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Financial investments of the dominant cruise companies as a component of the global economic recovery and eventual growth during COVID-19 crisis era

Abstract

One of the most important sectors of tourism globally is cruise tourism, as is giving a leisure experience to cruisers who are traveling across different destinations. It is also one of the most growing sectors in the tourism industry as is becoming increasingly popular. In this review study, conducted employing thematic analysis and thematic synthesis, the authors aim to approach the COVID-19 crisis era financial investments of dominant cruise companies as a component of global economic growth. Nowadays, the cruise industry operates big cruise ships as is contrary to the cruise industry back in 1960s. This study finds that the biggest cruise companies line up investment plans to renew their cruise fleet with larger, more modern, and environmentally friendly ships, borrowing from favorable financing sources. In other words, the companies are trying to introduce specific strategies to maintain their business growth, by investing in building new vessels with the target of expanding their current fleet with cruise ships with better capacity.

Keywords: *Financial management, Financial investments, Cruise industry, Economic impacts, Shipping companies, Financial accounting*

Jel Classification: G11, O16, Z32

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Konstantinos A. Chrysafis, Postdoctoral Researcher. Department of Tourism Economics & Management, University of the Aegean 8, Michalon str., Chios, Greece

E-mail: kchrysafis@aegean.gr

Georgia Ch. Papadopoulou, Assistant Professor (Corresponding Author). Department of Tourism Economics & Management, University of the Aegean 8, Michalon str., Chios, Greece

E-mail: gpapadopoulou@aegean.gr

1. Introduction

Cruise tourism can be traced back to the transoceanic sea travel in the 20th century when ships were the only way of long-distance travelling. This trend turned on the competition among

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different service providers to make sure that they offer the best services. Very soon, shipping companies began to expand by offering cruising services. Peninsular Oriental Steam Navigation Company was the first company to offer cruising in 1822 (London and Farias, 2019). Nevertheless, the industry would not gain impetus because of the growth and development of the aviation industry. Also, the cabins were fitted to maximize the number of passengers rather than to guarantee passenger comfort (Honey, 2019).

Since the beginning of cruise tourism, the industry has become one of the sectors that was growing rapidly in the tourism industry because of the rise in distribution of wealth globally. Kendall (1986) mentioned that the purpose of the cruise is the enjoyment of passengers and not the transport itself. Papadopoulou and Sambracos (2014) added that many tourists are able to visit big ports and experience alternative countries and cultures. During the past years, the cruise sector has faced a passenger growth rate, with an increase of 20.5% during 2018 (Atzampos et al., 2019). According to Lin et al. (2022), the figures of reservations from 2015 to 2019 in the three major cruise companies (Carnival Corporation, Norwegian Cruise Lines Holdings Ltd, and Royal Caribbean Group) showed a significant increase. Additionally, the cruise industry is an important source of employment and contributes significantly to the GDP for nations (both developed and developing), a feasible investment for many cruise companies. International cruise ships have faced many confirmed cases of the COVID-19 pandemic, which led to the international community's attention regarding the dangers of cruise restrictions (Sun and Zhao, 2022). The cruise industry has encountered a global economic loss of 77 billion US dollars and 518,000 job losses (CLIA, 2021b). By the end of 2023, passenger figures are expected to recover and exceed the levels of 2019. Roughly, passenger numbers are projected to recover at a rate above 12%, compared to 2019, by the end of 2026 (CLIA, 2022).

One of the main destinations, globally, is Greece. The Greek cruise industry has been developed since the 1930s, when the first companies provided travel services in the Aegean Sea and the Mediterranean (Lekakou and Stefanidaki, 2015). In the year 2021 the total number of cruise ship arrivals in Greek ports rose to 1,957 and the number of passengers to 1,316,662. The increase in arrivals compared to 2020 amounts to 732% and for passengers to 1750%. But with the reference year of 2019, a record year for Greek tourism, traffic in cruise ships moved to 49.2% while passengers to 23.7%. The significant difference between the number of ships and passengers is, of course, due to the necessary measures taken for dealing with the COVID-19 pandemic at global, European and national level by imposing restrictions on the occupancy rate of ships. In terms of the number of cruise ships, Piraeus, Mykonos, Corfu, Rhodes, Santorini, Katakolo and Heraklion are in first place. In terms of the number of passengers, Corfu, Piraeus, Mykonos, Rhodes, Katakolo, Heraklion and Santorini are ahead (Hellenic Ports Association, 2021).

