017 -2024 | 0.887 | 0.0033 | (p<0.01). |
| 2010 - 2024 | 0.789 | 0.0003 | Strong and significant correlation (p<0.001). |

Source: Own elaboration

The overall result ($r = 0.798$; $p = 0.0003$) shows a strong and highly significant relationship between the physical quantity exported and the economic value generated for Italy.

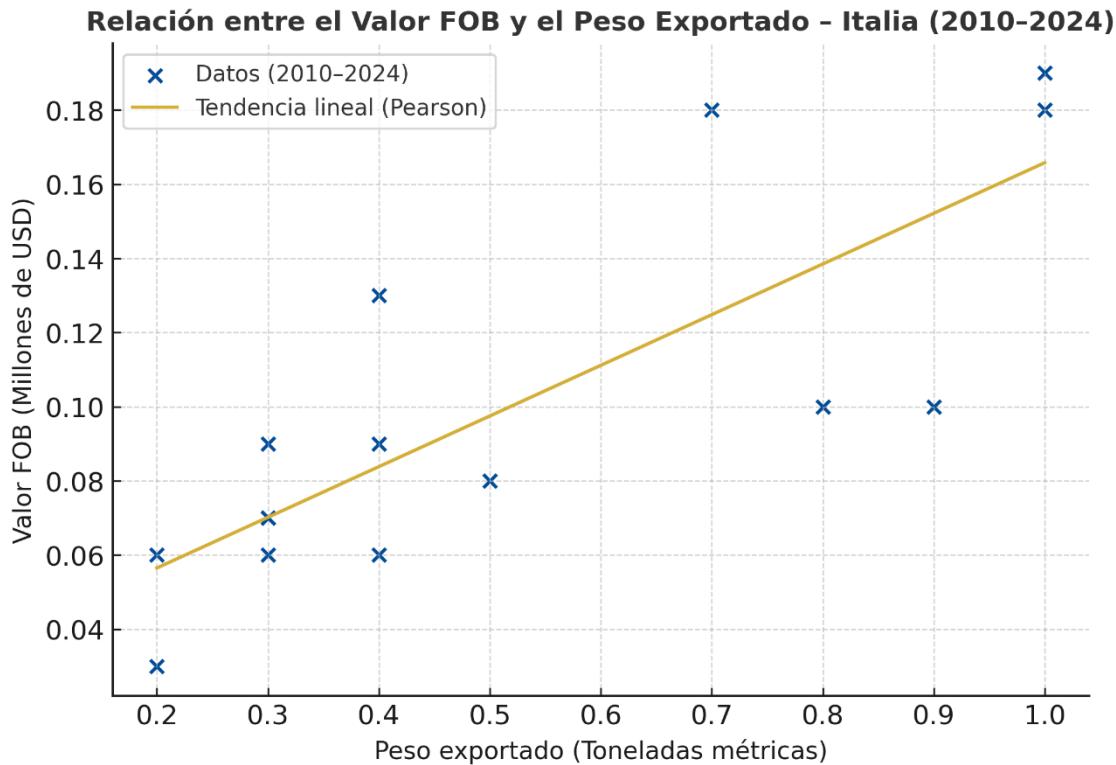
This means that the Italian market has been more stable and proportional compared to other European destinations, which can be attributed to:

- A preference for distinctive artisanal products.
- The consistent quality of Ecuadorian products (fine hats).
- The consolidation of stable commercial ties with European buyers.

Overall, the results suggest that the Multiparty Agreement reinforced an already solid relationship, maintaining proportionality between the weight exported and the FOB value.

Figure 10

Linear relationship interpreted by Pearson's correlation coefficient between the FOB value and the exported weight of products under subheading 6504.00.00.00 to Italy during the period 2010–2024.



Source: Own elaboration

Unlike other markets, in the case of Italy, the relationship between FOB value and exported weight remained positive and significant throughout the study period, although with lower absolute values compared to other destinations. During the 2010–2016 period, the correlation was strong ($r = 0.789$) and statistically significant ($p = 0.0347$), indicating that even before the Multiparty Agreement, there was consistency between the exported volume and the value obtained.

After 2017, the correlation strengthened further ($r = 0.887$; $p = 0.0033$), showing that the Italian market consolidated a stable relationship in which increases in export weight were directly reflected in FOB value. This behavior points to sustained trade, likely influenced by specific market niches—particularly high-quality artisanal products—that maintained stable prices and consistent demand.

Once the correlation analyses for each major destination country were conducted, the results show that, over time, the relationship between the FOB value and the exported weight of products classified under subheading 6504.00.00.00—including toquilla straw hats—has become clearer and more consistent, particularly after the Multiparty Trade Agreement between Ecuador and the European Union entered into force in 2017.

During the pre-agreement years analyzed (2010–2016), these relationships were weak or even statistically insignificant. This indicates that trade during that period was still unstable and limited, likely influenced by factors such as existing tariffs, shipping costs, or the limited international positioning of Ecuadorian handicrafts at the time.

