



# Performance of the Slovenian Hotel Companies in Times of COVID-19

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**Abstract:** *The chapter aims to analyse the performance of the Slovenian hotel companies in the times of Covid-19 compared to the performance before the pandemic. As the number of tourist arrivals and overnight stays significantly decreased during the pandemic, the Slovenian government has taken various measures to support the tourism industry. The research question of the article is: Is the performance of Slovenian hotel companies significantly different in times of Covid-19 than in times before Covid-19? The analysis is based on a sample of the 100 largest Slovenian companies operating in the hotel industry. The data covers the period 2018-2020. The results show that the performance of Slovenian hotels was significantly worse during the Covid-19 period. Without state aid, many hotels would most likely cease operations. The analysed industry faces major challenges. Suggestions for improvement and opportunities for further research are given.*

## 1. INTRODUCTION

The year 2020 was marked by the Covid-19 pandemic. According to the World Tourism Organization (UNWTO), the tourism industry was the sector most affected by the pandemic (UNWTO, 2021a). As reported by the World Travel & Tourism Council, tourism had a 10.4% impact on global GDP in 2019. With the emergence of Covid-19, this impact dropped significantly to 5.5% in 2020, representing a 49.1% decline over this period. The estimated number of tourism job losses in 2020 was 62 million, a decline of 18.5% (WTTC, 2021a; WTTC, 2021b). In 2020, international tourist arrivals at the global level declined by 73% compared to 2019, after a decade of steady growth. Between 2009 and 2019, tourist arrivals increased by an average of 5% per year and 63% overall (UNWTO, 2021a). In Slovenia, the decline in the contribution of tourism to GDP was slightly lower compared to the decline at the European level. In Slovenia, the impact of tourism on GDP in 2019 was 10.6%, and in 2020 6.5%, which represents a decrease of 42.3% (WTTC, 2021c). On the European level, the drop was 51.4% (WTTC, 2021d).

The year 2019 was the sixth consecutive record year for Slovenian tourism (in terms of tourist arrivals and overnight stays). At that time, expectations for future tourism growth were favourable. In the structure of all tourist arrivals, the share of foreign tourists in Slovenia in 2019 was 75.48% and in the number of overnight stays 72.08%. (SORS, 2021). This structure has changed significantly since the occurrence of Covid-19. Due to the outbreak of the epidemic, international travel decreased significantly, which resulted in the share of domestic visitors increased to 60% in 2020 (in 2019 it was 24.52%) (SORS, 2021). According to Eurostat (2021), Slovenia, Malta, and Cyprus were the only EU countries where the number of nights spent by domestic guests in tourism accommodation establishments increased in 2020 compared with the previous year. For the same period, Eurostat (2021) estimated an

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average decrease in overnight stays by domestic tourists to 34% at the EU level. On the other hand, the number of overnight stays by international tourists decreased in all EU countries covered by the study.

In 2020, there were 41.7% fewer overnight stays and 50.8% fewer arrivals in Slovenia compared to 2019 (STO, 2021a). The data show that the decline in overnight stays by type of accommodation establishments in 2020 compared to 2019 was greatest in hotels and other accommodation establishments (-49%), while it was smaller in campsites (-30%) and other accommodation establishments (-34%) (STO, 2021a). First measures to mitigate the impact of the Covid-19 virus were adopted in Slovenia in mid-March 2020. At that time, a decree banning direct sales of goods and services to consumers came into force, except for a few activities. Hotels reopened in the second half of May. Many measures were abandoned in the summer of 2020, followed by a second wave of infections in the fall.

Since the most important industry within the Slovenian tourism sector is hotels and similar establishments, both in terms of total revenues and number of employees (AJ PES, 2019), we will focus our analysis on this industry. Considering that the pandemic had a remarkable impact on the tourism industry, the paper aims to compare the performance of the Slovenian hotel companies in times of Covid-19 with times before the pandemic. Our research question is: Is the performance of Slovenian hotel companies significantly different in times of Covid-19 than in times before Covid-19? To achieve the aim of the analysis, we will analyse the financial data of the 100 largest hotel companies from 2018 to 2020. Data for 2021 was not available at the time of the analysis. Statistical analysis will be performed using non-parametric tests (Friedman's two-way analysis of variance by ranks and Wilcoxon signed-rank test). Our analysis is based on the most important categories from publicly available financial statements.

The paper is structured as follows. After the introduction, the theoretical background of the study is presented, explaining the impact of Covid-19 on the tourism industry and the measures taken by individual countries to mitigate the impact of Covid-19. The description of the data and the methodology used is provided in the fourth chapter. The obtained results of the analysis and the discussion form the fifth part. The sixth part concludes the paper.

