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Marina Business in Relation to Development

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ABSTRACT

Marina Business, or *Marina in&with Business* is a new term in the terminology of nautical tourism, introduced in Croatia in the conditions of COVID-19. In other words, the COVID-19 pandemic has exposed the old, disorganized relationships of entities operating in and with marinas. The damaged relations during the pandemic showed all the illogic in their existing relations as well as the damage to the better results of Croatian charters and ports of nautical tourism, especially marinas. The fact that the state distanced itself from the economy and the development of entrepreneurship was reflected in the development of nautical tourism in Croatia, which developed independently in all its sub-forms after the Homeland War. Favourable post-war opportunities on the market of nautical tourism offer, i.e. lagging in the development of nautical tourism capacities and high dynamics of tourism demand, favoured nautical tourism enterprises that achieved positive business results until the outbreak of the COVID-19 pandemic. If the problem of *cruising* is excluded, both large world cruises and small domestic cruises, nautical tourism ports, especially marinas and charters, developed dynamically, but with the intention of doing profitable business, the problems gradually deepened. At the same time, the relationship problem could not be solved due to the good mutual business results. The emergence of the pandemic in 2020 showed the other side of the cooperative relationship between charterers and marinas, which for both subjects led to the distancing of the state in aid programs that should have been specific and not general for subjects of all types of businesses. In addition to the problems of charters and marinas, it is also necessary to consider the activity of skippers, who are of great importance for Croatian charter, which is considered the largest in the world. The services of skippers are used by about 40% of sailors, and they are an important segment for the success of the Croatian charter business. It should be noted here that in the further paragraphs of this paper the terms nautical tourism ports and marinas will be used, and this is because charter is mainly located in marinas and only to a lesser extent in other forms of nautical tourism ports, so it is also mentioned in nautical tourism ports. Thus, the relationship "marina-charter-skippers" represents a working symbiosis that links it to the intention of all successful businesses. The goal of the research is to valorise the factors of the quality of business cooperation and good business relationships that ensure profitable business for everyone. The research hypothesis states that the necessary good business cooperation can be achieved through a higher level of cooperation than before.

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1 Introduction

Nautical tourism in its three basic subtypes is important for the development of tourist destinations on the Croatian coast. Each of the three subtypes (ports of nautical tourism, charters, and *cruising*) is strong enough to play the role of local leader. At the same time, nautical tourism ports, especially marinas as the most perfect type of nautical tourism port, are commercially linked to charter, which is considered the strongest charter in the world. In addition to charters, skippers are also an important segment of the charter offer, and marinas and charters with *skippers* form a strong business unit in the offer of nautical tourism in Croatia.[1]

[1] Luković, T. and co-authors: "Nautički turizam Hrvatske", Redak Split d.o.o., Split, 2015.

The connection between charters and marinas was only revealed during the COVID-19 pandemic, while it had not been scientifically researched before. The reason for this is the results of two Croatian associations, the Marina Association and the Charter Association, which, due to disagreement as well as some mutually unresolved business relations, did not act together towards the state, and the state refused them the assistance requested by both associations. This fact stimulated research and new knowledge was gained about their strong business connection. With the aim of developing their community, the first research appeared, which this research follows.

In accordance with the subject of the research, the goal of this research is contained in the valorization of the factors that support the cooperation of the Croatian charters with marinas, as well as the assessment of the results of such cooperation. In this regard, the research hypothesis states that the development of community contributes to better business of charters and marinas, and furthermore, there is a stronger attitude towards the state administration in order to ensure their development.

2 SME business projects, nautical tourism ports, marinas

Small and medium entrepreneurship (SME) is the basis of any national economy, so it should be the basis of the Croatian economy as well. The fact that Croatian entrepreneurship is not developing according to the dynamics required for Croatia to have a prominent place in the economy of the European Union is evident from numerous studies, most notably the GEM study "What makes Croatia an (un)entrepreneurial country?"[2]. Croatian entrepreneurship, together with Bulgaria, ranks last in the EU, despite the fact that Croatia has numerous resources and real opportunities for better entrepreneurial results. The main reason for the lagging behind of Croatian entrepreneurship is presented in the "Global Report" study as a part of GEM, which analyses the development of entrepreneurship in numerous economies of the world based on 12 factors. At the same time, 7 factors relate to the relationship between the state and national entrepreneurship, where Croatia has visibly poor results.[3] Taking into account the research on entrepreneurship[4], the relationship between marinas and charter companies is analysed in the following paragraphs, as it concerns small and medium enterprises, which include all marinas and charters, as well as ACI, which is approaching the border of a large company.

2.1 Classification of nautical tourism ports

Considering the ports of nautical tourism, where the marinas represent the pinnacle of the quality of the offer for boaters, below we will point out the problems contained in the relationship between the state administration, i.e. the competent ministry/ministries and science. That is, it is not clear why, but the fact is that, as a rule, every ten years the competent ministry/ministries (Ministry of Tourism together with the Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia) adopts new regulations every ten years, primarily the regulation on the classification of nautical tourism ports. Criticism on this issue is numerous and constant and should not be repeated, but it should be noted that in research it is necessary to deviate from this set of regulations because it only creates a misconception. Therefore, let us leave the regulations and laws to the state and its interests, of which the tax is the fundamental interest. The fact is that other departments of the Croatian state administration, such as the Croatian Bureau of Statistics (DZZS), do not adhere to this set of rules either. In short, the latest "Ordinance on categorization of nautical tourism ports divides ports on marinas and other facilities for the provision of services and accommodation of vessels"[5], which recognizes only the marina as a port for nautical tourism, while the anchorage and mooring are classified in the group of "other facilities" along with the landfill and dry marinas, speaks volumes about the need to deviate from this regulation. Regulations and laws that regulate the issue of maritime property and ports of nautical tourism do not contribute to the development of entrepreneurship, which means that it is necessary to involve the profession and science more intensively.[6]

Therefore, three types of ports, marinas, berths and anchorages, should be used and analyzed as nautical tourism ports. In this regard, after the 2020 pandemic, Croatia will have 206 nautical tourism ports on the Croatian coast in 2021, namely 85 marinas (of which 21 are dry marinas), 83 anchorages, 15 berths, and 23 disposal facilities for vessels. Thus, the "real ports" of nautical tourism, marinas, berths, and anchorages are connected by the sea and the concession they pay to the state. The total amount of their water area is 4,643,877 m^2 with 18,942 berths[7], of which

[2] GEM Hrvatska "What makes Croatia an (un)entrepreneurial country?", he title of the study related to Croatia GEM, traces the development of Croatian entrepreneurship from the beginning, which thus develops (un)entrepreneurially.

