# SOCIOECONOMIC IMPLICATIONS OF THE PANDEMIC IN THE GASTRONOMIC SECTOR IN A MUNICIPALITY OF NORTE DE SANTANDER, COLOMBIA

# GERSON RUEDA VERA1, YAIR R. CASADIEGO DUQUE 2, WILLIAM RODRIGO AVENDAÑO CASTRO3

- (1) Faculty of Business Sciences, Universidad Francisco de Paula Santander, Cúcuta-Colombia. E-mail: geruedacera@ufps.edu.co Orcid: https://orcid.org/0000-0001-9032-7100
- (2) Faculty of Business Sciences, Universidad Francisco de Paula Santander, Cúcuta-Colombia. E-mail: yaircasadiego@ufps.edu.co Orcid: https://orcid.org/0000-0003-3649-8042
- (3) Faculty of Business Sciences, Universidad Francisco de Paula Santander, Cúcuta-Colombia. E-mail: <a href="mailto:williamavendano@ufps.edu.co">williamavendano@ufps.edu.co</a> Orcid: <a href="http://orcid.org/0000-0002-7510-8222">http://orcid.org/0000-0002-7510-8222</a>

# **Abstract**

This work aims to know the effects of the pandemic that originated with Covid-19 on the gastronomic sector in the municipality of El Zulia in Norte de Santander. The population was 64 establishments registered in the Chamber of Commerce. In addition, a non-probabilistic sampling (purposive) was used for 25 restaurants. The main results obtained were the following: (1) approximately 48% of the businesses had *medium* productivity, and 36% had *low productivity* due to the pandemic; (2) 75% of the businesses had significant income losses and (3) 96% of the establishments had layoffs. Therefore, it was concluded that the gastronomic sector suffered economic and social losses due to the pandemic.

Keywords: pandemic, economic, establishments, Covid-19

#### INTRODUCTION

Since the end of 2019, the world began to worry about a virus that affects people's breathing; as time progressed, the situation began to become more worrying about Covid-19, which spread worldwide very quickly. This pushed countries to close their borders, which caused a reduction in international trade and consequently brought economic and social problems.

At the national level, according to International Monetary Fund (IMF) projections, Colombia's economy is expected to contract by -7.8% in 2020. Similarly, the forecasts of the World Bank and the Economic Commission for Latin America and the Caribbean (ECLAC) align with those of the IMF. The World Bank projected a drop of -4.9% in the Colombian economy in 2020 and a recovery of 3.6% in 2021. For its part, ECLAC predicted that the Colombian economy would contract by -5.6% in 2020 (Pro Colombia, 2020). The above represented a discouraging outlook since the Colombian economy, according to international organizations, would suffer the effects of Covid-19.

However, the Colombian tourism sector is expected to experience a contraction of US\$5.7 billion in revenues, reducing 1% of GDP. Consequently, this drop in GDP will generate an approximate



loss of 195 thousand jobs; this will have a more significant effect on women since they are the ones who work in the accommodation and food sector (ECLAC, 2020).

Taking into account the above, an evident effect of the pandemic on the economy. The purpose of this study is to determine the effect of the pandemic on the gastronomic sector of the municipality of El Zulia, Norte de Santander. To this end, this study is structured as follows: in the following section (2), there is a review of the literature on the effect of the pandemic on the gastronomic sector; in section 3, details on the sample and the type of methodology used are presented; in section 4, the results obtained are shown; and finally, in section 5 there are the conclusions.

# **BACKGROUND**

Covid-19 was a landmark in world history. It is to be understood that the initial concern was the people's health; therefore, a way was sought to reduce the transmission of this disease by compulsory isolation. However, isolation caused significant economic disruptions since it reduced most sectors' production, so much so that Nicola et al. (2020) argue that the losses were similar to those caused by the Second World War. Now, as mentioned above, the entire economy suffered due to isolation; the primary and secondary sectors were affected, but among all the sectors of the economy, and the one that suffered the most was the service sector due to its dependence on human interaction and relationships (Sanchez, M. 2020).

