

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.

Heineken N.V. Equity Research
“Brewing” new worlds

BRUNO MIGUEL WING VICENTE
Nº 29151

A Project carried out on the Master in Finance Program, under the supervision of:
Francisco Antunes da Cunha Martins

21/05/2021

Abstract

The Heineken N.V. is a multinational brewery that operates at a global level. Therefore, the company is highly exposed to what happens around the globe, and mainly due to the Covid-19 pandemic that affected the beer industry worldwide, it had to deal with constraints like the mandatory governments lockdowns and the closing of bars and restaurants, so there is a very uncertain future for Heineken and its share price.

This Equity Research Work Project includes a thoroughly performed analysis of the past and present of the company, using academic data bases available for Nova School of Business and Economics students, and it also includes expectations and forecasts for Heineken's future performance. A Discounted Cash Flow method was applied to evaluate the company, as well as a Multiples Valuation to compare it with its main competitors. A risk analysis was also performed with sensitivity and scenario analysis to evaluate potential outcomes if the most uncertain factors change. A target price for Heineken on 31st December 2021 was calculated and an investment recommendation was made for the potential investors who read this report.

Keywords:

M&A, Premiumization, e-Commerce, Covid-19

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

This report is part of the Heineken N.V. report (annexed) and should be read as an integral part of it.

Table of Contents

COMPANY OVERVIEW	5
Outlook.....	6
PERFORMANCE ANALYSIS	6
Operating costs	7
Returns.....	8
Financing and Working Capital ratios	8
Shareholder structure	8
BEER INDUSTRY OVERVIEW.....	9
Africa, Middle East and Eastern Europe	10
Americas.....	11
Asia Pacific	13
Europe.....	14
CIDER INDUSTRY OVERVIEW	15
BEER INDUSTRY TRENDS	15
FACTORS TO INHIBIT GROWTH.....	18

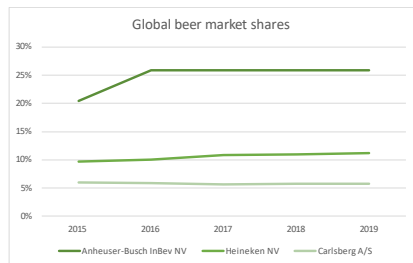


Fig.1- Top breweries global market shares (2015-2019)
Source: Company report; Euromonitor

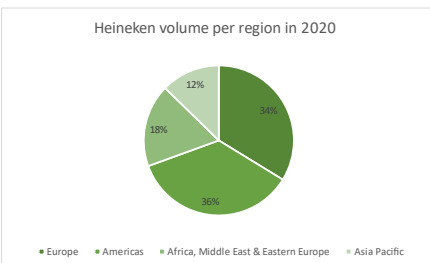


Fig.2- Heineken's volume per region in 2020
Source: Company report

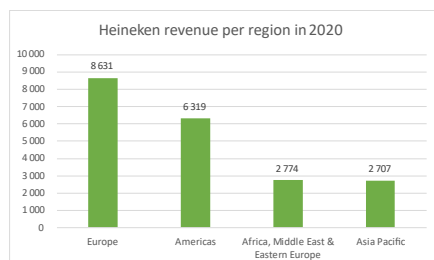


Fig.3- Heineken's revenue per region in 2020 (in million €)
Source: Company report

COMPANY OVERVIEW

The Heineken N.V. Company was founded in 1864, by Gerard Adriaan Heineken, in Amsterdam. The company produces and sells alcoholic beverages, namely beer and cider. According to the company's annual report, 25 million Heineken®'s are served per day across over 190 countries, making it the beer brand with the widest reach.

In terms of volume, Heineken is the second largest beer company in the world, only behind the Belgian brewery AB InBev (fig.1). It owns more than 300 brands, including Desperados, Sol, Tiger, Birra Moretti, Strongbow among many others, and operates over 165 breweries worldwide.

Its biggest segments are Africa, Middle East and Eastern Europe, which had 10.1% of Heineken's total operating profit (beia) in 2020, the Americas with 39.8%, Asia Pacific with 33.1%, and Europe with 17%.

In 2020, Heineken sold 221.6 million hectolitres of beer (41.8 of which from the Heineken brand). Its net revenue (beia) was €19,724m, with an operating profit of €2,421m (12.3% margin), meaning a final net profit of €1,154m.

Heineken N.V. shares are traded on Euronext Amsterdam, where the Company is included in the main AEX Index. In 2020, Heineken traded on average 129,130 shares daily.

In 2020, the Americas and Europe had 35.7% and 33.7% of Heineken's total beer volume, respectively, followed by Africa, Middle East and Eastern Europe with 17.9%, and by Asia Pacific with 12.7%(fig.2). In terms of revenue, Europe had the highest, followed by the Americas(fig.3). However, the biggest markets in terms of volume and revenues are not always the most profitable ones: Americas had the highest operating profit (beia) in 2020 with 39.8%, followed by Asia Pacific (33.1%) and Europe (17%). Africa, Middle East and Eastern Europe had only 10.1%. Due to the Company's global footprint, its revenue is exposed to strategic and financial risks that differ per region.

Its customer group can be split between the at-home market (or off-trade market), that covers all retail sales via supermarkets, hypermarkets, convenience stores or similar sales channels, and the out-of-home market (on-trade market), which encompasses all sales to hotels, restaurants, bars and similar service establishments.

The Company's goal is to create value, by focusing on its premium segment to drive growth and market share, improving its operating profit margins and reducing costs and inefficiencies, specially focusing on efficient deployment of capital and working capital efficiencies.

One fundamental point for Heineken's mission of delivering growth and becoming a more global brand is advertising. Heineken has partnerships with some of the most watched events in the world, which are key for advertising its products and reach the maximum people possible. However, advertising alcoholic drinks to a huge amount of people comes with responsibilities, and Heineken copes with them, improving responsible consumption awareness: "When You Drive, Never Drink" (fig.4) message was promoted on the Formula 1® platform. In 2020, where legally possible, all of Heineken's Formula 1® branding on the racetrack will be dedicated to Heineken® 0.0,



Fig.4- Heineken's responsible consumption campaign



Fig.5- Heineken is the official beer partner of EURO 2020.



Fig.6- Heineken is one of Champions League main sponsors.

Heineken's new non-alcoholic beer. Other examples of Heineken's huge marketing campaigns are becoming the Official Beer Partner of UEFA EURO 2020™(fig.5) and extending their UEFA Champions League partnership until 2024(fig.6). Heineken® reached hundreds of millions of consumers through its global sponsorship portfolio.

Outlook

Heineken's main objective is to improve its cost efficiency and develop its competitive advantages, in particular in the premium and cider markets. Through a number of acquisitions, Heineken has reached an optimal balance of both higher growth developing markets and more stable developed markets, and to build an extensive and complementary brand portfolio alongside its flagship Heineken® brand, the Company's strongest and their primary source of success, which helps to take advantage of premiumization trends globally. These factors help to explain why it remains a main focus for Heineken.

Over the last years, Heineken invested ahead of the premium volume growth, which limited its cost flexibility to mitigate the severe short-term pressures like the ones from the Covid-19, especially in the more profitable on-trade channels. Sales volume will recover in the coming years, but margin expansion is likely to be limited by emerging market transactional foreign exchange. Rising Net Debt-over-EBITDA ratio is also likely to limit scope for mergers and acquisitions in the short-term.

PERFORMANCE ANALYSIS

Heineken's performance and growth are driven by 2 key value drivers: revenue growth, which can be decomposed by the total volume of beer consumed and Heineken's market share, and the company's return on invested capital (ROIC).

Heineken was one of the most affected companies by the pandemic, as initially they presented globally superior annual growth rates of beer volume when compared to its main industry competitors, but ended up with a negative CAGR of -0,80%, way below the average of its main competitors (4,03%)(fig.7).

When we look at the net revenue (beia) from recent years, it increased until 2019 mainly by organic growth (that increased its market share), but also due to some new acquisitions (inorganic growth). 2020 was clearly an outlier year for the company's revenue, as it suffered a lot with the Covid-19 pandemic. The main reasons for this decrease were the mandatory lockdowns ordered by Governments at every part of the globe, the decrease in disposable income of consumers and also because people usually drink more beer when socializing with friends and at parties. Covid-19 produced significant negative effects on the company's revenues and performance, which can be seen on its key financial highlights. Revenues declined not only due to decreases in volumes but also due to foreign exchanges transactional effects. The total net revenue (beia) decline was 17.45%(fig.8). The operating profit (beia) decreased 39.8%, resulting in a net profit (beia) decrease of 54.2%¹.

In 2018 and 2019, a general increase in every segment can be verified, with few exceptions. However, in 2020, the Covid-19 negative effect can be seen in the net revenue growth: there was a general sharp decline in almost every segment, with all

Companies	CAGR [2016-2020]
Heineken	-0,80%
AB InBev	1,50%
Carlsberg	-2,20%
Molson Coors	22%
China Resources	2,40%
Asahi	3,70%
Tsingtao	1,60%
Average	4,03%
Median	1,60%

Fig.7- Top beer companies' revenues CAGR (2016-2020)
Source: Bloomberg

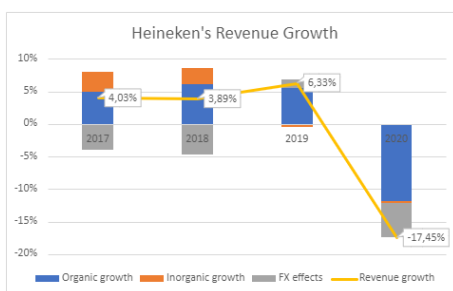


Fig.8- Heineken's revenue growth decomposition (2017-2020)
Source: Company report; Investors presentation

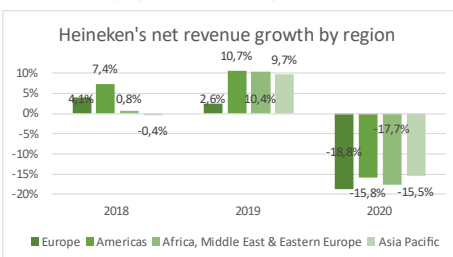


Fig.9- Heineken's net revenue growth by region (2018-2020)
Source: Company report

¹ According to the company's annual report

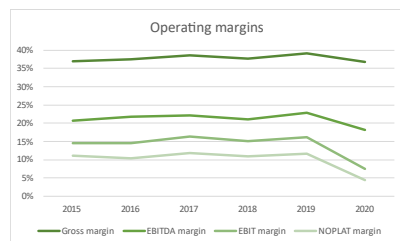


Fig.10- Heineken's operating margins

Source: Company report

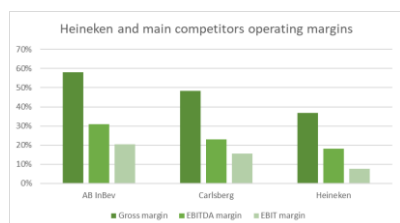


Fig.11- Heineken and main competitors' gross, EBITDA and EBIT margin

Source: Company report; Bloomberg

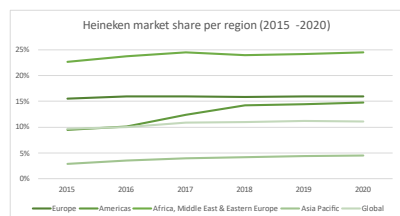


Fig.12- Heineken market share evolution per region

Source: Company report; Euromonitor

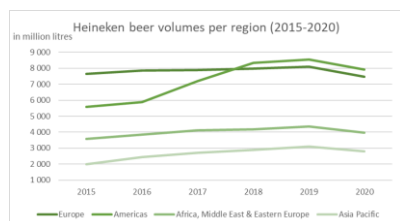


Fig.13- Heineken's beer volumes evolution per region

Source: Company report; Euromonitor

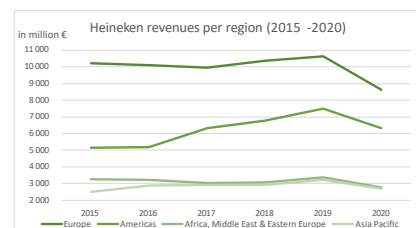


Fig.14- Heineken's beer volumes evolution per region

Source: Company report; Euromonitor

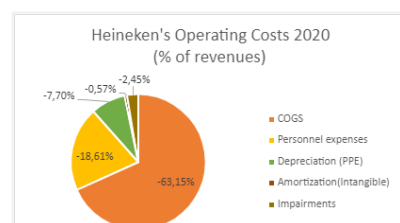


Fig.15- Heineken's operating costs (% of revenues)

Source: Company report

regions being heavily affected(fig.9). This effect is not expected to last for a long time, since the market is already recovering from the crisis caused by the global pandemic. Regarding consolidated beer volumes, there was an 8.2% decline in 2020², comparing with 2019, mainly due to the Covid-19 pandemic. The first quarter of the year was the worst, and after April, beer volumes started to gradually recover into June as lockdowns were lifted around the world and customers restored depleted inventories.

Over the past years, Heineken's margins have been constant. However, the negative effects of the pandemic led to a significant decrease on its margins in 2020, which are below its direct competitors AB InBev and Carlsberg(fig.10 and 11). AB InBev is clearly outperforming both of its main competitors, with an EBITDA margin of 30.80% last year against 23.10% and 18.24% of Carlsberg and Heineken, respectively. Regarding EBIT margins, AB InBev is also the clear winner, with a margin that is 2.5x larger than Heineken's. Carlsberg also has twice the value of the Heineken one, who struggles to compete with the others on this matter.

When we look at Heineken's market share by region(fig.12), we can observe stability with a slight increase from 2015 to 2020 in most regions. The Americas was the region with the biggest increase, mainly due to the Kirin Holdings acquisition in Brazil in 2017. The same conclusion as before can be drawn when we interpret the Company's beer volumes(fig.13) and its revenues(fig.14) per region. Europe is stable both in volumes and revenues as it is a market that is already saturated. The Americas is also a big market in terms of revenues and volumes, but it has more growth opportunities, especially since two of Heineken's most important markets are there (Brazil and Mexico). In the Asia Pacific, Heineken has been increasing considerably its volumes, showing signs of its growth prospects, and shows one of the regions where the Company is focusing its investment strategy.

Operating costs

Although raw materials, consumables and services (that is, the Cost Of Goods Sold) have been increasing in absolute terms over the past years (in line with the company's revenues), they have been decreasing as a percentage of revenues, which suggests that Heineken is achieving relevant cost savings and economies of scale. Personnel expenses have been following the same line, increasing in absolute terms but decreasing as a percentage of revenues. In fact, from 2018 to 2019, the company experienced the highest revenue growth rate and absolute value from the past 5 years, while simultaneously showing the highest operational efficiency gains. However, in 2020, due to the Covid-19 pandemic effects, these efficiencies were harmed, as the Company struggled with volumes sold as well as with the revenue and, therefore, the profit, and we have verified an increase in the operating costs as a percentage of revenues. This increase is not expected to continue in the coming years, with the Company recovering from the pandemic-generated crisis.

² According to the company's annual report

Returns

Heineken's Return on Invested Capital (ROIC) was above the industry average and median in 2020 (fig.16). When comparing the company's ROIC with its main competitors we observe a ROIC aligned with the industry's top players, higher than the one from Anheuser-Busch InBev, but lower than the one from Carlsberg. In 2020, the Company's ROIC increased in comparison with the previous year, due to an increase in the NOPLAT. Heineken is creating value since the return on the invested capital (ROIC=7.54%) is greater than its weighted average cost of capital (WACC=3.71%). Analysing Heineken's return on assets (ROA) and return on equity (ROE), ROE is in line with the competitors average and median, while ROA is slightly above the average. They are also above AB InBev but lower than Carlsberg, the same that happens with the ROIC.

Return on assets slightly decreased in 2020 due to the challenges faced with the pandemic. The same happened with return on equity. The company has a cost of equity (Re) of 4.43% which is lower than its ROE, meaning that the Company is creating value for its shareholders.

Financing and Working Capital ratios

Heineken presented an interest coverage ratio of 7.24x in 2020, decreasing from 10.39x in 2019 (fig.17). Even though the ratio decreased, it still suggests that the company has a strong and healthy financial positioning in order to survive future and unexpected financial crisis, such as the Covid-19 pandemic. The company also presented a decrease in Cash coverage in 2020 from 8.25x to 5.07x. It still means Heineken has a strong ability to meet its interest obligations and future borrowings and has a low probability of default, although it was harmed by the pandemic.

Heineken's cash conversion cycle was -109.9 in 2020, lower than the top competitors average (-60.20) (fig.18). This value can be explained by the fact that the Company has a disciplined working capital management. The days sales in inventory (operating cycle) had a high value of 182.48 in 2020, higher than the top competitors average (105.58), driven mainly by the days inventory outstanding (138.73) and by the high bargaining power with suppliers (292.37 accounts payable turnover days).

The Company is committed to a long-term target Net debt-to-equity ratio of below 2.5 (fig.19). This ratio is a measure of the company's leverage and of how well the company can cover its debt obligations. In the past 6 years, this ratio ranged from 2.6x to 2.81x. However, in 2020, this ratio increased to 3.4x, mainly due to the Covid-19 pandemic negative effects, which significantly decreased the company's EBITDA.

Heineken's dividend policy follows a dividend payout ratio of 30 to 40% of net profit before exceptional items and amortisation of acquisition-related intangible assets (net profit beia). In 2020 it exhibited a dividend payout of 34.9%³.

Shareholder structure

Heineken N.V. shares held by Heineken Holding N.V. equals the number of shares issued by Heineken Holding N.V.. Heineken Holding N.V. holds 50.005% of the

Companies	ROE	ROA	ROIC
Heineken	5,51%	4,05%	7,54%
AB inBev	1,95%	0,61%	0,39%
Carlsberg	14,57%	4,99%	8,90%
Molson Coors Beverage	-7,36%	-3,38%	-3,35%
China Resources Beer Holdings	10,24%	4,91%	11,15%
Tsingtao Brewery	11,06%	5,59%	9,54%
Average	6,00%	2,80%	5,70%
Median	7,88%	4,48%	8,22%

Fig.16- Industry top-players' return on capital
Source: Company report; Bloomberg

Financing	2018	2019	2020
Debt coverage (Net Debt/Operating EBITDA)	2,60	2,81	4,00
Interest Coverage (Operating EBITDA/ interest expense)	9,63	10,39	7,24
Cash Coverage (gross CF/interest)	7,46	8,25	5,07
Debt/Total book capitalization	0,79	0,89	1,00

Fig.17- Heineken's financing ratios
Source: Company report

Companies	Cash Cycle	Days Sales in Inventory
Heineken	-109,9	182,48
AB InBev	-183,55	111,76
Carlsberg	-120,45	85,11
Molson Coors Beverage	-41,85	63,6
China Resources Beer Holdings	69	116,71
Tsingtao Brewery	25,54	73,82
Average	-60,20	105,58
Median	-75,88	98,44

Fig.18- Industry top players' working capital ratios
Source: Bloomberg

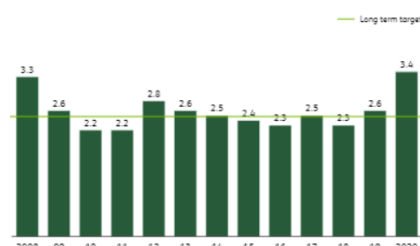


Fig.19- Heineken's long-term Net Debt/EBITDA target
Source: Heineken investors' presentation

³ According to the Company's annual report

Heineken N.V. issued shares. L'Arche Green N.V. holds 52.599% of the Heineken Holding N.V. shares. The Heineken family still owns the majority of the company, with 88.86% of L'Arche Green N.V.

By geography, the majority of Heineken N.V. shares are in Europe (37.4%), with strong concentration in the United Kingdom and Ireland (21.3%), and in the Americas (31.1%). Similar happens with the shares of Heineken Holding N.V., with 38.1% in the Americas, 28.9% in the United Kingdom and Ireland and 8.8% in the rest of Europe.

Heineken's share price has been fluctuating in the most recent years, although with a general increase (fig.20). The most recent decrease was due to the effects of the Covid-19 crisis, as seen globally. The Company has a dividend policy that intends to preserve the independence of the Company, to maintain a healthy financial structure and to retain sufficient earnings in order to grow the business both organically and through acquisitions⁴. Heineken pays an interim dividend and a final dividend. The interim one is fixed at 40% of the total dividend of the previous year, and the annual dividend proposals will remain subject to shareholder approval. Therefore, we do not expect any consequences in the value of the company coming from its shareholder structure, at least in the short-term.

In 2020, no interim dividend was paid, helping to explain the decrease in the total dividends paid when comparing with the previous years, from 1.68€ in 2019 to 0.70€ (fig.21).

BEER INDUSTRY OVERVIEW

Beer is one of the oldest and most consumed drinks in the world, surpassed only by water and tea.

The brewing industry is a global business, consisting of several dominant multinational companies (like Heineken) and many thousands of small and regional breweries. In 2020, the total beer volume sold decreased 9.87% in comparison with 2019, with around 181 billion litres⁵.

