### Global Trade of Coffee and its Economic Effects in the Value Chain

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#### **Abstract**

The purpose of this work is to analyze the economic-cultural effects that globalization has in each link of the value chain in the commercialization of coffee in the world. Starting from the fact that coffee is the second most consumed beverage globally after water, in the same way it is the second most exported product after oil, the economic influence that has due to the fact that it is a grain that can grow simultaneously in the tropical belt around the world and because the coffee farmer tends to be poor. We will address its influence and contribution to the world economy by analyzing the process from the coffee farmer to the industrialization, uncovering the industrial supply chain to the different distribution channels that reach and delight the final consumer.

**Key Words:** Value chain, commercialization, culture, globalization, chopped coffee segment. **JEL** D46, F10, M21

#### Introduction

The consumption of coffee in a globalized way is through history, an important engine of development for the world economy and of the producing countries. Where in each era, region and with each generation the way and the costumes of preparing it evolves. Causing economic impact and cultural changes, the commercialization of this grain, developed a value chain where a series of businesses are activated around the grain, and starts with the coffee farmer, the merchant who sells to the industrialists, so that these in turn distribute it around the world.

The phenomenon of globalization plus technological development in equipment for the preparation of coffee is undoubtedly a determining factor that currently causes the increase in per capita consumption around the world. However, this increase in grain consumption is not reflected in the coffee farmer's economy, but in the large corporations that are left with the highest profit. The average coffee farmer obtains a minimum amount that is estimated at \$ 300.00 USD per month, the transnationals and the rest of the value chain being the big winners, who keep the producers that give life to such an important industry in poverty (Lora, 2019).

## **Objective**

To point out and list the problems that cause an uneven distribution of wealth in the value chain generated by this industry, because it is very important for subsistence, based on the prices remaining stagnant for many years, as well as problems like plagues. To prevent the continuous switch of coffee regions around the world to other types of more profitable crops and to raise awareness to large corporations dedicated to the coffee trade, which requires a fair payment for their crops based on the final price of each cup, since it makes no sense that the increase in coffee consumption generates an increasingly deep wealth gap and poverty in the value chain that makes it possible for us to finally have a cup of coffee on the table.

## **Background**

The coffee trade represents an important source of income in the world economy and there is a value chain around this industry, made possible by the final consumer, who leaves a trail of benefits, but also a damage because the income of the producer is way below the cost of production. Sometimes below the cost of production. Since its origin, in coffee growing areas that include the Tropic of Cancer to the Tropic of Capricorn around the world, this belt being the most climate-friendly for the development of the plant that gives the grain. This plant of the Rubiaceae families is a family of plants normally called the blonde, white gallium, or coffee family (Sanders and Motz, 2019).

These plants have a worldwide distribution; however, they are much better represented in terms of shapes and number of species in phytogeographical areas of the Neo-Tropic. The coffee plants are native to Abyssinia in Ethiopia and were discovered by a shepherd, legend has it that he discovered them because of his goats' strange behavior after having consumed the leaves and fruit that were similar to the cherries of a certain bush, the goats were jumping around very excited and full of energy. Seeing this, the shepherd consumed them and soon felt full of energy (Mehari, et al. 2016). He decided to take them to the monastery and tell the Abbot the story, he put the branches and cherries in water but the result was a very bitter drink that he immediately threw into the fire. When the cherries fell on the fire, they began to boil, the green beans inside the cherries were roasted producing a delicious aroma that made the Abbot think about making a drink based on the roasted grain and that is how the coffee drink was born.

#### Method

This paper is methodologically based on documentary research using a theoretical procedure for its structure and development, which allows us to address the issue in a structured way and carrying out its development with a qualitative scientific sense, basing it on mostly indirect sources of information, such as bibliographies, essays, journals and books.

# **Background**

According to the International Coffee Organization (ICO) in the global economy, it is estimated that coffee sales exceed 200,000 million dollars annually. Coffees is the second most commercialized product worldwide after oil and the second one most consumed after water, which would make us believe that coffee producers are in economic abundance enjoying a standard of living well above what they actually are today, the reality of coffee farmers is that they barely receive between 6 and 10% of the profit, which does not allow their families to even send their children to school in some cases, these being the link in the chain that remains submerged in poverty exploitation and underdevelopment with a profit of \$ 300 per month within the thriving business in this lucrative activity.

