



## The impacts of the COVID-19 pandemic on the opening and closing of companies and on ICMS tax collection in the state of Maranhão from 2019 to 2021

### Os impactos da Pandemia causada pelo COVID – 19 na abertura e encerramento de empresas e na arrecadação de ICMS no Estado do Maranhão no período de 2019 a 2021

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Paulo Salgado Carneiro Zenha<sup>1</sup>, José Francisco Belfort Brito<sup>2</sup>, Mauro Santos<sup>3</sup>, Poliano Bastos da Cruz<sup>4</sup>.

#### ABSTRACT

The objective of this scientific research is to identify the impacts of the pandemic caused by COVID-19 on the economy of the state of Maranhão (Brazil), aiming at this purpose the evolution of ICMS revenues and the balance between the opening and closing of companies during the peak of the disease in the state was analyzed. The variables were validated after a review of the existing literature that addresses the origins of COVID-19, originating in the Asian continent and spreading around the world until it reached Brazil, especially in Maranhão, the ICMS was also conceptualized from the perspective of indirect tax and on the consumption of families and companies. The study will use data/documents available in the official means of the national state and Maranhense, with a quantitative approach, with the use of a statistical tool "R" and exploratory and descriptive purposes. Even early to determine precisely the real impacts of the pandemic on the economy of Maranhão, it is possible to observe signs of negative trends both for the formal continuity of companies and for the collection of ICMS in Maranhão; When comparing only the months "with" and "without" the pandemic in the years 2019/2020, it is already possible to statistically extract the first direct effects caused by the stoppages both in the collection and in the performance of opening and closing new businesses. Given the information captured in the research, the intention is not to exhaust the subject, but to have a study that will serve as an initial step for future surveys and thus contribute to the scientific and academic community that will be able to better understand what is happening with the economies and the effects of this virus.

**Keywords:** Opening and closing of companies, Collection, ICMS, Covid-19.

#### INTRODUCTION

The dilemma caused by Covid-19 is the great agenda of the moment, the concern is enhanced by the fact that it is not known definitively what the virus is, how it originated, how it

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<sup>1</sup> Ceuma University

<sup>2</sup> Fucape Business school

<sup>3</sup> Ceuma University

<sup>4</sup> Ceuma University



behaves in the human body, which prophylactic drugs to be used with an adequate response to the known variations of the virus, especially because there is no vaccine to combat the diseases caused by it. However, the unrest does not stop there, it is not known for sure what its impacts will be on the economy, on people's social lives. These questions are brought to the academic environment and enter the human, health, social and applied social sciences such as accounting, administration and economics, sociology. One of these concerns is to know the impact of the new Covid-19 on the economy of a given territory and population, whether they are a national state, or a small federative unit, in this case the federated state of Maranhão – Brazil. In this sense, the present research starts from the following problem: **what is the impact on the economy of Maranhão in terms of tax collection and the opening and closing of companies in the face of the effects of COVID-19?**

Both tax collection and the opening and closing of companies are indicators that involve issues related to various branches of accounting, including public accounting, tax accounting and accounting services themselves. Therefore, to solve the research problem, the study in question aims to: **analyze the impacts of isolation measures due to Covid-19 on the opening of companies and on the collection of Taxes on the Sale of Goods and Services (ICMS).**

As is well known, both the disease and its economic impacts have no precedent in world history, so the study will have as references mainly articles published in reputable repositories and research carried out by official bodies, at this time a debate on the origin of the disease will be prioritized, as this issue may raise how the expenses will be carried out by the national states, including in this area a possible economic reparation for the most socioeconomically vulnerable nation states.

The study is premised on knowing the impacts on the collection and opening of companies in Maranhão, in this sense it is salutary to understand the origin of this new pandemic and how its influences are felt in the economy as a whole. These approaches will be reflected from articles and market research that show the variations of indicators, due to their unprecedented effects on both human health and the economy.

