

## **IMPACT OF THE PANDEMIC ON THE HORECA INDUSTRY IN 2020**

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### **Abstract**

Small and medium-sized enterprises in Romania, as well as those throughout the European Union, have been severely affected by the COVID-19 pandemic. This crisis has affected the HoReCa industry the most in the world, given that events and accommodations have been cancelled and restaurants closed. The main reason why this industry has suffered the most is the health regulations imposed by governments to limit the spread of the virus. This paper aims to make an analysis of 3 companies in this industry that are listed on the Bucharest Stock Exchange. Thus, we will use time series data for the period 2009-2020 in the EViews econometric software. The purpose of the analysis is to highlight the economic shock caused by the pandemic, as well as the solutions found by these companies to overcome this crisis. Thus, we will use the net result as a dependent variable, and we will use income and expenses as independent variables. The paper indicates that small and medium-sized enterprises in the field of HoReCa in Romania have been severely affected by the pandemic crisis, due to lack of access to finance, high unemployment, and declining incomes.

### **Keywords**

pandemic, HoReCa industry, sustainability, financial market

### **JEL Classification**

D53, Q56

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### **Introduction**

The COVID-19 virus has started to make its presence felt since December 2019. Given that the number of cases has risen rapidly globally, as has the number of deaths, the World Health Organization declared the pandemic in March 2020. Out of a desire to stop the spread of the virus, each country has adopted a state of emergency, an aspect that has influenced both the activity of companies and the personal lives of people. Thus, small and medium enterprises are the companies most affected by the covid-19 pandemic.

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There are over 25 million small and medium-sized enterprises in Europe, representing over 99% of EU businesses. They also employ two-thirds of their employees and generate more than 85% of new jobs. The COVID-19 pandemic has caused many casualties worldwide and has caused significant social and economic consequences, severely affecting SMEs around the world. The COVID-19 pandemic has had a significant impact on everyone, especially on economies as a whole and on sectors of activity that have been directly affected by quarantine measures. Thus, one of the economies that has been negatively affected by the pandemic is that of restaurants, cafes, and bars. However, the HoReCa sector is a very important sector for the Romanian economy, contributing almost 5% to GDP (Badea, 2018).

In the period 2020-2021, the HoReCa sector was one of the most affected by the COVID-19 pandemic, due to the restrictions imposed by the authorities at the international level, needing financial help and assistance from the states. The impact of the pandemic on global tourism and the hospitality industry has been significant. Thus, the principles of sustainability refer to environmental, economic, and socio-cultural aspects of tourism development, having the obligation to establish an appropriate balance between these three dimensions in order to guarantee long-term sustainability. Sustainable tourism must ensure long-term sustainable economic activities that offer well-distributed socio-economic benefits.

The pandemic caused the cancellation of flights, the closure of restaurants and cafes, hotels, the closure of museums, so everything that belongs to the hospitality industry and the HoReCa sector. Since the beginning of the pandemic crisis, 22.5 billion euros have been lost in the turnover of companies, more than one million people have gone into technical unemployment and 35,000 companies in the HoReCa industry have gone bankrupt. Thus, since March 2020, the pandemic crisis has been felt in the business environment, which has led to a decrease of up to 74% of newly established companies compared to 2019. Most small and medium-sized enterprises, which have up to 20 employees, and those who have been severely affected by the COVID-19 pandemic are those in areas such as HoReCa, those who provide certain services to the population (tourism, events, neighborhood shops, game rooms, beauty salons, etc.) who either closed their activity because of decisions taken at administrative level, or due to a substantial decrease in profits. In recent years, the situation of SMEs in EU-27 countries has deteriorated considerably.

Given the current situation, the goal is to highlight the impact of the pandemic on the main sector of the economy and on the HoReCa sector, analyzing the effects of the solutions adopted both nationally and internationally. The paper also highlights the need to digitize SMEs, and especially the HoReCa industry, given their importance in the economy through their contribution to creating added value and generating new jobs. Finally, the purpose of the paper is to highlight the importance of accessing the sources of financing by these companies and the elimination of the barriers they face.

