

# AB INBEV (ENXTBR:ABI)

BREWING AND BEVERAGES

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# COMPANY REPORT

06 MAY 2018

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## The Champion of Beer

*Leveraging the Dream-People-Culture platform*

- ~50% upside potential with an indicative FY18 intrinsic value per share of € 117.4 based on the realisation of margin expansion in LatAm, rationalisation of US brewing footprint, strong volume growth in EM and a smooth deleveraging process.
- ~17% underperformance since 4Q16 SABMiller closing has evaporated 10yr average P/E premium of ~30% to a discount of ~1%; significant rerate potential as benefits are reaped from transformational period.
- We argue that AB InBev's brand value (7 of top 10 global beer brands), economies of scales (~28% global market share) + high barriers to entry justify returns on invested capital exceeding its cost of capital by ~1.5% in perpetuity; next 10yrs by ~3% reverting back to pre-SABMiller levels.
- We project sales to grow organically at ~3% p.a. over the next five years with ~5.1% EBITDA growth p.a.; margin expansion by capture of additional \$ ~1.3 billion in SABMiller synergies and further brewing footprint rationalisation (mainly in LatAm and US).
- 4Q17 outperformance with 8.1% revenue growth, 6.6% revenue per hl growth, 1.6% volume growth (2.3% beer volume growth), 21.0% EBITDA growth, 446 bps EBITDA margin expansion and 141.9% normalised EPS growth (6.12% surprise).

### Company description

Anheuser-Bush InBev ("AB InBev") is the world's largest brewing company. AB InBev sells over 500 beer brands across more than 100 countries. The USA, Brazil and Mexico are its most important markets, with the recent acquisition of SABMiller adding significant exposure to African markets.

**Recommendation: BUY**

*Vs Previous Recommendation* -

**Price Target FY18: € 117.4**

*Vs Previous Price Target* -

**Price (as of 23-May-18) € 81.7**

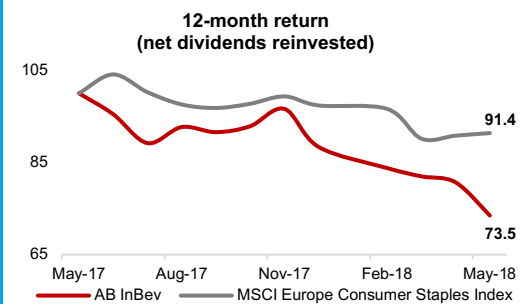
Source: Bloomberg, own estimates

52-week range (€) 79.0-110.1

Market Cap (€m) 157,925.3

Outstanding Shares (m) 1,933.7

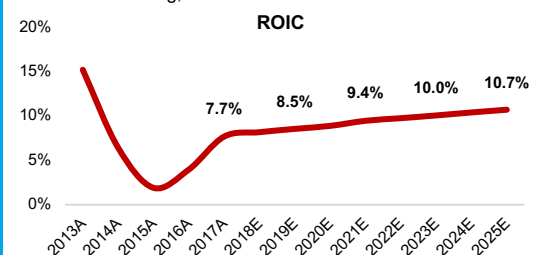
Source: Bloomberg



Source: Bloomberg

(\$ millions; excl. ratios, EPS)	2017A	2018E	2019E
Revenue	56,444	57,802	59,339
Gross profit	35,058	36,211	37,467
EBITDA	21,474	23,806	24,889
EBIT	17,813	19,790	20,794
Net profit	9,183	11,974	12,743
EPS	4.75	6.15	6.50
Net debt-to-EBITDA	4.6x	3.9x	3.4x
ROIC	7.7%	8.2%	8.5%
P/E	20.6	15.9	15.1
EV-to-EBITDA	14.7	13.3	12.8

Source: Bloomberg, own estimates



Source: Bloomberg, own estimates

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY ALEXANDER DE SWAEF, A MASTERS IN ECONOMICS STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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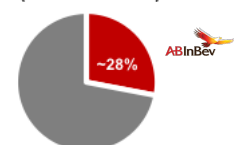
## Executive summary

We initiate a **BUY** with a **12-month price target of € 117.4**. Including our expected dividend yield, this would work out to a **total shareholders' return of 48.7%** over the next 12-months. The expected total shareholder's return is based on the realisation of *margin improvements in Latin America fuelled by a strong economic recovery in Brazil, further rationalisation of the North American brewing footprint, accelerating organic growth in APAC and Africa and a smooth deleveraging process following the transformational SABMiller acquisition.*

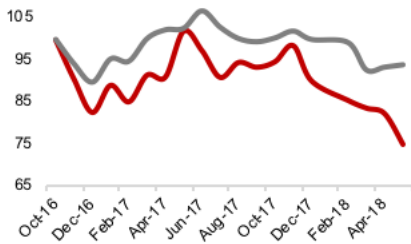
AB InBev's stock price has **declined by 23.6%** (net dividends reinvested) since completing the SABMiller acquisition in October 2016, underperforming the MSCI Europe Consumer Staples Index – which has declined by 6.3% (net dividends reinvested) over the same period – by 17.3%. We believe AB InBev's transformational period is coming to an end, presenting an **excellent buying opportunity**. For the *first time in nine years*, AB InBev's stock trades at a **P/E discount to its peers**. Now that the **first signs of improvement were visible in the 4Q17 results** (i.e. the Brazil situation improving, favourable FX developments, higher than expected SABMiller synergies and consensus EPS outperformance), we believe such discount to be unjustified. In our opinion, a **stock price of € ~105** – eliminating the relative valuation discount – is feasible in the *next six months* if HYQ18 results show proof of increased profit margins in North America to accommodate for local volume loss. Furthermore, we believe a **gradual rerate towards its average 10-year P/E premium of ~30%** is due over the next 3-5 years as AB InBev captures the benefits of its transformational period.

The *skin in the game* of the controlling shareholders – i.e. the Belgian families and the Brazilian founders of 3G Capital (\$ ~100 billion) and the executive management (\$ ~2 billion) in combination with an *effective incentive structure* across all levels of employment has resulted in an **owner-operators culture** at AB InBev. With the influence of 3G Capital – of which the founding partners have been significant shareholders for over 30 years, AB InBev has become a **lean and mean organisation** with superior profitability (~38% 2017A EBITDA margin vs ~22% for listed breweries). A **centralised operational structure** combined with a plug-and-play global distribution network has allowed AB InBev to build an *unparalleled track-record of acquisitive growth* – resulting in a **global market share of ~28%** in terms of volume.

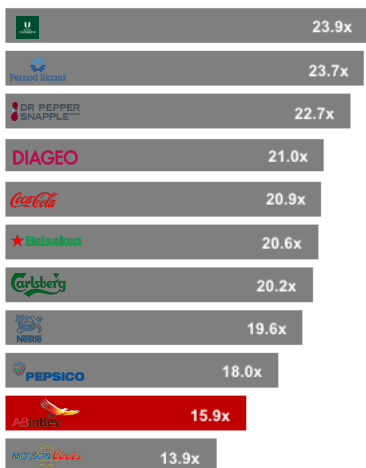
Global beer market (2017A volume)



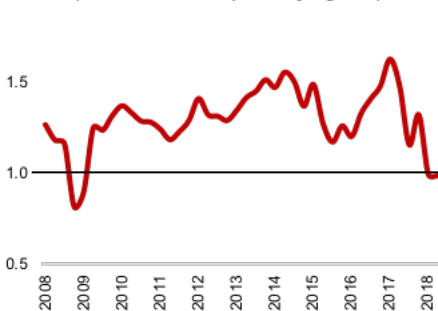
Post SABMiller return (net dividends reinvested)



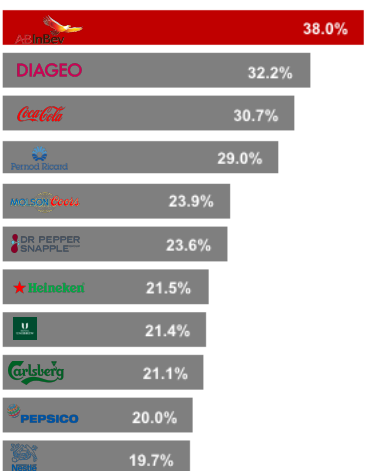
P/E 2018F



10yr valuation premium (norm. LTM P/E, quarterly figures)

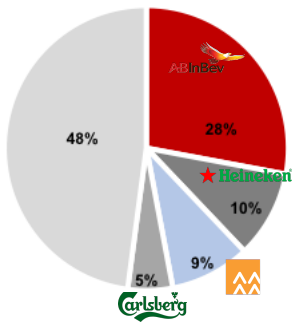


% 2017A EBITDA

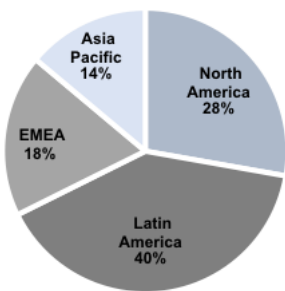


# Company overview

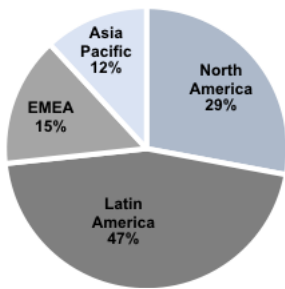
Global beer market (2017A volume)



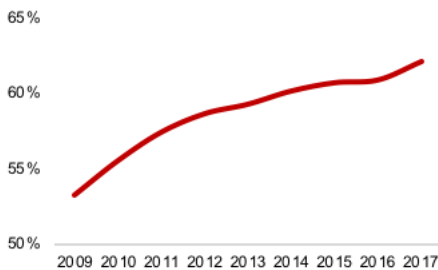
Sales split per segment (2017A)



