



Company Report



NORWEGIAN CRUISE LINE®

Target value: 14.8 billion\$
Current value: 12.8 billion\$
Conclusion: 17% Upside
Verdict: BUY

Revenue: 9.5 billion\$
EBIT: 1.48 billion\$
Credit Rating: B+

Company Introduction

Norwegian is a cruise line operator with three brands/subsidiaries, Norwegian Cruise Lines, Oceania Cruises, and Regent Seven Seas Cruises.

Figure 1: Norwegian compared to its competitors



Sources: Yahoo Finance

Norwegian Cruise line is the smallest of the three big cruise lines. It focuses more on the premium and luxury segments in cruising. This enables them to have higher ticket revenue per customer but also leads to higher expenses due to the need for more frequent upgrading of ships. Furthermore, Norwegian Cruise Line acquired Oceania Cruises, a high-end cruise line, and Regent Seven Seas Cruises, a premium luxury brand. These two subsidiaries are now affiliates of NCLH, representing distinct segments within the company's portfolio.-

Revenue

To determine revenue forecasts, we analyzed Norwegian Cruise Line's customer capacity by examining its fleet. As the company adds new ships while retiring some older ones in the coming years, we can expect shifts in overall passenger capacity. Additionally, we know that the duration and pricing of cruises vary based on ship type, newer ships typically offer shorter cruises and higher ticket prices due to advanced innovation in terms of services. Below, we detail the approach to revenue forecasting.

Capacity

In the cruise industry, expanding a fleet requires placing ship orders 3 to 5 years before their delivery. As Norwegian Cruise Line also has for subsidiaries Oceania and Regent seven seas cruise line, we looked at articles and annual reports that presented the new ships that those three companies are going to acquire in the coming years.

Ticket prices fluctuate seasonally, with the "down period" (quarters 1 and 2) featuring lower average prices and the "up period" (quarters 3 and 4) showing higher averages. This pricing strategy allows Norwegian Cruise Line to maintain full occupancy by adjusting prices to attract customers during lower-demand periods. In our analysis, occupancy rates were set at 106% for Q1, 109% for Q2, 111% for Q3 and 104% for Q4 by taking the ones from previous years, because those percentages have remained almost similar since 2013.

Figure 2: Ships to be received by the company between 2024 and 2030

Starting Year	Passengers Capacity	Ship's Price	Average Ticket Price (Down-Period)	Average Ticket Price (Up-Period)
2025	3.571	1.000	1.200	1.500
2025	1.200	600	1.200	1.500
2026	3.571	1.000	1.000	1.300
2026	850	550	5.000	6.500
2027	3.650	1.000	1.200	1.600
2027	1.450	680	1.000	1.400
2028	3.650	1.000	1.200	1.600
2029	1.450	680	1.000	1.400
2029	850	600	5.000	6.500
2030	5.100	1.200	1.300	2.300

Source: Norwegian Cruise Line website and annual report

The company's ships typically remain in service for 30 years, after which they are considered no longer viable. Below is a summary of the retirement plan and other key data for the fleet.

Figure 3: Ships to be retired between 2024 and 2030

Ending Year	Passengers Capacity	Ship's Price	Average Ticket Price (Down-Period)	Average Ticket Price (Up-Period)
2028	2.018	100	700	1.400
2028	684	150	2.500	5.000
2028	684	150	2.500	5.000
2029	684	150	2.500	5.000
2029	1.928	230	800	1.500
2029	490	200	5.600	8.400
2030	684	150	2.500	5.000

Source: Own Forecasts based on data from Norwegian Cruise Line, Oceania and Regent seven seas cruise website

Furthermore, every 15 years, the ships require restoration, which incurs additional maintenance costs for the company. As a high percentage of our ships have already been restored in 2022 and 2024, we don't believe that more ships will need maintenance in the 5 next years.