According to the Statista Consumer Market Outlook 2020, the worldwide beer revenue is expected to increase at a total CAGR of 4.3% from 2012 to 2025, while beer volume sales will grow annually by 0.4% in the same period. However, due to the Covid-19 impact, the beer revenue in 2020 was lower than the initial forecast (fig.23), but it is expected to recover in the coming years.

Roughly half of value sales of beer are generated via out-of-home sales channels (fig.24). However, in 2020, the beer consumption at home increased due to the lockdowns ordered by the Governments because of the pandemic. Generally, the profit margins of beer processors, when selling to on-trade customers, are much higher than those of selling to off-trade customers, justifying the great impact of the Covid-19 on the industry.

The five biggest companies operating in the Beer segment are AB InBev, Heineken, Carlsberg, China Resources Breweries and Molson Coors. AB InBev led the market with 25.9% market share in 2019, followed by Heineken and Carlsberg, with 11.2%



Fig.20- Heineken's share price in € (2015-2020)
Source: Bloomberg

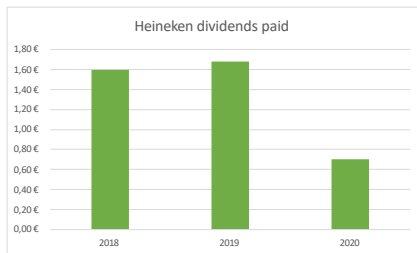


Fig.21- Heineken's dividends paid (2018-2020)
Source: Company report

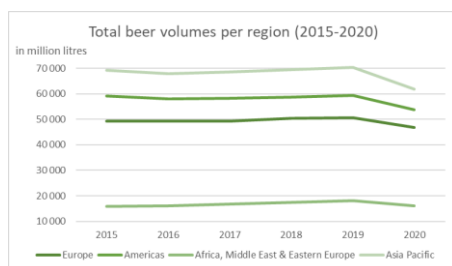


Fig.22- Total beer volumes per region (2015-2020)
Source: Euromonitor

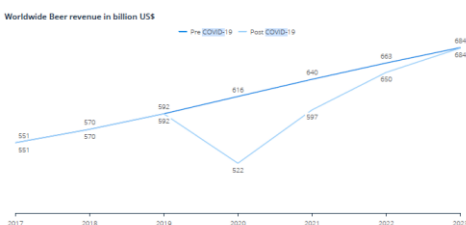


Fig.23- Worldwide beer revenue forecast
Source: Statista Consumer Market Outlook

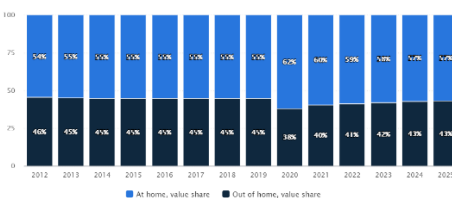


Fig.24- At home vs. Out of home beer value share
Source: Statista

⁴ According to the company's reports

⁵ According to Euromonitor

Company	2017	2018	2019
Anheuser-Busch InBev NV	25,9%	25,9%	25,9%
Heineken NV	10,9%	11,0%	11,2%
Carlsberg A/S	5,7%	5,8%	5,8%
China Resources Holdings Co Ltd	6,1%	5,7%	5,7%
Molson Coors Brewing Co	4,8%	4,6%	4,5%

Fig.25- Industry top-players' market share (2017-2019)
Source: Company report; Euromonitor

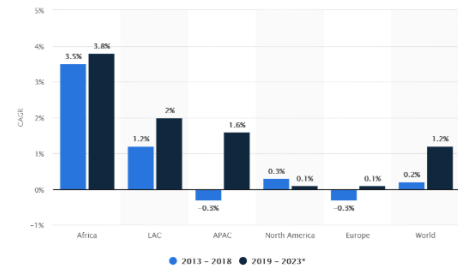


Fig.26- CAGR of beer worldwide, by region, from 2013 to 2023
Source: Statista

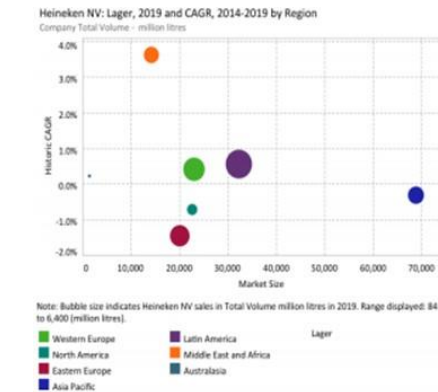


Fig.27- CAGR of beer worldwide and market sizes by region, from 2014 to 2019
Source: Euromonitor

and 5.8%, respectively. China Resources Breweries had 5.7% and Molson Coors 4.5%(fig.25). Together, the 5 biggest companies by volume own more than half of the global market, which highlights the advanced degree of consolidation and concentration in the brewery industry. The beer market is characterized by saturated volume sales, meaning that organic growth tends to be slow, so the industry players try to overcome this with increased mergers and acquisitions, as well as with premiumisation strategies. Therefore, market share growth occurs usually inorganically (through acquisitions). AB InBev market share is nearly one-third of the market because with the SABMiller acquisition in 2016, it has expanded its lead over the main competitors. Since then, the company's market share has remained stable. Therefore, in the beer industry, acquisitions help to shape the global beer landscape. Heineken has been increasing its market share, although at a slow pace: from 2014 to 2019, its market share increased 1%, benefitting from the strong growth in the emerging markets of Asia Pacific and the acquisition of Kirin Brazil in 2017. Since 2007, Heineken spent over 40 billion euros on acquisitions.

AB InBev and Carlsberg are the main competitors of Heineken. The three companies' rivalry is intensified by their shared emphasis on the higher end of beer. Heineken competes directly with AB InBev mostly in the Americas, especially in Mexico, Brazil and the United States (the most struggling market for Heineken). In Europe, Heineken's main competitor is Carlsberg, with Asahi also growing in recent years. AB InBev and Heineken have a fairly well-balanced geographic split, with all regions contributing to sales, while Carlsberg relying primarily in three regions, being Western Europe the most important one.

The non- and low-alcohol beer segment is expected to grow at the highest CAGR in the coming years⁶. Because of this consumers' inclination toward low-alcohol or non-alcohol beers, the overall beer market is getting a boost. The craft segment is also expected to grow in the coming years, aid by the rise in the demand for premium and flavoured beers.

Regarding Heineken's operating segments, we can observe that smaller markets like Africa and Middle East have been growing the most in the recent years, and it is expected to continue in the years to come, while bigger markets like Western Europe and Latin America have lower CAGRs(fig.26 and fig.27). Asia Pacific has not been growing, with a negative CAGR close to 0%, but it already is a big market in terms of volume, and in the coming years it is expected to increase its size, with a 1.6% CAGR from 2019 to 2023. Latin America, one of Heineken's main focus for the future, is expected to increase at a good rate⁷.

Africa, Middle East and Eastern Europe Market

Africa, Middle East and Eastern Europe saw its beer volume reduced by 10.65%. South Africa operations suspended from late March to May and reintroduced a new ban on sale of alcohol in July. However, Heineken 0.0 triplicated its growth, and

⁶ According to Passport: Euromonitor forecasts
⁷ According to Statista

Nigeria gained market share. Heineken's premium portfolio continued to grow in 12 markets, including Nigeria, Ethiopia and Ivory Coast.

Africa as a continent has the lowest beer per capita consumption globally. However, with 15% of the world's population, rising disposable income and increasing urbanisation, Africa is also the fastest growing segment. The five-year CAGR of beer consumption between 2015 and 2020 in Africa was 5.25%, 3% in the Middle East and North Africa, and 0.4% in the Eastern Europe. The CAGR from 2019 to 2023 is forecasted to be 3.8% in Africa, according to Euromonitor(**fig.27**).

Lager is the main growth driver in the market, but other types of beer are also becoming more important. In the countries with lower disposable incomes, consumers buy cheaper products (like economy lager), maintaining volume growth rates in the region. Craft beer is also trending in the region, and it helps to add dynamism to the market.

The majority of beer markets in the region are highly consolidated, and the top brewers usually account for most of the local sales. Heineken is the second biggest player in the region, with a presence across most of it, only behind AB InBev, who took advantage of the SABMiller acquisition in 2016 to become the leading player.

The Covid-19 impact in the region was particularly strong, with the measures to limit the spread of the virus also harming the economy, decreasing consumers' purchasing power and reducing consumption.

In the Middle East and Africa, Heineken's market share has been stable(**fig.28**). In Eastern Europe, the biggest player on the market is Carlsberg AS, with 19% of the total volume in 2019. It is a very competitive market, with Heineken and Asahi very close to Carlsberg in terms of market share (with 17.5% and 16.3%, respectively) (**fig.29**). In recent years, Carlsberg has been losing market share to its competitors.

Heineken

The second smallest of the four main segments of Heineken by volume. In 2020, had a consolidated beer volume of 39.6 million hectolitres (17.9% of total), representing a net revenue of €2,782 million and an operating profit (beia) of €264 million (10.1% of total). The segment's key brands are Heineken®, Primus, Amstel, Mutzig, and Life.

Despite its relatively small size, the segment's premium portfolio is performing very well, having a double-digit growth in Africa, Middle East and Eastern Europe. The brand Heineken® continued to perform well, especially in South Africa, where it is leading the premium segment and being well received by consumers, Nigeria and Russia, with Heineken®0.0 driving the growth in the non-alcohol beer segment.

Heineken is currently leading the craft segment in South Africa, with the South African craft brand Jack Black gaining popularity in urban areas and the recent acquisition of Stellenbrau, a craft brewery from Stellenbosch⁸.

The segment's low- and non-alcohol category is performing well, with high growth across malt-based beers and Radlers.

Americas

Market

Middle East and Africa beer market share

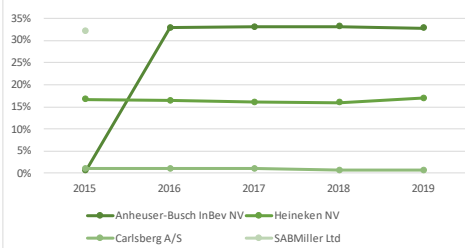


Fig.28- Middle East and Africa market share (2015-2019)
Source: Company report; Euromonitor

Eastern Europe beer market share

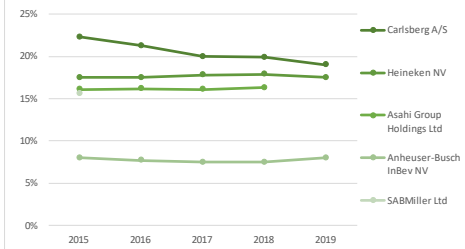


Fig.29- Eastern Europe market share (2015-2019)
Source: Company report; Euromonitor

⁸ According to the company's reports

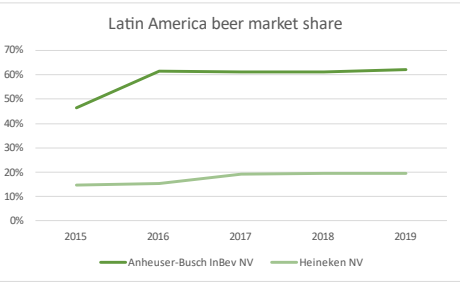


Fig.30- Latin America market share (2015-2019)
Source: Company report; Euromonitor



Fig.31- North America market share (2015-2019)
Source: Company report; Euromonitor

The Americas is the second largest beer and cider market in the world, with a total Beer volume in 2020 of 53,662 million litres. The beer consumption has been stable in the last years. The five-year CAGR of beer consumption between 2015 and 2020 in North America was 1.2%, and in the Latin America 2.65%.

Brazil and Mexico are the countries that stood out by delivering solid results, driving profit growth in the region, and are two of the most important markets for Heineken. These countries are also among the biggest beer producers worldwide, and Mexico is one of the most favourable markets for beer manufacturers to expand, due to the rising demand for beer and availability of raw materials. In Brazil, the Kirin's assets acquisition gave Heineken large exposure to a huge beer profit pool, enabling the company to guide consumers towards its premium offerings.

The US market is challenging. The millennials, one of the largest demographics in the US population, are a targeted segment of breweries, and this segment is expected to grow in the coming years. Thus, North America is expected to have a high growth in the next years.

The beer market shows us a trend toward higher priced specialty products that offer new taste experiences to consumers even if at premium prices, especially in the US. Craft beer has been trending for a long time, with its share of total beer production increasing from 7.8% in 2013 to 13.2% in 2018. In 2000, it was only 2%.

Heineken

Heineken's second biggest and most important segment by volume, with a consolidated beer volume of 79.1 million hectolitres in 2020, representing 35.7% of the Company's total. The segment's net revenue (beia) was €6,319 million, with an operating profit of €1,045 million. Heineken's key brands are of course Heineken®, along with Tecate, Dos Equis, Schin, and Lagunitas.

The premium and mainstream portfolios in Brazil had a positive growth, led by Heineken® and Amstel, and it helped the Company to achieve its highest market share ever, now with value share ahead of volume share. In Mexico, Heineken® achieved a double-digit growth. AB InBev and Heineken dominate the Mexican beer market. Heineken's performance in the region has been affected by the pandemic and alcohol bans by the governments, but a solid recovery is expected in the coming years. Non-alcoholic beer is a fast-growing category in Mexico and Heineken's leading position in non-alcoholic beer globally (especially with the global rise of Heineken 0.0) means it is well placed to capitalize on this trend.

In Brazil, although AB InBev holds a strong lead with 63% of the national beer market and 78% of the premium lager segment, the acquisition of Kirin by Heineken in 2017 helped not only to increase its market share in the country, but also to benefit from strengthening its operational independence, allowing it to compete more directly with AB InBev.

The competitiveness of the US segment can be seen with the Company's market share in the North America(fig.31): in 2019, Heineken had only 4.29% of the market, while AB InBev, the leading company, had 42.19%. However, more focused campaigns resulted in positive trend changes with Heineken® and Dos Equis, and Heineken® 0.0 has been the fastest growing brand extension in the US, and is now

sold also in Canada, Mexico, Puerto Rico, Chile, French West Indies and West Caribbean. Lagunitas' US market share is stabilising in the context of fierce competition in the craft market. The brand is now being sold in 35 markets globally. In May 2019, Heineken acquired a majority stake in Biela y Bebidas del Ecuador⁹, a fully operational brewery in Ecuador. It has a strong growth potential for the Company's premium offering led by Heineken®, with its favourable demographics, increasing tourism industry and GDP growth.

Asia Pacific Market

The Asia Pacific region accounted for about 34% of the total beer volume in 2020, with 61,901 million liters (a 12% decrease comparing to 2019) due to the effects of the pandemic, but it is expected to recover in the coming years. The region is witnessing a growing trend of premiumisation and low- and non-alcohol beer due to its health benefits, as also seen in other parts of the world. With 376.53 million hectolitres, the Chinese beer market is the largest in the world.

The market was also impacted in 2020 by the Covid-19, however, it was the first one to recover, mainly in China, and in 2021 it is expected to outperform all of the other regions.

The Asia Pacific market is still expected to grow in the coming years, due to the increasing demand for the product from countries such as China, India, and Australia in the region. The five-year CAGR of beer consumption between 2015 and 2020 in Asia was 3.05%¹⁰. The current segment leader is the China Resources Holdings, with 16.3% in 2019, followed by AB InBev and Tsingtao Brewery, with 13.09% and 11.48%, respectively (fig.32).

Heineken

Asia Pacific is the smallest operating segment of Heineken. In 2020 it had a consolidated beer volume of 28.1 million hectolitres (12.7% of the Company's total). Its net revenue (beia) was €2,707 million, resulting in an operating profit (beia) of €867 million. The segment's key brands are Heineken®, Anchor, Larue, Tiger and Bintang.

Although it is still small for Heineken, the region has a lot of growth possibilities. This is why it is a key expansion focus in the company's strategy. Heineken has been increasing its market share in the region (from 2.39% in 2014 to 4.18% in 2019). Because of this, Heineken sold its three Chinese breweries to China Resources Beer, and took a 40% stake in CRB's holding company, gaining access to the world's largest beer market (second biggest for premium segment). The benefits of this acquisition might not be seen in the short-term due to the impact of Covid-19, but it will undoubtedly have a positive impact for Heineken in the region. This acquisition was a win-win situation both for Heineken and for China Resources Beer, as the brand Heineken is filling a gap in the Chinese company's premium offerings, while Heineken gained access to the whole country (China accounted for 23% of the global beer

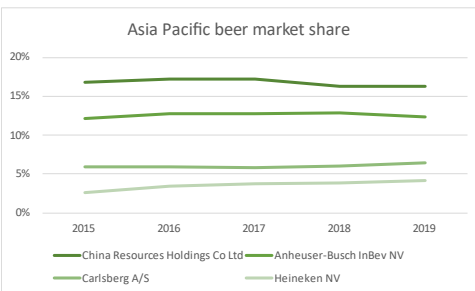


Fig.32- Asia Pacific market share (2015-2019)
Source: Company report; Euromonitor

⁹ According to the Company's website

¹⁰ According to Passport: Euromonitor

volume in 2019, according to Euromonitor). Asia is expected to be the main driver of beer-volume growth globally over the next decade, due to its young, urban population bias.

However, tourism bans and lower exports are threatening economies across the segment, like in Cambodia and Indonesia. Vietnam, however, is the leading market in the region, mainly due to the increased urbanization, changing lifestyles, tourism and increasing purchasing power. The acquisition of Tiger brand from Singapore in 2012 helped the company's focus on Asia Pacific, and it's now its third largest brand globally. Heineken® became the number one brand in the premium segment in South Korea, and the brand's sales in Japan were boosted to the highest level in 25 years, due to the main sponsorship of the Rugby World Cup, hosted in the country for the first time.

Europe

Market

Aging populations and cultural shifts that lessen the social importance of alcohol consumption and promotes health and wellness are a problem to the beer industry in the Western Europe. In 2020, the beer volume decreased 7.59%. The on-trade decline amplified operational deleverage, and the off-trade market grew mainly due to the continued growth of premium and market share gains in many markets, including UK, France, Italy and the Netherlands¹¹.

Europe has a long and established brewing tradition. The five-year CAGR of beer consumption in the Western Europe between 2015 and 2020 was 0.15%, the lowest of all segments, as the market is already mature.

However, there is plenty of growth potential to be realized in the craft beer segment in the future. New trends like the evolution of craft breweries, their diversification and the change in consumer patterns might pose a challenging environment in the times ahead. Due to these reasons, Europe remains an attractive and valuable market for beer and cider.

Heineken

Europe is one of Heineken's biggest segments by volume, with a consolidated beer volume of 74.8 million hectolitres (33.7% of total). This resulted in a net revenue (beia) of €8,631 million, and an operating profit (beia) of €447 million (17% of Heineken's total). The segment's key brands are Heineken®, Cruzcampo, Birra Moretti, Desperados and Strongbow.

The focus on premiumisation and innovation maintained positive results on the segment, as Heineken® reported an organic volume growth of 3.1%.

Heineken's strategy in Europe is to provide variety and choice through their Zero Zone range of low- and non-alcohol beverages. The cider category is an emerging market, and the craft category is also on the rise and grew significantly in 2019.

In Europe, Heineken is well positioned in the context of economic market evolution with still a bit of growth potential in its key markets. The brewing industry has always been diversified in Europe. As the region is Heineken's biggest segment, it is not

¹¹ According to the company's reports

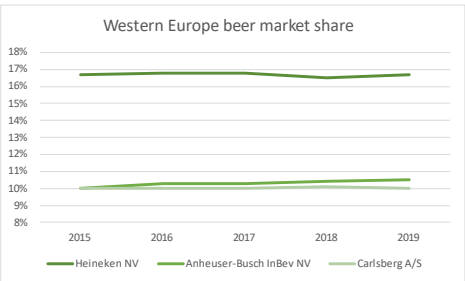


Fig.33- Western Europe market share (2015-2019)
Source: Company report; Euromonitor

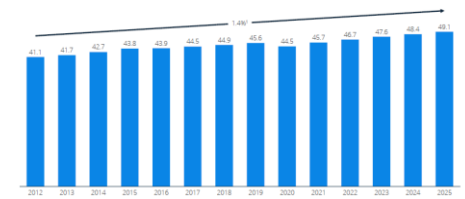


Fig.34- Cider volume CAGR forecasts (in billion liters)
Source: Statista

surprising that the Company is leading the segment with 16.73% of market share in 2019, ahead of AB InBev, with 10.32%, and Carlsberg with 10.01%(fig.33). The market shares of the 3 biggest companies in Europe have been stable over the past years, and as Europe is a mature market, the competitive landscape is not forecasted to change considerably.