[3] GEM Global Report, for the past ten years, has been monitoring the development of entrepreneurship in about 50 countries around the world, including Croatia, according to constant criteria.

[4] Piplica, D. & Luković, T. & Hruška D.: "Normative Antecedents and Entrepreneurial Consequences of Marina Business Models Development", Asian Economic and Financial Review , AESS Publications , June 2021.

[5] "Ordinance on categorization of nautical tourism ports divides ports on marinas and other facilities for the provision of services and accommodation of vessels", OG 120/2019.

[6] Vuković. A. & Mišić, Ž.: "Why should the Ordinance on the Classification and Categorization of Nautical Tourism Ports be changed", Proceedings of the Faculty of Law in Split, Vol. 56, No. 3, 2019.

[7] Nautički turizam – Kapaciteti i poslovanje luka nautičkog turizma u 2021., DZZS, Zagreb 2022, p. 1.

the so-called dry-docks and landfills should be eliminated, which is presented below. Considering the topic of this research, the following paragraphs will focus on Croatian marinas.

2.2 The problem of the marina

At the beginning of the explanation of the issue of marinas, it is necessary to define the term marina. There are numerous definitions of the term marina, but one could accept the explanation that "a marina is a part of a specially built and equipped sea or water area and coast for the provision of berthing services, accommodation of tourists in vessels and other services for the needs of tourists. Drinks, beverages and food services are provided in the marinas."[8] This definition has many shortcomings, but it is still suitable for the continuation of this research. Considering the capacity of marinas, i.e. nautical tourism ports in Croatia, according to the report of the Croatian Bureau of Statistics (DZZS), in 2021 there were 64 commercial marinas on the Croatian Adriatic coast, as well as 83 anchorages and 15 berths.[9] In the pre-pandemic and the best tourist season in Croatia in 2019, there were 61 marinas, 71 anchorages and 9 berths on 4,349,270 m^2 of water area covered by the concession, where there were 18,179 berths. Of these berths, the dry marinas and landfills are excluded. So, within two years, 3 new marinas and 763 new berths were registered on the Croatian Adriatic. In the mentioned 2 years, the area of engaged water area increased by 6.77%, but in 2021 there were 3.68% fewer employees in nautical tourism ports. In the same period in 2021, the revenue from nautical tourism ports amounted to HRK 945.94 million, while in 2019 the revenue amounted to HRK 918.50 million, so in 2021 the revenue was 3.0% higher, which is a new revenue record for nautical tourism ports.[10]

Since this research focuses on marinas, the revenues need to be "cleaned" according to the scientific classification of berthings and anchorages, as well as landfills and dry marinas, which, according to the definition of a port, do not belong to the nautical tourism ports. In the absence of official data from the DZZS, the revenue of the nautical tourism ports should be corrected by about 10% to match the revenue of marinas.[11] Therefore, in the following paragraphs, only the term "marina" is used, even though the data is for the nautical tourist ports, which means that they only need to be corrected by 10% less. Therefore, in 2021, Croatian marinas generated an income of about HRK 850 million or about EUR 114 million.[12]

Important for the result of marina operation is the ratio of berths in transit and berths under contract. On average, about 80% of vessels are on a permanent berth in marinas in Croatia, but the differences between marinas regarding the relationship between permanent berth and transit are pronounced, which is the result of the business policy of the management. In other words, marinas that were more oriented towards permanent berths in the 2020 pandemic year achieved significantly better financial results than, for example, ACI, which was oriented towards transit. High-quality marinas, such as Marina Frapa, Rogoznica, have about 90% of vessels at a permanent berth, and the same is true for Marina Punat. Such business orientation has proven to be very good.

As pointed out by a group of Spanish and Portuguese authors, when it comes to business orientation in nautical tourism, especially in the marina environment, it is necessary to pay attention to five key factors.

In accordance with the mentioned factors, the development of marinas should be viewed through the representation of sea quality factors. Therefore, the schedule is important of marinas by county on the Croatian coast, where there are six counties that have their own coast and marinas. The number of marinas also determines the revenue from marinas, i.e. from nautical tourism ports, as indicated by DZZS. Again, it should be noted that the revenues from the marinas exempt from the long ports of nautical tourism and auxiliary facilities (dry marinas and landfills) must be reduced by approximately 10%, as established in the aforementioned research.

Also, Considering the fact that the distribution of marinas on the Croatian Adriatic depends on the income from the marinas, and thus on the importance of their business for the county and indirectly for Croatia. Therefore, it is necessary to carry out an analysis of the schedule and results of marinas by county, of which there are six counties on the Croatian coast.

Since the number of berths by county for the year 2021 is not available, an approximation for the year 2020 is used in preparing the results of the further analysis. This means that the number of berths in 2021 in the coastal counties of the Republic of Croatia was 18,942, i.e. 1.7% higher than in the previous year 2020. However, this is not a large difference. Since the difference is not large, the results of income in relation to berths can be approximated using the capacity of berths by county from 2020. Thus, the analysis of revenue per berth shows that the two outermost counties are significantly below the Croatian average and also significantly below the av-

8 Article 7. "Ordinance on categorization of nautical tourism ports divides ports on marinas and other facilities for the provision of services and accommodation of vessels", OG 120/2019.