## **THEORETICAL FRAMEWORK**

### **THE ORIGIN OF THE PANDEMIC AND ITS IMPACTS ON THE ECONOMY**

Recent research casts doubt on the true origin of COVID-19. Studies show that the new virus may have been created in a laboratory in China, and possibly escaped from these manipulation areas (XIAO; XIAO, 2020). The evidence shows that the thesis that the virus

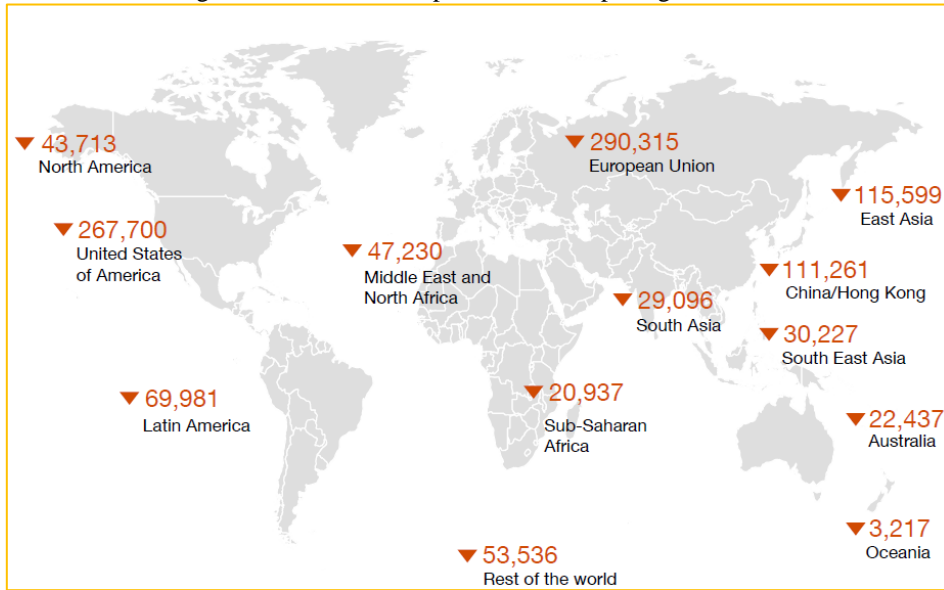


originated from a natural host and this being the bat is partially correct, as there is a high chance that it is true that the virus originated in bats, but there is no proof that it is natural. What Xiao and Xiao's (2020) research shows is that bats live in caves or places with many trees and that the shellfish market where the first cases of virus infection were seen is approximately 900 kilometers from this market, so it is unlikely that these animals have moved from their home to such markets.

For PWC (2020), the new Covid-19 will have several impacts on the economy of a country or region, the research points out that the consequences will be mainly on the labor market, impacts on the increase in government spending and the decrease in tax collection caused mainly by the reduction of economic activity reflected in the GDP (set of all wealth created in a country), Because there will be consequences in the productivity of capital, a shock in technology, in private consumption, especially of companies and families. The research by PWC (2020) estimates that global GDP will suffer a drop of 5.2%, as mapped in figure 01.

A sharp drop in the GDP's of the continents is evident due to COVID-19, in Latin America a loss of 69.981 billion dollars in GDP is projected, in Brazil the forecast for a drop in the economy in 2020 is 5.77%, according to the Market Report (Focus Bulletin) released by the Central Bank July 27, 2020, this negative growth will be mainly due to the effects of social isolation measures and spending on health and emergency aid (BANCO CENTRAL DO BRASIL, 2020). This drop will lead to the temporary interruption of production chains, consumption circuits and the formation of income and cash flows, which may bring to negative levels the collection of the tax systems that are part of the Brazilian federative pact, also affecting the credit programs for companies as well as income transfer for families.

Figure 01: Estimated impacts on GFC's peak global GDP



Source: PwC | The possible economic consequences of a global coronavirus pandemic, Accessed August 22, 2020

Covid-19 had its first contaminations in the seafood market in the city of Wuhan in China, but it is not known if this was the origin of the virus, the truth is that this disease is having unpredictable impacts on GDP around the world, and Brazil is no different. The most optimistic data predict a drop in the economy of at least 5.77% for the year 2020 and this drop will result in a drop in ICMS collection and in the opening and continuity of companies.

### TAXES ON TRANSACTIONS RELATED TO THE CIRCULATION OF GOODS AND ON THE PROVISION OF INTERSTATE AND INTERMUNICIPAL TRANSPORT AND COMMUNICATION SERVICES – ICMS

To better understand the tax and how it reflects a large part of the GDP, Sabbage (2009) summarizes this tax as shown in table 01:

Table 01: Systematization of ICMS

<b>Competence</b>	States and Federal District
<b>Active Subject</b>	States and Federal District
<b>Taxable</b>	Persons who carry out operations related to the movement of goods Provision of Interstate and Intermunicipal Transport and Communication Services, importation of goods of any nature and provision of communication services.
<b>Triggering Event</b>	Movement of goods, interstate and intercity transport services and communication services.
<b>Basis of Calculation</b>	Value of the operation, price of the service, and value of the imported goods or goods.
<b>Aliquot</b>	The states and the Federal District are free to set their own rates, and the tax is selective.