In this paper the authors focus on the financial investments of the dominant cruise companies as a component of global economic growth. This review employs thematic analysis and thematic synthesis to identify the main investment strategies of the dominant cruise companies globally. The findings are expected to provide a clear overview of these companies' action in managing the COVID-19 crisis through the adoption of new investments. These investments will help to mitigate the effects of the COVID-19 crisis on corporate growth. Ensuring the growth of cruise companies will assist in a multitude of ways to the global economy's strengthening and gradual recovery.

The remainder of the paper proceeds as follows: Section 2 analyzes the literature review for the cruise industry and the economic impacts. Section 3 presents the methodology. Section 4 discusses the findings and section 5 concludes.

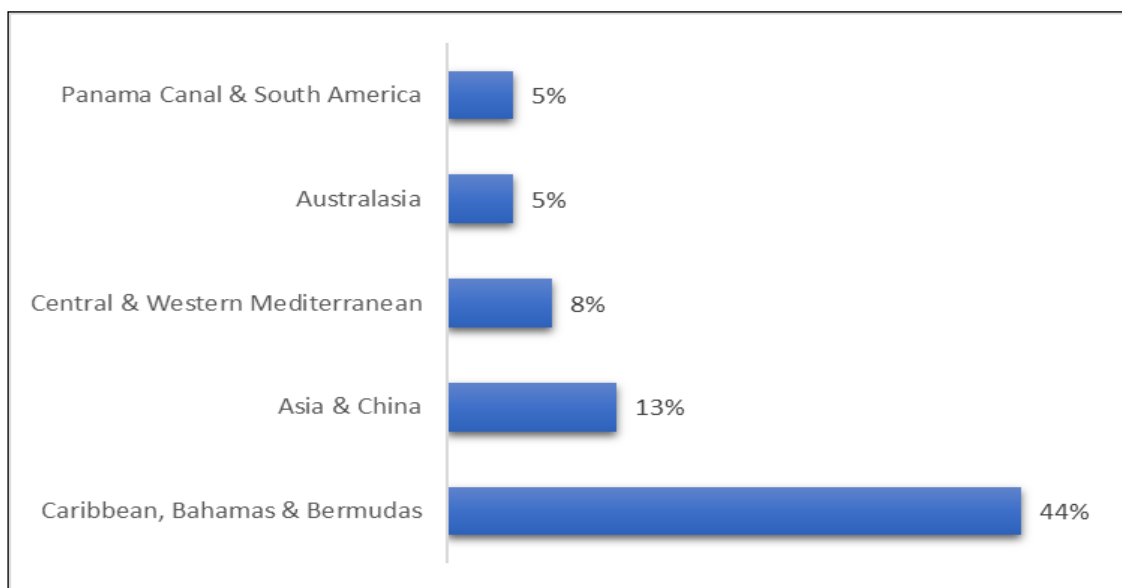
2. Literature Review

2.1 Cruise Tourism Industry

As stated in previous sections, the cruise sector is a major component of contemporary tourism because it is multipurpose. Not only does it serve as a luxury mode of transportation as a floating resort, but cruise tourism also takes passengers to exotic traveling destinations. The main characteristic of a cruise ship is the hotel operation by offering hotel type services Papatheodorou (2001) reported. A cruise ship can be geographically moved and that is the difference between a hotel and a cruise ship.

In most cruises, passengers have the opportunity to enjoy luxurious on board features such as restaurants, fitness centers, shopping centers, entertainment spots and play areas for children (Weeden, 2016). Aside from these luxurious features, passengers also have the luxury of visiting onshore sites in various ports of call. Cruise Lines International Association (2019) mentioned that the main cruise destinations in the world are Australasia, Brazil Asia, Europe, North America, Asia and the United Kingdom, while CLIA (2022) claimed that the top destination from 2018-2020 was Caribbean, Bahamas and Bermuda, followed by Asia and China as shown in the below graph 1.

