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Methods of Raising Funds for Purchasing of New Cruise Ships by International Corporations

Abstract

The world's cruise corporations regularly purchase large, luxurious cruise ships. In accordance with the Cruise Line International Association, 33 new ocean cruise ships will be available on the market by 2020. These types of capital expenditures are associated with large financial outlays of up to $1 billion. The leading cruise corporations are not able to finance purchases of new units with their own resources and therefore look for different solutions. Available publications focus mainly on issues related to purchasing cargo ships, not cruise ships. The objective of the article is to identify sources of funding of new cruise ships. Our analysis identifies the average capital expenditure associated with purchasing new cruise ships and factors that influence it. The most popular methods for raising such capital are also provided. Our research methodology relies on data exploration method, a desk research method and comparative analysis.

Keywords: business investment, capital expenditure, corporate investment
JEL: G3, G310

Introduction

For the last two decades, a few ocean cruise ships enter the market every year in response to growing demand for sea cruises. According to the Cruise Line International Association

(CLIA), annual average growth in demand for ocean cruise travels is estimated to be 7.2% per annum [Florida Caribbean Cruise Association, 2013, p. 6]. Cruise line owners also face a competitive market for customers, continuously tracking market trends, conduct regular consumer market research, and try to respond with new technologies to changing expectations of customer preferences. These often complex reasons drive capital expenditures and investment in new ships.

Cruise tourism corporations use, and compete through, innovation to attract new customers. The manifestation of this competition influences the modernization of cruise ship fleets every few years. As a result a dozen or more high capacity cruise ships (up to 6 thousand passengers and 200 thousand GT (Gross Tonnage)) have been introduced to the market annually with 50 new units contracted until 2022. The largest ships will accommodate up to 5.4 thousand passengers and cost more than 1.3 billion US dollar (Table 2). These larger cruise ships also cut unit costs per a passenger, bring economies of scale, and lower unit operating costs [Lester, Weeden, 2004, pp. 39–50; Wood, 2004, pp. 133–146]. The larger the cruise ship is (i.e. designed for a larger number of passengers and crew), the lower unit costs per a cruise passenger. Globalization and consolidation focused on increasing profitability drive the contemporary cruise ship market [Dowling, 2006, p. 424].

The cruise ship industry has been the subject of many research on investments in the cruise ship market [Byung-Wook, 2005, pp. 203–217], partnerships in economic activities among cruise ship owners [Hall, Braithwaite 1990, pp. 339–347], cruise ship market globalization [Wood, 2000, pp. 345–365], the functioning of that market in different regions of the world [Hobson, 1993, pp. 345–365], and challenges faced by cruise corporations [Veronneau, Roy, 2009, pp. 128–139]. There is, however, a gap in the literature concerning funding for the construction and purchase of new cruise ships. In this study we identify sources of funding for new cruise ships available to the leading cruise companies. In addition, we consider the following research problems (1) Historically, what methods of financing cruise ship purchases have been used (2) What are the plans for introducing new cruise ships in the next few years? (3) What methods of financing do the largest world cruise corporations now choose when purchasing new cruise ships? We employ an exploration method of data, i.e., extraction and data harvesting (data mining) from the databases. We also develop several methods of processing and presenting results, such as qualitative and quantitative data analysis as well as classification and grouping. A desk research method and comparative analysis are also applied.

Methods of Financing the Construction of Cruise Ships in the Past

Historical data on financing new vessel construction originates from the 16th century, when the first marine expeditions were organized. However, most financing data dates

back to the first half of the 19th century, with the building of steamships [Stopford, 2009, p. 270]. At that time, the value of a vessel was commonly divided into 64 parts, referred to as "sixty-fourth" company shares, which investors could then acquire. Through this process three main groups of investors were established i.e.: individuals, individuals organized into partnerships, and investors in joint stock companies [Stopford, 2009, p. 271]. However, the vast majority of vessels belonged to private owners.

As ship sizes increased, larger financial resources were necessary and joint stock companies began to play a more important role. However, this form of financing involved numerous audits and allowed easier public access to company information. A number of owners therefore still preferred traditional forms of financing in which a family enterprise with capital borrowed the money from a variety of banks and private investors.