Font: SABBAG (2009), pp. 334–341.



The ICMS originated in Brazil by the 1988 constitution and is described in its article 155, item II and paragraphs 2 to 5, this tax is also regulated by Complementary Law 87 of 1996. It arose from a unification of six other taxes existing in the legal system prior to CF/88. The operation of circulation of goods may be due to donation, exchange, return, any legal act that characterizes an exchange of ownership of goods or any other form of circulation, except for the hypotheses already enshrined in law or in agreements (BORBA, 2009).

The ICMS is a tax that reflects the performance of the economy, as it has as its competence and/or active subject the state, which in Brazil is an entity of the federation that represents a considerable part of society and the territory, on the other hand its taxable subject are the individuals or legal entities that sell goods and intermunicipal and interstate transport and communication services.

FUJIWARA & OFFMANN (2020), state in their research that the collection of some of the municipalities analyzed, even before the emergence of the pandemic, was quite oscillating. In turn, BECHO & CAMPELO (2020), state that the World Health Organization considered that large-scale public health measures taken by the various countries to face the pandemic, the so-called lockdown or shutdown, such as restrictions on movement, closure of schools and business activities, geographic quarantine, restrictions on international travel and eventual total closure of the economy, must be taken.

When taken these measures, these measures take into account complex criteria, such as epidemiological factors, the incidence rate of the disease and hospital admissions, the capacity of the public and private health system to promote the care and treatment of those infected, and the existence of pharmaceutical interventions, highlighting that there is still no vaccine to combat the virus. Corroborating the same position, ISLAN et al. (2020) unequivocally demonstrated that the application of physical isolation measures, social distancing, reduces the incidence of COVID-19 in the affected territory, by up to 13%. Still on the restriction of locomotion, after the blockade, SILVA, FIGUEREDO FILHO & FERNANDES (2020), found in a study carried out in four capitals of Brazil, São Luís (MA), Belém (PA), Fortaleza (CE), and in Recife (PE) that after the blockade there was a reduction in the difference in the moving average of deaths, translating into a flattening of the curve of the epidemic.

ARAÚJO, DE SOUZA, GONÇALVES & SILVA (2020) point out that in the case of ICMS, the benefited companies and products are the ones that perceive higher revenues because they have a guaranteed market when offering products to combat the pandemic. In this way, Micro and small businesses, individual entrepreneurs and companies that sell hospital and



contamination prevention products have benefited from measures of extension or exemption from payment in several federative units, which helps the national states in tax collection at a time of crisis such as the one currently posted.

BORGES (2020) understands that there is a direct correlation between the capacity of self-collection, such as tax revenues, and the financial condition of the national states in their composition. He also demonstrates in his study that the financial condition needs to be associated with the variables pertinent to it, and it is interesting to understand how significant the government's financial health can be.

BEZERRA, PEREIRA, NASCIMENTO, MACIEL & SILVA (2020), state that a better understanding of the economic impact of this crisis implies sticking to the role that such organizations, micro and small enterprises and individual microentrepreneurs, play in our society. In this way, the imposed crisis also brought the impossibility of paying the tax obligations of companies within their normal deadlines, since there was a reduction and/or the non-existence of their revenues. Therefore, measures were adopted throughout Brazil, inserting in the legal framework of the Brazilian federative pact, actions on the extension of tax payment deadlines within the scope of the Simples Nacional, resizing the largest federal taxes (IRPJ, IPI, CSLL, COFINS and PIS/Pasep) in six months and resizing municipal (ISS) and state taxes (ICMS, IPVA).

## **METHODOLOGY**

The database made available for the study was composed of the set of information on registrations and closures of companies extracted from the database of the Ministry of Health, to know the evolution of the disease, the data related to the opening and closing of companies will be obtained on the website of the Board of Trade of Maranhão (JUCEMA), the information related to the evolution of ICMS collection extracted by the system of the State Secretariat of Finance of Maranhão (SEFAZ-MA), all from the 2019/2020 period. The database also includes 12 observations over time of 4 numerical variables related to the collection of ICMS in the state of Maranhão. The values were observed in the months of January to June, considering the years 2019 and 2020, and the only corresponding missing value was the closure of companies in June 2020 due to the absence of these data available in the 2020 fiscal year.

In the qualitative study with descriptive analysis of the variables, measures of position, central tendency and dispersion were used, such as mean, standard deviation, minimum, maximum and quartiles. Absolute and relative frequencies were also used to compare the values



of the variables between the years considering each month. It is worth mentioning that the period of action of the Covid-19 virus considered was between the months of March and June 2020.