9 Nautički turizam – Kapaciteti i poslovanje luka nautičkog turizma u 2021, DZZS, Zagreb 2022, p. 1.

10 Nautički turizam – Kapaciteti i poslovanje luka nautičkog turizma u 2021, DZZS, Zagreb 2022 and Nautički turizam – Kapaciteti i poslovanje luka nautičkog turizma u 2019, DZZS, Zagreb 2020.

11 Luković, T. & Piplica, D, & Hruška, D.: "Analysis of business performance *Marina Business*, journal "Transactions on Maritime Science – ToMS", University of Split, 2021.

12 Calculation after correction.

Table 1 Matrix of factors

No.	Factors	
1	Natural	1.1. Influence of wind; 1.2. The influence of waves
2	Nautical	2.1. Port entrance and maneuvering; 2.2. the depth of the sea
3	Technically	3.1. Infrastructure port; 3.2. Reception capacities (number of berths); 3.3. Space for the development of other service activities in the port; 3.4. Mobility of boating tourists (required travel hours); 3.5. Quality of moorings and nautical services
4	Environment	4.1. Ecological value; 4.2. Monitoring of sea and port quality
5	Socioeconomic	5.1. Influence on the economic development of local communities; 5.2. Cultural influence on the local community; 5.3. Impact on other services

Source: Manuel A. Andres, Ernesto Madariaga, Olga Delgado, Jesus, E. Martinez.: "Marine polution in the nautical seaport in Croatia by the effluent of tourist", European Transport / Transporti Europei (2017), Issue 64, Paper no 3, Issn 1825-3997 [a5]

Table 2 Distribution of berths in coastal counties and revenues from nautical tourism port operations (in HRK 000) in 2019 and 2021 (2020)

Counties	Number of berths		Index 2021/2020	Revenue		Index 2021/2019	Revenue per berth
	2019	2020*		2019	2021		
Republic of Croatia	18,179	18,625	102.5	918,495	945,936	103.0	50.8
Primorsko-Goranska County	3,093	3,103	100.3	123,072	131,633	107.0	42.4
Zadar County	4,202	4,233	100.7	183,491	184,981	100.8	43.7
Sibenik-Knin County	3,982	3,853	96.8	232,962	250,195	107.4	64.9
Split-Dalmatia County	2,446	2,600	106.3	206,936	211,106	102.0	81.2
Istrian County	3,283	3,528	107.5	118,645	120,711	101.7	34.2
Dubrovnik-Neretva County	1,173	1,308	111.5	53,289	47,310	88.8	36.2

Source: Analysis by authors Luković, T. & Piplica, D, & Peronja , I. based on the data of the DZZS [b2]

Note: * DZZS did not publish data on berths by county for 2021, so 2020 is used.

erage of Split-Dalmatia and Šibenik-Knin counties, which are the most successful.

For further analysis and the subject of this research, it is therefore important to note that in 2021 there were 14,805 vessels on permanent berths, thus filling 78.2% of total berths of the marina (port n.t.), i.e. if corrected by 10%, "clean" marinas have 86.7% of berths under contract.

Considering the fact that the Croatian charter fleet berths its vessels mainly in marinas and that this berth is a contractual berth, the charter fleet is an important entity and customer for the marinas' business. The question is how important the charter fleet is for the Croatian marinas.

3 Croatian charter

According to the data for 2019, 126,033 Croatian boats and 3,118 yachts sail in the Croatian Adriatic. Of these, 4,378 yachts and boats are on charter.[13] In addition, according to the data of the Ministry of the Sea, Transport and Infrastructure, there are 2,762 charter companies registered in the Republic of Croatia, but only about 930 charter companies are active. Active charter companies charter 1,956 (44.7%) boats, 2,166 (49.5%) sailing yachts and 256 (5.8%) motor yachts, according to HGK data.

Looking at the distribution of the number of overnight stays of yachtsmen in charter by county, Split-Dalmatia County is the most represented with 44% of overnight stays. It is interesting to note that Split-Dalmatia County is ahead of Šibenik-Knin and Zadar in terms of charter, although Šibenik-Knin is stronger than Split-Dalmatia in terms of revenues from marinas in 2021.[14]

[13] www.poslovni.hr/hrvatska/hrvatska-flota-od-4378-charter-plovila-najveca-je-na-svijetu-356504 (accessed on August 14, 2022)

[14] "Nautički turizam u Hrvatskoj, nautički charter 2020", Croatian Tourist Board, Zagreb 2020.

