TALLINN UNIVERSITY OF TECHNOLOGY
School of Business and Governance
Department of Business Administration

Bivek Dhungana

FINANCIAL RATIO ANALYSIS OF CRUISE COMPANY OPERATING IN BALTIC SEA: A CASE STUDY OF TALLINK AND VIKING LINE 2015-2020

Bachelor's thesis
Programme TVTB, specialisation Finance & Accounting

Supervisor: Hla Thel Phyu,
Early Stage Researcher(Ph.D. student)

Tallinn 2021

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Bivek Dhungana ……

(signature, date)

Student code: 177667TVTB

Student e-mail address: bivekdhungana123@gmail.com

Supervisor: Hla Thel Phyu, Early Stage Researcher(Ph.D. student)

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ABSTRACT

An increase in globalization and tourism destinations in Europe helps to grow and expand the cruise industry into new destinations. The cruise industry is one of the most rising industries in the Baltic region. It has been rising gradually, even during the economic crises of the 2000s. Between 2009 and 2019, the number of cruise passengers at seaports in the Baltic region rose significantly from 3.35 Million to 5.91 million in 2019.

This paper aims to evaluate the financial performance of the shipping industries (Tallink and Viking Line) by conducting a financial ratio analysis. Another aim is to develop a better understanding and gain the knowledge of financial ratio analysis and to identify the areas where they are performing well and on the other hand areas where their performance is weak by using publicly available financial information. The financial data are collected from the company's annual report from 2015 to the first 9 months of 2020. Eight different financial ratios from liquidity, profitability, solvency, and activity are calculated and analyzed with the help of graphical measurement.

The findings show that Tallink has better financial performance than Viking Line in terms of profitability and return on assets although Viking Line has better liquidity and more efficient asset management than Tallink. Moreover, this study highlights that the coronavirus pandemic of 2020 has a huge impact on the financial performance of cruise companies.

Keywords: Cruise companies in Baltic Sea, Financial ratio, Financial ratio analysis, Tallink, Viking Line

INTRODUCTION

This thesis paper is about the financial ratio analysis of 2 shipping companies operating in the Baltic Sea. The author chooses this topic because the subject is indeed very related to his professional career and can help him in his further higher education and learning process. Tallink and Viking Line are the 2 largest passenger and cargo shipping companies operating in Baltic Sea Region. Together with high safety, protection, and environmental standards, both cruise companies have a modern fleet, a large route network, strong market share, and brand recognition. They both have very good financial performance and they are the big competitors to each other in the shipping industry with lots of customers over many years. (Tallink Annual Report, 2018)

The objective of this paper is to examine how the financial ratio analysis influences the financial statement of shipping companies(Tallink and Viking Line) and to evaluate and provide a better understanding of the annual financial performance of these companies in different areas such as their profitability, capital efficiency, liquidity, solvency to financial managers, financial analysts, auditors, investors, and stakeholders by using traditional ratio analysis. This research aims to obtain a greater understanding as well as develop the knowledge of financial ratio analysis and to identify the areas where the companies are performing well and on the other hand, areas where their financial performance is weak by analyzing the company's actual financial statement published in their annual reports. Based on the importance of financial ratios analysis in accessing the company's financial position, the author has developed the following research questions.

- Can financial ratio analysis be used for the shipping company to evaluate the financial performance of the company?
- What is the financial performance of these companies related to liquidity, profitability, asset, and debt management and solvency?
- How do we determine which company(either Tallink or Viking Line) is performing well by looking at financial ratios?

This Thesis paper consists of theoretical and empirical parts. The theoretical part of this paper mainly consists of the knowledge of financial ratios and their application in the financial analysis also the overview of both shipping companies. (Tallink and Viking Line) Definition and explanation of each financial ratio which the author has used in this paper are described in this

theoretical part. The empirical part shows the calculation and analysis of 8 different financial ratios of both Tallink and Viking Line. It also shows the performance analysis of both companies with the help of various charts and calculations.

The analysis will include the evaluation of the financial ratios of both companies throughout the selected period (2015-20). Using the quantitative research method, the author has used the secondary data sources: annual reports of Tallink and Viking Line for the year 2015-20 where we can find the financial statements(including income statement, balance sheet, and cash flow statement). The Author is using data from the year 2015-20 because it helps to understand the company's past and current financial position and based on that the ratio analysis can also help to make financial predictions for the coming years. The author decided to include the financial analysis of 2020 although the financial year of 2020 is not ended yet because the coronavirus pandemic has significantly affected the financial performance of transportation businesses during the year 2020. Therefore, the author presents the data only for the first nine months of 2020. The author will use the historical data from the annual reports from both companies to compute the financial ratios and do the ratio analysis from the year 2015-2020 because this selected period will provide a better overview of the major changes in the financial performance of the companies in different financial areas(liquidity, profitability, solvency, and activity) during the past years from 2015-20. In addition, it helps to understand how the companies have been performing and which financial elements have mostly been affected and helps to make the comparison easy between the companies for this study.

The first chapter focus on the introduction and overview of shipping industries. It provides general information and history about Tallink and Viking Line. The second part will be more focused on financial ratios, formulas, and financial analysis techniques. The other half of this thesis will be the calculation of eight financial ratios for Tallink and Viking Line for the year 2015-2020 as well as analysis and comparison of the financial ratios between both the companies. In the end, the author will concentrate on conclusions, lists of references, and appendices.

1. OVERVIEW OF THE CRUISE INDUSTRY

Over almost 40 years, the cruise industry has experienced a dynamic development, generated initially by demand from North America, but more recently by rising demand from Europe and the rest of the world. Companies all over the world have expanded the number of ships on the market and with the introduction of new and larger passenger and cargo ships that can deliver a wide range of onboard activities, have enhanced their supply. There is a tremendous opportunity for the cruise industry to continue its development and build new cruise destinations. An increase in the tremendous growth of the tourism industry helps to make a significant contribution to the economic development of the places and countries visited.

Since 1980, the worldwide demand for cruising has grown from 1.8 million passengers to 26.75 million in 2017. Cruise demand has increased by an annual growth rate of 7.5% throughout 1980-2017 (Peručić, 2019). The rise in demand for cruises has caused cruise companies to invest in the construction of new and large ships. With the evolution of new and larger ships, countries, as well as companies, are growing the number of ports and destinations. Passengers are given a wide range of itineraries around the world from one day to many months.

Considering European geography, its history, and globalization process, the European Union is still dependent on shipping and cruise transport, which is important for the economic growth of the EU economy to compete globally. Shipping and related services are an important contributor to the European economy, to the quality of life of EU people, to economic development, and the competitiveness of the European Union. Nearly 75% of its external trade (imports and exports of the Union) and 37% of its internal trade go by sea; overall 1.65 billion tons of freight are exported and imported by the sea in the EU each year. And with the increase in tourism in Europe, more than 400 million sea passengers travel through the EU every year. (ECSA, 2014)

The Baltic Sea cruise market is regarded as an emerging market. The Baltic Sea cruise industry is seasonal because of the cold climate and sea ice. The major tourism activities last from April/May till September/October with most calls in the summer months. However, the increasing numbers of cruise and ships visiting the Baltic countries have been observed for the last 10 years. In 2019, the cruise business in the Baltic Sea experienced the highest number of cruise passengers visiting the Baltic countries amounting to a total number of 5,909,784 (Cruise Baltic, 2020).

Figure 1.1 Number of cruise passengers at seaports in the Baltic region from 2000-2019

Source: Based on data from (Cruise Baltic, 2020)

Figure 1.1 shows the number of cruise passengers visiting the Baltic ports from 2000 to 2019. It simply indicates that the number has increased from 1.05 million in 2000 to 5.91 million in 2019 which is the all-time highest. Which is because of the establishment of new ports and an increase in the numbers of tourist visiting the Baltic and Nordic countries. Figure 1.2 shows the total number of cruise guests increased by 9% in 2019. From 2000-2019 the number of guests increased by an average annual rate of 9.5% per year.

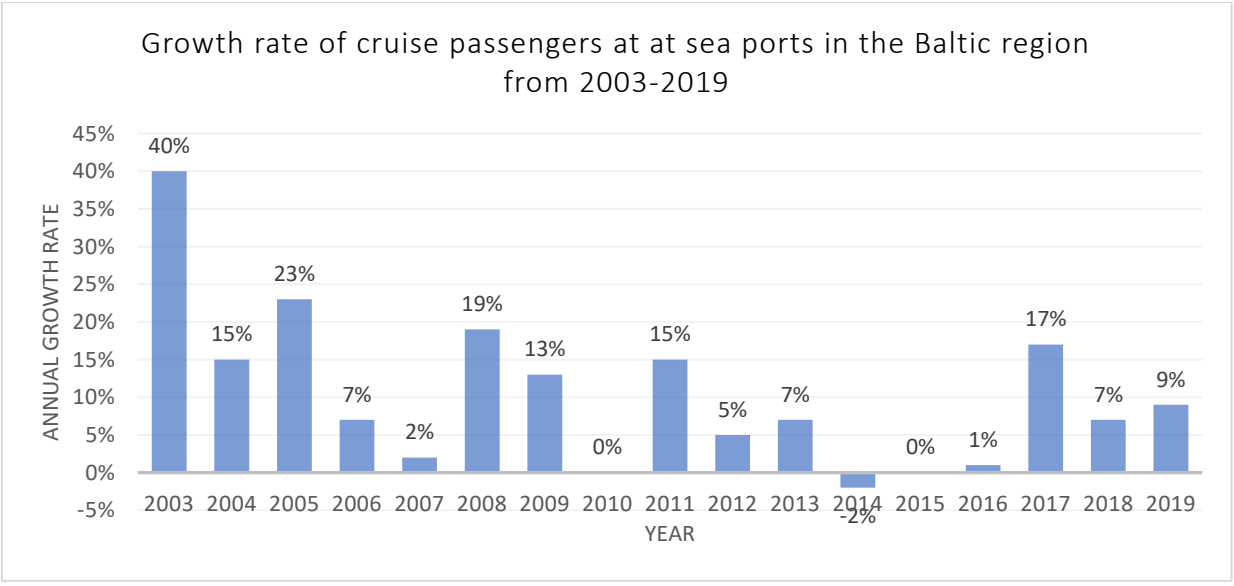

Figure 1.2 Growth rate of cruise passengers at seaports in the Baltic region from 2003-2019