To assess the impact of fleet changes on forecasts, we estimated the number of passengers based on the ships' capacity. Since Norwegian cruise line does not plan to change the average cruise duration, we maintained it at seven days. However, as it is a really luxury brand with only a capacity of 800 passenger per ship, this doesn't have a big impact. For capacity, we added the new ships and removed the old ones to accurately calculate the total number of passengers. This resulted in a discrepancy compared to the market's expectations, primarily due to the number of ships ordered. The new ships that we considered have been identified in the annual report of Norwegian Cruise line for 3 entities: Norwegian cruise, Oceania and Regent seven seas. We then expect 2 new ships in 2025, 2026, 2027 and 2029 and one in 2028 and 2030.¹

Figure 4: Passengers' forecast

	2023	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
# Passengers	2.716.546	2.961.872	2.973.737	3.318.869	3.539.487	3.681.999	3.746.358	3.733.375
Passengers cruise days	23.311.672	23.617.619	20.816.158	23.232.083	24.776.409	25.773.990	26.224.507	26.133.626
Average Days	7	7	7	7	7	7	7	7

Source: Bloomberg and own data

Using these data points, we calculated revenue from ticket sales and onboard spending. Ticket revenue is derived by multiplying the expected number of passengers by the adjusted ticket price. Onboard revenue directly depends on the number of passengers and the inflation and stays constant at around 33% of the revenue as it has been the case for the last 10 years.

¹CCLship.

Figure 5: Revenue forecast (in million \$)

	2013	2014	2015	2016	2017	2018	2019	2023
REVENUE	2.570,29	3.135,93	4.377,48	4.875,39	5.396,18	6.055,13	6.462,38	8.549,92
<i>Growth rate</i>	—	22,01%	39,59%	11,37%	10,68%	12,21%	6,73%	—
Tickets	—	—	—	3.388,96	3.750,03	4.259,82	4.517,39	5.753,97
<i>Growth rate</i>	—	—	—	—	10,65%	13,59%	6,05%	—
On Board	—	—	—	1.486,44	1.646,15	1.795,31	1.944,98	2.795,96
<i>Growth rate</i>	—	—	—	—	10,74%	9,06%	8,34%	—

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
REVENUE	9.594,83	10.127,47	10.947,97	11.184,58	11.417,92	12.420,27	12.863,92
<i>Growth rate</i>	12,22%	5,55%	8,10%	2,16%	2,09%	8,78%	3,57%
Tickets	6.484,06	6.784,17	7.328,33	7.487,91	7.642,56	8.317,60	8.612,21
<i>Growth rate</i>	12,69%	4,63%	8,02%	2,18%	2,07%	8,83%	3,54%
On Board	3.110,77	3.343,30	3.619,63	3.696,67	3.775,36	4.102,67	4.251,70
<i>Growth rate</i>	11,26%	7,48%	8,27%	2,13%	2,13%	8,67%	3,63%

Source: Bloomberg and own data

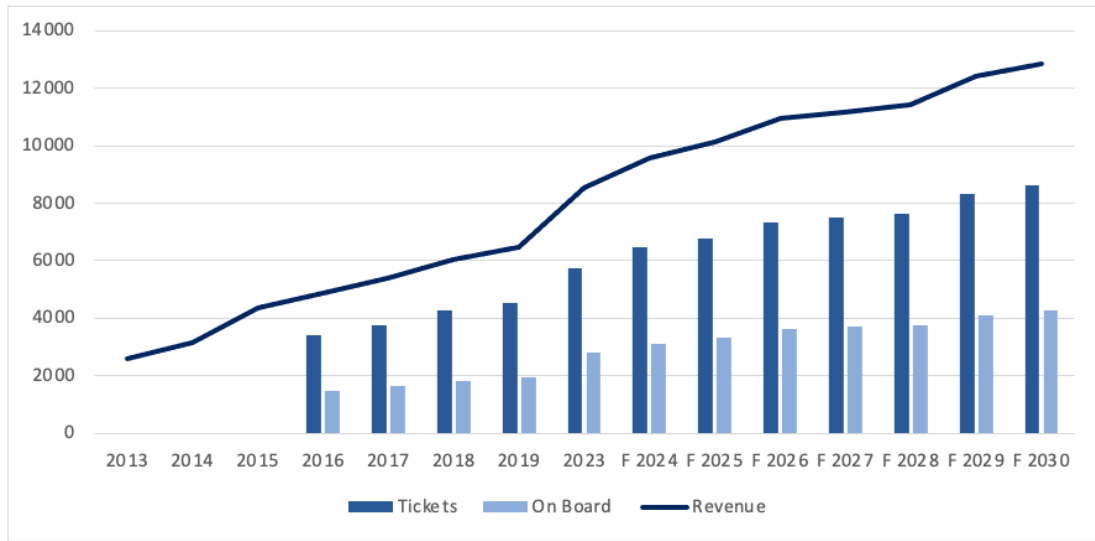
Reviewing the projections, revenue is expected to grow by 50.46% between 2023 and 2030. While this represents a notable increase, historical data suggests that it is relatively modest compared to past performance. For instance, between 2013 and 2023, the company achieved a remarkable growth of over 230%. This substantial growth can be attributed in part to Norwegian Cruise Line's positioning as a high-end luxury cruise operator, with pricing significantly higher than industry averages.