## **2. TOURISM INDUSTRY AND COVID-19**

One of the peculiarities of hotel companies is that their services cannot be stocked; they cannot be sold in the future. All unsold rooms and other related services are permanently lost. The tourism industry was extremely affected by the lockdowns, required social distances, health measures, restrictions on international travel, and destination-specific restrictions. Because of the impact of the pandemic on tourism, many countries have helped the tourism sector with various economic stimulus initiatives (e.g., job security programmes, "bonuses" for vacations, etc.).

According to the literature, between December 2019 and March 2021, numerous articles were published on the topic of Covid's impact on the tourism industry (Zopiatis et al., 2021). In the initial phase, the studies were more conceptual, as many numerical data were not available for empirical analysis at that time. Analyses in the early stages focused on changes (transformation and operations) and opportunities for the industry. Later studies were increasingly supported by empirical analyses. These studies examined tourist behaviour, designed models, and provided guidelines for the hospitality industry and tourism destinations (Zopiatis et al., 2021).

Previous studies on the impact of various epidemics on the tourism industry are not comparable to the impact of the Covid-19 epidemic, as the latter has much broader implications. Zhang et al. (2021) pointed out that traditional statistical models used for forecasting have limitations because they do not account for the unprecedented factors of the Covid-19 pandemic. Among the first studies to examine the impact of the Covid-19 epidemic on tourism is an analysis by Škare et al. (2021). The impact was analysed using a sample of 185 countries. The shock caused by the epidemic has a significant negative impact not only on employment levels in tourism but also on other industries. The authors note that the impact varies from country to country, so it is important that countries take appropriate economic measures. The authors further note that given the magnitude of the shock to the tourism industry, the number of people employed in the industry is not expected to return to pre-crisis levels very quickly (Škare et al., 2021). Studies forecasting a recovery in tourism show that the industry will recover gradually (Zhang et al., 2021).

As indicated by Huang et al. (2021), the hospitality labour market was more affected compared to other major industries. Their analysis of U.S. data shows that there was a decline in employment and job postings for hospitality workers. Recent research from Serbia also shows that younger workers and those without families are more motivated to seek employment in other industries (Demirović Bajrami et al., 2021). A recent World Travel & Tourism Council survey (WTTC, 2021b) of samples in Spain, United Kingdom, United States, France, Italy, and Portugal found that during periods when travel restrictions were reduced and the number of tourists increased, the supply of labour was less than the demand for it. As a result, companies in the tourism industry have had difficulty finding suitable workers. According to WTTC (2021b), the reason is that many workers shifted from the tourism sector to other sectors, while some workers have left the labour market entirely. Baum et al. (2020) note that some workers in the hospitality sector are particularly vulnerable during times of pandemics. Very often, workers with precarious status, non-residents, migrants, students, and some others were excluded from governments' emergency incentives.

Crespí-Cladera et al. (2021) pointed out that in a situation of significantly lower revenues for hotel companies, crucial factors that should be considered by hotel managers are liquidity, solvency, and operating leverage (companies with a lower share of fixed costs in total costs will have less difficulty adjusting to a decline in revenues). Since hotel companies have a high proportion of fixed costs relative to variable costs (Crespí-Cladera et al., 2021), they will have more difficulty surviving the crisis compared to some other industries where variable costs represent a higher proportion of total costs. Companies that have the ability to reduce operating leverage will have less difficulty adjusting to a lower volume of their operations due to Covid-19. In addition to the cost and liquidity aspects, Garrido-Moreno et al. (2021) also suggest the postponement of investments and flexible staff allocation as effective control measures to overcome the crisis in the hotel industry.

Assaf and Scuderi (2020) pointed out that prices in the industry will increase due to a decrease in demand. As the industry faces additional costs due to hygiene measures and, in some countries, restrictions on the maximum possible capacity utilization (e.g., for hotels and restaurants), the profitability of these companies is consequently lower. This may have an additional impact on price increases.

Due to the sharp decline in international tourists, Arbulú et al. (2021) suggest stimulating domestic tourism. In particular, countries where the importance of foreign visitors was high, showed a comprehensive crisis in tourism. European countries with a high share of domestic guests are,

for example (2018 data): Finland (90%), Romania (85%), Sweden (84%), and Germany (80%) (UNWTO, 2021b). These countries did not feel the impact of the income loss from foreign tourists as much as countries where the importance of foreign guests was significantly higher.