Source: Based on data from (Cruise Baltic, 2020)

1.1. Tallink

In 1965 Ferry link between Helsinki and Tallinn was established by the Estonian Shipping Company (ESCO). Later, in 2002 it was renamed as AS Tallink Grupp also embarked on an ambitious new building program, taking delivery of seven new vessels from 2002 to 2009. Revenues grew tenfold from 1998 to 2012 and the company paid a dividend to its shareholders for the first time in 2013. The biggest regulatory issue facing the company complies with the Sulphur Emission Control Area (Tallink Annual Report, 2014). To help achieve lower emissions and reduce fuel costs, in June 2015 the company ordered 230 million Euros LNG-fuelled ro-pax to operate the Helsinki-Tallinn route (Tallink Annual Report, 2018). Tallink's financial year was changed in 2011. Now the financial year is exactly like the calendar year, starting on the 1st of January and ends on the 31st of December. The shares of AS Tallink Grupp have been listed on the Nasdaq Tallinn Stock Exchange since 9 December 2005, where the shares are traded under the symbol TAL1T... (Tallink, 2020)

Tallink is ranked as the number one ferry company in terms of global travel retail sales and number 4 in Europe as one of the leading travel retail outlets. In the Baltic and Nordic regions, Tallink is the number one in terms of sales. Over half of Tallink’s sales are contributed by restaurants, bars, and shops onboard (Tallink Annual Report, 2018). All the customers and passengers can choose various types of meal from typical a la carte or buffet menu from different restaurants and fast foods. There are also many dining areas and pubs run by some of the region’s best chefs at varying price levels. There are onboard shops in all the Tallink vessels where passengers can buy products and services, different beverages, cigarettes, beauty and make-up goods, confectioneries, clothing, gadgets, gifts, and different accessories.

Tallink’s strategy has been focused on the highest level of customer satisfaction, establish a wide range of quality offerings for various customers, and seek new growth opportunities. It also includes to ensure cost-efficient operations and maintain an optimal level of debt that makes sustainable dividends.

As of 31.12.2019, Tallink had a total number of 7,240 employees working in the company. ´´It has a fleet of 14 vessels including cruise ferries, high-speed ro-pax ferries, and ro-ro cargo vessels, and provides the services on seven routes between Estonia and Finland, Estonia and Sweden, Finland and Sweden and Latvia and Sweden´´. (Tallink Annual Report, 2019)

1.2. Viking Line

Viking Line is a public limited company established and has the head office in Finland. It is running a fleet of cruise ferries and freight between Finland, the Aland Islands, Sweden, and Estonia. It was founded in 1959 with the name of Rederi Ab Vikinglinjen and began the service inside Finland. Viking Line's passenger traffic was started in 1959 when the company Vikinglinjen AB started its traffic between Finland, Åland, and Sweden. Before the cruise traffic started, it was expensive to travel between these countries, when travelers had to travel by plane or night boat. After the start of traffic, the company has grown from a poor range of services and services to today's modern fleet. The company could offer everything from luxury cruises to a large car tire. This is perfectly suited for freight traffic and a new phenomenon, car tourism. Viking Line also started one long-awaited, flexible and cheaper way to get to travel between Finland and Sweden. All this with combination and the opportunity to trade tax-free on board created conditions for one growth in passenger transport.

Although everyone was questioning the new industry, the competition began to grow with time. This led to the pioneers in the industry having to lower their ticket prices and then began the "great ferry price war" which resulted in a collaboration between the company's marketing.

In 1970, Viking Line began to develop and got three newly built ships that focused on service and quality for their travelers. During the 70s and 80s, customer needs to be developed such as recreational cruises, conference cruises, transportation, and freight traffic. Also route network was improved with other terminals in Helsinki, Naantali, and Turku in Finland and Stockholm in Sweden. In the late '80s, cruise traffic to Estonia was started and after that Estonia joined the EU, regular traffic was created for passengers, freight, and passenger cars. As of 31.12.2019, 2,632 people are employed in Viking Line. It also consists of cruise and ferry traffic with the ships Gabriella, Mariella, Amorella, Isabella, Viking Cinderella, Rosella, and Viking XPRS. These ships operate between Turku-Mariehamn / Långnäs-Stockholm / Kapellskär, Helsinki-Mariehamn-Stockholm, and Helsinki-Tallinn. Viking Line has its terminals in Stockholm and Turku, in Tallinn, Helsinki, Mariehamn, and Kapellskär rent the cruise company space for their terminal operations. (Viking Line Annual Report, 2019)

The business provides customers traveling through the Baltic Sea with a range of transport services. Its range of services includes luxurious cruises, meeting facilities, travel packages, and hotel packages for individual customers and organizations. Viking Line also provides onboard services, including shopping, restaurants, bars, night clubs, entertainment clubs, accommodation,

and professional entertainment. Besides, Viking Line also offers car carriage and taxi services to and from the port as well as bus transport based in the Aland Islands to the customers (Viking Line Annual Report, 2019). Viking Line's vision and strategy are to focus on relaxation for their travelers, travel and freight transport, and to develop to constantly be a top player in the Northern Baltic Sea (Viking Line Annual Report, 2019). Since 5th of July 1995 the shares of Viking Line Abp is listed on the Nasdaq Helsinki Stock Exchange where the shares are traded under the symbol VIK1V (Viking Line).

1.3. Tallink and Viking Line as competitors

Both Tallink and Viking Line are operating in the Baltic Sea with the same groups of customers and are great competitors to each other. Since Estonia has less salary and a low tax rate, Estonian crews and workers are cheaper as compared to Finnish crews. As a result, the Estonian company Tallink has established a good foothold on the route between Helsinki, Tallinn, and Stockholm. Tallink has become a leader in the shipping industry in the Baltic Sea. Tallink was able to have access to financial resources that enabled a rapid expansion of its potential, embarking on an aggressive growth strategy (Tallink home page). Tallink has been more profitable every year as compared to Viking Line. Tallink's net profit has risen to 30 million over the 2004-2005 financial year and its turnover has increased by an impressive 24%. (Tallink Annual Report, 2005)

After Estonia entered the EU as a member state, Viking Line faced a tough time immediately which brought intense rivalry and a new kind of consumer demand. The business is trying to address this challenge by winning more market share and selling more to new customers on board. Tallink concentrated on operating from its home base Tallinn but made a major strategic decision in 2006 by purchasing Silja Line, the main rival of Viking Line from Sea Containers Ltd. Tallink turned from being a marginal competitor to a major rival to the Viking Line as a result of the 450 million Euro deal and surpassed the overall industry leader in the Baltic Sea. (Tallink, 2020)

Tallink's markets itself on both the passenger and freight side. Then the company marketing strategies aim to exceed customer expectations, they want to create a picture of the company's image and brand as the most modern fleet in the Baltic Sea. The company does not want to emphasize the price as the decisive factor among customers purchasing decisions but want to produce a high quality of service. From a relational point of view, Tallink strives to the value already established customer contacts but invests large marketing efforts to establish new

customers. To reach its customers, Tallink operates multiple sales channels. The focus lies on Tallink's home markets, namely Latvia, Finland, Estonia, and Sweden, as well as major markets in Russia, Lithuania, and Germany. Additionally, cooperation with general sales agents is employed in other European markets and the Far East. To promote cruise services in China, an emergent sales region, social media platforms such as WeChat and Sina Weibo are the dominating marketing channels. (Tallink Annual Report, 2019)

Viking Line wants to market itself as an adaptable shipping company with products and services which meet the needs of all customers. As the company has already created a strong brand identity in the market, which is spread through word-of-mouth communication, the trust in them increases existing customers, as well as a growing desire to travel with new stakeholders. Respondents' answers from the survey showed that most visitors previously traveled with Viking Line, which indicates an increased flow of returning travelers. One of the marketing measures Viking Line attaches great importance to dividing their customer groups into different segments to be able to more effectively identify the specific needs that travelers demand.

2. FINANCIAL RATIO ANALYSIS

Financial ratio analysis can be done for different companies (banking institutions, airline industries, telecommunication), and so on. Some of the studies which have successfully analyzed the financial ratio of the companies and found out the solutions to their research problem in different areas such as the company's financial performance, profitability, capital efficiency, liquidity, solvency have been discussed below.