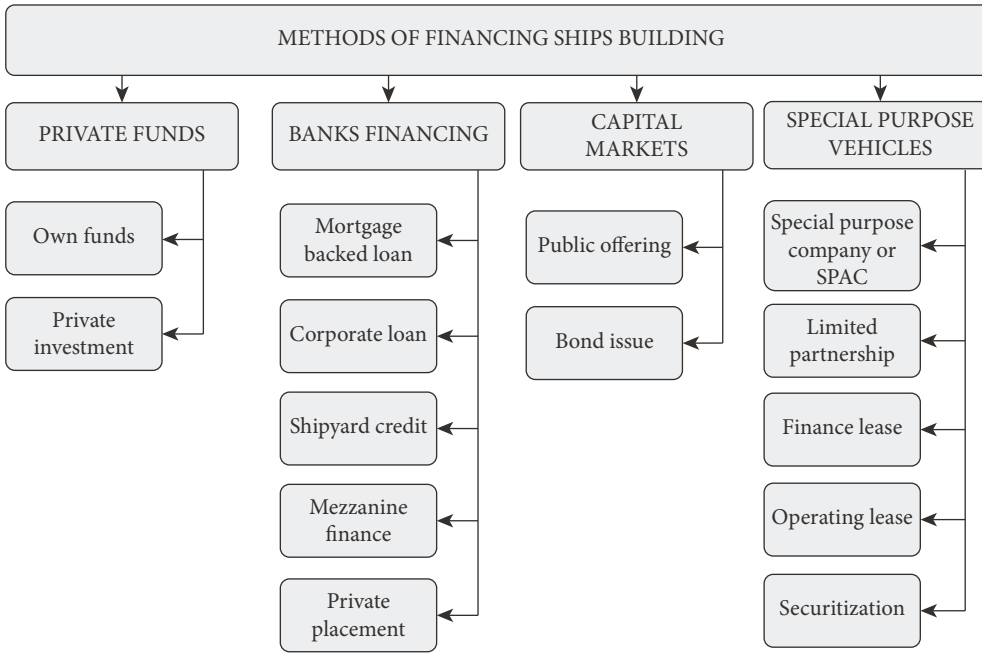
From the mid-19th century to the 1950 s, dozens of luxury ocean passenger liners were introduced, such as: "Deutschland" in 1901, belonging to the Hamburg America Line [Urbanowicz, 1977, p. 73]; "France", belonging to the Compagnie Générale Transatlantique [Miller, 1997, p. 8]; and "Titanic", belonging to the International Mercantile Marine, (operated by White Star Line) [Lück, 2007, p. 473]. During this period, it was common to set up "one-ship companies" companies that were registered as entities funding the construction using highly leveraged charter-backed finance.

Ocean liners were superseded in the 1960 s and 70 s by more economical and faster cruise ships. The first cruise ship (and first cruise corporation) was Norwegian Caribbean Line (NCL) operating in 1966, followed in 1968 by Royal Caribbean International and Carnival Cruise Lines in 1972, which are currently the largest cruise ship owners [Kizielewicz, 2015, p. 29]. The first mortgage on the hulls of these ships – with little additional security – was the main source of vessel financing offered by bankers [Stopford, 2009, p. 263].

Opportunities to Raise Financing for the Construction of New Cruise Ships by Ship Owners

Nowadays, ship owner companies rely on a wide range of options to acquire capital to purchase new cruise ships, ranging from a company's own equity or bank loans to public offerings and even special purpose companies. No cruise ship company can self-finance the construction and purchase of new cruise ships, which are currently the most expensive ships built in the world. Container ships and tankers can cost up to $ 150 million, and LNG tankers up to $ 225 million [Stopford, 2009, p. 269]. The average cost of building a cruise ship is at least twice as high, and the most expensive among them can cost up to $ 1.3 billion. These are very capital-intensive investments with returns estimated over a period of from 25 to 30 years. Hence, as a rule, purchase budgets are composed of a variety of sources to spread the financial risk.

FIGURE 1. Methods of financing ships building



Source: own elaboration based on: Stopford, M. (2009), *Maritime Economics*, Third Edition, Routlege, Taylor & Francis Group, London & New York, p. 283.