Slovenia is a country where the proportion of foreign guests was very large in the period before the appearance of Covid-19. In 2019, when the effects of Covid-19 were not yet felt in Slovenia, the share of foreign tourist arrivals was 75% and the share of domestic arrivals was 25%. The share of foreign tourist arrivals has increased over time (in 2008, for example, it was 64%). In 2020, the share of foreign tourists decreased to 40%. Compared to 2019, the number of arrivals of foreign guests in 2020 decreased by 74%. At the same time, the number of domestic guests increased by 21% (data retrieved from SORS, 2021). Preliminary data for 2021 show that the number of domestic guests increased by 25% compared to 2019 (period from January to September) (STO, 2021b). The data show that the number of arrivals by domestic guests has increased, but this increase has not come close to offsetting the decline in arrivals by foreign guests. Tourist vouchers introduced by the Slovenian government in both 2020 and 2021 have stimulated domestic tourism. According to Eurostat (2021), Slovenia ranked first in Europe in terms of growth in the average number of nights spent in tourist accommodation by domestic guests in 2020 compared to 2019 (Eurostat, 2021). However, domestic guests in Slovenia traditionally spend less on average than foreign guests. Arbulú et al. (2021) point out that governments prefer international visitors because of their higher spending.

The appearance of Covid-19 is already changing the habits of tourists. The Croatian example shows that before the pandemic there was a high concentration of tourists on the coast and in coastal regions. In 2019, seven coastal counties recorded 90% of overnight stays in all of Croatia. In 2020, there was a significant decrease in all regions. This was greater for continental Croatia than for Adriatic Croatia. In 2020, the less populated areas performed better than the densely populated areas and the destinations to which tourists frequently travel by air. In hilly areas, the decrease in tourist visits was also lower (Šulc and Fuerst-Bjeliš, 2021). The results of their analysis show that tourists preferred to stay in less crowded areas because they are more likely to feel safer there. The consequences of the epidemic are likely to be reflected in socioeconomic changes that affect tourism, such as changes in mobility and consumption habits (Romagosa, 2020; Gössling et al., 2020). Romagosa (2020) also notes that tourists will more likely travel to nearby destinations in the post-crisis period. Breier et al. (2021) see the expansion of marketing to domestic guests as a good opportunity to increase hospitality companies' revenues.

To date, studies in the hospitality industry have not focused on how companies are prepared for the crisis (Giousmpasoglou et al., 2021), and at the same time, research on sustainability has been underdeveloped (Jones and Comfort, 2020). Authors (Jones and Comfort, 2020; Romagosa, 2020; Abbas et al., 2021) believe that now is the time to shift tourism toward more sustainable development. Romagosa (2020) states that it is time to consider structural changes in tourism, starting with a reflection on sustainability (ensuring a balance between environment, society, and economy).

Hotel managers must address the impact of the Covid-19 crisis on tourism. To this end, strategic actions must be taken. Garrido-Moreno et al. (2021) identify six areas found in the literature as essential for the implementation of recovery strategies. Hotels must intensify digitalization and various other technological solutions to minimize human contact. In addition, hotels should adopt organizational and human resources strategy measures, such as special training programs

and additional internal communication channels. As suggested by Garrido-Moreno et al. (2021), hotel managers should also implement marketing measures (specific offers for the local market; development and promotion of new products and services), service provision measures (improved facilities and customer service), healthcare measures, and cancellation management (offering greater flexibility, e.g., free cancellation, flexible re-scheduling).

### 3. HOSPITALITY INDUSTRY AND PUBLIC MEASURES

A survey conducted by the American Hotel and Lodging Association (2020) in November 2020 of a sample of 1,200 members of its association found that nearly 50% of the hotels in the sample would close without further government assistance.

European Union countries have taken various measures in parallel with those taken by the EU to mitigate the impact of Covid-19 in the tourism sector. Countries have introduced their own measures, as the importance of tourism varies from country to country. Sanabria-Díaz et al. (2021) examined public strategies in the EU to recover the hospitality industry due to Covid-19. Countries have helped the tourism industry by offering refunds for postponed vacations, covering wages and social security contributions, temporary work programmes to secure jobs, providing unemployment benefits, and measures to solve liquidity problems. Some countries have reduced VAT on certain products and services, and some have issued holiday vouchers to encourage domestic tourists to travel in their own countries. Collins-Kreiner and Ram (2021) analyzed national tourism strategies during the Covid-19 pandemic. Their sample includes seven countries, namely Australia, Austria, Brazil, China, Israel, Italy, and Japan. The analysis considered the policies implemented by the countries until July 2020. They found that the most common action was to preserve jobs, support the self-employed, and help businesses provide liquidity. Strategies for the future were developed by only one country, while talent development and sustainable development were not addressed.

In addition to the general measures taken for the economy as a whole, some countries have also taken specific measures in the area of tourism. Many of these measures have been taken to promote domestic tourism (Arbulú et al., 2021)). Not only because the importance of domestic tourism is high in some countries, but also because domestic tourism is expected to recover faster than international tourism. Arbulú et al. (2021) argue that incentives such as marketing campaigns to promote domestic tourism and financial incentives are particularly important in countries where the share of foreign tourists was very high before Covid-19 occurred.