The novelty is the identification of the main measures that the state can adopt in order to facilitate access to finance and the implementation of digitization, as a result of the results obtained. The paper is structured in the analysis of the specialized literature in

the field, the presentation of the methodology used, of the main results obtained and at the end being presented the main conclusions and the limits of the paper.

In this paper we want to demonstrate that the number of employees in this industry has been strongly impacted by the pandemic. Employees in this field have been severely affected by the reduction in accommodation and the closure of restaurants. Although the government supported this sector, the measures were not enough. Thus, the number of employees in the hotel and restaurant industry decreased during 2020 from 186,000 to 150,000, a decrease of 19% (<https://www.forbes.ro/cifra-de-afaceri-din-industria-horeca-low-2020-with-35-face-of-2019-218133>). And the companies in this field had to find other solutions, which we will present later, to keep their staff.

### **1. Review of the scientific literature**

Until the outbreak of the COVID-19 pandemic, the literature did not include public health as a determinant, which inevitably affects the life of society and tourism. In the work carried out by Asalos and Lazăr (2020), the economic consequences generated by the pandemic within the HoReCa sector and especially around the Romanian coast were evaluated. Depending on the geographical area, these negative consequences for the business environment were felt at different intensities for the business environment, and in the coastal area the statistics show a smaller decrease.

The crisis caused by the COVID-19 pandemic has blocked the entire tourism sector, which will see significant changes in both tourism demand and supply. On June 1, 2020, over 85.3% of restaurants in Romania were reopened, but over 54% of them recorded losses of at least 80% of turnover in 2019.

Authors such as Dobrescu and Mazilu (2020) analyzed the repercussions of the pandemic crisis on the HoReCa sector in Romania. They used both quantitative and qualitative data in the analysis, the research method being inductive. Morei (2021) highlighted the negative consequences of the pandemic on small and medium-sized enterprises, both in EU countries and in the Republic of Moldova. The authors also reflected on some measures taken by the governments of the respective countries to reduce the negative effects of the pandemic on the business environment. During 2020, 90% of EU SMEs reported that they are economically affected, and the most affected branches are services (60% -70%), construction and industry (40% -75%). Also, about 30% of all SMEs recorded a decrease of about 80% in turnover. Small and medium-sized enterprises in Belgium fell by 72%, Germany by 50%, France and Spain by 80% and 75% respectively. Most sectors of the economy made a negative contribution to the evolution of Gross Domestic Product, but the most significant influences were recorded in the accounts of internal trade, transport, and storage, HoReCa, agriculture and industry.

Malev (2020) conducted a study on the digital industry, finding numerous economic challenges caused by the pandemic. Thus, 60% of those surveyed stated that the pandemic has a negative impact on companies. However, the results showed that the impact of the pandemic on industries was not uniform, with some businesses being able

to adapt to the new changes. Breier (2021) conducted research on companies in the HoReCa industry (hotels, bars, restaurants) and found that by innovating the business model, companies were able to successfully overcome the pandemic crisis. In the process of innovating the business environment, the emphasis is on creating value. Also, another study by Han and Qian (2020) on the stock market of China's listed companies showed that the pandemic has had a positive impact on investment in research and development. The results of the study showed that innovation skills increased significantly during the pandemic, due to the fact that companies want to increase their contribution to innovation in order to find new opportunities for survival and profitability.

Roper and Turner (2020), following the study, concluded that firms that have maintained their capacity for innovation have a better chance of survival and higher profitability. However, sectors such as production, travel and transport have seen significant declines in employment, difficulties in retaining staff and significant declines in profits, which has even led to the bankruptcy of a significant number of companies in the HoReCa sector.

