

A Work Project, presented as part of the requirements for the Award of a Master Degree in Finance from the
NOVA – School of Business and Economics.

AB InBev Equity Research Report - Generating returns as
the leading brewery in a mature beer market

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Abstract

This report, which is part of the consolidated AB InBev Equity Research Report covers two main subjects. In the first part, a performance analysis is conducted on the historical metrics of the company and those of selected comparable peers. The second part of the report covers the intrinsic and relative valuation calculation based on the Discounted Cash Flow and the multiples approach. Regarding intrinsic valuation, the forecasted free cash flows, the different discount rates and the terminal value - including terminal capital structure, terminal WACC and growth rate - provide a 12-months target share price of €67.26. A scenario analysis offers an upside potential of ~25.00% on this target price. Relative valuation provides a target price of €59.55 with a range of [€35.52; €81.15]. Overall the recommendation to BUY AB InBev's shares is given to investors.

Keywords (AB InBev, Beer Market, Performance, Valuation)

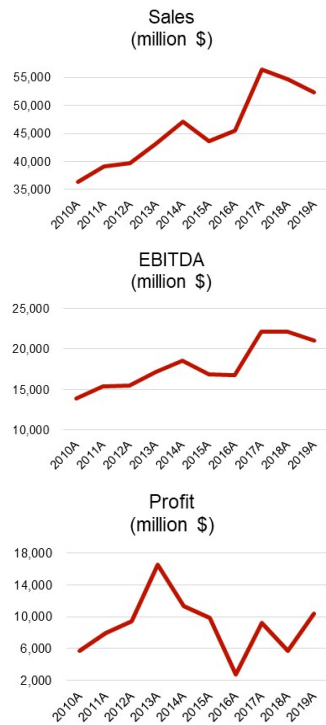
This report is part of the Equity Research report (annexed) and should be read as an integral part of it.

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Performance Analysis

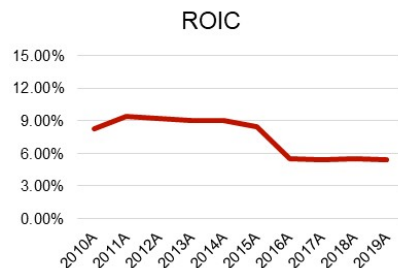
AB InBev Performance



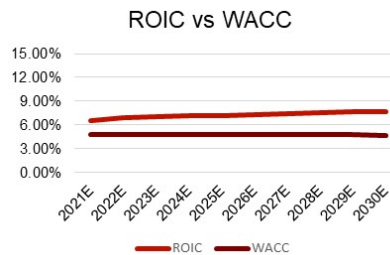
Historically, AB InBev's sales and EBITDA are showing the same evolution with an upward trend between 2010 and 2019. In 2010, the company achieved sales of \$36,297 million and an EBITDA of \$13,869 million, both are increasing until 2019 with sales of \$52,329 million and EBITDA of \$21,078 million. In 2016, the sales and EBITDA are showing a dip down to \$45,518 million and \$16,753 million, respectively, due to the acquisition of SABMiller.¹

While sales and EBITDA are providing a similar historical evolution, the net profit fluctuated more in the last ten years with a peak in 2013 of \$16,518 million. In line with sales and EBITDA, the profit dipped in 2016 to \$2,769 million and recovered afterwards until 2019 up to \$10,414 million. However, the profit in 2019 is exceeding the level in 2010.²

The ROIC (based on Capital IQ values for comparison purpose) is showing a downward trend since 2016 driven by higher invested capital due to the SABMiller acquisition. We expect that the NOPLAT will not increase fast enough to offset this effect in the forecasted period. Between 2021 and 2030, the ROIC is projected to slightly grow ranging between [6.54%; 7.71%]. Thus, it will exceed the forecasted WACC - ranging between [4.73%; 4.74%] - and will generate excess return.^{3,4}



Source: Capital IQ



Source: Valuation Model

Peer Performance

In order to conduct a proper relative valuation of AB InBev, we compared the performance of selected peers (see Appendix B). The purpose of this study is to note the similarities of companies (which were suggested by Capital IQ) with AB InBev and to consequently make decisions on the weights given to the comparable companies in the later shown multiple valuation section.

The first operating metric evaluated is related to the EBITDA. In this comparison we used data of 2019 as all peers have reported this information. By looking at the EBITDA margin, AB InBev is clearly outperforming its comparables with a 38.11% EBITDA margin. Only three out of the fifteen selected peers - Diageo (33.76%), Keurig Dr Pepper (30.40%) and Coca-Cola (32.17%) - have a margin above 30.00%. None of them reached a higher percentage than AB InBev. Comparing this margin per category, the median EBITDA margin of "Brewers" peers is 20.00%, for "Alcoholic beverage companies" it is 29.72% and for "Other beverage companies" the EBITDA margin is 30.40%. As stated above, this analysis provides insights on similarities.