If we imagine this situation as a line where zero is the point of equilibrium, where you do not win or lose, but that their reality is always to be at a negative extreme point practically in misery, contrasting the situation, on the other end of the imaginary number line with the large multinational companies that their profit has no end, generates in this activity in the value chain a chasm between the actors on the one hand the coffee farmers with a minimum profit that barely allows them subsistence and on the other the multinationals the most economically benefited because they are the ones that keep the biggest slice.

These companies, both US and European multinationals are the ones that generate the highest consumption. They get to sell a cup of coffee at 3 dollars, in Germany, New York and Paris, while the producer is paid at \$ 2.50 dollars on average per kilo and the yield is 60/100 cups per kilo, that's where the huge difference is generated (Figueroa-Hernández, Pérez-Soto & Godínez-Montoya, 2019). A long time ago farm products used to be commercialized directly from the farmers to the consumers, without intermediaries, which was an advantage for the costs to be accessible to the final consumer and when the product got to the market, it used to have a reasonable price, generating a profit for the farmer who was guaranteed a livelihood with access to different kinds of goods and services.

As time went by, merchants would impose an intermediation business, hoarding the production, finding a business opportunity that had very little or no risk and taking over the production, focusing on warehousing, where the production could be stored, speculation starts and the supply and demand concepts control the prices on the market. Gomez, (2019). says that controlling the coffee market was not an easy task, due to the fluctuation in prices and the risks associated with production and transportation, in the 1870's the physical market of coffee collapses in on itself giving laying the foundations that have been historically damaging the producer because in that same year in the City of New York 112 merchants gathered and created the New York coffee bag with the objective of protecting each other through the creation of a market where buyers, distributors, roasters and merchants were protected from price fluctuations, where they created "future contracts which is an agreement, where the parties are obliged to buy or sell goods or securities, in this case, coffee on a certain date and with a previously established price (Gómez, 2019).

Adopting the strategy known as "risk transfer", which consists of foreign creditors who reside in a country experiencing an inability to pay due to lack of money. In the same way they agreed on the development of standards of the types of coffee that would be commercialized, setting prices according to supply and demand. This is how the coffee economy is born as a commodity traded in the stock market. Speculation price of coffee comes from futures contracts on the value that will be determining it, by factors such as calculating dates that countries will release the product to the market and determine the possible price that will have coffee then. In New York, when coffee stock was created in order to give security to investors and attract money to the market, it ends up distributing the benefits more unfairly in the coffee economy, because the speculators in the economy of coffee are the ones who earn the most without having the grain physically. Speculation is precisely where they are willing to take risks high in exchange for an attractive future profit, shedding contracts before the expiration date is met.

This way, they gamble for a huge profit margin without coffee even having passed through their hands. The benefit that these speculators keep, is the first moment in which small production is high, prices plummet, this uncertainty over the years has caused many coffee farmers to change to other crops, risking the income of hundreds of thousands of families that continue betting on the crop even though pests also limit their yield. We can see that the wealth generated by coffee and its profit in the stock market only benefits a few investors, speculators who play buying and selling while they make a profit on any purchase or sale movement without adding any value to the product. On the contrary, the producer has a production cost of \$ 1.10 USD per pound, losing \$ 0.18 USD since its origin, since the New York Stock Exchange is trading at \$ 1.02 USD, from this perspective we cannot talk about fair trade in coffee.

The costs of production in the labor force in the farms worked by the same family members, must be applied to the final cost of the product so as to measure the situation of economic delay of the producing families and this must reflect in the cost of the grain, being necessary to calculate and apply the costs of the hours of work used in the farms by the family, to obtain the real cost of production of the grain. The traditional consumer of coffee hardly wonders where coffee comes from, but today in the face of globalization and the grain trade is no exception, they have focused on knowing its origin, so the American Starbucks since 1971 to date has been the pioneer in the classification of types of grain, roast and origin. Until then they had high-quality roasted coffee beans and spices emulating European coffee shops. When he joined the sales team in 1984. Howard Schütz as director of operations, they only had 4 stores and on one of his trips around the world he visited Italy, arriving in the city of Milan where he would change his luck by living and discovering an experience of a relationship between coffee retailers in stores with customers, a tradition for coffee known as espresso, convincing members to return to serve latte coffee in 1984. This was one of the factors that gave it a differentiation and a competitive advantage compared to their rivals, who were first in the American Union, allowing its expansion all over the continent and subsequently the rest of the world. Table 1 has the world's main coffee producers, according to information from 2018.