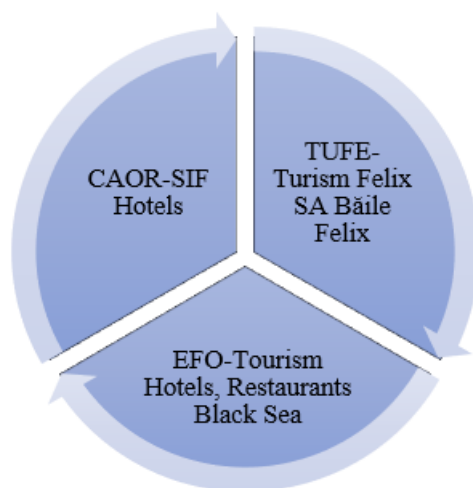
The European Union has adopted several measures since the beginning of the pandemic to support companies in protecting jobs and the SME sector (European Commission, 2020). Thus, in Romania, the HoReCa industry was supported by state aid, which was used by over 10,000 companies. Sava (2020) has made a list of companies in the tourism area in Romania that have resorted to these measures and on the first place are Christian Tour, Fix Events & Travel, Parallel 45 Turism, etc. The hospitality industry has experienced significant losses globally because of travel restrictions, which has led to the temporary closure of several companies in this sector (Bartik, 2020, Gursoy and Chi, 2020).

Research (Siminiuc and Țucanu, 2020) has shown that a third of restaurant customers and over 40% of hotel customers are willing to pay more to benefit from increased protection measures. Studies also show that a large proportion of restaurant customers (64.71%) and over 70.42% of hotel customers believe that the use of technology in service delivery is imperative during the pandemic to reduce human contact. The most indicated technologies consist in the use of service robots, the use of bank cards in the payment of orders, the use of digital menus that can be accessed on personal mobile devices, the use of contactless elevators, etc.

The literature review shows a small number of studies investigating the impact of the pandemic on the HoReCa sector, with most studies focusing on the impact on the supply chain and the use of technological advances. The supply chain has been identified as a priority area for the hospitality industry in terms of resilience and sustainability.

## **2. Research methodology**

In figure no. 1 we will make a presentation of the notations for the analysed companies.



**Figure no. 1: Company presentation**

We decided to analyse 3 large companies in the field of HoReCa that are representative for this analysed sector. The above-mentioned companies have a long history in this field and large turnover. However, the level of turnover of the operators in the analysed field registered a decrease of 35% in 2020 compared to 2019, according to a National Foodservice Research study, conducted by Hospitality Culture Institute (<https://financialintelligence.ro/studiu-hospitality-culture-institutes-market-restaurant-doubled-the-average-purchase-voucher-is-423-lei/>).

The conclusions drawn from the analysis of these 3 companies can be extrapolated to the entire HoReCa sector.

In Table no. 1 we will make a presentation of the notations made to determine how the net result of the 3 companies analysed was influenced by the restrictions imposed by the authorities to limit the spread of the new coronavirus. The analysed period is 2009-2020.

**Table no. 1. Notations**

Explication	Type of variable
Net result	Dependent
Revenues	Independent
Expenses	Independent
No. of employees	Independent

Source: own processing

Data for these variables were obtained from the Stock Exchange Bucharest website. All these operations were performed using the EViews 12 software.

We considered the net result as a dependent variable because during the pandemic companies in this field registered losses or even went bankrupt due to restrictions. Also, the net result of these companies was strongly affected by the reduction in the number of employees, according to the calculations they will present. Income fell as people were banned from traveling, but fear of illness was also a decisive factor in preventing people from staying or going to restaurants. Although there was no longer the same flow of customers, companies in the field continued to have approximately the same operating expenses.

As we said before, in this sector, the most affected were the employees. Many employees in this sector were sent into technical unemployment, as a solution found by the Government. Thus, we want to observe the link between the variables mentioned above and the number of employees in this sector, which decreased in 2020.

Below (figure no. 2) we present the correlation matrix for the TUFÉ company, to determine if there is a link between the chosen variables.

