Business Structure of Marinas as Protection against COVID-19

Tihomir Luković[a], Ante Anić[b], Srđan Gjurković[c]

The threat of COVID-19 has affected all economies of the world, including those of the European Union and Croatia, as well as the sector of nautical tourism. The threat has appeared suddenly, and the responses to it have been varied. The assistance provided by EU member state governments varied, and the Croatian government implemented two sets of measures that were not particularly developmental, but rather focused on preserving jobs and filling the budget. Consequently, the burden fell on entrepreneurs, including marinas, which, apart from the state-owned marina chain ACI, are classified as small and medium-sized enterprises (SMEs). Looking at the business performance results for 2020, marinas experienced negative results, similar to other entrepreneurs. However, due to their specific business structure, the negative results for certain marinas were significantly lower. In particular, marinas with five anchors, which have a wide and diversified product range, performed worse than marinas with two anchors. However, the use of management tools and elements of modest controlling in the management of the higher category marinas minimised the negative results for the "other" product group in the service portfolio. Since the results for 2020 and the forecasts for 2021 are known, the objective of this research is to evaluate the segments of the marinas' business structure that have been crucial in reducing the negative results. The research hypothesis states that the specific business structure of marinas has a significant impact on lower negative earnings than expected. The method of sampling and approximating the size of marinas and berths is applied based on statistical data through basic comparative analysis. This is only preliminary research based on limited dataset.

KEY WORDS
~ COVID-19 in nautical tourism
~ Measures of the Croatian Government
~ Business structure of marinas
~ Marina business
~ Charter
~ Controlling-oriented management

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1. INTRODUCTION

Business 2020 will be marked in all economies of the world, including the EU and Croatia, as a year burdened by the threat of COVID-19, which has left a deep negative impact on the financial results of most businesses. This threat has changed the way of life and doing business that we have become accustomed to, and a return to the old ways is unlikely to be easily realised.

Negative business results in 2020/2019 vary among industries, sectors, and business activities, and there are many reasons for that. In tourism and nautical tourism, the negative financial impact, in terms of comparing 2020/2019, differs significantly depending on the types of nautical tourism activities. The distance from attractive tourist destinations due to the cessation of air travel proved to be a particularly unfavourable factor, and cruising experienced the docking of cruise ships in ports worldwide. All of this has had an impact on the operations of marinas and entities associated with them.

Therefore, the purpose of this study is to analyse the factors contributing to the poor business performance of marinas, as

well as charter companies connected to marinas. The goal of this research is focused on assessing the internal and external forces that prevent a worse business performance in 2020 than expected. The research hypothesis states that marinas contain defensive mechanisms in the form of a business system, but this does not extend to the associated entities within the marina. The sample method and approximation of marina and berth sizes, based on statistical data, will be used for a fundamental comparative analysis.

The importance of this topic can be illustrated by search of relevant databases, such as Web of Science Core Collection (WoSCC). Search of "Business structure marina as protection against COVID" for all fields has resulted in 0 paper, whereas the search "Business structure marina" AND „COVID-19" has resulted in twelve papers. Unfortunately, they are not all related to the topic of the paper, except for one (Yakovlev et al., 2023), giving us a hope that this paper might present a small contribution towards this field of reseach.

2. NAUTICAL TOURISM

Nautical tourism is a subtype of tourism that plays an important role in the Croatian economy, especially in the coastal environment. Local development along the Croatian coast often relies on, or is supported by, nautical tourism. In order to understand what is meant by nautical tourism, apart from its definition, it is necessary to consider its classification. The extended scientific definition encompasses the structure of nautical tourism (Luković et al., 2014), while a shorter definition explains its basic characteristics, stating: "Nautical tourism is a multifunctional tourist activity with a strong water/maritime and seafaring component." (Luković et al., 2015).

2.1. Marinas, Ports of Nautical Tourism

The significance of nautical tourism for the economy of the coastal part of Croatia was recognised under the pressure of scientific research, and the Croatian administration responded by adopting the first Development Strategy for Nautical Tourism 2006-2016 in 2006. Subsequently, numerous laws and subordinate regulations were enacted. However, over time, there has been an increasingly noticeable deviation from nautical tourism as a tourism reality, and from a research perspective, it is necessary to disregard the latest regulations (Luković, Piplica i Hruška, 2021).

Considering the scientific aspect, the basic classification of nautical tourism in Croatia was established as early as 2007 (Luković, 2007), which remains relevant in Europe and beyond to this day. However, since 2007, this classification has been expanded and further specified, reflecting the advancements made in the field (Luković et al., 2014).