Financial ratio analysis is important to understand financial statements and to identify changes and monitor improvements in a company's financial statements as well as to recognize developments in positive and negative financial patterns (Rashid, 2018). Ratios allow historical performance evaluation, analysis of existing financial positions and helps to provide some perception of the potential future results of the company. It also helps to measure insights into the willingness of management and financial stability to raise the requisite amount of money to expand and fulfill the financial short and long-term obligations. (Robinson et al, 2009) Financial ratio analysis is typically carried out in three ways – time series, cross-sectional, and benchmarking, most of which do not necessarily have or vary between industries. The aim is to evaluate the efficiency and effectiveness of the company in the management of operations, acquisitions, funding, and dividend management (Palepu & Healy, 2013). Financial ratios are especially important in the interpretation of financial statements because they allow the comparison of information from one financial statement with the pieces of information from another financial statement (Williams et al, 2008). There are two different groups of users for financial ratio analysis, internal and external. Internal users are the person and managers from the different departments of the company while external users are the people outside of the company such as creditors, analysts, students, finance journalists, etc. The analysis done by internal users is more in-depth than external users because internal users have access to more up-to-date information than the outsiders who have to rely on the financial statements or the information published on the company's annual reports. (Hampton, 2011)

2.1. Liquidity Ratios

The financial ratio indicating the relationship between the cash and other existing assets of a company and its current liabilities is called the Liquidity ratio. Liquidity can be analyzed from two different points of view, static liquidity and dynamic liquidity. Static liquidity means the capacity to fulfill the obligations at a certain time such as the date of the balance sheet or the last date of

the financial year. On the other hand, dynamic liquidity refers to the capacity to fulfill the obligations with future cash flow. Two different liquidity ratios (Current and Quick ratio) are being calculated and analyzed to measure Tallink's and Viking Line's liquidity.

2.1.1. Current Ratio:

The current ratio is a commonly used ratio to indicate the short term debt paying ability. This ratio is calculated by dividing total current assets by total current liabilities. The firm is considered to be more liquid if it has a higher current ratio. Historically, some banks and other short-term creditors claimed that a company has a current ratio of 2:1 or higher than that that has good credit risk. (Williams et al, 2008)

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

Figure 2.1. Current Ratio

Source: (Brigham & Houston, 2009)

2.1.2. Quick Ratio:

The quick ratio is also called the acid test ratio which is calculated by deducting inventories from current assets and dividing the balance by current liabilities. Inventory is considered as the less liquid item in the company's current assets and cannot be turned into cash as quickly as expected and during liquidation of the company, it usually generated losses. Therefore the quick ratio which measures the ability of the company to generate the cash quickly from the assets to pay the short-term financial obligations excluding the selling of inventories is important. (Brigham & Houston, 2009)

$$Quick\ Ratio = \frac{Current\ assets - Inventories}{Current\ liabilities}$$

Figure 2.2. Quick Ratio

Source: (Brigham & Houston, 2009)

2.2. Profitability Ratios:

The profitability ratio is used to measure the company's profit from the income statement and balance sheet. It shows how well the company is doing in terms of profits compared to sales as well as shows how the use of assets is helping to generate revenue (Clausen, 2009). The ability of a firm to generate revenue and earn a profit during a period is called profitability. Profitability demonstrates the competitive position of a company on the market. Profitability may also reflect the efficiency of management. (Robinson et al, 2009)

In this paper, three profitability ratios will be used to measure Tallink's and Viking Line's profitability, and they are returned on assets, return on equity, and profit margin.

2.2.1. Return on Assets (ROA):

Return on assets shows how efficiently the company uses its assets to generate revenue. ROA helps to analyze how the assets have been used in the company to generate profit. ROA is considered to be one of the most significant profitability ratios as it relates the earning to investments. 5% of ROA for every company is considered to be good. Low ROA means a negative signal for the financial growth of the company and considered that assets are not being used efficiently throughout the period (Robinson et al, 2009). ROA is calculated by dividing net income with average assets. Average assets are calculated by adding the total value of current and previous year assets and divided by two.

$$\textit{Return on Assets} = \frac{\textit{Net Income}}{\textit{Average Assets}}$$

Figure 2.3. Return on Assets (ROA)
Source: (White et al, 2014)

2.2.2. Return on Equity (ROE):

Return on Equity (ROE) demonstrates how efficient or unsuccessful the business has been in optimizing the return on investments from owners or the shareholders. Companies with less equity capital invested and more debt financing may have higher rates of ROE than the companies with only equity financing, which is why the ROE may fluctuate within the industry (Vasigh & Rowe,

2019). Stockholders expect to earn a better return on their investments and this ratio shows how well the company is doing in an accounting sense. Similarly to ROA, ROE is calculated by dividing net income with average equity. Average equity is calculated by adding the total value of current and previous year equity and divided by two.

$$\textit{Return on Equity} = \frac{\textit{Net Income}}{\textit{Average Equity}}$$

Figure 2.4. Return on Equity (ROE)
Source: (White et al, 2014)

2.2.3. Profit Margin:

The profit margin is part of the profitability ratios calculated by dividing net income by total revenue. Net income or net revenue can be calculated by subtracting the overall expenses of the company including operating cost, material cost, and taxes from the total revenue. Profit margin is used to measure how many units of profit the firm has generated for each Euro of sale. It is one of the most frequently used profitability ratios. (Weygandt et al, 2015) For all the companies the goal is to earn the profit margin as high as possible.

$$\textit{Profit Margin} = \frac{\textit{Net Income}}{\textit{Net Sales}}$$

Figure 2.5. Profit Margin
Source: (Weygandt et al, 2015)

2.3. Activity ratios:

Activity ratio evaluates how efficiently a company is managing its assets. Companies use assets to generate profits. If the company uses the assets inefficiently, the cost of the company may increase and decrease the sales which may affect the financial performance of the company. On

the other hand, if a company succeeds to manage the assets more efficiently, less capital is required and costs are controlled in a better way which will result in to increase in revenue over time (Sherman, 2015). Two activity ratios, total asset turnover ratio and average collection period will be analyzed in this paper to evaluate the activity ratio of Tallink and Viking Line.

2.3.1. Total Asset Turnover Ratio:

The total asset turnover ratio evaluates how many cents revenue is being generated from each euro spent on average assets. A higher turnover ratio shows the better efficiency of the assets. It also shows the overall turnover of the company's assets. (Brealey et al, 2001) The total asset turnover ratio is calculated by dividing sales by average assets.

$$\textit{Asset Turnover Ratio} = \frac{\textit{Sales}}{\textit{Average Assets}}$$

Figure 2.6. Asset Turnover Ratio

Source: (Brealey et al, 2001)

2.3.2. Average Collection Period:

The average collection period activity ratio measures the collection duration of the receivable also determines how early or late customers pay their company for their financial obligations. It shows how quickly a company is generating cash from sales. A low collection period indicates an efficient collection of the receivables and fast cash collection. It also means the company has a strict or very narrow credit policy which would lead to a decrease in the number of potential customers and vice versa. (Brigham & Houston, 2009)

$$\textit{Average Collection Period} = \frac{\textit{Average receivables}}{\textit{Average Daily Sales}}$$

Figure 2.7. Average collection Period

Source: (Brealey et al, 2001)

2.4. Solvency Ratio:

The solvency ratios are the ratio used to measure a company's ability to meet its long-term obligations. The solvency ratio shows whether the cash flow of a company is adequate to cover its long term obligations or not. Solvency ratios and liquidity ratios both calculate the financial stability of a business but solvency ratio evaluates in long run than liquidity ratio (Henry et al, 2011). The ratio that the author will analyze in this paper is the Debt to Equity Ratio.

2.4.1. Debt To Equity Ratio:

The debt to equity ratio is calculated by dividing a company's total debt by its shareholder equity and used to evaluate a company's financial leverage. Higher debt to equity ratio indicates low solvency of the company and can lead the company at risk. (Henry et al, 2011) The debt to equity ratio of 1 shows that the debt and equity of the company are in an equal ratio to each other.

$$\text{Debt to Equity} = \frac{\textit{Total Debt}}{\textit{Total Equity}}$$

Figure 2.8. Debt to Equity Ratio
Source: (Brealey et al, 2001)

3. FINANCIAL RATIO ANALYSIS FOR TALLINK AND VIKING LINE (2015-2020)

In this chapter, we will evaluate and compared the selected financial ratios for Tallink and Viking line from the years 2015 to 2020. It is very important to know-how has been the revenue of Tallink and Viking line for these years especially during 2020 because the coronavirus pandemic has affected the world economy mostly in the tourism and transportation industry. And due to these, there has been a huge negative effect on the revenue for all the companies. Most of the financial ratios are generated from the elements in income statements and balance sheets. Such as revenue, net profit, current assets, current liabilities, debt, etc.