¹ Valuation Model

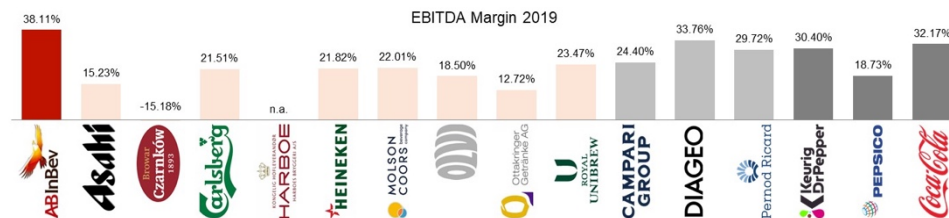
² Valuation Model

³ Capital IQ

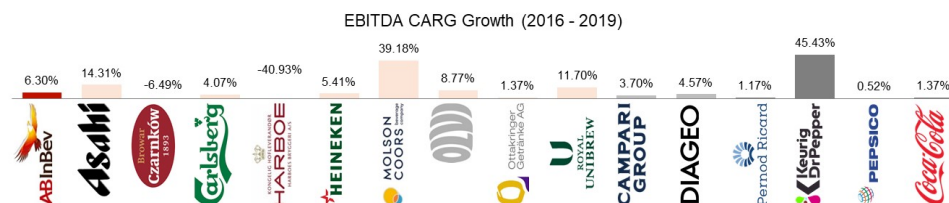
⁴ Valuation Model

Therefore, for example Browar Czarńk6w is not seen as a significant comparable company and thus will have no or less weight in the relative valuation part, whereas the categories “Alcoholic beverage companies” and “Other beverage companies” provide more similar EBITDA margins and are more valuable in the multiple valuation calculation.⁵

Evaluating the EBITDA growth over 2016 and 2019, AB InBev grew its EBITDA by 6.30%. Although this seems like a small increase, we have to note that the effect of the merger with SABMiller was already included in the 2016 EBITDA and that our main competitor Heineken only achieved a growth of 5.41%. Overall the EBITDA growth over the chosen period is in between -6.49% and 14.31% excluding 3 outliers - Harboes Bryggeri, Molson Coors and Keurig Dr Pepper. Keurig Dr Pepper which has an EBITDA growth of 45.43%, is only created in 2018. Therefore, we believe that before 2018 only one of the merged companies was considered while after 2018 the combined company is used for EBITDA calculations. The other outlier, Molson Coors, which has an EBITDA growth of 39.18% also acquired multiple companies during 2016 and 2019. Although we expect these acquisitions to be the reason for the higher growth, we don’t conduct a further analysis on the peer companies and information might be missing to provide correct explanations.⁶



Source: Capital IQ



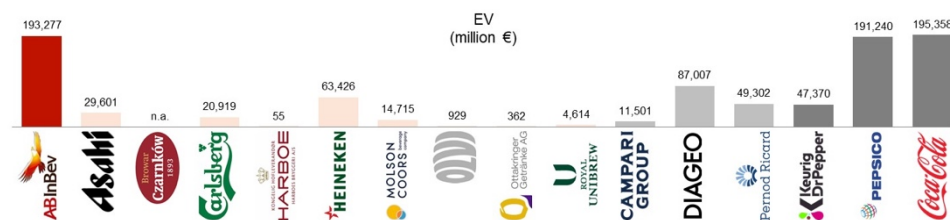
Source: Capital IQ

Another interesting aspect to consider is the difference in size between the peers. Using Capital IQ data (also used here for the EV calculation of AB InBev to make a proper comparison using one source) to give us a first indication, only two companies - PepsiCo with €191,240 million and Coca-Cola with €195,358 million - have a similar size in EV terms. As a result, the other companies will be given less weight in the relative valuation section.⁷

⁵ Capital IQ

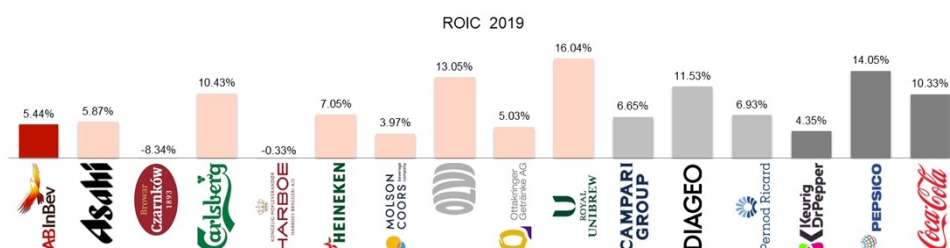
⁶ Capital IQ

⁷ Capital IQ



Source: Capital IQ

Comparing AB InBev's ROIC in 2019 (based on Capital IQ data) we can observe that it is underperforming with a ROIC of 5.44%. Further, the ROIC between the brewers are not in line showing high differences whereby Royal Unibrew delivers the highest ROIC with 16.04%. The "Alcoholic beverage companies" provide a smaller range of ROIC - [6.65%; 11.53%]. In addition, for the "Other beverage companies" we can observe a significant difference within the category. While PepsiCo generated a ROIC of 14.05%, Keurig Dr Pepper only provided 4.35%.



Source: Capital IQ

This analysis further strengthens the approach regarding multiple valuation to use assigned weights to the different individual peers and not to the categories of peers as a whole.⁸

Valuation

The current price level of AB InBev is stated at €58.35 (28th of December 2020).⁹ By applying intrinsic and relative valuation, shareholders could expect a **return between [5.44%; 18.66%]** over a period of 1 year. The intrinsic valuation based on a Discounted Cash Flow analysis targets a share price of €67.26 at 2021. Relative valuation through company historical and competitor multiples indicates a target price range between [€35.52; €81.15].¹⁰

Intrinsic Valuation

The target stock price estimated with Discounted Cash Flow approach is **€67.26 per share**. With this - in our opinion reasonable - future share price, a shareholders' return of 18.66% (€10.89 per share) is obtained over a 1-year period.¹¹

Discount Rates

For the intrinsic valuation of AB InBev, different discount rates need to be taken into account, constituting the opportunity cost of capital that should reflect the required return to both debt and equity holders of the company. The estimation of different discount rates requires the input of different components such as the risk-free rate, market premium rate, Net Debt/Equity structure, cost of equity and cost of debt.