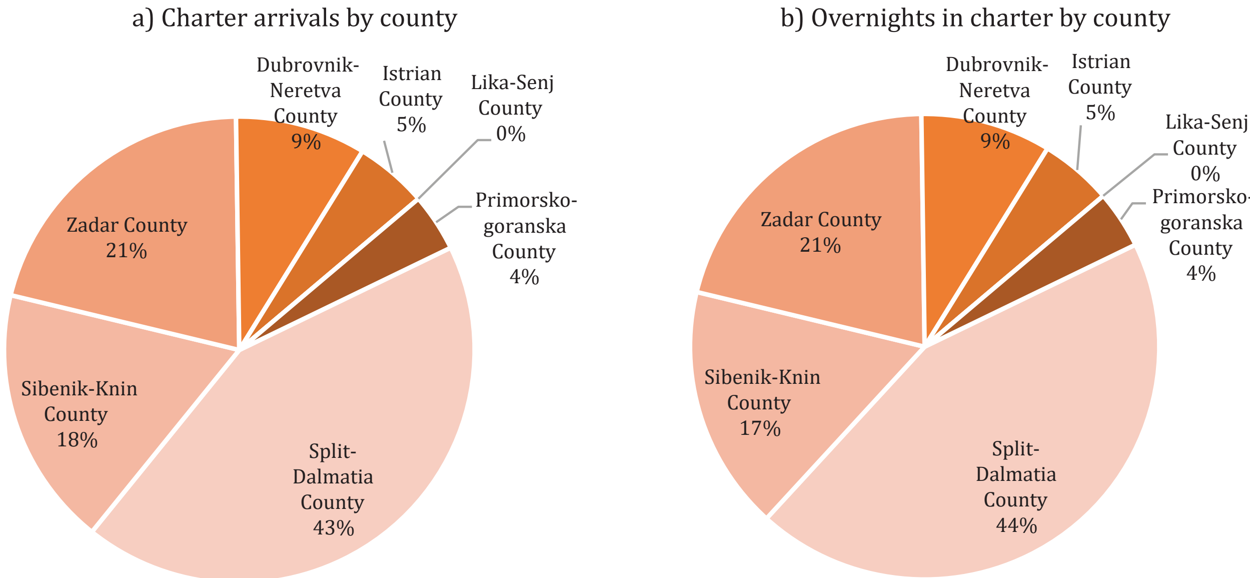

Figure 1 Shares of the counties in arrivals and overnight stays in the nautical charter in 2019

Source: "Nautical tourism in Croatia, nautical charter 2020", Croatian Tourist Board, Zagreb 2020, p. 7. [b5]

As can be seen from charts a) and b), there is no significant difference between the number of arrivals and the number of overnight stays in the charter, and the development of the charter should be viewed through the arrival of charterers in the marina. There are 3 types of yacht charters to consider:

- A bareboat charter, where members of the crew are skipper license holders
- Skippered charter, where none of the crew members possess a skipper's license, or even if they do, they feel insecure to navigate on their own, thus, a professional skipper is required to be hired.
- Crewed charter, where the group of tourists charters a yacht including a professional skipper and a chef or a hostess onboard.[15]

Accordingly, it is important to have more detailed information about the charter in Croatia. As Tomas Nautika – yachting 2017 shows, charterers are younger and educated people who are more dynamic in their annual vacation and account for about 40% of boaters' arrivals, while in the structure of demand for vessels by ownership, the domestic charter fleet accounts for 60%, while foreign charters participate with 5%.[16] Regarding the arrival of boaters, 58% travel by car and 24% by plane, with the note that arrival by plane is increasing. 33% of charter boaters arrive by plane, which depends on the airline in question.[17] According to HGK, charter in 2021 significantly exceeded the record results of 2019, which shows the importance of the charter for nautical tourism as a whole. The reason for this is the increased capacity of the airports in Split and Dubrovnik, so that the number of air routes in 2021 increased by 128 and the coastal airports are connected to the emission markets through 250 air routes.

Charter sailors and tourists generated more than 3.2 million overnight stays in Croatia in 2021, which represents 3% of total tourist overnight stays in Croatia.[18] Revenues from charters in Croatia amounted to approximately 300 million euros in 2021, which, together with 130 million euros of revenues from nautical tourism ports[19], represents approximately 5% of total tourism revenues in Croatia in 2021. According to the Tomas Nautika – yachting 2017 study[20], the average daily consumption of charterers amounts to 183 euros, while hotel guests spend 75 euros per day. Among charterers, the British spend the most with 212 euros, the French 207 euros and the Dutch 202 euros.[21] The importance of Croatian charter can also be seen in the revenue of 300 million euros per year generated by charter companies in Croatia. According to unof-

15 Stelios, Iaonnidis: „An Overview of Yachting Tourism and Its Role in the Development of Coastal Areas of Croatia", JOHTI-Journal of Hospitality and Tourism Issues/ Year: 2019, Vol: 1 No:1 30-43, p. 31-32

16 Tomas Nautika-jahting 2017. (short version), Research results, Institute for Tourism Zagreb, Opatija 2018.

17 Ibid

18 Hrvatska turistička zajednica, "Nautički turizam Hrvatske" – nautički charter – 2016 – 2018, Zagreb 2019, p. 6.

19 DZS, Press release, NAUTIČKI TURIZAM – Kapaciteti i poslovanje luka nautičkog turizma u 2021.

20 Tomas Nautika-jahting 2017., Institute for Tourism Zagreb, Zagreb 2018. and Microsoft PowerPoint – Tomas Nautika Jahting 2017 29 06 2018 Opatija FIN ISPRAVAK.pptx (iztzg.hr) (posjećeno 27. 08. 2022.)

21 Hrvatska turistička zajednica, „Nautički turizam Hrvatske" – nautički charter – 2016 – 2018, Zagreb 2019, p. 26.

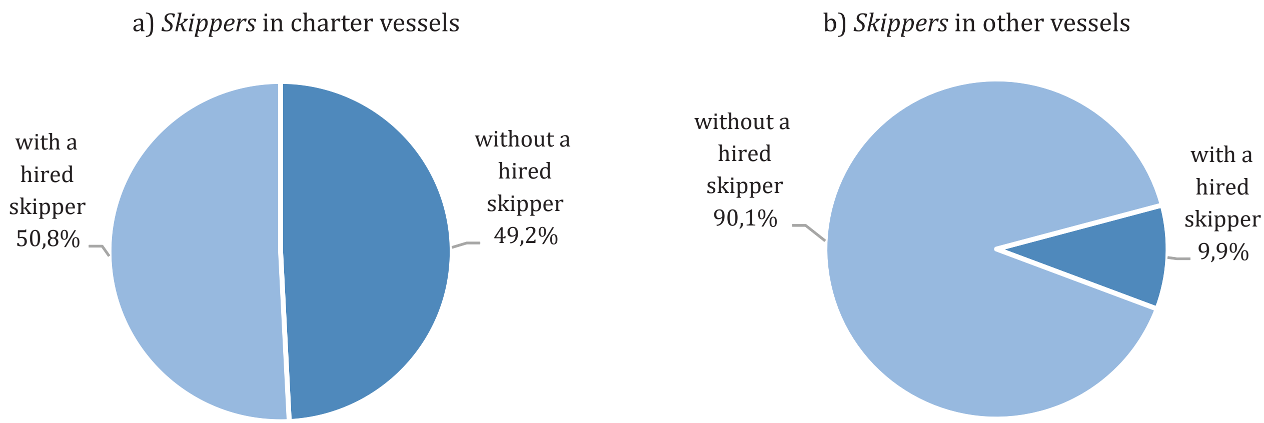

Figure 2 Use of skipper services in 2017

Source: Tomas NAUTICA Yachting 2017, Institute of Tourism Zagreb, Zagreb 2018 [b12]