<table>
<tr><th colspan="5">NAUTICAL TOURISM INDUSTRY</th></tr>
<tr><th>1. SECONDARY activities</th><th colspan="3">BASIC TYPES AND SUBSYPES OF NAUTICAL TOURISM</th><th>2. SUPPLEMENTARY activities</th></tr>
<tr><td rowspan="3">- Diving tourism ..
- Surfing,
- Rafting,
- submarine
- Rowing,
- Fishing tourism,
- Robinson tourism,
- Lighthouse tourism,
- And others.</td><td colspan="2">Doing business at the port of n.t. and port-related activities</td><td colspan="2">Cruising</td><td rowspan="3">- Dry dock
- Shipbuilding of mega yachts,
- Production of small vessels
- Production of equipment for n.t.
- Skipper services
- Information services,
- Sailing schools,
- Research institutes and educational centres,
- And other services</td></tr>
<tr><td>Nautical tourism ports:</td><td>Charter</td><td>Little shippers (local cruising)</td><td>Ports for receiving large cruisers</td></tr>
<tr><td>• Anchorage
• Mooring
• Marinas, by category</td><td>• Motor boats with and without skipper
• Sailing boats with and without skipper</td><td>• Day trips
• Multi-day excursions with accommodation service</td><td>a) Large city ports:
• Cruise Europe members
• Non-members
b) Other small local ports</td></tr>
<tr><td colspan="5">BASIC FIELD OF RESEARCH</td></tr>
</table>

Figure 1.
Nautical tourism classification model, according to the principle of basic activities (after 2019).
(Piplica and Luković, 2021).

As may be seen from the classification, the category of "land-based boat parking," previously referred to as (1) dry marina and (2) boatyard in previous regulations, has been removed from the group of nautical tourism ports because it does not pertain to the ports. Thus the divergence between the scientific research of nautical tourism and the official legislation becomes increasingly evident, thereby hampering the development of nautical tourism in Croatia, as well as the overall economy.

In other words, after the National Classification of Activities (NKD) in 2002, subsequent classifications have eliminated the ability to gain insight into the operations of marinas and nautical tourism ports. According to the latest documents, marinas have been merged into the group of "Other amusement and recreational activities," while chartering is placed in the group of "Rental and leasing of water transport equipment." Therefore, according to the latest updated version of the NKD (National Classification of Activities, 2007, Official Gazette 102/2007), marinas are included in two groups within the category "R-Arts, entertainment, and recreation," specifically under subcategory R. 93.2 - amusement and recreational activities, as well as under subgroup 93.29 - Sports activities and other amusement and recreational activities. Consequently, data on marinas have become unknown to the public and to researchers. The link between science and government administration has disappeared, which has proved detrimental to the development of marinas, nautical tourism ports, and charter.