⁸ Capital IQ

⁹ Bloomberg (28.12.2020)

¹⁰ Valuation Model

¹¹ Valuation Model

	Rf Rate	Market Premium	Cost of Debt	Cost of Equity	Tax Rate	WACC
2021E	0,64%	5,50%	2,76%	9,18%	29,00%	4,74%
2022E	0,64%	5,50%	2,76%	9,02%	29,00%	4,74%
2023E	0,64%	5,50%	2,76%	8,86%	29,00%	4,74%
2024E	0,64%	5,50%	2,76%	8,71%	29,00%	4,73%
2025E	0,64%	5,50%	2,76%	8,55%	29,00%	4,73%
2026E	0,64%	5,50%	2,76%	8,39%	29,00%	4,73%
2027E	0,64%	5,50%	2,76%	8,23%	29,00%	4,73%
2028E	0,64%	5,50%	2,76%	8,08%	29,00%	4,73%
2029E	0,64%	5,50%	2,76%	7,92%	29,00%	4,73%
2030E	0,64%	5,50%	2,76%	7,99%	29,00%	4,73%

Source: Valuation Model

As a risk-free rate we used the current treasury yield of a 10-year US government bond (GT10 Gov Index).¹² The bond can be used as a proxy for the risk-free rate as it is AAA rated by Moody's and therefore considered to have low default risk. Since AB InBev published the annual reports in US Dollar, we consider a Dollar currency bond to be most relevant. The choice of **5.50% market premium** is based on valuation literature.¹³

■ Cost of Equity

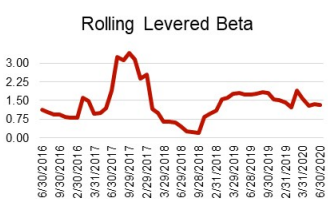
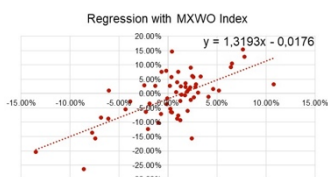
As we do not have a stable target structure for our forecasted period (2020 - 2030), the cost of equity is changing throughout this period based on the estimated Net Debt/Equity ratio for the corresponding year. In 2021 the **cost of equity is 9.18%**, whereas at the final forecasted year 2030 it is **7.99%**.¹⁴



Source: Valuation Model

In order to estimate the cost of equity (by using the Capital Asset Pricing Model) of AB InBev, an appropriate approximation of the equity beta is required to reflect the incremental risk which is defined here as the extent to how much AB InBev's stock price fluctuates compared to the overall stock market.

First, an analysis of the historical betas of the company itself is completed by regressing AB InBev's returns over the MXWO Index for a period of 5 years. This regression corresponds to a **levered equity beta, β_e , of 1.32** with a 95.00% confidence interval of [0.94; 1.70], and an **unlevered equity beta, β_u , of 0.69** calculated by using the average Net Debt/Equity ratio over the selected data period.¹⁵



On top of that, the 6-months rolling betas based on the same data (based on monthly returns for the last 5 years June 2015 - June 2020) are calculated in order to understand temporary fluctuations. The **median rolling β_e is 1.32** and the **median rolling β_u is 0.71**.¹⁶ Further analysis shows us very high levered equity betas during the acquisition period of SABMiller in 2016. AB InBev raised a significant amount of debt, which increased risk and therefore required

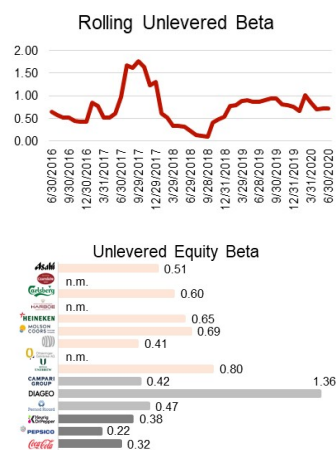
¹² Bloomberg

¹³ John Wiley and Sons, 2020

¹⁴ Valuation Model

¹⁵ Valuation Model

¹⁶ Valuation Model



compensation for shareholders translated in higher returns.^{17,18}

Secondly, current β_u s of selected peers (see Appendix B) are analyzed. Comparing AB InBev's unlevered beta with the other breweries shows that all of them have a beta below 1 - indicating that beer companies are less exposed to cyclical risks than the global market. Looking at AB InBev's main competitor, Heineken, we observe a β_u of **0.65** which is aligned with our own estimations of **0.73**. Regarding the other categories, the outcome of a beta below 1 is shown as well (excluding one outlier Pernod Ricard).¹⁹

In order to challenge our analysis, we consulted other sources. Bloomberg provided us a β_e of 1.18 corresponding to a β_u of 0.63 for AB InBev (accessed on 25th of December 2020) and NYU Database indicates a β_u of 0.91 for alcoholic beverages.^{20,21} After considering all this information, we argue for β_u of **0.73**, which is the median historical rolling beta of AB InBev over the period starting from the 1st of January 2017 until the 30th of June 2020, in our base case scenario.²²

Since the beta was determined through a regression, we performed a sensitivity analysis on the cost of equity. For a Net Debt/Equity ratio ranging from 110.00% and 160.00% and β_u between 0.49 and 0.91 - the highest unlevered beta in our analysis (coming from NYU Database source) -, the cost of equity is varying between 5.41% in a bright scenario and 11.33% in a scenario where systematic risk is considered higher and a worse terminal capital structure is achieved.²³ The Net Debt /Equity range is chosen based on analysis done in the section "Target Capital Structure". Net Debt/Equity of 160.00% is the highest estimated terminal target ratio according to our valuation model. Whereas 110.00% Net Debt/Equity is chosen based on capital structure levels before the SABMiller acquisition and a comparison of the ratio with AB InBev's main competitor Heineken.