Even the largest cruise ship corporations have experienced budgetary problems regarding new cruise ship financing. As a result, financial institutions treat the cruise ship industry as a high risk market and impose a number of requirements on ship owners seeking funding for the new ship construction. Bankers prefer granting loans to entities that have a well-defined corporate structure and well-defined ownership [Stopford, 2009, p. 269] but the cruise ship industry is made up of corporations with complicated organizational structures that bring together operators from all over the world, and are subject to differing tax laws. These issues create numerous challenges for potential creditors. The cruise ship owners usually pursue four main funding sources: i.e. private funds; bank financing; capital markets; or special purpose vehicles (Figure 1). The selection depends on various determinants, i.e., the financial condition of the borrower; size of the investment project; enterprise credibility; and the business plan. The leading cruise corporations are listed on the stock exchanges and a significant part of the funds they obtain are through public offerings. Mortgage backed loans are also important financing sources (Table 1).

TABLE 1. Potential methods of financing the construction of new ships

Structure of financing	Features of Structure
Own funds	Equity finance provided by the owner or private investors in return for shares in the privately held company.
Private investment	Equity loan arranged privately with family, colleagues, high net worth individuals.
Mortgage backed loan	Term loan provided by a bank, secured against a mortgage on the ship(s). Large loans may be syndicated between several banks.
Corporate loan	Loan secured against the company's balance sheet.
Shipyard credit	Loan provided or guaranteed by the government or an agency to assist domestic shipyards in obtaining orders.
Mezzanine finance	Finance containing both debt and equity elements.
Private placement	Sale of equity or corporate debt to one or several investment institutions.
Public offering	Offering shares sold by subscription on a stock exchange and subsequently traded on a secondary market.
Bond issue	Long term security issued in the capital market, usually with interest payments every six months and principal repaid on maturity.
Special purpose company or SPAC	Shares in a special purpose company sold privately by individuals or listed on the stock exchange.
Limited partnership	Limited liability partnership set up as a vehicle for financing ships.
Finance lease	Long term tax-efficient finance based on the sale of a ship to company which benefits from tax allowance and leases the ship back to user.
Operating lease	Short term lease, generally less than seven years, which does not have to be shown on the leases balance sheet.
Securitization	Financing structure designed to separate the assets from company management.

Source: own elaboration based on: Stopford, M. (2009), *Maritime Economics*, Third Edition, Routlege, Taylor & Francis Group, London & New York, p. 283.

Many ship owners still choose commercial bank debt, which provides the foundation of most public and private shipping companies' capital. According to the OECD report on ship financing "commercial loans can be arranged to finance the construction of vessels and/or as their permanent "take out" financing. In addition to commercial banks, export credit banks such as KEXIM play an active role in offering competitively priced construction and permanent financing for vessels" [OECD, 2007, p. 4]. Cruise ship companies pay installments in the form of a percentage (typically 5–10%) of the value of building contracts during the ship's construction stage, which are generally concluded in 2–4 years, after which a completed ship is expected to be placed on the market.

Cruise ship owners also take advantage of the financial services offered by Traditional Shipping Banks, such as HSH Nordbank with shipping loan portfolios of $ 29.5 billion and the Royal Bank of Scotland (RBS) with $ 17.5 billion [OECD, 2007, p. 9].

Financial institutions offering resources for new units often impose a number of requirements for cruise ship owners. According to the OECD report, these requirements include [OECD, 2007, p. 12]:

- Mortgage on subject vessels.
- Assignment of Borrower's time charters and earnings.
- Assignment of the insurance on each of the vessels subject to a mortgage.
- Assignment of the vessel management agreement with Ship Manager.
- Pledge of Borrower's retention account.
- Assignment of Borrower's interest in any hedging arrangement.

A less attractive financing option involves so-called *Refund Guarantees* options funding. This elevates confidence in the yard that the owner is good for all promised payments. A ship owner must also trust that the shipyard will execute the order in a timely manner. Such transactions are often supported by local state-affiliated banks such as the Bank of China, The Export-Import Bank of China and The Export-Import Bank of Korea [OECD, 2007, p. 9].

For more than a decade, substantial financial resources for development and investment have been collected by the ship owners in public offerings on the stock exchange. All mainstream cruise shipping corporations in the world are currently listed on a stock exchange. Only a small percentage of financing is by private individuals, as such investment requires freezing capital for a long period of time and affects company cash flow and leverage.

Another important financing method is the Special Purpose Acquisition Company (SPAC), for which financial support of a new vessel construction is the main objective. In recent years, several such entities have been established etc.: FreeSeas Inc., International Shipping Enterprises, Rand Acquisition Corp and Star Maritime [OECD, 2007, p. 35].

The method chosen to finance ship construction and purchase has a significant impact on the financial liquidity of ship owners and must be carried out sensibly.