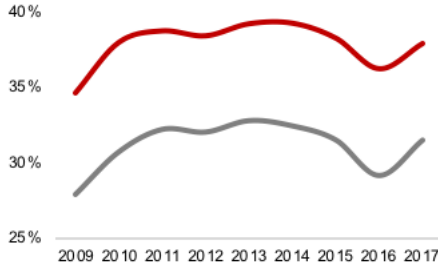
Norm. EBITDA split per segment (2017A)



% Gross margin



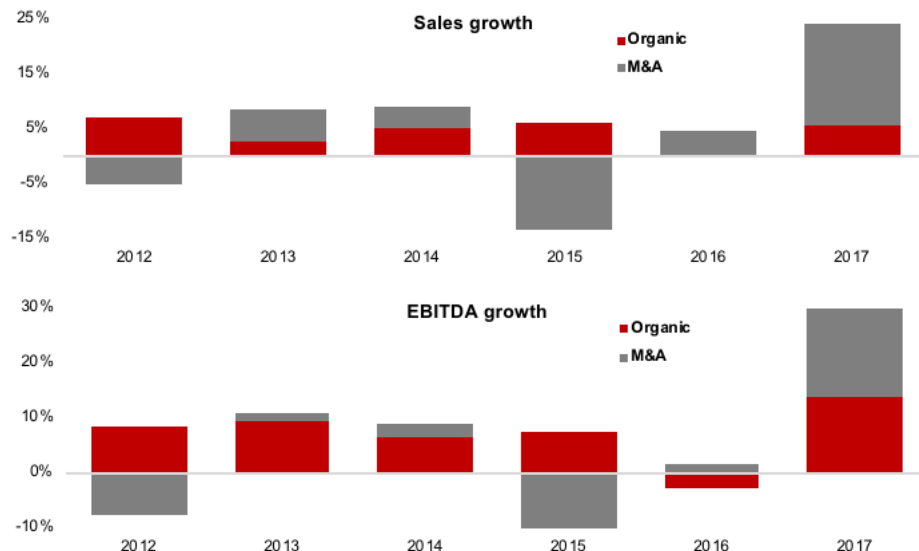
% EBITDA / % EBIT



Incorporated through the merger of InBev with Anheuser-Busch in 2008, AB InBev is the **largest global brewer** (~28% global market share in terms of volume). AB InBev employs ~200 thousand individuals in more than 50 countries worldwide, collectively responsible for **over 500 beer brands** (2017 BrandZ top 100 ranks seven of AB InBev’s brands within the top 10 global beer brands; 19 brands generate annual sales exceeding \$ 1 billion) **sold across more than 100 countries**. The company is geographically diversified, with balanced exposure to developed and developing markets. Please refer to Appendix A for a historic overview of AB InBev with a detailed overview of transformational M&A activity.

AB InBev’s business model is built around **cost efficiency** (strict application of zero-based budgeting; 38.0% 2017A EBITDA compared to a peer group average of 24.3%; please refer to Appendix B for an overview of the selected group of comparable companies), **acquisitive growth** (merged with the 5<sup>th</sup> largest global brewer in 2004, acquired the 2<sup>nd</sup> largest global brewer in 2008 and again in 2016; ~10 smaller acquisition p.a.) and **a globalised network** (derives organic growth from cross-selling and margin expansion through its procurement network).

AB InBev’s culture is orchestrated around **shareholders’ alignment** (executive management owns \$ ~2 billion of stock; controlling families have \$ ~100 billion tied up in AB InBev – more than the Carlsberg Foundation, the Heineken Family and Societe Paul Pernod Richard combined – and are still closely involved), **incentive alignment** (exceptional target-related compensation; e.g. 2020 Dream Incentive Plan to pay out \$ 350 million to 65 top managers if revenue exceeds \$ 100 billion by 2020-2022) and **meritocracy** (radical transparency towards individual performance; no private offices; fast career opportunities based on merit).

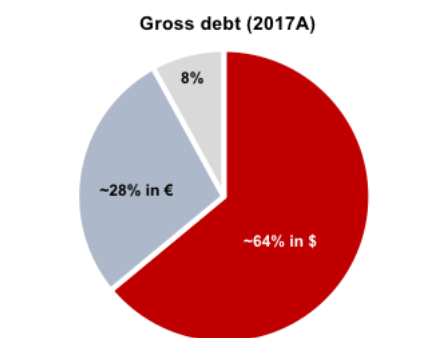
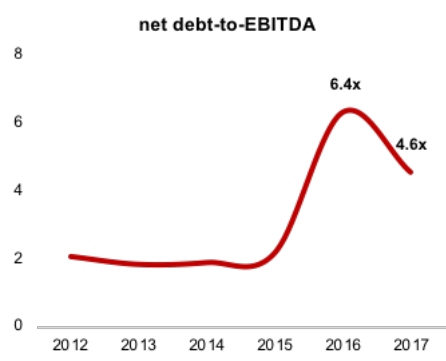
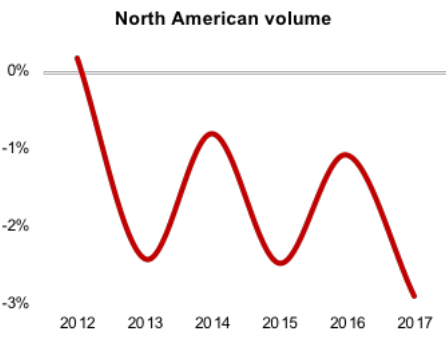


## Investment thesis

Following the transformative period of the *SABMiller acquisition*, **2018 could mark a turning point** for investor’s sentiment and stock performance. Over the past 3-5 years, investors have mainly been concerned with Brazil’s political and economic crisis (real GDP contractions of 3.8% and 3.6% in 2015 and 2016 respectively), weak volume growth in the North American segment (five years of negative volume growth) and the pace of deleveraging (4.6x net debt-to-EBITDA compared to a target net debt-to-EBITDA of 2.0x) after a period of aggressive consolidation.

We believe 2017 marked the start of an anticipated **return to sustainable volume growth** (accelerating organic volume growth throughout the year; reached 8.2% in 4Q17 – the highest in three years), a **strong economic recovery in Brazil** (real GDP growth of 1.0% in 2017; real GDP growth of 1.9-2.6% p.a. expected in 2018-2019; strong uptick in 17Q4 with 23.7% EBITDA growth) will pave the way for material margin expansion in Latin America and the **benign competitive environment and high barriers to entry in emerging markets will further increase AB InBev’s EM profit pool**. A *temporary dividend cut* in terms of recurring operating profit (~25% according to our estimates) within the next two to three years may be required to relief investor’s doubt regarding AB InBev’s leveraged balance sheet but we believe this will not have a significant impact on the stock price. Management has reiterated on multiple occasions that it is their goal for the dividend to be a growing flow over time. However, we believe the pay-out ratio to be too high to accommodate a smooth and gradual deleveraging process.

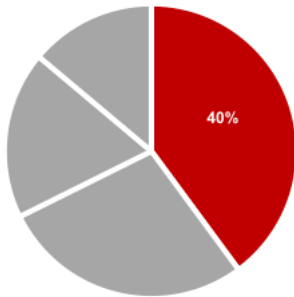
In our opinion, the main risks are credit and FX related. AB InBev has the *majority of its debt* denominated in *US dollars* (~64%) and in *euros* (~28%) while the *majority of cash earnings* are denominated in *EM currencies* (59-74%; approximation based on geographical EBIT split). Weakness in EM currencies could have a material adverse impact on AB InBev’s ability to generate the cash flows required to deleverage and create headroom for investments. In any event, it seems **unlikely that a next megadeal will occur in time to achieve the ambitious 2020 Dream Incentive Plan** (i.e. \$ 350 million incentive programme to boost revenue towards \$ 100 billion). On the contrary, we believe this initiative will weigh on AB InBev’s operating margin in the short term as executive management may feel incentivised to focus on astronomical revenue growth regardless of cost. Other risks, in our view, are related to the *continuing execution of the SABMiller transaction*, *competitive dynamics in EM* and *further deterioration of volumes in developed markets*.



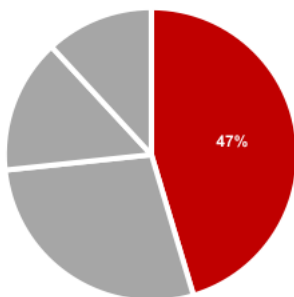
## Segments

- Latin America

Revenue (2017A)



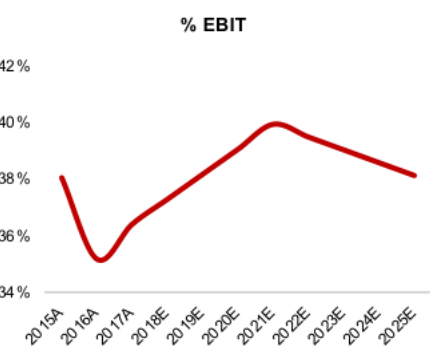
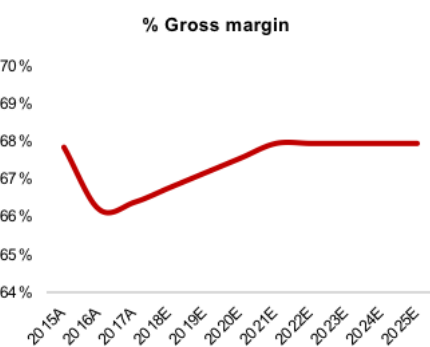
Normalised EBITDA (2017A)



AB InBev realised **\$ 22.4 billion of revenue** (39.6% of total) and **\$ 10.3 billion of normalised EBITDA** (46.6% of total) in Latin America during 2017. Inkwood Research estimates the total 2017 **market size to be \$ 94.6 billion**, which translates into a **market share of 23.7%** for AB InBev, and to grow at a **3.1% 2017-2025 CAGR**.