Re	Unlevered Equity Beta						
	0.49	0.57	0.65	0.73	0.79	0.81	0.91
110.00%	5.41%	6.19%	6.98%	7.76%	8.36%	8.55%	9.56%
112.67%	5.46%	6.25%	7.04%	7.84%	8.44%	8.64%	9.65%
115.33%	5.51%	6.31%	7.11%	7.91%	8.52%	8.72%	9.75%
118.00%	5.56%	6.37%	7.18%	7.99%	8.60%	8.81%	9.84%
132.00%	5.83%	6.68%	7.53%	8.38%	9.04%	9.25%	10.34%
146.00%	6.09%	6.99%	7.89%	8.78%	9.47%	9.69%	10.84%
160.00%	6.36%	7.30%	8.24%	9.18%	9.90%	10.13%	11.33%

Source: Valuation Model

■ Cost of Debt

In order to estimate the cost of debt, we approximated the **average expected returns for debtholders** of the company. Two approaches are considered to determine an appropriate cost of debt which is estimated at **2.76%**.²⁴

As S&P's downgraded AB InBev's ratings, from A- to BBB+ with a pessimistic outlook, they are now consistent with Moody's. This downgrade was mainly driven by the high leverage of the company and the updated expectation of a slower than expected leverage decrease. Until now Moody's rates the company's bond at **Baa1 with a stable outlook** which corresponds to a loss of default of 52.00% and probability of default of 2.11%.²⁵

¹⁷ Bloomberg

¹⁸ Valuation Model

¹⁹ Bloomberg

²⁰ Bloomberg

²¹ NYU Stern, 2020

²² Valuation Model

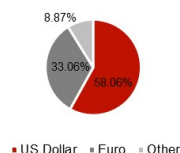
²³ Valuation Model

²⁴ Valuation Model

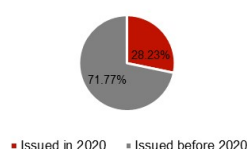
²⁵ Moody's



Currency Split Debt Outstanding



Debt Outstanding



Based on data accessed in November 2020, the company has over 120 debt instruments outstanding from which 35 are issued in 2020. Regarding the currencies of outstanding debt, 58.06% of the debt instruments are in US Dollar, 33.06% in Euro and the other 8.87% is in Canadian Dollar, Britain Pounds, Australian Dollar or Brazilian Real.²⁶ Having their outstanding debt in these strong currencies can increase complexity in terms of deleveraging. The company needs to repay the majority of leverage in US Dollar and Euro, while the incoming cash flows are in multiple different currencies. As recently currencies like Mexican Peso or Argentine Peso depreciated against the Dollar, more cash flow in these currencies needs to be generated to pay off the same amount of debt.

For our estimation of the cost of debt, we looked at two paths. In the first approach we looked at the yield to maturity of the bonds currently outstanding with a maturity over 10 years (based on data accessed in November 2020) and adjusted this by the corresponding probability of default and loss given default resulting in 2.49% cost of debt.²⁷ In the second approach the credit default spread of the bonds issued in 2020 are added to the risk-free rate (0.64%) to get the cost of debt of 2.76%. As in the second approach our estimations are based on the bonds issued in 2020, we assume those bonds to be a good proxy for the portfolio of bonds outstanding because they represent 28.23% of the current debt instruments outstanding.²⁸

In order to address the impact on potential future up- or downgrades of S&P or Moody's, a sensitivity analysis was performed. Further devaluation of currencies in which the company generates cash flows against the US Dollar or Euro (currencies in which most of their leverage needs to be repaid), will potentially downgrade the rating even more.

A sensitivity analysis for the credit default spread is done based on the NYU Database data which provides spreads for developed market firms with a market capitalization above \$5 billion. In an optimistic scenario where the **company's rating improves to A-**, the **cost of debt decreases to 1.86%**, whereas in a pessimistic scenario where the company's **debt rating worsens to B+**, the **cost of debt increases to 4.15%**. The impact on the terminal WACC is limited - ranging from [4.38%; 5.26%] - considering the target capital structure of 118.00% Net Debt/Equity is achieved. A more detailed and realistic analysis is done in the section "Scenario Analysis" where we simultaneously change the target capital structure and the cost of debt, bearing in mind that they depend on each other.²⁹