The highest growth rates in the forecast are anticipated in 2026 and 2029. This can be linked to the delivery of new ships from Regent Seven Seas Cruises, Norwegian Cruise Line's most luxurious brand. These ships, though limited to a capacity of 850 passengers, command an impressive average ticket price of \$6,500 for a 10-day cruise, reflecting their exclusivity and high standards.

Looking ahead, Norwegian Cruise Line is positioned to sustain its growth trajectory, driven by a significant fleet expansion and the continued reinforcement of its luxury brand image. By maintaining its focus on premium quality and exclusive experiences, the company aims to capitalize on its established market niche and attract high-value clientele.²

²CCLship.

Figure 6: Revenue depending on tickets and onboard (in million \$)

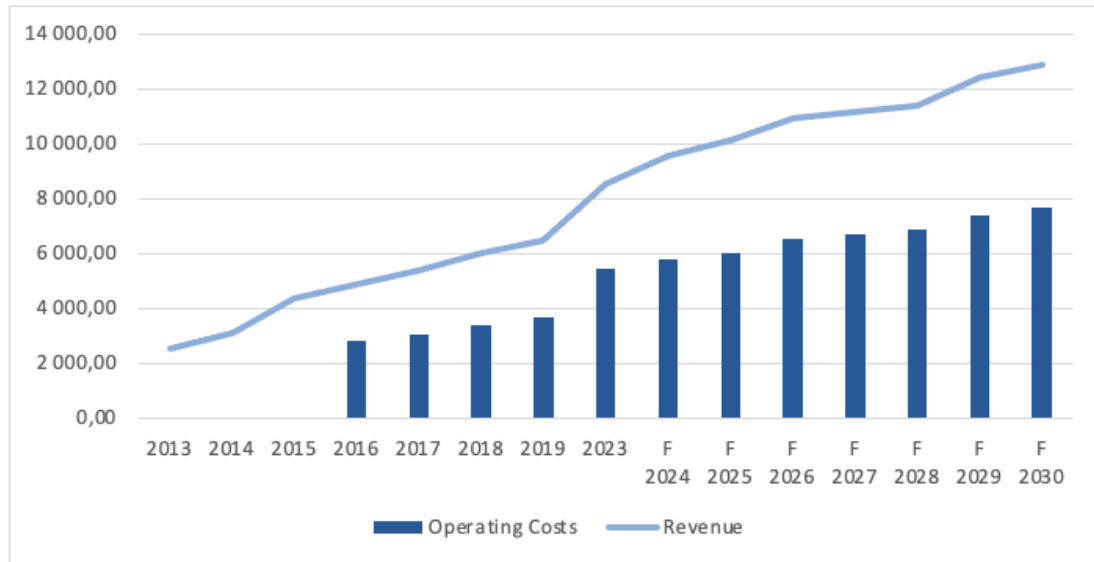


Source: Bloomberg and own data

Operating Expenses

The Operating Expenses are divided into commissions, occupancy-related, food, fuel, payroll, and others. The cruise ship industry can be regarded as cyclical and some of their costs fluctuate in a year depending on the number of passengers transported.

Figure 7: Total operating expenses (in million \$)



Source : Bloomberg and own forecast

Commissions

Commissions make up between ~29% - 32% of ticket sales and ~20% of total revenue. These rates have remained pretty stable over the years and Commissions are highly correlated with ticket revenue (~95.8%). Based on this the commissions for the coming years are:

Figure 8: Cost of Commissions (in million \$)

Commissions	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Ticket revenue	16.613,65	17.696,47	17.888,50	18.949,92	18.815,35	18.447,73	17.848,72
Cost of Commissions	1.972,92	2.082,78	2.250,20	2.298,98	2.347,71	2.552,08	2.643,94

Source: Own forecast

Food

The Food costs are highly correlated with the number of passenger cruise days and inflation (~92%). Based on the predicted future passenger cruise days and the FED and EU target rate of 2% inflation per year³⁴, we can estimate the future cost of food:

³ECB 2024.