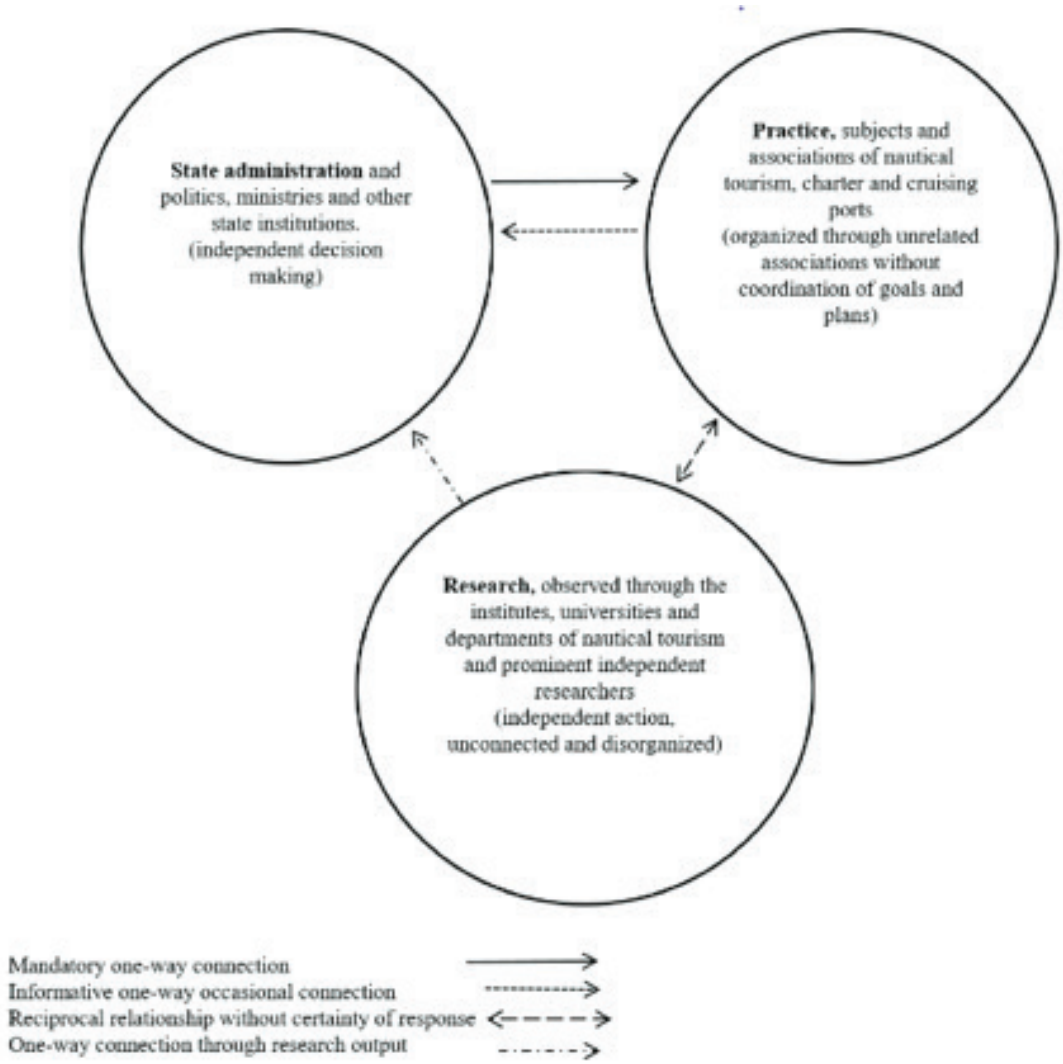

Figure 2.
Key stakeholders in the development of nautical tourism ports and nautical tourism. (Luković, Piplica, and Hruška, 2021).

Regardless of the numerous limitations imposed by the Croatian government administration on the research of nautical tourism, especially concerning marinas, the research must continue. In the absence of official sources, which have been destroyed, researchers rely on estimations, which complicates the research process and makes the results somewhat less realistic. However, with the condition of experience and knowledge of nautical tourism, the conducted research is generally accurate and applicable.

2.2. (In/with) Marina Business

Looking at the operation of marinas and entities within marinas during COVID-19, a new concept, called "marina business," has emerged, referring to the business connection between charters and marinas. This has prompted a need to refine the existing classification of nautical tourism. Why is that?

<table>
<tr><th colspan="5">NAUTICAL TOURISM INDUSTRY</th></tr>
<tr><th>SIDE</th><th colspan="3">BASIC TYPES</th><th>SUPPLEMENTARY</th></tr>
<tr><td rowspan="2">- Diving tourism,
- Surfing,
- Rafting,
- Diving,
- Rowing,
- Fishing tourism,
- Robinson tourism,
- Lighthouse tourism,
- and others.</td><td colspan="2">Marina business, operation of nautical tourism ports and in ports of nautical tourism</td><td colspan="2">Business with cruisers</td><td rowspan="2">- Dry dock, keeping the vessel on dry land, much further from the sea
- Shipbuilding of mega yachts,
- Production of small vessels,
- Production of equipment for nautical tourism,
- Skipper services,
- Information services,
- Sailing schools,
- Research institutes and educational centers,
- And other services.</td></tr>
<tr><td>Ports of nautical tourism</td><td>Charter</td><td>Cruisers</td><td>Ports for accepting cruisers</td></tr>
<tr><td></td><td>•Anchorage
• Mooring
Marines*
Sorted by categories</td><td>• Motor yachts
- with a skipper
- without a skipper
• Sailing yachts:
- with a skipper
- without a skipper</td><td>•great world cruisers
• local cruisers:
- daily cruising
- multi-day cruising</td><td>Ports for large cruisers:
- specialized ports that are members of "Cruise Europe" and other associations
- not specialized ports
Ports for local cruisers:
- ports in small and large towns
- island ports</td><td></td></tr>
<tr><td colspan="5">RESEARCH SUBJECT</td></tr>
</table>

Figure 3.
Nautical tourism classification model according to the principle of basic activities (after 2019). (Luković, Piplica, and Peronja, 2022).
* the categorisation of marinas is not uniform in Europe; in Croatia it was changed in June 2008, in the new set of rules of 2019 it has remained the same again, but it has not been accepted in practice yet; the classification of nautical tourism ports according to the new "Regulations on the categorisation of nautical tourism ports and the classification of other facilities for the provision of mooring services and the accommodation of vessels" (Official Gazette 120/19, adopted on December 9, 2019) is not acceptable and should therefore be avoided in scientific research.