For developed market firms with market cap > \$5 billion			
If interest coverage ratio is	Rating is	Spread is	
>			
8.50	100000	Aaa/AAA	0.63%
6.5	8.49999	Aa2/AA	0.78%
5.5	6.49999	A1/A+	0.98%
4.25	5.49999	A2/A	1.08%
3	4.24999	A3/A-	1.22%
2.5	2.99999	Baa2/BBB	1.56%
2.25	2.24999	Ba1/BB+	2.00%
2	2.24999	Ba2/BB	2.40%
1.75	1.99999	B1/B+	3.51%
1.5	1.74999	B2/B	4.21%
1.25	1.49999	B3/B-	5.15%
0.8	1.24999	Caa/CCC	8.20%
0.65	0.79999	Ca2/CC	8.64%
0.2	0.64999	C2/C	11.34%
-100000	0.19999	D2/D	15.12%

		Default spread					
Rd		1.22%	1.52%	1.82%	2.12%	2.59%	3.05%
		1.86%	2.16%	2.46%	2.76%	3.23%	3.69%
		3.51%					
		Rd					
WACC		1.86%	2.16%	2.46%	2.76%	3.23%	3.69%
		4.38%	4.49%	4.61%	4.73%	4.90%	5.08%
		5.26%					

Source: Valuation Model

Terminal Value

We believe that AB InBev's **main challenges**, which includes their **deleveraging strategy**, will be addressed during the next 10 years. In line with this assumption, we used an explicit forecasted period of 10 years - 2021 until 2030. From year 2031 onwards, we expect stable **growth of 2.30%** and a constant terminal **WACC of 4.73%** based on the selected target capital

²⁶ Thomson Reuters

²⁷ Thomson Reuters

²⁸ Valuation Model

²⁹ Valuation Model

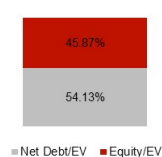
structure (Net Debt/Equity) of **118.00%**.³⁰

Target Capital Structure

As mentioned earlier, AB InBev's main challenge is to reduce the company's leverage. Since the acquisition of SABMiller in 2016, the company's financial Net Debt has increased significantly, and it became one of the main strategic goals to bring it back to competitive levels.

Although the COVID-19 crisis jeopardized this deleveraging strategy, for the terminal targeted capital structure, we have to understand the measures taken beyond the current situation. By **continuously divesting in declining sub-markets** of the beer industry and **cutting dividends**, we believe a target **Net Debt/Equity of 118.00%** would be reached in 2030. In the following scenario analysis section of the report, further analysis for this percentage is conducted.

Target Capital Structure



The choice for the target 118.00% Net Debt/Equity can be justified as AB InBev's management points out it wants to obtain leverage ratios in line with amounts and ratios prior to the acquisition in 2016. In order to cross check our chosen percentage we compared AB InBev's capital structure with Heineken, as this seems the only brewery in the peer group similar in size and geographical exposure.³¹

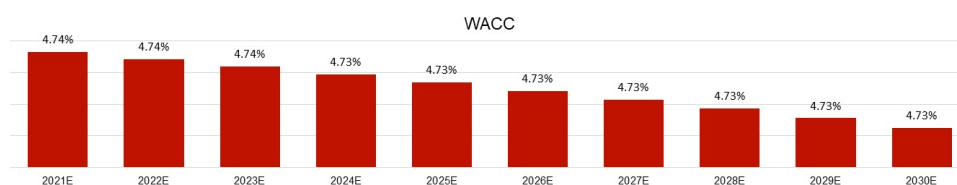
As Heineken is consistently obtaining lower values, it gives an understanding of what a reasonable and achievable target structure would be. Whereas Heineken has a median Net Debt/Equity (December 2014 - December 2019) of 111.36%, AB InBev reaches 163.30% over the same period.³² The biggest % differences between the structures is observed in year 2016 where AB InBev's ratio peaked to 320.70%.



Source: Capital IQ

Terminal WACC

The WACC is estimated based on the cost of equity of 7.99%, the cost of debt of 2.76% and the target financial Net Debt /Equity of 118.00%. As a result, we observe a terminal **WACC of 4.73%**.³³



Source: Valuation Model

Furthermore, we analysed the impact of varying inputs, cost of debt and cost of equity on the terminal WACC. Both the choice for the ranging cost of equity and cost of debt is based on the earlier shown sensitivity analysis for these returns. The highest cost of equity 11.33% was obtained based on the belief of β_u equal to 0.91 and a Net Debt/Equity of 160.00%. Resulting

³⁰ Valuation Model

³¹ Valuation Model

³² Capital IQ

³³ Valuation Model

from our own probable scenarios regarding these inputs, WACC is in between 3.18% and 6.58%.³⁴

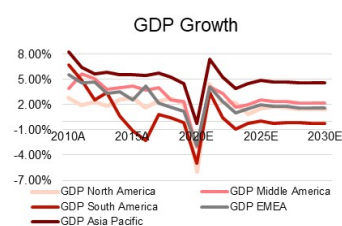
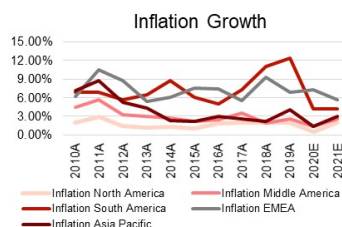
		Re						
Rd	Terminal WACC	5.41%	6.27%	7.13%	7.99%	9.10%	10.22%	11.33%
	1.81%	3.18%	3.57%	3.96%	4.36%	4.87%	5.38%	5.89%
	2.13%	3.30%	3.69%	4.09%	4.48%	4.99%	5.50%	6.02%
	2.45%	3.42%	3.81%	4.21%	4.60%	5.11%	5.63%	6.14%
	2.76%	3.54%	3.94%	4.33%	4.73%	5.24%	5.75%	6.26%
	3.04%	3.65%	4.04%	4.44%	4.83%	5.34%	5.85%	6.37%
	3.31%	3.75%	4.15%	4.54%	4.94%	5.45%	5.96%	6.47%
	3.59%	3.86%	4.25%	4.65%	5.04%	5.55%	6.07%	6.58%