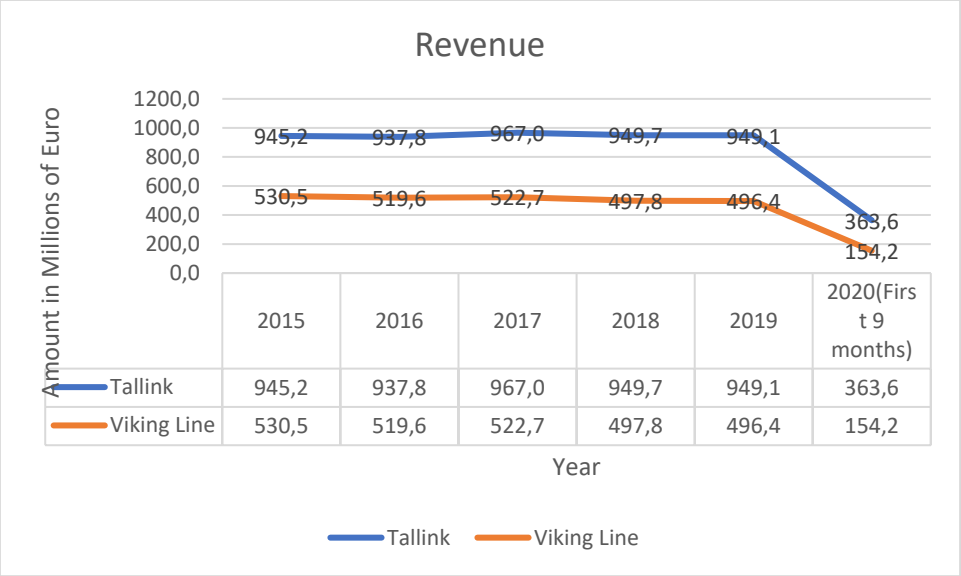

Figure 3.1 Revenue of Tallink and Viking for 2015-2020

Source. Based on data from appendix 1 and 2

From the given figure, in terms of revenue Tallink always have a greater amount than the Viking Line. It is because Tallink has 14 vessels that carried a record number of 9,763,210 passengers while Viking Line has 7 vessels and carried a total number of 6 200 480 passengers in 2019. It is very clear that the revenue of the Viking line has been continuously decreased over the past 5 years from 530.5 Million to 496.4 Million and it is because of the tough competition in the market for cruises and ferry services in the Baltic Sea and also because of political decisions which may have changed the Viking Lines operating conditions (Viking Line Annual Report, 2019). Tallink has revenue of 945.2 Million in 2015, which has slightly decreased to 937.8 Million in 2016 but succeed to increased their revenue by 29.2 Million in 2017 which was the year of highest revenue of total 967 Million for Tallink. The revenue of Tallink decreased in 2018 and 2019 to 949.7 and

949.1 Million respectively. A weaker than anticipated cargo market has strongly affected Tallink's main business during 2018-19, mainly due to the uncertainties surrounding the withdrawal of the IK from EU, labor strikes in Finland in the fourth quarter of 2019, and the rise in the competition for cruise services in the Baltic Sea (Tallink Annual Report, 2019).

In the first 9 months of 2020(Jan-Sept), Tallink carried a total of 3.3 million passengers which is less by 56.3% as compared to last year during the same period of nine months. The revenue of Tallink for these 9 months in 2020 after the coronavirus pandemic was 363.6 million Euro which was decreased by 49.7% as compared to last year. Because of the decrease in the number of passengers and revenue in the first nine months of 2020, Tallink has a total loss of 81.5 million euros. While Tallink earns a profit of 44.2 million euros in the same period in 2019. (Tallink, 2020) The financial performance of Viking Line has also been affected in the first nine months of 2020. Like Tallink, Viking Line has also experienced a decrease in the number of passengers, a decrease in revenue, and also experienced loss in the business during this period because of the coronavirus outbreak. The total number of passengers in 2020 were decreased to 1.6 million (was 4.8 million in 2019 during the first nine months). Revenue generated was 154.2 million Euro, less by 226.6 million Euro as compared to last year as well as the experienced loss of 30.8 million Euro. Viking Line earned a net profit of 11.1 million euros during the same time in 2019. (VikingLine, 2020)

In this paper, the horizontal analysis is done for the period of 5 years from 2015 to 2020 based on Tallink's and Viking Line's financial statements retrieved from the annual reports published on the company's website. Horizontal analysis is the comparison of financial statements or specific items in a financial statement that covers two or more periods (Scott, 2003). The selected period helps to understand the companies past and current financial position. It also helps to make financial predictions for the coming years.

3.1. Liquidity ratio analysis

The current ratio and liquidity ratios are selected for liquidity analysis of the Tallink and Viking Line. Both ratios are used to determine the company's ability to pay current or short term debt obligations.

3.1.1 Current Ratio

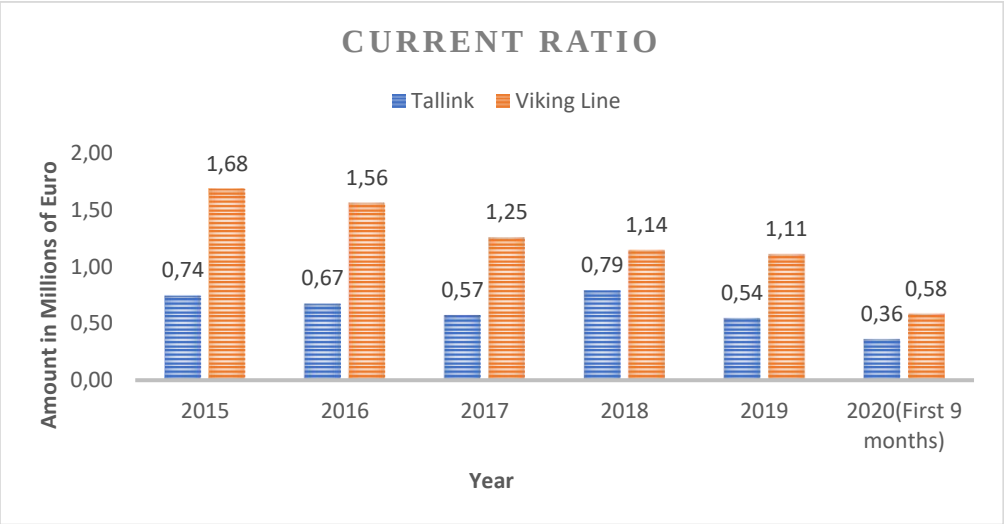

Figure 3.1.1. The current ratio for 2015-2020

Source: Based on data from appendix 3

The current ratio of Tallink is less than 1 for the whole selected period. It means that for every 1 EUR of current debt, Tallink has less than 1 EUR to pay for the short term obligations. For the last selected 5 years, Tallink has not been able to maintain a satisfactory current ratio which is less than 1. In 2015, Tallink has a current ratio of 0.74 which has decreased to 0.67 and 0.57 in 2016 and 2017 respectively. It is because of the increase in short term loan and borrowings during that period. Tallink was successful to increase the current ratio to 0.79 in the year 2018 but could not maintain the same level as the current ratio decrease in 2019 to 0.54 and it is also because of an increase/decrease in short term loans and borrowings. As the current ratio of the Viking line is always more than 1, we can say that Viking Line has been liquid enough to pay its short term financial obligations during the years from 2015-2019. But it has been in decreasing trends since 2015 from 1.68 to 1.11 in 2019 because of a continuous increase in the payable during the years. And talking about the year 2020, the current ratio has significantly dropped to 0.36 and 0.58 for both Tallink and Viking Line respectively which can create a financial problem for both of the companies to pay their short-term obligations in coming years. It is the effect of coronavirus and a decrease in cash and cash equivalents of the companies and an increase in the payables and short-term loans.

3.1.2 Quick Ratio

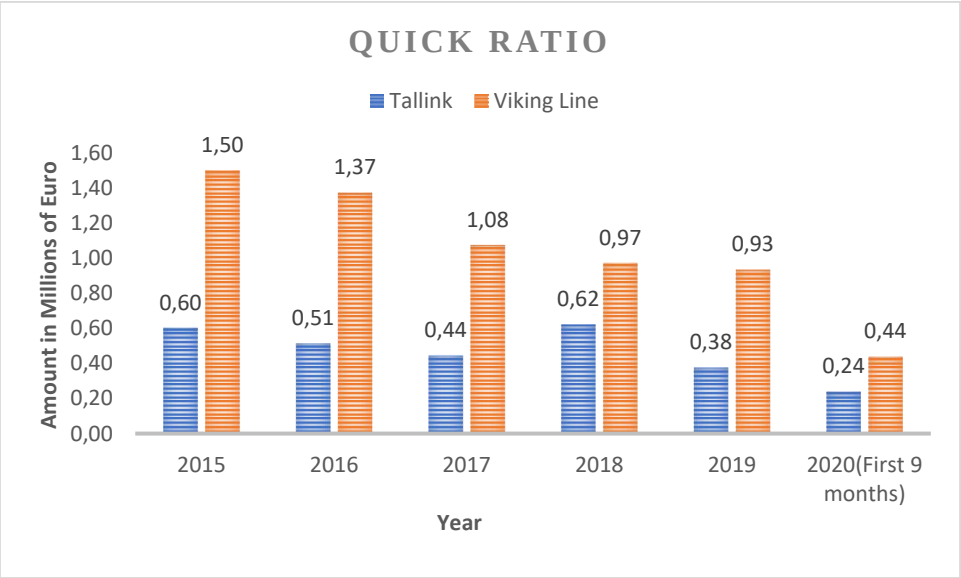

Figure 3.1.2. Quick ratio for 2015-2020

Source: Based on data from appendix 3

The quick ratio also measures the company's ability to meet its short term loan and obligations but with its most liquid assets. It is always considered better in terms of liquidity if the quick ratio is higher than 1. The quick ratio is directly proportional to the current ratio in the context of the Tallink and Viking line. It means if the current ratio increase so does the quick ratio and vice versa. As the Viking line has a better financial position in terms of current ratio compared to Tallink, it is also more liquid having an average quick ratio of 1.17 for the past 5 years from 2015-2019. For the first nine months in 2020, Viking Line's quick ratio has decreased to 0.44 which is 50% less than the previous year and it is because of the decrease in inventories, cash, and equivalents and increase in the short term liabilities of the company. The quick and current ratio of Tallink has always been less than 1 and indicates liquidity problems for both of the companies in near future. According to the above ratios Viking Line is hs performed better and financially sound in the context of liquidity.

3.2 Profitability ratio analysis

Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin ratios have been selected for the profitability analysis of Tallink and Viking Line. It measures and evaluates the capacity of a company to earn profit relative to its revenue, assets, and equity during a selected period from 2015-2020.

