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THE PANDEMIC OF EVENTS: IMPACT OF PANDEMIC RESTRICTIONS ON LAYOUTS IN THE EVENTS SECTOR IN THE STATE OF RIO GRANDE DO SUL

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Abstract: The effects of the Coronavirus pandemic have caused irreparable damage to modern society. With a dose of uncertainty associated with a portion of biased policies and controversial information, in Brazil, several economic sectors were paralyzed for several moments, geographically disordered, resulting in loss of competitiveness. Some segments were more affected than others, as their main activity is bringing people together, as is the case in the Events sector. To understand the impact of the sector, Grupo Foto Sul, an important photographic industry that develops and manufactures products sold by studios, graduation companies and image professionals throughout Brazil, carried out a quantitative survey among the brand's partners in the state of Rio Grande do Sul. This took place in two stages, the first from 06/24/2020 to 07/06/2020 and the second from 12/22/2020 to 01/15/2021 resulting in 703 responses from 600 unique respondents in 91 municipalities in the state. Thus, being the largest research related to the segment in the state during the pandemic period. The present study analyzed data from the second stage, with 289 observations, and aims to understand the impact of the pandemic in relation to jobs lost in the first months of the COVID-19 pandemic, as opposed to those that would still be lost at the time of the research. In the analysis, it was also observed whether or not the companies expected to dismiss more people in the following months, as well as the estimated amount; your industry and average monthly revenue before the restrictions.

Keywords: Events sector, Rio Grande do Sul, Events sector in Rio Grande do Sul, Pandemic, Covid-19, Grupo Foto Sul, jobs, photography, layoffs, admissions, photographer, photography and videography, creative economy.

INTRODUCTION

The coronavirus pandemic that occurred at the beginning of 2020 and arrived in Brazil in mid-February of that same year, caused the closure of virtually all production and sales sectors, and abruptly impacted the country's growth and development. The WHO (World Health Organization) recommended the closure of commercial establishments that promoted the gathering of people (restaurants, parties, events) and also the use of masks to protect against the spread of the virus.

According to such restrictions, many companies and entities that practiced their activities in these branches that were closed, observed a drop in their revenues, difficulties in sustaining their production costs, paying employees, among other factors. As a result, many companies closed their activities or reduced their production scale.

From the context mentioned above, the events sector was the victim of the toughest restrictions, remaining approximately two years with its activities stopped, while other sectors were already gradually resuming their exercises. In order to identify its national relevance, ABRAPE[1] (Brazilian Association of Event Promoters) shows that the sector accounted for 4.32% of the national GDP in 2013, moving R$209.2 billion in that same year. Every year, there is an increase in movement, with the participation of more than 60,000 companies in the field and generating more than 2 million direct and indirect jobs, according to the entity.

Throughout the pandemic period, the private company from the north of the state of Rio Grande do Sul, Grupo Foto Sul, carried out a survey[2] with more than 600 respondents, carried out in two stages, in order to gather data and request better conditions from political entities of work and the return to face-to-face activities, since the entire sector works with a group of people, regardless of

scale.

These respondents work in different sectors within events, such as photography, videography, waiters, stationery, organization, production, clothing, locations, lighting, concert hall, animation, drinks, buffets, among other functions. Located in 91 municipalities throughout the state, in different regions, the survey covers approximately 20% of all municipalities in the state.

The entire research encompasses many issues corresponding to the impacts suffered during the pandemic, but this article will address the issue of layoffs resulting from these restrictions, motivated by the drop in billing, postponed contracts, impossibility of operation, closure of companies, among other situations.

The purpose of this article is to show the impacts of the COVID-19 pandemic on the number of layoffs per company in the events sector in the period from 12.22.2020 to 01.15.2022, based on a survey carried out by the company Grupo Foto Sul with a total number of 288 answers for each question, in the second stage. This perspective under the research seeks to relate the reasons why these employees were dismissed, if the company already had the forecast to dismiss these employees, if the sector in which the company carries out its activities influences the increase of dismissals, if that forecast of dismissal from the first step actually took place, and whether the company's monthly billing before the restrictions has an influence on the shutdowns.