Source: Valuation Model

Growth Rate

In our opinion, the best way to determine the terminal growth is by analyzing the operating free cash flow growth during the forecasted period and using logical reasoning. The reason for not looking at historical growth rates is based on the fact that historically the company was engaged in many M&A activities to grow inorganically, but this will be rather limited in the future due to governmental restrictions and anti-trust regulations. In line with this assumption our terminal growth rate does not account for any M&A activity in the long-term future.

By analyzing the estimated operating free cash flows, a **stable annual growth of 2.30%** is reached in 2029. We assume that AB InBev will remain growing at this rate from 2031 onwards.³⁵ For mature companies, terminal growth rates are typically in line with historical and expected inflation rates growth - 4.56% average combined inflation growth rate of regions for 2010 - 2021 - and average GDP growth rates - 2.29% average combined GDP growth of regions for 2021 - 2030. Therefore, challenging the estimated growth rate with these percentages provides confidence for the chosen approach.^{36,37}



Since the terminal growth rate is based on our own expectations, we performed a sensitivity analysis keeping other input values unchanged. The analysis shows an upside potential of 26.97% which would lead to a target price of €85.40 and a downside potential of -16.56% with a share price of €56.12. Even if the growth rate declines to 1.91% considering a dividend payout per share of €1.97 in 2021 our BUY recommendation to investors wouldn't change.

Target Price	Growth Rate						
	1.72%	1.91%	2.11%	2.30%	2.49%	2.69%	2.88%
	€ 56.12	€ 59.33	€ 63.00	€ 67.26	€ 72.26	€ 78.21	€ 85.40

Source: Valuation Model

Scenario Analysis

Although the majority of our analysis is done based on a base case scenario, we want to look deeper and include pessimistic and optimistic scenarios.

In a good state, the company's strong and stable forecasted free cash flows will allow the company to reduce leverage much faster and / or target a lower financial Net Debt/Equity ratio leading to a share price of €67.41 considering the cost of debt stays at 2.76%. In a more pessimistic case, the company is much slower at repaying debt and the target financial Net Debt/Equity ratio of 118.00% will not be reached which would lead to a price decrease to €66.86. AB InBev exposure to exchange rates is quite strong and further depreciation of cash generating currencies against the US Dollar or Euro could rationalize this scenario. In line with the leverage levels of the company, the cost of debt is affected. Not only will the company's

³⁴ Valuation Model

³⁵ Valuation Model

³⁶ International Monetary Fund, 2019

³⁷ International Monetary Fund, 2019 & Valuation Model

ability to acquire funding be threatened, it will also become more expensive, increasing the cost of debt. Considering a downgrade on the bond's rating to B+ resulting in 4.15% cost of debt would change our BUY recommendation to a SELL recommendation. On the other hand, when the bond's rating upgrades, the cost of debt would be lower than assumed. Based on the scenario analysis, the highest value AB InBev could generate for its shareholders is €80.97 per share - with a cost of debt of 1.86% and Net Debt/Equity of 172.77%. In a pessimistic case with cost of debt of 4.15% and Net Debt/Equity of 172.77% AB InBev would be valued at €52.47 per share which seems unlikely without a significant downgrade of the rating.³⁸

Target Price		Rd						
		1.86%	2.16%	2.46%	2.76%	3.23%	3.69%	4.15%
Target D/EV	50.58%	€ 78.69	€ 74.56	€ 70.82	€ 67.41	€ 62.73	€ 58.62	€ 54.97
	51.82%	€ 78.91	€ 74.67	€ 70.84	€ 67.36	€ 62.59	€ 58.41	€ 54.72
	53.01%	€ 79.11	€ 74.77	€ 70.86	€ 67.31	€ 62.46	€ 58.22	€ 54.48
	54.13%	€ 79.31	€ 74.87	€ 70.87	€ 67.26	€ 62.33	€ 58.04	€ 54.26
	57.68%	€ 79.94	€ 75.18	€ 70.93	€ 67.11	€ 61.94	€ 57.47	€ 53.56
	60.71%	€ 80.49	€ 75.45	€ 70.97	€ 66.98	€ 61.60	€ 56.98	€ 52.97
	63.34%	€ 80.97	€ 75.68	€ 71.01	€ 66.86	€ 61.31	€ 56.57	€ 52.47

Source: Valuation Model

Other developments such as successful entry into the right products and product segments, which are backed by the prior expansion experience and brand support, could build new revenue streams and reduce exposure to cyclicity of the beer market. In an optimistic scenario, AB InBev could for example benefit from strategic investments in cannabis-based alcoholic beverages, which global market is supposed to grow up to \$5,294 million until 2030. We conducted a sensitivity analysis on the effect of the target price considering different assumptions regarding the market share obtained in the cannabis-based beverages market and the gross profit margin achievable on this category of beverages. In a most extreme optimistic scenario, our target price is only increasing from €67.29 to €67.55.³⁹ However, in a bad scenario, the beer market shrinks, and AB InBev would be restricted from entering new markets for revenue generation. Since the acquisition of SABMiller AB InBev could face decreased ability for further add-on acquisitions or mergers due to anti-trust regulations. Taking this into account and analyzing the entrance in the cannabis market, we argue that expansion into new markets may be needed to continue trading at the same share price level.