⁴FED 2024.

Figure 9: Cost of food (in million \$)

Food	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Passenger cruise days	23.311.672	23.617.619	20.816.158	23.232.083	24.776.409	25.773.990	26.224.507
Inflation	2,5%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Cost of food	313,88	284,12	324,72	351,66	372,75	385,94	386,97

Source: Own forecast

Occupancy related

Occupancy related seems to be the Onboard costs as it has a ~97% correlation with the onboard spending. Given our forecasted onboard spending, we can estimate the future onboard cost as the following.

Fuel

The fuel costs are probably highly related to the sea miles driven, the number of tonnes moved and the oil prices in that period. Again we have no data on sea-miles driven. We have to assume that the cruise tours in the last year are similar in length to the ones driven in the future. For the tonnage, we used the gross tonnages of the current and predicted future fleet (taking into account future ships and the selling of old ships).

Unlike Royal Caribbean and Carnival, Norwegian opts to make their fleet future-proof with Methanol instead of LNG.

Similar to LNG, Methanol and Very Low Sulfur Fuel Oil (VLSFO) have different energy densities with 19.7 MMBTU compared to 40 MMBTU. Based on the NYMEX, the prices for a metric tonne have fluctuated in the last two years between 291 and 435\$ and prices are not correlated with other fuel types. Additionally, the NYMEX has future prices only for the next half year. With no way to predict future prices, we will take the last value of 375\$ as a static future reference, giving us a price of ~761\$ for 40 MMBTU.

Norwegian has no current operational ships and will only resume with it in 2027. We also have to assume that all future ships are Methanol fueled.

Figure 10: Fuel cost (in million \$)

	2023	2024	2025	2026	2027	2028	2029	2030
Tonnes Conventional	2.879.613	2.879.613	3.103.430	3.335.980	3.335.980	3.199.522	3.063.338	3.033.061
Tonnes Methanol	0	0	0	0	255.000	424.000	586.550	811.550
WTI Costs	77,50	71,86	69,30	67,89	67,22	67,08	66,84	66,73
Methanol to fuel	106,24%	114,59%	118,82%	121,28%	122,50%	122,75%	123,18%	123,39%
Total Fuel Costs	716,80	664,59	690,73	727,43	787,63	801,43	812,76	864,69

Source: Own forecast

The scenario described reflects the current strategy, which has its merits as LNG takes up more space and is, therefore, less suited for smaller ships such as the ones from NCLH but this strategy gives a comparative disadvantage on the costs. This cost disadvantage is however minor considering that fuel costs only make ~13% of total operating costs. In addition, Norwegian could still switch their focus to another fuel source.

Payroll

Norwegian's payroll-related costs are highly correlated with the number of onboard and onshore employees (~97%) excluding the Covid years. Mentionable is that they have become more effective from revenue per employee over the covid period (~180 thousand to 210 thousand per employee).

Figure 11: Payroll cost (in million \$)

Payroll	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Employees (end of year)	45.689	48.226	52.133	53.259	54.371	59.144	61.256
Payroll costs	1.406,57	1.484,65	1.604,93	1.639,62	1.673,83	1.820,77	1.885,81
Revenue	25.582,14	27.528,45	27.833,01	29.488,99	29.272,79	28.702,43	27.763,30
% of revenue	5,50%	5,39%	5,77%	5,56%	5,72%	6,34%	6,79%

Source: Own forecast

Other

The other costs are highly correlated with the revenue (~99%). We scaled the cost by the historic rates and by the predicted revenue.

