

## Impact of COVID-19 Outbreak on Accounting Entities Providing Beverage Service Activities

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**Abstract:** *The restrictive measures in the first and second wave of COVID-19 outbreak have significantly affected mainly HORECA segment. Accounting entities recorded drop in sales, drop in profit or loss. Their financial position in 2020 was worse compared to 2019. Many restaurants, fast food and pubs have been swept away by the first and second wave of pandemic. The paper focuses on analysis of the impact of COVID-19 on food and beverages sector with focus on the financial position of accounting entities providing beverage service activities.*

**Keywords:** *profit or loss, sales, COVID-19 crisis, financial situation, beverage service activities*

JEL codes: M48, J38, M54

### 1 Introduction

The COVID-19 pandemic that first appeared in 2019 in Wuhan (Aljofan & Gaipov, 2020) have an impact on various spheres of economic and social life. Countries all over the world have adopted various measures in effort to protect health of their inhabitants, and slow down the spread of the pandemic (Shafi, Liu, & Ren, 2020; Donthu & Gustafsson, 2020; Berger et al., 2020). According to Leite, Hodgkinson, & Gruber (2020) the impact of the pandemic on society and economy has been witnessed due to the lockdown of cities all over the world, labour mobility restrictions, travel bans, airline suspensions, and most importantly slowdown of the economy which is seriously influencing the sustainability of supply chains in many businesses around the globe. The lockdown enforced in various countries globally and the operational impacts of COVID-19 have had negative impacts on economies and severely impacted the sustainability of businesses (Telukdarie, Munsamy, & Mohlala, 2020). This is supported by Hobbs (2020) who draws attention to the fact that restriction of movement and closure of markets have a significant impact on small holder producers, who do not have the finance and resources of larger producers. The Slovak Republic, immediately after the first COVID-19 patient was identified in March 2020, has adopted very strict measures. Services, schools, borders were closed, and movement of persons was limited. The restrictive measures in the second wave of outbreak were stricter than in the first wave, and have significantly affected mainly the so-called HORECA segment that includes hotels, restaurants and cafes (Kullová, 2020). A similar stance is taken by Kekely (2020), who states that according to data from Bisnode Company, the first wave of pandemic has swept away about a thousand restaurants, fast food and pubs in the Slovak Republic, despite the fact that according to Chowdhury et al. (2020) the food and beverage industry is one of the excelling industries, through which basic needs for human development are fulfilled. The most vulnerable were smaller entities. Ižip (2020) supports this view. According to his paper, entities that managed the first wave of the outbreak successfully, have recorded an average drop in sales of 40 to 50%. Up to 60% of companies in the gastronomy sector reported a drop in sales in 2020 compared to 2019. Nortjé (2020) expresses that the varying levels of lockdown initiated in various countries globally, social distancing requirements and health concerns, have seen a shift in consumer behaviour to home cooked meals rather than eating out. This fact influenced food and beverages industry. Many restaurants and pubs shifted to delivery services of food. In this industry (Rizou et al., 2020), more safety measures are needed since more people (more potential sources of infection) are involved in the process while moving from farm to work.

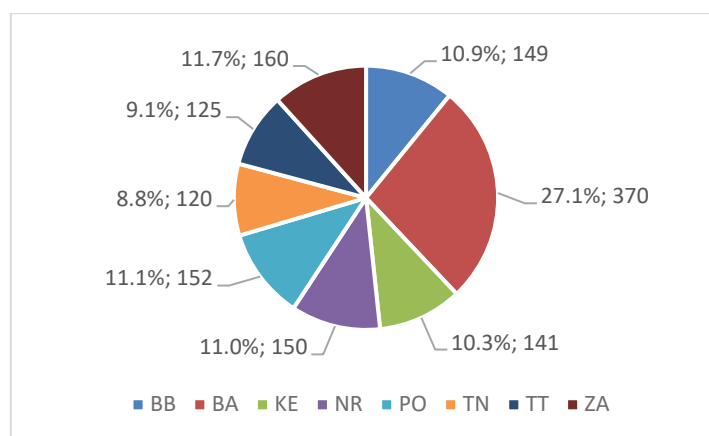
Various authors investigated the impact of COVID-19 on society and economy (Memon et al., 2020; Gomes, 2021; Cohen, 2020; Fraccascia & Alvarado, 2020; He & Harris, 2020; Shen et al., 2020, etc.). In our paper we focus on analysis of impact of lockdown related to COVID-19 pandemic on the financial position of accounting entities providing beverage service activities.