	RESULT	REVENUES	EXPENSES	NO_OF_...
RESULT	1	0.66322900...	0.59975493...	-0.0304920...
REVE...	0.66322900...	1	0.99474073...	-0.4556124...
EXPE...	0.59975493...	0.99474073...	1	-0.4709604...
NO_...	-0.0304920...	-0.4556124...	-0.4709604...	1

**Figure no. 2: Correlation matrix for TUFÉ**

Analysing these values, we can see if there are statistical links between statistical variables. We notice that there are several positive correlations in addition to the negative ones. So:

- Result and revenues:  $r = 0.6632 > 0$ , so there is an average direct correlation.
- Result and expenses:  $r = 0.5998 > 0$ , so there is a direct correlation.
- Result and no. of. employees:  $r = -0.0305 < 0$ , so there is an indirect correlation.

We presented the correlation matrix for EFO (figure no. 3) to determine if there is a link between the chosen variables.

	RESULT	REVENUES	EXPENSES	NO_OF_...
RESULT	1	0.88408172...	0.77049038...	-0.1437658...
REVE...	0.88408172...	1	0.97728411...	-0.1389235...
EXPE...	0.77049038...	0.97728411...	1	-0.0972775...
NO_...	-0.1437658...	-0.1389235...	-0.0972775...	1

**Figure no. 3: Correlation matrix for EFO**

Analysing these values, we can see if there are statistical links between statistical variables. We notice that there are several positive correlations in addition to the negative ones. So:

- Result and revenues:  $r = 0.8841 > 0$ , so there is a strong direct correlation.
- Result and expenses:  $r = 0.7705 > 0$ , so there is a strong direct correlation.

• Result and no. of. employees:  $r = -0.1438 < 0$ , so there is an indirect correlation.  
We presented the correlation matrix for CAOR (figure no. 4) to determine if there is a link between the chosen variables.

	RESULT	REVENUES	EXPENSES	NO_OF_...
RESULT	1	-0.2519633...	0.38400706...	-0.1587431...
REVE...	-0.2519633...	1	0.75086571...	0.84942794...
EXPE...	0.38400706...	0.75086571...	1	0.71120214...
NO_...	-0.1587431...	0.84942794...	0.71120214...	1

**Figure no. 4: Correlation matrix for CAOR**

Analysing these values, we can see if there are statistical links between statistical variables. So:

- Result and revenues:  $r = -0.2520 <$ , so there is an indirect correlation.
- Result and expenses:  $r = 0.3840 > 0$ , so there is a direct correlation.
- Result and no. of. employees:  $r = -0.1587 < 0$ , so there is an indirect correlation.

The equation used to determine the influence of the 3 independent variables on the dependent variable, respectively the net result of the companies is:

$$Y = \beta_0 + \beta_1 * X_1 + \beta_2 * X_2 + \beta_3 * X_3 + \varepsilon \quad (1)$$

where:

B0-constant

B1-parameter of the independent variable X1, revenues.

B2-parameter of the 2nd independent variable X2, expenses.

B3-the parameter of the 3rd independent variable X3, no. of employees.

$\varepsilon$ -error term of the equation.

We will verify Granger's causality by using Granger causation. This principle allows us to explain the current values of the net result through independent variables, and vice versa.

### 3. Results and discussion

Below (figure no. 5) we present the results obtained in the regression for TUF:

Dependent Variable: RESULT  
 Method: Least Squares  
 Date: 02/24/22 Time: 14:08  
 Sample: 2009 2020  
 Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXPENSES	-0.903467	0.251977	-3.585508	0.0071
REVENUES	0.876718	0.212932	4.117361	0.0034
NO OF EMPLOYEES	13481.76	10347.97	1.302841	0.2289
C	-7802309.	8225390.	-0.948564	0.3706
R-squared	0.820874	Mean dependent var		5228112.
Adjusted R-squared	0.753701	S.D. dependent var		3876526.
S.E. of regression	1923861.	Akaike info criterion		32.03877
Sum squared resid	2.96E+13	Schwarz criterion		32.20040
Log likelihood	-188.2326	Hannan-Quinn criter.		31.97893
F-statistic	12.22040	Durbin-Watson stat		2.520117
Prob(F-statistic)	0.002345			

**Figure no. 5: The equation for TUFÉ company**

It is observed that only the first 2 variables are statistically significant. The model is statistically significant. Since prob (F-statistic) <0.05.

