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Export Diversification: Strategy for International Trade of the Automotive Sector in Mexico Category

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ABSTRACT

The automotive industry has important and strategic relevance in Mexico's economic growth. Since its inception in this country, it has provided a source of global expansion in terms of international marketing; however, over the years, there has been a significant trend of little diversification in the export of the specific products of this sector of the Mexican economy, concentrating the largest percentage of its trade towards the United States and setting aside the incursion into economies such as Canada, with which the T-MEC (Government of Mexico) treaty is, (2019) which represents some benefits for the distribution of goods and services between the countries of Mexico, USA and Canada, which in this regard are not being properly exploited by Mexico by concentrating its exchange of automotive goods in the United States. According to Wells and Wint (2000), one of the alternatives to mitigate this commercial centralization in the automotive industry is outside Mexican borders, through attracting foreign investment and achieving greater export diversification. The methodology used for this research is qualitative in focus. It focuses on the technique of documentary review through a descriptive explanatory study, which results in a historical comparison of the export percentages of the automotive sector by Mexico from 2018 to 2021. Finally, it concludes by describing the impacts that arise concerning the international promotion of the country in terms of foreign trade by not taking advantage of the international agreements and treaties in force.

Keywords: Automotive Industry, Export Diversification, T-MEC, Mexico

Introduction

The automotive industry has managed to position itself as one of the most dynamic and competitive worldwide. The constant technological and organizational innovations in production



processes, the large investments it makes, the contributions to the economies' gross domestic product, and the number of jobs it generates have consolidated it in many of the countries where it is present. In order to increase their competitive capacity and thus position themselves in the first places in production and sales of world markets, the companies that make up the sector have always been in search of innovations that allow them to strengthen and make their production and organizational processes more competitive.

The automotive industry has important and strategic relevance in Mexico's economic growth. It has provided a source of global expansion in terms of international marketing; however, over the years, there has been an important trend of little diversification in the export of specific products of this sector of the Mexican economy, concentrating the largest percentage of its trade to the United States and leaving aside the incursion into economies such as Canada, with which the USMCA treaty is in place (Government of Mexico, 2019) that represents a series of benefits for the distribution of goods and services between the countries of Mexico, USA and Canada, which in this sense are not being properly exploited by Mexico by concentrating its exchange of goods from the automotive sector in the United States.

Faced with this entire panorama, the country's automotive companies have opted for different paths to adapt as best as possible to the current requirements of foreign trade. However, the latest modifications and volatile changes of management by Mexico's main trading partner leave the pillars of the automotive sector in the air.

The relationship of the United States is born from the strategic geographical position since for country it is easier to export vehicles from Mexico than from Central America or Asia; in addition, the location of the country allows to have more than 13 trade agreements with 52 countries, which makes it export 3.3 million cars and 81 billion dollars in auto parts and if that were not enough in Mexico there are more than 600 factories of level 1 auto parts. However, considering diversification in Canada makes economic improvement possible for Mexico, for example, manufacturing a car in Mexico has the preference of being free of tariffs to be exported to the United States (this by the TMEC), but "How would it impact to focus the automation industry on Canada?"

In short, analyzing the cost-benefit of choosing Canada as the first country to be diversified by Mexico in the automotive sector seeks to comply with everything required by the treaty (including expenses on salaries, materials or change of supply), or that the country is willing to pay the respective tariffs, with the aim of improving its own economy.

That said, this research studies and analyzes the preferred benefits of foreign investment in the automotive sector to Canada, hoping to achieve the diversification of exports from Mexico. To do this, a qualitative approach methodology was used, which is focused on the documentary review technique through a descriptive-explanatory study that generates; as a result, a historical comparison of the export percentages of the automotive sector by Mexico from 2018 to 2021; describing the effects that arise in relation to current international agreements and treaties to finally analyze the possibility of focusing the automotive sector on Canada.

Literature Review

The process of industrialization in Mexico had its first signs at the beginning of the twentieth century, through initial conditions that will accommodate industrial development and greater participation of this sector in the Mexican economy in an organized manner; however, it is not until after the Second World War that the true development of it is experienced through sustained growth over time.