## 2 Methodology and Data

The aim of the paper is to analyse the impact of the restricted government measures on the financial position of the accounting entities providing beverage service activities in 2020 in comparison with 2019.

The financial statements of accounting entities providing beverage service activities for the accounting period 2020 were selected from the website [www.finstat.sk](http://www.finstat.sk). Out of the total number of 1,700 accounting entities, we have excluded those accounting entities that entered into liquidation in 2020, and those accounting entities that had not presented any sales in their financial statements neither in 2019, nor in 2020. Out of the analysed sample of 1,367 accounting entities, 149 entities had their headquarter in the Banská Bystrica (BB) Region, 370 entities in the Bratislava (BA) Region, 141 entities in the Košice (KE) Region, 150 entities in the Nitra (NR) Region, 152 entities in the Trnava (TT) Region, and 160 entities in the Žilina (ZA) Region (Figure 1).

**Figure 1** Registered Office of Analysed Accounting Entities



Source: Own research on the analysis of accounting entities

The analysed accounting entities were divided into three categories according to the number of employees. There were 996 entities in the category of 0-9 employees, 111 entities in the category of 10-49 employees, and only 2 entities in the category of more than 50 employees. Up to 258 entities have not stated the number of employees in their financial statements.

Software SAS Enterprise Guide and SAS programming language have been used for our analysis, through which multiple comparisons, interval estimates, and predictions of probability have been applied. All results were interpreted qualitatively.

## 3 Results and Discussion

We have analysed changes in sales and profit or loss in selected accounting entities providing beverage service activities in 2020 compared to 2019.

### 3.1 Impact of Restrictive Measures on Sales

The analysis of the presented financial statements revealed that within the analysed category of accounting entities, there was an overall decrease in sales of € 44,567,864, which represents a year-to-year decrease of 23.63% compared to the previous accounting period. Up to 947 entities reported a decrease in sales, while 420 entities reported an increase in sales for accounting period 2020 compared to 2019.

Accounting entities with a decrease in sales in 2020 compared to 2019 reported sales by € 65,982,154 lower in 2020 compared to 2019. The drop represents an average decrease in sales of € 69,675 per accounting entity. Out of the accounting entities that had reported a decrease in sales, 105 entities (11.1%) had their headquarters in the BB Region, 252 (26.6%) in the BA Region, 96 (10.1%) in the KE Region, 109 (11.5%) in the NR Region, 105 (11.1%) in the PO Region, 80 (8.4%) in the TN Region, 86 (9.1%) in the TT Region, and 114 (12.1%) in the ZA Region (Table 1 column percentages „Decrease”). The analysis proved that most accounting entities with a decrease in sales, had their headquarters in the BA Region. Out of all accounting entities providing beverage service activities in the NR Region, up to 72.7% reported decrease in sales. In the ZA Region, up to 71.3% entities reported decrease in sales, and in the BB Region, up to 70.5% entities reported decrease in sales (Table 1 row percentages „Decrease”). Out of the total number of 947 entities that reported a decrease in sales, up to 36.5% reported a decline of more than 50 percent in sales.

Despite the bad pandemic situation, 420 entities reported an increase in sales in 2020 compared to 2019, most of them had their headquarters in the BA Region (28.1%, see table 1 column percentages “Increase”).