A survey of European data was conducted in April 2020 among 488 respondents working in the hospitality industry in England (Ntounis et al., 2021). 72.9% of respondents reported that they could continue their business for up to four months without further government support. Thus, the government measures were important support for the companies. 97.4% of respondents had already applied for assistance at the time of the survey. If countries did not take measures to help the tourism sector, several businesses would be declared bankrupt. Giousmpasoglou et al. (2021) emphasise that the economic recovery of the hotel industry is likely to be gradual. It takes time for tourists to return to their old mobility after the end of the pandemic (Uğur and Akbıyık, 2020).

Škare et al. (2021) predict that the tourism industry will recover slowly in the first five years, depending on the size of the shock to the economy as a whole. In the past, the tourism industry

has proven to be relatively resilient to shocks. The industry's recovery time dropped from 26 months to 10 months during the 2001-2018 period. This time is expected to be different. If tourism business management and the government do not respond with appropriate measures, the consequences of Covid-19 could lead a country into a deep recession (Škare et al., 2021).

## **4. DATA USED AND METHODOLOGY**

### **4.1. Data used**

In the continuation of the chapter, we present an analysis aimed at answering the research question: whether the performance of Slovenian hotel companies during the Covid-19 period is statistically significantly different from the performance before the occurrence of Covid-19. To achieve the aim of the analysis, we collected financial data from Slovenian hotel companies (standard classification of activities I55.100) for the period 2018-2020. The years 2018 and 2019 are treated as the period before the occurrence of Covid-19, while 2020 is treated as the year of the pandemic due to Covid-19. Data for 2021 were not available at the time of analysis. Data were collected for the 100 largest hotel companies from the GVIN financial database. The size of the companies was defined based on the value of total assets as of the balance sheet date. In 2020, there were a total of 702 Slovenian hotel companies (standard classification of activities – hotels and similar accommodation).

We included in our analysis only companies that are still active, those that have more than 1 employee and generate more than zero revenues. From the initial list of companies sorted by size, 14 companies were excluded because they had no employees or did not generate revenues in all years included in our analysis. These companies were replaced with companies that met the conditions for selection in the sample.

For our study, the following data were collected from the financial statements: total assets, owners' equity, revenues from sales, EBIT (earnings before interest and taxes), net income for the financial year, ROE (return on equity), ROA (return on assets) and number of employees. These categories were collected for fiscal years 2018-2020.

The author would like to point out that the presented study is based on publicly available data from financial statements, internal data were not available, which represents a limitation of the study. Since the International Standards for the Hotel Industry (USALI) are not used in Slovenia for the purposes of external financial reporting (for more details see Ivankovič, 2005), the analysis is based on data from companies that reflect not only the operation of a single hotel but the entire business of the company.

### **4.2. Methodology**

First, we used the Shapiro-Wilk test, which checks whether the variables are normally distributed. We use it when a sample is not large. In cases where the test is not statistically significant (sig. > 0.05), the null hypothesis is not rejected, but we conclude that the distribution of the variable does not deviate from the normal distribution. The variable is not normally distributed if the test results show sig. < 0.05. Since we found that our variables are not normally distributed, we used non-parametric tests in the following steps of the analysis. To examine whether there are differences in the selected variables between fiscal years 2018, 2019, and 2020, we

performed a sample Friedman's two-way analysis of variance by ranks. The variables used are total assets, owners' equity, revenues from sales, EBIT, net income, ROE, ROA, and the number of employees. With this test, we check whether there are differences between the years covered by the analysis and thus determine whether further analysis is meaningful.

Since the results (presented in chapter five) show that there are statistically significant differences between the years of analysis, we will examine the differences in more detail in our further research. We test for the presence of possible statistical differences between pairs (years) using the nonparametric Wilcoxon signed-rank test. At this point, we analyse whether there are statistically significant differences in the values of total assets, owners' equity, revenues from sales, EBIT, net income, ROE, ROA, and the number of employees in the periods before Covid-19 occurred and in the Covid-19 period. We compare selected variables for 2018 with 2020 (1st pair) and 2019 with 2020 (2nd pair).

## 5. RESULTS OF THE ANALYSIS

First, descriptive statistics of selected categories from the financial statements (balance sheet and income statement) of the analysed companies are presented. Table 1 shows the average value, standard deviation, a minimum and maximum value of total assets, total owners' equity, and revenues from sales. The sample includes the 100 largest Slovenian hotel companies.