The gastronomic sector was greatly affected by the pandemic since its services are provided directly to the client; therefore, they were considered potential places to transmit the virus. Because of this situation, many were forced to close their doors. According to Bancolombia (2020), out of 90 thousand restaurants operating in 2019 in Colombia, approximately 22 thousand closed definitively due to the pandemic, representing a discouraging panorama for this sector. However, this did not happen only in the national territory, which effect was suffered by most restaurants worldwide.

In Paraguay, the study by Bazán et al. (2021) found that there was a decrease in sales between 50 and 70%. This is very similar to the results obtained by Duque (2021) where it is found that restaurants in Girardot have had the most significant economic losses since their opening, and to those of González & Rodríguez (2021), who found that the reduction in sales in restaurants in the Peñón sector in Cali was reduced by between 51 and 70%. Similarly, the study by Domínguez (2022) obtains that the pandemic brought unrecoverable losses and bankruptcies to many fine dining establishments and small restaurants in Spain. In the same line, the study by Flores & Vargas (2021) shows an average decrease of 62.29% in sales and 73.16% in the profits of restaurants in Peru. The above studies reflect the reality of the gastronomic sector in times of pandemic, given that the fear of contagion and mandatory isolation were fundamental determinants in reducing sales and profits.

#### THEORETICAL REFERENCE

Covid-19, which started in Wuhan in 2019, ended up spreading worldwide until it became a pandemic. Initially, what was done was to isolate the inhabitants of most countries since the level of interdependence allowed the contagion to occur more quickly. However, after a time in isolation, the dilemma between health and the economy began to be felt; in other words, whether it was more important for people to go to work during the pandemic or whether it was better for them to remain isolated during an economy that offered fewer and fewer goods and services. As a result, the economy was slowing down day by day, and in turn, each of the sectors



was facing the effects of isolation differently, with the service sector, and more precisely, the restaurants, being the most affected.

Considering the above, the study took as a theoretical reference the systems theory, originally proposed by Von Bertalanffy (1986) in the area of natural sciences, where his main contribution is to consider a system as a set of interacting elements. According to Ríos & Santillán (2016), systems can be classified as open or closed; the former are those related to their environment; closed systems are completely isolated from the circulating environment. In this sense, Soto (2016) clarifies that the systemic approach cannot be used only in the natural sciences, but on the contrary, it can be used in any area, regardless of whether they are soft or hard sciences. The latter is the subject of the present study since the economic units as the restaurants of the gastronomic sector of Zulia, are taken as open subsystems that depend on a supra-system. Therefore, changes in the supra-system (national or international economy) affect their functioning.

Taking this to the theory of the firm, Gutiérrez (2013) states that an organization is "a sociotechnical system included in a broader one, which is the society with which it interacts, influencing each other (p.70)." Schein (2010) proposes that the organization should be an open system; therefore, it acquires the following characteristic: a probabilistic and non-deterministic behavior, meaning that organizations are affected by the environment, an environment that in many cases has no boundaries and includes unknown and uncontrolled variables.

Once the systems theory has been described, it could be stated that the gastronomic sector of Zulia is an organization that depends on what happens to its environment, in this case, the situations caused by Covid-19.

Supply and demand theory: According to Mankiw (2012), supply and demand are the forces that make market economies work, determining the quantity produced of each good and the price at which it should be offered. In the same way, Pindyck & Rubinfeld (2009) establish that supply and demand help to understand the cause and effect of price variation and, in turn, the consequences of state intervention in markets. Based on these concepts, it is possible to explain the expected effect of State intervention, in this case, by declaring a sanitary emergency and compulsory physical isolation. As a result, the supply of gastronomic services decreased considerably due to the confinement since it was avoided to offer these services. However, even if the temporary closure had not been carried out, the demand was already conditioned, i.e., consumers considered restaurants as potentially dangerous places since the virus could be contracted there, so their demand would have been inevitably reduced. In other words, demand and supply in the restaurant sector contracted due to the generalized effect of Covid-19.