		Market Share						
		5.00%	7.50%	10.00%	12.50%	15.00%	17.50%	20.00%
Gross Profit Margin Cannabis	Target Price							
	15.00%	€ 67.29	€ 67.31	€ 67.32	€ 67.34	€ 67.35	€ 67.37	€ 67.38
	18.33%	€ 67.30	€ 67.32	€ 67.34	€ 67.36	€ 67.37	€ 67.39	€ 67.41
	21.67%	€ 67.31	€ 67.33	€ 67.35	€ 67.37	€ 67.39	€ 67.42	€ 67.44
	25.00%	€ 67.31	€ 67.34	€ 67.36	€ 67.39	€ 67.41	€ 67.44	€ 67.47
	28.33%	€ 67.32	€ 67.35	€ 67.38	€ 67.41	€ 67.44	€ 67.46	€ 67.49
	31.67%	€ 67.33	€ 67.36	€ 67.39	€ 67.42	€ 67.46	€ 67.49	€ 67.52
	35.00%	€ 67.33	€ 67.37	€ 67.40	€ 67.44	€ 67.48	€ 67.51	€ 67.55

Source: Valuation Model

Further, volume upside could be generated by new sale channels, coming from increased and improved e-commerce activities leading to the growth of online purchases of beer. Moreover, revenues could also be negatively impacted by any damage in the company's reputation. AB InBev's success is highly dependent on the image of its existing products and although the company monitors brewing quality, it is dependent on multiple other players in the value chain. Adjusting our base case scenario by changing growth volume proportion captured can have a significant impact on the target price. Whereas in our base case scenario we assume volume proportion of overall beer volume to be stable, we questioned the effect of decreasing and increasing it with 5.00%. Within this range we observe target prices in between €37.95 which

³⁸ Valuation Model

³⁹ Valuation Model

would result in a SELL recommendation and €112.85 for which our current recommendation is encouraged.⁴⁰

Target Price	Growth Volume Proportion						
	-5.00%	-3.33%	-1.67%	0.00%	1.67%	3.33%	5.00%
€	37.95	46.29	56.00	67.26	80.32	95.42	112.85

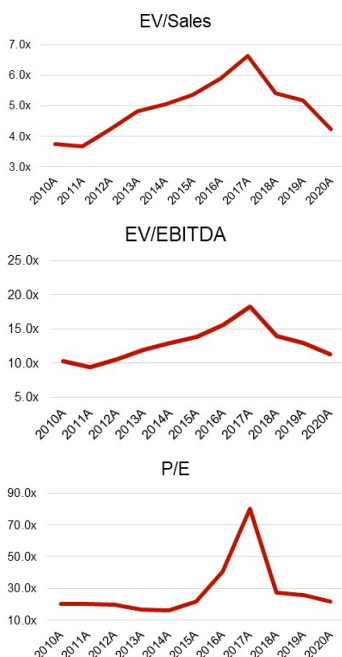
Source: Valuation Model

Regarding non-current items, the imaginable violation of regulations and the corresponding fines need to be highlighted but not considered for valuation purposes as they are non-recurring events. As AB InBev operates in emerging markets with political and economic instability, a lack of legal systems and corruption, the company faces higher legal risk leading to penalties and fines. Referring to the cannabis-based beverages, activities in this segment might also lead to increased legal, reputational and financial risk, as the regulations for cannabis are expected to be subject to frequent changes.

Relative Valuation

Within the relative valuation approach, AB InBev's historical multiples and the multiples of its peers (see Appendix B) are analyzed. The most appropriate multiple - EV/EBITDA 2021- combined with our financial forecasted figure - \$20,501 million - provide a stock price of €59.55 (with minimum and maximum range of [€35.52; €81.15]) which corresponds to a total shareholders' return of 5.44%. This is in line with the BUY recommendation which resulted from the DCF approach.⁴¹

AB InBev Historical

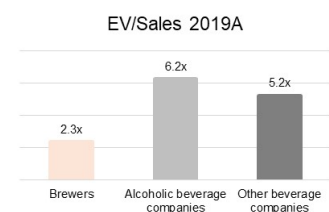


In order to select proper multiples, historical values are evaluated. We believe they provide us reasonable guidance as the company will continue to operate according to historical and current key drivers including operational excellence and cost awareness and abilities to adapt to trends.

Over a period of 10 years (2010-2020), we observe a stable LTM EV/Sales within a range of [3.7x; 5.4x], a LTM EV/EBITDA between [9.4x; 13.9x] and a more fluctuating P/E between [16.2x; 27.3x] excluding the outliers in 2016 and 2017 which were caused by the acquisition of SABMiller.⁴²

While P/E seems a relevant metric for investors as it is obtained from net income which is the number equity holders receive, we argue that because AB InBev is currently in the middle of its deleveraging process (which impacts interest expenses and consequently net income), the use of other multiples which reflect the operating part of AB InBev are more meaningful. On top of that, we believe the P/E ratio is currently skewed due to non-operational expenses coming from COVID-19.