Namely, as has been known, Croatia boasts the largest fleet of charters in the world. In terms of capacity, the Croatian charter fleet officially has 4,378 registered yachts and boats (Source: theworldnews.net, accessed on December 26, 2020). According to official data, there are 2,762 registered charter companies in Croatia, out of which 930 are active (Original data from the Ministry of the Sea, Transport, and Infrastructure of the Republic of Croatia, accessed on December 27, 2020).

According to the data published by the Croatian Chamber of Economy (HGK) on the internet, charter companies in Croatia rent out 1,956 boats, 2,166 sailing yachts, and 256 motor yachts. In terms of the number of nights spent by nautical tourists in charters, the Split-Dalmatia County has the highest representation with 45% of charter nights (Croatian Tourist Board, 2019).

However, in the conditions of COVID-19, the charter business has proven to be vulnerable, with a decline in business observed from the northern regions by approximately 35% compared to 2020/2019, and a decline of over 65% in the southern regions of Croatia. Simultaneously, the Croatian charter fleet is located in marinas, and the category of marinas is associated with the image of charter companies. In this combination, which neglected cooperation and mutual dependence, marinas increased the prices of berths for charter companies by 10-20%. Despite the successful performance of charter businesses, they have accepted these increases. However, COVID-19 in 2019 and 2020 exposed all the shortcomings of such a relationship. Specifically, in their approach to the government in 2019, seeking special assistance measures, both associations (marinas and charters) failed to find unity and acted separately, resulting in defeat. The marinas stated, "If the government accepts our demands for measures, then we will help the charters," but the government did not approve their specific measures.

The question remains open as to whether both groups will realise that better cooperation and a joint approach to the government are beneficial for everyone.

3. COMMERCIAL MARINAS AND MARINA BUSINESS IN 2019

Considering that the state, with the new National Classification of Activities (NKD) and subsequent classification of Croatian activities, has prevented access to original data on marinas, it was necessary to conduct a separate analysis and estimate their number. It should be noted that marinas are entrepreneurial projects that, without exception, except for the state-owned ACI (Adriatic Croatia International Club), fall under the SME (Small & Medium Enterprise) category. Through a specific study (Luković, Piplica, and Hruška, 2021), the capacities of private commercial marinas were estimated.

Table 1.
ACI marinas and private marinas, based on their size (total number of berths), adjusted to entrepreneurial criteria, and categorised accordingly. Source: author's calculation.
(Luković, Piplica i Hruška, 2021).
Note: Considering the category, marinas with three and four anchors are classified as marinas of the second category.

ACI marinas				Total ACI marinas		Private marinas	
Category	till 200	200-400	over 400	Number	structure	Number	%
1	-	1	1	2	9.00	6	15.4
2	5	4	3	12	54.6	18	46.2
3	6	2	-	8	36.4	15	38.4
∑	11	7	4	22		39	100
∑ %	50.0	31.8	18.2		100		

Therefore, when we "cleanse" the report entitled "Nautical Tourism, Capacities and Operations of Nautical Tourism Ports in 2019," Zagreb 2020, by excluding ports that are not marinas, boatyards, and dry marinas, we should consider anchorages and berths as nautical tourism ports. This way, we arrive at the data that Croatia has a total of 61 marinas. Out of these, 22 are ACI marinas, and 39 are private commercial marinas. What is important and constitutes the main source of income for marinas are berths, as well as services.

The analysis of the structure of ACI marinas, in terms of the number of marinas or berths, indicates the dominance of the second category of marinas, which can also be observed in private marinas.

Considering the size of marinas, the group of "large marinas" with over 400 berths accounts for only four marinas in ACI (18.2%), which comprise 33.7% of ACI berths and cover the first and second category of marinas. Additionally, the smaller and medium-sized marinas, which constitute 81.8% of ACI marinas, have a lower number of berths (66.3%). These observed relationships among ACI marinas, if transferred to private marinas, provide insight into the subsequent structure of berths in private marinas.