Graph 1: Top Five Destinations by Average Passenger Volume from 2018-2020.



Source: CLIA, 2022.

North America remains the largest source market holding 51%, with other markets growing rapidly (CLIA, 2022). Audited statistics from the CLIA (2016) indicate that there are certain cruise lines that dominate the global industry, and these are the Carnival group, Royal Caribbean International, and Norwegian Cruise Lines which controlled 76% of the market. Whereas the largest passenger source is North America, which generates around 55% of the cruise passengers worldwide (Esteve-Perez and Garcia-Sanchez, 2015). Regardless of the advancement of the sector in those areas, it is important to appreciate that a significant opportunity arises for Middle East Cruises since the European and North America cruise markets have entered maturity and saturation, whereas the Oceanian and Asian markets are also fast approaching maturity as well (Papathanassis, 2017). As a result, a gap in the cruise market is bound to arise and this can be properly satiated by the Middle East market. The cruise industry has become a symbol of globalization of the tourism industry in terms of the mobility of its assets, practices and market coverage (Chin, 2008; Weaver, 2005; Wood, 2000). Dickinson and Vladimir (1997) discussed that the previous years, only the wealthy and the elderly had the opportunity to experience a cruise trip.

Sun et al. (2018), Hung et al. (2019) and Han et al. (2019) in their research discussed cruise tourism, but they stated that it has not received much significance. Research on cruise tourism has been targeted mainly on cruisers' behavior as well as the effects of the sector on

the local economies (Durko, 2015; DiPietro and Peterson, 2017; Dwyer and Forsyth, 1998; Gabe et al., 2017; Petrick, 2004; Penco and Di Vaio, 2014; Petrick and). To the authors' best knowledge, studies examining the financial performance of the cruise industry are rather few.

Cruise tourism is growing rapidly (Papathnassis and Beckmann, 2011). Yan (2018) added that it is growing three times more than the tourism as a whole. The advance of cruise tourism has been discussed in various different reports (Santangelo, 1984), identifying the trends of extended-length cruising (Marti, 2004).

2.2 Cruise Impacts on the Global Economy

Brida and Seijas (2012) discussed that major benefits can be added to the cruise destinations by increasing the employment growth, the foreign exchange earnings, taxes and the profits from the passengers' spending. As per CLIA (2022), cruisers spend an average of \$750USD per passenger in port cities over the course of a typical seven-day cruise.

The relation between the different parts of the economy and the cruise sector is compound. The cruise industry is related to financial activities, construction, trade, F&B, real estate, recreation, education and many more. Brida and Zapata (2008) noticed that money flows can assist the total economy by attracting investment, creating new jobs and increasing profits. Papadopoulou and Sambracos (2014), Pallis (2015), Gargano and Grasso (2016) and Gouveia and Eusébio (2018) focused on the direct economic impacts of cruise tourism, while Brida and Zapata (2010), Brida, et al. (2011), Larsen, Wolff and Marnburg (2013) attempted to estimate cruise passengers' expenditures through surveys which face a major impact on the profitability of cruise tourism and the related cruise sectors (Marksel et al., 2016).

Cruise passengers, unlike holidaymakers, spend perhaps larger amounts on the cruise ship. Nevertheless, their land trips also have a significant economic impact on local areas (B.R.E.A., 2001). This economic impact is spreading to the national and regional economies, as cruising and tourism in general is an industry linked to other organizations which vend their services and products on cruise ships, guests and crew. These kinds of buyers (cruise lines, passengers and crews) are the leading revenue generators for local communities, with their earnings depending on those who make the costs and to what extent these costs are related to services and goods which are produced within the specific region (Dwyer and Forsyth, 1998). Host countries will try to increase the benefits of the cruise, by extending the ship's stay in port or by welcoming more cruise ships (Brida et al., 2011). Therefore, these ways lead to an increase in consumption as landings increase and passengers spend more money having more free time.