Starting in 2017, the picture changes completely. Across all countries analyzed, there are very strong correlations with high statistical significance ($r > 0.90$, $p < 0.01$), revealing a much more stable relationship between export volumes and the economic value obtained. In practical terms, this means that exports of toquilla straw hats have become more consistent, competitive, and better aligned with European market demand, taking advantage of tariff elimination and the preferential access provided by the agreement.

Italy stands out for maintaining high correlations both before and after the agreement, reflecting a solid and well-established trade relationship over time. In contrast, Spain and France show a notable shift: they moved from having no statistically significant relationship before 2017 to exhibiting almost perfect correlations in the subsequent period—a clear indication of the positive effect the Agreement had on their trade dynamics. Germany also shows significant improvement after 2017, achieving, like the other markets, a very strong and statistically significant correlation.

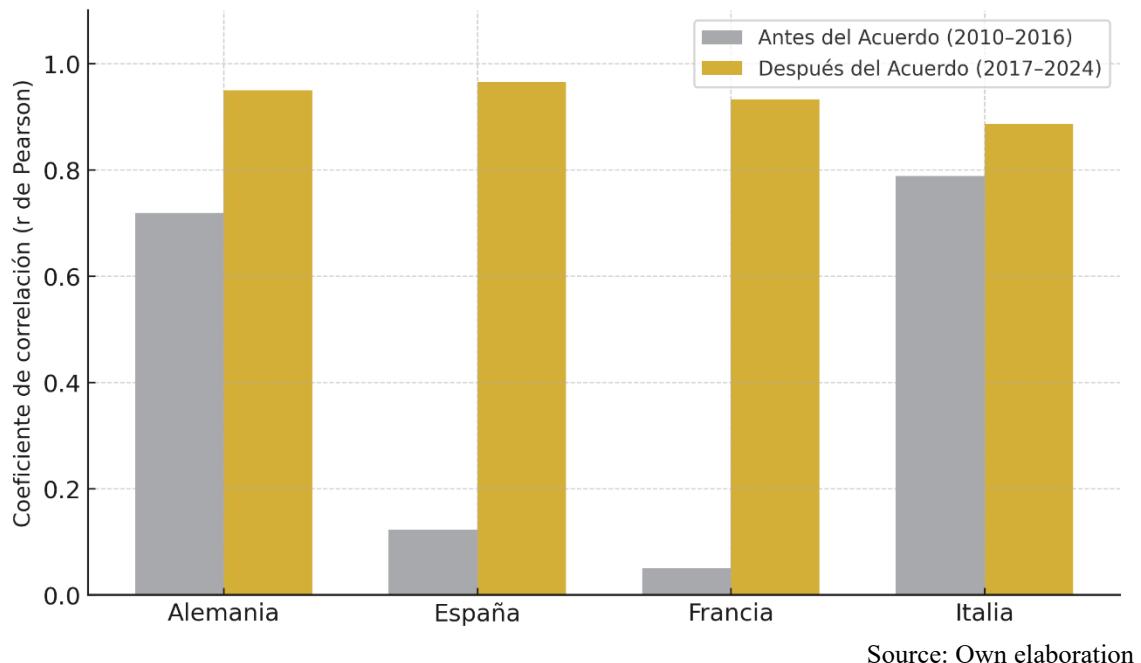
Overall, the results clearly show that the Multiparty Trade Agreement between the European Union and Ecuador has made a positive and significant contribution to the performance of exports classified under subheading 6504.00.00.00, corresponding to toquilla straw hats. The strengthening of the correlation between FOB value and exported weight suggests that there is now a more consistent relationship between the physical quantity shipped and the economic value generated. In other words, exports appear to be making more effective use of the preferential access provided to the European market.

This shift not only indicates an improvement in trade efficiency but also reflects a broader process of productive consolidation and international positioning of the Ecuadorian handicraft sector. This progress is particularly evident in markets where authentic,

handmade, and sustainably produced goods hold significant cultural and economic value. The following bar chart illustrates this trend.

Figure 11

Evolution of the degree of association between the FOB value and the exported weight of toquilla straw hats to Germany, Spain, France, and Italy before (2010–2016) and after (2017–2024) the Multiparty Trade Agreement.



Source: Own elaboration

RECOMMENDATIONS

One of the main concerns that motivated this work was: if a product encounters trade barriers during its export process, what should the exporter do, and who should they turn to for support? Based on this question and considering the analysis conducted, the following recommendations are proposed, focusing specifically on products classified under subheading 6504.00.00.00, among which toquilla straw hats are the most prominent.

First, the analysis shows that, following the implementation of the Multiparty Trade Agreement, exports of toquilla straw hats to the European Union have become more stable and predictable. This reflects a strengthening of the sector's export structure and demonstrates that a favorable environment exists for consolidating its presence in the European market. In this regard, it is essential to maintain and reinforce this trend through clear positioning strategies, strict technical compliance, and continuous international promotion, ensuring that the stability achieved translates into sustainable competitiveness.