Below (figure no. 6) we present the results obtained in the regression for EFO:

Dependent Variable: RESULT  
 Method: Least Squares  
 Date: 02/24/22 Time: 14:43  
 Sample: 2009 2020  
 Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXPENSES	-0.785989	0.088404	-8.890847	0.0000
REVENUES	0.804870	0.065202	12.34420	0.0000
NO OF EMPLOYEES	2911.380	2396.216	1.214991	0.2590
C	-1964469.	1198318.	-1.639356	0.1398
R-squared	0.979969	Mean dependent var		3941897.
Adjusted R-squared	0.972458	S.D. dependent var		2635913.
S.E. of regression	437452.2	Akaike info criterion		29.07652
Sum squared resid	1.53E+12	Schwarz criterion		29.23816
Log likelihood	-170.4591	Hannan-Quinn criter.		29.01668
F-statistic	130.4622	Durbin-Watson stat		2.328558
Prob(F-statistic)	0.000000			

**Figure no. 6: The equation for EFO company**



It is observed that only the first 2 variables are statistically significant. The model is statistically significant. Since prob (F-statistic) <0.05.

Below (figure no. 7) we present the results obtained in the regression for CAOR:

Dependent Variable: RESULT  
 Method: Least Squares  
 Date: 02/24/22 Time: 16:31  
 Sample: 2009 2020  
 Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXPENSES	0.685610	0.117841	5.818072	0.0004
REVENUES	-0.582645	0.158661	-3.672260	0.0063
NO OF EMPLOYEES	-14545.47	27107.21	-0.536590	0.6061
C	2481356.	1984623.	1.250291	0.2465
R-squared	0.823075	Mean dependent var		3912635.
Adjusted R-squared	0.756728	S.D. dependent var		4021847.
S.E. of regression	1983682.	Akaike info criterion		32.10001
Sum squared resid	3.15E+13	Schwarz criterion		32.26164
Log likelihood	-188.6001	Hannan-Quinn criter.		32.04017
F-statistic	12.40560	Durbin-Watson stat		2.235435
Prob(F-statistic)	0.002234			

**Figure 7: The equation for CAOR company**

It is observed that only the first 2 variables are statistically significant. The model is statistically significant. Since prob (F-statistic) <0.05.

Concluding the 3 equations, we can say that the net result of the 3 companies depends on income and expenses.

#### *Granger causality*

H<sub>0</sub>: The independent variable does not Granger cause the dependent variable

H<sub>1</sub>: The independent variable does Granger cause the dependent variable

We will reject the null hypothesis at a 5% confidence level. Below (figure no. 8) we present the results of the Granger test for TUFÉ.

VAR Granger Causality/Block Exogeneity Wald Tests  
 Date: 02/24/22 Time: 17:16  
 Sample: 2009 2020  
 Included observations: 36

Dependent variable: RESULT

Excluded	Chi-sq	df	Prob.
REVENUES	0.618445	2	0.7340
EXPENSES	0.641468	2	0.7256
NO__OF_EMPLOYEES	0.368665	2	0.8317
All	2.997176	6	0.8092

Dependent variable: REVENUES

Excluded	Chi-sq	df	Prob.
RESULT	0.937407	2	0.6258
EXPENSES	1.359019	2	0.5069
NO__OF_EMPLOYEES	0.248941	2	0.8830
All	8.553948	6	0.2003

Dependent variable: EXPENSES

Excluded	Chi-sq	df	Prob.
RESULT	1.076572	2	0.5837
REVENUES	1.709370	2	0.4254
NO__OF_EMPLOYEES	0.262716	2	0.8769
All	12.48294	6	0.0520

Dependent variable: NO\_\_OF\_EMPLOYEES

Excluded	Chi-sq	df	Prob.
RESULT	19.78265	2	0.0001
REVENUES	63.34797	2	0.0000
EXPENSES	68.11154	2	0.0000
All	405.9281	6	0.0000

**Figure no. 8: Granger causality for TUFЕ company**

The results of the Granger test show that the number of employees is determined by the net result, income, and expenses with a probability of 5%. Below (figure no. 9) we present the results of the Granger test for EFO.