**Table 1.** Descriptive statistics of the sample for the period 2018–2020

	Year/category	Total assets (in €)	Total owners' equity (in €)	Revenues from sales (in €)
2018	Average value	13,617,446	7,101,518	5,162,978
	Standard deviation	25,458,288	15,026,484	9,623,817
	Minimum	350,558	-2,452,524	16,200
	Maximum	172,176,000	106,206,000	72,126,000
2019	Average value	15,286,618	8,442,230	5,549,844
	Standard deviation	32,536,818	20,543,846	11,223,051
	Minimum	1,121,925	-204,083	3,689
	Maximum	255,926,000	167,659,000	91,630,000
2020	Average value	15,388,323	7,944,263	3,101,193
	Standard deviation	33,612,739	19,879,491	7,069,125
	Minimum	1,988,902	-997,016	11,077
	Maximum	270,194,000	160,424,000	55,165,000

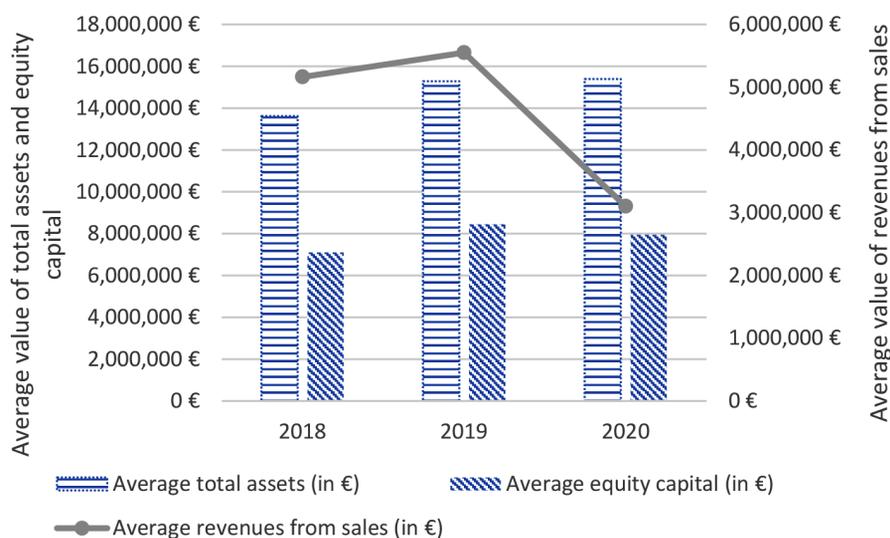
**Source:** own calculations based on data retrieved from the financial database GVIN, 2021

Table 1 shows that the average value of total assets increased from 2018 to 2020. Contrary to our expectations, there has been no decrease between 2019 and 2020. The standard deviation value shows that the companies in the sample differ in size. The largest company in the sample (the value of total assets in 2020 is 270,194,000€) is much larger than the smallest company in the sample (the value of total assets in 2020 is 1,988,902€).

The average value of owners' equity increased in 2018-2020, but there is a decrease in 2019-2020. In 2020, the average value of owners' equity was 7,994,263€, while in 2019 it was 8,442,230€. This decrease is a result of the negative net income (more details in Table 4 and Figure 2), which led to a lower value of owners' capital (-5.9%). The average value of revenues from sales in 2018-2020 decreased significantly (-39.9%) from an average value of 5,162,978€ in 2018 to an average value of 3,101,193€ in 2020. Although average revenues from sales decreased significantly, the

impact on owners' equity was not as dramatic. Government measures to preserve jobs, cover some of the fixed costs, and other forms of government aid most likely helped hotel companies significantly.

The data show that revenues from sales increased from 2018 to 2019 (by 7.5%), while there was an extremely sharp decline from 2019 to 2020 (by -44.1%). This event is a result of the appearance of Covid-19. 2019 was the sixth consecutive record year for Slovenian tourism (in terms of tourist arrivals and overnight stays), while in 2020 there was a significant decrease in international arrivals. This is clearly reflected in the amount of revenues generated for the sample of Slovenian hotels. If the state did not introduce tourist vouchers for residents in 2020, the decrease in revenues from sales would be even greater. According to Eurostat data (2021), Slovenia recorded the highest increase in overnight stays by domestic guests among EU countries, which shows that the measures have had an overall positive impact on the growth of domestic tourism. Figure 1 shows more clearly the changes in the average values of total assets, total owners' equity, and revenues from sales for the analysed period.