Figure 12: Other costs (in million \$)

Other	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Revenue	25.582,14	27.528,45	27.833,01	29.488,99	29.272,79	28.702,43	27.763,30
Other costs	766,62	811,96	882,60	901,06	921,43	997,75	1.036,29

Source: Own forecast

Selling, General & Administration

The SG&A in NCLH's past is pretty stable. Taking the last year as an indicator, NCLH has come back to the pre-COVID ratio and could even improve them downwards slightly (~0.4%) back to levels of 2017. We scaled the SG&A with the latest ratio and our quarterly revenue forecasts, giving us the following values:

Figure 13: Cost of SG&A (in million \$)

SG&A	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Revenue	25.582,14	27.528,45	27.833,01	29.488,99	29.272,79	28.702,43	27.763,30
SG&A cost	1.441,94	1.526,93	1.660,46	1.692,02	1.730,80	1.875,94	1.904,89

Source: Own forecast

Depreciation and Amortization

The main fixed assets NCLH holds are ships, computers and software, and transportation equipment. The NCLH annual report from 2023 says that the ships are amortized for 30 years, while computers, software and transportation equipment are amortized on a 3 to 10-year period. Based

on the previous values of the D&A (between 2013 and 2019), it appears that the ships represent more than 93% of this value. Due to this information, we decided to focus on forecasting the ships' amortization.

Figure 14: D&A Forecast (in million \$)

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
D&A	886,10	1.049,60	1.257,93	1.509,60	1.662,93	1.764,93	1.864,60
% of revenue	9,24%	10,36%	11,49%	13,50%	14,56%	14,21%	14,49%

Source: Bloomberg and own forecast

Figures 1 and 2 show the values at which the ships, both old and new, have been bought. We added the value of D&A to the boats that have been bought and removed the one from the one that will be retired in the coming years.

We can observe a 19% increase in depreciation and amortization (D&A), driven by NCLH's ongoing replacement of older ships with newer, more efficient models.

Debt

As with other Cruise lines, Debt has grown massively over the COVID period to ~19 billion \$. We calculated the following interest payments based on their loans and their debt schedule.

Figure 15: Debt schedule

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Mix 2024	250	—	—	—	—	—	—
Change	250	—	—	—	—	—	—
New Rate	3,63%	3,63%	3,63%	3,63%	3,63%	3,63%	3,63%
Mix 2025	450	450	—	—	—	—	—
Change	0	450	—	—	—	—	—
New Rate	5,38%	5,38%	5,38%	5,38%	5,38%	5,38%	5,38%
Mix 2026	1.425	1.425	1.425	—	—	—	—
Change	—	—	1.425	—	—	—	—
New Rate	5,88%	5,88%	5,88%	5,88%	5,88%	5,88%	5,88%
Mix 2027	2.623	2.623	2.623	2.623	—	—	—
Change	—	—	—	2.623	—	—	—
New Rate	3,18%	3,18%	3,18%	3,18%	3,18%	3,18%	3,18%
Mix 2028	1.125	1.125	1.125	1.125	1.125	—	—
Change	—	—	—	—	1.125	—	—
New Rate	7,33%	7,33%	7,33%	7,33%	7,33%	7,33%	7,33%
Mix 2029	1.390	1.390	1.390	1.390	1.390	1.390	—
Change	—	—	—	—	—	1.390	—
New Rate	7,96%	7,96%	7,96%	7,96%	7,96%	7,96%	7,96%
Mix 2030	315	315	315	315	315	315	315
Change	—	—	—	—	—	—	315
New Rate	6,25%	6,25%	6,25%	6,25%	6,25%	6,25%	6,25%
Loans	8.250	8.250	8.250	7.739	7.436	7.314	6.708
Change	—	—	510,7407227	303,184	121,4235008	605,761632	659,422615
New Rate	4,58%	4,58%	4,58%	4,58%	4,60%	4,55%	4,53%
Refinancing	—	—	680,70	2.341,77	5.559,77	6.346,10	8.369,45
Change	—	—	—	—	—	—	—
New Rate	6,90%	6,90%	6,90%	6,90%	6,90%	6,90%	6,90%