3.2.1 Return on Assets (ROA)

The following figure indicates that Tallink has always higher values of ROA as compared to Viking Line. It means that assets owned by Tallink are being used more efficiently than the Viking Line. It shows that there has been quite a lot of improvement in ROA of Tallink and Viking Line in 2019 as compared to 2018 and it is because of an increase in net profit and decreased expenses. The average ROA during 2015-2019 for Tallink is 3.08% with the lowest value of 2.62% in 2018. But at the end of the first nine months(Jan-Sept) in 2020, it has a negative return on assets because both companies revenue has been relatively decreased are not able to earn profit instead they are suffering from the huge amount of loss.

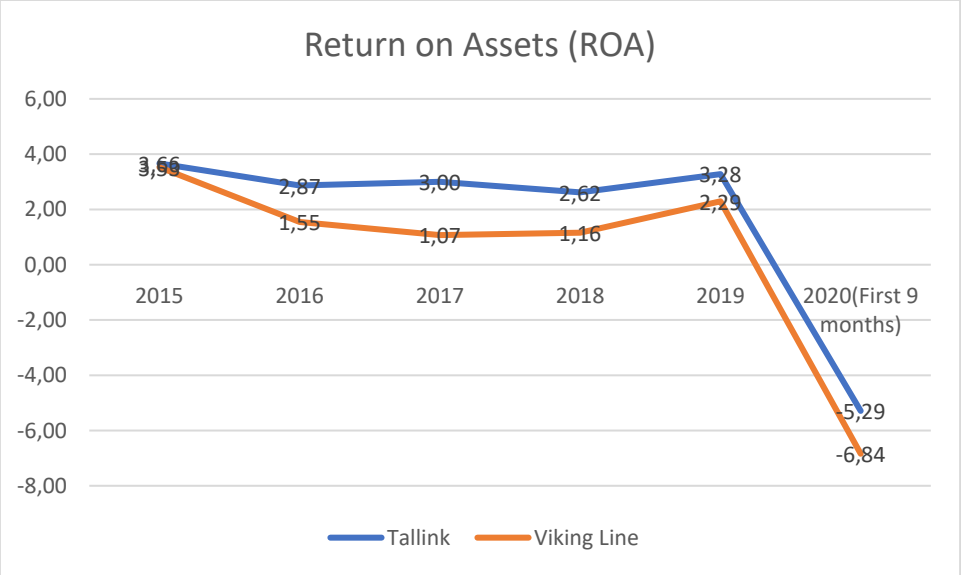

Figure 3.2.1 Return on Assets for 2015-2020

Source: Based on data from appendix 3

From the figure, it shows both companies ROA moves almost in the same direction. Viking Line has a smaller value in ROA because of low sales and low net income as compared to Tallink for the selected year 2015-2019. Both Tallink and Viking Line were able to improve ROA in 2019 which is very positive and reflects the improvement of assets management and shows that every EUR they invest in assets generates 3.28 and 2.29 EUR of net income respectively. But suddenly in 2020, ROA for both the companies are in negative figure but it is not because of bad management or loosing of money but it is because of the direct impact of coronavirus pandemic in the turnover of the business where there was a decrease in the number of passengers and trips.

3.2.2 Return on Equity (ROE)

Similarly to ROA, ROE has increased from 2018 to 2020 for both Tallink and Viking Line. This means that both companies have generated more profits in 2019 from their equity than in 2018. In 2015 ROE for Tallink was 7.39% which was decreased to 5.41% in 2016, a slight increase in 2017, and have the lowest of 4.73% in 2018. In 2019 investments in technical dockings of vessels to upgrade the ships ' restaurants, shops, and other public areas and investments in technical maintenance of ship leads to an increase (Tallink Annual Report, 2019) in ROE in 2019 to 5.92% which shows that every euro invested by shareholders of Tallink created 5.92 EUR of profit during 2019. But the return on equity has decreased to -10.41 in the first nine months of 2020. It is because of the decrease in the retained earnings and the net profit.

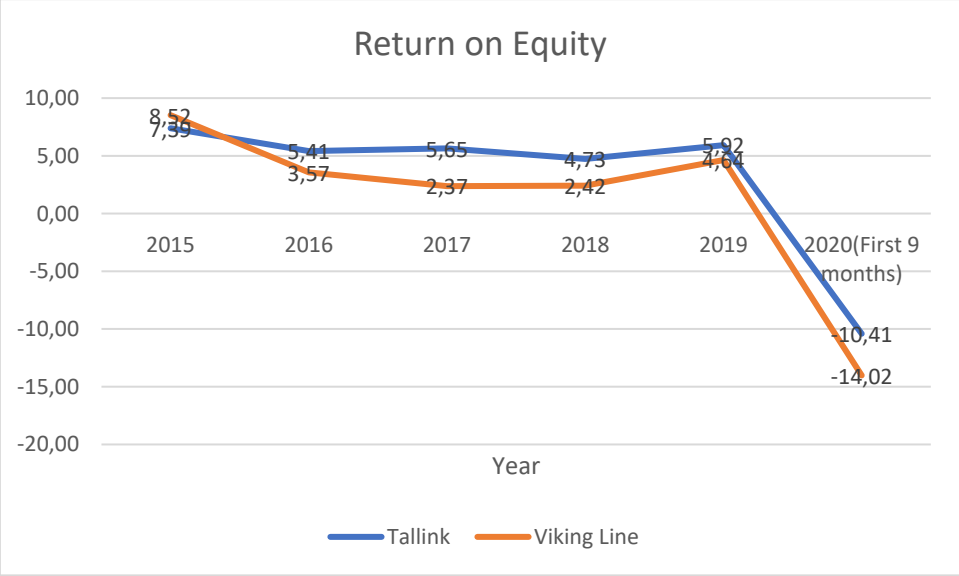

Figure 3.2.2. Return on Assets for 2015-2020

Source: Based on data from appendix 3

Viking Line, however, started as the most profitable firm compared to Tallink in 2015 in context of ROE was the least profitable form 2016-2019. Until 2017 ROE of Viking Line was in a decreasing trend but has started to improve from 2018-2019 to 4.64% ROE, which implies that every euro invested by shareholders of Viking Line generated 4.64 EUR of profit in 2019. Viking Line also followed the same trend as Tallink with a negative ROE of -14.02 resulted from the decrease in retained earnings during the first nine months of 2020. Both the companies have positive and higher ROE than ROA till 2019, which explains that Tallink and Viking Line depends on financial leverage to generate profits. However, Tallink can be termed as more profitable than Viking Line in terms of ROE and ROA but 2020 can be termed as an exceptional year.

3.2.3. Net Profit Margin

Figure 3.2.3 clearly shows that Tallink has the highest profit margin as compared to the Viking line over the selected period from 2015-2019. Both the companies are doing good in terms of profitability as they both have a positive value. The low net profit margin of Tallink in 2018 can be explained by a decreased in sales and increased financial expenses. Both the companies have quite a low-profit margin and we can assume that the products and services of both Tallink and Viking are not hugely overpriced. As the net profit margin ratio has increased in 2019 from 4.22% to 5.24%, it indicates that Tallink has either increased the price of the services which leads to generating higher revenue or minimized the expenses to increase profits. The net profit margins of 5.24% in 2019 implies that every euro generated by sales earned 5.24 EUR of profit for Tallink.

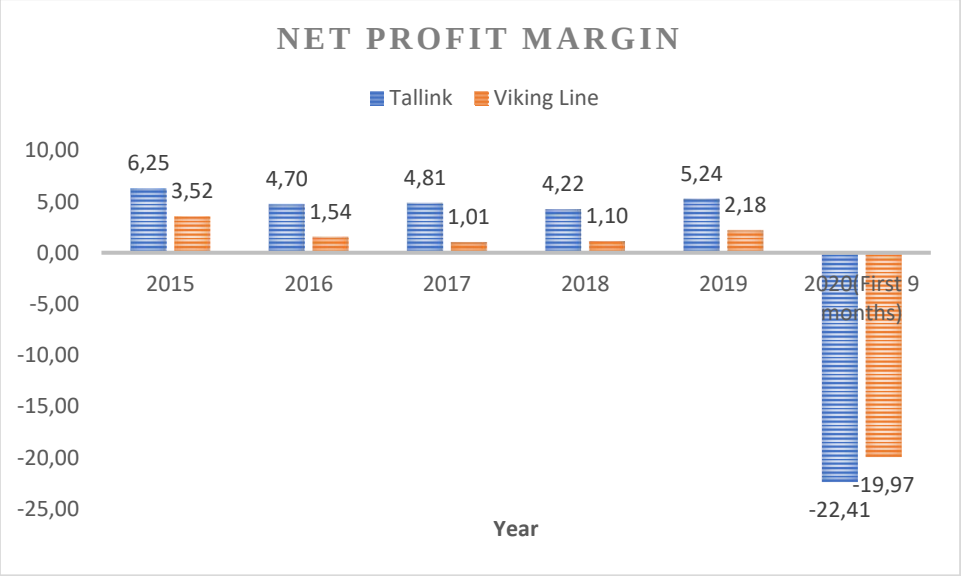

Figure 3.2.3. Net Profit Margin 2015-2020

Source: Based on data from appendix 3

As seen in figure 3.2.3 Viking Line has an average profit margin of 1.87% during the years 2015-2019, with the lowest of 1.01% in 2017. It was because of an increase in fuel cost, increase in many other operating expenses, and high-income tax paid during 2017. Like Tallink, Viking Line also improves the net profit margin in 2019 to 2.18% which means that every euro generated by sales earned 2.18 EUR of profit for Viking Line. In general, Tallink has been more profitable because the profit margin ratios are always higher than Viking Line over the selected period from 2015-2019.