Table 1: The world's main coffee producers

1 Brazil	6 Etiopía	
2 Vietnam	7 India	
3 Colombia	8 Uganda	
4Honduras	9 México	
5 Honduras	10 Perú	

Source: Gómez, 2019.

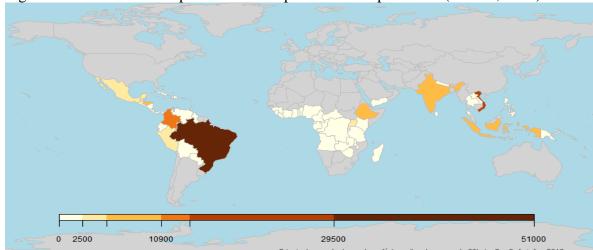


Figure 1 shows a world map of the most important coffee producers (Gómez, 2019).

Figure 1: Biggest producers of coffee worldwide.

Source: Gómez, 2019.

Figure 2 shows the per capita consumption of coffee in the first world in the year 2017.

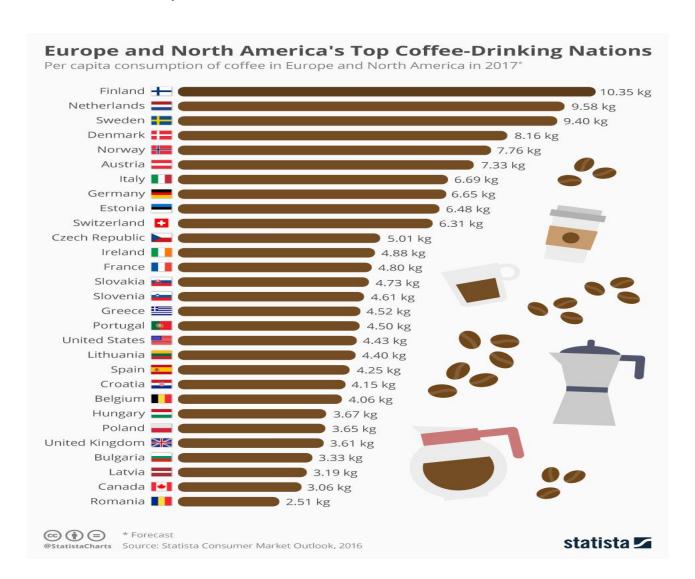


Figure 2: Biggest consumers of coffee worldwide. Source: *Statista Consumer Market Outlook*, 2016.

At this point it is essential to clarify where the profits obtained from the coffee economy will end, if only 6 to 10% of the field remains with the farmers, we are clear that a pound of good quality, roasted and ground Colombian coffee costs an average of \$ 15 USD per pound and out of that, only \$ 0.92 USD goes to the farmer, the rest goes to the large multinationals.

So far we have focused on what happens in the global economy between the producing countries and the main consuming countries and a small historical review of one of the world 's leading coffee brands, but let's see what happens in Mexico where consumption has had a sustained growth over the last two decades, the economic behavior of the coffee trade is interesting, given that internal consumption and its per capita rise, isn't very different from what is happening all over the world, given that there is an existing value chain where the coffee farmer is in poverty.

It should be noted that the culture of consumption has had a change and has caused an evolution in the consumer, where paradigms of yesteryear have been broken, that consumption occurred at home, so much so that the sayings like when they invited you to have some coffee, the answer was ''no, , I'm not an old man'', or when they tried to introduce Frappe coffee machines to the local market, that the client answered ''you are crazy, who is going to drink iced coffee?'' well, this is how the new way of drinking coffee is propelling innovative technology, a determining factor that invites to consume.