Spearman's correlation was used to evaluate the association between the values of the numerical variables (DETHELANDER; WOLVES, 1999).

The mixed-effect models were applied with the objective of modeling the observed values considering the temporal period and the presence of Covid-19, and these models allow verifying the effect of time or Covid-19 on the values of the variables.

The following formulas were used to adjust the models with mixed effects in order to analyze the effect of the year or presence of Covid-19 on the values of the response variables (ICMS Revenue – SIMPLE, ICMS Revenue – NORMAL, COMPANY Opening and COMPANY Closing):

$$\begin{aligned} \text{Response variable}_i &= \alpha + b_i + \beta \times \text{ano} + \varepsilon_i \text{ onde } i = \text{jan, fev, } \dots, \text{jun} \\ \text{Response variable}_i &= \alpha + b_i + \beta \times \text{Covid19} + \varepsilon_i \text{ onde } i = \text{jan, fev, } \dots, \text{jun} \end{aligned}$$

The software to be used in the analyses will be "R" (version 3.6.3).

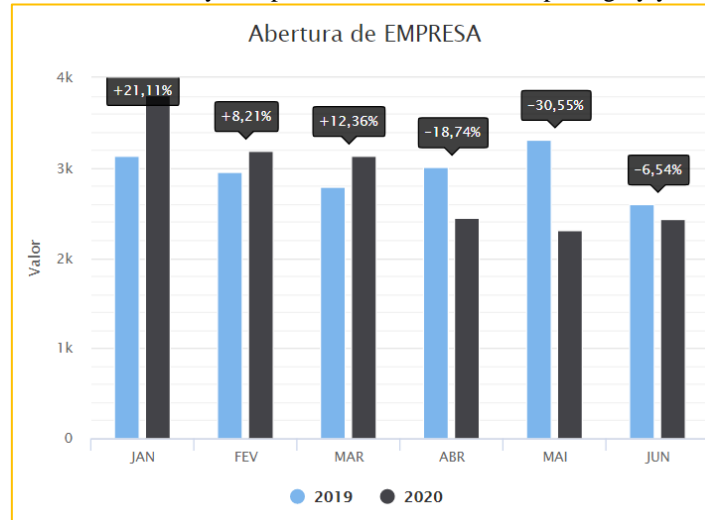
## PRESENTATION AND ANALYSIS OF INFORMATION

To achieve the objective proposed in this research, the quantitative number of openings and closings of companies in the first half of 2019 and 2020 was compared. In addition to this comparison, the collection of 2019 in relation to the same period in 2020 was considered. Within the context of analysis, it is appropriate to highlight some data and information that will contribute to the analysis and understanding of the data analyzed here: On March 19, the first confirmation of coronavirus in the state of Maranhão was made official; on March 29, the first death due to COVID-19 was confirmed in the state and from May 5 to 17 there was a lockdown in the metropolitan region of São Luís.

## EFFECT OF COVID-19 ON THE OPENING AND CLOSING OF COMPANIES IN MARANHÃO

By analyzing graph 01, it was possible to verify the evolution of the number of business openings in the state of Maranhão in the first half of 2019, when there were no effects of the pandemic with the openings of companies in 2020, when the state faced the highest peaks of the disease.

Chart 01: Monthly comparison of COMPANY Opening by year.

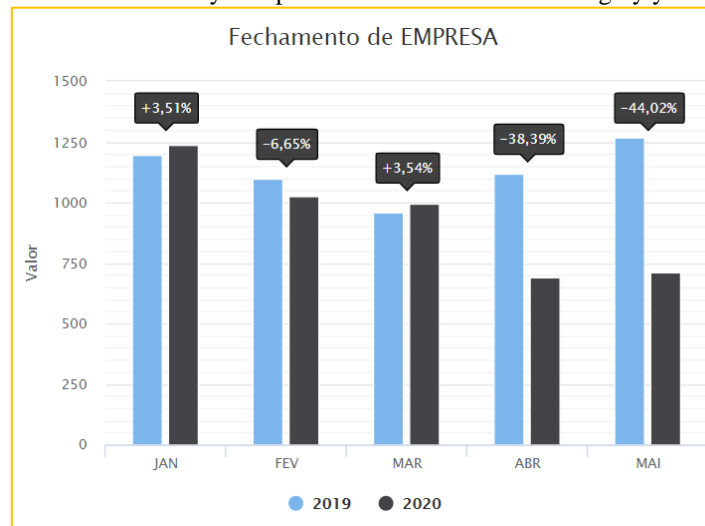


Source: prepared by the authors (2020).