Cider industry overview

Cider is one very important segment for Heineken, who is the biggest player in the market globally and has been working on expanding geographically with local production. Heineken competitors AB InBev and Carlsberg have also been expanding their involvement in the cider market, with Carlsberg ranking fourth globally and AB InBev ranking fifth. Cider's similarities in production, distribution and consumption patterns make it an easy alternative to diversify beyond beer.

In 2019, Asia had the biggest revenue share with 45%, followed closely by Africa with 38%. Europe and Americas had 10% and 7% respectively. Although Africa is already a big market, there is a lot of growth potential.

In Europe, it is expected that the segment's sales will increase at a CAGR of 3.97% from 2019 to 2025, while in the Americas, it is expected to increase at a CAGR of 16.76% from 2019 to 2025. Asia is a pretty matured market already, so the sales are expected to increase at a CAGR of 1.09% between 2019 and 2025. Africa is already a big Cider market, but there's plenty of growing potential, with the sales increasing at a CAGR of 10.98% from 2019 to 2025¹². Regarding cider volumes, it is expected that from 2012 until 2025 the segment grows at a CAGR of 1.4%(fig.34)¹³.

Heineken's leading position in the market is due to its ownership of the top brand Strongbow, 74% of Heineken's cider sales volume in 2019. In 2020, Heineken acquired Strongbow from Asahi in Australia, following Asahi's purchase of Carlton & United Breweries.

Beer Industry Trends

AB InBev alone today commands a volume market share of almost 30% worldwide, and together, the five biggest brewers command a share of more than 50% of global production, highlighting the advanced degree of consolidation and concentration in the brewery industry.

Although the market was severely impacted by the pandemic, global beer production is expected to recover in the coming years, associated with middle class expansion in emerging markets, government investment in infrastructures and recovery in the business-to-business segment. In 2030, Asia Pacific is expected to account for 45% of the global beer production¹⁴, supported by the growth in consumer incomes and exports mainly in China, India, and Japan.

Industry competitiveness

The beer industry is expected to remain competitive in the coming years. Product launches by the companies will help to increase demand in a market with numerous

¹² According to Statista forecasts.

¹³ According to the Statista Consumer Market Outlook 2020 forecasts.

¹⁴ Source: Passport, Euromonitor

manufacturers who compete in both prices and quality. Companies are adopting strategies such as innovative product launches, partnerships, and mergers and acquisitions to gain advantages against their competitors.

Emerging markets hold value for brewers

Although mature markets play the key role in value sales for Heineken and its main competitors due to the higher prices and stronger premiumization trends, emerging markets are also a significant part of the business (especially Latin America and Asia Pacific). Due to the low prices, volumes in these regions usually translate into lower value sales, but still account for a major proportion of the companies' total beer sales.

Digitalization

With the pandemic, companies are also looking to reduce their exposure to the on-trade channels, by investing in new technologies and becoming more digitalized. Investing in production automation and digital tools that can help to comply with new health measures and increase operational flexibility are measures manufacturers can take to reduce their risk against similar situations in the future. Growth will also be driven by the need to invest in new sales channels and changing consumer preferences.

E-Commerce

This continuing trend toward premiumization leads to opportunities for growing eCommerce sales. Compared to non-food consumer goods, online sales channels are still relatively underdeveloped, but specially with the pandemic, these sales are expected to grow a lot in the coming years. Beer is also a good that is easily sold online due to its durability and ease in storage, and it makes it easier for small producers who do not have the scale to build and maintain a classical distribution chain to take their products to bars and supermarkets and are thus able to sell directly to consumers without the need for a complex traditional distribution chain. The mandatory government lockdowns together with the closing of bars, pubs and restaurants, has boosted the eCommerce sales of beer, as people found themselves in a situation where even going to the supermarket can be difficult because of the pandemic. E-Commerce has driven triple-digit growth in the sales of alcoholic beverages¹⁵.

Beerwulf

Heineken's business-to-consumer platform in Europe, which according to the Company's annual report had more than 10 million visitors in 2020 (49% of them new). It helped to increase beer revenues in high double-digits, as consumers changed shopping patterns with the lockdowns.

Premiumization: craft and flavoured beers

Consumers are shifting its preferences towards the allure and taste of smaller craft breweries and craft beers, as well as flavoured drinks like hard seltzers. These types of beers are growing at a fast rate, while the premium beer is already a mature market. In Europe, mainly, there is a lot of growth prospects. We can expect that the biggest players will continue to create their own craft beer and hard seltzer brands, but also

¹⁵ According to the Beverage Industry, June 2020

acquire craft breweries and even the many independent breweries or local breweries that are rapidly springing up worldwide.

With the recent premiumization of the market, beer producers across the world have been focusing on quality rather than quantity. The market has witnessed an increased number of small independent breweries, which sell locally and directly to consumers, taking advantage of the unique experience they are able to create for consumers.

Lagunitas is Heineken's leading craft brand, available in more than 35 countries, according to the company's annual report 2019. The brand also opened the door to the cannabis beverages in the United States. Cannabis beverages are expected to gain greater popularity in the future, so Heineken might take advantage of an early representation, especially because its rivals are also exploring new opportunities in this market.

The Covid-19 pandemic affected the craft beer segment in the short-term, as consumers were led to cheaper choices in the market and also with the collapse of the on-trade segment, as it plays a very significant role for craft.

Hard Seltzer

Hard seltzer has been growing at a fast pace over the past years and disrupting the beer segment. Top brewers are entering the expanding hard seltzer category. With a rising number of options available, the need to stand out and differentiate is clear, so companies are expected to use different ingredients and different alcohol-by-volume ratios. Due to the risk of HS disruptions, several big players started accelerating its investments, and new launches are expected to continue to keep the category's dynamic in 2021. The hard seltzer segment was initiated by brands owned by smaller companies, but the top brewers are leading international expansion efforts.

Company's such as ABI have entered this market with an enormous success by launching the Bud Light Seltzer in the U.S with high market share performance. However, competition has been increasing. New brands led by Anheuser-Busch InBev have also entered the market with many launches coming in 2021, including entry by Heineken, that has to overcome challenges in generating interest and awareness for the category outside of the US.

Low and non-alcohol beers

Interest in low and non-alcohol beers has been growing in the recent years. However, with the pandemic affecting our everyday lives, consumers' focus on health has been increasing even further, leading to higher interest in the category. Heineken has been working to increase its presence in the category, and is leading in several key non-alcoholic markets, with its main brand Heineken 0.0. Its competitors are also expanding in this category, like AB InBev with Budweiser Zero.

Heineken 0.0 is available in 69 countries worldwide, according to the company's annual report. The company's main brand Heineken strong performance has been supported by its expansion into this new segment, particularly in Western Europe. Although Heineken has historically limited extensions of its flagship brand to avoid weakening its reputation, Heineken 0.0 is an example of a brand extension that aligns with changing demand trends and enhances its flagship brand's reputation.

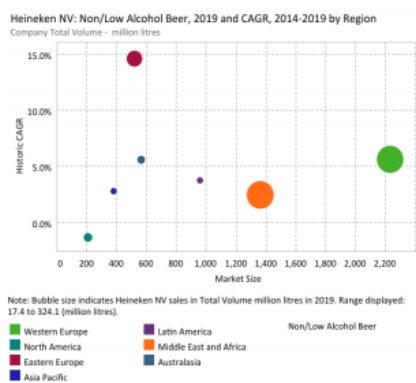


Fig.35- Non and low-alcohol beer CAGR by region
Source: Euromonitor

IPAs

India Pale Ales have been the subject of several beer trends over the past few years and becoming more popular, with new variations popping up. Lighter IPAs with fruity and dry profiles might be a big trend in the coming years.

Factors to inhibit growth

Taxation and higher excise duties on beer, increased health awareness among consumers, fluctuating rate in employee retention and uncertain consumer spending due to economic conditions with the pandemic crisis are factors that might inhibit the growth of the beer market. Climatic changes, strict government regulations and emergence of inexpensive substitutes are other factors that are anticipated to impede sales of beer in the upcoming years.

Covid-19 short-term impact

Covid-19 has brought the world to a standstill, with a health crisis that severely impacted businesses across industries. The short-term impact of Covid-19 on the beer market is high, mainly due to the closing of restaurants and bars, inhibiting an important industry sales channel. The long-term impact, however, is expected to be low, because the beer industry historically sees minimal last impact after recessions.

Demographics

Changing age structures and increasing awareness on health and wellbeing are factors that put pressure on beer volume consumption. In many countries, alcohol consumption peaks in younger years and declines with age, which can be explained by the social life constraints of people over 30 due to family or professional commitments. Medical impediments also tend to specially affect the older population, limiting their alcohol consumption. Millennials are more aware about health and wellness than the previous generations, with healthier lifestyle movements making volume consumption of alcohol flat and even falling in most countries around the globe. Countries such as the US and the UK have been reporting mostly stable consumption while Western Europe, like Italy and Germany have been declining. Emerging countries, such as China and India have been growing in the past years but appear to be reaching their respective saturation levels, with volume growth expected to stagnate in the future.

However, positive prospects of consumer spending in industrialized countries and the middle-class affluence emergence in Asia make good indicators of further premiumization of the market.

Brazilian Real Fluctuations

As stated before, Brazil is one of Heineken's most important countries. This brings risks to the Company, mainly its currency: the Brazilian Real has been fluctuating and depreciating a lot against the Euro and its future is uncertain. It depreciated a lot in 2020, as investors try to avoid the Brazilian market risk. Against the dollar, for example, it has depreciated 29% in 2020¹⁶, one of the worst global performances. Against the Euro, it has been depreciating since 2017 (fig.37). Some factors contributing to this depreciation are the low return for investors against the risk taken, and the damages caused by the pandemic, which put Brazil on a crisis that they are not

Worldwide population by age group

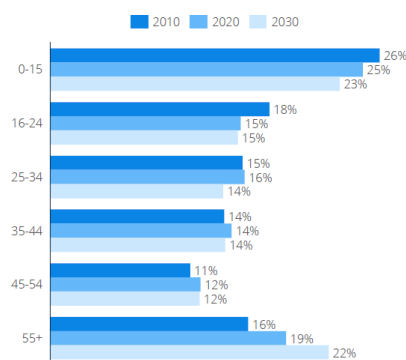


Fig.36- Worldwide population by age group
Source: Statista



Fig.37- Brazilian Real to Euro exchange rate
Source: Bloomberg

¹⁶ “Exchange rate imbalance between the Brazilian real and the dollar will persist in 2021, say analysts”, Latin America Business Stories, 2020

expected to recover from in the near-term. All of this can result in losses to Heineken, and the Company has calculated a negative currency translational impact of approximately 570 million euros in net revenue (beia), 100 million euros at operating profit (beia) and 50 million euros at net profit (beia), using the spot rates of 19 April 2021 to last year's financial results as a baseline¹⁷.

¹⁷ According to the Company's First-Quarter Trading Update

Appendix

“HEINEKEN N.V.”

“ALCOHOLIC BEVERAGES”

COMPANY REPORT

21 MAY 2021

STUDENT: “TERESA REBELO DA SILVA & BRUNO VICENTE”

29076@novasbe.pt

29151@novasbe.pt

“Brewing” new worlds

Dealing with changing consumer preferences in the context of a pandemic

- Low- and non-alcohol beers were already important segments, but the Covid-19 pandemic increased consumers awareness about health. This means that in the coming years we are expecting to see an even further increase in the segment volumes, becoming more and more important as people get more aware.
- Heineken is leading in several markets in the non-alcohol segment with Heineken 0.0, available in 69 countries worldwide. Heineken is promoting this brand a lot, mainly through advertising in big events, due to its potential for the company.
- Heineken’s performance and market share highly relies on M&A deals. The company has spent over 40 billion € on acquisitions since 2007, due to the advanced degree of consolidation and concentration in the brewery industry. Organic growth tends to be slow, so players try to overcome this with increased mergers and acquisitions and premiumisation strategies. Recently, Heineken’s major acquisitions were a 40% stake on China Resources Beer Enterprise to launch itself further into the Asia Pacific market, and Kirin Holdings in Brazil.
- Heineken owns the cider brand Strongbow, which makes it the biggest player in the market. Strongbow represented 74% of Heineken’s cider sales volume in 2019. In 2020, the company acquired Strongbow from Asahi in Australia.

Company description

Heineken N.V. is a Dutch-based brewing company founded in 1864. It owns more than 300 brands sold in over 190 countries and operates more than 165 breweries. It is the second biggest brewer in the world in terms of beer volumes, only behind AB InBev. Heineken’s biggest operating segments are the Americas and Western Europe. The Company has a strong presence in Africa, Middle East and Eastern Europe, and while Asia Pacific is its smallest segment, it is one of the key focus to expand in the future.

Recommendation: **SELL**

Vs Previous Recommendation -

Price Target FY21: **89.51 €**

Vs Previous Price Target -

Price (as of 31-Dec-20) **91.22 €**

Reuters: HEIN.AS, Bloomberg: HEIA:NA

52-week range (€) 74.26-100.40

Market Cap (€m) 52,508,567.050

Outstanding Shares (m) 575,625.598

Source: Bloomberg, Company report, Analyst estimates



Source: Bloomberg

(Values in € millions)	2020	2021E	2022F
Revenues	19 715	21 375	22 745
Gross Profit	7 265	8 048	8 758
Gross Profit Margin	36,9%	37,7%	38,4%
EBITDA	3 596	4 484	5 251
EBITDA Margin	18,2%	21%	23,1%
EBIT	1 482	2 967	3 626
EBIT Margin	7,5%	13,9%	16%
NOPLAT	891	2 095	2 589
NOPLAT Margin	4,5%	9,8%	11,4%
Core ROIC	7,5%	20,8%	26,7%
DPS	0,7	1	

Source: Company report, Analyst estimates

Table of Contents

COMPANY OVERVIEW	3
OUTLOOK	4
PERFORMANCE ANALYSIS	4
OPERATING COSTS	5
RETURNS	6
FINANCING AND WORKING CAPITAL RATIOS	6
SHAREHOLDER STRUCTURE	7
BEER INDUSTRY OVERVIEW	7
AFRICA, MIDDLE EAST AND EASTERN EUROPE	9
AMERICAS	10
ASIA PACIFIC	12
EUROPE	13
CIDER INDUSTRY OVERVIEW	14
BEER INDUSTRY TRENDS	14
FACTORS TO INHIBIT GROWTH	17
FORECASTS	18
INCOME STATEMENT	18
BALANCE SHEET	27
VALUATION	30
DISCOUNTED FREE CASH FLOWS	31
SENSITIVITY ANALYSIS	31
MULTIPLES	32
SCENARIO ANALYSIS	33
APPENDIX	34
FINANCIAL STATEMENTS	34
DISCLOSURES AND DISCLAIMERS	36
REPORT RECOMMENDATIONS	36

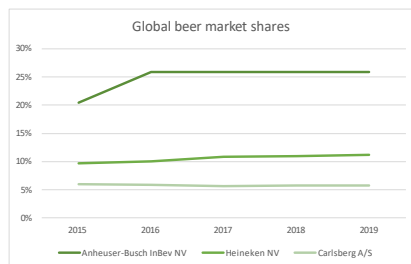


Fig.1- Top breweries global market shares (2015-2019)
Source: Company report; Euromonitor

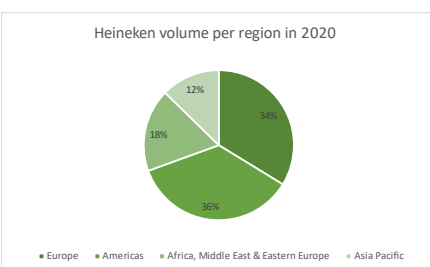


Fig.2- Heineken's volume per region in 2020
Source: Company report

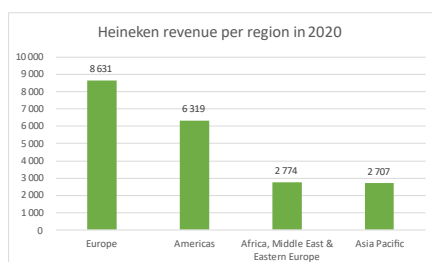


Fig.3- Heineken's revenue per region in 2020 (in million €)
Source: Company report

COMPANY OVERVIEW

The Heineken N.V. Company was founded in 1864, by Gerard Adriaan Heineken, in Amsterdam. The company produces and sells alcoholic beverages, namely beer and cider. According to the company's annual report, 25 million Heineken®'s are served per day across over 190 countries, making it the beer brand with the widest reach.

In terms of volume, Heineken is the second largest beer company in the world, only behind the Belgian brewery AB InBev (fig.1). It owns more than 300 brands, including Desperados, Sol, Tiger, Birra Moretti, Strongbow among many others, and operates over 165 breweries worldwide.

Its biggest segments are Africa, Middle East and Eastern Europe, which had 10.1% of Heineken's total operating profit (beia) in 2020, the Americas with 39.8%, Asia Pacific with 33.1%, and Europe with 17%.

In 2020, Heineken sold 221.6 million hectolitres of beer (41.8 of which from the Heineken brand). Its net revenue (beia) was €19,724m, with an operating profit of €2,421m (12.3% margin), meaning a final net profit of €1,154m.

Heineken N.V. shares are traded on Euronext Amsterdam, where the Company is included in the main AEX Index. In 2020, Heineken traded on average 129,130 shares daily.

In 2020, the Americas and Europe had 35.7% and 33.7% of Heineken's total beer volume, respectively, followed by Africa, Middle East and Eastern Europe with 17.9%, and by Asia Pacific with 12.7%(fig.2). In terms of revenue, Europe had the highest, followed by the Americas(fig.3). However, the biggest markets in terms of volume and revenues are not always the most profitable ones: Americas had the highest operating profit (beia) in 2020 with 39.8%, followed by Asia Pacific (33.1%) and Europe (17%). Africa, Middle East and Eastern Europe had only 10.1%. Due to the Company's global footprint, its revenue is exposed to strategic and financial risks that differ per region.

Its customer group can be split between the at-home market (or off-trade market), that covers all retail sales via supermarkets, hypermarkets, convenience stores or similar sales channels, and the out-of-home market (on-trade market), which encompasses all sales to hotels, restaurants, bars and similar service establishments.

The Company's goal is to create value, by focusing on its premium segment to drive growth and market share, improving its operating profit margins and reducing costs and inefficiencies, specially focusing on efficient deployment of capital and working capital efficiencies.

One fundamental point for Heineken's mission of delivering growth and becoming a more global brand is advertising. Heineken has partnerships with some of the most watched events in the world, which are key for advertising its products and reach the maximum people possible. However, advertising alcoholic drinks to a huge amount of



Fig.4- Heineken's responsible consumption campaign



Fig.5- Heineken is the official beer partner of EURO 2020.



Fig.6- Heineken is one of Champions League main sponsors.

people comes with responsibilities, and Heineken copes with them, improving responsible consumption awareness: “When You Drive, Never Drink” (fig.4) message was promoted on the Formula 1® platform. In 2020, where legally possible, all of Heineken’s Formula 1® branding on the racetrack will be dedicated to Heineken® 0.0, Heineken’s new non-alcoholic beer. Other examples of Heineken’s huge marketing campaigns are becoming the Official Beer Partner of UEFA EURO 2020™ (fig.5) and extending their UEFA Champions League partnership until 2024 (fig.6). Heineken® reached hundreds of millions of consumers through its global sponsorship portfolio.

Outlook

Heineken’s main objective is to improve its cost efficiency and develop its competitive advantages, in particular in the premium and cider markets. Through a number of acquisitions, Heineken has reached an optimal balance of both higher growth developing markets and more stable developed markets, and to build an extensive and complementary brand portfolio alongside its flagship Heineken® brand, the Company’s strongest and their primary source of success, which helps to take advantage of premiumization trends globally. These factors help to explain why it remains a main focus for Heineken.

Over the last years, Heineken invested ahead of the premium volume growth, which limited its cost flexibility to mitigate the severe short-term pressures like the ones from the Covid-19, especially in the more profitable on-trade channels. Sales volume will recover in the coming years, but margin expansion is likely to be limited by emerging market transactional foreign exchange. Rising Net Debt-over-EBITDA ratio is also likely to limit scope for mergers and acquisitions in the short-term.

PERFORMANCE ANALYSIS

Heineken’s performance and growth are driven by 2 key value drivers: revenue growth, which can be decomposed by the total volume of beer consumed and Heineken’s market share, and the company’s return on invested capital (ROIC).

Heineken was one of the most affected companies by the pandemic, as initially they presented globally superior annual growth rates of beer volume when compared to its main industry competitors, but ended up with a negative CAGR of -0,80%, way below the average of its main competitors (4,03%) (fig.7).