So it took more than forty years to witness the beginning of the industrial sector, since at first it was hindered by the Mexican Revolution (1910-1920) and in the following years for reasons of reorganization of the country. In this sense, it was not until 1940 when the participation of the primary sector was surpassed by the secondary sector in the Gross National Domestic Product. The first went from 23.1 to 21.2%, while the second did so from 21.3 to 24.4%. This determined the transition from a national economy based on agricultural structural dominance to industriality. (Garza, G. & Rivera, S., 1994)

Then, it is from the decade of the forties when the Mexican federal government intensified the implementation of measures aimed at promoting industrial development, which allowed to accelerate the pace of growth of the industrialization process in a way hitherto unknown. A situation that was reinforced by other types of support such as subsidies in transport, credits at very low interest, tax exemptions, among others.

It is under these conditions that the first phase of automotive production in Mexico begins, which is characterized by its implementation and start of its operations around 1925.

First, the Ford company, a pioneer that already had considerable development in the United States and whose fundamental interest was focused on the assembly activity; later in 1935 came the General Motors, and three years later did the Automex, which was renamed following years as Chrysler, also for these last companies the central function to play was the assembly, with the aim of supplying the national market.

In this sense, the forties are recognized as the time when the industrialization process has its origins considerably and the territories corresponding to the Federal District and the State of Mexico as the spatial framework in which such a process takes place. These two entities already concentrated, in 1940, more than 30% of the total demand for employment.

However, by the end of the period, in 1960, the year in which the take-off of industrial activity was identified, the Federal District increased its percentage share of total employment, corresponding to 40% followed, since then, by the State of Mexico, 15%, Nuevo León, 8.4% and Jalisco, 5.7%, a hierarchical structure that remains to date. So the two most important entities in the central region of the country went from 32 to 55% in the concentration of employment during the 20 years referred to. It should also be noted that automotive production in Mexico was practically centralized in five transnational firms, these are the "big three" Americans, General Motors, Ford and Chrysler, the German Volkswagen and the Japanese Nissan. By 1999 they accounted for 99% of the production of motor vehicles manufactured in the country. Their stake until 1990 remained very similar and equitable between them, ranging from 17% of Nissan to 24% of Volkswagen. In the years after this date, there is greater differentiation in the percentage shown between some of them presenting for 1999 a difference of up to 15 percentage points between the

one with the highest and lowest participation, Volkswagen (27.5%) and Nissan (12.4%) and according to Vieyra (1999), the production that was destined to the foreign market during the years of 1985, 1990, 1995 and 1999 was marked by a little constant participation of firms, depending on the year.

Finally, according to Suárez & Laura (2014), the Free Trade Agreement between the United States, Mexico, and Canada has been able to direct the performance and evolution of the automotive industry in Mexico for more than twenty years, and during this period, the export stage of this sector with a surplus in the trade balance was consolidated, in addition, progress was made in its gradual deregulation, and since then there has been a very important growth in both the automobile and auto parts industry, which has led it to become one of the largest vehicle producing countries globally.

Methodology

The methodology used for this research has a qualitative approach (Vega et al., 2014) of descriptive type (Garcia et al., 2019) through the bibliographic collection and statistical database review. During the development of this research, it was necessary to identify the current situation of the export diversification of the automotive sector in Mexico and then describe its importance within the economic context of the country. The current state of export diversification of the automotive sector in Mexico was necessary for the development of this research; on the basis of a hermeneutic analysis should be carried out through the consultation of scientific databases and regulations with respect to the TMEC treaty, and then describe the importance of export diversification for the international marketing of the automotive sector. All of this seeks to generate an analysis of the importance of export diversification for the international marketing of the automotive sector in Mexico to provide an international perspective on the impact of strategically diversifying exports.

During the development of this research, consultations were carried out in databases specialized in the subject of study, involving various authors, government entities and companies; in addition to books, magazines, articles, master's thesis, doctoral thesis published on the Internet and on platforms of the main foreign trade control bodies in Mexico and internationally, as well as official export statistics in the automotive sector; in order to describe in which countries Mexico is concentrating its efforts for the export of automobiles and auto parts and identify whether there is a pattern that motivates the lack of diversification of cars, all in order to present a descriptive and comparative analysis that reflects the current situation of the country in this particular case and provides a starting point for future research on this same problem in this important sector of the economy.