Within Latin America, we are particularly optimistic about *Peru, Ecuador, Brazil and most of Central America* (based on population aged between 18 and 40 and real GDP expectations). We expect AB InBev to lose some market share in Colombia after Heineken’s joint venture with Postobon and CCU launches its planned three million hectolitre brewery in April 2018. Brazil is the largest individual contributor within the Latin American segment (according to official company communication; exact figures not reported). We believe developments in Brazil will have a significant impact on AB InBev’s share price as it is this market that due to a political and economic crisis has caused investors most distress over the past years. Now that the real GDP contractions (3.8% and 3.6% in 2015 and 2016 respectively; growth of 1.0% in 2017 & growth of 1.9-2.6% p.a. expected in 2018-2019) are behind us and the competitive environment has improved, we see **significant room to realise margin expansion and return towards sustainable volume growth**. AB InBev has *strengthened its brands and distribution network in Brazil over the past two years*, putting itself in a good position when the industry recovers. On one hand it was able to lower price points for some of its mainstream brands without margin pressure through the *introduction of returnable glass bottles (RGBs) in off-trade channels*, on the other hand it *successfully raised price points for Budweiser and Corona* – both of which have seen double digit growth over the past year and now make up for ~10% of overall Brazil volumes. In addition to further tailoring its brand portfolio to Brazil’s massive income inequality (Gini coefficient of 51.3), AB InBev has *increased the utilisation rate of its local brewing footprint* by scoring production and distribution licenses for Craft Brew Alliance’s (CBA) flagship brands (i.e. Kona’s Longboard Lager and Big Wave Golden Ale). The second half of 2017 showed that the **anticipated rebound in Brazil has started to take off**, showing a **20.4% organic EBITDA increase**, compared to the same period in 2016. We believe that AB InBev will continue to profit from a *recovery in disposable income* (assuming that the expected real GDP growth will drive disposable income growth) over the next 2-3 years. Furthermore, we believe a *recovery of the real in terms of US dollars* (fallen by 14.3% over the past 12 months, ~50% over the past seven





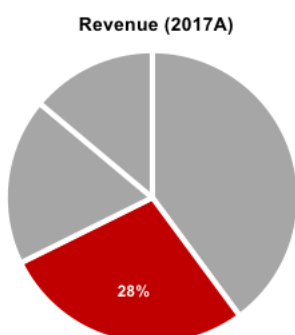
years) may drive significant margin expansion in Brazil over the next 3-5 years (although we don't account for this directly in our model given the complexity of tangible evidence).

Given it's a dominant *market position of nearly one fifth* in Latin America, we expect **revenue growth to be more or less in line with the projected market growth over the long-term**. Both in the short- and long-term, we believe **most market growth to be price-driven** a result of *premiumisation*, as there is a clear trend observable towards the consumption of import and high-end beer. Over the **next two years**, we believe **150 bps incremental volume growth p.a.** (in comparison to market growth) will be captured through price level optimisation (see previous comments regarding the introduction of RGBs and double-digit growth for Budweiser and Corona). With regards to cost efficiency, we believe the decrease in operational costs – predominantly in Brazil – will translate itself into a reduction of COGS as a percent of revenue to 32% in 2021 (through the optimisation of the utilisation rate as a result of the CBA contract and incremental organic volume growth). This would materialise in a **gross margin expansion of 150 bps over the next four years**. SG&A as a percent of revenue is expected decrease 200 bps to 28% in 2021 (one-off costs related to the introduction of RGBs and the CBA licensing contract are coming to an end) – realising **EBIT margin expansion of 350 bps over the next four years**. *After the Brazilian economic situation is sorted out and the focus shifts back towards premiumisation of the Latin American beer market*, we believe SG&A as a percent of revenue to revert back to its 2013-2017 average of 29.8% driven by *increased marketing* spending to stay ahead of Heineken – **contracting EBIT margins with 190 bps over 2021-2025**.

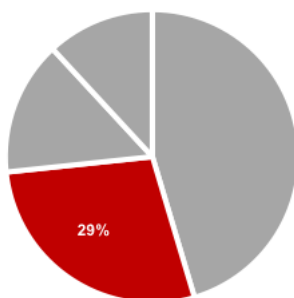
- North America

AB InBev realised **\$ 15.6 billion of revenue** (27.6% of total) and **\$ 6.3 billion of normalised EBITDA** (28.7% of total) in North America during 2017. The Brewer Association estimates the total 2017 **market size to be \$ 111.4 billion**, which translates into a **market share of 9.2%** for AB InBev. The past five years have shown exceptional growth in the sale of craft beers – now accounting for 23.3% of the total North American beer market. Modor Intelligence projects the market to grow at a **4.7% 2018-2023 CAGR**.

As a result of a persistent decline in AB InBev's North American volumes (there have been only eight quarters with volume growth since 2010), investors have grown doubtful whether AB InBev will ever be able to turn this trend with *nearly all market growth realised in the highly fragmented craft beer segment* (in which we believe AB InBev lacks). In the USA alone, 98% of all operating breweries are



Normalised EBITDA (2017A)

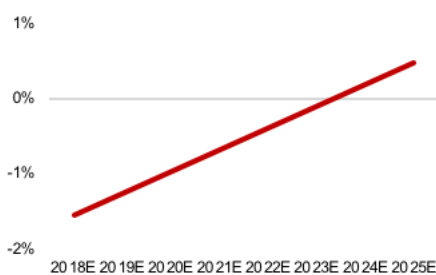


small and independently owned craft breweries. AB InBev has acquired 10 formerly independent craft brewers starting with Goose Island in 2011. There have been some initiatives such as the Brews Studs-organised boycott of brands acquired by AB InBev that indicated resistance from a growing cult following of North American craft beers. In 2017, AB InBev laid off ~90% of its High-End division – responsible for its craft beer activities – stating that it will start to focus on *organic growth* from its current network.

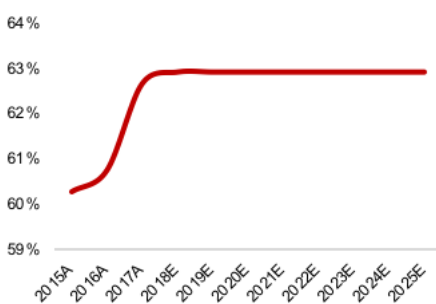
We project North American **volume to decline at a decelerating rate** as *High End*, the fast-growing craft segment, becomes a *larger portion of the pie* (current figures unreported) through continued strong organic growth while *Bud Light and Budweiser*, brands that are in *rapid decline* in the North American market, become a smaller portion of the pie. In addition to decelerating volume declines from **300 bps in 2018 to 100 bps in 2025**, we expect **prices to raise slightly slower than expected inflation – 75 bps** lower than the expected average 2018-2025 inflation of ~2.2% – to account for our view that *price increases exceeding the inflation rate have reached a point of saturation* (based on the decelerating rate of price hikes) and the unlikely event that price deterioration occurs from MillerCoors increasing its reinvestment rate in North America (stated during the annual meeting of shareholders; we consider price deterioration unlikely as AB InBev has been able to do the opposite i.e. increasing its average price level at a 2010-2017 CAGR of 2.2%, higher than the average 2010-2017 inflation rate of 1.7% while drastically increasing its reinvestment rate over the same period, according to management comments). However, we are confident in management’s expectation that AB InBev will continue to be able to maintain **profit levels more or less flat through cost and product mix efficiencies**.

Given the impressive COGS reductions (please note that it is difficult to determine the exact contributors as COGS and SG&A are not broken down further on the segment-level) that have been realised since 2010, we expect further efficiency improvements to come from **SG&A rationalisation** as these have grown significantly over the past few years – with management incurring *incremental marketing expenses in an attempt to turn the tide with Bud Light and Budweiser* (with very little success) – and a *falling utilisation rate of its brewing facilities* since 2010 (~20%, own estimates based on persistent volume declines without significant blue-collar layoffs). AB InBev has been reluctant to implement operational improvement initiatives that could be looked upon unfavourably from a stakeholder’s perspective after making social commitments such as not to close any breweries (amongst other confidential terms) to the *Teamsters union* following the Anheuser-Bush acquisition. However, we believe AB InBev will accelerate initiatives such as *reducing the number of shifts at sites that are*

% Sales growth

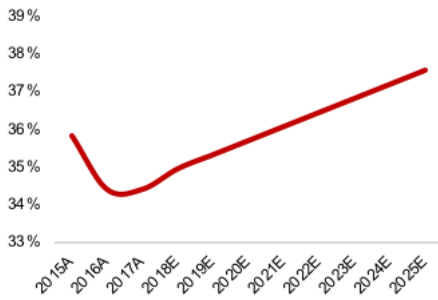


% Gross margin





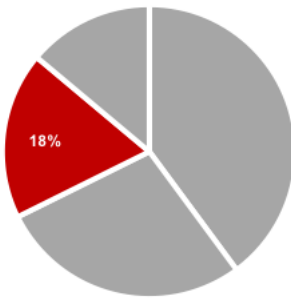
% EBIT



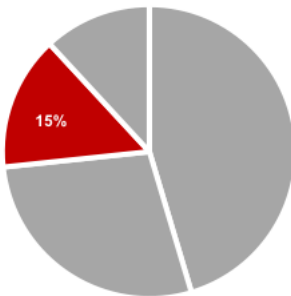
*underutilised and moving production lines to rationalise its brewing footprint* now that the end of the current Teamsters contract is in sight (Feb-19). As a result, we believe SG&A reductions to drive **EBIT margin expansion of 300 bps over 2018-2025** – to reach its 2007-2017 average of 25% in 2025 (better representative of the cost structure in absence of extreme measures to shift the tide with Bud Light and Budweiser and exceptional obligations towards the Teamsters union, in our view).