ficial estimates, Croatia holds almost 40% of the world charter fleet. The pandemic year 2020 hit Croatian charter more than any other subtype of nautical tourism, indicating high vulnerability. However, as early as 2021, Croatian charter was able to regain the results of 2019 and even surpass them in most indicators.

Looking at the relationship between charters and marinas, it can be concluded that the vulnerability of Croatian charters also affects marinas, as the Croatian charter fleet is estimated to occupy around 30% of the marinas' permanent berths.[22] At the same time, it should be emphasized that there is another important factor for the successful operation of Croatian charters, namely the *skippers*. The topic of Croatian skippers is interesting, but in the following paragraphs only basic information about their role in yachting is given.

4 Skippers

Skippers are a part of the charter offer, and a good business relationship and cooperation is maintained and developed between charter companies and professional *skippers*. However, there are problems between *skippers* and charters, behind which there are unresolved problems of state administration. The problem that *skippers* are not in the VAT system in relation to the charter company creates a problem, as does the need to issue invoices. Another problem is the arrival of the vessel at the destination after the disembarkation of the charterer. However, so far all problems have been solved amicably and successfully.

The importance of *skippers* for charters, but indirectly also for marinas, is expressed in their participation in services demanded in the market of ship use.

As can be seen from the figure, skippers are hired in every second rented vessel, but in owned vessels they are used only 10%. Given that the structure of all vessels on the Croatian Adriatic shows that charter vessels make up 65% of all vessels (60% domestic charter and 5% foreign charter)[23], it can be estimated that about 40% of vessels use the services of skippers, which is a very high percentage of services on vessels.

5 Partnership relations *Marina in&with Business*

As previously explained, the business connection between the marina and the charter is obvious, and in the charter the role of the skipper is important and should be formalized. In this regard, it is necessary to analyze and compare the basic sizes of marinas and charters in order to conclude the quantity of these commonalities. In this regard, the data available for 2019 for marinas and charters as a business segment are included in the analysis. As previously stated, all marina and charter entities belong to the group of small and medium-sized enterprises in Croatia. At the same time, it should be noted that skippers, i.e. "ship crew", have not yet found a place in the official processing and statistics of DZZS, i.e. ship crew is not yet processed. As far as the ship crew is concerned, there is only unofficial information that there are about 1,200 skippers in Croatia, earning about 18,000 euros per year, but other data are not known, but they are certainly significant and growing fast. For the analysis, the data from 2019 were taken for analysis, which did not change significantly in 2021, i.e. the changes are positive for both charters and marinas, so their relationship remains relatively similar, which allows a comparative analysis of marinas and charters.

[22] More detailed results will be obtained through further research on the example of the marina Frapa Rogoznica for 2021.

[23] Tomas NAUTICA Yachting 2017, Institute of Tourism Zagreb, Zagreb 2018.

Table 3 Basic comparative business indicators of Croatian marinas and charters in 2019 according to SME methodology and experiential SME method (in 000)

CHARTER					
According to the criterion of entrepreneurship	**Micro**	**Small**	**Medium**	**Large**	**TOTAL**
Fixed assets (in HRK 000)	2,214,073	668,993	394,046		3,277,112
Fixed assets (in %)	*67.56*	*20.41*	*12.03*		*100.0*
Profit/loss (in HRK 000)	- 99,698	13,364	7,044		- 79,290
Total revenue (in HRK 000)	890,446	917,252	577,241		2,384,939
Total revenue (in €000)	118,726	122,300	76,965		317,992
Total revenue (in%)	*37.34*	*38.46*	*24.20*		*100.0*
Employees	757	686	387		1830
Employees (in%)	*41.37*	*37.49*	*21.14*		*100.0*
Number of companies	1,399	55	7		1,461
MARINE by size criterion					
According to the criterion of entrepreneurship	**Micro**	**Small**	**Medium**	**Large**	**TOTAL**
Fixed assets (in HRK 000)*****	*675,000*	*375,000*	*450,000*		*1,500,000*
Fixed assets (in %)	*45.0*	*25.0*	*30.0*		*100.0*
Total revenue (in HRK 000)****	238,630	211,750	364,050		814,430
Total revenue (in €000)****	31,817	28,233	48,541		108,591
Total revenue (in%)****	*29.3*	*26.0*	*44.7*		*100.0*
Employees ***	534	474	814		1,822
Employees (in%) ***	*29,3*	*26,0*	*44,7*		*100.0*
Number of berths (according to the organisation)**	*7,056*	*3,920*	*4,705*		*15,681*
Structure of the number of berths**	*40*	*30*	*30*		*100.0*
Number of marinas*	*35*	*16*	*10*		*61*
Structure of the number of marinas*	*57.6*	*24.2*	*18.2*		*100.0*

Source: Author's analysis, based on Luković, T. & Piplica, D, & Hruška , D,: "Analysis of business performance *Marina Business"*, journal "Transactions on Maritime Science – ToMS", University of Split, 2021. [a2]

Note:

* Estimation according to the sample from "Benchmarking December 2019" and the number of marinas in the sample, and there were 33 marinas in the sample. ** Estimation according to the sample from "Benchmarking December 2019" and the number of berths of ACIa and private marinas, and the average was approximated, and it was calculated that marinas without dry marinas have 15,681 berths. *** Estimation according to the sample from "Benchmarking December 2019", but according to the structure of the berths, because the assumption that there is a strong correlation between connections and employees. **** Estimation according to the sample from "Benchmarking December 2019" and the number of berths in the sample, and there were 17,421 berths. Another assumption is the average price of berths among marinas of all categories, which is true especially true for annual berths, which dominate the income structure in many marinas, so the influence of prices can be ignored. ***** Estimation based on a small sample of private marinas.