If we look at the figures for the first nine months of 2020, both the companies Tallink and Viking Line are suffering from huge loss with a net profit margin of -22.41 and -19.97 respectively. As

explained in the earlier chapter it is because of the decrease in the number of passengers in the coronavirus pandemic time in which both the companies failed to generate revenue but has increased the expenses due to the cancellation of the tickets, very less number of trips, and some additional cost to maintain the health and safety of the passengers and crews.

3.3. Activity ratio analysis

Asset turnover ratio and average collection period are selected to analyze the activity ratio, which helps to determine how efficiently Tallink and Viking Line uses its assets to generate revenues and cash. It can be said that if assets are not used efficiently costs will increase and leads to financial suffering.

3.3.1. Asset Turnover Ratio

As seen in figure 3.3.1, the asset turnover ratio has stayed almost stable during these selected periods from 2015-2019. The asset turnover ratio of Tallink can be considered as low and can be concluded that the asset has not been used efficiently because the ratio is always less than 1 for the selected period. Every unit of the asset in Tallink generates less than one euro revenue with an average of 0.61. In the balance sheet, we can see that property, plant and equipment are the largest groups of the asset in Tallink which can be used efficiently to improves its asset turnover ratio by reducing the fixed assets.

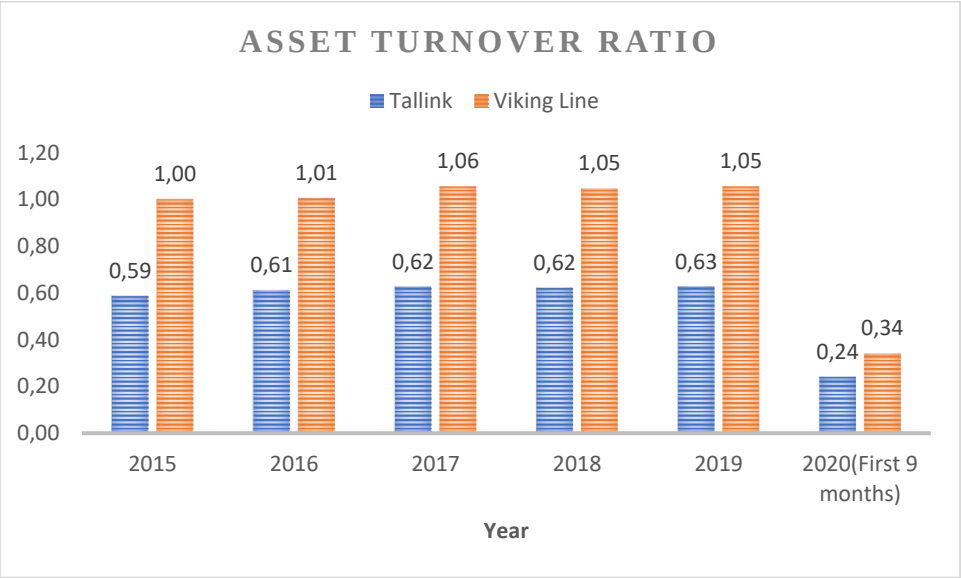

Figure 3.3.1. Asset Turnover Ratio of 2015-2020

Source: Based on data from appendix 3

Based on figure 3.3.1, it can be concluded that Viking Line has the best asset turnover ratio which is always more than 1 during the years 2015-2019 as compared to Tallink. It has experienced an increase in 2017 but has slightly decreased in 2018 and remain constant at 1.05 in 2019. The main asset which contributes to this asset turnover ratio is vessels which have been efficiently used over the period and succeed to earn more than 1 euro with the use of every unit of asset.

Since the asset is directly proportionate to sales/revenue of the company, as the sales decrease in the first nine months of 2020, the asset turnover ratio has also decreased to 0.24 and 0.34 for Tallink and Viking Line respectively. Of course, companies could not use their assets efficiently during the period in 2020 because of the pandemic situation where they could not generate the sales by using the assets also due to many restrictions imposed by the local governments to the companies and all the citizens of the nations for traveling or crossing the international borders and for the tourism and business purpose.

3.3.2. Average Collection Period

From figure 3.3.2, it can be seen that Tallink has a shorter collection period than Viking Line over the selected period of 2015-2019. This implies that Tallink is better at securing debt and can pay its loans and debts faster. Trade and other receivables are the major components of receivables for both of the company. It can be said that Tallink has a strict credit policy with an average collection period of 15.63 days. Viking Line's highest average collection period was in 2017 which is 24.58 days. This suggests that Viking Line has a weak credit policy and is also an indication of difficulties converting profits into cash and paying for its obligations. Despite having a longer collection period and possible problems in turning cash, Viking Line has been able to manage improved liquidity ratios than Tallink.

In 2020, the average collection period for both the companies has increased to 23.62 and 43.77 days and can have a problem in the shortage of cash and more chances of insecure debt and might face problems to pay their financial obligations.

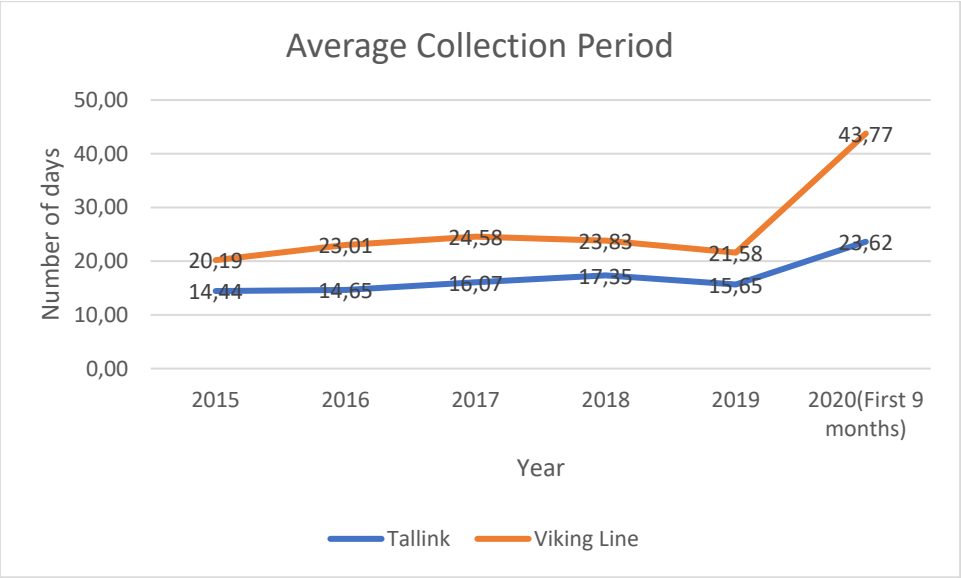

Figure 3.3.2. Average Collection Period 2015-2020

Source: Based on data from appendix 3

3.4. Solvency Ratio Analysis

Debt to Equity ratio is selected to analyze the solvency ratio of Tallink and Viking Line which helps to examines the ability of selected company's to meet their long-term debt obligations as well as helps to determine the financial stability of the company in long term.

3.4.1. Debt to Equity Ratio – D/E

As seen the figure 3.4.1, the debt to equity ratio has stayed consistently below 1, meaning that both company Tallink and Viking Line are not risky investments. The average debt to equity ratio for Tallink was 0,54 with the lowest of 0,48 in 2017 and the highest of 0.70 in 2020. The lowest value of 0.48 in 2017 was likely caused by a decrease in debt by 51.8 Million and an increase in equity by 26.4 Million. Also, the highest debt to equity of 0.70 in 2020 was likely caused by an increase in debt by 10.54 Million and a decrease in equity by 3,446.90 Million. The debt to equity ratio is closely related to risk and we can see from the figure that risk has been increasing in Tallink from 2018-2019. The debt to equity ratio of 0.70 in 2020 shows that Tallink has 0.70 EUR of debt for every euro of equity.

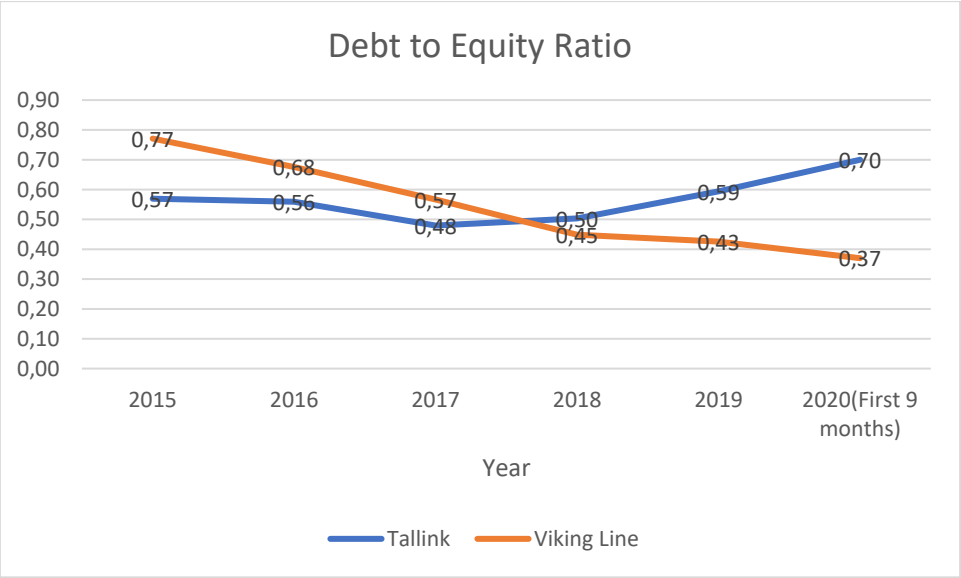

Figure 3.4.1. Debt to Equity Ratio 2015-2020

Source: Based on data from appendix 3

However, the debt to equity ratio for Viking Line is lowest in 2020 with 0.37 and the highest of 0.77 in 2015. The lowest value of 0.37 in 2020 was likely caused by a decrease in debt and an increase in equity. We can see from the figure that risk has been decreasing in Viking Line for the last two years. In 2020, the lower value of 0.37 was presumably affected because of a fall in debt and a rise in equity.