# PROFITABILITY THEORY

According to Sánchez (2002), cited by Torres (2011), profitability is understood as a notion that applies to any economic activity in which material, human and financial resources are mobilized to obtain a profit. Therefore, it could be stated that the profitability of companies is the benefit obtained from an investment, so profitability is the objective that every company projects, reflecting good administrative management.

**Human capital theory:** Human capital can be conceived as the capabilities people acquire through formal education or experience (empiricism). Nelson & Phelps (1966) describe the importance of education for the appropriation of new technological developments and innovation; since education gives workers the ability to receive, decode and understand

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information, which is important to perform or learn to perform many jobs. Therefore, human capital is of paramount importance, which was demonstrated during the pandemic. Sectors of the economy were affected differently by the pandemic; within these, each sector faced the challenges of the pandemic differently. For example, in the case of restaurants, most of them opted for information technologies to reach their customers. In this scenario, for some, it was extremely difficult (those with low human capital), while for others, it did not present great difficulty; in this scenario, it could be said that the first ones suffered more during the pandemic, while the others only at the beginning.

# **METHODOLOGY**

This is a descriptive study that uses a quantitative methodology. According to Bernal (2010), the quantitative or traditional method "is structured to measure the characteristics of social phenomena, which involves deriving from a conceptual framework relevant to the problem analyzed, a series of postulates that express relationships between the variables studied in a deductive way, which tends to generalize and standardize the results" (p.60). For his part, Hernández (2012) argues that quantitative research makes it possible to accurately establish the behavioral patterns of a society (p.10). In turn, Hueso and Cascant (2012) express that it is based on statistical techniques to know the characteristics of interest of the object of study.

The sample corresponds to 25 restaurants in the municipality of Zulia, which belongs to the population of 64 restaurants registered in the Chamber of Commerce of the municipality. The instrument used to carry out the present investigation is the survey, which García (1993) refers to as an investigation carried out on a representative sample through the interrogation method; in this case to the owners of restaurants in the municipality of El Zulia, to obtain quantitative measurements of a great variety of situations and characteristics of the population to know the socioeconomic effect of covid-19 in the restaurant sector of the municipality of El Zulia.

The data obtained were organized and tabulated for the calculation of the descriptive and correlational analysis using SPSS software in Excel. The responses were then organized, taking into account the most relevant responses, i.e., those with the highest weighting, for the respective descriptive analysis and interpretation of the data, as well as the significant coefficients of the correlations.

# **RESULTS**

# **DESCRIPTIVE ANALYSIS**

In Figure 1, it can be observed that most of the restaurants in the municipality of El Zulia considered that their productivity in times of pandemic has not been the best; given that 48% considered to have medium productivity and 36% low productivity. This is largely due to the strict confinement regulations issued by the national government to prevent the spread of the virus. These measures caused a decrease in the demand for services in this sector, which ultimately ended up reducing their productivity. These effects caused by the pandemic are similar to those experienced by most restaurants in the world since the closure of the premises meant the cessation of their services, which caused their productivity to decrease considerably.



Figure 1

How do you consider your productivity has been in these times of pandemic?

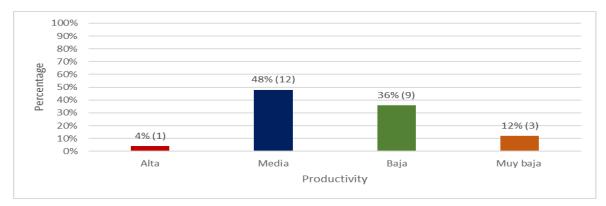


Figure 2 shows that more than half of the restaurants in the sample of the gastronomic sector of the municipality of El Zulia indicate that they have been considerably affected (Very high) because this was a situation that was not foreseen. The pandemic caused the number of their sales to decrease, which generated economic losses and a contraction in demand for employment, variables that would affect the country's overall economic situation. In general, 96% of restaurants consider that the effect of the pandemic on their business was high (High and Very High). As a consequence of this situation, a part of their lives was paralyzed, so they were forced to look for other ways to obtain income and be able to face the health and economic crisis they were going through; for some of them, the panorama was quite difficult and devastating, because they imagined when this would end, how they could continue and what strategies they should implement not to leave their businesses and reach total closure.