▪ EMEA

Revenue (2017A)



Normalised EBITDA (2017A)



AB InBev realised **\$ 10.3 billion of revenue** (18.3% of total) and **\$ 3.3 billion of normalised EBITDA** (15.2% of total) in the EMEA during 2017. Modor Intelligence estimates the total 2018 **European market size to be \$ 145.8 billion**, and to grow at a **4.3% 2018-2023 CAGR**. Exact figures for the African and Middle East beer markets are scarce. Beverage Daily approximates **market growth for the next two years to be 5% per annum in Southern and Central Africa and 3% per annum in North Africa and the Middle East**. The Financial Times estimates the **African beer market to be worth around \$ 13.0 billion**. Transparency Research projects the **Middle East beer market to reach annual revenues of \$ 4.8 billion by 2021**.

In **Europe**, AB InBev has hit a rough patch over the past decade (based on the assumption that the European contribution to the EMEA segment has been relatively constant over the 8 years prior to the SABMiller acquisition – the EMEA segment marked *negative volume growth at a 2008-2015 CAGR of 8.5%*) with consumer preferences shifting from beer towards spirits and healthier alternatives (a Barclays survey showed that beer as the preferred drink among 18-29 year olds decreased from ~71% in 1993 to ~41% in 2013, whereas wine and liquor increased from ~14% to ~24% and ~13% to ~28% respectively; although these figures have become outdated, we are unable to provide definitive proof that this trend has discontinued). However, comparing the 2017A organic EBIT growth rates of AB InBev (13.2%) and Heineken (9.0%) to the equivalents of Diageo (6.4%) and Pernod Ricard (3.3%), indicates that the growth gap has been narrowing (note that we used consolidated figures as a proxy because of reporting restrictions). We believe this is a result of craft beer bringing beer back to the centre of attention. Going forward, we see the tide turning for AB InBev in Europe as it will further reap benefits from its **investments in the growing craft segment** (e.g. 2016 acquisition of the Bosteels Brewery which owns one of the leading craft beers – Tripel Karmeliet – and the 2016 acquisition of the Ginette Brewery which taps into the promising organic craft segment), its strong position in the **international premium segment** (which in our view should perform well

now that adjusted gross disposable income per capita has started to grow again (i.e. 1.4% in 2017 compared to a decrease of 0.3% in 2016) and further **adoption of no-alcohol and low-alcohol beer** (we believe sales to have grown spectacularly over the past 2-3 years based on the data we have seen so far – +40% estimated YoY growth in the UK for example – now that global brewers seem to have cracked the right taste profile after years of R&D investments). Logically, *we see the latter growth driver have a significant impact on the long-term value of AB InBev*. During the 17Q4 earning call, CEO Carlos Britto stated that no-alcohol and low-alcohol beer now makes up ~8% of the company's total portfolio and that the goal is to realise 20% of volume sold in this category by 2025. We believe AB InBev is positioned particularly well (currently 15 no/low-alcohol brands, introduction of non-alcohol variants of core brands such as Budweiser – Budweiser Prohibition – and Corona – Corona Cero). According to Heineken, which reported great success with the recent introduction of Heineken 0.0, *no/low-alcohol beer volume is not directly sourced from beer but rather from soft drinks in adult consumption occasions*. Furthermore, we believe this category will be *margin accretive* as it sells *close to beer price points* (average price of Heineken 0.0 in NL supermarkets is € 2.2 per litre whereas regular Heineken is sold at € 2.7 per litre; comparison based on packages with six servings; supermarkets included based on the BierNet.nl database) but *isn't subject to excise tax*.

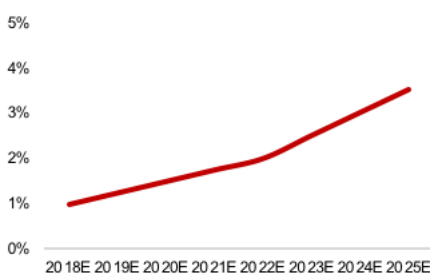
In **Africa**, AB InBev is experiencing a transformational period following the acquisition of SABMiller, which has greatly increased its exposure to the African continent. SABMiller operates in 17 African countries directly and another 21 through an association with the French drinks group Castel. As a result of this transaction, *the African beer market has become extremely concentrated with AB InBev and Heineken accounting for approximately two-thirds of the profit pool*. In comparison to other developing markets, most volume growth is derived from the **value-for-money segment** rather than from premiumisation. This has put a lot of *downward pressure on the profit pool* in recent years. However, AB InBev has been able to extract some value in this segment recently as *SABMiller's has always cherished affordability through large packs, the use of cheaper locally sourced ingredients and price increases below inflation*. Heineken, on the other hand, has historically been behind the curve within the value-for-money segment in an attempt to avoid undermining its large profit pool built on premium brands. We believe it is unlikely that AB InBev would take action to change SABMiller's successful affordability strategy in Africa but do account for **increasing low-price competition** in our forecasts now that Heineken has shown initial signs of a shift towards the value-for-money segment. In *South Africa* especially, we expect AB

InBev to continue losing some market share to Heineken given its accelerating efforts to increase market penetration in the main land and the volume impact that may result from AB InBev’s experiment to conduct an *initial premiumisation push* with increased price ladders for Budweiser and Corona (management comments; magnitude is unclear at this time). The *rest of the African continent is more business as usual* in our view. The dominating market position in the value-for-money segment – inherited from SABMiller – in combination with increasing economic momentum across several key markets should allow for a **return to sustainable volume growth**. We do expect price pressures to remain present as the *competitive emphasis shifts towards the value-for-money segment* and the *increased production capacity* from AB InBev’s new mega breweries opening later this year (Nigeria and Tanzania) amongst planned expansionary investments of Diageo and Heineken in their respective African production facilities.

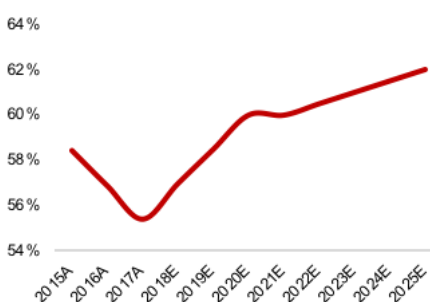
Not much is known about AB InBev’s presence, or lack thereof, in the **Middle East**. AB InBev gained a *24% stake in Anadolu Efes*, the largest Turkish brewery with some distribution activities in the Middle East, through the SABMiller acquisition but has *not yet stated its intentions going forward*. We believe AB InBev will only shift its focus to the Middle East after it is able to sort out volume issues in North America, the SABMiller integration has been fully digested and competitive dynamics have matured in Africa and APAC. Although we recognise *some untapped potential*, we steer away from forecasting specific scenarios as long as management does not set any guidelines. Furthermore, we believe the market size (projected to reach \$ 4.8 billion by 2021) of the Middle East subsegment to be *rather negligible* in comparison to the European (\$ 145.8 billion) and African (\$ 13.0 billion) subsegments. Nevertheless, we will keep a very close look at new developments.

We project **EMEA volumes** to remain **flat in 2018** after which they will **slowly accelerate on the back of African volume growth overshadowing the fall in European volumes to 100 bps in 2022**. In **2022-2025**, we believe the European **no/low-alcohol beer market** will have grown large enough to **contribute 50 bps volume growth per annum**. To account for the *ever-growing African value-for-money segment* and *intense competitive dynamics in European markets*, we project a conservative **price increase of 100 bps p.a.** across the EMEA segment. AB InBev’s \$ 3.2 billion expected synergies (66.7% has been captured so far) from integrating SABMiller’s organisational structure are expected to drive **460 bps gross margin expansion over the next three years** as well as an **additional 170 bps EBIT margin expansion over the next five years**, in line with management comments. Furthermore, we expect the rise of *no/low-alcoholic*

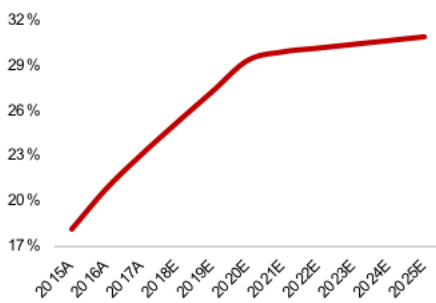
% Sales growth



% Gross margin



% EBIT



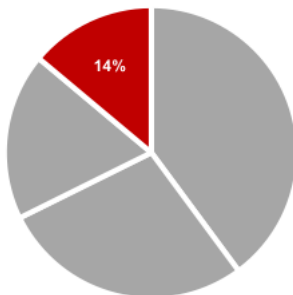
beer predominantly in Europe to drive **gross margin expansion of 50 bps p.a. in 2022-2025**. However, we believe this will only translate itself in **EBIT margin expansion of 25 bps in 2022-2025** as AB InBev will have to *increase its marketing efforts* to achieve its ambitious goals in this product category (i.e. 20% of volume sold by 2025) – especially taking into consideration that Heineken and Carlsberg also view the no/low-alcohol beer segment as a key value lever over the next decade.

▪ Asia Pacific

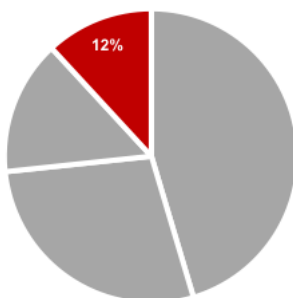
AB InBev realised **\$ 7.8 billion of revenue** (13.8% of total) and **\$ 2.7 billion of normalised EBITDA** (12.2% of total) in APAC during 2017. Modor Intelligence estimates the total 2017 **market size to be \$ 196.1 billion**, which translates into a **market share of 4.0%** for AB InBev, and to grow at a **9.7% 2017-2023 CAGR**.