The Study

The current global situation in which the Mexican automotive industry develops encourages rethinking strategies to achieve international competitiveness by involving most markets and stakeholders involved in all automotive and auto parts design, development, manufacturing, marketing and sales processes. It is also important to take advantage of the policies and treaties

that have been consolidated to guide entrepreneurs in this important sector to achieve the objective of internationalization. (Miranda, 2007)

General objective

Analyze the importance of export Diversification for the international marketing of the automotive sector in Mexico.

Specific objectives

Identify the current state of export diversification of the automotive sector in Mexico.

Compare automotive export levels from Mexico to Canada and the United States with respect to the T-MEC trade treaty.

Describe the importance of export diversification for the international marketing of the automotive sector in Mexico.

Analytic mark

The current global situation in which the Mexican automotive industry develops encourages rethinking strategies to achieve international competitiveness by involving most markets and stakeholders involved in all automotive and auto parts design, development, manufacturing, marketing and sales processes. It is also important to take advantage of the policies and treaties that have been consolidated to guide entrepreneurs in this important sector to achieve the objective of internationalization (Miranda, 2007).

In context, since the 1980s, Mexico has followed a regional policy of gradual trade openness and signing trade agreements with several countries, most of which are used for trade development. With respect to the above, Bouzas(2017) states that most Latin American companies are more focused on Mexico, considering that it is one of the fastest-growing economies in the world in terms of signing trade agreements through treaties such as free trade with the countries of the United States and Canada.

According to the Foreign Trade Information System SiicexCaaarem (2021), Mexico currently has 13 trade agreements in force with 50 countries, of which 73% of exports go to the three T-MEC countries (the United States and Canada). It should be noted that this agreement not only reduces taxes to zero but also enjoys customs procedures such as customs clearance.

Finally, it is emphasized that traditional export platform systems have been directly based on the US market, mainly in the port industry, and choose to vary from place to place. According to a report by the Mexican Association of the Automotive Industry (AMDA, 2018) the automotive industry in Mexico contributed 3.7% of national GDP and 20.2% of manufacturing GDP in 2017 and is also the second-largest economic activity with the largest share in manufacturing GDP after the food industry.

Moreover, from 2010 to 2017, the GDP of the automotive industry grew 12.3% on average in real terms, increasing its importance in national GDP and generating an impact on 90 economic activities in the secondary sector and 70 on trade and services. It was also shown that this sector generated more than 800,000 direct jobs in the manufacture of vehicles and auto parts in 2017, and one in five jobs in manufacturing is in the automotive industry, and recorded a super commercial trade balance of \$71 billion, where 83% of light vehicle production goes to the export market; all

of the above means that Mexico is the world's 4th exporter of automotive products; why it becomes important to analyze how diversified this country's export is.

Automotive industry context

The automotive industry is a pioneering branch of innovation and creation in economic history, and it is important to mention that the innovative factor in this sector fundamentally changed the organization of manufacturing production processes and is now considered as a basic department in the management of the knowledge economy, which generates motivation and sustained pace in the global economy (Fernández, 2021).

However, the history of the automotive sector in Mexico dates back to 1925 with the installation of Ford assembly lines, whose development in the United States increased markedly; later, in 1935 comes the one that would become the world's largest vehicle manufacturer in the future: General Motors.

The automotive industry has managed to position itself as one of the most dynamic and competitive worldwide. The constant technological and organizational innovations in production processes, the large investments it makes, the contributions to the gross domestic product of the economies and the number of jobs it generates have consolidated it in many of the countries where it is present. To increase their competitive capacity and thus position themselves in the first places in production and sales of world markets, the companies that make up the sector have always been in search of innovations that allow them to strengthen and make their production and organizational processes more competitive. Among the main strategies that have been applied to achieve its mission are the adoption of the "just-in-time" and "total quality" models (which involve subcontracting, increased supplier responsibility and flexibility in production); the production of vehicles through platforms and modular systems; or the relocation of manufacturing activities in regions that allow them to take advantage of advantages, such as low costs, the abundance of skilled labour and existence of raw materials and natural resources, as well as proximity to the most important markets. In Mexico, the automotive sector has also had a success story.