Based on this, a key recommendation is to strengthen the identity of origin of the toquilla straw hat. The misleading international label "Panama Hat" continues to obscure its true Ecuadorian origin, weakening its cultural recognition abroad. It is recommended to promote awareness and positioning campaigns under the national country brand, emphasizing the craftsmanship involved, its designation as cultural heritage, and its historical origins in Ecuador. Reinforcing this narrative will enhance its cultural value and differentiate the product from imitations and substitutes in the European market.

When exporters encounter technical or commercial barriers, it is recommended that they turn to the appropriate specialized institutions, depending on the nature of the obstacle. For customs or documentary procedures, it is advisable to contact SENAE, FEDEXPOR, or PRO ECUADOR. If the restrictions relate to sanitary, phytosanitary, or technical requirements, it is essential to consult ARCSA and the Ministry of Production, Foreign Trade, Investment, and Fisheries, as these entities are responsible for regulation and oversight. This institutional support is indispensable for resolving issues and avoiding delays in the export process.

It is also recommended to ensure strict compliance with technical standards, European regulations, and the rules of origin established under the Trade Agreement. To benefit from tariff preferences, the product must meet the corresponding criteria, including the calculation

of the Regional Value Content (RVC). Exporters must be registered in the REX system, keep all technical documentation up to date, and ensure full traceability of the inputs used.

In terms of production, improving manufacturing processes, quality control, and logistics should be a priority. The European market demands high standards regarding labeling, sustainability, materials, pest control, and product consistency. The adoption of good manufacturing practices, sustainability certifications, and efficient logistics will strengthen the competitiveness of Ecuadorian products against low-cost global suppliers such as China and Vietnam.

In situations where specific requirements or particular regulatory interpretations arise in the importing country, it is advisable to maintain direct communication with European buyers. Importers possess up-to-date technical knowledge of local regulations and can provide practical solutions or alternatives for compliance, helping exporters avoid penalties, product returns, or commercial losses. Finally, it is recommended to promote active and continuous participation in international trade fairs, as these events facilitate product positioning in high-value markets, provide access to specialized buyers, offer insights into design trends, and strengthen the Ecuador brand within the global artisanal context. Moreover, this international visibility contributes to maintaining the export stability observed in the analysis, supporting the consolidation of the toquilla straw hat as an emblematic and competitive product in the European market.

CONCLUSIONS

The Multiparty Trade Agreement between the European Union and Ecuador has had a positive and demonstrable effect on the performance of Ecuadorian exports classified under tariff subheading 6504.00.00.00, particularly toquilla straw hats, which represent both a cultural symbol of the country and an essential economic activity for local communities and artisan workshops. Since the agreement entered into force on January 1, 2017, exports to the main European markets have shown a sustained upward trend, with Germany, Spain, France, and Italy standing out as strategic destinations for the product's international integration.

The fulfillment of the research objectives made it possible not only to identify the most relevant destination markets but also to analyze the tariff and non-tariff barriers that influence export performance. The findings show that the elimination of tariffs significantly enhanced the product's competitiveness, reduced costs, and facilitated access to the European market. However, challenges remain related to technical regulations, health and safety requirements, sustainability standards, traceability, and compliance with the Regional Value Content (RVC), all of which are essential for maintaining preferential access and meeting the expectations of European consumers.

A key finding of this study emerges from the correlation analysis between FOB value and exported weight. Before the agreement (2010–2016), the relationship between the two variables was weak, unstable, or statistically insignificant in most countries, reflecting irregular trade dynamics that were vulnerable to logistical, technical, and demand-related fluctuations. However, after the agreement entered into force (2017–2024), the correlation became very strong and statistically significant across all markets analyzed, demonstrating greater consistency between export volume and the revenue generated. This finding confirms that the agreement not only increased exports in terms of value but also helped organize and stabilize their commercial behavior, strengthening the export structure of the artisanal sector.

The results also show that, despite the progress achieved, there remains considerable room for market diversification within the European Union, as trade continues to be concentrated in only four countries, while several member states remain insignificant destinations. To fully capitalize on the opportunities offered by the Agreement, it will be necessary to deepen international promotion strategies, expand participation in specialized trade fairs, and strengthen the country's as a tool for cultural and commercial positioning. Likewise, the continued professionalization of the artisanal sector in areas such as foreign

trade, technical certifications, and European consumer trends will be essential for maintaining its competitiveness.

In summary, although the Multiparty Trade Agreement has generated concrete, measurable, and significant benefits for exporters of toquilla straw hats, fully capitalizing on these advantages requires a comprehensive strategy that integrates public policies, institutional support, productive strengthening, and international promotion. Only through such an approach will it be possible to consolidate the global, sustainable, and competitive positioning of this emblematic Ecuadorian product within the European market.

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