Peer Comparison



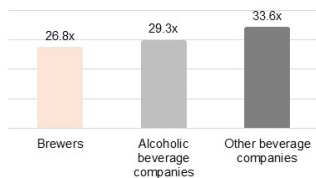
We analyzed multiples of peers (see Appendix B) which is needed to give proper weights to each of them. We used data of 2019 for the comparison between companies as we want to observe differences in the recent past, but we also want to exclude the distinctive effects of COVID-19 on the companies. Overall, we observe that the "Alcoholic beverage companies" and the "Other beverage companies" trade at higher multiples than the brewers in our selected peer

⁴⁰ Valuation Model

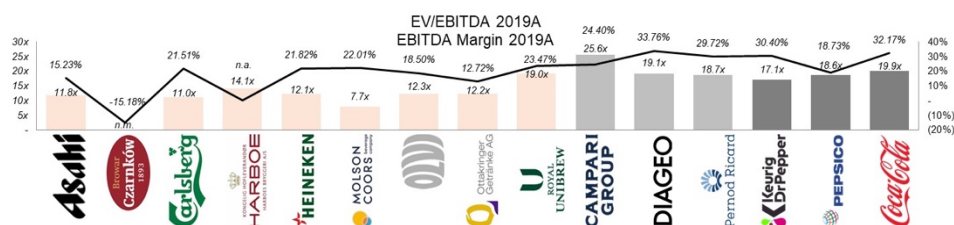
⁴¹ Valuation Model

⁴² Capital IQ

P/E 2019A



group. Whereas the average LTM EV/Sales in 2019 was only 2.3x for “Brewers”, “Alcoholic beverage companies” and “Other beverage companies” reached 6.2x and 5.2x respectively. Regarding the P/E of 2019, other beverages companies had the highest multiples of 33.6x. Evaluating the EV/EBITDA in 2019 together with the EBITDA margin in 2019, two trends can be observed. In a first observation the “Brewers” of our selection have lower multiples ranging from [7.7x; 19.0x], while “Alcoholic beverage companies” and “Other beverage companies” have multiples in between [18.7x; 25.6x] and [17.1x; 19.9x]. The other trend noted is the connection between this multiple and the EBITDA margin.⁴³

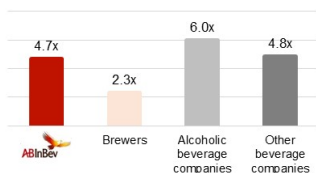


Source: Capital IQ

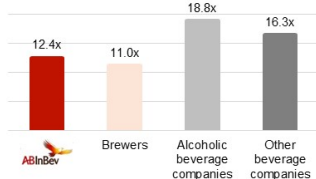
As mentioned above, weights are assigned to the multiples of our peers. This allocation is done based on the similarities of EV and EBITDA margin - both considered equally significant with 50.00% each - which are analyzed in the “Performance Analysis” section. On top of that we gave 70.00% to most similar EVs - [€190,000 million; €200,000 million] - and EBITDA margins - >30.00% - and 30.00% to less similar EVs - [€35,000 million; €190,000 million] and EBITDA margins - [20.00%; 30.00%].^{44,45}

▪ Forward Looking

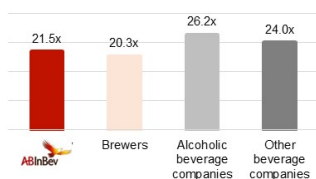
EV/Sales 2021E



EV/EBITDA 2021E



P/E 2021E



In order to obtain a shareholders' return over 12-months, we believe the forward-looking multiples are most relevant. It can be observed in the graphs, AB InBev is trading at higher multiples than the average of its brewer peer group for all types of multiples considered and “Alcoholic beverage companies” are outperforming the two other categories.

Analyzing the lowest and highest multiple for all our selected peers regarding EV/Sales we observe a range between [1.7x; 6.5x] indicating a target price of [€14.36; €40.63]. Further, the EV/EBIT provides a multiple range of [13.2x; 27.5x] leading to a share price between [€35.13; €73.45]. Moreover, the P/E of our peers shows a very wide multiple range of [10.5x; 36.7x]. As argued before, we don't consider P/E as a valid multiple, consequently we don't calculate a target price based on this multiple.

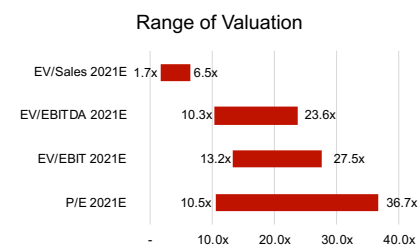
As mentioned, we want to use a multiple reflecting the operating part of the business and decided on the EV/EBITDA to be most appropriate. Combining this choice with the assigned weights given to comparable companies led to an estimated EV/EBITDA 2021 of 17.3x for AB InBev. This resulted in a target price of €59.55 leading to a shareholders' return of 5.44%. At the highest and the lowest multiples of our peers - [10.3x; 23.6x] - our share price ranges in between [€35.52; €81.15].⁴⁶

⁴³ Capital IQ

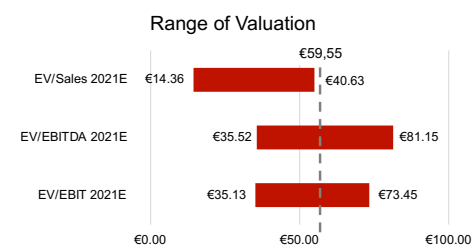
⁴⁴ Capital IQ

⁴⁵ Valuation Model

⁴⁶ Valuation Model



Source: Capital IQ



Source: Valuation Model