Aiming to justify the effective dismissals, the authors used the database resulting from the research and treated the observations according to the eminent question, in order to select and create an econometric model of multiple regression analysis, through the application Eviews[3]. The data and results will be made effective, and the analysis will be discussed according to the impacts visualized.

A real comparison will also be made in order to prove the result, using a survey carried out by Sebrae4 on the Impacts of Covid by Sector, carried out online from 04.30.2020 to 05.05.2020 in RS, in which the event sector in question can be found in the Creative Economy section.

Numerical results will be correlated from the equation made by the present econometric model and the results and averages of the Sebrae survey, affirming the significance of the effective models.

DEVELOPMENT

This research aims to run an econometric model of multiple regression analysis, through the Eviews platform. The variables chosen to run the model are: list of employees fired up to the collection date, resignation forecast in up to 3 months, the sector in which you work, and the average monthly revenue that the company has.

The model found is in Figure 1.

Through the database obtained by the research of Grupo Foto Sul, the authors created a second database in Excel, using these variables and the respective answers. To allow the development of the model, some variables were conditioned to change in the DUMMY format, which is the binary classification (0 or 1) of responses, which may admit YES or NO answers, or classification ranges. In this case, the altered variables are represented with the letter d, they are: pre-pandemic monthly billing (billing ranges), dismissal forecast (yes or no) and the sector to which it belongs within the events market. The variables with dummy are always analyzed a priori by the number 1 that configures the item that wants to be explained.

EMPLOYEES DISMISSED UNTIL DATA COLLECTION DATE

The first variable surveyed is the ratio

of employees dismissed up to the date of data collection. In the observed model, this is the unknown to be analyzed, that is, the entire model seeks to justify the number of employees dismissed in the pandemic, through the forecast of dismissals within 3 months, the number of employees dismissed during this period, the sector of activity and the company's average monthly revenue. In the regression model, it is necessary to list a dependent variable, that is, a variable that will be justified by others. In this case, the number of employees fired is the dependent variable of the regression analysis, obtained with absolute numbers.

Through the question "How many employees did you fire during the pandemic?" The answers were listed and included in the database. As examples, company X fired 10 employees, while company Y did not fire any. Others fired 4, or 3 employees. Each company according to its scale and especially considering how much it is directly affected by the restriction of the sector.

FORECAST OF DISMISSALS IN THE 3 MONTHS AFTER DATA COLLECTION

To build the model, other variables were listed to try to justify the number of dismissed employees. One of them, "Do you foresee, in the next 03 months, dismissing employees due to the pandemic?". The use of this question is of paramount importance, because in the context of the study, the objective was to sensitize entities and those responsible for public policies, denoting the importance of the sector in terms of employability. In addition, it also indicates the situation of the company in its capacity and availability for the permanence of employees.

With the pandemic, there was a drop in the level of employment in the country on a large scale. At the time of the survey, the situation was one of uncertainty, with social distancing rules and a large drop in demand for products. In addition, a long time had passed, and the promise of entities about the return of activities was still not concrete. That is, the unstable scenario created doubts and difficulties to keep the company running.

For this, the answer of each company was "yes" or "no". Thus, in order to carry out the econometric model, the forecast variable was adapted to a dummy. As the analysis will always be done for 1, which is the explained variable, 0 (zero) corresponds to not foreseeing dismissing employees and 1 (one) to foresee dismissing employees.

Consequently, those who said they anticipate laying off employees were asked the question "If your answer is yes, how many?". In this variable, we seek to quantitatively identify the impact of these dismissals. Therefore, this variable assumes absolute numbers, and can be based on studies of unemployment, GDP, purchasing power, among others.

SECTOR OF ACTING

The sector in which it operates was an important factor in the construction of the research, considering that the initiative came from a private company with a strong presence in the photography market, thus being an indirect supplier of this economic group. Through the collection of data from the sector of activity, we can analyze whether the research was capillary among the ramifications of the researched group, or if it was concentrated only in the subgroup of photography and videography.