The direct economic impacts are those that have a direct impact on the individual or business that is affected by cruise activity. A raise in the figure of vessels would automatically raise the port fee for cruise companies, fuel consumption and suppliers' revenue (Chrysafis et al., 2022). The additional revenue would be used to create new jobs, help raise workers' wages at the port and invest in port infrastructure. The above is characterized as a direct impact on the costs of cruise lines. Similarly, when many passengers disembark at a port, their costs directly affect the market. Income from sales is calculated as direct costs to passengers, which can cause differentiations in the sector in terms of provided services, the figures of crew required and the level of their profits (Styliadis, 2012).

Indirect economic impacts are those caused by the interconnectedness of industry expenses. Those who are directly involved in the business activities of cruising, spend again to buy products and services from other related fields. For example, a port should distribute the revenue already earned in other sectors and interconnected industries to acquire services and products needed to make sure that the levels of satisfaction of the vessels and their guests are high. If a port is willing to strengthen its services by building a new dock, then this will be done by a construction company. Relevant differentiations in revenue and employment in the construction sector are the indirect economic implications of the increase in the figures of vessels approaching this port. The construction company, in turn, must procure raw materials

and special vehicles and have experienced staff for the construction of the new dock (Styliadis, 2012).

The induced economic impact is the outcome of the cost of those households employed in the cruise sector (Stynes, 1997). Employees who are directly or indirectly associated with the cruise industry spend their wages on purchases of goods and services, such as food, rent, transportation, etc., to meet the needs of their household (Ardahaey, 2011). The percentage of workers' salaries used for this objective and creates extra sales, revenue and jobs for the industries is the induced economic effect depends on the levels of household consumption and market probability, local goods and services.

The economic impact of cruise tourism is bigger than the direct expenses of cruisers and employees and has a close relation to the local industries and multipliers (Stöckl, 2015). Thus, the indirect economic impacts and other expenses are hard to be measured (Cárdenas-García and Pulido-Fernandez, 2019; Pulido-Fernández et al., 2017 and Wang and Davidson (2010) indicate. The main sources of direct economic impacts on the destinations are divided into three categories: a) expenses by cruisers on shore during their trips, b) spending by crew members and c) port agent services and cruise line purchases.

The COVID-19 pandemic revealed the significance of cruise economic impacts after the suspension of cruise ships in 2020. Passenger embarkations in 2020 dropped by 81% in relation to 2019, cruise supported jobs have decreased by 51% and the total economic contribution of 2020 was 63.4B compared to the 154B of previous year (CLIA, 2022).

3. Methodology

As mentioned in the introduction section, the aim of this review is to conduct a thematic analysis and thematic synthesis to find the most important investment strategies of the three largest companies in the cruise industry with the aim of recovering from the COVID-19 crisis. These investments can act as levers to restart the global economy. Thematic synthesis is intended to synthesize the data coming from thematic analysis and is one of the well-known methods to define themes and key messages in primary qualitative data (Ryal et al., 2018). According to Nicholson et al. (2016) the steps of this process are as follows: i) research focus, ii) literature search, iii) selection of the most appropriate literature, iv) definition of quality threshold, v) data extraction, vi) thematic synthesis.

Research Focus: Initially, the research focused on the main investment strategies of the biggest cruise companies. Special emphasis was placed on any type of investment made by the major cruise companies. More specifically, the main object of the study was the investments made as part of the recovery plan from the pandemic crisis and the management of potential risks.

Literature search: For the purpose of this literature review, articles written since the onset of the COVID-19 pandemic onwards were studied. In addition to the articles, electronic databases such as Cruise Market Watch were used mainly for the period after COVID-19 pandemic.

Sampling: The time period under examination was one of the basic articles' search and selection criteria. In the articles search process, keywords such as "cruise company" "investment", "COVID-19 crisis recovery", "financial investments", "COVID-19 crisis future risks", "economic growth" etc. were used. All these keywords are related to the investments of cruise companies with the aim of dealing with the impacts of the pandemic crisis and the proactive management of future risks.

Quality threshold: The quality of the content is established by the quality level of the publications (scientific journal proceedings, conference proceedings etc.), the quantity of citations, the quantity of downloads, the relevance of the author's area of expertise to the study, and the publication date.