It can be concluded, from table 3, that the revenue of charters in the group is two times higher than the revenue of the marinas, while the long-term assets of charters are only one time higher than the assets of the marinas. However, if we consider the ratio of revenue per unit of long-term assets for charters, the factor is 0.73, while for marinas it is 0.54, which means that charters earn more income for one unit of assets. That is, HRK 1 million in marina revenue is generated with HRK 1.8 million in fixed assets, while HRK 1 million in charter revenue is generated with HRK 1.4 million in fixed assets. So, from a business perspective, chartering is in a somewhat more favourable position. Considering the fact that the difference in performance indicators is not very large, as well as the fact that the analysis contains estimated values, it can be concluded about the similarity of the business results of marinas and charters. Comparing the revenues by the criterion of company size, it can be concluded that there are 8% more small companies, i.e. micro-entrepreneurs, in the charter. At the same time, micro-size companies in the charter hire 67.56% of the fixed assets of the Croatian charter. At the same time, the group of micro companies in the charter achieves a negative business result of HRK 99,698 thousand. The negative business result of the small charter companies weighs on the overall result of the Croatian charter group, which had a negative result in the amount of HRK 79,290 thousand loss in 2019.

The analysis of other comparative indicators shows significant differences between marina and charter performance. For example, if we consider the employees, there are 1.8 million kuna of fixed assets and 1.3 million kuna of income for one charter employee. At the same time, in the marina there are 0.8 million kuna of fixed assets and 0.447 million kuna of income for one employee. From the above indicators, it can be concluded that there is a significant difference between marinas and charter companies, with the charter business being clearly better.

Furthermore, the analysis of the grouping of charter companies by company size in terms of employees shows a significant difference between micro, small and medium-sized charter companies. On average, one Croatian charter company employs 1.2 employees, and operates with only 3 vessels. The average indicators do not give a good insight into the background of the operations of Croatian charter companies. An analysis based on the size of charter companies shows that small and especially medium-sized companies have significantly better business indicators than the group average. For example, 7 medium-sized charter companies have an average of 55 employees and generate 1.5 million in annual revenue per employee. At the same time, micro charter companies generate 1.2 million in revenue per employee, but through 1,399 companies. Medium-sized charter companies are very successful, for example, 7 medium-sized companies with fixed assets of HRK 1,000 generate HRK 1,500 in revenue. At the same time, micro-companies with fixed assets of HRK 1,000 generate only HRK 0.4,000 in sales and, moreover, operate at a loss. Thus, considered according to the criteria of SMEs, 7 medium-sized charter companies dominate the Croatian charter, besides 55 small companies operate successfully. At the same time, the micro charter companies operate at break-even or with losses.

Analysis of marina operations shows that the situation is more favourable for marinas, at least in terms of negative business results. In other words: On average, marinas earn HRK 447,000 per employee. At the same time, micro companies, i.e. very small marinas, earn on average HRK 441 thousand in revenues, small ones HRK 447 thousand and medium ones also HRK 447 thousand in revenues. This shows that the size of the marina does not have a significant impact on the business results of the marina, which is due to the structure of berths.

In conclusion, it can be said that these are two similar companies, Croatian marinas and Croatian charter, which have a significantly different business system and market sensitivity, but have achieved very similar business results in the years that have occurred outside the impact of some disasters such as COVID-19. It is important to define their business connection and mutual conditionality. Both marinas and charterers do business in the marina environment, both narrowly and broadly. Often, charter clients are also clients of marinas, indicating the need for a stronger connection. The need for a better business connection between Croatian marinas and charters became evident in the conditions of COVID-19 in 2020, when the disunited were not able to realize the special benefits they demanded from the state.[24] The fact that together they have almost 4,000 employees, to which can and must be added another 1,200 skippers and certainly another 500 other members of the ship's crew, adds up to almost 6,000 employees. This means that about 20,000 people live on their income as family members, reaching the size of a small Croatian city. Therefore, the development of their commonality is of great importance for both or all three areas of nautical tourism and also the reason for the introduction of the new term *Marina in&with Business.*

The research question remains, how the marina-charter relationship, *Marina in&with Business,* is realized in the Frapa Rogoznica marina, as an extremely successful marina on the Adriatic and Mediterranean Sea.

6 Marina Frapa Rogoznica, *Marina in&with Business*

Marina Frapa Rogoznica is the most awarded marina in Croatia and a worldwide known and respected marina that promotes Croatian nautical tourism and marina offer in the best way. It is a medium sized marina, but rich in various facilities that it maintains at the highest quality level. There are two main reasons for the quality of Marina Frapa Rogoznica: (1) constant investments from the profits and (2) high quality of management and analytics service, which contribute to good management decisions. 2020 was a difficult year for marinas due to the COVID -19 pandemic, but the Frapa Marina still achieved a good result and operated with a profit that is significantly higher than ACI's profit in 2020 compared to ACI's operations. That is, ACI focused mainly on revenues from transit as opposed to Frapa, which focused on permanent berths, i.e. contractual relationship with ship owners. From these two business concepts, the result in 2020 is that despite COVID-19, Frapa had a profit of 23.8%[25], while ACI had a profit of 0.3% in relation to the realized revenues of the same year.[26]

The question arises, as to what role charter plays in the business of marinas that have focused on the charter business and what is the intention of all private commercial marinas. This can be best shown by the example of the Frapa Rogoznica marina in the years of regular business, i.e. business that is not burdened by COVID-19.