We can also observe whether the data collection method was effective, given that the initial idea was that respondents in the photography and videography category would send the survey to the other participants in the sector with whom they work together in the formation of an event.

We observed that around 31% of respondents belong to different ranges of the dominant subgroup of the research, so in this study, a DUMMY variable was created in order to identify which sector the dismissed people belonged to, seeking a relationship between these factors. Likewise, 69% belong to the photography and videography group, given that they were the first to receive the data response form, as well as its distribution, also considering the core activity of the research company.

Despite the fact that the photography and videography sector is highly impacted by the restrictive measures of the pandemic, some participants may, even with a significant and relevant drop in their revenue, continue with their activities. This fact is present, as some members of this group may have parallel activities in the photography market, such as a studio for children's photos. In any case, by inference in the market, it is denoted that the largest source of income, in most cases, still comes from the events sector.

In the survey carried out, several sectors were included in the group within the 31% belonging to other areas, namely: Event House, Night Club, DJ, Bands and Artistic Attractions, Stylist and Costume Design, Lighting and Sound, Assembler (of structure), Organization and Event Production, Stationery (invitations, pamphlets, menus), Food Service, Decoration Service, Rental Service (clothing, toys…), General Services (Waiter, Kitchen Service…).

Despite the high concentration in the Photography and Videography sector, it is observed that the database was capillary, denoting that the distribution strategy chosen for the respondents was correct.

AVERAGE PRE-PANDEMIC BILLING

The average pre-pandemic billing was one of the variables considered in order to understand the size of the responding companies, and whether this influences the number of employees dismissed. Through the question "What was your average monthly billing before the pandemic?". The groups were divided into 7 income ranges, as follows: Up to R$6,000 per month, From R$7,000 to R$15,000 per month, From R$16,000 to R$30,000 per month, From R$31,000 to R$60,000 per month month, From R$61 thousand to R$100 thousand per month, From R$101 thousand to R$200 thousand per month and Above R$201 thousand per month.

The number of respondents who earned up to R$6,000 per month was approximately 40% of the sample, being relevant compared to the other ranges, thus, a DUMMY variable was formalized in the econometric model, separating the initial range from the others. As it is a binary variable, when running the model, 0= other billing ranges 1= up to R$6,000 per month, considering that the variable to be explained is always the information linked to 1, this way, being possible later, generate analyzes through linear regression.

COMPARISON BETWEEN DATA (FOTO SUL GROUP X SEBRAE)

To relate the production of data in this research, we sought external references from bibliographies of the sector that proved to be inefficient. The one closest to this object of study was a survey by Sebrae called "The impact of the coronavirus pandemic on small businesses – 3rd edition" used for comparative purposes in reference to the main one, so that we could build a relationship between the data obtained by the entity and the private company. Such an inference is given because, in the entity's research, the events sector was considered within a larger category named "CREATIVE ECONOMY". According to the website Órama5 - The creative economy

is divided into four major areas, namely: consumption, media, technology and culture. This way, it is also considered, by the main category that the sampling of Rio Grande do Sul is mixed, that is, they have other participants.

In addition, the collection took place at the national level and its sample has mostly respondents from the state of São Paulo, as shown in the following paragraph.

When analyzing Figure 2, we observe that the sample by federative unit denotes a number of respondents who are not very qualified for a diagnosis of the events sector (653) considering the two stages of the survey carried out by the private company (703). From the number referring to respondents in the state of Rio Grande do Sul, it must be taken into account that in addition to the creative economy sector, in which the events sector is included, there are other markets surveyed in the state.

In addition, figure 3 shows the number of respondents to the Sebrae survey by economic segment, with 342 participants across the national territory when we talk about the Creative Economy sector, in which events are understood.