Table 2.
ACI marinas and private marinas, categorised by size (total number of berths), based on adjusted entrepreneurial criteria.
Source: author's calculation (Luković, Piplica i Hruška, 2021).

fr	ACI berths					Private marinas	
	Number			Total	Structure %		
	Till 200	200-400	Over 400			Number	Structure %
1		318	515	833	14.2	6	15.38
2	875	1,086	1,468	3,429	58.3	18	46.15
3	933	687	-	1,620	27.5	15	38.46
∑	1,808	2,091	1,983				
∑ %	30.8	35.5	33.7	5,882	100	39	100

Table 3.
ACI marinas and private marinas, categorised by size (approximate total number of berths), based on adjusted entrepreneurial criteria.
Source: author's calculation (Luković, Piplica, and Hruška, 2021).

Category	ACI berths					Berths of private marinas				
	Number				Structure %	Approximation				Structure %
	Till 200	200-400	Over 400	∑		Till 200	200-400	Over400	∑	
1	-	318	515	833	14.2				1,470	15.0
2	875	1,086	1,468	3,429	58.3				5,880	60.0
3	933	687	-	1,620	27.5				2,450	25.0
∑	1,808	2,091	1,983	5,882		4,410	2,450	2,940	9,800	
∑%	30.8	35.5	33.7		100.0	45.0	25.0	30.0		100.0

Therefore, in order to obtain data on the berths of commercial marinas, the analysis of ACI (Adriatic Croatia International Club) was used, as well as the research conducted in December 2019 ("Benchmaringa prosinac 2019") by the Faculty of Tourism and Hospitality Management in Opatija, 2020. Based on these studies, the structure of private marinas and berths was established. By approximating the sizes of marinas and berths, the structure of private marinas according to categories and sizes was determined. According to these calculations, Croatia has approximately 9,800 berths, distributed among 39 private marinas, divided into three groups based on size and three categories of marinas, as shown in Table 3.

Considering the entities of the marina business, namely the marinas and associated charters, their basic characteristics will be explored and compared. Due to the unavailability of original data, this segment of the research relies on information from the Croatian Chamber of Economy (HGK), which has data on charters categorised under the group "Renting and leasing of water transport equipment" (N7734). Furthermore, marinas will be examined based on the data obtained from official sources and partially through approximation from a smaller sample of private commercial marinas.

Table 4.

Basic comparative performance indicators of marina business, Croatian marinas, and charters in 2019 according to the SME methodology and the experiential SME method (in thousands).
Source: author's calculation.

CHARTER					
According to the entrepreneurship criterion	Micro	Small	Medium	Big	Total
Fixed assets (in 000 HRK)	2.214.073	668.993	394.046		3.277.112
Fixed assets (as a percentage)	67,56	20,41	12,03		100,0
Profit/loss (in thousands of HRK)	- 99.698	13.364	7.044		- 79.290
Total revenue (in thousands of HRK)	890.446	917.252	577.241		2.384.939
Total revenue (in thousands of euros)	118.726	122.300	76.965		317.992
Total revenue (in %)	37,34	38,46	24,20		100,0
Employees	757	686	387		1.830
Employees(in %)	41,37	37,49	21,14		100,0
Number of companies	1.399	55	7		1.461
MARINAS by size criterion					
According to the entrepreneurship criterion	Micro	Small	Medium	Big	Total
Long-term assets (in 000))*****	675.000	375.000	450.000		1.500.000
Long-term assets (as a %)	45.0	25,0	30,0		100,0
Total revenue (in 000 HRK)****	238.630	211.750	364.050		814.430
Total revenue (in 000 EUR)****	31.817	28.233	48.541		108.591
Total revenue (%)****	29,3	26,0	44,7		100,0
Employees***	534	474	814		1.822
Employees (%)***	29,3	26,0	44,7		100,0
Number of berths (based on a sample)**	7.056	3.920	4.705		15.681
Berth structure**	40	30	30		100,0
Number of marinas*	35	16	10		61
Marina structure*	57,6	24,2	18,2		100,0

Note:
** estimation based on a sample from "Benchmarking December 2019" and the number of marinas in the sample, which included 33 marinas.*
*** estimation based on a sample from "Benchmarking December 2019" and the number of berths in ACI marinas and private marinas, with an approximation of the average. It was calculated that marinas without dry marinas have 15,681 berths.*
**** estimation based on a sample from "Benchmarking December 2019," but considering the berth structure, assuming a strong correlation between berths and employees.*
***** estimation based on a sample from "Benchmarking December 2019" and the number of berths in the sample, which amounted to 17,421 berths. The second assumption is the average berth price across marinas of all categories, which is accurate, especially for annual berths that dominate the revenue structure in many marinas, meaning the influence of prices can be neglected.*
****** estimation based on a small sample of private marinas.*