CONCLUSION

Because of globalization, rise in the economy, and increase in the world tourism industry there has been persistent growth in the cruise industry over the last two decades. Since people are more attracted to travel to Europe for tourism purposes, leading cruise companies are investing in new and large vessels with advanced technologies and modern facilities considering the demand of the customers and their choice. The main focus of this paper is the aim to evaluate the financial performance as well as to analyze and compare the calculated financial ratios of Tallink and Viking Line over the selected period from 2015-2020. Eight different financial ratios were used to perform the financial analysis of both companies. During these years, Tallink's revenue has always been highest as compared to Viking Line and it is because of more number of vessels with Tallink and also the wage rate and operating cost are relatively low for Tallink as compared to Viking Line.

The first research question of this paper was " Can financial ratio analysis be used for the shipping company to evaluate the financial performance of the company?" Based on the analysis of the financial ratios and the author's opinion, it seemed to be very useful to use and compare the financial ratio analysis on the shipping company. Liquidity, profitability, activity, and solvency ratios of two shipping companies were analyzed and compared in this paper. And it clearly shows that analysis of financial ratio reflects the financial performance of the shipping companies based on the profitability, assets management, investing from debt and equity. Since both companies, Tallink and Viking Line are using International Financial Reporting Standards(IFRS) all the relevant financial statements presented in their respective annual reports are the key elements to evaluate the financial ratios. Ratios are just numbers and are useless if it cannot be interpreted and compared. Authors show that financial ratios can be used and also be compared by calculating eight different financial ratios of Tallink and Viking Line and compare the ratios to each other by performing the horizontal analysis for the year 2015-2020 which helps to understand the availability of liquidity, capital requirements, capital structure mix, profitability and the efficient management of the companies asset to generate the revenue.

To answer the second research question " What is the financial performance of these companies related to liquidity, profitability, asset, and debt management and solvency?" As defined in chapter 3 and based on the calculations, Tallink's liquidity ratio is less than 1 which signals for liquidity problem in the company. Whereas Viking Lines's average current ratio and quick ratio are above 1 Which means that Viking Line is more liquid compared to Tallink. The higher the liquid ratio, the higher is the ability to meet the short term financial obligation of the company(Corporate

financial institute, 2020). Both the companies have had a positive profit margin for the last 5 years, and Tallink has always been able to earn more profit as compared to Viking Line because of its higher volume of revenue. Both Tallink and Viking Line has the highest profit margin in 2015. After 2015 profit margin for both companies are in declining trend and it is because of an increase in the competition in the market and high operating cost. The main goal of every goal is to earn as much as a positive and high-profit margin and both companies have successfully managed to maintain their positive profit margin for the year 2015-2019. Viking Line has the highest assets turnover ratio as compared to Tallink which means that assets in Viking Line has been used and managed more efficiently and can generate more sales per money invested in their assets but the debt collection period for Viking Line is higher than Tallink which means that Viking Line has loose credit policy or payment terms and is signaling for the problems in turning the turnover into cash. Both companies can be considered as a less risky investment because it has a debt to equity ratio below one. This means that every unit of money in equity has less than 1 unit of debt. It can be also said that creditors are less than investors in the company's assets and which is a positive sign for the financial performance of the company.

And to answer the final research question "How do we determine which company(either Tallink or Viking Line) is performing well by looking at financial ratios?" Tallink is a cruise company having more vessels and revenue as compared to Viking Line which is one of the competitors in the Baltic Sea. By analyzing all the financial ratios which were calculated and compare to each other, the author concludes that Tallink has stable financial performance. Although Viking Line is a more liquid company and has the highest asset management, Tallink can be considered as the company has a better financial performance by generating more revenue and profit margin as well as the highest return on the assets as compared to Viking Line based on the financial statements and financial ratios calculated for the year 2015-2019.

There are some limitations in this study while doing the financial ratio analysis for the performance evaluation of Tallink and Viking Line. To achieve a good and correct performance evaluation we need to select suitable ratios and financial indicators. That means the data must be correct otherwise it will lead to inaccurate calculations. Financial ratios are calculated based on information published in the annual report of the company. Sometimes the information provided might be manipulated by the management of the company to show that the company is doing great, is profitable and, shows that it has a better financial position than its actual performance. Hence the result might not be true and accurate and could not provide the correct analysis. Often we could not find the things to calculate the ratios, such as the common shareholder's equity, weighted

average number of outstanding shares, the market value of the share, interest charges, etc. As a result of which it would be difficult to conduct the complete ratio analysis and compare it between two companies.

The ongoing global coronavirus pandemic has significantly affected the world economy. The cruise industry is one of the highly affected industries. It has built a significant degree of public concern about the maintenance of the health and safety of passengers while onboarding. The industry and cruise market are in fear that the impact of the coronavirus pandemic will have a long-run effect on the revenue and operation of the cruise industry. During this time cruise companies are obligated to pay significant amounts to customers in reimbursement, compensation, and cancellation fees as per the ticket terms and conditions. There are also many additional costs of the companies such as the cost of docking at seaports during quarantine, additional cost in maintaining the health and safety protocol for the passengers while onboarding, etc. Even in at present situation, cruise companies are not able to board the passengers at full capacity because of the chances of the spread of coronavirus and are not able to generate enough revenue which can generate cash flow and financial problems for the companies. The major factors affecting the financial results are the travel restrictions in different countries because of coronavirus, a decrease in the number of tourists, and several trips. Also, the restrictions imposed by the government not allowing the ship to board in the maximum capacity because of the fear of spread of coronavirus.

The author also suggests using this thesis for further research on the topic, how the current coronavirus pandemic has affected the financial performance of the cruise and tourism industry in Europe and how the industry is handling the financial problems and whether the companies keep a reserve to solve pandemic situations in future.

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APPENDICES

Appendix 1. Income statement and Balance Sheet of Tallink 2015-2020 continuation
(in millions of euros)

Income Statement

Particulars	2014	2015	2016	2017	2018	2019	2020 First 9 months
Revenue	**921,5**	**945,2**	**937,8**	**967,0**	**949,7**	**949,1**	**363,6**
Cost of sales	**-739,8**	**-721,8**	**-745,2**	**-772,4**	**-765,9**	**-752,2**	**388,7**
Gross profit	**181,7**	**223,4**	**192,6**	**194,6**	**183,8**	**196,9**	**388,7**
Sales and marketing expenses	**-62,7**	**-63,6**	**-72,3**	**-71,3**	**-69,3**	**-67,7**	**-30,5**
Administrative expenses	**-49,2**	**-47,3**	**-51,0**	**-53,7**	**-55,2**	**-56,6**	**-35,1**
Impairment loss on receivables	0,0	0,0	0,0	0,0	-0,3	-0,2	0,0
Other operating income	1,7	1,0	2,5	2,9	4,6	2,6	22,4
Other operating expenses	-0,9	-10,3	-0,2	-0,5	-0,2	-0,1	0,1
Result from operating activities	**70,7**	**103,3**	**71,6**	**72,0**	**63,5**	**74,9**	**-68,4**
Finance income	11,8	12,8	10,5	12,7	8,6	1,0	0,0
Finance costs	-52,4	-47,0	-37,3	-34,0	-27,6	-18,7	-12,9
Share of profit of equity-accounted investees	0,0	0,1	0,0	0,0	0,0	0,0	0,0
Profit before income tax	**30,0**	**69,2**	**44,8**	**50,7**	**44,6**	**57,2**	**-81,3**
Income tax	**-2,7**	**-10,1**	**-0,7**	**-4,3**	**-4,5**	**-7,5**	**-0,2**
Net profit for the year	**27,3**	**59,1**	**44,1**	**46,5**	**40,0**	**49,7**	**-81,5**

Source: Tallink Annual Report 2015-2020

Appendix 1. Continuation

(in millions of euros)

Balance Sheet

	2014	2015	2016	2017	2018	2019	2020 First 9 months
ASSETS							
Current Assets							
Cash and cash equivalents	65,3	82,0	78,8	88,9	82,2	38,9	30,7
Trade and other receivables	38,2	36,6	38,7	46,5	43,8	37,6	25,7
Prepayments	3,8	5,3	7,9	5,4	6,1	6,8	10,7
Income tax prepayment	1,7	1,2	0,1	0,0	0,0	0,1	0,0
Inventories	31,3	29,2	38,7	40,7	35,7	37,3	32,5
	140,3	**154,3**	**164,2**	**181,5**	**167,9**	**120,6**	**99,6**
Non-current assets							
Investments in equity-accounted investees	0,3	0,4	0,4	0,4	0,4	0,4	0,4
Other financial assets	0,3	0,3	0,3	0,3	0,3	1,6	2,2
Deferred income tax assets	21,3	19,4	18,8	18,7	17,9	18,7	18,7
Investment property	0,3	0,3	0,3	0,3	0,3	0,3	0,3
Property, plant and equipment	1468,0	1311,4	1304,9	1308,4	1267,9	1347,1	1380,2
Intangible assets	55,2	52,7	50,1	48,9	46,2	44,3	41,6
	1545,3	**1384,5**	**1374,8**	**1377,1**	**1333,1**	**1412,4**	**1443,4**
TOTAL ASSETS	**1685,6**	**1538,8**	**1539,0**	**1558,6**	**1500,9**	**1533,0**	**1542,9**