Figure 2

How much has the restaurant sector in the municipality of El Zulia been affected by the pandemic?

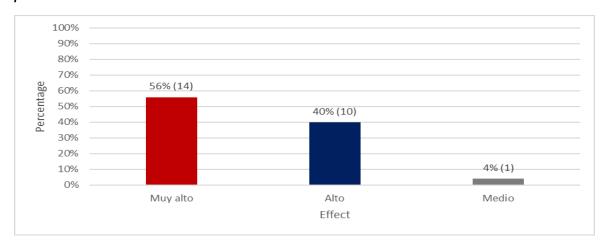
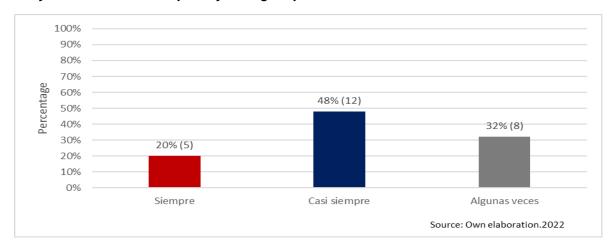


Figure 3 shows that at the beginning of the pandemic when the guidelines about ional Government were stringent, the restaurants in El Zulia closed in a differentiated manner; since one-fifth closed permanently, half of the sample of restaurants almost always closed and one-third closed sometimes. This shows a different response capacity on the part of the restaurants in

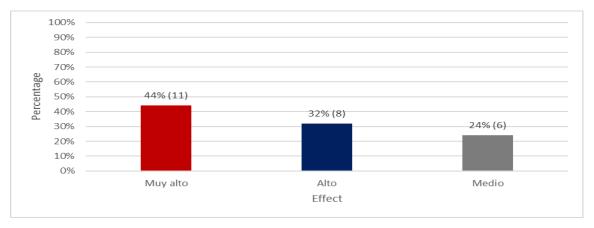
El Zulia to the situation that was being experienced due to Covid-19; in other words, some complied strictly with the regulations, while others only sporadically. This can be explained by the need to obtain subsistence income since these businesses are the only source of family income in some cases, so closing would mean opening the door to suffering and need.

Figure 3 Did you have to close the facility during confinement?



According to the respondents' opinions, Figure 4 shows that the effect of the pandemic on their income was highly significant, given that the sum of the surveyed restaurants that responded very high and high is approximately three-quarters of the sample. This is due to the situation evidenced in the previous figure, given that the establishments remained closed at the beginning of the pandemic; in view of this situation, their income was paralyzed. Furthermore, many of them did not have economic income from other sources since these were obtained from the sales they generated daily; in this situation, many of them expressed that they had to resort to part of their capital or even opt for informal loans in order to mitigate the economic situation a little. The above described is similar to the results obtained by the ECLAC study (2020), where it is evident that restaurants have experienced a drop in sales of 80%, which directly affects their income (p.68).

Figure 4 How much was your income affected at the time of confinement?



According to Cepal (2020), the lodging and food services sector in 2020 had lost 436 thousand employees. The results obtained in the present study are similar since the reduction of activities and the closure of establishments ordered by the government forced 96% of the establishments to reduce the number of employees (Figure 5) since they did not have the economic capacity to continue paying the corresponding salaries. According to the surveyed restaurants in the municipality of El Zulia, they normally had an approximate number of between 3 and 7 employees, of which, during the pandemic, more than half had to be dismissed; since the owners found it very difficult to keep them in the company, given that they were not generating income that could support such an expense and their businesses remained closed. This was caused because their activity represented a high risk of contagion since the diners were exposed to being outdoors or in closed places with crowds of people, situations that are part of the restrictions in order to mitigate the spread of the virus. Given the above, unemployment shot up rapidly.