Chart 01 shows that the month of January 2020 has the highest percentage rate (+21.11%) of increase for the Opening of COMPANY. Therefore, this was the month that showed a positive change in the creation of new companies in the period analyzed. On **the other hand**, May of this year was the month with the lowest percentage rate (-30.55%) for this variable. As shown in the context information, it was in May that the lockdown was decreed in the metropolitan region of São Luís.

Likewise, it is important to analyze the closure of companies in the state of Maranhão, comparing the months of January to June 2019 and 2020, to point out how these numbers were impacted by the actions of state and municipal governments in response to the pandemic caused by the new coronavirus.

Chart 02: Monthly comparison of COMPANY Closing by year.

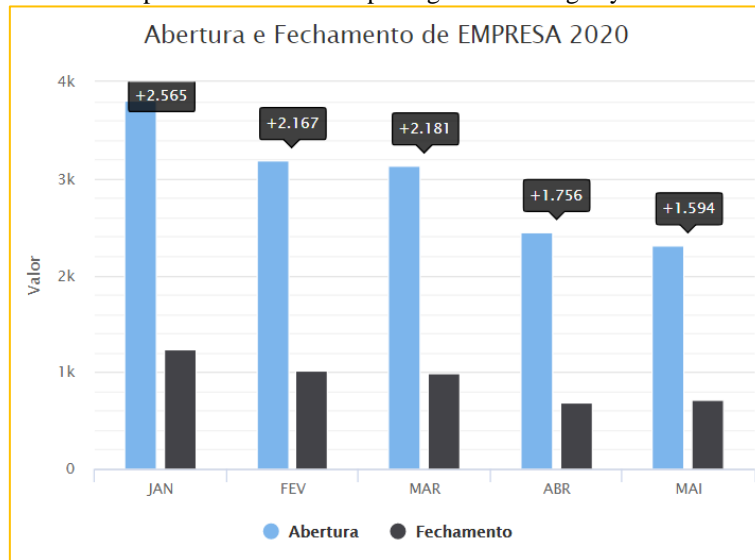


Source: prepared by the authors (2020).



The survey captured, through graph 02, the variation of the closure of companies in 2020 in relation to the year 2019, it is observed that March 2020 was the month with the highest percentage rate (+3.54%) for the Closure of COMPANY. Therefore, this was the month with the highest negative change in COMPANY Closing among the years. In addition, May was the month with the lowest percentage rate (-44.02%) for this variable. The above information becomes clearer when analyzing Graph 03 below, because although the opening value exceeded the closing value of COMPANY in the entire period observed, it is possible to verify a downward trend in the creation of new companies.

Chart 03: Comparison of business openings and closings by month in 2020.



Source: prepared by the authors (2020).

The month of January 2020, this shows the highest final balance – difference between the total number of open companies and the closures, in this month the balance was +2,565. It is important to note that in January the effect of the pandemic was not felt in Maranhão, in Brazil and in the world. On the other hand, May was the month with the lowest final balance (+1,594).

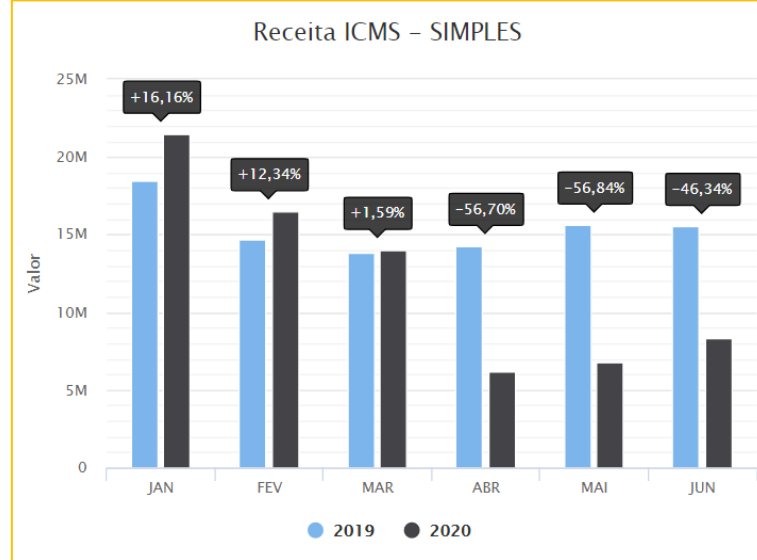
### EFFECT OF COVID-19 ON ICMS COLLECTION IN THE STATE OF MARANHÃO

Revenue collection is an important variable to measure the health of companies, on the other hand it serves to identify if these same companies are having cash problems, because most of the time taxes are due to household consumption. ICMS is the main source of revenue for a state in Brazil and is also part of indirect taxes.