The Financing of Cruise Ships by the World's Leading Cruising Corporations

Introduction of a new cruise ship on the market involves high investment outlays. As ships are getting bigger and more advanced technology is used in competitive markets, their production costs are also rising. Until recently, construction costs of vessels averaged some 500 million dollars. That figure can now exceed one billion dollars (Table 2).

TABLE 2. The selected cruise ships contracted by 2020

Nº	Cruise Line	Ship name	Capacity	Tonnage GT	Cost in USD	Yard
Cruise ships ordered for 2016						
1.	AIDA Cruises	TBD*	3 250	125 000	650 000 000	Mitsubishi
2.	Carnival Cruise Line	Carnival Vista	4 000	135 000	780 000 000	Fincantieri
3.	Holland America Line	Koningsdam	2 660	99 000	520 000 000	Fincantieri
4.	Regent Seven Seas	Explorer	738	54 000	450 000 000	Fincantieri
5.	Royal Caribbean International	Harmony	5 400	225 282	1 300 000 000	STX France
6.	Royal Caribbean International	Ovation of the Seas	4 180	167 800	1 032 000 000	Meyer Werft
7.	Star Cruises	Genting Word	3 364	150 000	960 000 000	Meyer Werft
8.	TUI	Mein Schiff 5	2 500	97 000	515 000 000	Meyer-Turku/ STX Finland
Cruise ships ordered for 2017						
9.	MSC Cruises	TBD*-Vista 1	4 500	167 600	1 000 000 000	STX Finland
10.	MSC Cruises	TBD* – Seaside 1	4 140	154 000	938 000 000	Fincanteri
11.	Norwegian Cruise Line	Norwegian Bliss	4 200	163 000	916 000 000	Meyer Werft
12.	Princess Cruises	TBD*	3 560	143 000	804 000 000	Fincantieri
13.	Star Cruises	TBD*	3 364	150 000	960 000 000	Meyer
14.	TUI	Mein Schiff 6	2 500	97 000	515 000 000	Meyer-Werft/ STX Finland
Cruise ships ordered for 2018						
15.	Carnival Cruise Line	TBD*	3 954	133 500	800 000 000	Fincantieri
16.	Celebrity Cruises	TBD*	2 900	117 000	868 000 000	STX France
17.	MSC Cruises	TBD*	4 140	154 000	938 000 000	Fincantieri
18.	Norwegian Cruise Line	TBD*	4 200	164 600	1 090 000 000	Meyer Werft
19.	Royal Caribbean International	TBD*	5 400	225 000	1 300 000 000	STX France
20.	TUI Cruises	Mein Schiff 7	2 500	97 000	625 000 000	STX Finland/ STX Finland Oy
Cruise ships ordered for 2019						
21.	MSC Cruises	TBD*	4 500	167 600	1 000 000 000	STX France
22.	Norwegian Cruise Line	TBD*	4 200	164 600	1 090 000 000	Meyer Werft
23.	TUI Cruises	Mein Schiff 8	2 500	97 000	625 000 000	STX Finland/ STX Finland Oy
Cruise ships ordered for 2020						
24.	Celebrity	TBD	2 900	117 000	868 000 000	STX France

** TBA – to be announced, EST. – Estimated,*

Source: CLIA (2015), *Cruise Ship New Order Schedule Q1 2015,* Cruise Line International Association, Miami, Florida 2015, p. 2; WAC (2015), *Cruise ships on order 2013–2020*, 127th Revision Amem Communication, pp. 2–6.

Most cruise ships are ordered by the world leading cruise shipping companies i.e.: Carnival Cruise Line, Royal Caribbean Cruises and Norwegian Cruise Lines (Table 3). In 2016, cruise ship owners spent more than $6 billion on the construction and purchase of new cruise ships.

TABLE 3. The estimated investment of cruise ship owners on the new cruise ships between 2016–2022

Year	Financing of new cruise ships (in USD)	Investments which were not included
2016	6 294 500 000	Viking Ocean, Seabourn
2017	5 115 000 000	Star Clippers, Viking Ocean & Silversea
2018	6 175 000 000	Crystal & Seabourn
2019	3 575 000 000	AIDA Cruises & Costa Cruises
2020	1 800 000 000	Virgin, AIDA Cruises, Costa cruises, Carnival Corp.
2021	950 000 000	Virigin & Carnival Corp.
2022	900 000 000	Virigin & Carnival Corp.
Total	24 809 500 000	

Source: own elaboration based on: Cruise Ship Order book (2015), *Cruise Industry News*, available at: http://www.cruise-industrynews.com/cruise-news/cruise-ship-orderbook.html, accessed: September 30, 2015.