Another factor is the development of coffee-based products such as Frapuchino, hot cappuccino, American coffee on the rocks, among others, changing habits and trends. And so, supply of coffee in different roasts, origin and preparations to go, open a distribution segment that generates growth on bars and coffee houses that we will identify from now on as the cupped coffee segment. In Mexico, there are several national brands among the best known are the Poblana, The Italian Coffees, Punta del Cielo Coffees from Mexico City, the Sonoran Caffenio (formerly known as Café Combate) who bet on the diversification of the sale of coffee in different concepts the markets traditionally exploited through the history of consumption of coffee as restaurants, grocery, convenience stores, etc., where it was creating an environment that transformed habits, creating a culture from which thoughts and changes emanated, and they were adopted for the big companies.

Oxxo commercial chain, seeing the opportunity and making its slogan effective 'Always ready, always there', implemented a coffee bar in its fast food area in alliance with the Sonoran coffee of the Pacific, who at that time was known for its commercial brand in the north of the country as Café Combate, which was a regional brand covering the states of Sinaloa, Sonora, Chihuahua, Baja California and Baja California Sur, making this alliance at one of its worst moments since its foundation in Chihuahua, in the year 1923. Today Caffeine is an important company in the FEMSA group. The success of this alliance since 2000 has been practically a benchmark where a different history begins at the national level in the per capita increase in coffee consumption, because Oxxo stores currently cover approximately 18,000 stores in the whole country, putting a glass or a thermos of coffee in the hand of the consumer managing to increase consumption creating a need.

In the case of the consumption of coffee in Sinaloa historically there were two companies that disputed the market for green bean coffee and coffee roasted with sugar, being the Café El Marino company located in the city of Mazatlán, Sinaloa and Café del Pacífico, from Sonora. They competed through marketing their brands, making their sales strategies with promotions and giveaways to stay in the market, in the same way by relying on the tasting of their products within the self-service stores with the support of a sales promoter, who would

offer a cup of coffee to taste its flavor and practically convinced the customer to take the bottle of soluble or roasted coffee.

There is currently a problem with theft of ideas, brands and intellectual property. Café el Marino was born in a rural community called El Verde, located a few kilometers from the city of Mazatlán, Sinaloa and its main product was green coffee in the presentation of 250gr. Which was known at that time in the small shops as green coffee, to roast it in a traditional way at home in a burner to later add sugar. In those years, the sonoran company Café Combate wasn't yet in the sinaloan market, which also produced and marketed green coffee in the 250 gr presentation; The fact is that upon entering the sinaloan market and realizing that coffee in that presentation is known as green, referencing the origin of the rural community from which the Café El Marino came. Café Combate registered the green trademark, thus remaining with the name original name of the Café El Marino company, where there is no record of this action for being a painful and shameful affront which is commented on in the field as urban legend.

It is such the case as theft of ideas and names between the businesses in order to obtain monetary gain at the cost of the lack of ethics in a globalized business world, where there is no such concept. It is really important to mention that in Sinaloa, particularly in the north of the state in the city of Los Mochis, there have been for several years, three companies dedicated to roasting, development of formulas, packaging and marketing made from coffee, who seek to position themselves in the regional market and are working hard on their strategic planning to enter the national and international market in the future.

These coffee companies are "La sobredosis", which is owned by Pedro Soberanes, "Piano Negro", commanded by Bernardo Balderrama, and a family business called "Kaféetane", whose name is of Yoreme mayo origin and means "I am coffee", directed by Edmundo Valle. These three companies have a great challenge to get involved in the value chain, first at a national and then to internationalize.

The fact is commercialization of coffee is evolving in consumption, which has developed a culture where the consumer dares to look for the origins of the grain and is willing to pay a greater amount for the final product, this opens a new segment that can be referred to as "cupped coffee segment". This term has been used internally by the Café del Pacífico company known today as Caffenio, where they don't really pay for the coffee itself, but for the concept that breeds status and a sense of belonging, a new segment that is different to the traditionally known segments of the industry and the entire value chain.

Today the consumer dares to break paradigms and sayings where they leave home with their mug or thermos in their hand, and they fill them at a bar or vending Coffee to go, at Oxxo or

Caffenio, among other businesses. These businesses have established their market since they opened their doors, revolutionizing sales through points of distribution of prepared Coffee, earning this segment in the dynamic Coffee industry. A market with a sustained development, whose value is still incalculable, highly attractive, which is why it is appropriate to add it to the graph of traditional segments of roasted, ground and soluble Coffee. Chart 2 shows the three most important segments for the sale of Coffee.