When we look at the net revenue (beia) from recent years, it increased until 2019 mainly by organic growth (that increased its market share), but also due to some new acquisitions (inorganic growth). 2020 was clearly an outlier year for the company’s revenue, as it suffered a lot with the Covid-19 pandemic. The main reasons for this decrease were the mandatory lockdowns ordered by Governments at every part of the globe, the decrease in disposable income of consumers and also because people usually drink more beer when socializing with friends and at parties. Covid-19 produced significant negative effects on the company’s revenues and performance, which can be seen on its key financial highlights. Revenues declined

Companies	CAGR [2016-2020]
Heineken	-0,80%
AB InBev	1,50%
Carlsberg	-2,20%
Molson Coors	22%
China Resources	2,40%
Asahi	3,70%
Tsingtao	1,60%
Average	4,03%
Median	1,60%

Fig.7- Top beer companies' revenues CAGR (2016-2020)
Source: Bloomberg

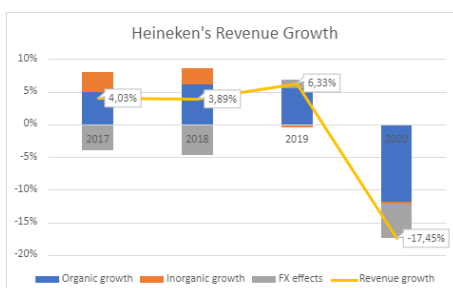


Fig.8- Heineken's revenue growth decomposition (2017-2020)
Source: Company report; Investors presentation

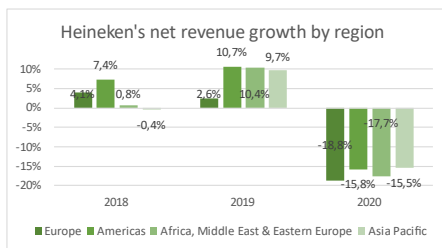


Fig.9- Heineken's net revenue growth by region (2018-2020)
Source: Company report

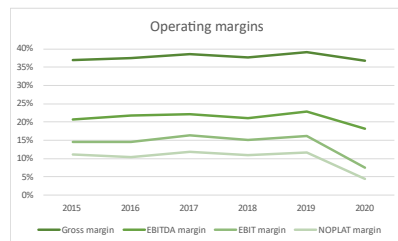


Fig.10- Heineken's operating margins
Source: Company report

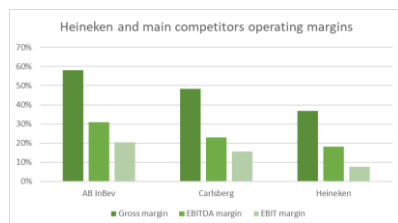


Fig.11- Heineken and main competitors' gross, EBITDA and EBIT margin
Source: Company report; Bloomberg

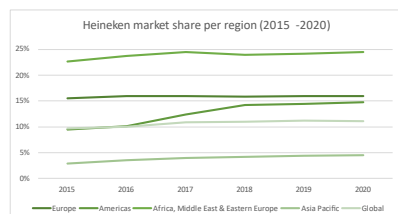


Fig.12- Heineken market share evolution per region
Source: Company report; Euromonitor

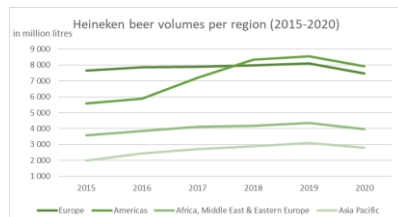


Fig.13- Heineken's beer volumes evolution per region
Source: Company report; Euromonitor

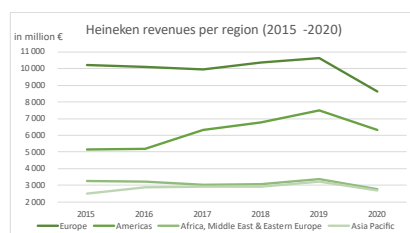


Fig.14- Heineken's beer volumes evolution per region
Source: Company report; Euromonitor

not only due to decreases in volumes but also due to foreign exchanges transactional effects. The total net revenue (beia) decline was 17.45%(fig.8). The operating profit (beia) decreased 39.8%, resulting in a net profit (beia) decrease of 54.2%¹.

In 2018 and 2019, a general increase in every segment can be verified, with few exceptions. However, in 2020, the Covid-19 negative effect can be seen in the net revenue growth: there was a general sharp decline in almost every segment, with all regions being heavily affected(fig.9). This effect is not expected to last for a long time, since the market is already recovering from the crisis caused by the global pandemic. Regarding consolidated beer volumes, there was an 8.2% decline in 2020², comparing with 2019, mainly due to the Covid-19 pandemic. The first quarter of the year was the worst, and after April, beer volumes started to gradually recover into June as lockdowns were lifted around the world and customers restored depleted inventories.

Over the past years, Heineken's margins have been constant. However, the negative effects of the pandemic led to a significant decrease on its margins in 2020, which are below its direct competitors AB InBev and Carlsberg(fig.10 and 11). AB InBev is clearly outperforming both of its main competitors, with an EBITDA margin of 30.80% last year against 23.10% and 18.24% of Carlsberg and Heineken, respectively. Regarding EBIT margins, AB InBev is also the clear winner, with a margin that is 2.5x larger than Heineken's. Carlsberg also has twice the value of the Heineken one, who struggles to compete with the others on this matter.

When we look at Heineken's market share by region(fig.12), we can observe stability with a slight increase from 2015 to 2020 in most regions. The Americas was the region with the biggest increase, mainly due to the Kirin Holdings acquisition in Brazil in 2017. The same conclusion as before can be drawn when we interpret the Company's beer volumes(fig.13) and its revenues(fig.14) per region. Europe is stable both in volumes and revenues as it is a market that is already saturated. The Americas is also a big market in terms of revenues and volumes, but it has more growth opportunities, especially since two of Heineken's most important markets are there (Brazil and Mexico). In the Asia Pacific, Heineken has been increasing considerably its volumes, showing signs of its growth prospects, and shows one of the regions where the Company is focusing its investment strategy.

Operating costs

Although raw materials, consumables and services (that is, the Cost Of Goods Sold) have been increasing in absolute terms over the past years (in line with the company's revenues), they have been decreasing as a percentage of revenues, which suggests that Heineken is achieving relevant cost savings and economies of

¹ According to the company's annual report

² According to the company's annual report

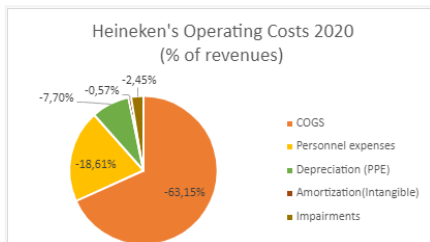


Fig.15- Heineken's operating costs 2020 (as % of revenues)
Source: Company report

scale. Personnel expenses have been following the same line, increasing in absolute terms but decreasing as a percentage of revenues. In fact, from 2018 to 2019, the company experienced the highest revenue growth rate and absolute value from the past 5 years, while simultaneously showing the highest operational efficiency gains. However, in 2020, due to the Covid-19 pandemic effects, these efficiencies were harmed, as the Company struggled with volumes sold as well as with the revenue and, therefore, the profit, and we have verified an increase in the operating costs as a percentage of revenues. This increase is not expected to continue in the coming years, with the Company recovering from the pandemic-generated crisis.

Returns

Heineken's Return on Invested Capital (ROIC) was above the industry average and median in 2020 (fig.16). When comparing the company's ROIC with its main competitors we observe a ROIC aligned with the industry's top players, higher than the one from Anheuser-Busch InBev, but lower than the one from Carlsberg. In 2020, the Company's ROIC increased in comparison with the previous year, due to an increase in the NOPLAT. Heineken is creating value since the return on the invested capital (ROIC=7.54%) is greater than its weighted average cost of capital (WACC=3.71%). Analysing Heineken's return on assets (ROA) and return on equity (ROE), ROE is in line with the competitors average and median, while ROA is slightly above the average. They are also above AB InBev but lower than Carlsberg, the same that happens with the ROIC.

Return on assets slightly decreased in 2020 due to the challenges faced with the pandemic. The same happened with return on equity. The company has a cost of equity (Re) of 4.43% which is lower than its ROE, meaning that the Company is creating value for its shareholders.

Financing and Working Capital ratios

Heineken presented an interest coverage ratio of 7.24x in 2020, decreasing from 10.39x in 2019 (fig.17). Even though the ratio decreased, it still suggests that the company has a strong and healthy financial positioning in order to survive future and unexpected financial crisis, such as the Covid-19 pandemic. The company also presented a decrease in Cash coverage in 2020 from 8.25x to 5.07x. It still means Heineken has a strong ability to meet its interest obligations and future borrowings and has a low probability of default, although it was harmed by the pandemic.

Heineken's cash conversion cycle was -109.9 in 2020, lower than the top competitors average (-60.20) (fig.18). This value can be explained by the fact that the Company has a disciplined working capital management. The days sales in inventory (operating cycle) had a high value of 182.48 in 2020, higher than the top competitors average (105.58), driven mainly by the days inventory outstanding (138.73) and by the high bargaining power with suppliers (292.37 accounts payable turnover days).

Companies	ROE	ROA	ROIC
Heineken	5,51%	4,05%	7,54%
AB inBev	1,95%	0,61%	0,39%
Carlsberg	14,57%	4,99%	8,90%
Molson Coors Beverage	-7,36%	-3,38%	-3,35%
China Resources Beer Holdings	10,24%	4,91%	11,15%
Tsingtao Brewery	11,06%	5,59%	9,54%
Average	6,00%	2,80%	5,70%
Median	7,88%	4,48%	8,22%

Fig.16- Industry top-players' return on capital
Source: Company report; Bloomberg

Financing	2018	2019	2020
Debt coverage (Net Debt/Operating EBITDA)	2,60	2,81	4,00
Interest Coverage (Operating EBITDA/ interest expense)	9,63	10,39	7,24
Cash Coverage (gross CF/interest)	7,46	8,25	5,07
Debt/Total book capitalization	0,79	0,89	1,00

Fig.17- Heineken's financing ratios
Source: Company report

Companies	Cash Cycle	Days Sales in Inventory
Heineken	-109,9	182,48
AB InBev	-183,55	111,76
Carlsberg	-120,45	85,11
Molson Coors Beverage	-41,85	63,6
China Resources Beer Holdings	69	116,71
Tsingtao Brewery	25,54	73,82
Average	-60,20	105,58
Median	-75,88	98,44

Fig.18- Industry top players' working capital ratios
Source: Bloomberg

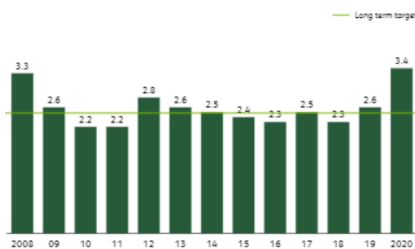


Fig.19- Heineken's long-term Net Debt/EBITDA target
Source: Heineken investors' presentation

The Company is committed to a long-term target Net debt-to-equity ratio of below 2.5(fig.19). This ratio is a measure of the company's leverage and of how well the company can cover its debt obligations. In the past 6 years, this ratio ranged from 2.6x to 2.81x. However, in 2020, this ratio increased to 3.4x, mainly due to the Covid-19 pandemic negative effects, which significantly decreased the company's EBITDA.

Heineken's dividend policy follows a dividend payout ratio of 30 to 40% of net profit before exceptional items and amortisation of acquisition-related intangible assets (net profit beia). In 2020 it exhibited a dividend payout of 34.9%³.

Shareholder structure

Heineken N.V. shares held by Heineken Holding N.V. equals the number of shares issued by Heineken Holding N.V.. Heineken Holding N.V. holds 50.005% of the Heineken N.V. issued shares. L'Arche Green N.V. holds 52.599% of the Heineken Holding N.V. shares. The Heineken family still owns the majority of the company, with 88.86% of L'Arche Green N.V.

By geography, the majority of Heineken N.V. shares are in Europe (37.4%), with strong concentration in the United Kingdom and Ireland (21.3%), and in the Americas (31.1%). Similar happens with the shares of Heineken Holding N.V., with 38.1% in the Americas, 28.9% in the United Kingdom and Ireland and 8.8% in the rest of Europe.

Heineken's share price has been fluctuating in the most recent years, although with a general increase(fig.20). The most recent decrease was due to the effects of the Covid-19 crisis, as seen globally. The Company has a dividend policy that intends to preserve the independence of the Company, to maintain a healthy financial structure and to retain sufficient earnings in order to grow the business both organically and through acquisitions⁴. Heineken pays an interim dividend and a final dividend. The interim one is fixed at 40% of the total dividend of the previous year, and the annual dividend proposals will remain subject to shareholder approval. Therefore, we do not expect any consequences in the value of the company coming from its shareholder structure, at least in the short-term.

In 2020, no interim dividend was paid, helping to explain the decrease in the total dividends paid when comparing with the previous years, from 1.68€ in 2019 to 0.70€(fig.21).

BEER INDUSTRY OVERVIEW

Beer is one of the oldest and most consumed drinks in the world, surpassed only by water and tea.

The brewing industry is a global business, consisting of several dominant multinational companies (like Heineken) and many thousands of small and regional breweries.



Fig.20- Heineken's share price in € (2015-2020)
Source: Bloomberg

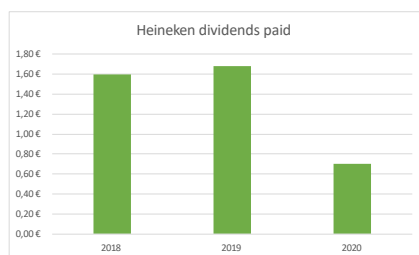


Fig.21- Heineken's dividends paid (2018-2020)
Source: Company report

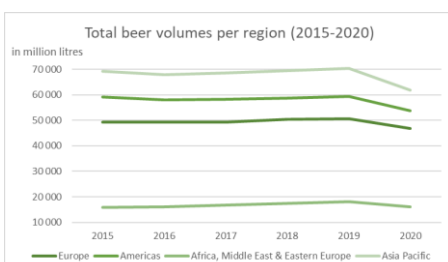


Fig.22- Total beer volumes per region (2015-2020)
Source: Euromonitor

³ According to the Company's annual report

⁴ According to the company's reports

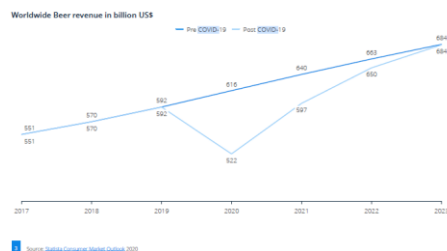


Fig.23- Worldwide beer revenue forecast
Source: Statista Consumer Market Outlook

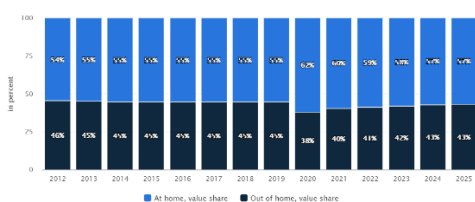


Fig.24- At home vs. Out of home beer value share
Source: Statista

Company	2017	2018	2019
Anheuser-Busch InBev NV	25,9%	25,9%	25,9%
Heineken NV	10,9%	11,0%	11,2%
Carlsberg A/S	5,7%	5,8%	5,8%
China Resources Holdings Co Ltd	6,1%	5,7%	5,7%
Molson Coors Brewing Co	4,8%	4,6%	4,5%

Fig.25- Industry top-players' market share (2017-2019)
Source: Company report; Euromonitor

In 2020, the total beer volume sold decreased 9.87% in comparison with 2019, with around 181 billion litres⁵.

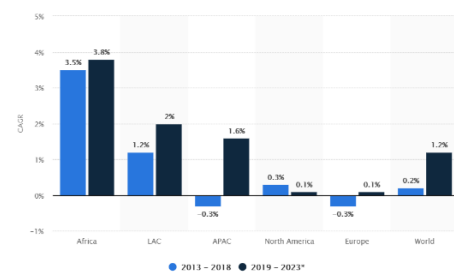
According to the Statista Consumer Market Outlook 2020, the worldwide beer revenue is expected to increase at a total CAGR of 4.3% from 2012 to 2025, while beer volume sales will grow annually by 0.4% in the same period. However, due to the Covid-19 impact, the beer revenue in 2020 was lower than the initial forecast(fig.23),but it is expected to recover in the coming years.

Roughly half of value sales of beer are generated via out-of-home sales channels(fig.24). However, in 2020, the beer consumption at home increased due to the lockdowns ordered by the Governments because of the pandemic. Generally, the profit margins of beer processors, when selling to on-trade customers, are much higher than those of selling to off-trade customers, justifying the great impact of the Covid-19 on the industry.

The five biggest companies operating in the Beer segment are AB InBev, Heineken, Carlsberg, China Resources Breweries and Molson Coors. AB InBev led the market with 25.9% market share in 2019, followed by Heineken and Carlsberg, with 11.2% and 5.8%, respectively. China Resources Breweries had 5.7% and Molson Coors 4.5%(fig.25). Together, the 5 biggest companies by volume own more than half of the global market, which highlights the advanced degree of consolidation and concentration in the brewery industry. The beer market is characterized by saturated volume sales, meaning that organic growth tends to be slow, so the industry players try to overcome this with increased mergers and acquisitions, as well as with premiumisation strategies. Therefore, market share growth occurs usually inorganically (through acquisitions). AB InBev market share is nearly one-third of the market because with the SABMiller acquisition in 2016, it has expanded its lead over the main competitors. Since then, the company's market share has remained stable. Therefore, in the beer industry, acquisitions help to shape the global beer landscape. Heineken has been increasing its market share, although at a slow pace: from 2014 to 2019, its market share increased 1%, benefitting from the strong growth in the emerging markets of Asia Pacific and the acquisition of Kirin Brazil in 2017. Since 2007, Heineken spent over 40 billion euros on acquisitions.

AB InBev and Carlsberg are the main competitors of Heineken. The three companies' rivalry is intensified by their shared emphasis on the higher end of beer. Heineken competes directly with AB InBev mostly in the Americas, especially in Mexico, Brazil and the United States (the most struggling market for Heineken). In Europe, Heineken's main competitor is Carlsberg, with Asahi also growing in recent years.

⁵ According to Euromonitor



Details: Worldwide, GlobalData, 2013 and 2018

© Statista

Fig.26- CAGR of beer worldwide, by region, from 2013 to 2023
Source: Statista

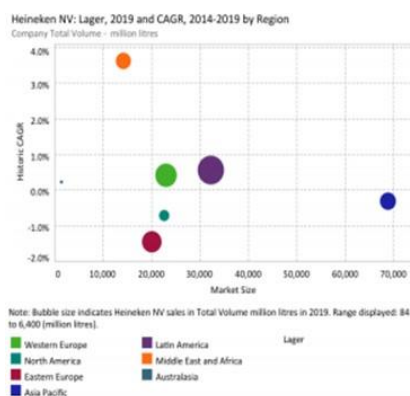


Fig.27- CAGR of beer worldwide and market sizes by region, from 2014 to 2019
Source: Euromonitor

AB InBev and Heineken have a fairly well-balanced geographic split, with all regions contributing to sales, while Carlsberg relying primarily in three regions, being Western Europe the most important one.

The non- and low-alcohol beer segment is expected to grow at the highest CAGR in the coming years⁶. Because of this consumers' inclination toward low-alcohol or non-alcohol beers, the overall beer market is getting a boost. The craft segment is also expected to grow in the coming years, aid by the rise in the demand for premium and flavoured beers.

Regarding Heineken's operating segments, we can observe that smaller markets like Africa and Middle East have been growing the most in the recent years, and it is expected to continue in the years to come, while bigger markets like Western Europe and Latin America have lower CAGRs(fig.26 and fig.27). Asia Pacific has not been growing, with a negative CAGR close to 0%, but it already is a big market in terms of volume, and in the coming years it is expected to increase its size, with a 1.6% CAGR from 2019 to 2023. Latin America, one of Heineken's main focus for the future, is expected to increase at a good rate⁷.

Africa, Middle East and Eastern Europe Market

Africa, Middle East and Eastern Europe saw its beer volume reduced by 10.65%. South Africa operations suspended from late March to May and reintroduced a new ban on sale of alcohol in July. However, Heineken 0.0 triplicated its growth, and Nigeria gained market share. Heineken's premium portfolio continued to grow in 12 markets, including Nigeria, Ethiopia and Ivory Coast.

Africa as a continent has the lowest beer per capita consumption globally. However, with 15% of the world's population, rising disposable income and increasing urbanisation, Africa is also the fastest growing segment. The five-year CAGR of beer consumption between 2015 and 2020 in Africa was 5.25%, 3% in the Middle East and North Africa, and 0.4% in the Eastern Europe. The CAGR from 2019 to 2023 is forecasted to be 3.8% in Africa, according to Euromonitor(fig.27).

Lager is the main growth driver in the market, but other types of beer are also becoming more important. In the countries with lower disposable incomes, consumers buy cheaper products (like economy lager), maintaining volume growth rates in the region. Craft beer is also trending in the region, and it helps to add dynamism to the market.