Carnival Corporation & plc, which holds a market share of 48% [Carnival Corporation & plc, 2015, p. 1] operates 100 cruise ships under the Carnival Cruise, Line, Holland America Line, Princess Cruises, Seabourn, AIDA Cruises, Costa Cruises, Cunard, P&O Cruises (Australia) and P&O Cruises (UK). By 2018, Carnival Corporation & plc plans to launch ten new cruise ships that each accommodate a minimum of four thousand passengers. Carnival Corporation & plc is the only cruise line company included in both the New York and London Stock Exchanges, and the only group in the world included in both the S&P 500 and the FTSE 100 indices [Carnival Corporation & plc, 2015, p. 1]. Cruise ships contracted by Carnival Corporation & plc are financed within tranches under the contract. The costs include, inter alia: engineering fees, capitalized interest, construction oversight, and various owner supplied items [Carnival Corporation & plc, 2015, p. 17]. For example, the Carnival Corporation & plc has ten ships for construction mentioned in the contract with an aggregate passenger capacity of more than 28,200 lower berths [Carnival Corporation & plc, 2015, p. 20], and their costs are estimated to be around $6.2 billion (Table 4).

Carnival Corporation & plc's investments vessel construction and equipment equals about $2.3 billion, $2,1 billion, and $2,6 billion in 2012, 2013, and 2014, respectively. Principal long-term debt repayments were $1,05 billion (2012), $2,3 billion (2013), and $2,46 billion (2014) [Carnival Corporation & plc, 2015, p. 9].

TABLE 4. Financing of cruise ships under construction by Carnival Corporation & plc from 2014 to 2018

Year	Financing of new cruise ships (in USD)
2014	0.5 billion
2015	1.6 billion
2016	1.9 billion
2017	0.8 billion
2018	1.4 billion

Source: own elaboration based on: Carnival Corporation & plc, (2015), *2015 Annual Report*, Carnival Corporation and plc, p. 20.

TABLE 5. Long-term debt and short-term borrowings of Carnival Corporation & plc (in USD)

Kind of debt	Details	2013	2014
Long-Term Debt	Export Credit Facilities	5 030 000 000	4 638 000 000
	Bank Loans	1 914 000 000	1 270 000 000
	Private Placement Notes	310 000 000	269 000 000
	Publicity-Traded Notes	2 219 000 000	2 219 000 000
	Other	27 000 000	26 000 000
Short-Term Borrowings	Euro bank loans (h)	60 000 000	13 000 000
	U.S. dollar-denominated commercial paper (h)	-	653 000 000
Total Debt		9 560 000 000	9 088 000 000
Less short-term borrowings		(60 000 000)	(666 000 000)
Less current portion of long-term debt		(1 408 000 000)	(1 059 000 000)
Total Long-term Debt		8 092 000 000	7 363 000 000

Source: own elaboration on the base of: Carnival Corporation & plc, (2014), *Form 10-K, For The Fiscal Year Ended November 30*, United States Securities and Exchange Commission, Washington, D.C., p. 14.

In 2014, Carnival Corporation & plc's total long-term loans were approximately $7.4 billion, with export credits exceeding $4,6 billion (Table 5).

It should be noted that cruise ship owners finance investments go beyond newly built cruise ships. Their property includes ships and ship improvements, ships under construction, land buildings and improvements (including leasehold improvements) and port facilities, as well as computer hardware and software, transportation equipment and other items. In the 2013 Carnival Corporation & plc Annual Report stated that those investments amounted to $2.12 billion and by 2014, it reached $2.58 billion. [Carnival Corporation & plc, 2014, p. 14].

These numbers, indicate that considerable resources for finance investments were obtained by Carnival Corporation & plc through long-term loans (Table 6).

TABLE 6. The scheduled annual maturities of the debt of Carnival Corporation & plc

Year	Debt		
	Short-Term Borrowings	Long-Term Debt	Total
2015	666 000 000	1 059 000 000	1 725 000 000
2016	-	1 785 000 000	1 785 000 000
2017	-	634 000 000	634 000 000
2018	-	1 302 000 000	1 302 000 000
2019	-	685 000 000	685 000 000
There after	-	1 957 000 000	1 957 000 000
Total	666 000 000	8 422 000 000	8 422 000 000

Source: Carnival Corporation & plc, (2014), *Form 10-K, For The Fiscal Year Ended November 30*, United States Securities and Exchange Commission, Washington, D.C., p. 14.