Source: Refinitiv, NCLH 10-K

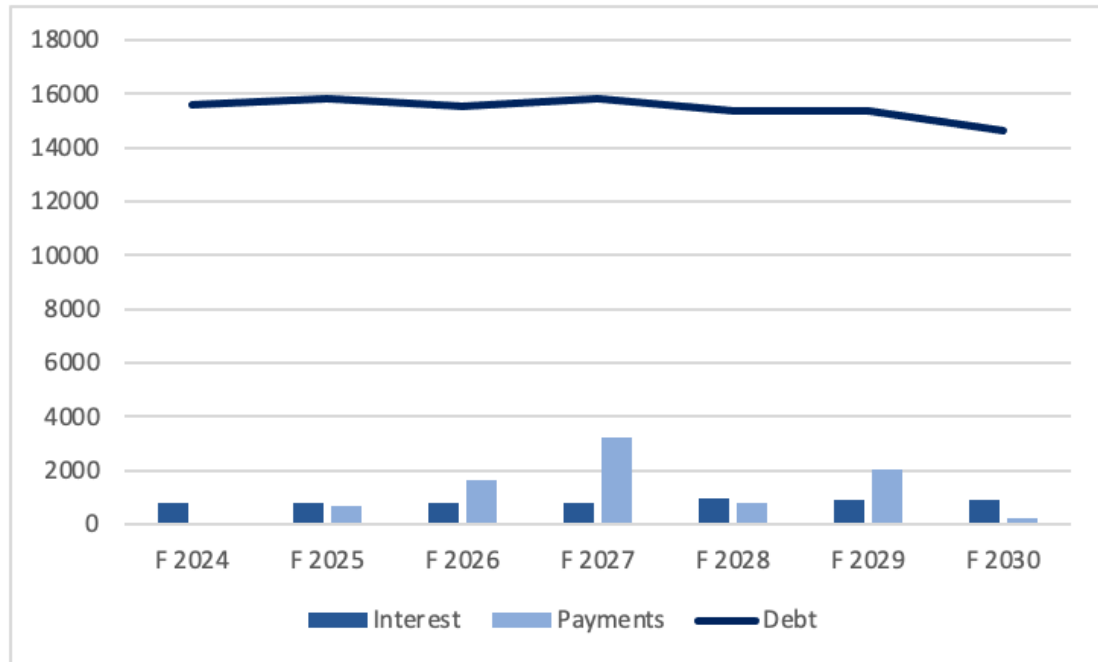
Figure 16: Debt forecast (in million \$)

Interest + Payments	2024	2025	2026	2027	2028	2029	2030
Mix 2024	9,06	—	—	—	—	—	—
Mix 2025	24,19	24,19	—	—	—	—	—
Mix 2026	83,72	83,72	83,72	—	—	—	—
Mix 2027	84	84	84	84	—	—	—
Mix 2028	82,41	82,41	82,41	82,41	82,41	—	—
Mix 2029	110,69	110,69	110,69	110,69	110,69	110,69	—
Mix 2030	19,69	19,69	19,69	19,69	19,69	19,69	19,69
Loans	378	378	378	355	342	332	304
Refinancing	—	—	46,97	161,58	383,62	437,88	577,49
EBITDA	2.369,17	2.558,24	2.758,16	2.756,13	2.797,78	3.133,30	3.270,14
Interest	791,07	782,01	804,79	812,70	938,19	900,75	901,33
D&A	886	1.049	1.257	1.509	1.662	1.764	1.864
Taxes 2.33% - 15%	16,12	16,93	16,20	65,07	29,50	70,14	75,63
Dividend	0,25	—	—	—	—	—	—
Boat payments /CapEx	795	1.990	1.662	2.170	1.370	2.190	1.540
Retained FCF	766,73	-230,70	274,67	-291,64	460,10	-27,59	753,18
Debt maturing	250	450,00	1.935,74	2.926,35	1.246,42	1.995,76	974,42
Refinancing	—	680,70	1.661,07	3.218,01	786,33	2.023,35	221,24
Equity in b\$	1.652,06	1.652,06	1.652,06	1.652,06	1.652,06	1652,06	1.652,06
Debt in b\$	15.578,16	15.808,86	15.534,19	15.825,83	15.365,74	15.393,33	14.640,14
Ratio in %	9,59%	9,46%	9,61%	9,45%	9,71%	9,69%	10,14%

Source: Own forecast based on Refinitiv & NCLH 10-Q

Based on our Free Cash Flow we prioritize CapEx (new planned Boats) and then pay off debt that matures. Based on the rather poor retained earnings and the poor credit rating, we believe Norwegian should not pay out dividends in the foreseeable future. If the Cash Flow is insufficient to pay off all maturing debt, we have to refinance at the set rate (seen in the Figure 16). We took the 6-year duration of the most recent refinancing as the standard duration on each newly issued debt.