Figure 5

During the pandemic how many employees did you have to lay off?

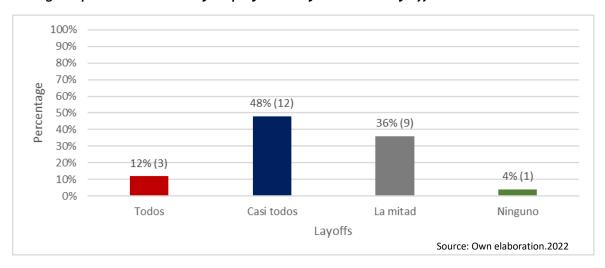


Table 1 summarizes the payments that owners had to make even during the pandemic. From this, it can be seen that the majority tried to meet their obligations, 44% made payments to suppliers, 56% met their commitments to their employees, and 44% paid their taxes. Now, the payment of the first two may be due to a type of social solidarity, that is, knowing that everyone was going through the same situation, it was best not to look bad; this may have helped the economy to slow down slowly because if the obligations had not been met, the poor circulation of money would have increased the speed of the crisis. Nevertheless, it is surprising that 12% of the owners were always able to meet their living costs, since 60% said that they almost always did; this shows the restaurant owners' commitment when meeting the obligations acquired by the business, forgetting their own.

Table 1
Fulfillment of financial commitments

Motive	Always	Almost always	Sometimes
Payment of suppliers	44% (11)	20% (5)	36% (9)
Payment of wages and insurance	56% (14)	24% (6)	20% (5)
Payment of Taxes	44% (11)	32% (8)	24% (6)



Note: Table 1 summarizes the fulfillment of commitments by the restaurants in the sample.

60% (15)

12% (3)

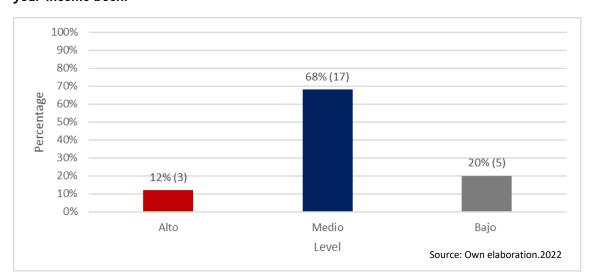
# Reopening

Livelihood costs

Figure 6 shows the effects of the relaxation of isolation strategies. As mentioned at the beginning, the countries faced the dilemma of either reducing the number of Covid-19 cases to a minimum or starting to reactivate the productive apparatus; in the face of this, they gradually opted for the latter. As a result, with the proper biosecurity measures, the gastronomic sector returned to work; in view of this reopening, a large part of those surveyed, approximately 68%, believe that their income has been maintained at an average level. This may be due to consumers' fear of visiting this type of business since it is still seen as a place with a high probability of contagion. Another point to highlight is that 20% of the sample perceives that despite the reopening, their income is still low; this partly reflects how difficult it has been for some businesses in the sector to return to operating in the same way they did in pre-pandemic times.

Figure 6

After the relaxation of confinement in pursuit of economic recovery, how has the quality of your income been?



# **Correlational Analysis**

Table 2

Correlation of Item 1 how you consider your productivity has been in these times of pandemic versus Item 10 after the relaxation of confinement in search of economic reactivation, how has been the quality of your income?

	Statistician	Value	Typical error asint.a	Approximate T <sup>b</sup>	Approxi mate Sig.
Ordinal by ordinal	Kendall's Tau-b	,682	,076	4,325	,000
	Gamma	1,000	,000	4,325	,000

Measure of agreement

Kappa

,196

,134

1,528

,126

N of valid cases

25

Note:

A result with a p-value < 0.05 is reflected, which translates into a significant correlation greater than 95%, and meaning that a strong association exists between the items observed. Based on the entrepreneurs' responses, it can be observed that after the relaxation, the quality of income has improved; this is compared to the beginning of the pandemic when the measures were stricter, so the possibility of generating income at that time was difficult.