Data extraction: Initially, the authors allocated the articles so that an intensive study could be done for each of them. Then, after extracting the necessary information (related to the

above data) each author judged the relevance of the information extracted by the other author. After this information was judged as relevant, scientifically sufficient, and original, it was then added to the results section. The relevance, scientific sufficiency, and originality of the studies were judged through a debate between the authors, a process recommended in cases of studies with different research approaches (Higgins and Green, 2013). In inclusion order, first the information about investments and their contribution to the development of the global economy was introduced. While extracting the information, the authors found something they already knew, that the studies included in the survey had different methodological approaches to the research question. For this reason, the method of thematic analysis and thematic synthesis were used, since they present the advantage of systematically evaluating and synthesizing sources of literature of different approaches (Health Development Agency, 2004).

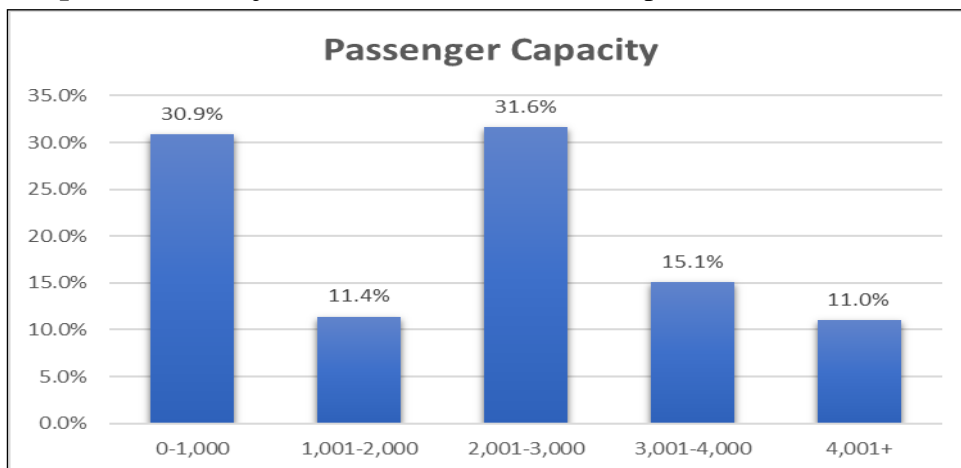
Thematic synthesis: The strategies of the three companies to recover from COVID-19 crisis are considered as themes and key messages resulting from the data analysis.

4. Findings

According to Stopford (2009), the most crucial component for the growth of a shipping company is an increase in its financial performance. This is accomplished by boosting revenue from the ship's core business operations, reducing operating costs, and picking effective business financing solutions. These statements are confirmed by the results of the current study. The three main financial investment strategies resulting from thematic synthesis are a) fleet renewal with modernized ships and capacity expansion with the goal of increasing the market share, b) the establishment of new sustainability goals with the purchase of new generation, environmentally friendly ships with the aim to increase sustainable performance and mitigate investment risk, and c) borrowing from financing sources under favorable terms.

The biggest cruise companies' line up investment plans to outstretch and renew their cruise fleet with larger and modern ships. They are trying to introduce specific strategies to maintain their business growth, by investing in building of new vessels as a target to expand their current fleet with cruise ships with better capacity (Syriopoulos et al., 2022). By the end of 2027, twenty-six LNG-powered cruise ships will be delivered, accounting for 16% of the global capacity. Also, 231 vessels will be fitted with Advanced Wastewater Treatment Systems (81% of the global capacity), 174 cruise ships will be delivered with shore side power connectivity (66% of the global capacity). Last but not least, 176 cruise ships are planned to be delivered with Exhaust Gas Cleaning Systems installed (CLIA, 2022). Passenger capacity of the 2022 projected member fleet are shown in the below graph 2.

Graph 2: 2022 Projected Member Fleet (% of ships).



Source: CLIA, 2022

The growth rate of the global cruise industry from 1990-2019 accounted for 6.6%. Between 2019 and 2021 the passenger capacity has been reduced by 49,105 due to the ships' retirement. On the other hand, eight new vessels were added in 2021 with a passenger capacity of 34,312 as shown in the below table 1.

Table 1: Shipbuilding Summary.