Graph 04 above compares the variations in revenues with ICMS month/month, what was seen was that the month of January obtained the highest percentage rate (+16.16%) for ICMS

Revenue – SIMPLES. Therefore, this was the month that showed the highest increase between the years for this value. On the other hand, May was the month with the lowest percentage rate (-56.84) for this revenue.

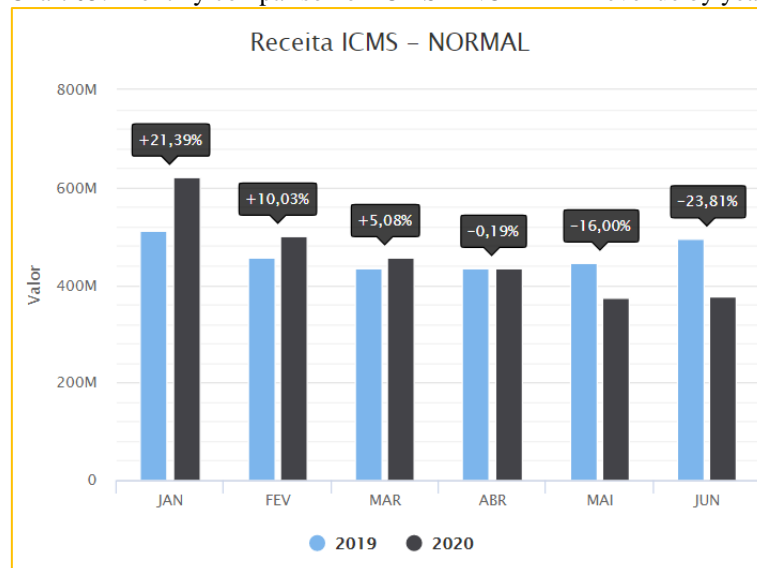
Chart 04: Monthly comparison of ICMS – SIMPLES Revenue by year.



Source: prepared by the authors (2020).

In addition to the ICMS revenue from companies opting for the Simples Nacional, it is salutory to verify how the evolution of the receipts of these same revenues from companies not opting for this differentiated regime, companies: "normal" companies, has evolved.

Chart 05: Monthly comparison of ICMS – NORMAL Revenue by year.



Source: prepared by the authors (2020).

As in the Simples revenue, January was the month with the highest percentage rate (+21.39%) for the ICMS Revenue – NORMAL. Therefore, this was the month that showed the highest increase between the years for this value. In addition, June was the month with the lowest percentage rate (-23.81%) for this revenue.

It should be noted that in the periods from January to March, both revenues showed a percentage increase between the years. Therefore, the values of these variables were higher in 2020 when compared to 2019 during the first half of the year. However, in the months of April to June, both revenues showed a percentage decrease between the years. Therefore, the values of these variables were lower in 2020 when compared to 2019 during this period.

#### 4.3 ANALYSIS OF THE INFORMATION FOUND AND THE IMPACT OF COVID-19

Table 01 below shows the comparison of the values of the numerical variables between the years 2019 and 2020. Thus, it is observed that the average of each variable was higher in 2019 than in 2020. However, there was no significant difference (p-values>0.05) between the years.

The table shows the variable "N" representing the number of months in the years analyzed (2019/2020), it is noted that in the months of January to June of 2019 (N=6) the pandemic was not yet felt in the markets of Maranhão, in the first 6 (six) months of 2020 are already analyzed with the impacts of the pandemic on the state's economy.

Table 01: Comparison of the values of the numerical variables between the years.

Variables	Year	N	Average	E.P.	1st Q.	2nd Q.	3rd Q.	p-value <sup>1</sup>
ICMS Revenue - SIMPLE	2019	6	15,41 M	679.727	14,30 M	15,11 M	15,64 M	0,378
	2020	6	12,21 M	2,50 M	6,75 M	11,19 M	16,48 M	
ICMS Revenue - NORMAL	2019	6	462,71 M	13,41 M	435,72 M	449,90 M	494,44 M	0,810
	2020	6	460,66 M	37,86 M	376,72 M	445,53 M	501,34 M	
Opening of a COMPANY	2019	6	2.968	104	2.791	2.980	3.140	0,689
	2020	6	2.885	241	2.428	2.791	3.191	
COMPANY Closure	2019	6	1.184	70	1.097	1.158	1.270	0,121
	2020	5	932	103	711	995	1.024	

Source: prepared by the authors (2020) <sup>1</sup> Mann-Whitney test.