We believe that the APAC segment offers *exceptional prospects*. In December 2017, AB InBev *opened Asia's largest brewery*, capable of producing *15 million hectolitres of beer per annum* (more than doubling its local production capacity – according to our estimates) to prepare for an *upswing in demand* which has already shown itself with a strong volume uptick in 4Q17 (12.1%). Contrary to other EMs, the APAC beer market is still largely fragmented without a clear leader. In terms of volume, China is the largest beer market in the world (~23%) and the dominating contributor to the APAC segment (~66%). We believe that **China offers the biggest opportunity for premiumisation** due to Chinese consumers' *obsession with luxury goods* (McKinsey demonstrated that Chinese households spend twice as much on luxury goods than their French or Italian counterparts; in addition, the number of Chinese millionaires is expected to surpass that of any other nation by the end of this year), the *enormous urbanisation* (60% of the Chinese population is expected to live in cities by 2030 – compared to 45% in 2010 and 13% in 1950) that is taking place and the fact that the *premium segment is still a fraction of neighbouring countries* such as Taiwan and Hong Kong (international premium segment represents ~7% of the Chinese beer market whereas this is 30-50% in Taiwan and Hong Kong). An example would be the *remarkable success of Budweiser*, which now accounts for more than half of the international premium segment in China. There are indications that China is also quickly developing a *super-premium segment*. During the 2017HY investors conference call, CEO Carlos Brito – CEO said *“Three or four years ago our guys in China said at some point there will be a super-premium segment and we need to lead that as well. So, we separated the route to market, we did everything that we had to do in order to create the*

Revenue (2017A)



Normalised EBITDA (2017A)



% Sales growth



infrastructure. We got the brands and now you look at Stella, Corona, and Hoegaarden, they are growing at triple digits, and with very high margins.”

Given recent efforts, we project AB InBev to **outperform the market at a decelerating rate in 2018 (+150 bps) to 2019 (+30 bps)** to account for the *initial impact of the new facility and expected demand uptick*, after which we expect **growth to slow down gradually (30 bps p.a.) to 8.2% in 2025 as the market matures**. A growing part (30% in 2018 to 64% in 2015) of our projected revenue growth is price-driven in line with **accelerating premiumisation and super-premiumisation**. In our opinion, fulfilling the ambition to become APAC’s number one beer company will **require additional investments in marketing and selling expenses** as Heineken and China Resources Enterprise have similar ambitions. We account for these **increasing competitive dynamics** by forecasting **EBIT margin contractions of 100 bps p.a. in 2018-2020**.

### General risks

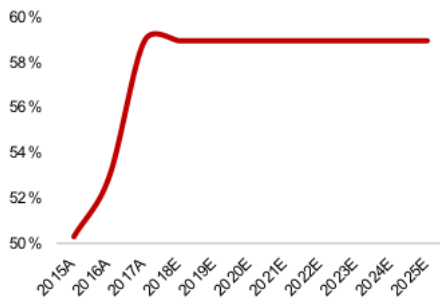
Notwithstanding economic cyclicalities, we believe credit and FX related risks to pose the largest threat of adversely impacting AB InBev’s share price over the next 5-10 years. Furthermore, we believe changing competitive dynamics, both from independent brewers as from large competitors, to require some additional enclosure.

#### Credit

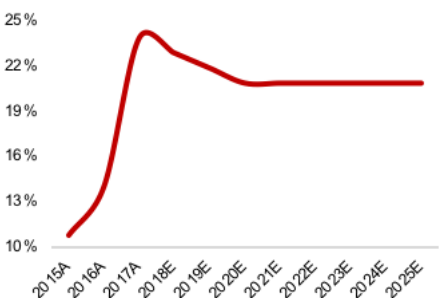
Even though AB InBev’s net debt of \$ 98.5 billion in an economic environment with tightening monetary policies may sound ludicrous to the defensive investor, **actual credit risk is limited** (~95% of net debt is locked in at a fixed interest rate). In addition, *net debt paydown has exceeded bond redemptions since the SABMiller acquisition*, making it unlikely that AB InBev will have to issue debt at a higher interest rate.

We expect the deleveraging process towards AB InBev’s target net debt-to-EBITDA ratio of 2 to be smoothed out over the next eight years to accommodate headroom for investments and avoid significant dividend cuts – a rather sensitive topic given the \$ ~102 billion that controlling shareholders and executive management have tied up in AB InBev’s stock. However, we do believe that a slight dividend reduction is inevitable but is unlikely to negatively impact the stock price as the benefit of relieved investors’ concerns outweighs the temporary loss in fixed income. We have accounted for this by **decreasing the payout ratio by 14.5% in 2018 and 10% in 2019**, after which it will recover to its current levels (relative to normalised operating profit) – allowing AB InBev to reach its target net debt-to-EBITDA ratio in 2025.

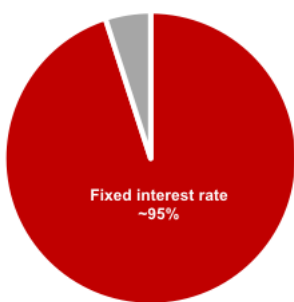
% Gross margin



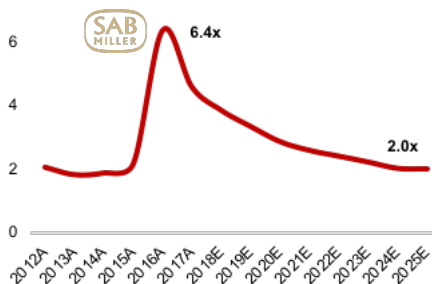
% EBIT



Net debt (2017A)



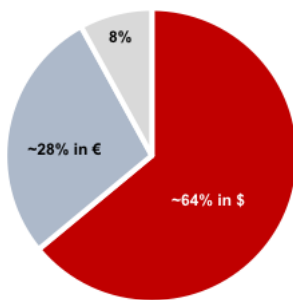
net debt-to-EBITDA estimates (annual figures)





**FX**

Gross debt (2017A)

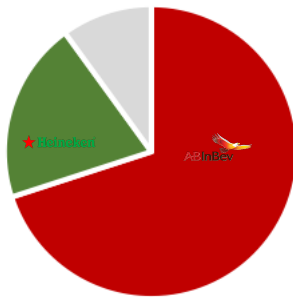


AB InBev has exposure to a broad basket of currencies through its global operations and **reports earnings in US dollars** while its **primary listing is in euros**. Financial and share price performance is therefore subject to currency fluctuations. ~64% of gross debt is denoted in US dollars, ~28% in euros with the remainder split across a basket of EM currencies. Although unreported, we believe it is safe to assume that a significant part of COGS across EMs are US dollar linked, which can create gross margin volatility when the US dollar moves relative to other currencies.

**Competitive dynamics**

*International competition*

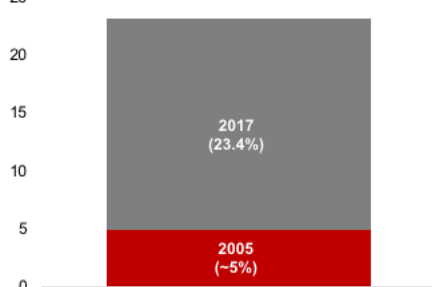
Top 10 global beer brands (2017 BrandZ)



Geographical overlap between large brewers has drastically increased (SABMiller acquisition, massive investments of Heineken and Diageo in Africa, etc.). In our opinion, this **does not pose a direct risk** as the process has been relatively smooth and gradual. The most significant confrontation has been between AB InBev and Heineken (mainly in LatAm and Africa; see Segments). However, given both companies track-record of focusing on value creation (+10% 10yr average ROIC) and brand development (7/10 most valuable beer brands owned by AB InBev; 2/10 owned by Heineken), we do not see it to be in either company's interest to break current competitive dynamics.

*Independent competition*

US craft market share



In terms of local competition, it is crucial to differentiate between developed markets and EMs. In the US, AB InBev has experienced its fair share of market loss to independent, craft breweries (exact market share loss not available; AB InBev's total US volume has fallen with a 2010-2017 CAGR of 2.1%). The craft beer segment has grown from ~5% in 2005 to 23.4% in 2016 (in terms of revenue) – 2017 marked a net increase of ~1000 craft breweries. In Europe, a similar phenomenon has occurred but to a lesser extent (less concentrated beer market – no exact figures, estimation based on volume of top three brewers; different beer culture – much more variety historically).

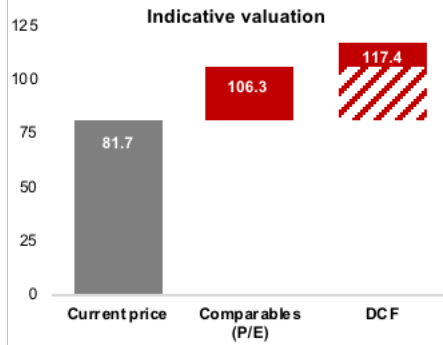
AB InBev, Heineken and Diageo have been relatively proactive in the EM craft segment. We believe AB InBev is unlikely to commit the same mistake it made in the US (dismissing the craft phenomenon in the early 2000s) based on the recent acquisitions of the Bogota Beer Company in Colombia, Boxing Cat in China and Colorado in Brazil. While competition is still relatively benign, it has definitely increased over the last few years with EM beer markets (excl. APAC) becoming relatively concentrated compared to developed peers (~75% market share for



Heineken and AB InBev in LatAm; no exact figures available for Africa). In our view, the absence of easy credit in many EMs will continue to hinder growth in the independent craft segment, especially taking into account that much more beer volume is sold outside of urban areas (degree of urbanisation), making it difficult to operate without an established production footprint and distribution network.

## Valuation

At the current price levels, AB InBev’s stock is significantly undervalued. Both its intrinsic and relative valuation indicate prices by which *double-digit returns are to be expected*. We believe AB InBev’s **intrinsic value per share to be € 117.4** (43.7% above the current level) whereas the **median forward-looking price-to-earnings multiple of AB InBev’s peer group** suggests a share price of **€ 106.3** (30.2% above the current level).



### DCF

We estimate the intrinsic value per share at **€ 117.4** – which, in our opinion is a fair 12-month target price. *Including dividend estimates*, this would work out to a **total 12-month shareholders’ return of 48.7%**.

