



Company Report



CARNIVAL CORPORATION & PLC

Target value: 48.44 billion\$
Current value: 31.59 billion\$
Conclusion: 47,48% Upside
Verdict: BUY

Revenue: 25.5 billion\$
EBIT: 3.9 billion\$
Credit Rating: BB-

- We believe Carnival Corp. is severely undervalued based on our APV forecasts
- We believe this is due to the market considering the historical growth rate rather than the actual growth rate.
- In addition the market takes historical onboard spending rates into account rather than the most recent ones.

Company Introduction

Carnival is the second biggest cruise company in the world by market cap and the largest by market share.

Figure 1: Carnival compared to its competitors



Sources: Yahoo Finance

Carnival Corporation is the largest of the three major cruise lines with over 90 ships and subsidiaries from Australia and Asia to the US and Europe. It has the highest market share and expects its capacity to expand by an average of 1.5% over the coming years. The main focus of Carnival is to pay off its accrued debt.

Revenue

To determine revenue forecasts, we analyzed Carnival’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. According to Carnival Cruise Line’s website and annual reports, we can identify the new ships scheduled for acquisition over the next five 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 Carnival Cruise Line to maintain full occupancy by adjusting prices to attract customers during lower-demand periods. In our analysis, occupancy rates were set at 103% for all quarters except Q3, which had an occupancy rate of 111%. This is because occupancy rates have remained relatively stable over the past 10 years.

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	4.300	1.000	500	1.500
2027	6.400	1.800	500	2.000
2028	6.400	1.800	500	2.000
2029	6.400	1.800	500	2.000

Source: Carnival 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)
2026	3.002	155	300	800
2027	2.050	600	500	1.500
2028	2.130	400	500	1.200
2028	2.124	300	300	900
2028	2.600	450	600	1.500
2029	2.984	200	400	1.100
2029	1.432	375	600	1.800
2030	2.984	200	400	1.000
2030	1.874	450	732	2.440
2030	1.432	300	700	2.000
2030	2.114	450	500	1.200

Source: Own Forecasts based on data from Carnival Cruise Line website

Furthermore, every 15 years, the ships require restoration, which incurs additional maintenance costs for the company. These costs amount to 10% of the ship’s price. As a result, during the

second quarter of this year, the ship will be out of service for one month and unable to operate cruises. Consequently, we have adjusted the capacity to reflect this downtime.

Figure 4: Ships Scheduled for Restoration Between 2024 and 2030

Maintenance	Passengers Capacity	Ship's Price	Maintenance (10% of the original cost)
2025	2.192	420	42
2025	3.100	535	54
2025	2.081	560	56
2025	2.106	450	45
2025	450	250	25
2025	2.826	450	45
2026	3.690	740	74
2026	2.192	420	42
2026	450	250	25
2026	3.780	510	51
2027	3.690	740	74
2027	2.192	765	77
2027	3.780	689	69
2028	2.192	600	60
2028	3.560	800	80
2029	4.947	500	50
2029	3.560	735	74

Source: Own Forecasts based on data from Carnival Cruise Line website

To assess the impact of fleet changes on forecasts, we estimated the number of passengers based on the ships' capacity. Since Carnival does not plan to change the average cruise duration, we maintained it at seven days. 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. In their most recent annual report, Carnival expressed their intention to add more ships in 2028, 2029, 2031, and 2033. However, based on online articles, it appears the market overlooked this information, focusing only on the ships scheduled for delivery in 2025 and 2027. As we did not have specific information on the capacity of the last two ships ordered, we assumed they were the same model as the one ordered in 2027.¹

Figure 5: Passengers' forecast

	2023	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
# Passengers	12.400.000	13.735.985	14.495.784	14.522.095	14.628.213	14.803.507	14.799.573	14.641.289
Passengers cruise days	91.400.000	100.651.901	101.470.493	101.599.011	101.521.472	102.328.766	101.919.631	100.346.186
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 38% of the revenue.

¹CCL 2024a.

Figure 6: Revenue forecast (in million \$)

	2013	2014	2015	2016	2017	2018	2019	2022	2023
REVENUE	15.457,00	15.883,00	15.715,00	16.388,00	17.510,00	18.881,00	20.825,00	12.168,00	21.594,00
<i>Growth rate</i>	—	2,72%	-1,06%	4,19%	6,62%	7,54%	9,80%	—	57,36%
Tickets	—	—	—	12.090,00	12.945,00	13.930,00	14.103,00	7.022,00	14.067,00
<i>Growth rate</i>	—	—	—	—	6,83%	7,33%	1,23%	—	69,48%
On Board	—	—	—	4.068,00	4.330,00	4.729,00	6.722,00	5.146,00	7.527,00
<i>Growth rate</i>	—	—	—	—	6,24%	8,81%	35,17%	—	38,03%

	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
<i>Growth rate</i>	16,95%	7,33%	1,10%	5,78%	-0,74%	-1,97%	-3,33%
Tickets	16.613,65	17.696,47	17.888,50	18.949,92	18.815,35	18.447,73	17.848,72
<i>Growth rate</i>	16,64%	6,31%	1,08%	5,76%	-0,71%	-1,97%	-3,30%
On Board	8.969,49	9.831,98	9.944,51	10.539,08	10.457,45	10.254,70	9.914,58
<i>Growth rate</i>	17,53%	9,18%	1,14%	5,81%	-0,78%	-1,96%	-3,37%

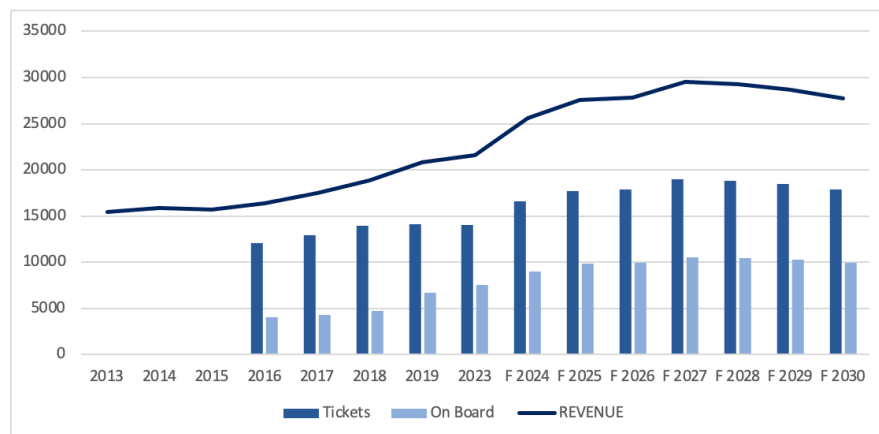
Source: Bloomberg and own data

Reviewing the projections, we observe that revenue is expected to grow by 16.96% in 2024. This significant increase can be attributed to the company’s efforts to recover from the COVID-19 pandemic, including a 9.33% rise in ticket prices between 2019 and 2024. Despite this substantial price hike, customer demand remained strong, as Carnival’s prices remained significantly lower than those of its competitors.

Additionally, the introduction of three new ships in 2024 contributed to higher revenue potential. However, the costs associated with these additions explain a slight dip in profit margins for the year. While the growth rate is expected to slow after 2024, revenue is projected to continue increasing steadily until 2028. This sustained growth will be driven by the introduction of innovative ships, incremental ticket price adjustments, and relatively low maintenance costs for the newer fleet.

From 2028 onward, however, the growth rate is expected to decline gradually as the aging fleet begins to pose challenges. Many older ships will either require extensive maintenance or be retired from service, which will hinder further revenue expansion. This will however be offset by the usage of even larger ships with a capacity of up to 8000 passengers.²

Figure 7: Revenue depending on tickets and onboard (in million \$)



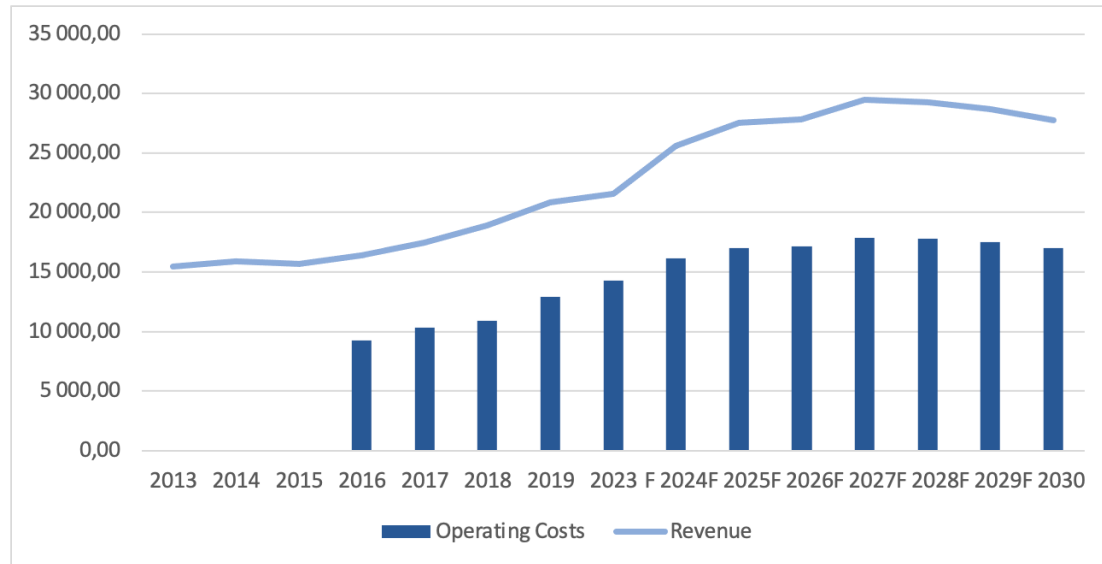
Source: Bloomberg and own data

²CCL 2024a.

Operating Expenses

The Operating Expenses are divided into commissions, 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 8: Total operating expenses (in million \$)



Source : Bloomberg and own forecast

Commissions

Commissions make up between ~19.2% - 23% of ticket sales. These have remained pretty stable over the years, thus Commissions are highly correlated with ticket revenue (~97%). Based on this the commissions for the coming years are:

Figure 9: 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	3.308,59	3.578,53	3.619,33	3.828,91	3.806,31	3.731,48	3.614,40

Source: Own forecast

Food

The Food costs are highly correlated with the number of passenger cruise days and inflation (~94.5%). 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 10: Cost of food (in million \$)

Food	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Passenger cruise days	100.651.901	101.470.493	101.599.011	101.521.472	102.328.766	101.919.631	100.346.186
Inflation	2,5%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Cost of food	2.675,17	2.743,31	2.800,62	2.855,46	2.936,46	2.983,25	3.004,25

Source: Own forecast

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).

Similar to Royal Caribbean, LNG plays a crucial role as the future propellant of the fleet of Carnival. Currently (based on gross tonnage) ~15.7% of the fleet are LNG based. This will change to around ~22.2%.

LNG and Very Low Sulfur fuel oil (VLSFO) have different energy densities with 47 MMBTU compared to 40 MMBTU. Based on Steuer 2019 the LNG costs are highly correlated with oil prices. At the current level of around 75\$ the LNG costs should be around 670\$ compared to 664.5\$ of VLSFO. But as LNG has a higher energy density, its only around 85.8% of the cost.⁵

Again as infrastructure still needs to be built up, we deduct most potential savings until 2027.

Figure 11: Fuel cost (in million \$)

LNG	2023	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Gross Tons	1.656.256	1.831.756	1.976.756	1.976.756	2.162.756	2.348.756	2.534.756	2.534.756
Discount in Price	—	—	—	5,00%	14,00%	14,00%	14,00%	14,00%

Fuel	2023	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Total Tons	8.211.112	9.792.384	9.792.384	9.688.503	9.611.004,00	9.359.653	9.194.558	8.869.159
US Crude WTI costs	77,50	71,86	69,30	67,89	67,22	67,08	66,84	66,73
Fuel cost	2.047,00	2.235,79	2.183,04	2.101,94	2.045,61	1.972,19	1.908,37	1.793,91

Source: Own forecast

Payroll

Carnival's payroll seem unrelated to inflation and only slightly correlated with the number of employees. This seems to be due to Carnival's proactive approach to managing its payroll costs. Thus they had the lowest ratio of payroll to revenue costs in 2024 then ever before. Taking the ratio from the first to quarters gives us a value of around 10%. We assume that this "active management" can not decrease costs much further, which is why we take the current ratio and grow the payroll costs according to the future revenue.

⁵Steuer 2019.

Figure 12: Payroll cost (in million \$)

Payroll	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Employees (end of year)	119.233	128.304	129.723	137.441	136.434	133.775	129.398
Inflation	2,5%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Payroll costs	2.568,04	2.763,42	2.793,99	2.960,22	2.938,52	2.881,26	2.786,99

Source: Own forecast

Other

The other costs are highly correlated with the revenue (~92%). As we did not find any other influences, we scaled the cost in accordance with the historic rates.

Figure 13: 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	3.857,71	4.171,45	4.220,69	4.470,22	4.437,86	4.351,56	4.209,79

Source: Own forecast

Selling, General & Administration

For the SG&A, we looked at the historical pre-covid average ratio of SG&A to revenue. We scaled SG&A with our quarterly revenue forecasts, giving us the following values:

Figure 14: Cost of SG&A (in million \$)

Q1 Average	15,04%	SG&A	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Q2 Average	13,65%	Revenue	25.582,14	27.528,45	27.833,01	29.488,99	29.272,79	28.702,43	27.763,30
Q3 Average	9,66%	SG&A cost	3.313,87	3.594,12	3.639,09	3.850,65	3.825,54	3.751,02	3.745,02
Q4 Average	14,60%								

Source: Own forecast

Depreciation and Amortization

The main fixed assets CCL holds are ships, computers and software, and transportation equipment. The CCL 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 15: D&A Forecast (in million \$)

	2013	2014	2015	2016	2017	2018	2019	2022	2023
D&A	1.589,00	1.637,00	1.625,00	1.738,00	1.845,00	2.017,00	2.160,00	2.275,00	2.371,00
% of revenue	10,28%	10,31%	10,34%	10,61%	10,54%	10,68%	10,37%	18,70%	10,98%

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
D&A	2.549,00	2.704,00	2.732,17	2.876,67	3.018,33	3.124,17	3.080,00
% of revenue	9,96%	9,82%	9,82%	9,76%	10,31%	10,88%	11,09%

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. Furthermore, every year, the company spends around 1400 million dollars on maintenance and ship restoration.

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

Debt

Debt has grown massively over the COVID period to ~29 billion \$. We calculated the following interest payments based on their loans and their debt schedule.

Figure 16: Debt schedule

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Mix 2026	1.351,00	1.351,00	1.351,00	—	—	—	—
Change	—	—	0	—	—	—	—
New Rate	7,63%	7,63%	7,63%	7,63%	7,63%	7,63%	7,63%
Mix 2027	3.855,55	3.855,55	3.855,55	3.855,55	—	—	—
Change	—	—	—	—	—	—	—
New Rate	5,75%	5,75%	5,75%	5,75%	5,75%	5,75%	5,75%
Mix 2028	4.635,50	4.635,50	4.635,50	4.635,50	4.635,50	—	—
Change	—	—	—	—	4.635,50	—	—
New Rate	6,91%	6,91%	6,91%	6,91%	6,91%	6,91%	6,91%
Mix 2029	2.500,00	2.500,00	2.500,00	2.500,00	2.500,00	2.500,00	—
Change	—	—	—	—	—	2.500,00	—
New Rate	6,20%	6,20%	6,20%	6,20%	6,20%	6,20%	6,20%
Mix 2030	1.546,50	1.546,50	1.546,50	1.546,50	1.546,50	1.546,50	1.546,50
Change	—	—	—	—	—	—	1.546,50
New Rate	8,82%	8,82%	8,82%	8,82%	8,82%	8,82%	8,82%
Loans	9.353,28	9.353,28	4.473,93	4.473,93	3.473,01	1.724,75	1.724,75
Change	—	4.879,358	—	1.000,923	1.748,250	—	3.093,000
New Rate	7,69%	7,69%	7,22%	7,22%	7,13%	6,67%	6,67%
Refinancing	6.403,00	6.403,00	8.237,71	8.237,71	9.903,49	13.117,52	13.117,52
Change	—	—	—	—	—	—	—
New Rate	5,75%	5,75%	5,75%	5,70%	5,65%	5,60%	5,60%

Source: Refinitiv, CCL 10-K

We are however missing around 6 billion \$ of the total debt on the most recent 10-Q compared to⁶ Refinitiv/ Bloomberg's data. We assumed a rate of 5.75% interest on these missing billions.

⁶around 4 bio. \$ should be long term

Figure 17: Debt forecast (in million \$)

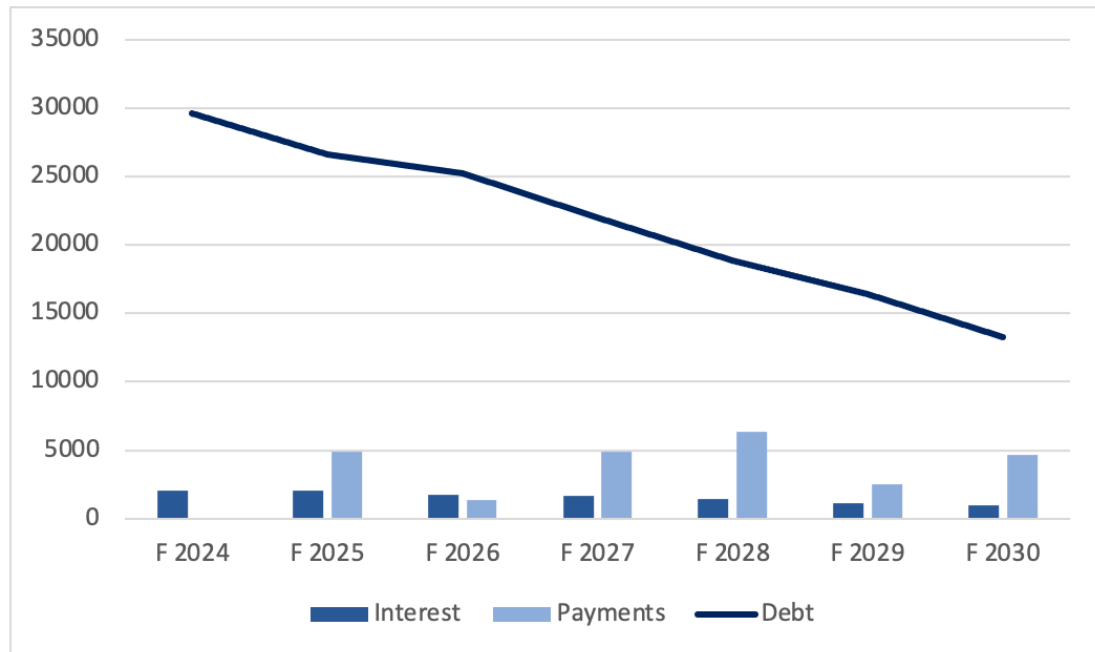
	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
Unsecured senior notes	103,01	103,01	103,01	—	—	—	—
Secured Senior notes	221,69	221,69	221,69	221,69	—	—	—
Unsecured Term loans	320,39	320,39	320,39	320,39	320,39	—	—
Convertible notes	155	155	155	155	155	155	—
Unsecured Revolving credit facilities	136,42	136,42	136,42	136,42	136,42	136,42	136,42
Loans	718,89	718,89	323,20	323,20	247,45	115,09	115,09
Interest on refinanced	368,17	368,17	473,67	469,55	559,55	734,58	734,58
EBITDA	6.416,57	7.277,66	7.321,99	8.107,62	7.850,56	7.449,41	7.395,68
Interest	2.023,59	2.023,59	1.733,39	1.626,26	1.418,82	1.141,09	986,090
D&A	2.549,00	2.704,00	2.732,17	2.876,67	3.018,33	3.124,17	3.080,00
Taxes 25%	42,96	59,42	66,55	540,70	512,01	477,62	499,44
Dividend	0,25	—	—	—	—	—	957,56
Boat payments /CapEx	3.900	2.150	1.850	2.750	2.750	2.750	1.850
Free Cash Flow	449,77	3.044,65	3.672,05	3.190,65	3.169,73	3.080,69	3.102,58
Debt maturing	—	4.879,36	1.351,00	4.856,44	6.383,75	2.500,00	4.639,50
Refinancing	—	1.834,71	—	1.665,79	3.214,02	—	1.536,92
Equity	8.597,00	8.597,00	10.918,04	10.918,04	10.918,04	10.918,04	10.918,04
Debt	29.644,00	26.599,34	25.248,34	22.057,69	18.887,96	16.387,96	13.285,38
Ratio in %	22,48%	24,43%	30,19%	33,11%	36,63%	41,23%	46,40%

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

Based on our Free Cash Flow we prioritize CapEx (new planned Boats) and then pay off debt that matures. As for dividends: "We do not expect to pay dividends on Carnival Corporation common stock and Carnival PLC ordinary shares for at least the next few years." ~CCL 2024b Based on this statement we don't consider dividend payments. If the Cash Flow is insufficient to pay off all maturing debt, we have to refinance at the set rate (seen in the Figure 17). We took the 6-year duration of the most recent refinancing as the standard duration on each newly issued debt.⁷

⁷CCL 2024c.

Figure 18: Debt, Payments & Interest



Source: Own forecast

CapEx % Investments

Carnival will have to replace boats as they leave their fleet. These ships are usually much bigger than the ones leaving the fleet. These payments are typically made by 25% in advance and 75% at delivery, seen in Figure 17.

Carnival also needs to maintain its fleet, which produces additional costs besides the downtime of the ships. These costs amounted to 1.4 billion \$ in 2023. We expect this amount to remain the same for the foreseeable future.

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

Adjusted Present Value Necessities

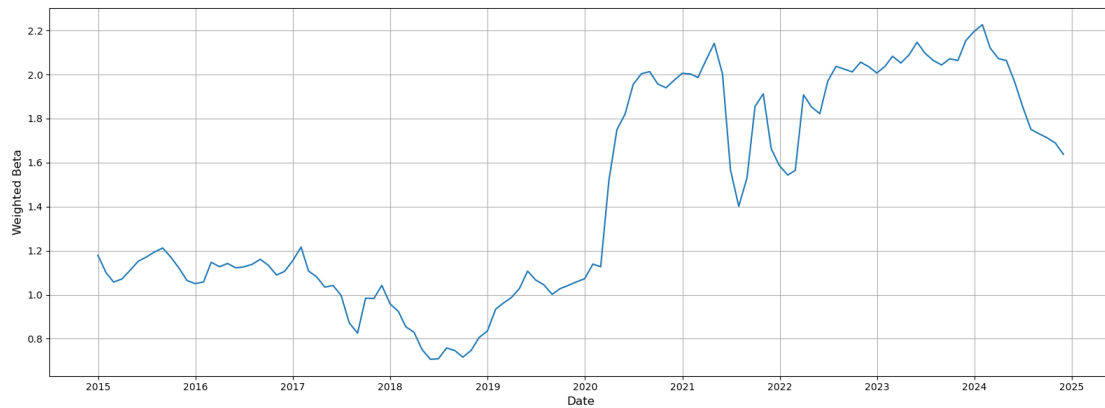
Beta

The Russel 3000 index was used for the beta calculation as the market index for Carnival. The return data was calculated based on the monthly close prices of the companies since 2010, which were obtained through the Python yfinance package.⁸ The resulting beta has a current value of 1,63. Given a debt reduction, we expect the long-term beta to decrease to the levels of 2017,

⁸Aroussi 2017.

~1.2. We estimated the change of the beta during our forecast period by, using the debt-equity to the beta comparison of 2017 and its current values and decreasing it in line with the forecasted debt-equity ratio.⁹

Figure 19: Carnivals 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%¹⁰ which we take as our long-term growth rate.

Tax rate

Carnival Corp. 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.

Risk free rate

The Risk-free rate in the first year (2024) is the current one-year US treasury rate of 4.03%.¹¹ For the years after that, we took the 5-year US treasury bond rate of 3.9%.¹²

Return on debt

We calculated the current return on debt based on interest payments and total debt. For refinancing we use the rate used in current refinancing activities¹³

⁹-0.09 change in beta for 1% change of debt weight change

¹⁰IMF 2024.

¹¹Fred 2024.

¹²Fred 2024.

¹³CCL 2024c.

Market risk premium

For the market risk premium, we used the United States risk premium of 4.6%.¹⁴

Adjusted Present Value

The debt payments give us a horizon value of the interest tax shield of ~3,2 \$ billion. Adjusting this to the present value gives us an Interest Tax Shield Value of 2,36 \$ billion.

The Horizon value of cash flows is 78.124,81 million \$. The resulting present value of all unlevered future cash flows is 62.278,88 million \$.

There are short-term investments specified. Thus, the total levered VOPS is 64.638,3\$ million. Minus all current debt of 29.644 million \$ results in the Adjusted present value of **34.994,3 million \$**, giving us an upside of ~11%.

If we think the global minimum tax will never come, the intrinsic value rises to 39.917,83 million\$ giving us an upside of ~26%.

Figure 20: US investors APV model

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
EBIT	3 593	4 034	4 041	4 647	4 256	3 759	3 750
Tax rate	2,33%	2,33%	2,33%	15,00%	15,00%	15,00%	15,00%
NOPAT	3508,93	3939,69	3946,63	3949,59	3617,60	3195,48	3187,67
CapEx	2 400	2 150	1 850	2 750	3 200	2 750	1 850
D&A	2549,00	2704,00	2732,17	2876,67	3018,33	3124,17	3080,00
Equity	8 597	8 597	10 352	10 352	10 352	10 355	10 355
Debt	29 644	27 127	25 776	23 107	20 928	18 428	14 946
Equity / total equity	22,48%	24,07%	28,65%	30,94%	33,10%	35,98%	40,93%
Growth rate	2,1%						
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	22,48%	24,07%	28,65%	30,94%	33,10%	35,98%	40,93%
Weight of debt	77,52%	75,93%	71,35%	69,06%	66,90%	64,02%	59,07%
Return on debt	6,83%	6,83%	6,50%	6,43%	6,40%	6,00%	5,97%
Beta	1,63	1,62	1,57	1,55	1,53	1,51	1,46
Return on stock leveraged	11,70%	11,34%	11,15%	11,06%	10,97%	10,85%	10,65%
Unlevered return	7,9215%	7,9132%	7,8347%	7,8594%	7,9104%	7,7444%	7,8849%
Interest Expense	2024	2024	1764	1656	1478	1255	1100
Interest Tax Shield	47,15	47,15	41,09	248,45	221,72	188,30	165,05
FCF	3657,93	4493,69	4828,80	4076,25	3435,94	3569,64	4417,67
Horizon value of ITS							2913,00812
Value of Interest Tax Shield	\$ 2 217,97						
Horizon value of OPS (FCF)							77968,7157
Unlevered VOPS	\$ 61 121,86						
Total Levered VOPS	\$ 63 339,84						
Short term investments	0						
Total levered value	\$ 63 339,84						
Debt	\$ 29 644,00						
Intrinsic Value of Equity	\$ 33 695,84						

Source: Own forecast

¹⁴Damodaran 2024.

Explanation of the Difference

We found that if we were to consider the historical revenue growth rate of 2.1% from 2025 to the long-term growth rate and were to change the onboard spending back to pre-covid levels, the market cap would decrease substantially back to ~33 billion \$.

Figure 21: Alternative Revenue forecast

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
REVENUE	25.582,14	25.349,01	25.602,51	25.858,53	26.117,11	26.378,28	26.642,07
Growth rate	15,04%	1,00%	1,00%	1,00%	1,00%	1,00%	1,00%
Tickets	16.613,65	17.696,47	17.888,50	18.949,92	18.815,35	18.447,73	17.848,72
Growth rate	16,64%	6,31%	1,08%	5,76%	-0,71%	-1,97%	-3,30%
On Board	8.485,39	8.890,49	8.986,97	9.520,21	9.452,61	9.267,92	8.966,98
Growth rate	17,53%	4,66%	1,08%	5,76%	-0,71%	-1,97%	-3,30%

Source: Bloomberg and Own forecast

Figure 22: Alternative APV model

	F 2024	F 2025	F 2026	F 2027	F 2028	F 2029	F 2030
EBIT	3 593	4 034	4 041	4 647	4 256	3 759	3 750
Tax rate	2,33%	2,33%	2,33%	15,00%	15,00%	15,00%	15,00%
NOPAT	3508,93	3939,69	3946,63	3949,59	3617,60	3195,48	3187,67
CapEx	2 400	2 150	1 850	2 750	3 200	2 750	1 850
D&A	2549,00	2704,00	2732,17	2876,67	3018,33	3124,17	3080,00
Equity	8 597	8 597	10 352	10 352	10 352	10 355	10 355
Debt	29 644	27 127	25 776	23 107	20 928	18 428	14 946
Equity / total equity	22,48%	24,07%	28,65%	30,94%	33,10%	35,98%	40,93%
Growth rate	2,1%						
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	22,48%	24,07%	28,65%	30,94%	33,10%	35,98%	40,93%
Weight of debt	77,52%	75,93%	71,35%	69,06%	66,90%	64,02%	59,07%
Return on debt	6,83%	6,83%	6,50%	6,43%	6,40%	6,00%	5,97%
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Return on stock leveraged	11,70%	11,34%	11,15%	11,06%	10,97%	10,85%	10,65%
Unlevered return	7,9215%	7,9132%	7,8347%	7,8594%	7,9104%	7,7444%	7,8849%
Interest Expense	2024	2024	1764	1656	1478	1255	1100
Interest Tax Shield	47,15	47,15	41,09	248,45	221,72	188,30	165,05
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Total Levered VOPS	\$ 63 339,84						
Short term investments	0						
Total levered value	\$ 63 339,84						
Debt	\$ 29 644,00						
Intrinsic Value of Equity	\$ 33 695,84						

Source: Bloomberg and Own forecast

We strongly believe both of these assumptions by the market are wrong. Our onboard revenue growth takes into account recent trends that this simplified assumption does not. The onboard revenues forecast was calculated by projecting the growth rate from before Covid, which was 5.3% between 2013 and 2019. We applied this same growth rate in the coming years as Carnival is also forecasting an increase in onboard spending. This increase in onboard revenue is part of their strategy. Furthermore, our medium growth rate considers incoming and departing vessels, which is different from the pre-covid growth rate.

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