From these data, it was possible to verify that the impacts of COVID-19 on the collection of ICMS revenues from both normal companies and companies opting for Simples Nacional, as well as the opening and closing of companies were not enough to influence the performance of the year. It is worth noting that in the first months of the year (January and Faveiro) the

collection was very expressive and these revenues were sufficient to mitigate the impacts of the pandemic when analyzing the semester as a whole.

As already pointed out at the beginning of this chapter, which was in mid-March 2020 (on March 19, the first confirmation of coronavirus in the state of Maranhão was made official), from that date the first practical consequences in the Maranhão economy derived, such as deaths, the state government's decisions to stop the economy through lockdown. In this sense, table 02 was prepared with statistical information for better analysis and to verify the impacts of the pandemic on the collection and on the opening and closing flows of companies in the state of Maranhão.

The variable "N" is the number of months without (No) or with (Yes) the impacts of the disease on the economy of Maranhão, it should be noted, however, that in the months of January to June of 2019 as well as in the months of January and February 2020 the pandemic was not yet felt in the markets of Maranhão, which was felt more intensely in the months of March, April, May and June 2020 (4).

Table 02: Comparison of the values of the numerical variables between the presence and absence of Covid-19.

Variables	Covid-19	N	Average	E.P.	1st Q.	2nd Q.	3rd Q.	p-value <sup>1</sup>
ICMS Revenue -SIMPLE	No	8	16,30 M	900.066	14,48 M	15,60 M	17,48 M	0,014
	Yes	4	8,83 M	1,79 M	6,47 M	7,55 M	11,19 M	
ICMS Revenue -NORMAL	No	8	487,42 M	22,08 M	439,94 M	475,03 M	506,77 M	0,075
	Yes	4	410,22 M	20,85 M	374,91 M	405,81 M	445,53 M	
Opening of a COMPANY	No	8	3.100	129	2.870	3.075	3.255	0,051
	Yes	4	2.579	188	2.367	2.437	2.791	
COMPANY Closure	No	8	1.171	56	1.061	1.158	1.254	0,032
	Yes	3	799	98	701	711	853	

Source: prepared by the authors (2020) <sup>1</sup> Mann-Whitney test.

The collection of ICMS revenue from companies opting for the national Simples was severely impacted during the occurrence of the pandemic, as there was a significant difference (p-value=0.014) of the ICMS Revenue – SIMPLES between the absence and presence of Covid-19. The mean for this variable was higher in the period of absence of virus action. The survey found that micro and small businesses in Maranhão were the most affected by the shutdown of the economy.

On the other hand, the collections of large companies were not so affected by the precautionary measures adopted, since there was no significant difference (p-value=0.075) of the IMCS – NORMAL Revenue between the absence and presence of Covid-19. The mean for this variable was higher in the period of absence of virus action.

It can be analyzed, in perspective, that there was a relative impact on the opening of new ventures in Maranhão as a result of the pandemic, as there was a marginally significant difference (p-value=0.051) of the COMPANY Opening between the absence and presence of Covid-19. Since the mean for this variable was higher in the period of absence of perception of the virus, this information is complemented with the following analysis.

When analyzing the statistical impacts on the closure of companies, there is a significant impact on this variable, since there was a significant difference (p-value=0.032) of the COMPANY Closure between the absence and presence of Covid-19. The average for this variable was higher in the period of absence of the virus in the Maranhão market.

In this sense, it is opportune to deepen the analysis with Table 3, below, where it is possible to synthesize the models with mixed effects for the opening and closing of companies, in order to verify the effect of the presence of Covid-19 for these variables.

Table 03: Model of opening and closing companies for the effect of Covid-19.

Variable	Opening of a COMPANY			COMPANY Closure		
	$\beta$	E.P.	p-value	B	E.P.	p-value
Intercept	3.100,13	130,20	<0,001	1.171,00	56,69	<0,001
Crown=Sim	-521,38	225,52	0,043	-372,33	108,56	0,008
R <sup>2</sup> fixed variables		32,70%			54,05%	
R <sup>2</sup> model		32,70%			54,05%	

Source: prepared by the authors (2020) <sup>1</sup> Mann-Whitney test.

The presence of a significant difference (p-value=0.043) in the amount of COMPANY Opening between the presence and absence of Covid-19 is clear. Thus, the captured amount of business openings was about 521 times lower in the presence of Covid-19 when compared to the period of action of this virus.