VAR Granger Causality/Block Exogeneity Wald Tests

Date: 02/24/22 Time: 17:25

Sample: 2009 2020

Included observations: 36

Dependent variable: RESULT

Excluded	Chi-sq	df	Prob.
REVENUES	0.661425	2	0.7184
EXPENSES	0.832015	2	0.6597
NO_OF_EMPLOYEES	41.41452	2	0.0000
All	91.20578	6	0.0000

Dependent variable: REVENUES

Excluded	Chi-sq	df	Prob.
RESULT	82.84941	2	0.0000
EXPENSES	78.30619	2	0.0000
NO_OF_EMPLOYEES	330.3329	2	0.0000
All	853.4541	6	0.0000

Dependent variable: EXPENSES

Excluded	Chi-sq	df	Prob.
RESULT	7.408122	2	0.0246
REVENUES	8.139949	2	0.0171
NO_OF_EMPLOYEES	14.78759	2	0.0006
All	46.59523	6	0.0000

Dependent variable: NO\_OF\_EMPLOYEES

Excluded	Chi-sq	df	Prob.
RESULT	1.559792	2	0.4585
REVENUES	1.299081	2	0.5223
EXPENSES	1.161896	2	0.5594
All	17.88185	6	0.0065

**Figure no. 9: Granger causality for EFO company**

The results of the Granger test show that revenue is determined by the net result, expenses, and the number of employees with a probability of 5%. Expenses are also

determined by the net result, income, and the number of employees with a probability of 5%. Below (figure no. 10) we present the results of the Granger test for CAOR.

VAR Granger Causality/Block Exogeneity Wald Tests  
Date: 02/24/22 Time: 17:28  
Sample: 2009 2020  
Included observations: 36

Dependent variable: RESULT

Excluded	Chi-sq	df	Prob.
EXPENSES	2.017476	2	0.3647
REVENUES	0.484292	2	0.7849
NO_OF_EMPLOYEES	1.381414	2	0.5012
All	2.479567	6	0.8707

Dependent variable: EXPENSES

Excluded	Chi-sq	df	Prob.
RESULT	2.286698	2	0.3187
REVENUES	3.339381	2	0.1883
NO_OF_EMPLOYEES	2.869359	2	0.2382
All	4.707165	6	0.5819

Dependent variable: REVENUES

Excluded	Chi-sq	df	Prob.
RESULT	2.186325	2	0.3352
EXPENSES	1.876006	2	0.3914
NO_OF_EMPLOYEES	2.104605	2	0.3491
All	5.835208	6	0.4419

Dependent variable: NO\_OF\_EMPLOYEES

Excluded	Chi-sq	df	Prob.
RESULT	349626.0	2	0.0000
EXPENSES	331553.5	2	0.0000
REVENUES	319180.6	2	0.0000
All	526815.3	6	0.0000

Figure no. 10: Granger causality for CAOR company

The results of the Granger test show that the number of employees is determined by the net result, income, and expenses with a probability of 5%.

Concluding the 3 results obtained by Granger causality, we can state that 2 of the 3 analysed companies registered a strong change in the number of employees depending on the other 3 variables. Thus, we can say that a change in the structure of income / expenses will lead to a change in the structure of staff. And this was reflected in the 2020 Reports of these campaigns.