The majority of beer markets in the region are highly consolidated, and the top brewers usually account for most of the local sales. Heineken is the second biggest player in

⁶ According to Passport: Euromonitor forecasts

⁷ According to Statista

the region, with a presence across most of it, only behind AB InBev, who took advantage of the SABMiller acquisition in 2016 to become the leading player.

The Covid-19 impact in the region was particularly strong, with the measures to limit the spread of the virus also harming the economy, decreasing consumers' purchasing power and reducing consumption.

In the Middle East and Africa, Heineken's market share has been stable (fig.28). In Eastern Europe, the biggest player on the market is Carlsberg AS, with 19% of the total volume in 2019. It is a very competitive market, with Heineken and Asahi very close to Carlsberg in terms of market share (with 17.5% and 16.3%, respectively) (fig.29). In recent years, Carlsberg has been losing market share to its competitors.

Heineken

The second smallest of the four main segments of Heineken by volume. In 2020, had a consolidated beer volume of 39.6 million hectolitres (17.9% of total), representing a net revenue of €2,782 million and an operating profit (beia) of €264 million (10.1% of total). The segment's key brands are Heineken®, Primus, Amstel, Mutzig, and Life.

Despite its relatively small size, the segment's premium portfolio is performing very well, having a double-digit growth in Africa, Middle East and Eastern Europe. The brand Heineken® continued to perform well, especially in South Africa, where it is leading the premium segment and being well received by consumers, Nigeria and Russia, with Heineken®0.0 driving the growth in the non-alcohol beer segment.

Heineken is currently leading the craft segment in South Africa, with the South African craft brand Jack Black gaining popularity in urban areas and the recent acquisition of Stellenbrau, a craft brewery from Stellenbosch⁸.

The segment's low- and non-alcohol category is performing well, with high growth across malt-based beers and Radlers.

Americas

Market

The Americas is the second largest beer and cider market in the world, with a total Beer volume in 2020 of 53,662 million litres. The beer consumption has been stable in the last years. The five-year CAGR of beer consumption between 2015 and 2020 in North America was 1.2%, and in the Latin America 2.65%.

Brazil and Mexico are the countries that stood out by delivering solid results, driving profit growth in the region, and are two of the most important markets for Heineken. These countries are also among the biggest beer producers worldwide, and Mexico is one of the most favourable markets for beer manufacturers to expand, due to the rising demand for beer and availability of raw materials. In Brazil, the Kirin's assets acquisition gave Heineken large exposure to a huge beer profit pool, enabling the company to guide consumers towards its premium offerings.

Fig.28- Middle East and Africa market share (2015-2019)

Source: Company report; Euromonitor

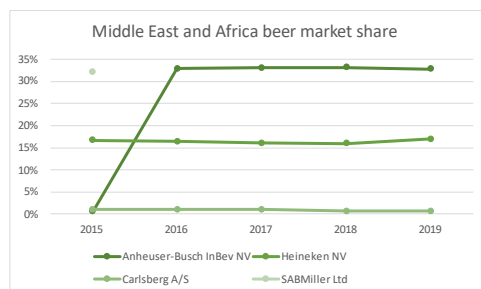


Fig.29- Eastern Europe market share (2015-2019)

Source: Company report; Euromonitor



Fig.30- Latin America market share (2015-2019)

Source: Company report; Euromonitor

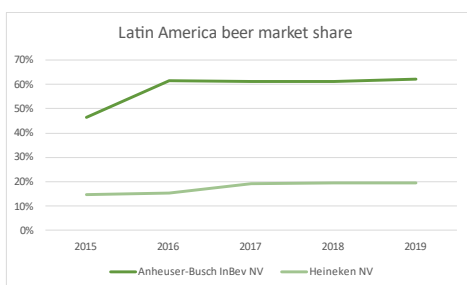


Fig.30- Latin America market share (2015-2019)

Source: Company report; Euromonitor

⁸ According to the company's reports



Fig.31- North America market share (2015-2019)
Source: Company report, Euromonitor

The US market is challenging. The millennials, one of the largest demographics in the US population, are a targeted segment of breweries, and this segment is expected to grow in the coming years. Thus, North America is expected to have a high growth in the next years.

The beer market shows us a trend toward higher priced specialty products that offer new taste experiences to consumers even if at premium prices, especially in the US. Craft beer has been trending for a long time, with its share of total beer production increasing from 7.8% in 2013 to 13.2% in 2018. In 2000, it was only 2%.

Heineken

Heineken's second biggest and most important segment by volume, with a consolidated beer volume of 79.1 million hectolitres in 2020, representing 35.7% of the Company's total. The segment's net revenue (beia) was €6,319 million, with an operating profit of €1,045 million. Heineken's key brands are of course Heineken®, along with Tecate, Dos Equis, Schin, and Lagunitas.

The premium and mainstream portfolios in Brazil had a positive growth, led by Heineken® and Amstel, and it helped the Company to achieve its highest market share ever, now with value share ahead of volume share. In Mexico, Heineken® achieved a double-digit growth. AB InBev and Heineken dominate the Mexican beer market. Heineken's performance in the region has been affected by the pandemic and alcohol bans by the governments, but a solid recovery is expected in the coming years. Non-alcoholic beer is a fast-growing category in Mexico and Heineken's leading position in non-alcoholic beer globally (especially with the global rise of Heineken 0.0) means it is well placed to capitalize on this trend.

In Brazil, although AB InBev holds a strong lead with 63% of the national beer market and 78% of the premium lager segment, the acquisition of Kirin by Heineken in 2017 helped not only to increase its market share in the country, but also to benefit from strengthening its operational independence, allowing it to compete more directly with AB InBev.

The competitiveness of the US segment can be seen with the Company's market share in the North America(fig.31): in 2019, Heineken had only 4.29% of the market, while AB InBev, the leading company, had 42.19%. However, more focused campaigns resulted in positive trend changes with Heineken® and Dos Equis, and Heineken® 0.0 has been the fastest growing brand extension in the US, and is now sold also in Canada, Mexico, Puerto Rico, Chile, French West Indies and West Caribbean. Lagunitas' US market share is stabilising in the context of fierce competition in the craft market. The brand is now being sold in 35 markets globally.

In May 2019, Heineken acquired a majority stake in Biela y Bebidas del Ecuador⁹, a fully operational brewery in Ecuador. It has a strong growth potential for the

⁹ According to the Company's website

Company's premium offering led by Heineken®, with its favourable demographics, increasing tourism industry and GDP growth.

Asia Pacific

Market

The Asia Pacific region accounted for about 34% of the total beer volume in 2020, with 61,901 million liters (a 12% decrease comparing to 2019) due to the effects of the pandemic, but it is expected to recover in the coming years. The region is witnessing a growing trend of premiumisation and low- and non-alcohol beer due to its health benefits, as also seen in other parts of the world. With 376.53 million hectolitres, the Chinese beer market is the largest in the world.

The market was also impacted in 2020 by the Covid-19, however, it was the first one to recover, mainly in China, and in 2021 it is expected to outperform all of the other regions.

The Asia Pacific market is still expected to grow in the coming years, due to the increasing demand for the product from countries such as China, India, and Australia in the region. The five-year CAGR of beer consumption between 2015 and 2020 in Asia was 3.05%¹⁰. The current segment leader is the China Resources Holdings, with 16.3% in 2019, followed by AB InBev and Tsingtao Brewery, with 13.09% and 11.48%, respectively (fig.32).

Heineken

Asia Pacific is the smallest operating segment of Heineken. In 2020 it had a consolidated beer volume of 28.1 million hectolitres (12.7% of the Company's total). Its net revenue (beia) was €2,707 million, resulting in an operating profit (beia) of €867 million. The segment's key brands are Heineken®, Anchor, Larue, Tiger and Bintang.

Although it is still small for Heineken, the region has a lot of growth possibilities. This is why it is a key expansion focus in the company's strategy. Heineken has been increasing its market share in the region (from 2.39% in 2014 to 4.18% in 2019). Because of this, Heineken sold its three Chinese breweries to China Resources Beer, and took a 40% stake in CRB's holding company, gaining access to the world's largest beer market (second biggest for premium segment). The benefits of this acquisition might not be seen in the short-term due to the impact of Covid-19, but it will undoubtedly have a positive impact for Heineken in the region. This acquisition was a win-win situation both for Heineken and for China Resources Beer, as the brand Heineken is filling a gap in the Chinese company's premium offerings, while Heineken gained access to the whole country (China accounted for 23% of the global beer volume in 2019, according to Euromonitor). Asia is expected to be the main driver of



Fig.32- Asia Pacific market share (2015-2019)
Source: Company report; Euromonitor

¹⁰ According to Passport: Euromonitor

beer-volume growth globally over the next decade, due to its young, urban population bias.

However, tourism bans and lower exports are threatening economies across the segment, like in Cambodia and Indonesia. Vietnam, however, is the leading market in the region, mainly due to the increased urbanization, changing lifestyles, tourism and increasing purchasing power. The acquisition of Tiger brand from Singapore in 2012 helped the company's focus on Asia Pacific, and it's now its third largest brand globally. Heineken® became the number one brand in the premium segment in South Korea, and the brand's sales in Japan were boosted to the highest level in 25 years, due to the main sponsorship of the Rugby World Cup, hosted in the country for the first time.

Europe

Market

Aging populations and cultural shifts that lessen the social importance of alcohol consumption and promotes health and wellness are a problem to the beer industry in the Western Europe. In 2020, the beer volume decreased 7.59%. The on-trade decline amplified operational deleverage, and the off-trade market grew mainly due to the continued growth of premium and market share gains in many markets, including UK, France, Italy and the Netherlands¹¹.

Europe has a long and established brewing tradition. The five-year CAGR of beer consumption in the Western Europe between 2015 and 2020 was 0.15%, the lowest of all segments, as the market is already mature.

However, there is plenty of growth potential to be realized in the craft beer segment in the future. New trends like the evolution of craft breweries, their diversification and the change in consumer patterns might pose a challenging environment in the times ahead. Due to these reasons, Europe remains an attractive and valuable market for beer and cider.

Heineken

Europe is one of Heineken's biggest segments by volume, with a consolidated beer volume of 74.8 million hectolitres (33.7% of total). This resulted in a net revenue (beia) of €8,631 million, and an operating profit (beia) of €447 million (17% of Heineken's total). The segment's key brands are Heineken®, Cruzcampo, Birra Moretti, Desperados and Strongbow.

The focus on premiumisation and innovation maintained positive results on the segment, as Heineken® reported an organic volume growth of 3.1%.

Heineken's strategy in Europe is to provide variety and choice through their Zero Zone range of low- and non-alcohol beverages. The cider category is an emerging market, and the craft category is also on the rise and grew significantly in 2019.

¹¹ According to the company's reports

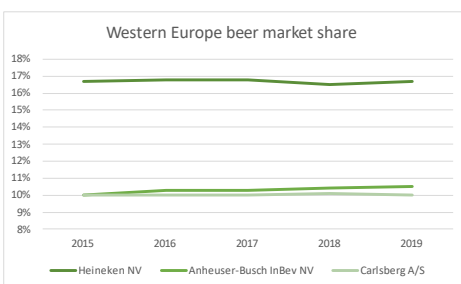


Fig.33- Western Europe market share (2015-2019)
Source: Company report; Euromonitor

In Europe, Heineken is well positioned in the context of economic market evolution with still a bit of growth potential in its key markets. The brewing industry has always been diversified in Europe. As the region is Heineken’s biggest segment, it is not surprising that the Company is leading the segment with 16.73% of market share in 2019, ahead of AB InBev, with 10.32%, and Carlsberg with 10.01%(fig.33). The market shares of the 3 biggest companies in Europe have been stable over the past years, and as Europe is a mature market, the competitive landscape is not forecasted to change considerably.

Cider industry overview

Cider is one very important segment for Heineken, who is the biggest player in the market globally and has been working on expanding geographically with local production. Heineken competitors AB InBev and Carlsberg have also been expanding their involvement in the cider market, with Carlsberg ranking fourth globally and AB InBev ranking fifth. Cider’s similarities in production, distribution and consumption patterns make it an easy alternative to diversify beyond beer.

In 2019, Asia had the biggest revenue share with 45%, followed closely by Africa with 38%. Europe and Americas had 10% and 7% respectively. Although Africa is already a big market, there is a lot of growth potential.

In Europe, it is expected that the segment’s sales will increase at a CAGR of 3.97% from 2019 to 2025, while in the Americas, it is expected to increase at a CAGR of 16.76% from 2019 to 2025. Asia is a pretty matured market already, so the sales are expected to increase at a CAGR of 1.09% between 2019 and 2025. Africa is already a big Cider market, but there’s plenty of growing potential, with the sales increasing at a CAGR of 10.98% from 2019 to 2025¹². Regarding cider volumes, it is expected that from 2012 until 2025 the segment grows at a CAGR of 1.4%(fig.34)¹³.

Heineken’s leading position in the market is due to its ownership of the top brand Strongbow, 74% of Heineken’s cider sales volume in 2019. In 2020, Heineken acquired Strongbow from Asahi in Australia, following Asahi’s purchase of Carlton & United Breweries.

Beer Industry Trends

AB InBev alone today commands a volume market share of almost 30% worldwide, and together, the five biggest brewers command a share of more than 50% of global production, highlighting the advanced degree of consolidation and concentration in the brewery industry.

Although the market was severely impacted by the pandemic, global beer production is expected to recover in the coming years, associated with middle class expansion in emerging markets, government investment in infrastructures and recovery in the

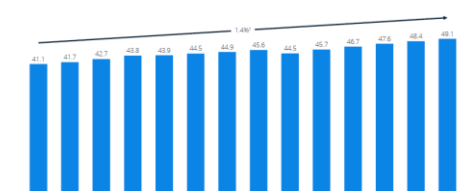


Fig.34- Cider volume CAGR forecasts (in billion liters)
Source: Statista

¹² According to Statista forecasts.

¹³ According to the Statista Consumer Market Outlook 2020 forecasts.

business-to-business segment. In 2030, Asia Pacific is expected to account for 45% of the global beer production¹⁴, supported by the growth in consumer incomes and exports mainly in China, India, and Japan.

Industry competitiveness

The beer industry is expected to remain competitive in the coming years. Product launches by the companies will help to increase demand in a market with numerous manufacturers who compete in both prices and quality. Companies are adopting strategies such as innovative product launches, partnerships, and mergers and acquisitions to gain advantages against their competitors.

Emerging markets hold value for brewers

Although mature markets play the key role in value sales for Heineken and its main competitors due to the higher prices and stronger premiumization trends, emerging markets are also a significant part of the business (especially Latin America and Asia Pacific). Due to the low prices, volumes in these regions usually translate into lower value sales, but still account for a major proportion of the companies' total beer sales.

Digitalization

With the pandemic, companies are also looking to reduce their exposure to the on-trade channels, by investing in new technologies and becoming more digitalized. Investing in production automation and digital tools that can help to comply with new health measures and increase operational flexibility are measures manufacturers can take to reduce their risk against similar situations in the future. Growth will also be driven by the need to invest in new sales channels and changing consumer preferences.

E-Commerce

This continuing trend toward premiumization leads to opportunities for growing eCommerce sales. Compared to non-food consumer goods, online sales channels are still relatively underdeveloped, but specially with the pandemic, these sales are expected to grow a lot in the coming years. Beer is also a good that is easily sold online due to its durability and ease in storage, and it makes it easier for small producers who do not have the scale to build and maintain a classical distribution chain to take their products to bars and supermarkets and are thus able to sell directly to consumers without the need for a complex traditional distribution chain. The mandatory government lockdowns together with the closing of bars, pubs and restaurants, has boosted the eCommerce sales of beer, as people found themselves in a situation where even going to the supermarket can be difficult because of the pandemic. E-Commerce has driven triple-digit growth in the sales of alcoholic beverages¹⁵.

¹⁴ Source: Passport, Euromonitor

¹⁵ According to the Beverage Industry, June 2020

Beerwulf

Heineken's business-to-consumer platform in Europe, which according to the Company's annual report had more than 10 million visitors in 2020 (49% of them new). It helped to increase beer revenues in high double-digits, as consumers changed shopping patterns with the lockdowns.

Premiumization: craft and flavoured beers

Consumers are shifting its preferences towards the allure and taste of smaller craft breweries and craft beers, as well as flavoured drinks like hard seltzers. These types of beers are growing at a fast rate, while the premium beer is already a mature market. In Europe, mainly, there is a lot of growth prospects. We can expect that the biggest players will continue to create their own craft beer and hard seltzer brands, but also acquire craft breweries and even the many independent breweries or local breweries that are rapidly springing up worldwide.

With the recent premiumization of the market, beer producers across the world have been focusing on quality rather than quantity. The market has witnessed an increased number of small independent breweries, which sell locally and directly to consumers, taking advantage of the unique experience they are able to create for consumers.

Lagunitas is Heineken's leading craft brand, available in more than 35 countries, according to the company's annual report 2019. The brand also opened the door to the cannabis beverages in the United States. Cannabis beverages are expected to gain greater popularity in the future, so Heineken might take advantage of an early representation, especially because its rivals are also exploring new opportunities in this market.

The Covid-19 pandemic affected the craft beer segment in the short-term, as consumers were led to cheaper choices in the market and also with the collapse of the on-trade segment, as it plays a very significant role for craft.

Hard Seltzer

Hard seltzer has been growing at a fast pace over the past years and disrupting the beer segment. Top brewers are entering the expanding hard seltzer category. With a rising number of options available, the need to stand out and differentiate is clear, so companies are expected to use different ingredients and different alcohol-by-volume ratios. Due to the risk of HS disruptions, several big players started accelerating its investments, and new launches are expected to continue to keep the category's dynamic in 2021. The hard seltzer segment was initiated by brands owned by smaller companies, but the top brewers are leading international expansion efforts.

Company's such as ABI have entered this market with an enormous success by launching the Bud Light Seltzer in the U.S with high market share performance. However, competition has been increasing. New brands led by Anheuser-Busch InBev have also entered the market with many launches coming in 2021,

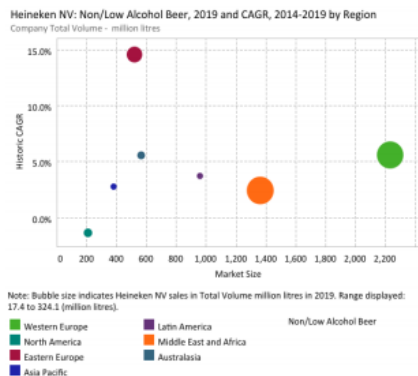


Fig.35- Non and low-alcohol beer CAGR by region
Source: Euromonitor

including entry by Heineken, that has to overcome challenges in generating interest and awareness for the category outside of the US.

Low and non-alcohol beers

Interest in low and non-alcohol beers has been growing in the recent years. However, with the pandemic affecting our everyday lives, consumers' focus on health has been increasing even further, leading to higher interest in the category. Heineken has been working to increase its presence in the category, and is leading in several key non-alcoholic markets, with its main brand Heineken 0.0. Its competitors are also expanding in this category, like AB InBev with Budweiser Zero.

Heineken 0.0 is available in 69 countries worldwide, according to the company's annual report. The company's main brand Heineken strong performance has been supported by its expansion into this new segment, particularly in Western Europe. Although Heineken has historically limited extensions of its flagship brand to avoid weakening its reputation, Heineken 0.0 is an example of a brand extension that aligns with changing demand trends and enhances its flagship brand's reputation.

IPAs

India Pale Ales have been the subject of several beer trends over the past few years and becoming more popular, with new variations popping up. Lighter IPAs with fruity and dry profiles might be a big trend in the coming years.

Factors to inhibit growth

Taxation and higher excise duties on beer, increased health awareness among consumers, fluctuating rate in employee retention and uncertain consumer spending due to economic conditions with the pandemic crisis are factors that might inhibit the growth of the beer market. Climatic changes, strict government regulations and emergence of inexpensive substitutes are other factors that are anticipated to impede sales of beer in the upcoming years.

Covid-19 short-term impact

Covid-19 has brought the world to a standstill, with a health crisis that severely impacted businesses across industries. The short-term impact of Covid-19 on the beer market is high, mainly due to the closing of restaurants and bars, inhibiting an important industry sales channel. The long-term impact, however, is expected to be low, because the beer industry historically sees minimal last impact after recessions.

Demographics

Changing age structures and increasing awareness on health and wellbeing are factors that put pressure on beer volume consumption. In many countries, alcohol consumption peaks in younger years and declines with age, which can be explained by the social life constraints of people over 30 due to family or professional commitments. Medical impediments also tend to specially affect the older population, limiting their alcohol consumption. Millennials are more aware about health and wellness than the previous generations, with healthier lifestyle movements making

Worldwide population by age group

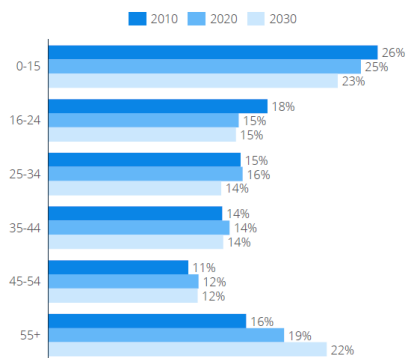


Fig.36- Worldwide population by age group
Source: Statista

volume consumption of alcohol flat and even falling in most countries around the globe. Countries such as the US and the UK have been reporting mostly stable consumption while Western Europe, like Italy and Germany have been declining. Emerging countries, such as China and India have been growing in the past years but appear to be reaching their respective saturation levels, with volume growth expected to stagnate in the future.