The fixed effects (presence/absence of Covid-19) in the model were able to explain 32.70% of the variation in the Opening of COMPANY, as well as the complete model explained 32.70% of the variation in these values. Therefore, only the fixed effects explained the variation of the COMPANY Opening in the model used.

On the other hand, there was a significant difference (p-value=0.008) in the amount of COMPANY closure between the presence and absence of Covid-19. Thus, the number of business closures was about 372 times lower in the presence of Covid-19 when compared to the period of absence of perception of the virus.

The fixed effects (presence/absence of Covid-19) in the model were able to explain 54.05% of the variation in the amount of closure of COMPANY, as well as the complete model

explained 54.05% of the variation in these values. Therefore, only the fixed effects explained the variation of the COMPANY Closure in the model used.

Finally, Table 4 summarizes the models with mixed effects for simple and normal ICMS revenues, aiming to identify the effect of the presence of the pandemic on these variables. It is noteworthy that the period of action of the Covid-19 virus was between the months of March and June 2020 (N=4).

Table 04: Revenue model for the effect of Covid-19.

Variable	ICMS Revenue - SIMPLE			ICMS Revenue - NORMAL		
	$\beta$	E.P.	p-value	B	E.P.	p-value
Intercept	16,16 M	1,08 M	<0.001	485.33 M	20.84 M	<0.001
Crown=Sim	-7.05 M	1.66 M	<0.001	-70.92 M	33.74 M	0,038
R <sup>2</sup> fixed variables		58,63%			27,10%	
Model R <sup>2</sup>		67,32%			36,30%	

Source: prepared by the authors (2020) <sup>1</sup> Mann-Whitney test.

It is noted, however, the presence of a significant difference (p-value<0.001) in the value of ICMS Revenue – SIMPLES between the presence and absence of Covid-19. Thus, the values were about 7.05 million times lower in the presence of Covid-19 when compared to the period of absence of COVID-19.

The fixed effects (presence/absence of Covid-19) in the model were able to explain 58.63% of the variation in ICMS Revenue – SIMPLES, while the complete model explained 67.32% of the variation in these values. There was, therefore, a significant difference (p-value=0.038) in the value of ICMS Revenue – NORMAL between the presence and absence of the disease. Thus, the values were 70.92 million times lower in the presence of Covid-19 when compared to the period of absence of action of the virus.

Finally, the fixed effects (presence/absence of Covid-19) in the model were able to explain 27.10% of the variation in ICMS Revenue – NORMAL, while the complete model explained 36.30% of the variation in these values.

## FINAL THOUGHTS

Perhaps it is still incipient to get to the real impact of the pandemic caused by the new coronavirus on the economies of regions, states and countries, since it is not even known how this disease originated. The literature is insufficient for a better understanding of this unprecedented phenomenon that occurs on the planet. What can be done at the moment is to



seek, through analysis, observation and scientific verification, to understand and mitigate the effects on the health of companies and revenues to the public coffers.

The purpose of this research was to verify the impacts on the economy as a result of the appearance of the new coronavirus in the state of Maranhão, the objectives were met, despite the finding that the real consequences will be known as humanity better understands the virus and its derivations. What we were able to find, for now, was that when we observe the information in a superficial and empirical way, it is possible to notice that there were drops in economic performance indicators with the drop in tax collection, and in the paralysis of companies in the state of Maranhão.

When modeling the data, what was extracted from the research was that the pandemic has not yet had significant impacts on the collection of the year 2020, when compared to the first half of 2019 and in relation to the same period in 2020. This is because in the months of January and February 2020, a period in which the consequences of COVID-19 were not felt, the state had enough revenue to minimize the impacts of the months to come.

However, when we compare the months "with" and "without" the influence of COVID-19, it can already be seen that the collections originating from companies that opt for the national tax collection had a significant reduction in the months of March to June 2020, a phenomenon that was not shown in the same proportion for companies that are not opting for the simplified tax collection regime. With regard to the opening and closing of companies, negative consequences were observed during the pandemic.

The concepts aborted here, as well as the analyses carried out, were based on the existing literature, bibliographic, which contextualizes the origin and evolution of the new coronavirus, which was born in a Chinese market and spread throughout most of the planet, and it was through the literature that the ICMS and its importance for the functioning and management of a state in Brazil were described.

Finally, the present research did not have the power to conclude the subject, because it is known that the scientific community still does not know the real effects of this disease, as well as the markets do not have enough information about its consequences on economies. Therefore, this study will serve as a contribution to understand how the initial effects on the economy from a Brazilian state were in addition to serving for future comparisons with other states or other countries.



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