Throughout the world since the first decades of this century as a pilot sector, "traditional area where the revolution of organizational and productive processes takes its first impulse and then spread to other economic activities" (Maldonado, 1995: 487). Therefore, it has been and continues to be a key reference sector in the productive dynamics since this is how it is considered from the implementation of mass production to the present day, with the so-called flexible production model.

To implement and take advantage of the advantages that the new production order has generated, large companies, and in particular multinationals, have established a series of changes in their structures, which, according to Coriat (1986) and Schaiken (1982), could be divided into two types:

1. On the one hand, the use and exploitation of technological innovations have intensified, of which robotics and microelectronics should be highlighted. This has allowed greater flexibility within the serial production processes of the old Taylorist-Fordist system, linked to large rigid productions adapting them to short production and market fluctuations.

2. On the other hand, there are those that have to do with the relocation of industries, and with it production processes, in places far from the industrial centre of origin, with the purpose of lowering production costs and raising their levels of profitability and competitiveness, through the important and multiple concessions offered by the governments of the countries where they come to settle, generally peripheral countries, in addition to taking advantage of an abundant and very cheap labour force and the advantages that the new location regularly offers, for example, the proximity to new markets, or being located in free zones.

To do this, they usually use strategies that generally make the practice and use of the aforementioned aspects more efficient. These include a few:

- 1. Diversification of business investments and exports.
- 2. Formation of "conglomerates", that is, the association between several firms. In addition to generalizing the development of specific projects together.
- 3. Introduction of new administrative processes, work organization and control of labour. The introduction of these changes in most companies, which had an organization based on the traditional Taylorism-Fordism, has resulted in a heterogeneity of the productive segments, technologies, forms of social control and workers' qualification.
- 4. Simplification of administrative structures.
- 5. Segmentation according to the phases of the production process, with the relocation of some of these, but always maintaining the centralization of "key" processes in the places where the headquarters is located.

It is important to note that in Mexico, automotive production represents one of the greatest achievements of industrialization in Latin America. Based on Foreign Direct Investment (EDI), it has been transformed from an outdated domestic market-focused industry to a highly competitive export platform; it is special for the North American market. In addition, this sector has become a pioneer in the generation of competitiveness within the industry. Among other results, these areas have become higher quality jobs, higher remuneration and greater development of human capital. (Suárez, 2020)

It should be noted that the Strategic Program of Badillo Reguera, and Rozo Bernal (2019), identified the vision of positioning the Mexican automotive industry in the main car producing and exporting countries around the world and promoting participation in a global market that attracts foreign investment.

Mexican authorities participated in The US Department of Commerce's public hearings in Washington, DC, in July 2019, around the investigation to determine the eventual application of tariffs on automotive imports. Prior to the signing of TL-CAN, it was true that the US automotive market was open to the importation of goods from Mexico with lower taxes. Based on previous work, the average was 2.5% for cars and 3% for repair products. On the first day of January 1994, the sector began to face a major transformation process that avoided a protective business model containing inconsistencies.

It follows that trade in the automotive sector played an important role during the negotiations, like Mexico, the United States and Canada were the sectors with the greatest economic exchange;

a clear example of this is that in 1992, 65% of US auto and automobile exports went to Mexico (\$6.8 billion) and Canada (\$23.7 billion), according to data from the US Department of Commerce in 1993 reason why it becomes important to explain (Moreno Brid, 1996).