Although the Sebrae survey contains highly relevant information, its scope is to explain the impact of the pandemic on small businesses, unlike the survey carried out by Grupo Foto Sul, which aims to measure the economic and social impacts of the pandemic on the events sector. However, due to the lack of data and the reliability of the source, we chose this one for comparison purposes.

Based on our research, we consider the study by Grupo Foto Sul to be the most relevant in terms of an assertive diagnosis of the reality of the events sector in the state of Rio Grande do Sul during the Coronavirus pandemic.

MATERIAL AND METHODS

As previously mentioned, the database for the construction of this article is born from the research carried out by Grupo Foto Sul, a private industry in the State of Rio Grande do Sul, in order to plead public policies in favor of the sector in which it operates indirectly through its customers and partners.

For the purpose of declaring a conflict of interest, it must be noted that access to the research database was provided by one of the authors of this article, who is an acting director of the company carrying out the research. However, the application of these data to the object of study does not result in a conflict of interest on the part of the author, considering that the analysis was used for educational purposes in a university chair of Econometrics, as well as its analysis occurred after the event of what was predicted by the research object. All those surveyed had names and any personal information protected by the research company with the exclusion of data that could result in identification before the construction and elaboration of this study.

The study carried out by the private entity was even used in the creation of protocols for the sector and delivered to important figures such as State Deputy Mateus Wesp6 and Federal Deputy Maurício Dziedricki 7 in addition to agents at the municipal level, such as mayors and secretaries, so that they could understand the capillarity and importance of the sector.

The Sebrae survey "The impact of the coronavirus pandemic on small businesses – 3rd edition" was used for comparative purposes in reference to the main one, so that we could build a relationship between the data obtained by the entity and the private company. In any case, the sampling of the research carried out by Sebrae, in this context, becomes unqualified to the relation as reported in topic 2.5. of Development.

Equations: 1

[TXT] "funcdemitidos = 1.39 "   Eq1:   funcdemitidos = F(d_fatprepand, d_prevdemissao, d_setor, prevquantdemi)