2021 New Build Ships		Passenger Capacity
Carnival	Mardi Gras	5,200
Royal Caribbean	Odyssey of the Seas	4,180
MSC	MSC Virtuosa	4,900
Virgin Voyages	Valiant Lady	2,860
AIDA	AIDAcosma	5,186
Holland America	Rotterdam	2,650
Princess	Discovery Princess	3,560
Costa	Costa Toscana	5,776

Source: Cruise Market Watch (2021).

Investments in the cruise industry are closely related to the sustainability strategies the cruise companies follow. Pallis et al. (2022) discussed the need for putting green strategies, technologies and investment options at a first place. The environmental protection that the cruise companies should follow is related to the cost of investments for the building of new generation vessels (Syriopoulos et al., 2022).

Carnival Corporation & plc owns a total of 92 cruise ships in its brands, with 223,000 lower berths and is considered to be the largest cruise company. In 2021 the group added five new vessels, one in Carnival Cruise Line, two in Costa Cruises, one in AIDA Cruises and one more in Holland America Line at the same year the group sold two vessels removing the less efficient ships from its fleet. (Carnival Corporation and plc., 2022). Carnival Corp. is projected to deliver eight next-generation cruise ships by the end of 2025 (Carnival Corporation, 2022). In 2019 the organization's revenue reached \$20.8B U.S.D. with a total market share of 45% (Statista, 2021). Carnival Corp. addressed new sustainability goals aligned with the United Nations' Sustainable Development Goals. These areas include circular economy, health and well-being, climate action, diversity, sustainable tourism, inclusion, equity, conservation and biodiversity which will lead to the organization's strength regarding its sustainability performance and to help the company mitigate the investment risk.

Among other ambitions, the organization is ambitious to partner with primary vendors to ensure near 100% reuse of packaging materials, to achieve 100% fleet shore power connection capability and to be recognized as a guider in the worldwide sustainable tourism. As a consequence of the COVID-19 pandemic, Carnival Corp. borrowed \$3B under export credit facilities, completed \$1B "at-the-market" equity offering program, retired \$590M of its convertible notes through the issuance of common stock and issued \$2B of senior unsecured notes (Carnival Corporation and plc., 2020).

According to Carnival Corp. (2021), in the organization, during 2021, net cash used in investing activities was \$3.5 billion and this was caused by capital expenditures of \$3B for its new shipbuilding program, capital expenditures of \$602M for vessel improvements,

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information technology, proceeds from sales of vessels and other of \$351M, purchases of short-term investments of \$2.9B and profits from short-term investments of \$2.7B. During 2021, net cash from financing activities of \$6.9B caused by repayments of \$6B of long-term debt, issuances of \$13B of long-term debt, net proceeds of \$1B from Carnival Corporation common stock, premium payments of \$545M, acquires of \$188M of the organization's usual shares and issuances of \$206 million of the company common stock and payments of \$319M related to debt issuance costs.

Royal Caribbean Group's is operating 64 cruise ships, waiting for eight more vessels by the end of 2026 and holding the second position in the cruise market with 25% market share in 2021 (Statista, 2021). The decarbonization strategy of Royal Caribbean Cruises LTD, namely Destination Net Zero, focuses on how to achieve net zero emissions by 2050, introducing new energy efficient cruise ships and investing in energy efficient programs. The effects of COVID-19 created a negative impact on the organization's operations, financial results and liquidity. Actions taken to improve the company's liquidity include reduction of capital and operating expenses in 2020 and 2021 during the cruise ships suspension, amending credit agreements, raising capital through debt and stock issuances and suspending dividend payments (Royal Caribbean LTD, 2021).

