

Sailboat Charter Company Income Analysis
Projecting the Impact on Income of Switching to a Charter-Only Model
23 Aug 2023

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Background

The company being discussed in this report is a sailboat charter company that has been serving customers for over a decade. Its income primarily comes from two services it offers: charters and lessons. Charters are sailing expeditions, led by a licensed captain (who also happens to be the owner), in which private groups of up to six passengers can spend between 2-6 hours aboard the sailboat on a tour of the local coast and nearby islands. The cost is dependent on the size of the group and number of hours selected. Lessons allow groups of 2-3 students to spend 1-5 days sailing aboard the sailboat while receiving private, industry-standard instruction from the captain, who is also a licensed instructor. The lessons start at a novice level, and students can enroll in additional lessons if they want to continue receiving more advanced instruction. The cost is based on the number of students and the specific course being taught.

In spring of 2023, due to the nature of teaching lessons, which take longer and often require him to spend nights aboard the sailboat away from his family, the owner decided that beginning in 2024 he would no longer offer lessons. With the business now only offering charters, he expressed concern about what impact this decision will have on the company's income. Should the owner anticipate a significant drop in income in 2024? This report has been created in response to the owner's request to have his company's books analyzed in order to provide clues to indicate what he can expect from this change.

Executive Summary

An analysis of the company's books from 2019-2022 suggests that the decision to stop offering lessons will not have a negative impact on income if the owner uses the time saved not teaching lessons to instead offer more charters. In fact, the average hourly income earned from charters is 131% more than the average hourly income earned from lessons. This provides the owner with two options beginning in 2024:

1. The owner can continue working the same number of hours doing just charters as he worked before doing both lessons and charters. Due to the higher hourly income earned with charters, the owner can expect to see his 2024 income increase by 86% when compared to his 2022 income.
2. The owner can choose to work fewer hours doing just charters than he worked while doing both lessons and charters. Due to the hourly income from charters being higher, he could work 46% fewer hours and still earn the same income as he did in 2022.

Data Cleaning

The analysis presented in this report was completed using RStudio. The data was taken from annual revenue reports manually created by the owner in Microsoft Excel. While loading the data into RStudio, the income portion of these reports was isolated for the purpose of this analysis.

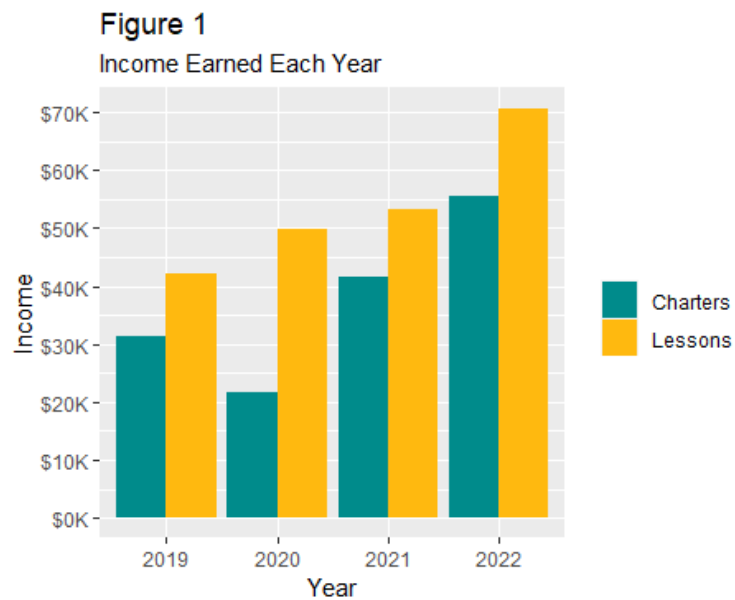
Prior to analysis, the data was cleaned to remove extraneous information and to correct mistyped entries. Of the 1,119 lines of data representing individual income generating events, 133 entries were filtered out because they did not apply to the question being investigated. Some examples are listed below.

- The sale of study materials for lessons from which the company did not make a profit. These were labeled as income in the income portion of the revenue reports, but they were also included in the expenses section of the revenue reports, meaning the net impact was zero profit.
- The data from 2022 continued into the first few months of 2023. The 2023 events were removed to focus on years with complete data (2019-2022).
- Clients occasionally hire the owner to deliver their boats for them, which does not fall into the category of lessons or charters.
- The greatest outlier removed from the data was for sizeable insurance claims the owner had. Not only do these not fall into the categories of charters and lessons, but including them would have heavily skewed the data for certain years.