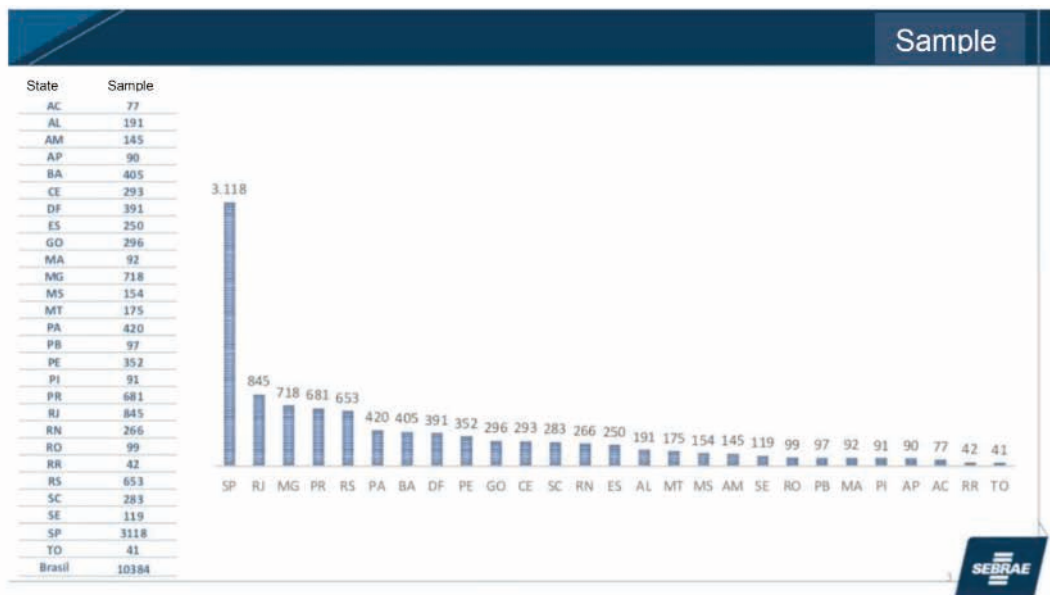Figure 1: Econometric model

Source: Eviews

Figure 2: Sample by UF

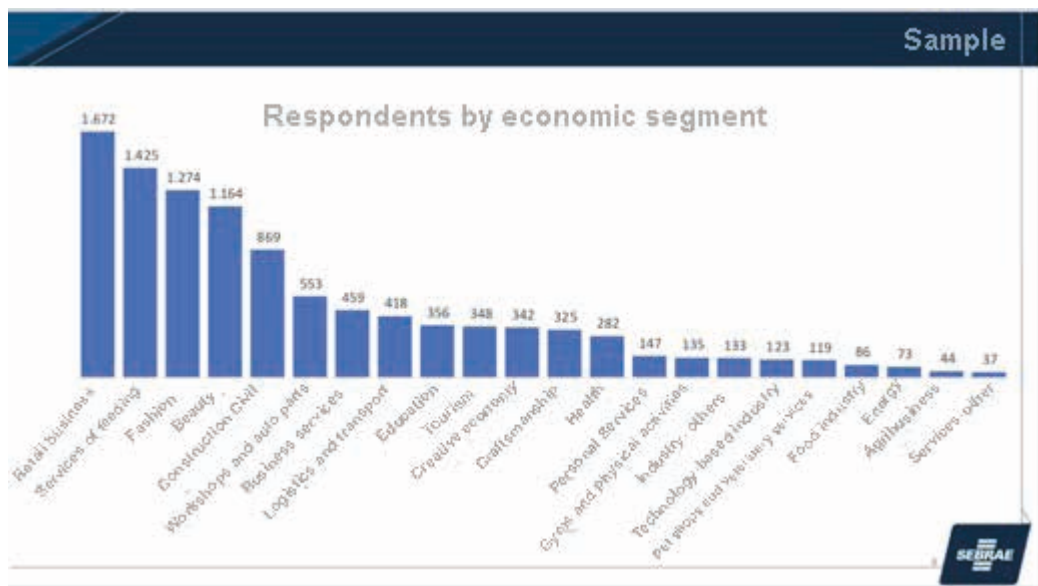Source: Sebrae Research – The impact of the coronavirus pandemic on small businesses – 3rd edition (2020)

Figure 3: Respondents by economic segment

Source: Sebrae Survey – The impact of the coronavirus pandemic on small businesses – 3rd edition (2020)

The research object of this study, carried out by the private company, took place in two stages, in a quantitative way, among brand partners in the State of Rio Grande do Sul. The study took place in two stages, the first from 06/24/2020 to 07/06/2020 and the second from 12/22/2020 to 01/15/2021 resulting in 703 responses from 600 unique respondents in 91 municipalities in the state, that is, obtaining relevant coverage, considering that the federative unit has a total of 497 municipalities.

For the object of this study, only the second stage was used, which had 288 observations due to the temporal distancing of cause and occurrence in view of the proposition of this article.

As for the procedure and technique for data collection, it was carried out voluntarily via Google Forms with brand partners, in the qualification of photographers, photography studios and graduation companies that replicated to their peers in the events sector, in order to obtain diversity in the observations. The database generated the analyzes published in the media and on the company's official page for open download, according to the electronic address referenced in the sources of this file.

The present study sought to stick to the impact of the pandemic on jobs in the sector through the econometric model of Multiple Regression Analysis. We defined as constant the number of employees fired from the beginning of the pandemic until the date of the second collection, informed by the respondents, through the question "How many employees did you fire during the pandemic?".

Then, through the question "Do you foresee, in the next 03 months, dismissing employees due to the pandemic?" we generated a binary variable (dummy) to transform the qualitative variables – yes or no – into quantitative ones,

assigning "1=yes; 0=no". To quantify the impact, the next question under analysis was "If your answer is yes, how many?", referring to the previous question. by the fact since the largest number of respondents were from the "photography and videography" sector, we created another binary variable, segmenting this sector from the others. Thus, through the question - "In which segment, within the Events Market, does your activity best fit?" – we created the dummy (binary variable), where 1= photography and videography; 0= other sectors.