Table 4, in the revenue and asset presentation of marinas and charters, shows that the revenue of charters is twice as high as the revenue of marinas, while the long-term assets of charters are only one times higher than the assets of marinas. However, when reduced to the unit of measure, this difference diminishes, and one million kuna of long-term assets of charters generates higher revenue than a million kuna of long-term assets of marinas. In other words, one million kuna of marina revenue is achieved with 1.8 million kuna of long-term assets, while one million kuna of charter revenue is achieved with 1.4 million kuna of long-term assets. It can therefore be concluded that charters, in terms of the relationship between assets and revenue, are in a slightly more favourable position than marinas, although the difference is not significant. When comparing revenues by the criterion of company size, it can be observed that there is an 8% higher proportion of small companies, specifically micro-sized companies, in charters, which utilise as much as 67.56% of the long-term assets of charters. This group of micro entrepreneurs in charters generates a negative operating result of 99,698 thousand kuna, which affects the overall charter group, resulting in a negative outcome of as much as 79,290 thousand kuna loss.

The analysis of other comparative indicators reveals notable differences between Croatian marinas and charters. For instance, in charters, there is 1.8 million kuna of long-term assets and 1.3 million kuna of revenue per employee. In contrast, marinas have 0.8 million kuna of long-term assets and 0.447 million kuna of revenue per employee. Based on these indicators, related to the number of employees, it can be concluded that charters operate somewhat more successfully. However, in order to draw more accurate conclusions regarding charters, and to assess the structure of their group, which faced the challenges of COVID-19 in 2020, it is necessary to analyse the assets and revenues based on the size of charter companies.

Considering the average number of employees in the structure of charter companies, based on their size, one charter company employs 1.2 employees, and on average, one charter company operates with only three vessels. Interestingly, the analysis based on the size of charter companies shows that small and medium-sized companies have better business indicators than the average of the group. For example, seven medium-sized charter companies employ an average of 55 employees and generate 1.5 million in revenue per employee annually. At the same time, micro companies, numbering 1,399, generate 1.2 million in revenue per employee. In terms of assets and revenues, the seven medium-sized companies with one thousand kuna of long-term assets achieve 1.5 thousand in revenue, while micro companies with one thousand kuna of long-term assets generate 0.4 thousand in revenue. As a result, small charter companies operate at a loss.

Therefore, if the large Croatian charter companies are observed through SMEs, it can be concluded that the charter sector is dominated by seven medium-sized companies, along with the successful operation of 55 small companies. At the same time, micro charter companies face business challenges and operate with significant losses. Undoubtedly, the operation of charter companies is complex, specific, and highly sensitive to market conditions, but it is functionally connected to marinas, and its development depends on the development of marinas. In other words, if we include the ACI berths in the analysis, the charter fleet, according to these analyses, covers approximately 28% of the berths in Croatian marinas, indicating a high degree of business interdependence.

In conclusion, the financial analysis of marina operations shows slightly better results, at least in terms of losses. However, the success of charter operations needs to be examined with respect to the size of charter companies, as this significantly changes the picture of performance. The analysis of marina revenue shows that, on average, each employee in marinas generates 447 thousand kuna in revenue. When viewed through the SME criterion, micro-sized marinas generate 441 thousand kuna in revenue per employee, small-sized companies generate 447 thousand kuna, and medium-sized companies, or marinas, also generate 447 thousand kuna in revenue. Considering the revenue per employee in marinas, it can be concluded that there is a uniformity of revenue based on the size of the marinas.

Given the business operations of marinas and charters in the conditions of the COVID-19 crisis, questions arise regarding their business protection considering market sensitivity.

4. THE STRUCTURE OF MARINAS AS PROTECTION AGAINST COVID-19

What we have learned through the threat of COVID-19 contributes to the theory of risk management and its connection to controlling. The task of controlling is to predict the emergence of threats and contribute towards research in risk management when assessing the strength and nature of upcoming problems. However, considering the underdeveloped state of controlling in Croatia, both at the micro and macro levels, the threat of COVID-19 was not anticipated. Croatian controlling has completely failed, which was to be expected given its utilisation in management. Therefore, after the impact of COVID-19 on the life and economy of Croatia, the measures implemented by the Croatian government through two stimulus packages only superficially mitigated the negative effects in entrepreneurship. In such a delayed reaction, the Croatian government attempted to protect employee jobs, while business entities, industries, and entrepreneurial groups, such as marinas and charters, were left to fend for themselves. This opened up a previously neglected aspect of risk management, which is business structure or, more specifically, in a market sense, refers to a particular aspect of business diversification. In other words, certain types of business

activities within their business structure have profit centres that withstand many external threats, which we refer to as "sensitivity of the business structure".