Analysis of export diversification, Mexico, the United States and Canada

Dispute settlement mechanisms are a key to trade agreements and disputes. In particular, it was one of the conflicting issues, and even in some chapters, bilateral agreements were pending in the negotiation of the Mexico-United States-Canada Treaty "TMEC in 2018" which replaced the North American Free Trade Agreement "TLCAN in 1994" The origin of the difficulties was that among the intentions of US negotiators were to sustain their protectionism and bring proposals closer to their own trade legislation, in particular, the ability to apply trade sanctions and investigations without complaints from domestic affected or mechanisms for appealing opinions of the authorities in the automotive industry. Notable changes to the new agreement, already announced in 2018, include the establishment of a quota of 2.6 million vehicles exported to the United States if Trump imposes global car tariffs of 25% on national security grounds. The quota would allow for significant growth in duty-free car exports from Canada above current production levels of around 2 million units, according to Reuters. As a counterparty, to be exported without tariffs, 75% of the vehicle will be required to have been produced in one of the three countries (NAFTA requires 62.5%). It is the only treaty in the world that sets rules of origin for vehicles, the EFE agency stresses. The agreement includes several rules affecting the export of vehicles within North America. In addition, 40% of the cost of the vehicle must come from plants that pay wages of US\$16 per hour; therefore, the United States seeks to avoid the relocation of factories to low-cost areas in Mexico. The term of the new agreement, expected to hold an annual trade of US\$1.2 trillion, is expected to be extended for 16 years, albeit with revisions every six by current administrations.

Mexico's limits in the current environment

Poor infrastructure and insecurity are problems that prevent companies from selling abroad; experts point out that entrepreneurs must change their culture to expand globally. Low investment in infrastructure, smuggling and insecurity are factors that prevent the country's business sector from making the most of Mexico's trade agreements around the world.

"The country has to increase its competitiveness, and we must not only think in terms of manufacturing production but also in improving ports, roads, infrastructure in general that makes us more competitive, coupled with the approval of important reforms such as the land and energy," said Mexican Business Council for Foreign Trade (COMCE), Fernando Ruiz Huarte.

Moreover, the creation of the High-Level Dialogue Group, which the presidents of Mexico and the United States agreed to form to enhance the economic relationship, also shows little more than a month's progress in its announcement.

José Zozaya commented that as a Chamber there are several aspects that have been pointing out, including the agricultural and food industry; energy and sustainable development; logistics and

customs; education; labour, tax, financial, security and migration issues and that based on this is where the working groups will be being set up.

Table 1. Significant change difference in the automotive sector according to its treaty

Treaty	Major Industry Changes automotive			
NAFTA	The regional content was 62.5%, regardless of high-wage areas where it was manufactured.			
TMEC	Regional content was increased to 75%, and cars will have to be manufactured in high wage areas (more			
	than 16 dls).			

Source: Contreras (2021).

"Progress is made every day; the trade relationship is going faster than regulation and sometimes faster than inter-government relations; it occurs naturally," said Kansas City Southern's executive representative of Mexico.

Anything that helps accelerate the processes of the trade relationship between the two countries sees it profitable. That said, it took 13 and a half months and eight rounds of negotiation for the three countries involved to sign one of the most economically important trade agreements on the continent.

In a closer look at Canadian demand, Mexican exports and supply capacity identified the ten product groups most likely to compete in the Canadian market, five of which coincide with Mexico's main exports to Mexico. In other words, there are five product groups that are not yet sold in broad proportions to Canada but have short-term potential. The products detected in the analysis are those that currently have the potential to be exported to Canada in the short term. However, this does not mean that they are the only ones. It is obvious that Mexico consumes other products that Mexico produces and exports but that do not meet the specific characteristics of demand. To the extent that Mexico adapts its supply to actual Canadian demand, it will be more feasible to increase shipments of other types of products.

Table 2. Marketing Benefits Mexico-U.S.- Canada

Country	Annual	Majority Export Benefits	Justification sales of the automotive
Canada	0%	 New source of employment for this sector. More agreements with Canada for future markets. 	The growth of Mexican exports to Canada will result from a combination of increased Canadian imports and Mexico's manufacturing capacity and supply lines to meet that demand.
United States	80 %	 Increased expansion of the sector. Price accessible for negotiations. Communication channel with confidence, ease and security. Fewer tariff barriers. 	The role played by the United States with Mexico is high-reaching; as a result of the agreements and the bilateral treaty (TMEC) of the automotive sector, the automotive sector develops cost-effectively, causing a majority balance to the United States.

Source: Authors with information extracted from Trade Map, 2021.