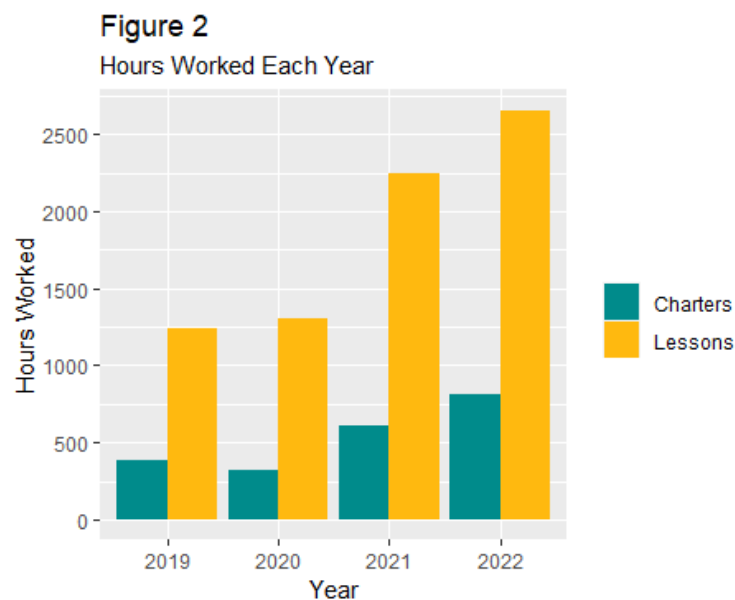
The remainder of the data was manually cleaned in RStudio to correct misspellings and other small issues that would prevent it from effectively being investigated.

Analysis of Historic Data

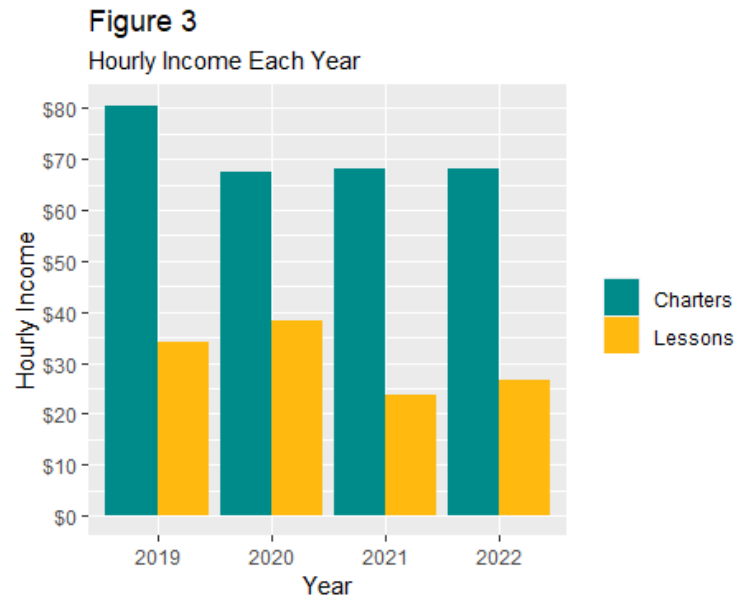
The total income earned from lessons and charters during the four-year period from 2019-2022 was \$366,305. Lessons accounted for \$215,821 of this total, and charters accounted for the remaining \$150,484 (see figure 1).



During this time period, the owner worked 9,581 hours between lessons and charters, with 7,440 of those hours spent teaching lessons, and the other 2,141 hours spent on charters (see figure 2).



These efforts yielded the owner a four-year average hourly income of \$50.87. Interestingly though, the average hourly income for lessons was only \$30.67, whereas the average hourly income for charters was \$71.07 (see figure 3).