In order to explore the sensitivity of two subjects in the marina business, marinas and charters, to the threat of COVID-19, it is necessary to take a sample on which the results of the threat will be examined, in the form of business performance in 2020. ACI, as a chain of state-owned marinas, and the commercial private marina "Frapa" Rogoznica, were chosen as a large and transparent sample. Based on the business results for 2019 and 2020, the difference in business performance can be assessed, as well as the segments of the marina business structure that are relatively resilient to the threat of COVID-19.

Table 5.
Business results of ACI and Marina FRAPA for 2019 and 2020, observed through the fundamental segments of the business structure.

Indicators	ACI Opatija		Difference	Index 2020/ 2019.	Marina Frapa, Rogoznica		Difference	Index 2020/ 2019.
	2019.	2020.			2019.	2020.		
Total berths	5,913	5,865	-48.0	99.2	650	612	-38	94.2
Berths, land	586	586	0.0	100.0	150	150	0	100.0
Berths, sea	5,327	5,279	-48.0	99.1	500	462	-38	92.4
Berths for charter companies *	-	-	-	-	28%	28%	0	100.0
Marina area, total (m^2)	1,346,892	1,346,892	0.0	100.0	183.834	183,834	0	100.0
Surface area under concession (m^2)	1,346,892	1,346,892	0.0	100.0	166.062	166,062	0	100.0
Permanent berth * points/ days	1,353,801	1,322,411	-31,390	97.7	No	No	0	-
Transit*	100,543	59,848	-40,695	59.5	No	No	0	-
Permanent employees	341	340	-1	99.9	101	101	0	100.0
Seasonal employees	61	43	-18	70.5	45	20	-25	44.4
Note for Frapa: We do not have data on permanent berths and transient berths per boat/day								

As can be seen from Table 5, all physical indicators of ACI and Marina Frapa did not change significantly in 2020 compared to 2019, except for the realised boat/days of transit berths, which were simply halved for both ACI and Frapa. This can be observed for Marina Frapa in the revenue figures in Table 6, as we do not have the data for boat/days. The fact that transit berths were unfavourably affected emphasises the need for an analysis of the financial results and a comparison between 2020 and 2019.

From the comparative performance indicators of ACI and Frapa in 2020, as compared to 2019, it can be concluded that the state-owned marina chain ACI experienced a significant catastrophe in terms of profitability, while Frapa had unfavourable differences ranging from 5% to 15% in various aspects in 2020, compared to 2019. The reasons for ACI's unfavourable results can be attributed to the fact that 63.5% of ACI's revenue comes from transit, and transit revenue declined by over 50%. Additionally, ACI's charter revenue structure, which accounts for 30.8% of their total revenue, was also unfavourable, with a physical decrease of 11% in charter activities. Therefore, ACI's charter-related issues should be further investigated.

On the other hand, Frapa's business structure is somewhat different and more resilient to the impact of COVID-19 in 2020. Transit berth revenues in Frapa accounted for only 9.7% in 2019, so the approximately 50% decline in this segment did not significantly jeopardise the overall revenue of the marina. Frapa experienced a significant decline of around 50% in catering services and an even larger decline of 125% in "other services for boaters." However, these two revenue categories account for only 14% and 3% of the overall revenue structure respectively, which did not significantly impact the marina's revenue.

In conclusion, the business structure of Frapa marina is significantly more resilient to the impact of COVID-19 as compared to ACI, whose business structure is more market-sensitive and therefoe more vulnerable. It is interesting to analyse the key segments of Frapa marina's structure, as well as the financial results derived from it.

Table 6.

Basic Financial Indicators of ACI and Frapa for 2019 and 2020. Source: Original Results of ACI and Frapa.

Indicators (in thousands HRK)	ACI Opatija		Difference	Index 2020/2019.	Marina Frapa, Rogoznica		Difference	Index 2020/2019.
	2019.	2020.			2019.	2020.		
Total Revenues	237,410	185,532	- 51,878	78.1	52,085	49,308	- 2,777	94.7
Profit Before Tax	39,176	517	- 38,659	1.32	13,230	12,772	- 458	98.5
Total Payments to the State and County*	19,811	9,587	-10,224	48.4	17,269	15,679	- 1,590	90.8
VAT 25%*	63,042	55,200	- 7,842	87.6	13,574	12,820	- 754	94.4
VAT 13%	80	70	-10	87.5	642	606	- 36	94.4
Parafiscal Charges*	1,309	1,272	- 37	97.2	2,679	2,266	- 413	84.6
Fixed Concession (m2)	1,754	1,889	135	107.7	83	83	0	100.0
Variable Concession (%)	5,781	4,627	-1,154	80.0	1,110	812	- 298	73.2

Note for ACI: Total payments to the state and county can be seen in the balance sheet under the liability section. For short-term obligations for taxes, contributions, and similar payments, see Table 4. Parafiscal levies include contributions for pension insurance, health insurance, tourist membership fees, contributions for forests, tourist taxes in 2019, and similar items.