However, positive prospects of consumer spending in industrialized countries and the middle-class affluence emergence in Asia make good indicators of further premiumization of the market.

Brazilian Real Fluctuations

As stated before, Brazil is one of Heineken's most important countries. This brings risks to the Company, mainly its currency: the Brazilian Real has been fluctuating and depreciating a lot against the Euro and its future is uncertain. It depreciated a lot in 2020, as investors try to avoid the Brazilian market risk. Against the dollar, for example, it has depreciated 29% in 2020¹⁶, one of the worst global performances. Against the Euro, it has been depreciating since 2017 (fig.37). Some factors contributing to this depreciation are the low return for investors against the risk taken, and the damages caused by the pandemic, which put Brazil on a crisis that they are not expected to recover from in the near-term. All of this can result in losses to Heineken, and the Company has calculated a negative currency translational impact of approximately 570 million euros in net revenue (beia), 100 million euros at operating profit (beia) and 50 million euros at net profit (beia), using the spot rates of 19 April 2021 to last year's financial results as a baseline¹⁷.

Forecasts

Income Statement

1.Revenues

Europe: Creating value is the focus

The European market is a mature market that plays a fundamental role in driving value sales for Heineken since it is a market with strong premiumization trends that enables the company to create value through higher prices.

As a mature market where volumes have been particularly stable there is a strong need to be constantly ahead of new emerging trends and to develop new innovative premium products to create value. As the European beer market becomes more saturated, Heineken has been increasing its development of new products and testing different

¹⁶ “Exchange rate imbalance between the Brazilian real and the dollar will persist in 2021, say analysts”, Latin America Business Stories, 2020

¹⁷ According to the Company's First-Quarter Trading Update

strategies to serve the fast-changing consumer preferences. The rise of the non-alcoholic beer segment, boosted by the pandemic and the growing focus on health, brought beer companies new opportunities to create value and grow in Europe. Heineken® 0.0 has been successfully expanding in the European market, being now present in 33 markets and 94 globally. The brand did not suffer the negative impact of the COVID-19 pandemic growing 4.7% in volume globally in 2020. However, although this flagship brand is turning out to be a good opportunity for value creation in a market with limited scope for growth, competition is intensifying with Carlsberg developing zero alcohol versions of many of its key brands and AB InBev expanding its Budweiser Zero, boosting its already strong positioning in this category. Despite the growing competition, we predict Heineken will be able to protect its strong positioning as the market leader in the zero-alcohol category. Heineken® 0.0 has been expanding successfully among its markets and the brand name is growing. Furthermore, recently Heineken® 0.0% became UEFA Europa League sponsor which is predicted to boost future growth by encouraging consumers towards healthier and responsible drinking and presenting the brand as the perfect choice.

The Covid-19 pandemic had a strong negative impact in this segment in FY20 which continued in the first quarter of FY21 with several restrictions with on-trade closures and restrictions to travel imposed in January. With less than 30% of the on-trade operating and with several lockdowns taking place during the entire quarter, beer volumes declined 9,7%. Although the premium portfolio continued to deliver strong results in the off-trade, the off-trade growth was not sufficient to compensate for the on-trade's decline. However, despite the first quarter's negative results, we expect a slow recovery in the next quarters with lockdowns being lifted, restrictions being eased, more travels permitted and the on-trade starting to operate again. Therefore, we expect the next three quarters to be able to compensate for this first quarter's poor performance and to deliver enough results to increase FY21 overall performance in comparison to 2020, increasing the company's revenues by 6.18% (Fig.38). Market conditions are expected to improve gradually over the forecasting period, with beer volumes returning to the pre-pandemic levels in FY24. Heineken's volume sold is set to grow at a 0.8% CAGR during the forecasting period (FY21 to FY30). The company's revenues are forecasted to grow at a 2% CAGR until FY30. The company's sales growth during this period is fostered mainly by de economic recovery from pandemic (which will increase the market beer volumes), price increases, and small share gains.

The European market has 4 main players, Heineken, Carlsberg Group, AB InBev and Asahi Group. These players owned together almost half of the European beer market (46,2% market share in 2019). Remarkably, the leading players, Heineken and Carlsberg Group, accounted together for 29% of the market, controlling a big part of the market. Heineken is the market leader and the one with the highest increase in market share from 2015-2019. Over the forecasting period, we predict fierce

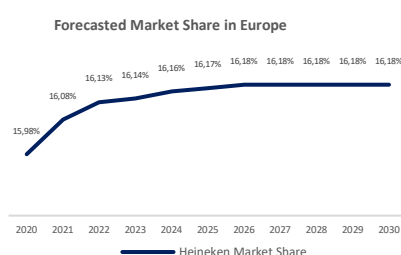


Fig.38- Forecasted market share in Europe
Source: Analyst estimates

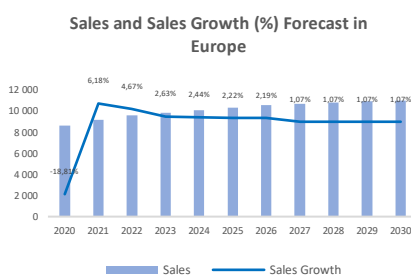


Fig.39- Sales and sales growth (%) in Europe
Source: Analyst estimates

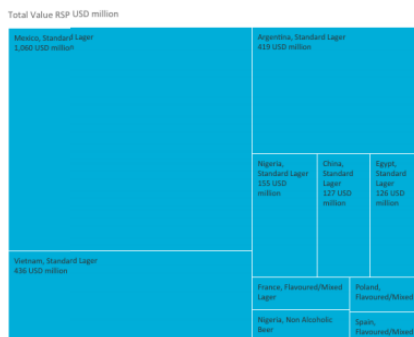
competition among players, with Asahi expanding in Europe and Carlsberg competing over the same markets to gain share (mainly France, the United Kingdom, and Russia). Due to the high levels of competition in a market already matured and stagnant in which growing by volumes has become extremely difficult, we predict the company will be able to increase its market share by a relatively small yearly, achieving a market share of 16,18% in FY26 (market share FY20: 15,98%) and remaining stable at this value until FY30 (Fig.2)

America: Biggest market in terms of volume

Mexico

Mexico, Heineken’s largest market and the one we expect to be more exposed to growth in the future years. In this market, the leading lager brands are Tecate, Dos Equis XX, and Sol, which are expected to maintain their good performance over the forecasting period and continue to boost growth in the region. Also, zero-alcohol beers have proved to be a strong category in this market, with Sol Cero and Heineken 0.0 growing fast although facing fierce competition from AB InBev which is particularly strong. Nevertheless, being Heineken the global leader in the non-alcohol beer segment and having strong operational capabilities in Mexico, we predict there will be room to attain a market share in this category.

There are two leading players in the Mexico market, Heineken with a market share of 40% and AB InBev with 57%, holding together nearly 98% of Mexico's beer market. Competition between these two companies is fierce since growth in the market share of one will mostly imply a decrease in the other. This market has been negatively impacted at the beginning of 2020 due to the alcohol bans. Beer volumes were able to grow by low-single-digit in the first quarter of 2021 despite several restrictions. This increase was driven by double-digit growth in Heineken 0.0 and Amstel Ultra with the launch of Amstel Ultra Seltzer in January. Mexico is the market predicted to experience the highest recovery during the forecasting period being the market with the highest growth exposure until FY22 (Fig.40).



Note: Absolute projected sales represent the net increase/decrease in annual sales between 2019 and 2022. See appendix for methodology on projected company sales.

Figure 40- Exposure to growth- TOP 10 growth rates (2019-2022)
Source: Passport

Brazil

Brazil is also another big profit pool for Heineken and very important for its future growth. The acquisition of Brazil Kirin in 2017 was a crucial strategic move for Heineken to achieve operational independence, the market share gains, and the right positioning to be able to compete with the strong AB InBev, the market leader with a 63% share of the beer market and a 78% share in the premium lager category.

Heineken 0,0 was successfully launched in Brazil growing double-digits and there is a strong trend towards the premium beer segment which is expected to outperform the other lager price categories over the forecasting period. However, the Covid 19 effects were felt hard during the first quarter of FY21 enhancing the Brazilian economic crisis. With the Brazilian currency sitting at a low record, inflation has risen, pushing up prices

of many essential goods. This affects consumer's behavior, changing their drinking choices towards more affordable beers. Hence, within the premium segment consumers will prefer domestic premium beers which offer the same quality and are less expensive than imported beers. As growth will be found in domestic premium lager, intense competition will rise among the international players who want to maintain and increase their share in the market. Heineken has already positioned itself with the expansion of its Ponta Grossa brewing plant in 2020, which will produce the Heineken and the Amstel brands. However, despite its better positioning, it remains difficult to excel the strong AB InBev in this market since the competitor owns eight out of the best 10 domestic premium lager brands and is perfectly positioned to capture this growth. Nevertheless, we predict that the new capacity expansions combined with the company's successful new product launches in the country will allow Heineken to steal market share from other smaller competitors in the market and therefore, increase its share over the forecasting period.

United States

The US market follows the same rationale as the Western Europe market. Being a mature market, it is characterized by weak volume growth. The company is therefore focused on growth through value creation and innovation, by exploring new trends and new product categories. Although in both Mexico and Brazil, Heineken has been able to successfully grow, the US market remains challenging for the company, especially when competing with AB InBev. Heineken is, however, more focused on the premium segment than its direct competitor in this market, giving it some space to possibly grow. Heineken was declining on this market in 2019. However, by focusing on new trends and developing new products, the company is now back on the right track. The launch of Heineken® 0.0 made Heineken the market leader on the US non-alcoholic segment and boosted sales of the Heineken® brand due to a halo effect. In the first quarter of FY21, the company's beer volume grew by low-single-digit mainly driven by the growth of a mid-single-digit growth in the Heineken brand and the double-digit growth of Heineken 0.0. Other brands such as Lagunitas continued to decline derived from the on-trade restrictions at the beginning of the year.

We predict that growth in the US will remain challenging for the company especially due to the strong presence of AB InBev and although Heineken® 0.0 is expected to keep growing in the future it will not be enough to sustain the company's long-term growth in the region due to its smaller scale when compared to normal beer. New brands coming from new trends were introduced in this first quarter such as Arizona SunRise Hard Seltzer providing new opportunities and possibilities for the company to increase its share. Through these new product launches, Heineken might be able to create value in the US market and turn around the declining trend it has been experiencing in this market for the last few years.

Argentina

Heineken operates in Argentina through a joint venture with CCU Argentina, gaining access to its production plants to produce the Heineken's brand. The company is focused on the premium segment in the region and is expected to experience high levels of growth during the forecasting period. Argentina is considered as one of the main drivers of the company's growth in the America region.

Americas Region

Overall, we predict the America Beer volume will grow at a 1.9% CAGR in the forecasting period, stabilizing at a 1.3% growth from FY27 to FY30. The company's beer volumes are expected to increase at a 3.1% CAGR due to yearly share gains. Market share is expected to increase to 16.65% by FY30 (Fig.41) (compared to the 14.74% share in FY20). The company's revenues are set to increase at a 4.3% CAGR over the forecasting period (Fig.42). Mexico is the main driver of growth in this region followed by Argentina which is also expected to significantly increase the company's volumes and boost its performance in the region.

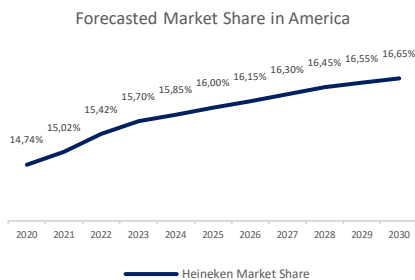


Figure 41- Forecasted market share in America
Source: Analyst estimates

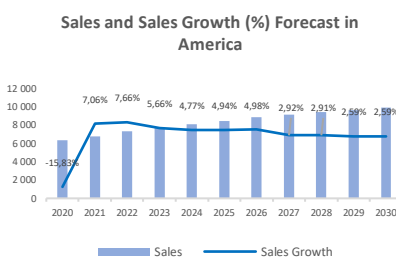


Figure 42- Sales and sales growth (%) in America
Source: Analyst estimates

Asia Pacific: Expansion that brings ongoing opportunities

Asia is expected to bring ongoing opportunities due to its growing population and rise in disposable income, being the main driver of beer-volume growth globally over the forecasting period. Due to the high diversity and differences across the Asia Pacific beer markets, including changes in consumers preferences, different market maturities, and macroeconomic conditions, the company needs to focus not only on global trends but also on targeting local tastes and preferences to be able to excel in each market and establish its presence.

Heineken still holds a very small share of this market of just 4.54% and ranked No.6. While the Asia Pacific is the market where Heinekens holds the lowest market share, it is a key segment for the company's future expansion and growth.

Markets such as Vietnam, Cambodia, and Myanmar are expected to deliver a strong volume growth, offering a great opportunity for Heineken's brand Tiger to expand. This brand was acquired in 2012 and is the company's third-largest beer brand representing a 1% global volume share. Vietnam is the most important market for the company in this region due to its increasing purchasing power and its tourism. Besides Vietnam, Cambodia is also another key southeast Asia beer market, with both countries expected to continue growing in the forecasting period. China is expected to record the highest absolute value growth in standard lager beer in the coming years. Although it is the world's largest beer market and the second biggest for premium beers, Heineken has struggled in the past few years to establish its presence and gain market share, being still underrepresented in this country. However, it is expected that its recent partnership with China Resources (DATE), the market leader, should give Heineken

the distribution capabilities it needs to position itself in this market and capitalize on the future growth of the region. This partnership will allow China resources to use Heineken's brand to fill the gap in its premium segment offerings while Heineken will be able to penetrate the whole region and gain access to the world's fastest-growing premium beer sectors. Heineken already reported a double-digit sales growth in China in FY20 and a strong double-digit sales growth in the first quarter of FY21 mainly fostered by Heineken Silver and the new distribution network given by China Resources.

Besides these strategic alliances, the company's new innovative product Heineken® Silver was launched in Vietnam in 2019 and more than double in volume in FY20, was also successfully launched in the second quarter of FY20 in China supporting its double-digit growth and making the country one of the top five markets for the brand globally. This new product is positioned to target the growing customer base that prefers beer that is lower in ABV while preserving the Heineken® taste. Moreover, Heineken® 0.0 was also successfully launched both in Vietnam and Taiwan. In Vietnam, besides Heineken® Silver and Heineken® 0.0, Heineken also launched its first national mainstream beer, Bia Vet. All brands combined gave Heineken the position as the market leader in Vietnam in FY20.

Regarding the Covid-19 Impact, the impact in this region was quite different than in Europe. While Western Europe was only affected in March when the lockdowns were initiated across most of its markets, in Asia the impact was felt much sooner, with China being significantly affected in the first quarter of FY20. However, contrary to Europe, it suffered a strong rebound from the second quarter onwards.

In the first quarter of FY21, the Asia Pacific delivered strong results with volumes increasing by 5.4% organically mainly boosted by the double-digit growth of Vietnam, China, Taiwan, Laos, Singapore, and South Korea. Markets such as Cambodia and the Philippines have declined due to poor economic conditions, lockdowns, and business restructures but is expected to recover by the end of FY21.

Overall, we predict that Asia Pacific will recover shortly from the Covid-19 with market volumes returning to pre-pandemic levels by FY23 and growing at a 1.4% CAGR over the forecasting period. Being the Asian market expansion such a key feature for Heineken's future strategic growth, and being the company now fairly well placed to capitalize on its ongoing opportunities, it is expected to improve its market share from 4.54% in FY20 to 6.25% in FY30 (Fig.43) by improving its share gradually every year. The company's volumes and revenues (Fig.44) are set to grow at a 4.6% CAGR and a 5.9% CAGR respectively from FY21 to FY30.

Forecasted Market Share in Asia Pacific

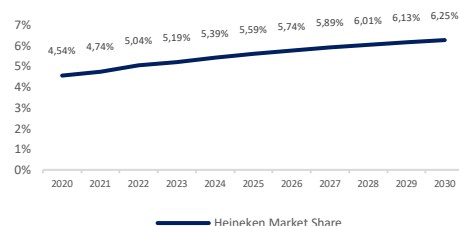


Figure 43- Forecasted market share in Asia Pacific
Source: Analyst estimates

Sales and Sales Growth (%) Forecast in Asia Pacific



Figure 44- Sales and sales growth (%) in Asia Pacific
Source: Analyst estimates

Africa Middle East & Eastern Europe: Hidden Opportunities

African markets are expected to deliver tremendous growth in future years since the continent's prospects are bright. With more than forty breweries in the region,

Heineken's is in an excellent position to take advantage and capitalize on this growth. With people's purchasing power increasing along with the urban middle class, low production costs, and small competition in the segment, beer in Africa is almost 50 percent more profitable than any other country in the world. Despite its high profitability the region still has some intrinsic problems such as poverty and bad infrastructures making beer distribution a difficult task. This did not stop Heineken's good performance in the region. The company has not only expanded its global brands in many of its emerging markets as also developed domestic brands that are locally produced. This was central to its strategy in the region, opening its first brewery in 2019 in Mozambique producing several brands and producing locally the Heineken brand in Rwanda and Côte d'Ivoire.

Although Heineken's focus on the premium segment was crucial to drive the company's strong performance and to align it with the market's main trends, for the company to grow in the Africa segments there is a need to adjust to local conditions by strengthening its economy offer to countries where per capita consumption is significantly lower (i.e., Nigeria).

Nigeria is one of the most lucrative countries in the world and with extreme importance for Heineken, which holds more than 50% share of the market (55% share in 2019). Its two main competitors, AB InBev and Diageo each hold a 22% market share but have been gaining space, recording share gains over the last years. Due to higher margins, companies tend to focus on the premium segment. However, in the Nigerian market the largest beer category is the economy lager, and, in this category, AB InBev takes the lead with a 48% market share while Heineken is ranked second with 43% market share.

Despite this, Heineken remains strong and focused on strengthening its economic offer which will allow for share gains over the forecasting period. The first quarter of FY21 already reveals strong results with Heineken's premium (Heineken brand and Tiger) and non-alcoholic (Maltina) portfolio growing by 14% and 30% respectively.

South Africa also delivered strong results with volumes growing by high-twenties due to low end-year stocks and the expansion of the Sedibeng production plants. The Heineken® 0.0 brand was also a success in the region, achieving the position as the market leader within the category mainly through increases in the retail and online distribution channels. Other markets such as Ethiopia continued to deliver double-digit growth in the premium portfolio (mainly by Bedele Special). Egypt declined due to the bans on tourism and increases in the prices of non-alcoholic drinks. However, we expect the country to return to its pre-pandemic levels in FY22. In Eastern Europe, Russia saw mid-teens volume growth in the first quarter with the premium portfolio growing led by Dr.Diesel.

Overall, the first quarter of FY21 volume growth in Africa, Middle East & Eastern Europe was particularly strong increasing 9.9% inorganically and is predicted to maintain its

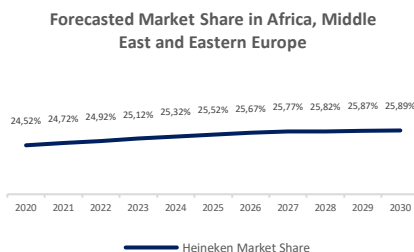


Figure 45- Forecasted market share in Africa, Middle East and Eastern Europe
Source: Analyst estimates

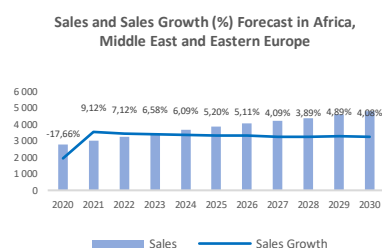


Figure 46- Sales and sales growth (%) in Africa, Middle East and Eastern Europe
Source: Analyst estimates

good performance throughout the year particularly due to the expected strong performance in Nigeria and South Africa.

Africa, Middle East, and Eastern Europe markets along with Asia are key for Heineken's future performance due to the possibility of future growth both through volumes and value. We predict the company will be able to increase its market share over the forecasting period mainly driven by significant increases in market share in Africa but slightly offset by the Eastern Europe region where gaining share has been harder due to the strong presence of Carlsberg and other competitors and less ongoing opportunities. We predict Heineken will be able to achieve a market share of 25,89% by FY30 (Fig.45) compared to the 24,52% market share in FY20) and display a volume growth of 4% CAGR during the forecasting period. Driven from increases in market share, prices, and global beer volumes, the group's revenues (Fig.46) are also set to increase at a 5,2% CAGR, exposing a strong company performance in the region during this period.