Figure 17: Debt, Payments & Interest



Source: Own forecast

CapEx % Investments

Norwegian, similar to the other cruise lines will have to replace boats as they leave their fleet. These ships are usually more expensive than the ones leaving the fleet. These payments are typically made by 25% in advance and 75% at delivery.

Norwegian also needs to maintain its fleet, which produces additional costs besides the downtime of the ships. These costs amounted to 475 million \$ in 2023. We expect this amount to grow by 25 million in line with historical growth and set another 100 million⁵ in 2027 and 2028 aside for announced changes in some of their ship switching to methanol.

Norwegian, similar to Carnival, did not specify any short-term investments in 2023 and we shall continue this trend in our forecast.

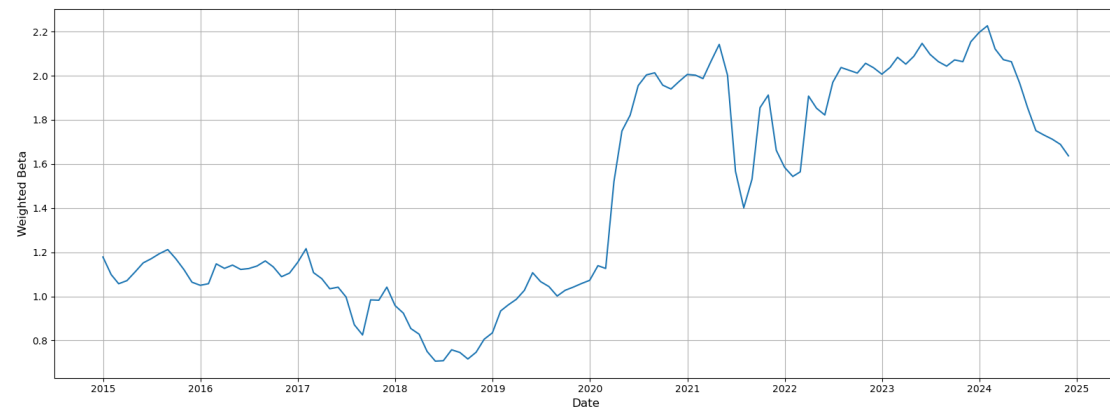
⁵a mid sized ship cost of retrofitting should be approximately (\sim €550 per kW * 60 MW) 35 mio.\$ for the engine plus another 15 mio.\$ for Fuel Storage and Distribution System. The 100 thus show the cost of retrofitting 2 ships per year

Adjusted Present Value Necessities

Beta

The Russel 3000 index was used for the beta calculation as the market index for Norwegians beta. The return data was calculated based on the monthly close prices of the companies since 2010, which were obtained through the Python yfinance package.⁶ The Figure 18 shows the beta across time with a 252 day rolling window.⁷ The resulting beta has a current value of 1,63. Based on the current beta and debt/equity ratio we unlevered the Beta and relevered it in line with the forecasted debt-equity ratio and the tax change in 2027.

Figure 18: Norwegian cruise line Beta across time



Source: Bloomberg and Yahoo Finance

Long-term growth rate

For the long-term growth rate, we assumed that the industry will grow its revenue at the same rate as the worldwide GDP as the industry can find consumers everywhere around the globe. The International Monetary Fund expects a GDP growth of 3,1%⁸ which we take as our long-term growth rate.

Tax rate

Norwegian also has found ways to bring its tax rate down to a level of 2-2.33% in the past. For 2024 to 2026 we took the tax rate of 2.33%. Carnival expects to be subject to the global minimum tax rate from 2026 onward, with the strong possibility of a one-year deferral. Therefore we set the tax rate as 15% from 2027 onward.

⁶Aroussi 2017.

⁷Covid does not have an impact on the most current number

⁸IMF 2024.

Risk free rate

The Risk-free rate in the first year (2024) is the current one-year US treasury rate of 4.03%.⁹ For the years after that, we took the 5-year US treasury bond rate of 3.9%.¹⁰

Return on debt

We calculated the current return on debt based on the current Bond yield of 7.11% for a rating of B and a maturity of 5 year and reduced it by the default probability in each year multiplied by the recovery rate of senior secured notes of 80%.