**Figure 1.** Average values of total assets, owners' equity, and revenues from sales in the period 2018-2020 (in €)

Source: own calculations based on data retrieved from the financial database GVIN, 2021

**Table 2.** Test of normality distribution

Variables	Shapiro-Wilk test		
	Statistic	df	Sig.
Total assets	0.426	300	0,000
Owners' equity	0.414	300	0,000
Revenues from sales	0.464	300	0,000
EBIT	0.607	300	0,000
Net income	0.579	300	0,000
ROE	0.446	300	0,000
ROA	0.701	300	0,000
Number of employees	0.491	300	0,000

Source: own calculations based on data retrieved from the financial database GVIN, 2021

To achieve the aim of our analysis, we examined the distribution of the selected variables that we will use in our further statistical analysis. Table 2 shows the results of the Shapiro-Wilk test.

Using this test, we found that the distribution of the data deviated from the normal distribution, as the significance was less than 0.05. This violates one of the requirements that must be met if we are to use the paired samples t-test. Therefore, we will base our empirical analysis on non-parametric tests.

In the next step, we performed Friedman's two-way analysis of variance by ranks. We used this test to analyse whether there are statistically significant differences between the years of analysis. The variables considered at this point are total assets (sig. = 0.085), owners' equity (sig. = 0.00), revenues from sales (sig. = 0.00), EBIT (sig. = 0.00), net income (sig. = 0.00), ROE (sig. = 0.00), ROA (sig. = 0.00), and number of employees (sig. = 0.00). The results show that, except for total assets, the test is statistically significant for all other variables considered. This means that our further (more detailed) analysis is meaningful.

We then tested whether there are statistically significant differences when comparing variables for 2018 with 2020 and 2019 with 2020. For this purpose, the nonparametric Wilcoxon signed-rank test is used. The results of this test can be found in Table 3. At this point, we tested variables that have already been tested in the case of Friedman's two-way analysis of variance by rank.

**Table 3.** Results of nonparametric Wilcoxon signed-rank test

Pairs		Sig.
Total assets 2018	Total assets 2020	0.169
Total assets 2019	Total assets 2020	0.388
Owners' equity 2018	Owners' equity 2020	0.255
Owners' equity 2019	Owners' equity 2020	0.000
Revenues from sales 2018	Revenues from sales 2020	0.000
Revenues from sales 2019	Revenues from sales 2020	0.000
EBIT 2018	EBIT 2020	0.000
EBIT 2019	EBIT 2020	0.000
Net income 2018	Net income 2020	0.000
Net income 2019	Net income 2020	0.000
ROE 2018	ROE 2020	0.000
ROE 2019	ROE 2020	0.000
ROA 2018	ROA 2020	0.000
ROA 2019	ROA 2020	0.000
Number of employees in 2018	Number of employees in 2020	0.001
Number of employees in 2019	Number of employees in 2020	0.000

**Source:** own calculations based on data retrieved from the financial database GVIN, 2021

The results in Table 3 show that, with a few exceptions, there are statistically significant differences for most variables (sig. < 0.05). Only total assets proved to be not significant (2018 compared to 2020 and 2019 compared to 2020), while there were no statistically significant differences between the value of owners' equity in 2018 compared to 2020. The results show that the value of owners' equity changed significantly between 2019 and 2020 (Table 1 shows that the average value decreased). Significant differences between 2018 compared to 2020 and 2019 compared to 2020 were found in revenues from sales, EBIT, net income, ROE, ROA and number of employees. To understand the changes in the analysed variables in detail, Table 4 provides descriptive statistics for EBIT, net income, and the number of employees.

Table 4 shows that the average EBIT was positive in 2018 and 2019, while there was a significant decrease in 2020 when the average EBIT was negative. This means that in 2020, on average, the

analysed hotel companies did not generate profit from their core business (negative result from operating activities). The data suggest that hotel companies were not able to reduce operating costs as much as revenues from sales decreased due to the occurrence of Covid-19. This was most likely the case since a large portion of total costs in hotels are fixed costs. In addition, the average net income for 2020 was also negative. Both EBIT and net income increased in 2018-2019, while there was a significant decrease in 2020 (on average). This means that the negative net income had a negative impact on owners' equity. Based on this data, it is not surprising that the average number of employees decreased in 2020 compared to 2019. There was a significant increase in 2018 compared to 2019 (average of 3.31 employees per company), but this was followed by a significant decrease in 2020 (average of 8.82 employees per company). The data shows that 2020 was a difficult year for the analysed companies.