2. Operating Expenses and Personnel

One of Heineken's main objectives to recover from the Covid-19 pandemic was to significantly reduce costs and reinvesting in marketing and digital initiatives, through a program called “EverGreen”, thus focusing on becoming more efficient and increase its operating margins. These cuts are in response to one of the Company's most challenging years, with the closing of bars and restaurants around the world and switched consumer demand to online and grocery channels. In 2020, its sales dropped by around 12% as volumes decreased by 8%, leading to net profits being down by nearly 50%.

Heineken targeted a 10% reduction in costs base (of around 2 billion euros), including a global workforce reduction (around 8,000 employees) and lower related costs like travel and infrastructures over 3 years. The staff at Heineken's Head Office will also be hit by the program, with personnel costs in Amsterdam in line for a 20% reduction. The Company believes that these cuts will allow them to reinvest in higher marketing and digital spending and thus increase its margins by increasing revenues and reducing costs. Heineken's target operating profit margin for FY23 is 17% and while this might be a bit ambitious and slightly optimistic given the current conditions the company is focused on achieving this goal. It all will depend on how fast the economies recover from the Covid-19 pandemic and on how fast beer consumption returns to normality. Also, to have better margins, brewers need to have sufficient large shares and efficient operations to benefit from economies of scale. Unfortunately, Heineken still does not have the scale advantages in their biggest markets which makes it difficult not only to increase its margins but also to excel on the margins of AB InBev, which due to its large scale benefits from much higher margins.

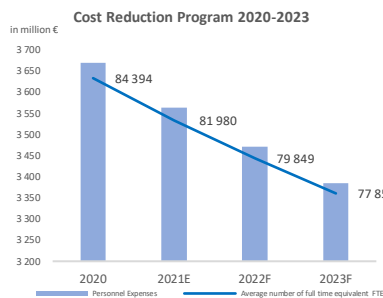


Figure 47- Cost reduction program (2020-2023)
Source: Analyst estimates

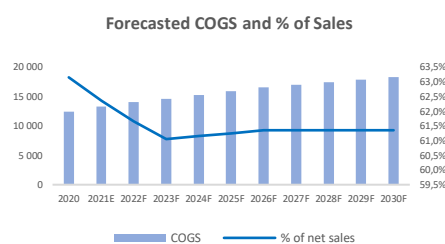


Figure 48- Forecasted COGS (and % of sales)
Source: Analyst estimates

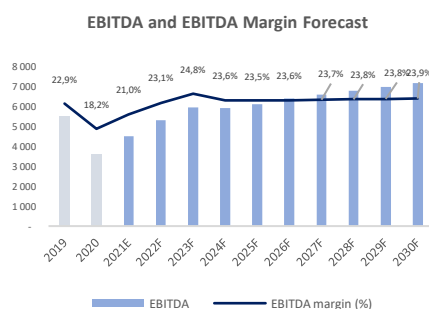


Figure 49- EBITDA and EBITDA Margin forecast
Source: Analyst estimates

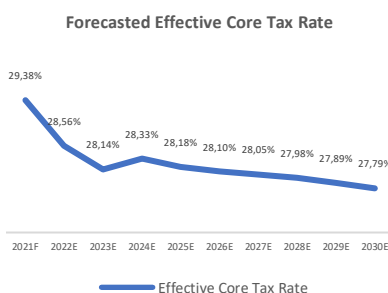


Figure 50- Forecasted effective core tax rate
Source: Analyst estimates

The company has already been improving its cost structure by lowering its workforce in FY20 with a reduction of about 1460 employees and simultaneously reducing the average cost per employee. We predict that Heineken will be able to maintain this average cost per employee between FY21 and FY23 and eliminate a total of 8000 employees by FY203 as targeted by the company (Fig.47). From FY23 to FY30 as we predict a sales growth of a 3.8% CAGR, we expect the average number of employees to increase as it would be extremely difficult for the company to sustain such levels of growth without increasing its workforce. Regarding the cost of goods sold (Fig.48), these costs are also expected to follow the same trends, decreasing as a percentage of revenues between FY21 and FY23 revealing some degree of economies of scale. However, this margin is expected to start increasing again from FY23 to FY26 and after, to remain constant until FY30 stabilizing at a 61.3% margin. This cost structure evolution, especially during the Covid recovery years (period until 2023), will allow for greater productivity and will eliminate the business inefficiencies generating the resources the company needs to reinvest in future growth.

EBITDA Margin

In 2020, the Group delivered a significant decrease in the EBITDA margin (Fig.49), decreasing from 22.9% to 18.2%. This decrease of EBITDA margin to the value of 18.2% was still above the industry average of 17.9% however lower than its main competitors with Anheuser-Busch InBev SA displaying an EBITDA margin of 30.82% and Carlsberg a margin of 23.1% which supports the company poor results in 2020. Given the previous revenue and cost structure analysis, EBITDA is set to increase during the forecasting period, except for the year FY24 due to increases in the cost structure of the company not offset by the growth in revenues in that year. Margins are predicted to increase until FY23 to 24.8% and then decrease from FY23 to FY25 mainly due to increases in personnel expenses. From FY25 until the end of the forecasting period it is expected that the company margins will increase, driven by significant increases in the company's revenues, enough to offset the increases in COGS and Personnel Expenses.

Taxes

To calculate the effective amount of taxes the company pays yearly we divided the amount paid into the income tax using the company's domestic tax rate (25%) plus the tax adjustments. The tax rate Heineken paid in FY20 was particularly high (39.91%) due to the negative impact of the pandemic where tax adjustments more than doubled compared to 2019. This growth in tax adjustments is mainly explained by the increases in operational losses for which no deferred assets were recognized and due to an increase in the effect of permanent items driven by the lower profit before taxes. We

predict that in FY21, the company will decrease this rate to 29.38% and that this rate will decrease until FY27 remaining stable until FY30 at a 27.79% tax rate (Fig.50).

NOPLAT

In 2020, the Group delivered a significant decrease in the NOPLAT (Fig.51) decreasing by 68% in comparison to the previous year and displaying a margin of 4.5% which is less than half of the previous year's margins. Given the previous revenue, cost structure, and tax analysis, NOPLAT is set to increase by 135% in FY21 which not only reveals the success of Heineken's cost-cutting plan with greater optimization of the business but also that most of Heineken's markets will start its recovery until the end of this year. During the forecasting period, we predict NOPLAT will increase at a decreasing rate until FY30 except for FY24 where NOPLAT decreases by 6% due to the assumption that the company will start to rise the personnel costs again in that year.

Forecasted NOPLAT

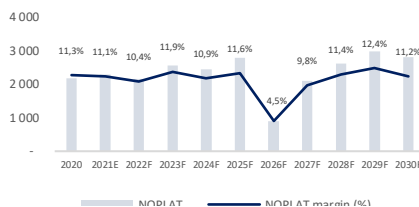


Figure 51- Forecasted NOPLAT
Source: Analyst estimates

Balance Sheet

Debt and Shareholder's Equity

Total gross Debt increased in FY20 to €18.196 million (compared to €17.052 million in 2019) and net interest expenses saw an organic increase of 9.7% (€470 million) reflected by the group additional funding and the increased local debt in some countries. Most of the company's borrowings are Unsecured Bond Issues which represent almost 80% of the company's total borrowings (Fig.52).

		2020		
In millions of €	Note	Non-current	Current	Total
Unsecured bond issues		13,242	1,200	14,442
Lease liabilities		936	263	1,199
Bank loans		374	38	412
Other interest-bearing liabilities		64	983	1,047
Deposits from third parties ¹		—	615	615
Bank overdrafts		—	481	481
Total borrowings		14,616	3,580	18,196

Figure 52-Heineken's total borrowings
Source: Company report

Net Financial Debt Forecasts

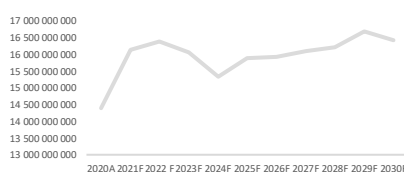


Figure 53-Net financial debt forecasts
Source: Analyst estimates

Forecasted Net Debt/EBITDA ratio

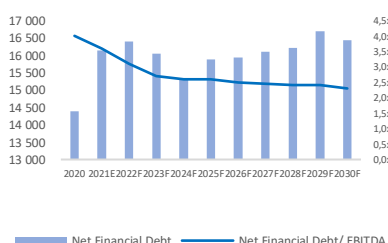


Figure 54-Forecasted Net debt/EBITDA
Source: Analyst estimates

The Net Debt value (Fig.53) on the other hand, decreased in 2020 to €14.4 million compared to €15.5 million in 2019 due to the sum of operating cash flows, inflows derived by the company's divestments, and the positive impact from currency translations on debt being higher than the dividend payments. However, although it is smaller than the one from 2019, it represents a significantly higher Net Debt to normalized EBITDA ratio increasing from a ratio of 2.8x to 4.0x mainly driven by a 34.6% decrease in EBITDA. Focusing on lowering this ratio remains a fundamental priority for the group which is committed to a long-term target of less than 2.5x. Setting EBITDA to increase every year during the forecasting period and assuming the company will not incur any major CAPEX expenditures that would force a significant increase in its current debt level, we predict Heineken will be able to gradually lower this ratio, achieving the company's target ratio of 2.4x in FY28 and decreasing until 2.3x in FY30 (Fig.54).

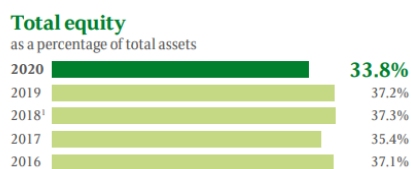


Fig.55-Heineken's total equity
Source: Company report

The company will increase its Net Financial Debt from FY20 to FY22 to a value of €16.4 million to gain the leverage it needs to boost its growth and have a faster recovery from the current adverse conditions. As the company starts generating profits and economic conditions stabilize, the company will focus on deleveraging from FY22 to FY24. From FY24 to FY30 Net Debt of the company is expected to be stable although with a slightly increasing trend due to higher capital expenditures predicted during this period.

Shareholders' equity decreased from 37.2% to 33.8% (Fig.55) as a percentage of total assets to a value of €13.392 million in 2020 (decreased by €2.755 million). This decrease can be explained by a €204 million net loss, a dividends payment of €597 million, and a negative comprehensive income of €1.923 million due to translational differences.

Capital Expenditures

In FY20, Capital expenditure related to property, plant and equipment and intangible assets decreased to a negative value of €109 million (compared to €3.567 million in 2019) due to the suspension of non-committed CAPEX as from late march, remaining only the investments necessary for safety and business continuity. The value of capital expenditure in 2020 is negative as the company received more cash proceeds from the assets sold and divestitures than it spent in new PP&E and Operating Intangible Assets. These new investments made by the company included the renovation in UK pubs and capacity expansions in Brazil.

To estimate the Capital Expenditures, we forecasted the PP&E and the Operating Intangibles as a function of Revenues. In FY21 we estimated PP&E (Fig.56) to represent 52.6% of the Group's Revenues assuming a decrease in comparison to the previous year (58.6% in FY20) due to a diminution in all the company's investment which were considered unnecessary to sustain the company's good performance. We predict this decreasing effect will remain until FY22 with this ratio decreasing to 51.0%. These decreases between FY20 and FY22 are justified by the negative effect of the COVID-19 on its business as the company needs more than ever to ensure it has enough liquidity to meet its debt obligations when they are due, without incurring losses. Furthermore, Heineken's CEO But Van den Brink stated that over the short term, due to its new cost-reducing strategy, the company will focus more on autonomous growth and innovation instead of continuing the strategy of growing through M&A acquisitions that Heineken was following before the pandemic. However, the CEO added that there are still important target opportunities in the company's key geographic segments that would be beneficial for the company's growth, and therefore short-term M&A acquisitions are not completely out of the table. Given this, and as we predict markets will start recovering by FY23, we expect an increase in the PP&E/Revenues ratio from FY22 until FY29, decreasing in FY30 as the company starts to stabilize.

Forecasted PP&E

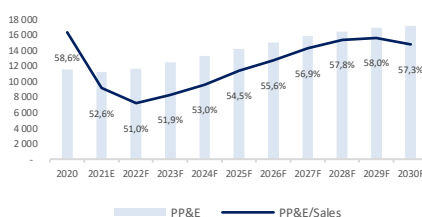


Fig.56-Forecasted PP&E
Source: Analyst estimates

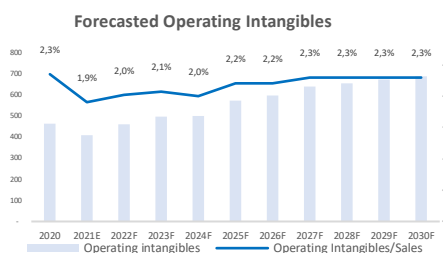


Fig.57-Forecasted Operating Intangibles
Source: Analyst estimates



Fig.58-Forecasted CapEx
Source: Analyst estimates

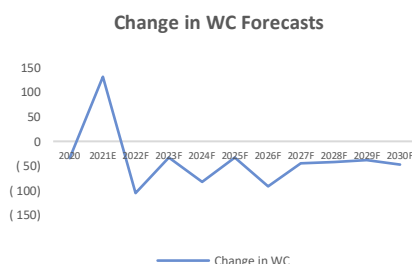


Fig.59-Forecasted change in WC
Source: Analyst estimates

As economic conditions and markets normalize, the company will be able to boost its revenues, putting less pressure on the company's resources to sustain the company's liquidity. This will allow Heineken to return to focus on the investments required to boost the company's presence in key markets such as Asia, Africa, Middle East & Eastern Europe, and the Americas where there's still a lot of room to expand and ongoing opportunities. Overall, the PP&E is expected to increase over the forecasting period. Regarding the operating intangibles (Fig.57) we assumed it to represent approximately between 1.9%-2.2% of revenues until FY27 and to stabilize at 2.3% until FY30. Therefore, the Operating Intangibles are also set to increase during this whole period. Both Depreciation and Amortization are forecasted as an average of the last four years of the historic Depreciation/PP&E and Amortization/Operating Intangibles ratios. Overall, Capital Expenditures (Fig.58) are set to represent an average of 9% of the Group's revenues and are expected to significantly increase in FY21 to a value of €998 million and set to increase until FY27. We predict the company will start decreasing its Capital Expenditures from FY27 until FY30.

Net Working Capital

Operational cash was set to be 1% of the group's revenues and therefore, expected to increase during the forecasting period. Other receivables, Returnable Packaging deposits, and Accrued assets are forecasted as a % of the Group's total Revenues using an average of the last four years. The inventory's holding period was calculated to forecast Inventories as well as the Collective Period was computed to forecast Trade and Other Receivable and the payable period calculated to forecast Trade and Other payables. Current tax assets were estimated as a % of the Cost of Goods Sold of the company. Our estimates assume a positive Net Working Capital in FY21 (Fig.59) of €131 million which exposes that the company's Working Capital increased and that it needs more capital to grow, reducing the amount of cash and the company's Free Cash Flow. Net working capital is forecasted to be negative from FY22 until the end of the forecasting period. A negative change in Net Working Capital (Working Capital is decreasing) reveals the company's current operating liabilities are increasing faster than the current operating assets which mean the company's use of cash has been delayed and the free cash flow increases consequently. A decreasing working capital ensures the company will be able to manage its liquidity in the future ensuring the company has enough funds to meet its short-term liabilities. Therefore, by assuming negative changes in working capital over the forecasting period, we predict the company will be able to control and monitor all the risks associated with working capital and thus ensure its liquidity, which has become one of the main priorities for the company given the adversities and volatile conditions derived from the COVID-19.

Valuation

Valuation Assumptions

Valuation Assumptions	
Statutory Tax Rate	25,0%
Risk Free Rate %	-0,11%
Market Risk Premium	5,75%
Beta Unlevered	90,0%
Beta Debt	24,59%
Beta Equity	106,87%
Unlevered Cost of Capital	5,07%
Cost of Equity	6,04%
Cost of Debt	3,0%
WACC	5,26%

Fig.60-Valuation assumptions
Source: Analyst estimates

The company's Enterprise Value was computed through a Discount Cash Flow (Fig.60) model using the Weighted Average Cost of Capital to discount future free cash flows. To estimate the cost of equity of 4,43% we applied the CAPM model. We used as risk-free rate the current German 10-Year bond yield of -0.107%. and the market risk premium was estimated to be 5,75%(ref). To obtain the company's β_e , we regressed Heineken's historical returns against the Stock 600, a well-diversified portfolio as a proxy of the European market getting an adjusted β of 0.82, revealing that the company is less volatile than the market, using a 95% confidence interval, 0.7132 to 0.9238, which ensures more accuracy in the result obtained, and a standard deviation of 5,37%. Furthermore, to get the Unlevered Beta we first studied the average unlevered Beta of Heineken's peer group, obtaining a value of 0.71. Due to the current Covid pandemic and the negative effects on the company's business in this segment, we evaluated and compared Heineken's performance against its main competitors, concluding that the company was more volatile to the market fluctuations than the average of its peers. Perceiving the company's operating risk to be higher, we assumed a value of 0.9. When analyzing Heineken's rolling beta (Fig.61) from a period between December 2015 and December 2020, we can conclude that the company's systematic risk has been always between 0.2 and 1 except from the period between June and September of 2018 when the company displayed values between 0 and 0.2.

The company's Beta has been increasing from FY18 to FY20 due to increases in volatility as systematic risk, although always exhibiting values below one, displaying a value of 0.92 in December 2020. We expect the company's beta to stabilize as market conditions return to normality and the economies recover from the COVID-19 pandemic. To estimate the cost of debt we used the "interest rate on the net debt position as at 31 December 2020" given in the company's annual report getting a value of 3.0% (equal to the one from 2019). The company's bonds average maturity at this date was 8 years increasing from the one from the 7 years average maturity from the previous year. Regarding the company's capital structure, we did not consider a target capital structure. We aligned our projections of the company's Net Debt over EBITDA targeting a ratio of below 2.5x with the firm's capital structure. The company's capital structure over the forecasting period (Fig.62) is predicted to be in line with the historical one, changing by small percentages yearly. We assumed a Debt over Enterprise Value of 20,50% in FY21 (compared to 21.51% in FY20) which we forecast to follow a decreasing trend until FY30 due to the assumption that the company is going to decrease its Net Debt over EBITDA ratio yearly to achieve its target of a ratio below 2.5. Having all the inputs computed, the WACC was calculated to be 5.3%.

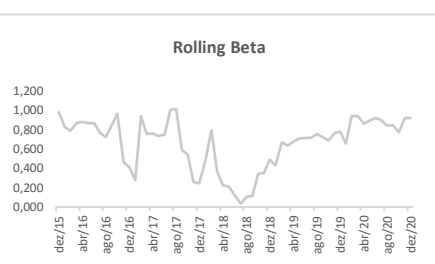


Fig.61-Rolling beta
Source: Analyst estimates; Bloomberg

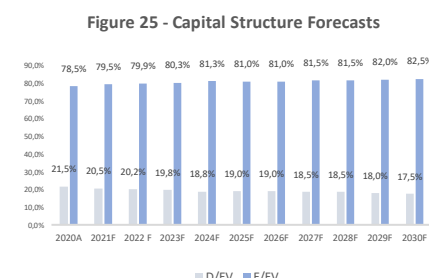


Fig.62- Capital structure forecasts
Source: Analyst estimates

Discounted Free Cash Flows

The Return on Invested Capital (ROIC) (Fig.63) in FY21 displays a value of 20,8% which is much higher than the one the 7,5% in 2020 and also higher than the company's WACC. This means the company's return on investments is very positive and that resources are being used efficiently, boosting the company's profits and growth. The company's ROIC is set to increase until FY23 and then to decrease until FY30 although remaining always positive. This implies that in the first period (FY21-FY23) the company will be able to improve its efficiency year by year by effectively employing its resources into profitable investments. On the other hand, in the second period (FY23-FY30) there is a reduction in the company's efficiency when allocating resources to new investments, and therefore with returns on capital invested being reduced due to higher capital intensity. However, ROIC values during this period are all above 20% which is still much higher than the company's WACC (5.3%) and a good rate of return. Thus, despite this decrease, resources remain being well employed and driving the company's profits and growth. The Core Enterprise value was calculated using the Discounted Free Cash Flow Model (DCF) using a WACC of 5.3% and a perpetuity growth of 1.4%(Fig.65) resulting in a value of €66.917,9 billion. The company's Equity value is 51.524,8 billion and was obtained by subtracting the net financial liabilities and minority interests. The share price at FY21 is € 89.5 implying the stock is overvalued. Our recommendation is to “SELL”, given that holding the stock will provide a loss of 0.71% (a capital loss of 1.87% and a positive dividend yield of 1.16%).