		WACC				
		5.0%	5.5%	6.0%	6.5%	7.0%
Perpetual growth	1.7%	€ 151.0	€ 127.5	€ 109.5	€ 95.1	€ 83.5
	2.2%	€ 161.9	€ 133.7	€ 112.9	€ 96.9	€ 84.2
	2.7%	€ 177.5	€ 142.1	€ 117.4	€ 99.1	€ 85.1
	3.2%	€ 201.8	€ 154.2	€ 123.5	€ 102.0	€ 86.1
	3.7%	€ 244.6	€ 173.0	€ 132.2	€ 106.0	€ 87.5

		WACC				
		5.0%	5.5%	6.0%	6.5%	7.0%
Perpetual ROIC	5.5%	€ 143.0	€ 114.7	€ 94.9	€ 80.2	€ 68.9
	6.5%	€ 162.9	€ 130.5	€ 107.9	€ 91.1	€ 78.2
	7.5%	€ 177.5	€ 142.1	€ 117.4	€ 99.1	€ 85.1
	8.5%	€ 188.6	€ 151.0	€ 124.7	€ 105.3	€ 90.3
	9.5%	€ 198.2	€ 158.6	€ 131.0	€ 110.5	€ 94.8

- WACC

We have first valued AB InBev using a DCF model. This required us to determine the expected return that all investors – equity and debt – expect to earn for providing their capital to AB InBev. The blended cost of capital will allow us to

uncover whether AB InBev is actually creating (or destroying) value – and to which extent. To compute a reasonable discount rate, we broke our calculations down to its core components: the **expected cost of equity**, the **expected after-tax cost of debt** and the **expected target capital structure**.

### **Cost of equity**

In order to estimate AB InBev's cost of equity, we have determined an approximation for the **expected return of the entire stock market** and measured **company risk** using the capital asset pricing model (CAPM).

#### *Expected stock market return*

To account for the significant influence of the prevalent rate of inflation on the expected return of the entire stock market, we estimated the expected return by adding a **historical risk premium** to the **normalised risk-free rate** – rather than using a simple average of historical stock market returns.

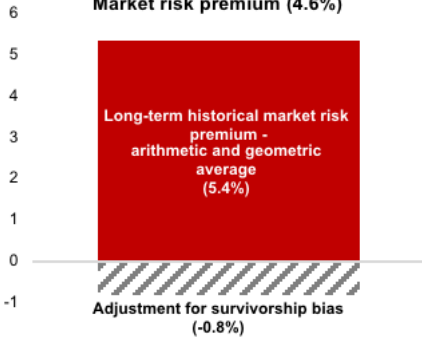
E. Dimson, P. Marsh and M. Staunton (2006) estimated the equity risk premium for 17 countries and a broad index over a 106-year interval. The authors research revealed that annualised stock market returns for Belgium (in which AB InBev is headquartered) between 1900 and 2005 were 2.4% – the lowest of the tested sample set. As we believe the *cost of equity of AB InBev should reflect global stock market returns*, using the historical stock market returns of Belgium would be negligent. As a countermeasure, we have used the 17 countries (Belgium, Australia, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, South Africa, Spain, Switzerland, UK, US) data set of E. Dimson, P. Marsh and M. Staunton (2006) as a proxy for the global stock market. Taking 10-year US Treasury yields – which we believe is most representative of our sample – as the risk-free asset (please note that we use a different forward-looking risk-free rate to adjust for the impact of monetary policy), results in an annualised equity risk premium of **4.7% according to the geometric mean** or **6.1% according to the arithmetic mean**.

While the arithmetic mean is considered best for perfectly measured average returns, compounding annual returns also compounds the estimation errors, making it vulnerable to overestimation. D. C. Indro and W. Y. Lee (1997) demonstrated that the empirically documented presence of negative autocorrelation in long-horizon stock returns magnifies the upward bias inherent to the use of arithmetic averages and downward bias inherent to the use of geometric averages as estimates of long-run expected returns and risk premiums. The authors showed that an average of the arithmetic and geometric averages contains a smaller bias and is a more efficient estimator of long-run expected returns. In line with the authors' results, we averaged our annualised

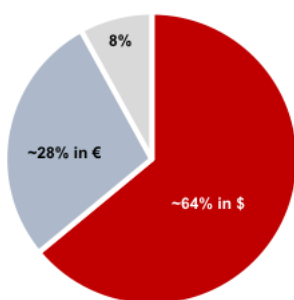
equity premiums obtained through E. Dimson, P. Marsh and M. Staunton's (2006) methodology, leaving us with a **market risk premium of 5.4% – prior to adjustments for survivorship bias**.

Although it is often argued that market risk premiums have dropped over time, Z. Bodie (2002) and McKinsey (2015) showed that a simple regression does not confirm this. We argue in favour of basing our risk premium on a total time period that is as long as possible rather than using a shorter period that includes the most recent 12 years. We do believe a slight adjustment for survivorship bias is mandatory. E. Dimson, P. Marsh and M. Staunton (2006) demonstrated that the arithmetic annual return exceeded the 17-country composite return by 0.8% in real terms. Using this figure as a proxy for the survivorship premium, we estimate the **market risk premium to be 4.6% – post adjustments**.

Market risk premium (4.6%)



Gross debt (2017A)



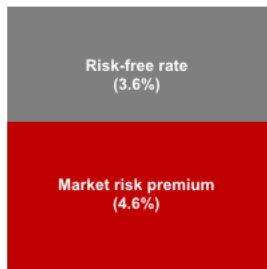
In line with our argumentation that the 10-year US Treasury yield is best representative of a risk-free asset for the 17-country sample used to determine our market risk premium as well as the facts that AB InBev's cash flows are denominated in US dollars – McKinsey (2015) suggest to always use government bond yields denominated in the same currency as the company's cash flow to estimate the risk-free rate – and that the majority of its gross debt (~64%) is denominated in US dollars, we use the *10-year US Treasury yield to maturity as the foundation for the risk-free rate estimation*. While we recognise that choosing a bond's duration that matches the maturity of each cash flow separately is the most theoretically sound approach, we argue in favour of using 10-year bonds for all cash flows to limit room for estimation errors and guarantee enough liquidity to correctly represent the risk-free rate. However, we do believe it is necessary to eliminate the impact of post-financial crisis monetary policies (such as zero-bound interest rates and quantitative easing) which has fueled some irregularities between the relationship of interest rates on government bonds and market valuations of equities. To account for this, and our confidence in AB InBev's ability to generate perpetual cash flows, we use a synthetic risk-free rate based on the **historical average real yield to maturity of the 10-year US treasury bond** and the **long-run expected inflation rate**. Over the past 16 years (note that the 16-year period was selected because of data restrictions; we would prefer an even longer period if possible), the average real 10-year US treasury yield was 1.1%. Adding this to our expected long-run inflation rate of 2.5% results in a **risk-free rate of 3.6%**.

Risk-free rate (3.6%)



		Real yield to maturity				
		0.9%	1.0%	1.1%	1.2%	1.3%
Expected inflation	1.5%	2.4%	2.5%	2.6%	2.7%	2.8%
	2.0%	2.9%	3.0%	3.1%	3.2%	3.3%
	2.5%	3.4%	3.5%	3.6%	3.7%	3.8%
	3.0%	3.9%	4.0%	4.1%	4.2%	4.3%
	3.5%	4.4%	4.5%	4.6%	4.7%	4.8%

Expected market return (8.2%)



Combining our estimations of the appropriate historical market risk premium (4.6%) and of the appropriate risk-free rate (3.6%) leads to an **expected market return of 8.2%**.

		Market risk premium				
		2.6%	3.6%	4.6%	5.6%	6.6%
Risk-free rate	2.6%	5.2%	6.2%	7.2%	8.2%	9.2%
	3.1%	5.7%	6.7%	7.7%	8.7%	9.7%
	3.6%	6.2%	7.2%	8.2%	9.2%	10.2%
	4.1%	6.7%	7.7%	8.7%	9.7%	10.7%
	4.6%	7.2%	8.2%	9.2%	10.2%	11.2%

*Company risk*

In order to account for AB InBev’s incremental risk (defining risk as the extent to which its stock moves up and down in relation to the stock market), we have calculated its **expected beta**. We based our approximation on a long-term sector analysis to limit the impact of idiosyncratic risk and temporary market distortions.

After careful analysis of the peer group, we argue in favour of using the median of the unlevered 52-week rolling betas of AB InBev and Heineken over the past five years as the foundation of our expected beta. We believe the remaining brewers lack size and geographical diversity – which presents itself in higher betas (and volatility) on average – to truly represent the same operational risk profile as AB InBev and question the value of including other beverage or staples companies. In line with this reasoning, we restricted the time frame to five years as we believe the AB InBev have changed fundamentally (due to increased size).

We estimated the beta of our sample companies by *dividing the covariance of its weekly returns during the prior year and the MSCI All Country World Index (ACWI) with the variance of the MSCI ACWI*. We believe the MSCI ACWI – with significant exposure to 23 developed and 24 emerging markets – best reflects the market as a whole (we used the Euronext 100 as a sanity check and the differences were negligible). As a result of persist trading volumes in AB InBev

and Heineken’s stock, we felt safe using **weekly returns** rather than monthly returns (we consider the downward bias inherent to illiquid securities to be irrelevant). Our choice for **annual rolling betas** (i.e. including the most recent 52 weekly returns for each data point) was made on the assumption that it would allow us to gain better insights into temporary fluctuations compared to longer time inclusions. Additionally, the use of the median of our annual rolling betas over a five-year period to obtain an approximation for the expected beta significantly reduces the impact of which period is exactly included.