Finally, to understand the size of the company, we defined another binary variable (dummy), through the average monthly revenue ranges before the start of the pandemic, declared by the respondents. The monthly billing range of up to R$6,000 was the most representative among those surveyed, so we defined 1= up to R$6,000 per month; 0= other ranges.

After processing the data, the model was run on the EViews platform, in order to understand the relationship between the dependent variable (employees fired during the pandemic) and the other independent variables. At the end, the numerical results from the equation made by the present econometric model were correlated, the results and averages of the Sebrae research, affirming the significance of the effective models as a comparative result.

RESULTS AND DISCUSSION

In the results of the econometric model of multiple linear regression analysis executed from the data (figure 4) the following affirmations can be made.

The first coefficient shown shows the dependent variable or called constant, which is the variable we are trying to establish a relationship with the other variables. Considering a 95% confidence interval and
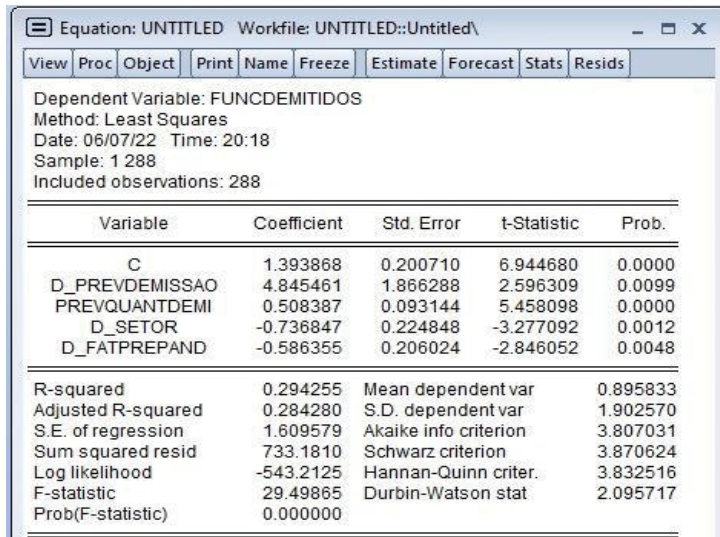
Figure 4: Execution of the econometric model
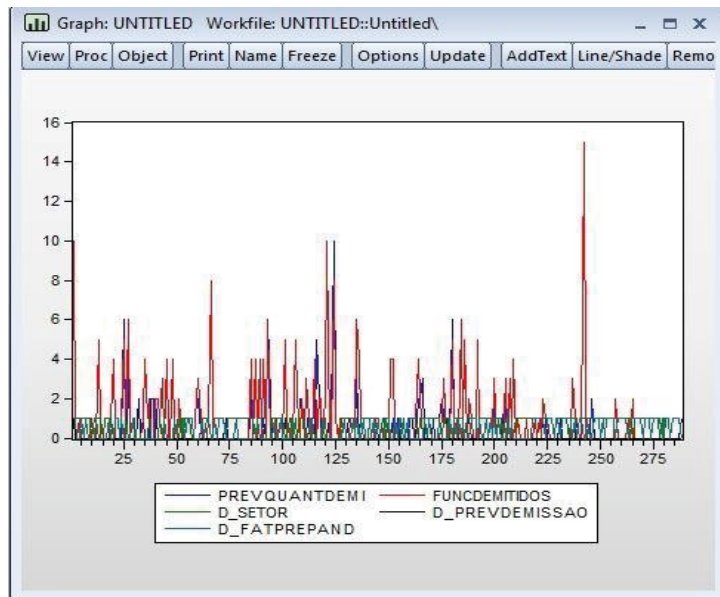
Source: Eviews

Figure 5: Econometric model chart

Source: Eviews

observing Prob. in the last column, or p value, we can see that all variables are somehow related to the dependent variable, as all its values are less than 0.05; i.e; have significance below 5% which denotes the relationship.