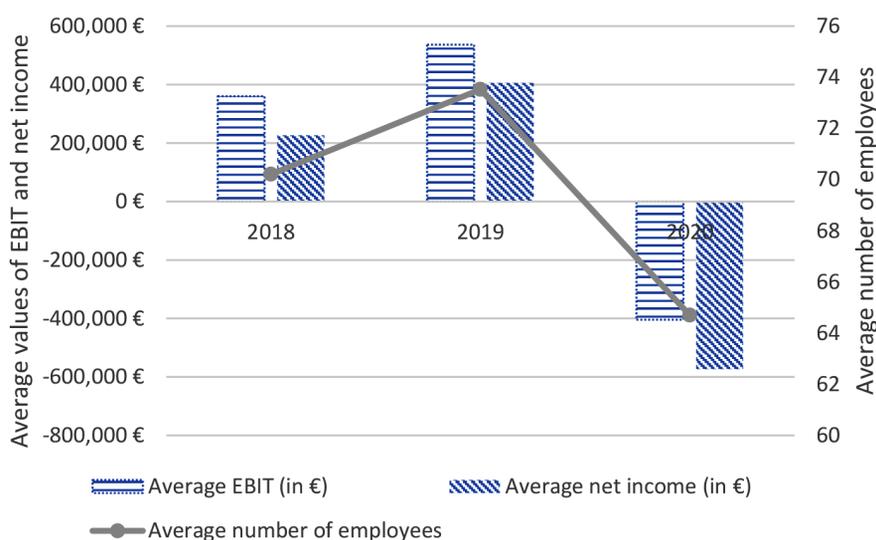
**Table 4.** EBIT, net income, and number of employees for the period 2018–2020 (in €)

Year	EBIT (in €)	Net income (in €)*	Number of employees
2018	Average value	360,301	70.21
	Standard deviation*	1,328,717	123.63
	Minimum	-5,122,586	0.07
	Maximum	8,163,000	738.13
2019	Average value	541,935	73.52
	Standard deviation	1,605,123	149.16
	Minimum	-2,941,459	0.17
	Maximum	12,745,000	1,178.60
2020	Average value	-404,319	64.70
	Standard deviation	1,131,723	141.30
	Minimum	-6,660,250	1.00
	Maximum	2,008,571	1,162.86

\* In 2018, 22 out of 100 companies recorded losses, in 2019 the number decreased to 16, while in 2020 the number increased significantly and was 68 (68% of companies in the sample).

**Source:** own calculations based on data retrieved from the financial database GVIN, 2021

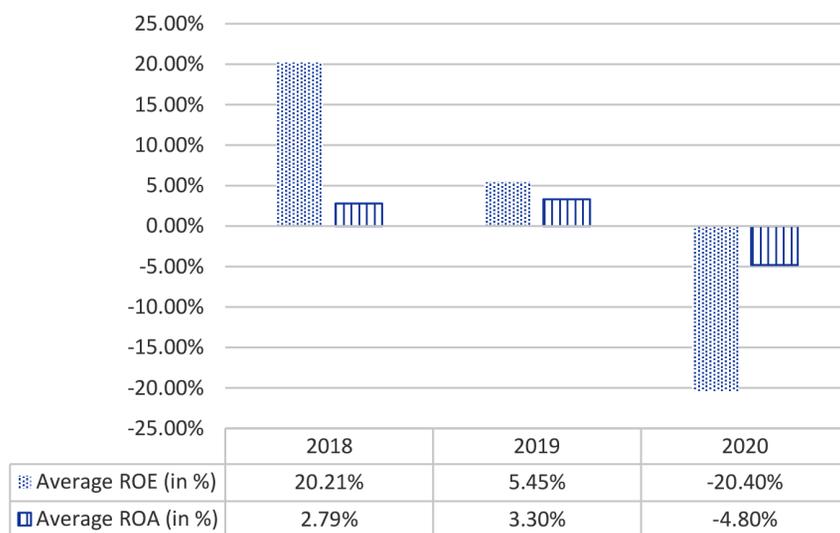
Figure 2 shows the average values of the variables presented in Table 4 in graphical form. All three variables show a significant decrease in 2020 compared to 2019.



**Figure 2.** Average values of EBIT, net income, and number of employees in the period 2018-2020

**Source:** own calculations based on data retrieved from the financial database GVIN, 2021

With our further analysis, we show that the owners of selected companies did not generate profit on their invested equity in 2020. In 2018 and 2019, the average ROE was positive, while in 2020 it decreased significantly and became negative (Figure 3). Previous research has already shown that the Slovenian hotel industry did not generate value for its owners (Stubelj & Jerman, 2019). The analysis was based on data from 2009 to 2018, which showed that the industry was not successful even before the pandemic. Since the epidemic has only worsened the results, the question is how many hotel companies will cease operations. Even though 2019 was the sixth consecutive record year for Slovenian tourism in terms of tourist arrivals and overnight stays, the performance of hotel companies in Slovenia does not reflect this.