**Table 1** Analysis of changes in sales depending on the place of business

Place of business - region	Changes in sales		Total
	Decrease	Increase	
<b>BB</b>	<b>105</b> (*7.7%) (**70.5%) (**11.1%)	<b>44</b> (*3.2%) (**29.5%) (**10.5%)	<b>149</b> (*10.9%)
<b>BA</b>	<b>252</b> (*18.4%) (**68.1%) (**26.6%)	<b>118</b> (*8.6%) (**31.9%) (**28.1%)	<b>370</b> (*27.0%)
<b>KE</b>	<b>96</b> (*7.0%) (**68.1%) (**10.1%)	<b>45</b> (*3.3%) (**31.9%) (**10.7%)	<b>141</b> (*10.3%)
<b>NR</b>	<b>109</b> (*8.0%) (**72.7%) (**11.5%)	<b>41</b> (*3.0%) (**27.3%) (**9.8%)	<b>150</b> (*11.0%)
<b>PO</b>	<b>105</b> (*7.7%) (**69.1%) (**11.1%)	<b>47</b> (*3.4%) (**30.9%) (**11.1%)	<b>152</b> (*11.1%)
<b>TN</b>	<b>80</b> (*5.9%) (**66.7%) (**8.4%)	<b>40</b> (*3.0%) (**33.3%) (**9.5%)	<b>120</b> (*8.9%)
<b>TT</b>	<b>86</b> (*6.3%) (**68.8%) (**9.1%)	<b>39</b> (*2.9%) (**31.2%) (**9.3%)	<b>125</b> (*9.2%)
<b>ZA</b>	<b>114</b> (*8.3%) (**71.3%) (**12.1%)	<b>46</b> (*3.3%) (**28.7%) (**11.0%)	<b>160</b> (*11.6%)
<b>Total</b>	<b>947</b> (*69.3%)	<b>420</b> (*30.7%)	<b>1 367</b>

Source: Own processing in SAS Enterprise Guide based on information from financial statements

Statistically significant correlation was not obtained between changes in sales and the place of business.

Performing a more detailed analysis of the accounting entities with a decrease in sales, we have revealed that up to 680 entities belong to smaller accounting entities that employ less than 10 employees, 84 entities employ 10 to 49 employees, and 2 entities employ more than 50 employees. The remaining entities with a drop in sales had not stated the number of employees in their financial statements.

### 3.2 Impact of Restrictive Measures on Profit or Loss

The sample of accounting entities was further subjected to the analysis of changes in profit or loss. Our research revealed that there was an overall decrease in profit or loss of € 6,411,096 that represents a year-to-year decrease of 68.4% in comparison with the

previous accounting period. Out of 1,367 of accounting entities, up to 814 entities (59.5%) reported a decrease in profit or loss, and 553 entities (40.5%) reported an increase in profit or loss. The profit or loss decreased by a total amount of € 17,090,269 in the 814 accounting entities with a decline in profit or loss. The profit or loss increased by a total amount of 10,679,173 in the 553 accounting entities with an increase in profit or loss.

Out of the 947 accounting entities with a decrease in sales, up to 609 (64.3%) entities also reported a decrease in profit or loss, whilst 338 (35.7%) entities reported an increase in profit or loss in the accounting period 2020 compared to 2019 despite the fall in sales (Table 2 row percentages "Decrease in sales"). Out of the 420 entities with an increase in sales, up to 215 (51.2%) entities also reported an increase in profit or loss, whilst 205 (48.8%) entities reported a decrease in profit or loss (Table 2 row percentages "Increase in sales").

**Table 2** Analysis of changes in profit or loss based on changes in sales

Changes in sales	Changes in profit or loss		Total
	Decrease	Increase	
<b>Decrease</b>	<b>609</b> (*44.6%) (**64.3%) (***)74.8%)	<b>338</b> (*24.7%) (**35.7%) (***)61.1%)	<b>947</b> <b>(*69.3%)</b>
<b>Increase</b>	<b>205</b> (*15.0%) (**48.8%) (***)25.2%)	<b>215</b> (*15.7%) (**51.2%) (***)38.9%)	<b>420</b> <b>(*30.7%)</b>
<b>Total</b>	<b>814</b> <b>(*59.5%)</b>	<b>553</b> <b>(*40.5%)</b>	<b>1 367</b>

Source: Own processing in SAS Enterprise Guide based on information from financial statements

There is a statistically significant correlation between changes in sales and changes in profit or loss at any level of significance (p-value < 0.0001). Based on Cramer V, the correlation is weak. The association is positive, which means that decrease in sales is directly associated with decrease in profit or loss (the drop in profit or loss occurs more often in the companies with the drop in sales).