Norwegian Cruise Line is placed in the third position of the biggest cruise companies regarding the market share which is 15% (Statista, 2021). The company owns seventeen vessels, and another six cruise ships are expected to be delivered by the end of 2027 (Norwegian Cruise Line, 2022)., Norwegian Cruise Line Holdings dropped in numbers in 2020 over the previous year and this decrease continued 2021 as a result of the COVID-19 pandemic (Statista, 2022c). The growth strategy of the organization includes, among others, investments in strategies regarding price and the improvement of booking technologies. In 2021, net cash used in investing activities was \$1B, which is related to ship improvement projects and newbuild payments. Capital expenditures for the third quarter of 2022 were \$80M (non-newbuild). Anticipated capital expenditures for the 2022 (non-newbuild) are expected to be \$470M. Capital expenditures (newbuild-related), are expected to be \$0.7B for 2022, \$0.5B for 2023 and \$0.4B for 2024. Finally, capital expenditures (net newbuild-related) are expected to be \$84M for the fourth quarter of 2022 (Norwegian Cruise Line Holdings LTD, 2022). The organization's mission regarding sustainability is the improvement of the culture of sustainability by introducing innovation, collaborations and education (Norwegian Cruise Line Holdings LTD, 2021).

5. Conclusions

This study aimed to categorize the financial investments' strategies of the dominant cruise companies as a component of global economic recovery and eventual growth. The biggest cruise companies adopt strategies to renew their vessel fleet with larger, more modern, and environmentally friendly ships. They follow investment plans to boost their business, by investing in the building of new vessels in order to expand their current fleet with cruise ships of bigger capacity. In other words, investments in the cruise industry are strongly connected with the new sustainability regulatory framework. A precondition for the successful implementation of these strategies is a favorable companies' borrowing to ensure the necessary funds.

In numbers, regarding the leading cruise companies, Carnival Corporation & plc added five new vessels in 2021 and is projected to deliver eight next-generation cruise ships by the end of 2025 with a total market share of 45%. Carnival Corp. addressed new sustainability goals aligned with the United Nations' Sustainable Development Goals. Royal Caribbean Group's is operating 64 cruise ships, and eight more are expected to be delivered by the end of 2026, holding the second position in the cruise market with 25% market share in 2021. The decarbonization strategy of the company focuses on how to achieve net zero emissions by introducing new energy efficient cruise ships by 2050. Norwegian Cruise Line is the third

biggest cruise company with a market share of 15%. The growth strategy of the company includes investments in pricing strategies.

In a managerial level, cruise companies' "sales and purchases" department should be directed to the purchase of green vessels to reduce the operating costs of the ship. Moreover, old vessels operating in high levels of fuel consumption should be sold or withdrawn. The ships' capacity expansion is also of utmost importance for achieving an increase in operations' profitability. The "financial management" department should be aware of financial institutions' loans offering the pretty favorable terms in line with the company's solvency capability. In a theoretical level, this research informs academics for the three most frequent strategies for crisis recovery and eventual growth, extracted from the three biggest companies' financial statements and international literature. Moreover, the applicability of the thematic analysis and thematic synthesis methods in other scientific fields, apart from medicine, is highlighted.

A limitation of this research is the exclusive study of the biggest cruise companies. This lacks information about the companies of a moderate or lower level regarding size and market share. A direction for future study could be a multilevel analysis of cruise companies in discovering the differentiation in facing financial impacts of possible crises such as COVID-19 pandemic.

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Author Biography



Dr. Konstantinos A. Chrysafis is an Adjunct Professor at the University of the Aegean, teaching Financial Management, Operations Management, and Crisis Management. Dr. Chrysafis has published various research in international peer-reviewed scientific journals, and he serves as a reviewer for many international journals of reputed scientific standing. He worked as a scientific staff member at the Ministry of Finance, Greece, in the Strategic Planning Division, as a Financial Analyst and Strategy and Business Planner from 2013 to 2017. He has been working as a scientific staff member for the Independent Authority for Public Revenue since 2017 as a Program/Project Manager.



Dr. Georgia Ch. Papadopoulou is an Assistant Professor of Tourism Economics at the Department of Tourism Economics and Management, University of the Aegean, Greece. She is teaching courses in Tourism Economics, Project Management and Operations Management. Her research interests include tourism economics, tourists' behavior, tourism management and cruise transport. Dr. Papadopoulou has published papers on cruise tourism, spa tourism, tourists' motivations, terrorism and tourism in international journals and chapters in books focused on the economic development of tourism, cruise experience and gender equality on the tourism sector. She has also presented her work in international conferences in Greece, Portugal, Cyprus, Indonesia and Thailand.

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