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[24] Luković, T. & Piplica, D. & Hruška, D. iz članka: "Analysis of business performance *Marina Business*", Naše more, University of Dubrovnik, Dubrovnik, 2021.

[25] Laguna Trade doo Rogoznica, Revised annual financial statements for 2021.

[26] ACI Annual Report, for the year ending on December 31, 2021 together with the independent auditor's report.

Table 4 Basic data of Marina Frapa Orgonic in 2019 and 2021 (in HRK 000)

Indicators	2019	2021	Index 2021/19
Number of berths in the sea	510	510	100.0
Number of berths on land	80	80	100.0
Revenue from contracts	24,452	24,797	101.4
Transit revenues	3,568	3,744	104.9
Service	8,756	10,401	118.8
Charter vessels	120	120	120
Charter revenue	11,188	11,432	102.2
The rest	10,873	9,571	88.0
Total revenue	**52,086**	**53,169**	**102.1**

Source: Analysis by authors Luković, T. & Piplica, D, & Peronja, I. based on the data of the Marina Frapa Rogoznica Analytic Service. [b6]

As shown in the table, contract berths, or "permanent berths," form the basis of the marina's revenues, and berth revenues account for 53.7% of total revenues in 2021. Moreover, the revenues from berths and the revenues from services are extremely positive in relation to the costs, while the rest of the content is either at the limit of profitability or negative, but the marina must have them to maintain the high quality of its offer.

There are 120 charter companies operating in Frapa Marina, which represent 23.5% of the port's berths. They are mainly sailboats, but there are also motor vessels. As Tomas Nautika – yachting 2017 shows, the ratio of sailboats and motor vessels is 60:40 in favour of sailing vessels. In relation to Frapa Marina, what is particularly important for this research is that charter boat revenues account for 46.1% of contract berth revenues and 40.0% of total berth revenues, as well as 21.5% of the marina's total revenues. At the same time, the 120 contract berths held by charter companies with their vessels represent only 23.5% of the total berths at Frapa Marina, but 46.1% of the revenue from permanent berths. This best shows how important Croatian charter is for the success of Croatian marinas. The guests who use the boats of the mentioned charter companies also use other services in the marina, and their consumption in Frapa marina is an important income from all the marina facilities.

7 New classification of nautical tourism

According to what has been stated, it is clear that in practice there is an intensive cooperation between the marina and the charter, and besides the charter, there are also Croatian skippers. This connection is highly causal, i.e. if there were no marinas, Croatia could not have a strong charter fleet, and the skippers could not earn money and feed their young families. Likewise, the good and successful operation of the marina would be jeopardized if there

<table>
<tr><th colspan="6">NAUTICAL TOURISM INDUSTRY</th></tr>
<tr><th>SIDE</th><th colspan="4">BASIC TYPES</th><th>SUPPLEMENTARY</th></tr>
<tr><td rowspan="3">– Diving tourism,
– Surfing,
– Rafting,
– Divers,
– Rowing,
– Fishing tourism,
– Robinson tourism,
– Lighthouse tourism,
– and others</td><th colspan="2">Marina business, business of nautical tourism ports and in the ports of nautical tourism</th><th colspan="2">Business of cruisers and with cruisers</th><td rowspan="3">– Dry dock , keeping the vessel on dry land away from the sea,
– Shipbuilding, yachts and mega yachts,
– Production of small vessels,
– Production of equipment for nautical tourism,
– Information services,
– Sailing schools,
– Research institutes and educational centres,
– And other services</td></tr>
<tr><th>Ports of nautical tourism</th><th>Charter & skippers</th><th>Cruisers</th><th>Ports for accepting cruisers</th></tr>
<tr><td>• Anchorage
• Berth Marinas:*
Sorted by categories</td><td>• Motor yachts
– with a skipper
– without a skipper

• Sailing yachts:
– with a skipper
– without a skipper</td><td>• big 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></tr>
<tr><td></td><th colspan="4">SUBJECT OF RESEARCH</th><td></td></tr>
</table>

Figure 3 Classification model for nautical tourism based on the principle of basic activities (after 2019). [3]

Source: The authors, Luković, T. & Piplica, D, & Peronja, I. [3]

Note:
* the categorization of marinas is not uniform in Europe, and in Croatia it changed in June 2008, it remained the same in the new rulebook from 2019, but it still has not been completely used in practice; * the classification of nautical tourism ports according to the new "Ordinance on categorization of nautical tourism ports divides ports on marinas and other facilities for the provision of services and accommodation of vessels" (Official Gazette 120/19, adopted on December 9, 2019) is not acceptable and should be avoided in scientific research.

were no charter vessels. Therefore, there is a need to connect marinas and charters, as well as skippers, which needs to be encouraged in every way possible.

As can be seen from the new classification, the cooperation of marinas, charters and skippers is recognized. At the same time, the current legislation should not be taken into account, because it is useless for scientific research and should remain what it was enacted for, namely the action of the state administration, primarily for the purpose of tax collection.

Particularly positive is the fact that the Croatian Chamber of Commerce (HGK) deals exclusively with marinas and charters through the so-called "Nautical tourism association HGK". Certainly, this is an important step towards the recognition of the unity of the still separated marina and charter associations, as well as skippers. It should be emphasized that the name of the association "nautical tourism" is not chosen happily, because it excludes ports for the reception of large cruisers, as well as domestic small cruisers, so-called "small shippers" This indicates a low level of knowledge about nautical tourism in the Croatian state administration. However, this should be ignored, because the essence of the association in the HGK is important, as well as the work of two key persons in this association, namely the president of the Charter Association and the president of the Marina Association, whose actions lead to unity. In other words, HGK has made it its mission to improve relations between marina and charter associations and the Croatian government, which is certainly positive. However, business cooperation in solving problems through unity and cooperation has not yet been achieved. It is hoped that in the foreseeable future the charter and marina associations will be united into one association and the Croatian skippers' association will join them, which would be an additional strength of such a unique new Croatian association.