Source: Tallink Annual Report 2015-2020

Appendix 1. Continuation

(in millions of euros)

	2014	2015	2016	2017	2018	2019	2020 First 9 months
LIABILITIES AND EQUITY							
Current liabilities							
Interest-bearing loans and borrowings	149,9	81,9	106,1	159,9	78,7	89,2	145,5
Trade and other payables	91,2	92,2	107,0	95,5	100,7	98,9	102,9
Derivatives	0,0	0,0	0,0	29,7	0,9	0,0	0,0
Dividends payable to shareholders	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Income tax liability	1,3	4,6	0,0	0,0	0,1	0,0	0,0
Deferred income	29,4	28,9	30,9	31,4	32,1	33,3	27,3
	217,8	**207,5**	**244,0**	**316,7**	**212,5**	**221,4**	**275,8**
Non-current liabilities							
Interest-bearing loans and borrowings	593,5	467,4	452,8	401,0	431,5	488,7	525,6
Derivatives	42,0	42,9	32,4	4,7	0,0	0,0	0,0
Other liabilities	0,0	0,2	0,0	0,0	0,0	0,0	0,0
	635,5	**510,5**	**485,2**	**405,7**	**431,5**	**488,7**	525,6
Total liabilities	**907,3**	**718,0**	**729,1**	**722,3**	**644,0**	**710,1**	801,4
Equity							
Equity attributable to equity holders of the Parent							
Share capital	404,3	404,3	361,7	361,7	361,7	314,8	314,8
Share premium	0,6	0,6	0,6	0,6	0,7	0,7	0,7
Reserves	70,1	65,1	68,8	68,9	69,5	69,6	70,7
Retained earnings	303,2	350,7	378,7	405,0	425,0	437,7	355,3
Total equity	**778,3**	**820,7**	**809,9**	**836,3**	**856,9**	**822,8**	**741,5**
TOTAL LIABILITIES AND EQUITY	**1685,6**	**1538,8**	**1539,0**	**1558,6**	**1500,9**	**1533,0**	**1542,9**

Source: Tallink Annual Report 2015-2020

Appendix 2. Income statement and Balance Sheet of Viking Line 2015-2020
(in millions of euros)

Income Statement

Particulars	2014	2015	2016	2017	2018	2019	2020 First 9 months
Revenue	527,4	530,5	519,6	522,7	497,8	496,4	154,2
Other operating revenue	0,7	0,5	2	1,7	0,3	0,4	16,7
Expenses							
Goods and services	148,1	153,2	151,7	150,1	135,8	133,1	39,3
Salary and other employment benefit expenses	120,8	118,1	122,3	120,6	117,3	117,1	56,6
Depreciation and impairment losses	31,8	27,7	28	25,2	23,8	24,6	18,1
Other operating expenses	213,6	205,5	206,1	218,4	211,8	204,5	92,1
Total Expenses	**514,3**	**504,6**	**507,9**	**514,3**	**488,8**	**479,4**	**206,1**
OPERATING INCOME	**13,7**	**26,4**	**13,7**	**10**	**9,3**	**17,4**	**-35,2**
Financial income	29	5	2,6	2,2	2,4	0,5	0,0
Financial expenses	-10,4	-8,2	-6,7	-5,6	-5,2	-4,3	-3,1
INCOME BEFORE TAXES	32,3	23,2	9,6	6,6	6,5	13,6	-38,3
Income taxes	-1,8	-4,4	-1,5	1,6	-1	-2,7	7,6
INCOME FOR THE PERIOD	**30,6**	**18,7**	**8**	**5,3**	**5,5**	**10,8**	**-30,8**

Source: Viking Line Annual Report 2015-2020

Appendix 2. Continuation

(in millions of euros)

Balance Sheet

Particulars	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020 First 9 months**
ASSETS							
Non-current assets							
Intangiblr assets	0,6	0,8	1,9	2,5	3,2	3,3	3,1
Land	1,1	1,1	0,6	0,6	0,6	0,6	0,6
Buildings and structures	10,8	10	9,2	8,6	7,7	7,3	6,9
Renovation costs for rented properties	0,6	1,2	2,3	2,7	2,5	2,2	1,9
Vessels	340,1	324,5	308,5	294,6	281,2	266	256,5
Machinery and equipment	6,7	5,5	5,6	5,2	4,9	3,9	3,5
Investments available for sale	26,1	26,8	27,1	27,9	32	28,1	5,1
Receivables	0,3	0,2	0	0		0	0
Advance payments	0	0	0	21,6	25,9	49,5	54,4
Right of use assets	0	0	0	0	0	5,2	0
Financial assets	0	0	0	0	0	0	28
Total non-current assets	**386,3**	**370,1**	**355,2**	**363,5**	**358**	**366**	**359,9**
Current assets							
Inventories	16,1	17,2	18,1	17,3	16,3	16,9	15,7
Income tax assets	0,3	0,5	1,7	1,6	0,4	0,4	0
Trade and other receivables	29,3	29,4	36,1	34,3	30,7	28	21,9
Cash and cash equivalents	101,1	110,7	94,9	68	61,8	62,8	28,6
Total current assets	**146,8**	**157,8**	**150,8**	**121,1**	**109,2**	**108,1**	**66,1**
TOTAL ASSETS	**533,1**	**527,8**	**506**	**484,6**	**467,2**	**474**	**426**

Source: Viking Line Annual Report 2015-2020

Appendix 2. Continuation

(in millions of euros)

	2014	2015	2016	2017	2018	2019	2020 First 9 months
EQUITY AND LIABILITIES							
Equity							
Share capital	1,8	1,8	1,8	1,8	1,8	1,8	1,8
Reserves	0	0,7	1	1,7	5,8	1,9	1,9
Translation differences	-0,8	-0,4	-1,3	-1,7	-2,3	-2,5	-2,6
Retained earnings	212,3	223,6	221,4	222,2	225,3	233,9	203,1
Total equity	**213,3**	**225,7**	**222,9**	**224,1**	**230,7**	**235,1**	**204,2**
Non-current liabilities							
Deferred tax liabilities	31,4	34,5	35,9	37	37,5	37,7	29,4
Non-current interest-bearing liabilities	197,5	174	150,6	127	103,5	100	75,7
Lease Liabilities	0	0	0	0	0	3,6	3,3
Total non-current liabilities	**228,9**	**208,4**	**186,5**	**164,1**	**141**	**141,3**	**108,4**
Current liabilities							
Current interest-bearing liabilities	23,5	23,5	23,6	23,5	23,5	23,5	50,4
Income tax liabilities	0	1,3	0	0	0,3	2,1	0
Trade and other payables	67,4	68,9	73	73	71,6	70,3	61,2
Lease Liabilities	0	0	0	0	0	1,7	1,8
Total current liabilities	**91**	**93,7**	**96,6**	**96,5**	**95,5**	**97,6**	**113,5**
Total liabilities	**319,8**	**302,1**	**283**	**260,6**	**236,5**	**238,9**	**221,8**
TOTAL EQUITY AND LIABILITIES	**533,1**	**527,8**	**506**	**484,6**	**467,2**	**474**	**426**

Source: Viking Line Annual Report 2015-2020

Appendix 3. Financial Ratio results of Tallink and Viking Line 2015-2020

Current Ratio						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	0,74	0,67	0,57	0,79	0,54	0,36
Viking Line	1,68	1,56	1,25	1,14	1,11	0,58
Quick Ratio						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	0,60	0,51	0,44	0,62	0,38	0,24
Viking Line	1,50	1,37	1,08	0,97	0,93	0,44
Return on Assets						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	3,66	2,87	3,00	2,62	3,28	-5,29
Viking Line	3,53	1,55	1,07	1,16	2,29	-6,84
Return on Equity						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	7,39	5,41	5,65	4,73	5,92	-10,41
Viking Line	8,52	3,57	2,37	2,42	4,64	-14,02
Net Profit Margin						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	6,25	4,70	4,81	4,22	5,24	-22,41
Viking Line	3,52	1,54	1,01	1,10	2,18	-19,97
Asset Turnover Ratio						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	0,59	0,61	0,62	0,62	0,63	0,24
Viking Line	1,00	1,01	1,06	1,05	1,05	0,34

Source: Based on the author's calculations from Appendix 1 and 2 data

Appendix 3. Continuation

Average collection period						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	14,44	14,65	16,07	17,35	15,65	23,62
Viking Line	20,19	23,01	24,58	23,83	21,58	43,77
Debt to Equity Ratio						
Years	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	0,57	0,56	0,48	0,50	0,59	0,70
Viking Line	0,77	0,68	0,57	0,45	0,43	0,37
Revenue in Millions of Euro						
	2015	2016	2017	2018	2019	2020(First 9 months)
Tallink	945,2	937,8	967,0	949,7	949,1	363,6
Viking Line	530,5	519,6	522,7	497,8	496,4	154,2

Source: Based on the author's calculations from Appendix 1 and 2 data

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