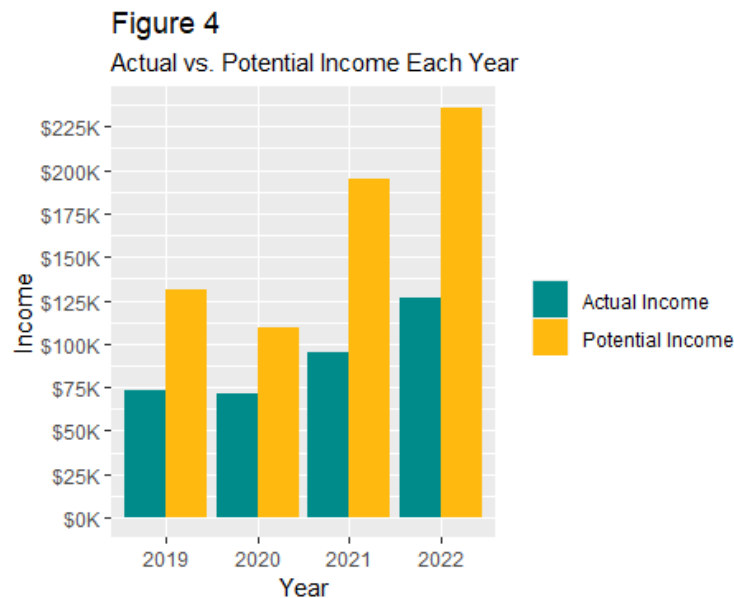
Comparing hourly incomes, it is clear that time spent doing charters was more profitable than the time spent teaching lessons. The owner has reported that he stays almost fully booked and regularly has to turn down requests for additional charters and lessons. This suggests that when he switches to a charter-only model, assuming he can continue generating enough charter business to continue staying almost fully booked, he will actually increase his income compared to when he had the dual lesson-charter model.

Way Ahead

While most business owners are generally focused on increasing income, the owner being discussed here has provided indications that he is trying to change his work-life balance. For this reason, this report continues by analyzing two possible courses of action the owner could take starting in 2024.

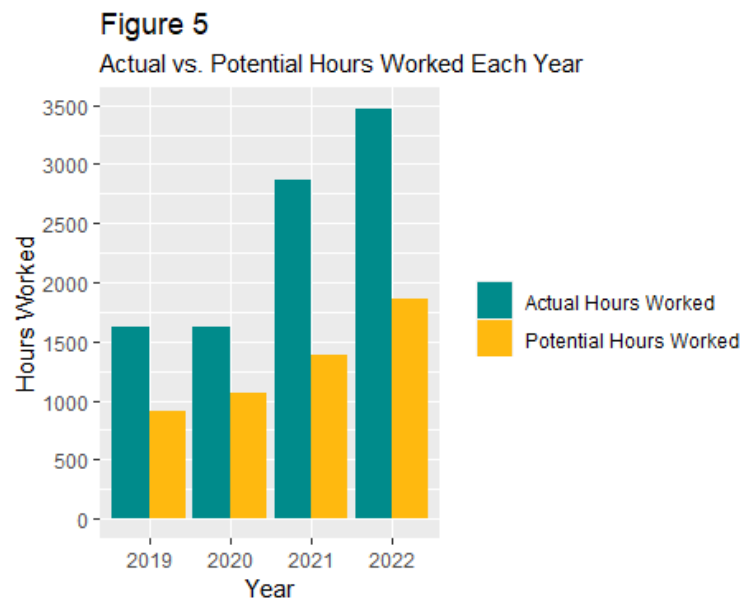
Option 1: Increase Income

The data suggests that this business decision will be effective if the owner wants to focus on increasing his income in 2024. If the owner had worked the same number of hours at the same hourly income focusing only on charters during the four-year period, he could have had a total income of \$617,717 during the four-year period instead of \$366,305 (see figure 4). The average hourly income for charters in 2022 was \$67.98. If the owner spends the same number of hours doing only charters in 2024 as he spent doing both lessons and charters in 2022, assuming he earns the same hourly charter income as he did in 2022, he could forecast his income in 2024 to be \$236,162, as compared to the \$126,342 he earned in 2022.



Option 2: Work Fewer Hours

The other option the owner has, since charters yield a higher hourly income, is to work fewer hours in 2024. If the owner had only offered charters during the four-year period, assuming he earned the average hourly charter income rate during that time, he could have earned the same income working only 5,221 hours instead of the 9,581 he spent doing both lesson and charters (see figure 5). If he wants to earn the same income doing only charters in 2024 as he earned doing both lessons and charters in 2022, he would only need to work 1,858 hours in 2024, as compared to the 3,474 hours he worked in 2022. That is less than 40 hours per week!



Conclusion

The data clearly shows that the owner earned a much higher average hourly income during 2019-2022 doing charters than he earned teaching lessons. Assuming his demand for charters continues to stay high, the decision to switch to a charter-only model provides him two possible options in 2024. One, he could continue working the same number of hours and expect to see increased income in 2024 due to the higher hourly income of charters. Two, he could work fewer hours in 2024, earning a higher hourly income, and continue earning the same income as before. Either way, his business decision will likely set him up for success in 2024, either financially or in regards to his improved work-life balance.