In its 2014 annual report, Royal Caribbean Cruises Ltd. identifies 2013 purchases of property and equipment that reached over $763,7 million, and $2,8 billion in 2014. Long-term debt repayments were $2,87 billion in 2013, and $3,72 million in 2014 [Royal Caribbean Cruises Ltd., 2014, p. 71]. This indicates that long-term loans have been a considerable source of financing investments by Royal Caribbean Cruises, Ltd. (Table 7).

TABLE 7. Financing of ships under construction by Royal Caribbean Cruises Ltd from 2012 to 2014

Year	Financing of new cruise ships (in USD)
2012	13 300 000
2013	17 900 000
2014	28 800 000

Source: own elaboration based on: Royal Caribbean Cruises Ltd. (2014), *Annual Report, Royal Caribbean Cruises Ltd*., Miami, p. 71.

Royal Caribbean Cruises Ltd.'s aggregate cost of ordered ships at the end of 2014 was about five billion US Dollars [Royal Caribbean Cruises Ltd., 2014, p. 97]. RCL has to pay for the construction of new ships in progress, as well as planning, design, interest and other associated costs. For example, in 2012 RCL paid $13.3 million, in 2013 – $17.9 million and in 2014 – $28.8 million. In 2014, RCL signed a contract with STX France for delivery of four ships scheduled for 2018. To finance these ships, in 2014 RCL entered

into credit agreements to finance two of these ships for up to $ 215.9 million and $ 1.1 billion, respectively. RCL also received commitments for the unsecured financing of those ships for up to 80% of the contract price because of the financial support guaranteed by COFACE (The Compagnie Française d'Assurance pour le Commerce Extérieur) [Royal Caribbean Cruises Ltd., 2014, p. 96]. At the beginning of 2015, RCL also reached conditional agreements with STX France to build two more ships known as "Project Edge", which are expected to reach the market by 2018 and the first half of 2020 [Royal Caribbean Cruises Ltd., 2014, p. 96]. Another ship (under the name "Harmony") was recently ordered from STX France by Royal Caribbean Cruise Lines for $ 1.3 billion. This unit will accommodate 5.4 thousand passengers and its tonnage will be 225 282 GT. The same cruise company also ordered a smaller unit called "Ovation of the Seas" (167.8 GT) for over a billion dollars from the Meyer Werft shipyard in Papenburg for 2016. Similar ships will be introduced by the company in 2018 and 2019. In addition, Norwegian Cruise Line (NCL) signed a contract with Meyer Werft shipyard in Papenburg to purchasing three new cruise ships by 2019. The first ship will be completed in 2017 and will cost $ 920 million, and the others will cost a total of $ 2.2 billion (Table 8). These vessels will accommodate more than 4.2 thousand passengers. NCL has export credit financing in place covering 80% of their contract prices [Norwegian Cruise Line Holdings Ltd., 2014, p. 114].

TABLE 8. Financing of ships under construction by Norwegian Cruise Line from 2014 to 2019

Year	Financing of new cruise ships (in USD)
2014	897 818 000
2015	514 375 000
2016	832 640 000
2017	892 362 000
2018	776 053 000
2019	-
Total	3 913 248 000

Source: own elaboration based on: Norwegian Cruise Line Holdings Ltd. (2007), *Annual Report 2014,* Norwegian Cruise Line, Miami 2014, p. 114.

NCL finances the purchase of new cruise ships, mainly through the acquisition of long-term loans submitted by financial institutions. For example, in July 2014, NCL entered into the € 666 million Seahawk 1 term loan and the € 666 million Seahawk 2 term loan to finance 80% of the contract price of two Breakaway Plus Class Ships, which must be delivered by 2019 [Norwegian Cruise Line, 2014, p. 101] (Table 9).