The output of our first step, obtaining the levered one-year rolling betas over the most recent five-year period for Heineken and AB InBev, was in line with our expectations (i.e. AB InBev’s higher median debt-to-equity ratio resulted in a higher median levered beta). In order to eliminate the impact of leverage – allowing for easier comparison – we converted each beta into its unlevered counterpart. Doing so reduced the difference between both companies’ median beta (from 23.3% to 3.4%) but also decreased the correlation between the full sample set (from 0.86 to 0.71). While this surprised us initially, we believe this is most likely a result of idiosyncratic shocks. As both companies are each other’s biggest competitor, in our view, what is good for one’s stock price often has an adverse impact on the others (e.g. Heineken’s stock price fell while AB InBev’s stock price increased on the news that the latter will be the official partner for the FIFA World Cup).

Next, we took the average of Heineken and AB InBev’s unlevered rolling betas to account for nonrepeatable events. We levered the median beta (0.42) to the expected target capital structure of AB InBev (see target capital structure section) resulting in a levered expected beta of 0.53 – prior to final adjustments. Finally, as we believe AB InBev to be a going concern with persistent perpetual cash flows, we smooth our beta to account for mean regression – which M. Blume (1975) amongst others demonstrated. Utilising a simple smoothing process (in accordance with Bloomberg’s standard methodology;  $0.33+0.67*unsmoothed\ beta$ ) results in an **expected levered beta of 0.69**.

**After-tax cost of debt**

In order to estimate AB InBev’s after-tax cost of debt, we have determined an approximation for the **expected return on its debt** and valued the **interest tax shield** using the **forward-looking marginal tax rate**.

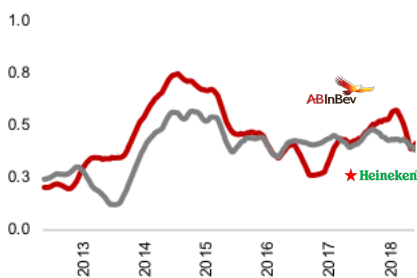
*Expected return on debt*

Although AB InBev has a net debt-to-EBITDA ratio of 4.6x, the company is rated investment-grade by Fitch (BBB; lower medium grade; 05/2018), S&P (A-; upper medium grade; 05/2017) and Moody’s (A3; upper medium grade; 05/2017). AB

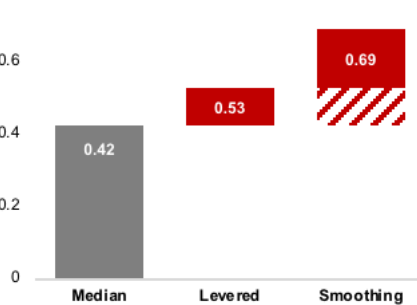
Levered 1-year rolling beta (weekly returns)



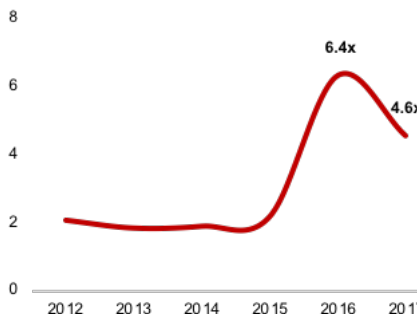
Unlevered 1-year rolling beta (weekly returns)



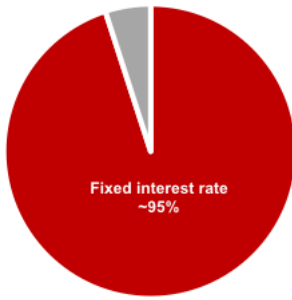
Expected company risk (beta)



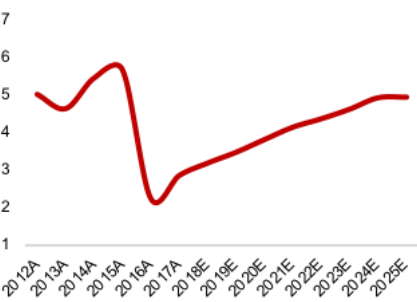
net debt-to-EBITDA



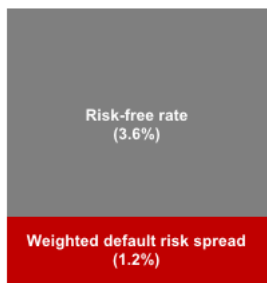
Net debt (2017A)



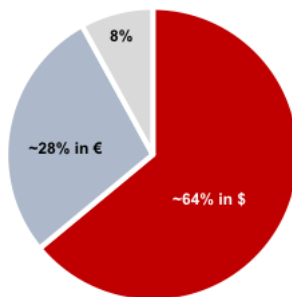
Interest coverage ratio



Pre-tax cost of debt (4.8%)



Gross debt (2017A)



InBev has a total of 97 *debt instruments outstanding*. Approximately 95% of its net debt is locked in at a fixed rate. In terms of FX, 64% of gross debt is denominated in US dollars, 28% is denominated in euros and the remaining 8% is split across a large basket of currencies. AB InBev has an interest coverage ratio of 2.9x.

Using the blended yield to maturity of all outstanding debt instruments as a proxy for expected return is complicated in AB InBev’s case as *part of its debt structure is composed of instruments with embedded options*. We argue in favour of using **the average yield to maturity for a basket of long-term bonds with the same credit rating as proxy for AB InBev’s implied yield on long-term debt** to overcome this matter. In accordance with A. Damodran’s (2018) research on average yield to maturities for large-cap non-financial companies (defined as listed enterprises with a market cap exceeding \$ 5 billion), we use a 1.27% *default spread for BBB ratings* (Fitch) and a 1.13% *default spread for A3/A-ratings* (S&P and Moody’s). We appoint twice the amount of weight to the 1.27% default spread compared to the 1.13% default spread as this rating was restated more recently. In addition, our view is further confirmed by A. Damodran’s (2018) research into synthetic ratings – I which he studied the relationship between interest coverage ratios and appropriate credit ratios for non-financial large-cap companies. According to the author, AB InBev’s *interest coverage ratio of 2.9x is an applicable proxy for a 1.27% default spread*. While we recognise the flaws of this approach, it does increase our confidence that the risk of a bias in the credit agencies’ ratings for AB InBev is limited and that a **2-to-1 weighting in favour of the 1.27% default spread** is a theoretically sound approach. Combining our risk-free rate (3.6%) with our weighted average default spread (1.2%) leads to a **pre-tax cost of debt of 4.8%** – which we use as proxy for the expected return on AB InBev’s debt.

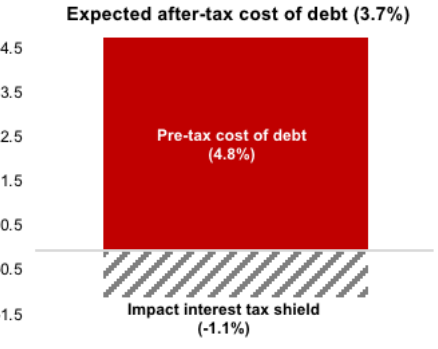
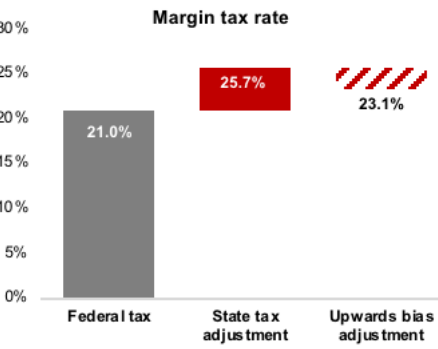
*Interest Tax Shield*

To move from the pre-tax cost of debt to the after-tax cost of debt, we have valued AB InBev’s tax shield. Although AB InBev is headquartered in Belgium, we believe the use of the **US marginal tax rate** is better justified given the dominance of debt denominated in US dollars in its debt structure (~64%). The recent Tax Cuts and Jobs Act (TCJA) reduced the US federal income tax rate from 35% to 21%. Further **accounting for state taxes** gives us a marginal tax rate of **25.7%** (we have used the simple average of state corporate income taxes due to the absence of data to compute more precise weights) – **prior to forward-looking adjustments**. Benchmarking this rate with the OECD average of 23.8% and taking the political sensitivity of raising taxes into consideration, gives us sufficient confidence that this tax rate will be sustainable – rather than being



dismissed as soon as a new president is elected. Furthermore, we argue that the probability of further tax cuts is negligible because of the significance of the US deficit (expected to surpass \$1 trillion by 2020).

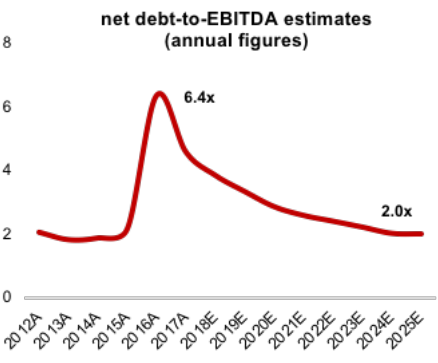
In line with J. R. Graham and Lillian F. Mills (2007) findings that the statutory marginal tax rate overstates the future marginal tax rate because of rules related to tax loss carryforwards, tax loss carrybacks, investment tax credits and alternative minimum taxes, we **apply a discount of 2.5%** to the statutory rate. Although the authors calculated the impact to be a discount of ~5% on average, we still believe this to be too much for AB InBev as their findings were significantly impacted by smaller, less profitable companies. In the event that AB InBev didn't possess such spectacular track-record of effective tax management – demonstrated by its effective tax rate of ~7-8% – we would consider this statutory tax discount to be irrelevant. Adjusting the marginal tax rate (25.7%) with 2.5% leads to a **marginal tax rate of 23.1%**.



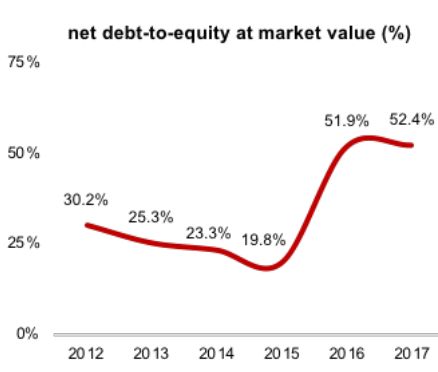
Applying the appropriate marginal tax rate (23.1%) to our pre-tax cost of debt (4.8%) leads to an **expected after-tax cost of debt of 3.7%**.