Table 2: The three segments for coffee and its participation in Mexico

	Retail, sales of coffee to the public	Participation in the
Soluble coffee	for home consumption in	Mexican market.
	supermarkets and stores.	54.2%
Food service. Sales to businesses,		
Ground coffee	such as coffee shops, restaurants,	40.5%
	bars, etc.	
	Institutional. Sales of coffee to	
Roasted coffee	formal institutions, including hotels,	5.3%
	offices, public and private	3.5%
	organizations, etc.	

**Source:** Own elaboration with data from Gómez 2019.

The segment of *cupped coffee* already exists in the consumer market for Coffee in different forms, it just has not been detailed in scope and dimension. Its characteristics must include the millennial generation that has been its engine of development, who in the search for identity and as in all the generations that have passed, have left their mark on history causing a change of habits in consumption and culture, marking this step and leaving its seal. It should be noted that INEGI does not have this segment of coffee in a specific line, it has it added in a generic section where there are furs, coffee shops and ice cream shops in a group.

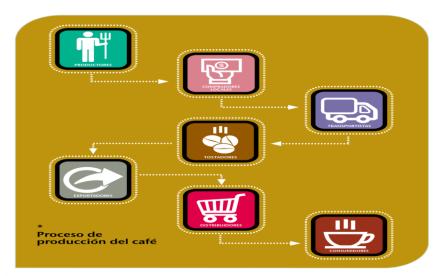
We argue that it should have its own special place because of the economy it generates and what it represents for both the internal and the exports market, and for the generation of foreign revenue. The economic and cultural impact globally is considerable, because the annual value for 2017 was 200,000 million dollars worldwide and in Mexico it is no exception, given that the market value for Coffee was 10,000 million pesos in the same year, with a 20 to 25% annual growth.

In summary, while the Coffee farmers in the field all over the world are characterized by a low price on their yield, in a locked world on their crops, there is a globalized world, paralleled in which the invisible hand of markets and big capital operate a supply and demand law, manipulated so that the gap between poverty and wealth remains abysmal, where profit predominate, and the lack of awareness profiting with the farmer's need and poverty. It is incredible that almost 200 years after the Coffee stock was created in New York, the scope of its empire and its impact continue to prevail in the world, with the same practices seeking profit at the expense of the Coffee farmer's misery.

It is important to mention that Coffee entered the international movement known as fair trade, a movement that was created in the 40's-50's in the United States and from there the idea was shared to different countries of the world such as the Netherlands and then Germany, Switzerland, Austria, France, Sweden, Great Britain and Belgium. This movement fights for the justice of the marketing of products made under fair conditions. Fair trade denounces the outrages, which originate poverty and inequality where political opinions come in, which also seeks an alternative trading system.

Fair trade looks for the rights of the peoples to be protected and that they are part of the economic activity, guaranteeing, among other things, fair treatment, respect for human rights and the environment. In the fair-trade network in the world there are more than 2000 organizations in Africa, Asia and Latin America which contain producers and working people, agreeing on prices and seeking counseling to improve their marketing existing in the world more than 4000 stores specializing in fair trade.

However, in the field of Coffee, fair trade does not conform this scheme even when the grain is within the organization, due to the economic interests that it represents for transnational corporations which speculate on production, prediction, commercialization and the final price paid to the Coffee farmer.



The figure 3 shows the value chain of the green Coffee bean.

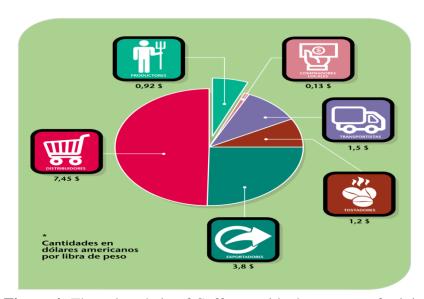
**Figure 3:** Green coffee bean value chain within the producing country **Source:** Gómez, 2019

The coffee value chain starts from the coffee field with the cherry harvest, where the green coffee beans are obtained, this is the beginning with the producer, then it passes to the buyers, carriers, distributors, roasters, exporters, arriving to the industrialist who subjects it to different processes for different presentations and markets, which leads us to this study, that tries to open up a panorama that sensitizes the position of the farmer from the field to the final consumer, generating an industry and an economy, which affects and benefits people inside and outside of the business.