The analysis of changes in profit or loss depending on the region of the registered office (headquarter) of the accounting entity is in Table 3.

**Table 3** Analysis of changes in profit or loss depending on the place of business

Place of business - region	Changes in profit or loss		Total
	Decrease	Increase	
<b>BB</b>	<b>87</b> (*6.4%) (**58.4%) (***)10.7%)	<b>62</b> (*4.5%) (**41.6%) (***)11.2%)	<b>149</b> <b>(*10.9%)</b>
<b>BA</b>	<b>211</b> (*15.4%) (**57.0%) (***)25.9%)	<b>159</b> (*11.6%) (**43.0%) (***)28.8%)	<b>370</b> <b>(*27.0%)</b>
<b>KE</b>	<b>81</b> (*5.9%) (**57.4%) (***)10.0%)	<b>60</b> (*4.4%) (**42.6%) (***)10.9%)	<b>141</b> <b>(*10.3%)</b>
<b>NR</b>	<b>94</b> (*6.9%) (**62.7%) (***)11.5%)	<b>56</b> (*4.1%) (**37.3%) (***)10.1%)	<b>150</b> <b>(*11.0%)</b>
<b>PO</b>	<b>84</b> (*6.1%) (**55.3%) (***)10.3%)	<b>68</b> (*5.0%) (**44.7%) (***)12.3%)	<b>152</b> <b>(*11.1%)</b>
<b>TN</b>	<b>77</b> (*5.6%) (**64.2%) (***)9.5%)	<b>43</b> (*3.2%) (**35.8%) (***)7.8%)	<b>120</b> <b>(*8.8%)</b>
<b>TT</b>	<b>80</b> (*5.9%) (**64.0%) (***)9.8%)	<b>45</b> (*3.3%) (**36.0%) (***)8.1%)	<b>125</b> <b>(*9.2%)</b>
<b>ZA</b>	<b>100</b> (*7.3%)	<b>60</b> (*4.4%)	<b>160</b>

Place of business - region	Changes in profit or loss		Total
	Decrease	Increase	
	(**62.5%) (***)12.3%)	(**37.5%) (***)10.8%)	(*11.7%)
<b>Total</b>	<b>814 (*59.5%)</b>	<b>553 (*40.5%)</b>	<b>1 367</b>

Source: Own processing in SAS Enterprise Guide based on information from financial statements

Out of the total number of accounting entities operating in the analysed sector, in which the profit or loss decreased in 2020 in comparison with 2019, up to 25.9% of companies were located in the BA Region (Table 3 column percentages "Decrease"). Up to 64.2% of companies located in the TN Region providing beverage service activities reported a decrease in profit or loss in 2020 in comparison with 2019. It is followed by the TT Region, where the profit or loss fell in 64.0% of entities. The NR Region is ranked third, where the profit or loss fell in 62.7% of entities providing beverage service activities in this region (Table 3 row percentages "Decrease"). Statistically significant correlation was not obtained between changes in profit or loss and the place of business.

## Conclusions

The restrictive government measures, aimed at protecting people's health and slowing down the spread of pandemic related to COVID-19, affected economic and social life globally. Tourism belongs to one of the most affected sectors by crisis.

We focused on the analysis of the impact of COVID-19 crisis on accounting entities providing beverage service activities in our paper. We investigated a rapid drop in sales and profit or loss in 2020 in comparison with the previous accounting period. More than 69% of entities operating in this sector reported lower sales in 2020 compared to 2019. Most of them were located in the BA Region, and in the ZA Region. Up to 36.5% of entities reported a decline in sales of more than 50%. Almost 60% of entities reported a decrease in profit or loss. The year-to-year decline in profit or loss in the analysed accounting entities was up to more than 68%.

There were various forms of state aid in this sector – First Aid, First Aid+, Rent subsidies, Tourism Assistance Scheme, etc. However, the state aid is not sufficient. We believe that other planned forms of state aid will revive business in this sector.

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