Table 7.

Key indicators of the business structure and performance of Frapa Marina, Rogoznica in 2019. (Source: prepared by the authors.)

	Segments of the business structure	2019.						2020.	
		Revenue	Revenue structure	Employees	Government contribution	Government Contribution Structure	Profit before taxation	Income	Income Structure
1	Berths in the marina	28,442,613	54.6	30	7,622,640	59.0	9,414,136	27,719,735	57.6
2	Vessel services	8.756.339	16.8	25	2,312,552	17.9	2,240,988	8,987,646	18.7
3	Hospitality	4.469.893	8.6	25	1,173,470	9.1	-1,603,984	2,193,089	4.6
4	Special services	699.964	1.3	6	177,690	1.4	349,982	773,656	1.6
5	Rental	5.798.490	11.1	2	1,037,521	8.0	1,500,000	4,339,296	9.0
6	Sales, Yacht club	36.974	0.1	0	9,982	0.1	3,600	32,436	0.1
7	Financial income	2.791.073	5.4	0	-*	-*	1,799,393	1,799,393	3.7
8	Currency exchange	102.988	0.2	1	2,060	0.0	60,000	63,559	0.1
9	Other miscellaneous income	987.576	1.9	0	-*	-*	-*	2,221,560	4.6
10	Total:	52.085.910	100.00	101	12,927,317	100.00	13,304,252	48,130,369	100.0

*Note: The revenues from anchorage and hotel are not included in the revenues of Frapa Marina, Rogoznica. * = there is as yet no relevant data as it has not been elaborated in the marina analysis. Italics indicate a decrease in 2020 compared to 2019.*

By analysing the business structure of Frapa marina, it can be concluded that berths and services, accounting for 71.4v of revenue in 2019 and 76.3 % in 2020, constitute the majority of its business activities' income. In 2020, all other revenues, except for services, decreased, but it only had a minor impact on a tolerable profit decrease of just 3.5 %. The positive aspect for Frapa marina, as well as other highly categorised marinas, is chartering, which accounted for approximately 30 % of total revenue in 2019 and over 70 % of berth-related revenue. The share of chartering in Frapa's revenue remained unchanged in 2020, which kept the marina's income very close to the 2019 level. However, chartering experienced significant losses, which the government ignored, and marinas were not interested in absorbing part of the chartering losses. Therefore, all hopes are placed on the ongoing year of 2021. With its short-term policy of filling the national budget, the government maintained its revenue from marinas at 27 % in 2019 and 2020, while, for example, German marinas contributed 0 % to the government during the same period. Hence the favourable relationship between the government and marinas, as well as chartering, is crucial to their development.

5. CONCLUSION

By conducting a comprehensive comparative analysis of the structure of marinas and charter companies, it can be concluded that there are certain similarities, with a note that micro charter companies perform significantly worse than small and medium-sized charter companies. This is not the case with marinas, as they all fall under the SME (Small and Medium-sized Enterprises) entrepreneurial group. The analysis of market stability in marinas and charter companies has shown a high degree of vulnerability for charter companies compared to marinas, as demonstrated by the 2020 tourist season. In contrast to charter companies, marinas have demonstrated a high level of protection against the COVID-19 threat, which is attributed to their favourable business structure.

A comparison between the state-owned marina chain ACI and the private commercial marina Frapa in Rogoznica has revealed a significantly greater resilience to threats in Frapa Marina due to its better-established business structure. This can be attributed to the low structure of transit and revenue from transit, as well as the high structure of charter revenue. It is important to highlight the lack of understanding from the government administration towards charter companies and the reluctance to provide assistance to marinas. Providing support to marinas from the government would encourage marinas to invest in charter activities and foster a better understanding of charter-related issues among marinas. The need for solidarity is essential, not only for entities in the so-called "marina business", but also for all industries that are interconnected and production-dependent, as demonstrated by the COVID-19 pandemic. Therefore further research in nautical tourism is crucial, as it contributes towards a higher level of knowledge at the macro level in Croatia.

CONFLICT OF INTEREST:

Authors declare no conflict of interest.

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