Year	Exp.	Imp.	BC	Exp. Growth Rate
2017	3,054,024	1,208,325,025	-3,054,022	-30%
2018	5,111,057	1,612,270, 848	1,607,159,791	17%
2019	5,414,318	1,645,174,335	1,639,760,017	16%
2020	3,460,703	2,568,396,449	-892,307,355	-10%

Table 3. Commercial movement rate of the automotive Sector in Mexico 2017-2020.

Source: Authors with information extracted from Trade Map, 2021.

In the table above, you can see a 30% drop in the level of exports of the automotive sector in Mexico since there was a bad public policy strategy affecting international trade, the trade movement of automotive exports and imports in Mexico during 2017, 2018, 2019 and 2020, showed a significant increase in 2017-2018 (17%) and 2018-2019 (16%). Subsequently, a significant decrease of 10% was observed in the last year, this or due to pandemic effects caused by Covid-19.

Discussion

Much has been said about Mexico's business opportunities in Canada. However, little has been said about Mexican export capacity. While its sales to the world show a growing trend, volume is not enough to serve multiple markets at once, let alone when 80% of them are headed toward one, the United States. In the face of such a competitive global market, it is essential to establish business strategies that consider, on the one hand, the comparative advantages and manufacturing capacity of the country of origin and, on the other hand, the particular characteristics of each target market.

Until recently, there was a considerable gap between Mexico and Canada. However, in recent years and more intensely since the start of the ECA negotiations, a new stage has emerged in the relationship, in which feelings of competence and collaboration are simultaneously combined.

Coupled with the Canadian market share, it is still under significance. Considering the current volumes of Mexican exports, as well as market demand, it is possible to detect which products made in Mexico are most likely to increase their participation in Canada, mainly the automotive industry.

Even though Canada maintains a deficit balance in its trade with Mexico, its exports are growing faster than Mexican exports there. Today, the Canadian government is developing a very intense campaign for its exporters to enter the Mexican market and even has special resources to do so; this means that Mexico's automotive industry is depleted because it constantly depends on the U.S. economy, so the country should seek to diversify into other territories with which it has tariff preferences and strategic conditions for export such as those presented in this study, where Canada is shown as one of the best industries in Latin America, due to its partial extension of national markets in the automotive sector, and that is why Mexico should prioritize countries with a greater range of periodic growth.

Conclusions and recommendations for México's future of the automotive sector

In conclusion, Mexico will vigorously defend the automotive and auto parts industry against any unjustified imposition of US tariffs, said US Undersecretary of Foreign Trade Juan Carlos Baker. So subjecting imports of Mexican cars and auto parts to potential tariffs of up to 25% would jeopardize the economic security of the US industry itself, the diplomat added. This has a negative effect on the competitiveness and exports of the US automotive and auto parts sector. Subjecting imports of Mexico's vehicles and auto parts to Section 232 tariffs disrupted the complex supply chains that make US automakers competitive, that it "would harm them and degrade their manufacturing base". President Donald Trump threatened last June to impose a tariff of up to 25% on all imports of foreign vehicles. In response to the representative's request, Commerce began an investigation under Section 232 of the US Trade Act to determine whether vehicle imports pose a threat to their domestic security. It is important to promote Mexico abroad with the creation of outreach offices which must be put in coordination with the governments of highly competitive states to work together, as well as increasing knowledge about the sector to boost competitiveness growth with other countries.

The new trade pact between Mexico, the United States and Canada, the ECA, increases protectionism in North America. While this new version reduces uncertainty, it doesn't actually eliminate it, as some of its changes can have detrimental impacts on trade, investment, or even value chains. The TMEC can be a small setback in the economic integration of the region, especially when compared to NAFTA.

The trend of an increasingly globalized economy and the growing spread of the new paradigm of flexible production make the order and spatial functioning of industrial activity in Mexico readjust, according to the current demands of the countries that may be targeted for export in the automotive sector.

It was also believed that Mexico's trade agreement with its other partners would not upward boost its growth expectations, as it only helps ensure that the worst economic performance scenarios were not realized. That is why Mexico should make strategies from its economic policy that allows it to take advantage of the advantages of the ECA in its external sector, as well as minimize the negative impacts that it will also generate, especially by creating an industrial policy that is more competitive to the country.

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Conflict of Interests

No, there are no conflicting interests.

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