8 Conclusion

As can be seen from the research, targeting revenue from permanent connections associated with the contract is significantly more successful than targeting revenue from transit. At the same time, charters and revenues from charters whose vessels are berthed in the marina contribute significantly to better business results than standard revenues from contract berths. The good business of Croatian charters is reflected in the marinas' revenues and improves them significantly. All this points to the development of cooperation and unity between charterers and marinas, both through joint association and agreement, and through individual cooperation of each marina with the charter located in it.

Considering the research results, it is advisable to expand the existing classification of nautical tourism so that the common features of marinas and charters are expressed by the term *Marina in&with Business*, which would clarify the importance of their common features. Certainly, there are two levels of community involved, macro and micro. Macro-level cooperation is necessary for better results of nautical tourism ports, especially marinas, and Croatian charters. In this regard, the efforts of the HGK to support marinas and charters are significant but still insufficient. Also, Croatian legislation regulating and influencing the business of marinas and charters does not contribute to the development of nautical tourism ports at the macro level, nor does the development of skippers, who play an important role in the charter. All this indicates that a much higher level of knowledge and understanding is required in the circles of the state administration, which should act proactively within its competences. At the micro level, it would be advisable to develop better and more efficient cooperation between the marinas, i.e., the ports of nautical tourism and the charter companies that moor their vessels in the marinas and operate from them.

In conclusion, the business form *Marina in&with Business* comes as a result of the new knowledge in nautical tourism, which should contribute to its better development. The Croatian charter business is very strong and represents a respectable segment of Croatian tourism, especially on the Croatian coast, with 60% domestic and 5% foreign charters. Therefore, research is necessary, as well as the application of research results in practice, especially in state administration.

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References

a) Books and articles

[1] Group of authors: "Benchmarkinga prosinac 2019", Opatija 2020.

[2] Luković, T. & Piplica, D, & Hruška, D,: "Analysis of business performance *Marina Business*, journal "Transactions on Maritime Science – ToMS", University of Split, 2021.

[3] Luković, T. & Piplica, D.: "Marina operations in SME approaches", University scientific journal "Naše more", Dubrovnik 2021.

[4] Luković, T., and co-authors: "Nautički turizam Hrvatske", Redak Split d.o.o., Split, December 2015.

[5] Manuel A. Andres, Ernesto Madariaga, Olga Delgado, Jesus, E. Martinez: "Marine polution in the nautical seaport in Croatia by the effluent of tourist", European Transport / Transporti Europei (2017), Issue 64, Paper no 3, Issn 1825-3997.

[6] Piplica, D. & Luković, T. Hruška D.: "Normative Antecedents and Entrepreurial Consequences of Marina Business Models Development", Asian Economic and Financial Review, AESS Publications, June 2021.

[7] Stelios, Iaonnidis: "An Overview of Yachting Tourism and Its Role in the Development of Coastal Areas of Croatia", JOHTI-Journal of Hospitality and Tourism Issues/ Year: 2019, Vol: 1 No:1 30-43, p. 31-32.

[8] Vuković. A. & Mišić, Ž.: "Why should the Ordinance on the Classification and Categorization of Nautical Tourism Ports be changed", Proceedings of the Faculty of Law in Split, Vol. 56, No. 3, 2019.

b) Laws, regulations, and reports

[1] ACI Annual Report, for the year ending on December 31, 2021 together with the report of the independent auditor.

[2] DZZS, Nautički turizam – Kapaciteti i poslovanje luka nautičkog turizma u 2021, DZZS, Zagreb 2022.

[3] GEM Global Report

[4] GEM Hrvatska "Što čini Hrvatsku (ne)poduzetničkom zemljom?"

[5] CTB, "Nautički turizam u Hrvatskoj, nautički charter 2020", Croatian Tourist Board, Zagreb 2020.

[6] Laguna Trade d.o.o. Rogoznica, Revidirani godišnji financijski izvještaji za 2021. godinu.

[7] NKD – HGK za djelatnost (N7734) Iznajmljivanje i davanje u zakup (leasing) plovnih prijevoznih sredstava.

[8] OG 105/2016 (16th November 2016), "Regulation on inland navigation crew members".

[9] OG 13/2020. (31.01.2020) Regulations on boats, boats and yachts

[10] Ordinance on categorization of nautical tourism ports divides ports on marinas and other facilities for the provision of services and accommodation of vessels, OG 120/2019.

[11] Tomas Nautika-jahting 2017 (short version), Rezultati istraživanja, Institut za turizam Zagreb, Opatija 2018. Microsoft PowerPoint – Tomas Nautika Jahting 2017 29 06 2018 Opatija FIN ISPRAVAK.pptx (iztzg.hr).

[12] Tomas Nautika-jahting 2017, Institute of Tourism Zagreb, Zagreb 2018.

c) Internet

[1] www.narodne-novine.nn.hr/clanci/sluzbeni/2020_01_13_223.html

[2] https://iztzg.hr/UserFiles/File/Narudzbe/2017-Tomas-nautika-JAHTING.pdf

[3] www.poslovni.hr/hrvatska/hrvatska-flota-od-4378-charter-plovila-najveca-je-na-svijetu-356504

[4] www.crosca.com

[5] www.skippercroatiasail.com/skiper-hostesa/?lang=hr

[6] www.skipper4you.com/cjenik.aspx

[7] www.narodne-novine.nn.hr/clanci/sluzbeni/full/2016_11_105_2254.html