**Figure 3.** Average ROE and ROA for the period 2018–2020 (in %)

**Source:** own calculations based on data retrieved from the financial database GVIN, 2021

According to the data of the Slovenian Tourism Organisation for 2020, the greatest decrease in overnight stays among Slovenian accommodation establishments was recorded in the capital (Ljubljana). The decrease amounted to 76%. Urban tourism in Ljubljana was the most affected, while accommodation establishments on the coast were the least affected (STO, 2021a).<sup>2</sup>

In the last part of our analysis, we divided the companies into two groups - those located in Ljubljana and those located outside Ljubljana. Using the non-parametric Mann-Whitney U-test for independent samples, we tested whether there is a statistically significant difference in ROE and ROA from 2020 between the two groups (hotel companies located in the capital and outside the capital). The results showed that the differences are significant (sig. for ROE = 0.013 and sig. for ROA = 0.031; in both cases sig. < 0.05). The average ROA and ROE for the two groups for 2020 show that the results for the capital are worse compared to all other hotel companies. A more detailed analysis of the data for hotel companies located in the capital also shows that in 2020, 80% of them recorded losses. In 2019, this share amounted to 12%.

The Slovenian government has taken several measures to support the Slovenian economy during Covid-19. In April 2020, the main measures implemented were (Government of the Republic of Slovenia, 2021): the state fully assumed compensation payments for workers waiting for work (for workers who could not work due to force majeure); in certain situations, employers

<sup>2</sup> Research of Spanish data has already shown that the consequences in terms of the number of tourists due to the occurrence of Covid-19 are not the same for all Spanish regions (Arbulú et al., 2021).

were exempted from paying social contributions for employees; subsidization of part-time work by the state; deferred payment of liabilities, state guarantees for business liquidity loans, and others. For the tourism industry, one of the most important measures implemented in 2020 was the issuance of tourist vouchers. Each adult citizen of Slovenia received 200€ and minors 50€. The state wanted to encourage citizens to travel within the country and not abroad. If the government would not take various measures to support the economy, the business results of hotel companies would be much worse. Given the very strong impact that Covid-19 had on the Slovenian hotel industry, the government could take additional measures to specifically help the tourism sector. Additional incentives would be needed for hotels characterized by urban tourism. These hotels experienced a significant decline in the number of foreign guests, which, however, could not be sufficiently replaced by domestic guests.

## 6. CONCLUSION

The crisis caused by the Covid-19 virus outbreak has far-reaching consequences for the tourism industry. In modern history, it has not yet happened that the number of tourists in all countries decreased so much at the same time, almost simultaneously. The review of the theory has shown that hotel companies are facing great challenges. Hotels and similar establishments recorded the sharpest decline in the number of overnight stays, while the decline in other lodging establishments was smaller. Countries, where the share of foreign guests was significant before the appearance of Covid-19, are under additional pressure, Slovenia is one of them.

With our analysis, we found that there is a statistically significant difference in the performance of the largest Slovenian hotels between 2019 and 2020. The value of assets of hotel companies in the sample has not decreased on average, but the value of owners' equity has decreased significantly, and the amount of revenues has decreased sharply. Net income was negative on average, as were ROE and ROA. The number of employees decreased significantly on average. We also found that performance was significantly worse at hotels in the capital, which are characterized by urban and congress tourism.

Hotel companies face many challenges. They must adapt to the new realities - the rules of social distancing, comply with all the safety requirements, and at the same time face major challenges in retaining workers and focusing more on domestic guests, at least until international tourist arrivals return to pre-crisis levels. One of the challenges for Slovenian hotel companies is certainly to retain employees. Numerous employees have many years of experience in this industry and if they leave, it will be difficult to bring them back. So far, data shows that the average number of employees per company has already decreased in 2020 compared to 2019. Since many companies are currently still receiving government support, we wonder what will happen once the government incentives are eliminated.

The next challenge for Slovenian hotels in the short term is to focus on domestic guests. As the number of international tourists has decreased significantly, this shift could help hotels increase their revenues. Based on the data presented for Slovenia, we claim that the Slovenian government has introduced good measures to promote domestic tourism. In the future, further measures (such as marketing campaigns and financial incentives) should be taken to attract new segments of domestic tourists. Promotional campaigns (using modern technology) should be coordinated at both the national (national authorities) and local (municipalities) levels. In this way, part of the loss of income from foreign tourists would be compensated by domestic tourists.

Given the many challenges facing the tourism industry, there are many opportunities for future research. Research can focus on the analysis of government policies in the field of tourism (job preservation measures, the impact of tourist vouchers), the impact of the epidemic on tourism workers, the changes in tourists' travel habits (travellers' expectations, changes in preferences for destinations, tourists' consumption) and, consequently, the need to change tourism companies' advertising and promotional activities at the national and local levels, and, last but not least, opportunities for more sustainable tourism.

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