In some countries like Mexico coffee industry provides sufficient foreign exchange to support the economy and has become important generator of revenue to the national economy after oil, money sent by workers abroad and tourism. Therefore, it is important in many countries of the world, which generate foreign exchange and economic support in countries and regions that this industry predominates such as in Vietnam, Colombia, Brazil among other grain producing nations.

This work has the purpose of exposing the importance of coffee consumption in the global economy and pointing out who makes each sip possible, through the different presentations of the type beverages made with coffee, it is clear that in order for global trade of grain happens, many strategic alliances need to happen between governments, industries and producers. The millennial generation has been the fundamental engine because of its high purchasing power, and it has revitalized the industry and new concepts have been created by companies dedicated to the retail of prepared coffee (Gapper, 2018).

It is worth mentioning that over time the old alliances last and are valid, as is the case with the Coffee stock in New York that almost 200 years after its foundation still handles the threads of power to define the price of grain worldwide, that from there with speculation the Coffee farmer loses money generating a gap of inequality in obtaining profit. Figure 4 shows the value chain outside of the country of origin, explaining that out of 15 dollars spent on Coffee, only 92 cents go to the original farmer and most of the rest stays with the big companies and retailers.



**Figure 4:** The value chain of Coffee outside the country of origin **Source:** Gómez, 2019

#### Conclusion

Along this paper we have exposed the economic and cultural effects of the Coffee trade for its study and analysis, due to the fact that globalization and trade of products such as Coffee, in this case, which causes social, economic and political situations with both positive and negative results, depending on the approach used.

Coffee is the second most consumed beverage in the world after water, and it generates a percentage of GDP globally generating jobs throughout the value chain and in Mexico is no exception since the market value is 10,000,000 million pesos annually.

The change in habits generated by the consumption of Coffee is an effect that is due to several factors, in which the millennial generation participates, these being the ones that currently have the most purchasing power and the multinationals that bet on infrastructure investment through the creation of new concepts adapting them to the search for a sense of belonging of said generation in a globalized way.

The Coffee trade represents an important source of income in the world economy and there is a value chain developed around this industry. The Coffee trade makes the world smaller because it makes it possible to have access to all the grains of each of the Coffee regions from the geographical point where we find everything thanks to the existing value chain. And this is currently happening since the consumer is specializing in the origin of the product, the same supply is being made by experts since they have entered the grain research, in the history of the chain that is a frequent customer, every day it is more common to meet consumers who question the quality of what they buy because, as usual, consumers are interested in reading what they consume.

The per capita consumption in Mexico is currently 1.3 kg of Coffee where a very promising path is seen in the growth of this market because the largest consumer in the world is Finland with almost 12 kilos per person in that country. This is why a promising future is seen with the growth of Coffee consumption at levels never seen before in a globalized way, so that the world Coffee trade will continue to be a source of foreign revenue for the countries that produce the grain.

In the case of Mexico, the growth in domestic consumption which has increased from .300 gr. to 1.3 kg Per capita is seen as an opportunity as consumption grows every year generating jobs at the points of sale of the Coffee chains that sell it through the segment of cupped Coffee, which are the Oxxo Coffee bar, Caffenio, Coffee Punta del Cielo, The Italian Coffee, and a number of local companies such as Black Piano and Kaféetane.

In Mexico, INEGI does not yet consider to the economic dimension that this industry represents and what it contributes to the GDP since they only focus on the field, in the primary activity and the importance of the internal market of the final consumer, in which currently through the segment of cupped Coffee is where a gradual increase in per capita Coffee, is detected. At this time is vitally important that INEGI will give Coffee market the status in all its dimensions, in traditional and emerging markets such as retail stores, and business concepts that offer prepared Coffee to take away and classify it in such a way that apart from the roasted, ground and soluble Coffee segment, it includes the cupped Coffee segment since

it is the engine that makes growth of consumption in the population possible. (Gómez-Posada, 2019).

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