TUFE has decided to maintain only a minimum number of staff to provide asset protection and maintenance services, as well as operational functions. The company is already facing a shortage of staff specific to the tourism sector, so it has pursued a policy of retaining core staff, most of the staff benefiting from 75% technical unemployment or other facilities related to staff. It also did not grant rest leave to its employees. For this reason, at the end of 2020, the provision for rest leave not taken during 2020 in the amount of 738,196 lei was constituted.

Thus, in the first half of 2020, EFO decided to postpone the hiring of seasonal staff. As a rule, it employs seasonal staff starting in April. But in the context of the declared emergency situation in Romania between March and May, the company has been hiring since May 18, 2020. The company reported an increase in staff debts of 43.94% in the first half of 2020 compared to the end of 2019. This problem was triggered by the outbreak of the pandemic, which closed the company's activity in a state of emergency.

CAOR reported a negative result at the end of September 2020, of 13,358,642 lei, compared to the profit of 1,510,606 lei obtained in the previous year, due to the reduction of the activity and, implicitly, of the revenue volume. Although benefiting from state support through technical unemployment, the company was able to maintain its level of employees. Thus, it has reduced its number of employees from 172 in 2019 to 92 in 2020.

## **Conclusions**

In conclusion, following the study we found that the HoReCa field is one of the most affected sectors in the economy and therefore it is important to present the importance of accelerating digitization in restaurants. The new working conditions imposed by the pandemic have caused an exceedingly tricky situation for the HoReCa sector worldwide, many of which have been forced to cease operations, which has led to a reduction in the number of active companies. The impact of the pandemic crisis was strongly felt in Romania because the economy registered a major slowdown, being felt its negative effects on both the population and the companies, referring especially to the volume of sales and jobs. Various measures taken by the authorities to control the COVID-19 epidemic (social distancing measures, travel restrictions, quarantine, and isolation) are intended to ensure that the duration of the shock will be limited, but which has had consequences for demand. and supply, affecting businesses and employees in the health, tourism, culture, retail, and transport sectors.

In conclusion, following the study we found that there are statistical links between the 4 variables considered. In the case of the TUFÉ campaign between Result and revenues,  $r = 0.6632 > 0$ , there is an average direct correlation. And between Result and expenses,  $r = 0.5998 > 0$ , there is a direct correlation.

In the case of EFO we have 2 strong links. There is a strong direct correlation between Result and revenues,  $r = 0.8841 > 0$ . Also, there is a strong direct correlation between Result and expenses,  $r = 0.7705 > 0$ .

In the case of the CAOR campaign between Result and revenues,  $r = -0.2520 <$ , there is an indirect correlation. And between Result and expenses,  $r = 0.3840 > 0$ , there is a direct correlation.

And between the dependent variable and the number of employees there was an indirect link in the case of all 3 companies.

Concluding the 3 equations, we can say that the net result of the 3 companies depends on income and expenses.

In the case of the TUFÉ campaign, the results of the Granger test show that the number of employees is determined by the net result, income, and expenses with a probability of 5%.

In the case of the EFO campaign, the results of the Granger test show that the revenue is determined by the net result, expenses, and the number of employees with a probability of 5%. Expenses are also determined by the net result, income, and the number of employees with a probability of 5%.

In the case of the CAOR campaign, the results of the Granger test show that the number of employees is determined by the net result, income, and expenses with a probability of 5%.

We can say that through this research we conducted a study that captures the way in which HoReCa employees were affected by the Covid-19 pandemic. Although I have presented a limited analysis, its conclusions can be extended to the whole sector. We also presented the measures implemented by companies to maintain the optimal number of employees for the development of the specific activity in good conditions. In general, only the measures implemented by the state to support this sector were discussed. And in this analysis, we analysed the situation within the campaigns affected by the pandemic.

The short period of analysis is caused by the lack of data on the pandemic period. As a future direction of research, we aim to empirically analyze a larger sample of companies in the HoReCa industry, in order to support the conclusions of this study, and to extend the analysis period. We also aim to compare the pre-pandemic situation with the current one.

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