Table 3

Correlation of Item 1, how you consider your productivity has been in these times of pandemic versus item 5 during the pandemic how many employees you had to lay off.

	Statistician	Value	Typical error asint.a	Approximate T <sup>b</sup>	Approxi mate Sig.
Ordinal by ordinal	Kendall's Tau-b	,815	,053	8,958	,000
	Gamma	1,000	,000	8,958	,000
Measure of agreement	Карра	-,195	,072	-2,778	,005
N of valid	cases	25			

Note:

A result with p-value < 0.05 is observed, which translates into a significant correlation greater than 95%, representing a solid association between the observed items. According to the employers' responses, it can be determined that the level of productivity is related to the number of employees dismissed during the pandemic. In contrast, their productivity is low, and the reduction of employees would increase because they do not have sufficient economic capacity.

Table 4

Correlation of Item 2 how affected the restaurant sector of the municipality of El Zulia has been due to the pandemic versus item 10 after the relaxation of the confinement in search of economic reactivation, how has been the quality of their income?

	Statistician	Value	Typical error asint.a	Approximate T <sup>b</sup>	Approxi mate Sig.
Ordinal by ordinal	Kendall's Tau-b	,597	,078	4,186	,000
	Gamma	1,000	,000	4,186	,000
Measure of agreement	Карра	-,081	,036	-1,973	,048
N of valid	cases	25			



#### Note:

A result with a p-value < 0.05 is evident, which translates into a significant correlation greater than 95%, symbolizing that there is a strong association between the items observed. According to the businessmen's responses, this reflects that the restaurant sector was indeed affected, regardless of the size, since the establishments had to close and slow down their activities. However, thanks to the flexibilization decreed by the government, they have been able to provide their services again.

Table 8

Correlation of Item 4 how much your income was affected at the time of confinement versus Item 10 after the relaxation of confinement in pursuit of economic reactivation how has been the quality of your income.

	Statistician	Value	Typical error asint.ª	Approximate T <sup>b</sup>	Approxi mate Sig.
Ordinal by ordinal	Kendall's Tau-b	,699	,085	4,508	,000
	Gamma	1,000	,000	4,508	,000
Measure of agreement	Карра	-,202	,051	-2,946	,003
N of valid	cases	25			

#### Note:

A result with a p-value < 0.05 is obtained, which translates into a significant correlation greater than 95%, showing a strong association between the items observed. Taking as a reference the responses of the businessmen, it can be affirmed that the establishments closed due to this crisis, which led to a high impact on their income. However, after the reopening, important changes have been seen in the income of the owners, a situation that is encouraging after the cessation of their activities.

#### CONCLUSIONS

The pandemic was a challenge for most countries, and within these, for each of the territories. Initially, human losses were significant, but as the days went by, economic losses became greater and greater. The slowdown of the economies was imminent since the contagion effect was not only from a health perspective but also economical; the loss of income due to the loss of employment caused a decrease in the consumption of workers from one sector to another.

In the present study, it was found that the restaurant sector of the municipality of El Zulia was one of the most affected by the confinement decreed by the territorial entities of this municipality in response to Covid-19. Since approximately 48% of the businesses have *medium* productivity and 36% *low* productivity in times of pandemic; added to this, three-quarters of the sample responded that there was a significant loss of income (very high 44% and high 32%). In addition, 96% of the establishments were found to have had layoffs.

On the other hand, it was evident that although the restaurant owners saw their income decrease, they did not lose out on their suppliers, employees and taxes; all this at a high cost to their families since 60% of the sample considered that they were *almost always* able to cover

their living expenses. However, the confinement measures became more flexible, and restaurants looked for a way to provide their services again, but this did not translate into a significant increase in their income since approximately 68% considered their income moderately acceptable.

Finally, the correlation analysis using the SPSS software shows, with a p-value < 0.5 and a significance level of 95%, that the pandemic had a considerable effect on the gastronomic sector of the municipality of Zulia. This is due to the isolation measures. However, despite the easing measures implemented, the outlook for restaurant owners is discouraging.

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