Our chosen constant or dependent variable was "fired employees". A beta value is observed in the coefficient, first column, of approximately 1.39, which represents that if all other variables are constant, or their X values equal to zero, the number of employees dismissed was 1.39 on average per respondent.

As previously mentioned, the qualitative variables that were transformed into quantitative ones through DUMMY are identified in the model by the item "D_".

The first explanatory variable "D_PREVDEMISSAO" refers to the forecast layoffs by respondents in the three months following data collection and was structured considering "0=does not foresee layoffs and 1=forecasts layoffs". The coefficient obtained was 4.84, which means that for each employee already dismissed, approximately 5 respondents expected to dismiss more employees in the three subsequent months.

The second explanatory variable was generated from absolute numbers in which the questioning, directed to those who answered that they believed in layoffs in subsequent months, was how many employees expected to leave. This way, we obtained a coefficient of approximately 0.51, which can be interpreted that for every 10 employees already dismissed, 5 others may still be dismissed in the next three months.

In the third explanatory variable "D_SECTOR" we generate another DUMMY as explained in item 2.3. to understand how many employees already laid off are from the photography and videography sector. The resulting beta value was approximately -0.74; which denotes that for every 10 people dismissed up to the data collection date, around 7 employees are from other sectors, with only 3 from the photography and videography subgroup.

The last explanatory variable concerns the relationship between the size of the company and the number of employees fired from the beginning of the pandemic to data collection. In this case the obtained coefficient or beta value was approximately -0.59; that is, for every 10 people dismissed, approximately 6 do not belong to a company or respondent with revenues of up to R\$6,000 per month. We can infer that the largest number of layoffs was carried out in larger companies, as they naturally have a more representative staff and liability for this type of action.

The graph in figure 5 shows the behavior of this model according to the number of observations (companies) and the number of employees leaving.

As part of the discussion and analysis of this article, we also seek to include suggestions and opinions issued by survey respondents within an open field on Google Forms. These opinions were written after a discussion on some measures to enable the resumption of event activities, listed by levels of importance. These measures are, respectively (in degree of importance by the respondents): Knowledge about the protocols, Financial assistance, Rapid tests for providers and participants, and Training of official bodies about protocols.

In short, the respondents believed that for a resumption of activities to occur, it would be necessary to adopt such measures. In addition, to justify the research, some opinions will be evidenced. Such as: for the resumption to occur, it is necessary that the responsible entities execute a financial credit line for the sector; that this resumption occurred with public awareness of a safe event; make vaccination a priority for those working in the event area; and the "selective quarantine" was also reviewed, where other segments resumed

their activities and the events sector did not have the opportunity.

In the end, it is analyzed that the adopted variables are justifications for the great economic impact that the sector suffered during the pandemic period, being the use of two future variables (forecast of dismissals and number of foreseen dismissals) and two variables of the pre-pandemic period. pandemic (sector of activity and revenue before the pandemic) result in an aggregate of information that allows affirming its impact on the employability of the sector, in addition to bringing reliability to the data, due to its scarcity in comparison to the survey by an external entity (SEBRAE) that showed the lack of actual data.

CONCLUSION/FINAL CONSIDERATIONS

Finally, we conclude that there were layoffs in the events sector as a result of the coronavirus pandemic and that the sector at the time expected to lay off even more if the government maintained the restrictive measures, reflecting the economic impact suffered during the period.

In addition, we observed that most of the layoffs occurred in sectors other than photography and videography, which is explained by the fact that such professionals, for the most part, worked autonomously or even were able to carry out their activities in other segments. Finally, analyzing the pre-pandemic billing in relation to the number of employees fired, we observe that, in large part, the dismissals occurred in larger companies.

The objective of this study was to sensitize entities and public bodies to the importance of the events sector, a scope successfully completed. However, for academic purposes, these data can kick-start a new post-restriction moment to measure the true impact on employability generated in this market. Still,

this could serve as a basis for the search for public policies in favor of the sector.

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