TABLE 9. Long-term debts intended to finance the cruise ships by Norwegian Cruise Line

Long-term debt	Amount of a long term debt	Maturities through	Balance in 2013 (in USD)	Balance in 2014 (in USD)
Norwegian Epic term loan	€662.9 million	2022	599 996 000	535 708 000
Pride of Hawai'i loan	€308.1 million	2018	167 392 000	130 194 000
Norwegian Jewel term loan	$334.1 million	2017	108 087 000	81 065 000
Pride of America Hermes loan	€258.0 million	2017	88 936 000	63 526 000
Norwegian Jewel term loan	€126.0 million	2017	47 837 000	57 989 000
Norwegian Jade term loan	€126.0 million	2017	48 105 000	58 524 000
Seahawk 1 term loan	€666.0 million	2030	-	40 845 000
Seahawk 2 term loan	€666.0 million	2031	-	40 845 000
Marina newbuild loan	$379.9 million	2023	-	379 868 000
Riviera newbuild loan	$427.2 million	2024	-	427 184 000
Sirena loan	$82.0 million	2019	-	82 000 000

Source: own elaboration based on: Norwegian Cruise Line (2014), *Form 10-K, For The Fiscal Year Ended November 30*, United States Securities and Exchange Commission, Washington, D.C., p. 100.

In 2011 NCL entered into agreements with Star Cruise Management Limited Crystal Aim Limited and Genting HK. Moreover, in 2014 it concluded a Merger Agreement with funds affiliated with Apollo and other owners for total of $3.025 billion. For example, Star Cruises**,** together with its associate NCL, made a deal with KfW IPEX-Bank to finance construction of a new cruise ship at the Meyer Werft shipyard in Papenburg in Germany. KfW IPEX-Bank, together with Crédit Agricole Corporate and Investment Bank and the Singapore branch of DNB Bank ASA, submitted a loan of over 600 million euro [KfW IPEX-Bank, 2014]. Another example involves the cruise ship owner MSC Cruises, which from 2017 to 2022 plans to introduce six units to the cruise market (4.1 thousand passengers), each costing over $900 million.

Cruise ship owners seek more economical units, especially in terms of fuel consumption, exhaust emissions and pollution. Those upgrades are necessary, as EU directives require a reduction of sulphur emissions to the marine environment through, among other things, installation of modern ship engines that raise construction costs. A second factor affecting profitability is the need to reduce costs per passenger and, consequently, lower ticket prices to make them more competitive. The result is a rising demand for larger cruise ships.

Conclusions

The financing of the construction of modern cruise ships has been a major challenge for cruise ship companies. Luxury facilities, modern equipment and navigation technologies to ensure security on the sea, as well as the cost of protecting the marine environment, all increase the capital investment needed in the industry. Our analysis suggests that:

- The growing gross registered tonnage of vessels and enriched cruise ship equipment put pressure on cruise ship construction costs, forcing cruise ship owners to seek alternative methods of financing.
- Currently, those costs calculated per ship range from $ 0.5 billion to more than $ 1 billion, which can only be available for cruise ship companies with a strong market position. Cruise ship companies face a wide range of opportunities to raise capital for projects related to the construction or purchase of new vessels; from the most popular, i.e., bank loans, to public offering on the stock exchange.
- As per our research questions formulated at the beginning of this paper, we find that cruise ship-owners have used various forms of financing that include bank loans, public offerings and bond issues, and special purpose companies. However, the majority of cruise ship-owners rely on the long-term loans from financial institutions. This trend has also been seen with market-leading cruise line companies. Financial institutions impose a number of requirements on such borrowers, including mortgages on vessels and assignment of insurance covering each vessel subjected to a mortgage.. Despite the difficulties inherent in funding such large, multi-year investments, several dozen new cruise ships have been contracted coming to market in the next years. It can also be assumed that cruise-line companies are going to order larger and more expensive cruise vessels to meet consumer preferences, market trend expectations and, above all, efficiencies of scale required to increase competitiveness.

Unfortunately, no operator in Poland is investing in cruise ships because construction costs exceed their financial capacity. For example, the Board of Port Gdynia S.A. spent $ 226.74 million for infrastructure investments in the period 2009 to 2015, which is the largest investment in the history of the port. However, this amount represents only 30% of the cost of a medium-sized cruise ship. Moreover, there is still a belief that Polish society is not interested in participating in marine voyages starting from Polish sea ports. Therefore, investment in this segment of the market is considered nonprofitable. In the near future, Polish tourists will only be able to take advantage of a wide range of sea cruises in the Mediterranean Sea or Caribbean Sea, which are currently offered by travel agencies in Poland. Unfortunately, such trips will start from ports in other countries, e.g.: Copenhagen, Barcelona or Miami.

Notes

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