Market risk premium

For the market risk premium, we used the United States risk premium of 4.6%.¹¹

Adjusted Present Value

The debt payments give us a horizon value of the interest tax shield of ~3,35 \$ billion. Adjusting this to the present value gives us an Interest Tax Shield Value of 2,33 \$ billion.

The Horizon value of cash flows is 49.133 million \$. The resulting present value of all unlevered future cash flows is 34,381 \$ billion.

There are short-term investments specified. Thus, the total levered VOPS is 37.393\$ million. Minus all current debt of 15.578 million \$ results in the Adjusted present value of **21.815 million \$.** We have to multiply this by the 1 - the probability of default. This gives us a final value of ~14.8 billion \$.

⁹Fred 2024.

¹⁰Fred 2024.

¹¹Damodaran 2024.

Figure 19: US investors APV model

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
EBIT	1 483	1 509	1 500	1 247	1 135	1 368	1 406
Tax rate	2,33%	2,33%	2,33%	15,00%	15,00%	15,00%	15,00%
NOPAT	1448,52	1473,49	1465,27	1059,56	964,62	1163,11	1194,71
CapEx	795	1 990	1 663	2 170	1 370	2 190	1 540
D&A	886,10	1049,60	1257,93	1509,60	1662,93	1764,93	1864,60
Equity	1 652	1 652	1 652	1 652	1 652	1 652	1 652
Debt	15 578	15 809	15 534	15 826	15 366	15 393	14 640
Equity / total equity	9,59%	9,46%	9,61%	9,45%	9,71%	9,69%	10,14%
Growth rate	3,1%						
Risk-free	4,20%	3,91%	3,91%	3,91%	3,91%	3,91%	3,91%
Risk premium	4,60%	4,60%	4,60%	4,60%	4,60%	4,60%	4,60%
Weight of equity	9,59%	9,46%	9,61%	9,45%	9,71%	9,69%	10,14%
Weight of debt	90,41%	90,54%	90,39%	90,55%	90,29%	90,31%	89,86%
Return on debt	7,11%	5,69%	5,47%	5,55%	5,75%	5,83%	5,82%
Beta	1,686530519	1,70906083	1,68223655	1,50980956	1,47071666	1,47306079	1,40906547
Return on stock leveraged	11,96%	11,77%	11,65%	10,86%	10,68%	10,69%	10,39%
Unlevered return	7,5748%	6,2661%	6,0606%	6,0535%	6,2298%	6,2969%	6,2881%
Interest Expense	791	782	805	813	938	901	901
Interest Tax Shield	18,43	18,22	18,75	121,91	140,73	135,11	135,20
FCF	1539,62	533,09	1060,71	399,16	1257,56	738,05	1519,31
Horizon value of ITS							4372,25715
Value of Interest Tax Shield	\$ 3 074,54						
Horizon value of OPS (FCF)							49133,5836
Unlevered VOPS	\$ 34 318,87						
Total Levered VOPS	\$ 37 393,42						
Short term investments	0						
Total levered value	\$ 37 393,42						
Debt	\$ 15 578,17	Default %					Actual value
Intrinsic Value of Equity	\$ 21 815,25	31,53%					\$ 14 936,68

Source: Own forecast

Important Disclaimer

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Bibliography

- Aroussi, Ran (2017). *yfinance 0.2.48*. URL: <https://pypi.org/project/yfinance/>.
- Damodaran, Aswath (2024). *Country Default Spreads and Risk Premiums*. NYU. URL: https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html.
- ECB (Nov. 2024). *Two per cent inflation target*. European Central Bank. URL: <https://www.ecb.europa.eu/mopo/strategy/pricestab/html/index.en.html>.
- FED (2024). *Why does the Federal Reserve aim for inflation of 2 percent over the longer run?* Federal Reserve United States. URL: https://www.federalreserve.gov/faqs/economy_14400.htm.
- Fred (Nov. 2024). *Market Yield on U.S. Treasury Securities at 1-Year /5-year Constant Maturity*. Federal Reserve Bank of St. Louis. URL: <https://fred.stlouisfed.org/series/GS5>.
- IMF (2024). *Real GDP growth*. International Monetary Fund. URL: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOORLD.