Baptista Research

Booking Holdings Inc. (BKNG)

Industry	Hotels, Restaurants & Leisure
Sector	Consumer Discretionary
No. of Employees	c.19600
Country	United States

Financial Strength Indicator	**3.11/ 5**
Overall Credit Evaluation Score	**BBβ**

Business Description

Booking Holdings Inc. provides travel and restaurant online reservation and related services worldwide. The company operates Booking.com, which offers online accommodation reservations; Rentalcars.com that provides online rental car reservation services; Priceline, which offer online travel reservation services, including hotel, rental car and airline ticket reservation services, as well as vacation packages and cruises; and Agoda that provides online accommodation reservation services, as well as flight, ground transportation and activities reservation services. It also operates KAYAK, an online price comparison service that allows consumers to search and compare travel itineraries and prices, comprising airline ticket, accommodation reservation, and rental car reservation information; and OpenTable for booking online restaurant reservations. Further, it offers travel-related insurance products, and restaurant management services. The company was formerly known as The Priceline Group Inc. and changed its name to Booking Holdings Inc. in February 2018. Booking Holdings Inc. was founded in 1997 and is headquartered in Norwalk, Connecticut.

Recent Developments & Credit Analysis Approach

Booking Holdings delivered strong results in its third quarter with a particularly decent performance in Europe, which benefited from strong cross-border travel within the region. However, the new set of lockdowns in Austria and other parts could dampen the progress in the coming months. After the negative impact of the Delta variant in July and August, the company saw an improvement in trends demonstrating the resilience of leisure travelers who want to travel when it is safe to do so and restrictions are lifted. In the third quarter, Booking Holdings saw a higher mix of its customers booking directly with the company than in Q3 2019 which was a positive sign. Moving into the fourth quarter, the management has seen a further improvement in their room night trends in October, including early signs of pickup in room night trends in Asia. Booking Holdings' management has executed well and produced strong results during their peak travel season. The company's business has been impacted negatively by the Omicron variant and we expect a tough couple of quarters ahead.Based on our credit analysis, the company merits a Credit Evaluation Score of BBβ with a negative outlook and as per our Financial Strength Indicator, its performance is 3.11/ 5.

Baptista Research looks to evaluate the different credit strengths and credit risks of the company as well as a line-by-line analysis of the financial statements of the company for the past four years. Our credit report caters to all forms of stakeholders, particularly lenders and fixed income or yield investors in the company. Our focus is on analyzing the financial strength and the debt servicing capability of the company and the analysis does not differentiate among debt instruments. We start off by analyzing the quarterly statements and move on the annual statements of the company. Our credit analysis is based on the independent assessment of each of the key financial ratios of the company as compared to industry benchmarks along with indicators such as the Altman Z-Score and the Beneish M-Score. This would help us arrive at our Financial Strength Indicator. We also carry out an objective analysis of the company's industry risks, ESG risks, management risks, forex risks, concentration risks, and so on, in order to arrive at our Credit Evaluation Score.

Recent Financial Performance

Booking reported a top-line of $4.68 billion for the most recent quarterly result for the period ended 9/30/21 which implies a 77.12% change as compared to the $2.64 billion number reported in the corresponding quarter of the previous year.

These revenues translated into a gross margin of 87.36% and an operating margin of 43.09% which was higher than that in the same quarter of last year. Booking reported an EBITDA of $2.12 billion which translated into a Net Income of $769.00 million.

In terms of cash flows, Booking reported $1.60 billion in the form of operating cash flows and spent $79.00 million in investing activities during the previous quarter. The company produced higher cash flows as compared to the same period in the previous year.

Credit Strengths

Competitive Advantage In Europe

In the majority of its business, Booking Holdings is not in a position to leverage the lock-in effect of a two-sided marketplace. The reason for this is that most of their customers come through Google Ads purchases, and many hotels listed with Booking Holdings are also listed on other platforms. However, the European market is an exception to this. In Europe, small hotels are more common in comparison to the hotel chains that dominate the U.S. As a result, Booking Holdings gets a key competitive advantage because these smaller hotels are more likely to sign exclusivity agreements with it. Booking.com is actually known to have the best selection of hotels in Europe which is why travellers searching for hotels are more likely to start their search on its platform. This results in a reduced cost of customer acquisition. As a result, the company has better margins even if they do not charge hotels extra since they end up paying much lower amounts to Google for acquiring customers. However, it is to be seen how long this advantage is sustainable. With increased digitization, even smaller hotels are likely to list on multiple platforms or even Airbnb for that matter, and try to compete with individually listed properties based on personalized services. This might impact the company's competitive advantage. However, the management is trying its level best with increased ad spending in Europe to ensure its dominance in the market.

Fintech Upside

Booking Holdings is also growing into the fintech vertical. In the initial stages, the company plans to use payment flows from its core business to compete on the digital front. The management claims that they witnessed close to $100 billion of transaction value on their platform and believes that setting up a separate fintech arm would help them to improve capitalize on these flows and would be beneficial for them in the long run. It would be following the footsteps of other large marketplace businesses (e.g.: Alibaba establishing Alipay) in order to make the most of the large transaction value on its platform. If Booking Holdings can successfully gain scale this business, it would be a new source of revenues that the market has probably not factored in while valuating the firm. The management Booking Holdings has an initial plan to provide more cut-throat currency exchange costs to customers in comparison to credit card companies. This way the company will be billing American clients travelling to Europe in USD and paying the hotels in EUR while earning a small margin on the exchange.

Historical Quarterly Statement Analysis - Income Statement & Cash Flows (USD Million)

Particulars	31-12-2020	31-03-2021	30-06-2021	30-09-2021
Revenues	1238	1141	2160	4676
% growth		*-7.8%*	*89.3%*	*116.5%*
Cost of Goods Sold	0	0	0	0
% of revenue	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Gross Income (excl. D&A)	1238	1141	2160	4676
% of revenue	*100.0%*	*100.0%*	*100.0%*	*100.0%*
EBITDA	305	-198	-77	2338
% of revenue	*24.6%*	*-17.4%*	*-3.6%*	*50.0%*
Depreciation & Amortization	458	113	221	323
% of Fixed Assets	*9.2%*	*2.3%*	*4.6%*	*6.8%*
Extraordinary Expenses	69	8	243	0
EBIT (incl. extraordinary exp)	-153	-311	-298	2015
% of revenue	*-12.4%*	*-27.3%*	*-13.8%*	*43.1%*
Pretax Income	245	-278	-41	968
% of revenue	*19.8%*	*-24.4%*	*-1.9%*	*20.7%*
Income Tax	418	-223	126	199
% rate	*170.6%*	*80.2%*	*-307.3%*	*20.6%*
Net Income	-165	-55	-167	769
% of revenue	*-13.3%*	*-4.8%*	*-7.7%*	*16.4%*

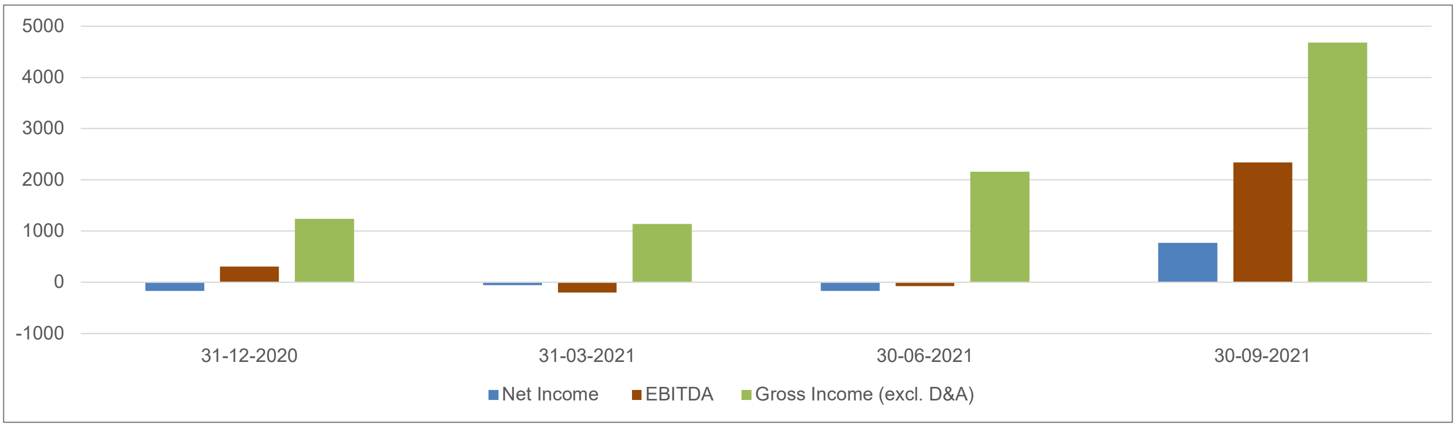
Twelve Month Quarterly Cash Flows (USD Million)

Particulars	31-12-2020	31-03-2021	30-06-2021	30-09-2021
Duration Covered	**12 months**	**3 months**	**6 months**	**9 months**
Cash From Operating Activities	85	-207	945	2,541
Cash From Investing Activities	2,637	-65	-136	-215
Free Cash Flows	2,722	-272	809	2,326

- Let us start off with analyzing the most recent and historical quarterly data reported by the company.
- Booking has reported a top-line of $4.676 billion in its recent quarterly result which is a 116.48% appreciation over the previous quarter.
- The company reported a positive gross margin of 100.00% for the quarter ended 30-09-2021.
- Its EBITDA for the quarter was $2.338 billion and the EBITDA margin was 50.00%.
- This was a 53.56% margin expansion at the EBITDA level which is definitely a positive outcome.

- Booking's operating income (EBIT) was reported at $2.015 billion and a margin of 43.09%.
- This EBIT margin grew by 56.89% in this quarter.
- The company's pre-tax margin for the quarter was 20.70%.
- Booking reported a net income of $769 million which resulted in a diluted earnings per share (EPS) of $-4.22.
- The company's net margin was 16.45%

Evolution Of Gross Income, EBIT, & Net Income (USD Million)



- Now let us move on to the cash flow generation in the recent quarter.
- Booking generated $2.541 billion in terms of operating cash flows for the 9 months period ended 30-09-2021.
- The company was able to convert about 34.13% of its revenues into operating cash flows in the recent quarter.
- This quarter's EBITDA-to-operating cash flow conversion ratio is 68.26%
- Overall, Booking delivered a positive free cash flow of $2.326 billion for the past 9 months.

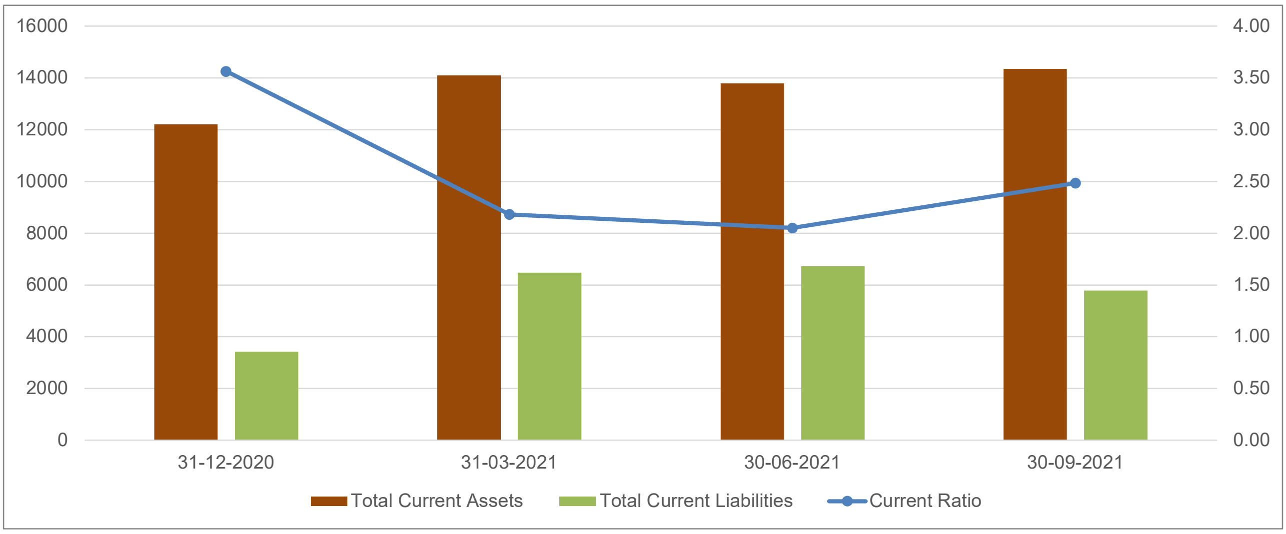
Historical Quarterly Statement Analysis - Balance Sheet (USD Million)

Balance Sheet	**31-12-2020**	**31-03-2021**	**30-06-2021**	**30-09-2021**
Assets				
Net Intangible Fixed Assets	3707	3644	3611	3549
Net Tangible Fixed Assets	1285	1214	1205	1207
Total Fixed Assets	**4992**	**4858**	**4816**	**4756**
% of revenue	*403.2%*	*425.8%*	*223.0%*	*101.7%*
LT Investments	4676	4689	5276	4233
Inventories	0	0	0	0
% of revenue	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Accounts Receivable	529	586	1290	1555
% of revenue	*42.7%*	*51.4%*	*59.7%*	*33.3%*
Cash and ST Investments	11063	12651	11732	12165
% of revenue	*893.6%*	*1108.8%*	*543.1%*	*260.2%*
Other Current Assets	614	871	767	632
Total Current Assets	**12206**	**14108**	**13789**	**14352**
Other Assets	0	0	0	0
Total Assets	**21874**	**23655**	**23881**	**23341**
Liabilities & Shareholder's Equity				
Equity & Minorities	4893	4764	4799	5545
% of capital employed	*25.2%*	*22.6%*	*24.8%*	*29.6%*
LT Debt	11029	9930	9991	9876

Other LT Liabilities	2527	2493	2367	2141
Total LT Liabilities	**13556**	**12423**	**12358**	**12017**
% of capital employed	*69.8%*	*58.9%*	*63.9%*	*64.2%*
ST Debt	985	3905	2180	1158
% of capital employed	*5.1%*	*18.5%*	*11.3%*	*6.2%*
Accounts Payable	735	570	1028	1466
% of COGS	*59.4%*	*50.0%*	*47.6%*	*31.4%*
Other ST Liabilities	1705	1993	3516	3155
% of revenue	*137.7%*	*174.7%*	*162.8%*	*67.5%*
Total Current Liabilities	**3425**	**6468**	**6724**	**5779**
Total Liabilities	**16981**	**18891**	**19082**	**17796**
Total Liabilities & Shareholder's Equity	**21874**	**23655**	**23881**	**23341**

- When we look at the quarterly Balance Sheet of the company, we see that the Fixed Asset base has evolved from $4.816 billion to $4.756 billion over the last 2 quarters.
- The current level of fixed assets, including tangibles & intangibles, is around 101.71% of the company's quarterly turnover.
- There was a -19.77% decrease in the long-term investments over the past quarter.
- The company's receivables were around 33.25% of the quarterly top-line.
- As a result of the positive free cash flows, the company had a final cash and short-term investment balance of $12.165 billion.
- When we analyze the capital structure of Booking, we realize that the company relies more on debt to finance its operations.
- The company's equity accounts for 29.62% of its total capital employed whereas debt (both long-term and short-term) accounts for about 70.38% of the total capital.
- Booking's payables account for 31.35% of its cost of goods sold.
- The following chart demonstrates the evolution of the company's working capital elements and its current ratio over the past 4 quarters.

Current Assets & Current Liabilities (USD Million)



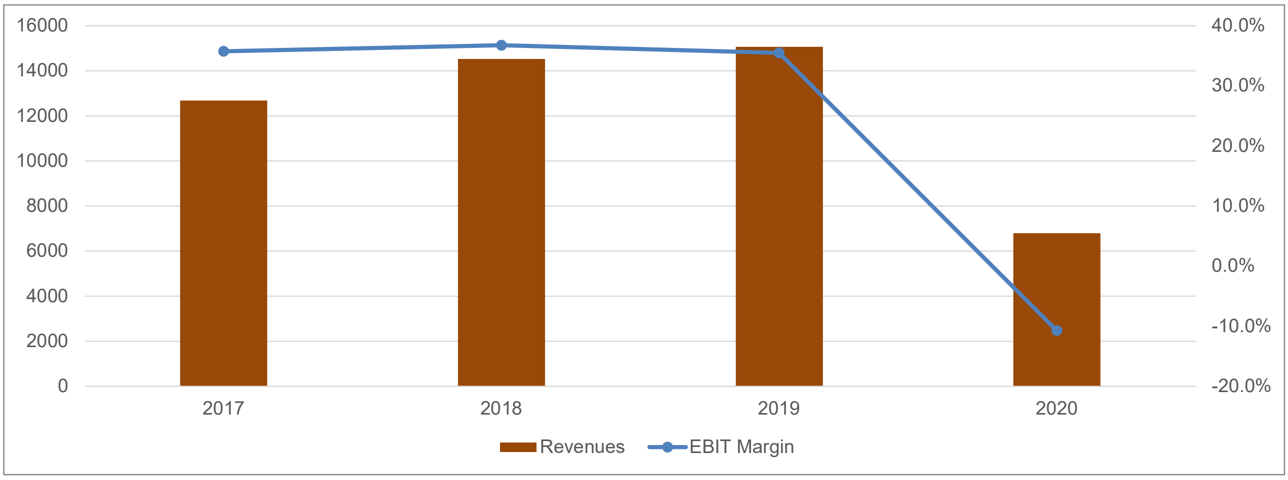
Historical Income Statement - Annual (USD Million)

Particulars	2017	2018	2019	2020
Revenues	12681	14527	15066	6796
% growth		*14.6%*	*3.7%*	*-54.9%*
Cost of Goods Sold	242	0	0	0
% of revenue	*1.9%*	*0.0%*	*0.0%*	*0.0%*

Gross Income (excl. D&A)	12439	14527	15066	6796
% of revenue	*98.1%*	*100.0%*	*100.0%*	*100.0%*
EBITDA	4530	5341	5345	-731
% of revenue	*35.7%*	*36.8%*	*35.5%*	*-10.8%*
Depreciation & Amortization	0	0	0	0
% of Fixed Assets	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Extraordinary Expenses	35	0	0	1184
EBIT (incl. extraordinary exp)	4530	5341	5345	-731
% of revenue	*35.7%*	*36.8%*	*35.5%*	*-10.8%*
Pretax Income	4399	4835	5958	567
% of revenue	*34.7%*	*33.3%*	*39.5%*	*8.3%*
Income Tax	675	883	1110	516
% rate	*15.3%*	*18.3%*	*18.6%*	*91.0%*
Net Income	2341	3998	4865	59
% of revenue	*18.5%*	*27.5%*	*32.3%*	*0.9%*

- When we analyze the company's annualized historical income statement, we see that the top-line was $6.796 billion for the previous financial year ending in 2020.
- The revenue growth was -54.89% in 2020 as compared to around 3.71% in 2019.
- Booking's cost of goods sold has decreased from 0.00% to 0.00% as a percentage of the top-line resulting in a rise in the gross margins.
- The company's overall annual EBITDA margin of -10.76% is lower than the reported quarterly EBITDA margin for the most recent quarter.
- Non-cash expenses in the form of depreciation and amortization have gone down as compared to the result in 2019.

Revenue & Operating Margin (USD Million)



- In terms of the bottom-line, Booking reported an operating income (EBIT) of $-731 million and a net income of $59 million.
- The slightly worrying news for investors holding the stock is that its net margin had decreased from 32.29% in 2019 to 0.87% in 2020.

Historical Balance Sheet - Annual (USD Million)

Particulars	**2017**	**2018**	**2019**	**2020**
Assets				
Net Intangible Fixed Assets	4914	5035	4867	3707
Net Tangible Fixed Assets	480	656	1358	1285
Total Fixed Assets	**5395**	**5691**	**6225**	**4992**
% of revenue	*42.5%*	*39.2%*	*41.3%*	*73.5%*

LT Investments	11022	8589	5344	4676
Inventories	0	0	0	0
% of revenue	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Accounts Receivable	1218	1523	1680	529
% of revenue	*9.6%*	*10.5%*	*11.2%*	*7.8%*
Cash and ST Investments	7401	6284	7310	11063
% of revenue	*58.4%*	*43.3%*	*48.5%*	*162.8%*
Other Current Assets	416	600	843	614
Total Current Assets	**9035**	**8407**	**9833**	**12206**
Other Assets	0	0	0	0
Total Assets	**25451**	**22687**	**21402**	**21874**
Liabilities & Shareholder's Equity				
Equity & Minorities	11261	8785	5933	4893
LT Debt	8813	8649	7640	11029
Other LT Liabilities	1880	1698	2463	2527
Total LT Liabilities	**10693**	**10347**	**10103**	**13556**
ST Debt	711	25	988	985
Accounts Payable	668	1134	1239	735
% of COGS	*5.3%*	*7.8%*	*8.2%*	*10.8%*
Other ST Liabilities	2119	2396	3139	1705
Total Current Liabilities	**3498**	**3555**	**5366**	**3425**
Total Liabilities	**14191**	**13902**	**15469**	**16981**
Total Liabilities & Shareholder's Equity	**25451**	**22687**	**21402**	**21874**

- Moving on to the company's historical annualized balance sheet, when we analyze the fixed assets versus the revenues, we see that the percentage has evolved from 41.32% to 73.45%
- Its receivables of $529 million are about 7.78% of the top-line.
- Booking has close to $11.063 billion in terms of liquidity i.e. cash and short term investments.
- On the other hand, its payables for 2020 account for around 10.82% of the cost of goods sold.
- The company's long term debt is around 2.8x times its equity.

Key Ratios - Annual

Other Metrics	2017	2018	2019	2020
Total Cash Dividends Paid	0.00	0.00	0.00	0.00
% growth		*NA*	*NA*	*NA*
Total Common Shares Outstandin	48	46	41	41
% change		*-5.9%*	*-9.2%*	*-1.1%*
Dividend Per Share	0.00	0.00	0.00	0.00
% change		*NA*	*NA*	*NA*

Operating Ratios	2017	2018	2019	2020
Receivables Turnover	10.4	9.5	9.0	12.8
Days Receivable	35.1	38.3	40.7	28.4
Inventory Turnover	NA	NA	NA	NA
Inventory Days	NA	NA	NA	NA
Payables Turnover	0.4	0.0	0.0	0.0
Days Payable	1006.8	NA	NA	NA
Fixed Asset Turnover	2.4	2.6	2.4	1.4
Total Asset Turnover	0.5	0.6	0.7	0.3

Other Performance Ratios	2017	2018	2019	2020
Return on Assets	9.2%	17.6%	22.7%	0.3%
Return on Equity	20.8%	45.5%	82.0%	1.2%

- The receivables turnover helps quantify a company's effectiveness in collecting the money owed by clients and demonstrates how well it uses and manages the credit it extends to customers.
- As per the days receivable, the company takes an average period of 28.4 days to collect money from its clients which appears to be reasonable.

- The inventory turnover shows the number of times a given company has sold and replaced inventory during the year and is an indicator of how many days of working capital is blocked in inventory.
- The inventory days ratio is not applicable as the company has no inventory.

- The accounts payable turnover is a short-term liquidity measure used to quantify the rate at which a company pays off its suppliers. It shows how many days of credit a company gets from its suppliers.

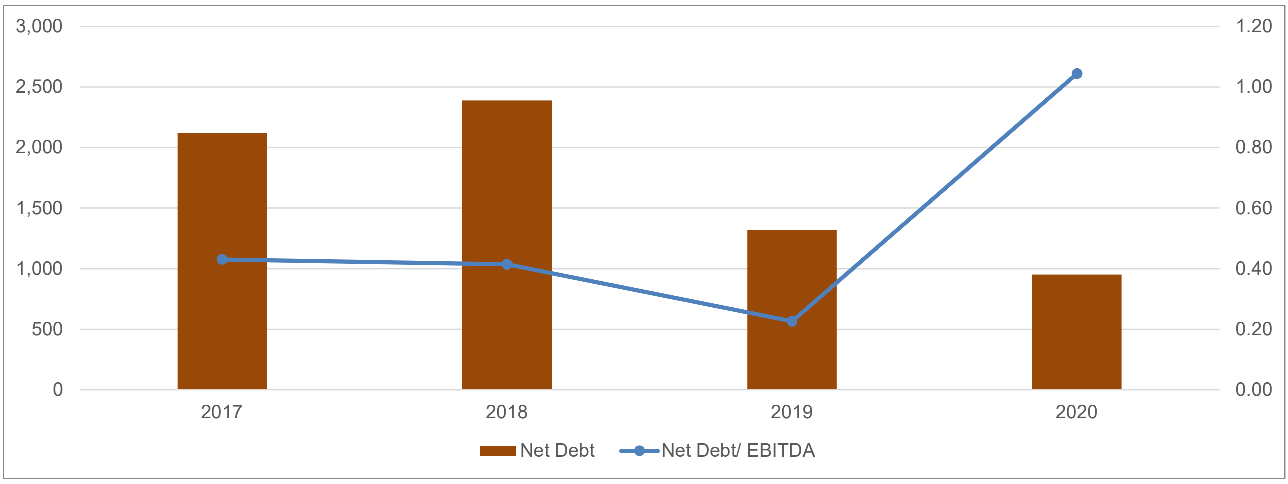
- As per the days payable, the company takes an average period of NA days to pay off its creditors which appears to be reasonable.
- The fixed asset turnover ratio measures how well a company generates sales from its tangible as well as intangible fixed assets. The higher the ratio, the greater the company’s efficiency to its assets to generate revenues.
- Booking's fixed assets turnover ratio of 1.4 has decreased in 2020 indicating that the company is generating lower revenues from its fixed assets.

- The total asset turnover ratio measures the value of a company's sales or revenues relative to the value of its assets. The higher the asset turnover ratio, the more efficient a company is, with respect to using its assets to generate revenues.
- Booking's total assets turnover has decreased to 0.31 in 2020.
- Return on assets is an excellent indicator of how efficient a company's management is in generating earnings from their economic resources or assets on their balance sheet.
- The company's overall Return on Assets is 0.27%.

Evolution of Net Debt	2017	2018	2019	2020
Net Debt	2,122	2,390	1,318	951
% change		*13%*	*-45%*	*-28%*

- Booking's Net Debt has increased in 2020 and is expected to follow a similar trend over the coming years.
- The Net Debt-to-EBITDA ratio is a measure of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA. It shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant.
- Booking's Net Debt-to-EBITDA ratio was 13.19 in 2020 which indicates that the company is over-leveraged.
- Net-Debt-to-Equity ratio, also known as the gearing ratio shows how encumbered a company is with its debt.
- The company's Net Debt-to-Equity ratio for 2019 is 1.45 and it indicates that the company has reasonable gearing.
- The below chart shows the evolution of the company's Net Debt and their Net-Debt-to-EBITDA ratio.

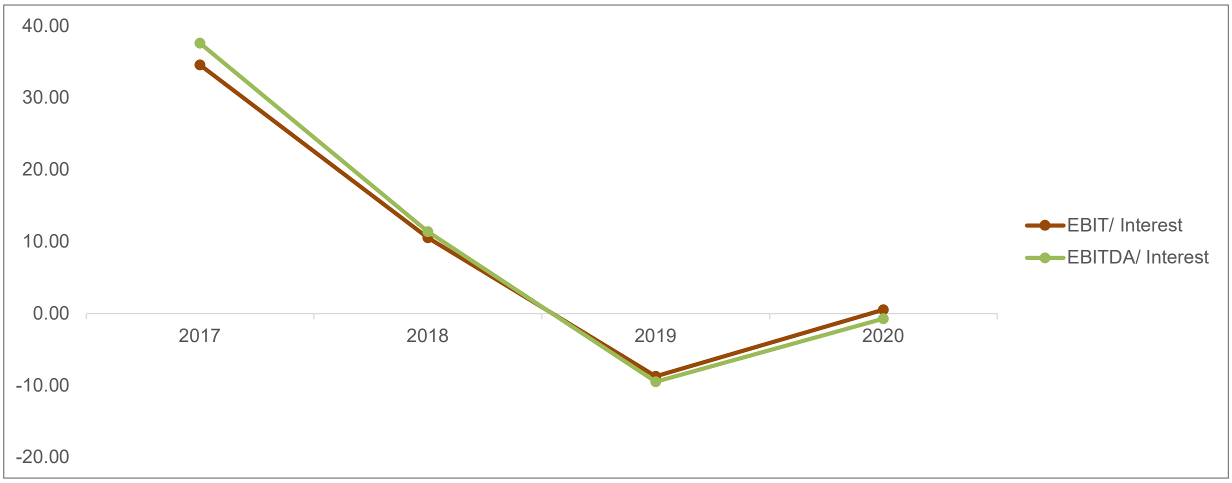
Evolution of Net Debt & Net-Debt-to-EBITDA Ratio



Leverage Ratios	2017	2018	2019	2020
Cash/ Debt	0.78	0.72	0.85	0.92
Debt/ Equity	0.85	0.99	1.45	2.46
Debt/ EBITDA	1.93	1.50	1.48	13.19
Debt/ Capital	0.46	0.50	0.59	0.71
Net Debt/ EBITDA	0.43	0.41	0.23	1.04
Net Debt/ (EBITDA - Capex)	0.46	0.45	0.24	1.52
EBIT/ Interest	34.58	10.56	-8.72	0.56
EBITDA/ Interest	37.62	11.40	-9.48	-0.70
(EBITDA-Capex)/ Interest	35.42	10.52	-8.88	-0.48
Total Liabilities/ Assets	0.56	0.61	0.72	0.78

- The Cash-to-Debt ratio indicates what portion of the company's total debt obligations can instantly be repaid through the cash and short term investments in a company.
- Booking's Cash-to-Debt ratio of 0.9 is above the industry average for the Miscellaneous sector.
- EBIT-to-Interest, commonly known as the Interest Coverage ratio is helpful to determine a company's riskiness relative to its current debt or for future borrowing.
- Booking's Interest Coverage ratio has fallen to 0.6 in 2020 which is a sign of improvement.
- The EBITDA-to-Interest ratio, also known as the EBITDA Coverage ratio is also an excellent indicator to evaluate how easily a firm can pay the interest on its outstanding debt.
- The company's EBITDA coverage ratio has contracted to -0.70 and is higher than the previous year.
- The Debt-Equity ratio is a classic ratio used as a measure of the degree to which a company is financing its operations through debt versus wholly owned funds.
- Booking's Debt-to-Equity ratio has increased from 1.45 to 2.46 which means the company has more capital gearing.

Evolution of Coverage Ratios



Altman Z-Score	5.67

- The Altman Z-Score is a modern scoring mechanism that focuses on profitability, leverage, liquidity, solvency, and activity ratios in order to determine the credit strength and the possibility of bankruptcy of an organisation.
- Altman Z-scores closer to 0 suggest that a company might be headed for bankruptcy, while a score closer to 3 suggests a company has a strong financial position.
- Booking's Altman Z-Score is 5.67 which means that there is no real risk of bankruptcy.
- For our calculation of the Altman Z-Score, we have used annual filings data and not trailing twelve month data as we believe it is a better indicator of a company's financial position.

Beneish M-Score	-2.81

- The Beneish M-Score is another modern metric that uses multiple financial ratios and eight variables to identify whether a company has manipulated its earnings.
- Manipulation of books of accounts and window dressing are consindered one of the biggest issues that affect any and every form of credit analysis which is why the M-Score has an important weightage in our scoring system.
- In terms of interpretation, companies with an M-Score below -1.78 are less likely to have manipulated their books and profit figures whereas those with a score above -1.78 have a reasonably high probability of manipulating their profitability.
- Booking's Beneish M-Score is -2.81 which implies that the manipulation of books of accounts is unlikely.
- For our calculation of the Beneish M-Score, we have used annual filings data and not trailing twelve month data as we believe it is a better indicator of a company's financial position.

Credit Risks

It is important to highlight the key risks associated with an investment in Booking as well as the inherent risks associated with the financial projections and price forecasts presented in this report.

Despite the recent recovery in travel, the possible impact of the Delta variant and other mutations of the SARS-CoV-2 loom on the travel and tourism industry which could significantly affect Booking's future business. The company is incurring heavy expenditure on advertising to speed up the recovery which is adding to the losses.

The company's dominant market continues to be Europe which accounts for nearly half of its business and is at a more mature growth phase versus emerging markets where it is below other majors.

The company faces immense cost pressure associated with digital advertising as it has to compete with other players on Google in order to ensure that its booking revenues can be maximized.

Global economic, political and other conditions may adversely affect trends in consumer, business and government spending, which may adversely impact the demand for the company’s services and its revenue and profitability.

Rapid technological progress, changing client demands, and developing industry standards may all contribute to the obsolescence of present and future products and services. In addition, the management claims that the success of their client acquisition approach will always be critical to their business.

It is worth highlighting that the extent to which Covid-19 impacts the financial results of the company is highly uncertain and could significantly disrupt the operations including sales, manufacturing and supply chain-related activities. It could also result in social, economic, and labor instability in the countries where the customers and suppliers operate.

There is a possibility that the company's financial statements are materially impacted as a result of unexpected events and circumstances such as the realization of the threats mentioned in the paragraph above. In such a scenario, it is likely that our Credit Evaluation Score and our Financial Strength Indicator will not remain constant. We would like to clarify that we had no interaction with the management of the company and they did not comment on the credit evaluation which is why it is purely independent in nature. Please check out our detailed disclosures at the end for further details.

Baptista Research's Generalist Approach To Credit Evaluation

Baptista Research's credit evaluations are a representation of its view with respect to the relative credit risk associated with timely debt servicing by an entity. Our credit evaluation approach involves a combination of a historical analysis as well as futuristic view of an entity and evaluating its ability to generate profitability and free cash flows in order to service the debt obligations. Baptista Research's credit evaluation is its very own proprietary assessment mechanism and it does not explicitly consider the loss expected to be borne by any specific investor or lender in the event of a default or liquidation or bankruptcy of an entity. This is why Baptista Research's credit evaluations focus on companies/ issuers and not specific instruments and they do not differentiate among debt instruments in terms of their secured or unsecured nature. Since our scores are dedicated to companies and not specific instruments, we do not factor in the liquidation preference, seniority and other contractual features of any specific instrument.

The credit evaluation of an entity is governed by the degree of its exposure to industry risk, business risk, financial risk and management risk. The relative impact of each of these broad risk categories on an entity's credit risk may vary from case-to-case and is assessed by Baptista Research based on both quantitative considerations as well as qualitative judgments. Baptista Research's credit evaluation approach also involves an assessment of the entity's management quality and governance practices. In addition to these considerations, an entity's credit evaluation may also be influenced by its ownership, the nature of linkages with its parent or group entities, degree of financial flexibility, the corporate legal structure, track record of operations and that of debt servicing, vulnerability to discrete event risks, and other factors.

What is the Financial Strength Indicator?

The Financial Strength Indicator is Baptista Research's proprietary quantitative mechanism that provides the most objective evaluation of a company's financial statements, narrowing it down to one number. For the calculation of the Financial Strength Indicator, we use all the key ratios of the company with respect to value creation (Revenue Growth, EBITDA margin, EBITDA expansion, Net margin, cash flow generation etc.), working capital management (receivable days, inventory days, payable days, current ratio etc.), and of course, leverage (Debt-equity, Net-debt-to-EBITDA, Coverage ratios). We also use some of the latest metrics that have gained immense relevance over the past few years in credit analysis – the Altman Z-score and the Beneish M-score. As a part of our process, we assign weights to different ratios and determine scores based on industry benchmarks.

Needless to mention, every industry is characterized by different averages for each of these ratios. For example, it would be unfair to have the same scoring mechanism for the ratios of a fast-growing tech major like Microsoft and a global retail behemoth like Walmart. Given that Microsoft has significantly higher margins and a faster top-line growth, it should score significantly higher on a common platform but at the end of the day, it would be like comparing apples to oranges.

For this sake, Baptista Research has developed a strong database of industry data to have the right benchmarks for the comparison of different financial ratios of a company. The biggest differentiation factor of the Financial Strength Indicator is that it is a pure, objective quantitative metric that provides a true measure of the company's financial risk. It looks at the numbers alone which is why there could easily be companies which have a decent Credit Evaluation Score (which includes the Financial Strength Indicator metrics + adds qualitative factors like industry risks, ESG risks, and so on) and yet do not have a good enough Financial Strength Indicator. The Financial Strength Indicator is measured on a scale of 5 and its interpretation is as follows:

Above 4.25 - Companies with this score are considered to have extremely robust financial fundamentals and are considered truly rock rolid from a financial standpoint. They have a nominal investment risk from a lender's standpoint.

3.5 to 4.25 - Companies with this score are considered to have reasonably strong financial fundamentals and a low investment risk from a lender's standpoint.

2.75 to 3.5 - Companies with this score are considered to have satisfactory financial fundamentals with scope for improvement. They have a moderate investment risk from a lender's standpoint.

2 to 2.75 - Companies with this score are considered to have moderate to weak financial fundamentals and a moderate to high investment risk from a lender's standpoint.

Below 2 - Companies with this score are considered to have extremely weak financial fundamentals and a very high investment risk from a lender's standpoint.

What is the Credit Evaluation Score?

The Credit Evaluation Score is Baptista Research's proprietary mechanism to carry out an assessment of a company's creditworthiness. It is a measure of the degree of safety with respect to timely servicing of financial obligations. Each time we assign a company a score, it remains valid until the publication of its next annual financial results, unless we provide an interim upgrade/ downgrade depending on the quarterly performance or the occurrence of any significant events that might affect its creditworthiness. We use an alphabet-based score system as described in the section "Interpretation of the Credit Evaluation Score". Our Credit Evaluation Score factors all the quantitative elements used in the calculation of the Financial Strength Indicator and adds to it, an evaluation of the following qualitative factors of a company, that go beyond just the financial statements. Some of the key qualitative factors that we consider are as follows:

Industry Risk

Industry risk can be characterized by a number of factors such as the level of competition, customer switching costs, supplier bargaining power, customer bargaining power, barriers to entry, and risk of disruption through substitutes. Competition in an industry is a key factor that we evaluate while analyzing industry fragmentation, market shares of the company and other prominent players, entry barriers, exit barriers, nature of products or services, production capacity, and so on. Industry-related business environment is often considered highly dynamic in nature and may change over time if the market players demonstrate collective change in product pricing strategies. We use a checklist-based approach to evaluate how the competitive landscape in an industry could be expected to change over time and measure each of the above-mentioned factors in order to evaluate if the company has a sustainable competitive advantage. There is a certain quantitative element to industry analysis as well as Baptista Research analyzes comparative cost structures of the company versus the rest of the industry. Our goal is to factor in every element of industry risk and ensure that all bases are covered with respect to a given company's risk of losing its position in a given industry.

Regulatory Risk

All industries face different degrees of regulatory intervention which takes place in different forms such as taxation, duties and subsidies, price controls, supply controls, FDA approvals (for pharma and biotech), restrictions on imports, or outright bans. The intention of regulatory interventions ranges from ensuring better consumer protection (e.g.: price control of essential drugs), improving the industry structure, controlling systemic risks, protecting the environment, protecting the domestic industry, to meet socio- political objectives. While analysing the exposure of an industry to regulatory risks, Baptista Research analyzes whether the Government's role is restricted to that of a facilitator or does the Government exercise control over many facets of the industry. Baptista Research uses a checklist-based approach to evaluate the extent of susceptibility of an industry to the Government's policies regarding subsidies, taxation and import-export restrictions and duties. We also analyze the ramifications of international regulations and policies on a given industry.

Management Risk

Under management risk assessment, we evaluate the core management team's track record in running a business successfully by looking at the past performance of the entity and that of group concerns, if any. We evaluate the team's commitment, risk appetite, and their ability to successfully manage business cycles. We carefully analyze the company's call transcripts and other management commentary to evaluate the management's risk appetite, their innovative capabilities, their M&A approach, their policies on leveraging, managing interest rate and currency risks (if any). We adopt a checklist-based approach to assess the frequency of management changes and the level of experience of the core management in a given industry.

Concentration Risk

This is a critical risk that needs to be evaluated from various standpoints, whether it is the concentration of business lines, customers, suppliers, geographies, products, and so on. Diversification is an effective solution for businesses dealing with volatility in profitability and cash flow or even the risk of possible disruption. Apart from increasing the odds of survival, diversification also often acts as a strategic lever to spur business growth. Its only downside as perceived by critics is that it could diffuse the management's focus. A sufficient amount of diversification, whether in the form of customer diversification, geographical diversification, product diversification or asset diversification, imparts greater long-term stability to a company's financials which is why Baptista Research looks to objectively evaluate the degree of diversity of a business.

ESG Risk

The assessment of ESG (Environmental, Social & Governance) risks by Baptista Research includes a wide range of considerations that pertain to the long-term sustainability of a company. We keep our evaluation focused on updates with the potential to have a material impact on a company's credit quality. Environmental and social risks tend to be both sector-related as well as company-specific and could be driven by external factors such as regulations or demographic changes. On the other hand, we believe that governance risks are largely entity-driven. Often, if the ESG risks are material and yet remain unmitigated, they result in a lower credit evaluation score.

Forex Risk

Forex risks arise if an entity's primary costs and revenues are denominated in different currencies. This would include entities companies in the domestic market but having large imports, or export-oriented units operating largely as per the domestic cost structure. Baptista Research assesses the degree to which such companies' financials may be materially affected by fluctuations in foreign exchange by evaluation the magnitude of such exposure, relative to their profitability and cash flows.

Interpretation of the Credit Evaluation Score

AAα (Highest Safety) - Companies with this score are considered to have the highest degree of safety with respect to timely servicing of financial obligations. Such companies carry the lowest credit risk.

Aα (High Safety) - Companies with this score are considered to have high degree of safety with respect to timely servicing of financial obligations. Such companies carry very low credit risk.

A (Adequate Safety) - Companies with this score are considered to have adequate degree of safety with respect to timely servicing of financial obligations. Such companies carry low credit risk.

BBβ (Moderate Safety) - Companies with this score are considered to have moderate degree of safety with respect to timely servicing of financial obligations. Such companies carry medium credit risk.

Bβ (Moderate Risk) - Companies with this score are considered to have moderate risk of default with respect to timely servicing of financial obligations.

B (High Risk) - Companies with this score are considered to have high risk of default with respect to timely servicing of financial obligations.

C (Very High Risk) - Companies with this score are considered to have very high risk of default with respect to timely servicing of financial obligations.

D (Default) - Companies with this rating are either in default or expected to be in default soon.

Disclosures

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