ROIC Forecasts

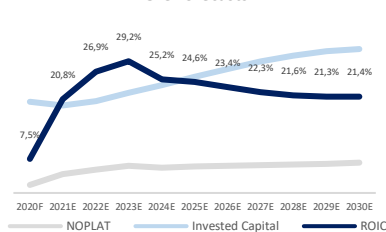


Fig.63- ROIC forecasts
Source: Analyst estimates

RR Forecasts

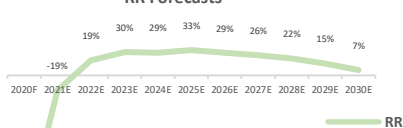


Fig.64- RR forecasts
Source: Analyst estimates

Growth Forecast

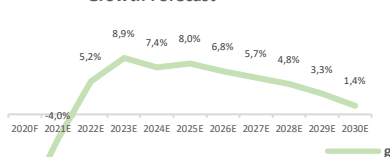


Fig.65- Growth forecast
Source: Analyst estimates

Sensitivity Analysis

Given all the parameters used to compute WACC, it is important to build a sensitivity analysis to access how small changes in those parameters can impact the company's valuation, in other words, to measure how sensitive the share price is to changes in the assumptions.

Firstly, a sensitivity analysis on the Market Risk Premium and the Risk-free rate was performed (Fig.66). The risk-free rate has a strong impact on the company's valuation as if it decreases the target share price obtained becomes higher than the current share price. This is important as considering a bond with maturity lower than 10 years, would have a strong impact on the company's valuation changing the final recommendation to “BUY” (as yields become lower as the bonds maturity decrease), whereas choosing a bond with higher maturity such as a 20-year, 30-year maturity bond would imply the company to be even more overvalued, supporting our recommendation to “SELL”. We also observe high sensitivity regarding the market risk premium observing that small decreases, resulting in a share price higher than the current share price, undervaluing the stock.

Price		g					
		1.00%	1.20%	1.40%	1.60%	1.80%	
WACC	89,51						
	4,26%	116,58	124,07	132,60	142,42	153,82	
	4,76%	96,50	101,85	107,83	114,57	122,22	
	5,26%	81,17	85,13	89,51	94,37	99,78	
	5,76%	69,09	72,12	75,43	79,05	83,04	
	6,26%	59,34	61,71	64,27	67,05	70,08	

Fig.66- Sensitivity Analysis on Market Risk Premium and Risk-free rate

Price		Market Risk Premium				
		89,5	5,55%	5,65%	5,75%	5,95%
Rf	-0.31%	100,97	97,81	94,80	89,16	84,01
	-0.21%	98,01	94,98	92,10	86,70	81,75
	-0.11%	95,17	92,28	89,51	84,33	79,57
	-0.01%	92,46	89,69	87,03	82,05	77,47
	0.09%	89,86	87,20	84,65	79,86	75,46

Fig.67- Sensitivity Analysis on WACC and Perpetual Growth Rate

A second sensitivity analysis (Fig.67) was made to assess the impact of changes in WACC and the Perpetual Growth Rate on the valuation. Given that our terminal value represents 74% of the Total Enterprise Value, most of the company's value comes from perpetual growth. This makes perpetuity growth one of the most sensitive parameters on the company's valuation. Higher perpetuity growth rates would lead to a share price higher than the current price whereas assuming lower rates would overvalue the stock. There is a strong sensitivity regarding the WACC, with small changes significantly impacting the company's share price. Decreasing this parameter by a small amount leads to much higher share prices and vice versa. This puts into evidence the importance of determining these parameters as most accurately as possible as small changes could lead to totally different results.

Multiples

Since the company has established its presence in more than 70 countries from all over the globe, we selected global similar companies operating in the beer industry, as Heineken's peer group (Fig.68). We selected 9 companies, including Heineken itself and Carlsberg, Anheuser-Busch InBev, China Resources, Molson Coors, Tsingtao, Asahi Group, AMBEV, and Kirin Holding. All these competitors have a strong presence in the beer market and compete directly with each other across many markets. There is fierce and intense competition due to their shared emphasis on the premium segment (high-end beers). To compare the EBITDA Multiple implied by our DCF valuation of 14.9x as well as our Sales Multiple of 3.1x, we analyzed the peer group minimum, maximum and average multiples excluding China Resources and Molson Coors, considered as outliers. The average EBITDA multiple from the industry was 15.46x which would value Heineken's share price at €95,39 with a total expected capital gain plus dividend gain of 5,66%. This share value goes against our recommendation to “SELL”. The average Sales multiple from the industry was 2.94x originating a share price of €84.27 with a negative total expected capital gain plus dividend gain of 6.38%, which is aligned with our recommendation to “SELL”. When computing the average of the Equity Value of the two multiple methods and dividing by the number of the company's outstanding shares, we obtain a share price of €89.83, the value that is close to our DCF valuation (€89.51) and therefore supporting our recommendation to “SELL”. Given that the average share price of the different multiple methods of the industry peers is in line with our view and final recommendation we conclude that our vision is in line with the industry.

Security	P/E	EV/EBITDA	EV/Sales	Price
Heineken NV	56,4x	18,5x	3,4x	91,2
Carlsberg AC	23,6x	12,6x	2,9x	131,1
Anheuser-Busch Inbev	N/A	16,0x	4,9x	57,0
China Resources	92,5x	39,5x	6,1x	7,5
Molson Coors	12,2x	30,2x	1,8x	37,0
Tsingtao	61,0x	24,5x	3,4x	8,6
Asahi Group	21,6x	15,2x	1,9x	33,5
AMBEV	21,6x	11,0x	4,0x	2,5
Kirin Holdings	28,4x	13,5x	1,6x	19,2

Fig.68- Heineken's peer group multiples
Source: Bloomberg; Analyst estimates

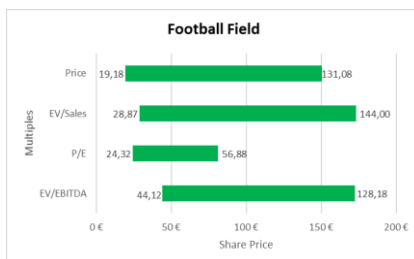


Fig.69- Heineken's football field analysis
Source: Bloomberg; Analyst estimates

Revenues Scenario			
	Best Case	Worst Case	Base Case
Probability of Occurrence	20%	15%	65%
Share Price	€ 92,0	€ 85,0	€ 89,5
Costs Scenario			
	Best Case	Worst Case	Base Case
Probability of Occurrence	15%	15%	70%
Share Price	€ 90,6	€ 86,1	€ 89,5
CapEX Scenario			
	Best Case	Worst Case	Base Case
Probability of Occurrence	15%	15%	70%
Share Price	€ 90,2	€ 86,3	€ 89,5

Fig.70- Heineken's scenario analysis

Revenues Scenario	
Target Share Price Dec2021	€ 89,3
Current Share Price Dec2020	€ 91,2
Expected Capital Gain (%)	-2,07%
Dividend Yield	1,16%
Return	-0,91%
Recommendation	SELL

Fig.71- Target share price revenues scenario

Costs Scenario	
Target Share Price Dec2021	€ 89,2
Current Share Price Dec2020	€ 91,2
Expected Capital Gain (%)	-2,26%
Dividend Yield	1,16%
Return	-1,09%
Recommendation	SELL

Fig.72- Target share price costs scenario

CAPEX Scenario	
Target Share Price Dec2021	€ 89,1
Current Share Price Dec2020	€ 90,2
Expected Capital Gain (%)	-1,15%
Dividend Yield	1,14%
Return	-1,15%
Recommendation	SELL

Fig.73- Target share price CAPEX scenario

Scenario Analysis

A scenario analysis (Fig.70) was performed to measure (1) the impact on changes in the forecasted company's volume sales (2) the impact of changes in the cost reduction plan and (3) the impact of changes in capital expenditures. All the scenarios are implemented over the period between FY21 and FY24, a period in which the recovery from the COVID-19 is expected to take place, and due to the riskiness and level of uncertainty evolved, it is important to test how the company will react to positive or negative. In all the scenarios the base case corresponds to our forecasting model predictions.

First, we tried to measure the impact of a slower/faster recovery on the on-trade predicting lower volume sales under the worst scenario and higher under the best scenario with on trade restriction being lifted. The average share price (Fig.71) from the scenario is €89.30, close to the price obtained through the DCF which is still aligned with our recommendation to “SELL”.

The second scenario measures the impact of a less/more efficient cost-cutting plan implementation predicting lower costs achieved under the best scenario and higher under the worst. In other words, the best scenario predicts higher operating margins which more economies of scale while the worst scenario assumes lower operating margins through higher personnel costs and Costs of Goods sold. The average share price (Fig.72) from the scenario is €89.16, close to the one from the base case, corroborating with our recommendation to “SELL”.

In the third scenario, it was measured the impact of more/fewer capital expenditures, assuming a case of higher investments required as the worst scenario and one with lower investments required as the best-case scenario since the company's cash flow would in that case increase. The average share price (Fig.73) from the scenario is €89.1 which still implies a recommendation to “SELL”. From the scenario analysis we conclude that even under different conditions resulting from the current volatile pandemic environment, the recommendation would be always to “SELL”.

Appendix

Financial Statements Reformulated Income Statement

000 000 €	2019	2020	2021E	2022F	2023F	2024F
Net Revenue	23 969	19 715	21 375	22 836	23 953	24 965
COGS	(14 592)	(12 450)	(13 327)	(14 079)	(14 623)	(15 266)
Gross Profit	9 377	7 265	8 048	8 758	9 330	9 699
Cost of employees	(3 880)	(3 669)	(3 564)	(3 471)	(3 385)	(3 805)
EBITDA	5 497	3 596	4 484	5 286	5 945	5 893
Depreciation (PPE)	(1 488)	(1 518)	(1 283)	(1 338)	(1 469)	(1 583)
Amortization (Operating Intangibles)	(87)	(112)	(79)	(90)	(101)	(104)
Impairments PP&E	(52)	(467)	(153)	(203)	(234)	(299)
Impairments Operating Intangibles	(2)	(17)	(2)	(2)	(2)	(2)
EBIT	3 868	1 482	2 967	3 654	4 140	3 906
Operating Taxes	(1 077)	(592)	(872)	(1 044)	(1 165)	(1 106)
NOPLAT	2 791	891	2 095	2 611	2 975	2 799

Revenues

	2019	2020	2021E	2022F	2023F	2024F
Europe						
Volume Consumed (millions of li	50 666	46 818	48 617	50 026	50 497	50 791
Heineken Market Share	15,99%	15,98%	16,08%	16,13%	16,14%	16,16%
Competitors Market Share	84,01%	84,02%	83,92%	83,87%	83,86%	83,84%
Heineken Volume	8 100	7 480	7816	8 068	8 149	8 206
Average price per unit	1,31	1,15	1,17	1,19	1,21	1,23
Net Revenue (in millions of €)	10 631	8 631	9 165	9 593	9 845	10 085
Americas						
Volume Consumed (millions of li	59 275	53 662	55 481	57 375	58 598	59 788
Market Share	14,44%	14,74%	15,02%	15,42%	15,70%	15,85%
Competitors Market Share	85,56%	85,26%	84,98%	84,58%	84,30%	84,15%
Heineken Volume	8 560	7 910	8 334	8 847	9 200	9 477
Average price per unit	0,88	0,80	0,81	0,82	0,84	0,85
Net Revenue (in millions of €)	7 507	6 319	6 765	7 283	7 696	8 063
Africa, Middle East & Eastern Europe						
Volume Consumed (millions of li	18 073	16 149	17 200	18 024	18 756	19 408
Market Share	24,18%	24,52%	24,72%	24,92%	25,12%	25,32%
Competitors Market Share	75,82%	75,48%	75,28%	75,08%	74,88%	74,68%
Heineken Volume	4 370	3 960	4 252	4 492	4 712	4 915
Average price per unit	0,77	0,70	0,71	0,72	0,73	0,75
Net Revenue (in millions of €)	3 369	2 774	3 027	3 243	3 456	3 666
Asia Pacific						
Volume Consumed (millions of li	70 354	61 901	65 863	68 188	70 491	70 752
Market Share	4,42%	4,54%	4,74%	5,04%	5,19%	5,39%
Competitors Market Share	95,58%	95,46%	95,26%	94,96%	94,81%	94,61%
Heineken Volume	3 110	2 810	3 122	3 436	3 658	3 813
Average price per unit	1,03	0,96	0,98	0,99	1,01	1,03
Net Revenue (in millions of €)	3 202	2 707	3 056	3 411	3 690	3 912

Reformulated Balance Sheet

OPERATING	2019	2020	2021E	2022F	2023F	2024F
Assets						
Operating non-current assets	15 285	13 092	12 924	13 495	14 405	15 258
Operating Intangible assets	484	463	407	460	496	499
PP&E	13 269	11 551	11 243	11 646	12 432	13 231
Other receivables	1 532	1 078	1 275	1 388	1 477	1 528
Operating current assets	6 699	5 116	5 772	6 145	6 422	6 619
Working Cash	240	197	214	228	240	250
Inventories	2 213	1 958	1 942	2 083	2 203	2 296
Trade and other receivables	4 123	2 807	3 478	3 673	3 820	3 903
Accrued Assets	-	-	-	-	-	-
Current tax assets	123	154	139	160	159	170
Total Operating Assets	21 984	18 208	18 696	19 640	20 827	21 877
Liabilities						
Operating non-current liabilities	1 808	1 292	1 660	1 624	1 596	1 543
Tax liabilities	-	-	-	-	-	-
Other liabilities	153	131	147	150	145	143
Deferred Tax Liabilities	1 655	1 161	1 513	1 474	1 451	1 400
Operating current liabilities	8 368	6 820	7 345	7 822	8 133	8 412
Returnable packaging deposits	565	454	534	553	574	600
Trade and other payables	7 520	6 107	6 531	6 997	7 286	7 541
Current tax liabilities	283	259	280	272	273	271
Total Operating Liabilities	10 176	8 112	9 004	9 446	9 729	9 955
Operating Invested Capital	11 808	10 096	9 692	10 193	11 098	11 922

Free Cash Flow Map

'000 €	2019	2020	2021E	2022F	2023F	2024F
NOPLAT	2 791	891	2 095	2 611	2 975	2 799
Depreciation	(1 488)	(1 518)	(1 283)	(1 338)	(1 469)	(1 583)
Amortization	(87)	(112)	(79)	(90)	(101)	(104)
Gross FCF	4 366	2 521	3 457	4 038	4 544	4 486
Change in Inventory	293	(255)	(16)	141	120	93
Change in Accounts Receivable	383	(1 316)	671	195	147	83
Change in Accrued Assets	0	0	0	0	0	0
Change in Current Tax Assets	52	31	(15)	22	(1)	11
Change in Working Cash	15	(43)	17	15	11	10
Change in Accounts Payable	629	(1 413)	424	467	288	255
Change in Returnable packagin	(4)	(111)	80	19	21	27
Change in Current tax liabilities	17	(24)	21	(8)	1	(2)
Change in WC	101	(35)	131	(105)	(33)	(82)
Operating Cash Flow	4 265	2 555	3 326	4 143	4 577	4 568
Other receivables	107	(454)	197	114	89	51
Tax liabilities	0	0	0	0	0	0
Other liabilities	(15)	(22)	16	3	(5)	(2)
Deferred Tax Liabilities	87	(494)	352	(39)	(23)	(51)
Δ Net other non-current	35	62	(171)	149	117	104
CAPEX	3 567	(109)	998	1 884	2 390	2 490
Free Cash Flow	663	2 602	2 499	2 109	2 070	1 975

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

This report was prepared by Teresa Rebelo da Silva and Bruno Vicente, Master in Finance students of Nova School of Business and Economics (“Nova SBE”), within the context of the Field Lab – Equity Research.

This report is issued and published exclusively for academic purposes, namely for academic evaluation and master graduation purposes, within the context of said Field Lab – Equity Research. It is not to be construed as an offer or a solicitation of an offer to buy or sell any security or financial instrument.

This report was supervised by a Nova SBE faculty member, acting merely in an academic capacity, who revised the valuation methodology and the financial model.

Given the exclusive academic purpose of the reports produced by Nova SBE students, it is Nova SBE understanding that Nova SBE, the author, the present report and its publishing, are excluded from the persons and activities requiring previous registration from local regulatory authorities. As such, Nova SBE, its faculty and the author of this report have not sought or obtained registration with or certification as financial analyst by any local regulator, in any jurisdiction. In Portugal, neither the author of this report nor his/her academic supervisor is registered with or qualified under COMISSÃO DO MERCADO DE VALORES MOBILIÁRIOS (“CMVM”, the Portuguese Securities Market Authority) as a financial analyst. No approval for publication or distribution of this report was required and/or obtained from any local authority, given the exclusive academic nature of the report.

The additional disclaimers also apply:

USA: Pursuant to Section 202 (a) (11) of the Investment Advisers Act of 1940, neither Nova SBE nor the author of this report are to be qualified as an investment adviser and, thus, registration with the Securities and Exchange Commission (“SEC”, United States of America’s securities market authority) is not necessary. Neither the author nor Nova SBE receive any compensation of any kind for the preparation of the reports.

Germany: Pursuant to §34c of the WpHG (*Wertpapierhandelsgesetz*, i.e., the German Securities Trading Act), this entity is not required to register with or otherwise notify the *Bundesanstalt für Finanzdienstleistungsaufsicht* (“BaFin”, the German Federal Financial Supervisory Authority). It should be noted that Nova SBE is a fully-owned state university and there is no relation between the student’s equity reports and any fund raising programme.

UK: Pursuant to section 22 of the Financial Services and Markets Act 2000 (the “FSMA”), for an activity to be a regulated activity, it must be carried on “by way of business”. All regulated activities are subject to prior authorization by the Financial Conduct Authority (“FCA”). However, this report serves an exclusively academic purpose and, as such, was not prepared by way of business. The author - a Master’s student - is the **sole and exclusive responsible** for the information, estimates and forecasts contained herein, and for the opinions expressed, which exclusively reflect his/her own judgment at the date of the report. Nova SBE and its faculty have no single and formal position in relation to the most appropriate valuation method, estimates or projections used in the report and may not be held liable by the author’s choice of the latter.

The information contained in this report was compiled by students from public sources believed to be reliable, but Nova SBE, its faculty, or the students make no representation that it is accurate or complete, and accept no liability whatsoever for any direct or indirect loss resulting from the use of this report or of its content.

Students are free to choose the target companies of the reports. Therefore, Nova SBE may start covering and/or suspend the coverage of any listed company, at any time, without prior notice. The students or Nova SBE are not responsible for updating this report, and the opinions and recommendations expressed herein may change without further notice.

The target company or security of this report may be simultaneously covered by more than one student. Because each student is free to choose the valuation method, and make his/her own assumptions and estimates, the resulting projections, price target and recommendations may differ widely, even when referring to the same security. Moreover, changing market conditions and/or changing subjective opinions may lead to significantly different valuation results. Other students’ opinions, estimates and recommendations, as well as the advisor and other faculty members’ opinions may be inconsistent with the views expressed in this report. Any recipient of this report should understand that statements regarding future prospects and performance are, by nature, subjective, and may be fallible.

This report does not necessarily mention and/or analyze all possible risks arising from the investment in the target company and/or security, namely the possible exchange rate risk resulting from the security being denominated in a currency either than the investor’s currency, among many other risks.

The purpose of publishing this report is merely academic and it is not intended for distribution among private investors. The information and opinions expressed in this report are not intended to be available to any person other than Portuguese natural or legal persons or persons domiciled in Portugal. While preparing this report, students did not have in consideration the specific investment objectives, financial situation or particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in any security, namely in the security covered by this report.

The author hereby certifies that the views expressed in this report accurately reflect his/her personal opinion about the target company and its securities. He/ She has not received or been promised any direct or indirect compensation for expressing the opinions or recommendation included in this report.

The content of each report has been shown or made public to restricted parties prior to its publication in Nova SBE's website or in Bloomberg Professional, for academic purposes such as its distribution among faculty members for students' academic evaluation.

Nova SBE is a state-owned university, mainly financed by state subsidies, students tuition fees and companies, through donations, or indirectly by hiring educational programs, among other possibilities. Thus, Nova SBE may have received compensation from the target company during the last 12 months, related to its fundraising programs, or indirectly through the sale of educational, consulting or research services. Nevertheless, no compensation eventually received by Nova SBE is in any way related to or dependent on the opinions expressed in this report. The Nova School of Business and Economics does not deal for or otherwise offer any investment or intermediation services to market counterparties, private or intermediate customers.

This report may not be reproduced, distributed or published, in whole or in part, without the explicit previous consent of its author, unless when used by Nova SBE for academic purposes only. At any time, Nova SBE may decide to suspend this report reproduction or distribution without further notice. Neither this document nor any copy of it may be taken, transmitted or distributed, directly or indirectly, in any country either than Portugal or to any resident outside this country. The dissemination of this document other than in Portugal or to Portuguese citizens is therefore prohibited and unlawful.