**Target capital structure**

The acquisition of SABMiller has increased AB InBev's financial leverage to excessive levels in comparison to the years prior to the acquisition. In our quest to determine an expected target capital structure, we have looked beyond the current situation to approximate market-based weights that are best in line with management's financing philosophy, backed by historical evidence.

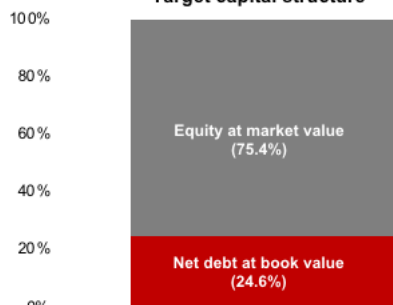


AB InBev targets a net debt-to-EBITDA level of 2.0x – in which it has succeeded well historically (with the obvious exception following the SABMiller acquisition). In line with management statements, we believe deleveraging to be a core focus over the next years. According to our estimates, the target net debt-to-EBITDA should be achieved in 2025. To determine how this would translate itself in the **relationship between the market value of equity and debt net of excess cash**, we use the net debt-to-equity at market value of 2012-2015 as a guideline (the average net debt-to-EBITDA level was 2.0x during this period). If we expect AB InBev to **revert to its target net debt-to-EBITDA level at similar market valuations** as in 2012-2015 (as we expect over the next years; outlined in the comparables and investment thesis sections), the target capital structure should consist of **24.6% net debt and 75.4% equity at market value** – on average, over the life of the business.



Given the complexity of estimating a fair market value of AB InBev's gross debt (i.e. significant presence of hybrid securities, substantial unquoted debt and some illiquid instruments with unclear embedded options), we argue in favour of

Target capital structure



using the carrying value – which is in line with our methodology used to determine the expected equity weighting – rather than using a discounted cash flow model to approximate the market value of its debt. AB InBev’s investment grade ratings (BBB by Fitch, A- by S&P and A3 by Moody’s) and strong interest coverage ratio (2.9x) confirm our belief that **default risk is low**. However, as interest rates have been rising rather quickly in the US (54 bps increase in the US 10-year yield YTD) and ~64% of gross debt is denominated in US dollars, it is *likely that the market value of such debt has fallen*. While we recognise the significance of this to its fullest extent, we believe accounting for such trend will result in assumptions that stretch the truth and may result in value distortions over the long-term that outweigh benefits that could be reaped in the short-term.

▪ Terminal value

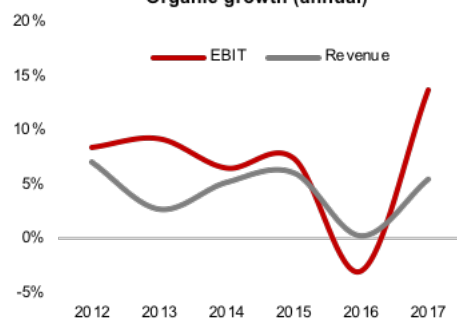
In our view, AB InBev’s main challenges and opportunities will outplay themselves to a sufficient extent over the next eight years (we used 2018-2025 as the explicit forecast period) to restrict the amount of assumptions for the continuing value. From 2026, we expect AB InBev to grow at a relatively stable growth rate and achieve relatively constant returns on capital – which we will capture through a terminal value by using the **value driver formula**.

**Growth rate**

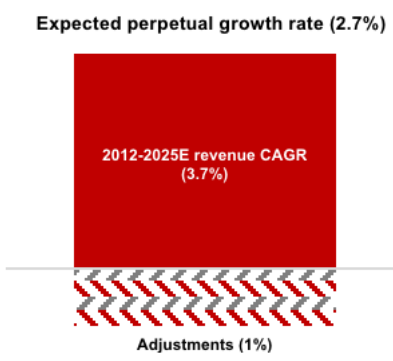
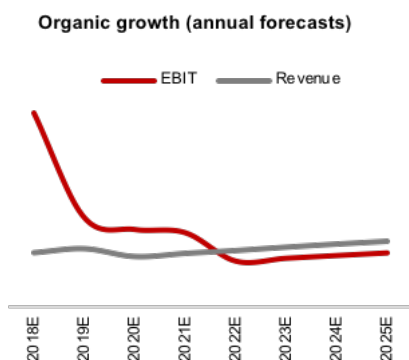
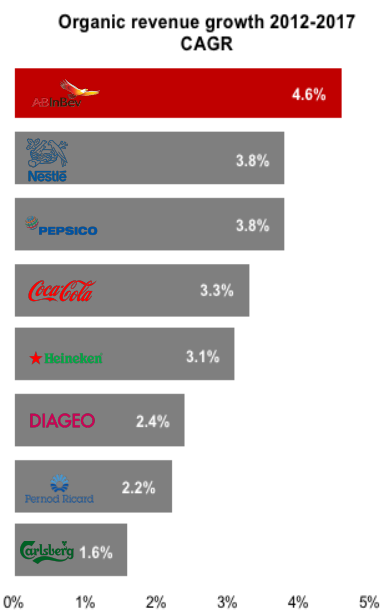
The expected growth rate of free cash flows in perpetuity is, in our opinion, best determined by combining a thorough analysis of historical growth, growth during the explicit forecast period, the long-term outlook of the beer market (also other markets in which the company plans to expand, if applicable) and some logical reasoning as to which extent perpetual growth is feasible. We argue in favour of employing rather defensive assumptions – on which optimistic scenarios can be sensitised (its goes without explanation that the same should be done for pessimistic scenarios).

*Historical*

Organic growth (annual)



Given AB InBev’s aggressive M&A activity over the past decade – which, in our opinion, has neared its natural limitations due to antitrust issues – we limit our historical analysis to **organic growth**. AB InBev has achieved global organic revenue growth at a 4.6% 2012-2017 CAGR. During this same period, AB InBev achieved organic EBIT growth at a 10.2% 2012-2017 CAGR. We argue in favour of focusing on organic revenue growth as we believe much of the discrepancy between organic revenue and EBIT growth has been driven by increasing economies of scale due to M&A activity – which we don’t consider sustainable in



perpetuity. Furthermore, we do not see the added value in looking beyond 2012, as we believe AB InBev has changed a lot fundamentally since then.

To put the 4.6% 2012-2017 CAGR into perspective, we obtained the same figure for the comparable companies (please refer to Appendix B for a description of the peer group) for which organic revenue growth figures are readily available. Such analysis shows a very bright picture for AB InBev – which outperformed its peer group with organic growth that was almost double of the group’s average (excl. AB InBev) of 2.9%. *We believe much of this to be attributed to the cross-selling opportunities of AB InBev’s aggressive M&A strategy* – which in our opinion, should be adjusted for.

*Expected*

Going forward, we expect AB InBev to grow sales organically at a 3.2% CAGR 2017-2025. Albeit a significant part of this can be attributed to expected cross-selling opportunities as well (following the SABMiller integration). Furthermore, we do not account for expected M&A activity as we expect antitrust issues have made it nearly impossible to continue a strategy of accretive M&A (additionally, we argue that it is infeasible to determine to which extent incremental acquisitions would add value without assumptions that are vulnerable to significant estimation errors). In line with its sheer size (market share of ~28% in terms of volume), we believe a downward adjustment on the 2012-2025 growth expectations should be made to account for the *difficulty of sustaining growth over long periods*. The European and US beer markets have taught us that market maturity can drastically increase *competitive pressures from independent, craft breweries as purchasing power increases and consumer demand becomes more complex* – for this reason we believe AB InBev’s sheer size to be more of a liability rather than the accommodating economies of scale to be an asset in terms of relative growth in perpetuity. Furthermore, we believe *growth in the global beer market to slow down significantly as the APAC, Latin American and African markets mature* (please note that we do not have access to market forecasts beyond 2025).

Finally, using the 3.7% 2012-2025E revenue CAGR as a starting point (we consider the cost structure of 2025 sufficiently normalised to use a revenue approximation for FCF growth), we make adjustments for the 2012-2017 peer group average – motivated by **mean reversion** – of 2.9% (25 bps), the **impact of cross-selling opportunities** (25 bps), the **limitations of growth due to sheer size** (25 bps) and the **global beer market slowing down** (25 bps). While we consider the size of these (simplified) adjustments to be quite arbitrary due to the absence of data required to approximate their impact, we emphasise that we

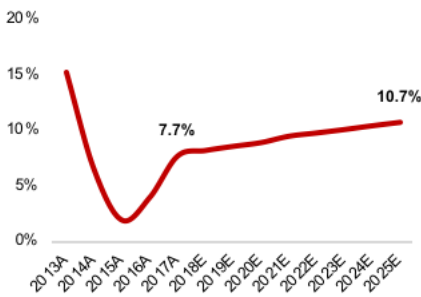
appoint limited value to our final **perpetual growth rate of 2.7%** (which is more in line with our expected long-term global inflation) but rather are interested in a scenario-based interpretation.

**ROIC**

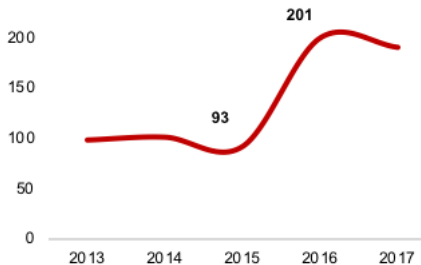
The expected return on new invested capital (after 2025) in perpetuity is, in our opinion, best determined by combining a historical analysis of the ROIC of AB InBev and closely related peers – on which we make an adjustment to account for changing competitive dynamics. Again, we argue in favour of employing conservative assumptions – on which scenarios can be sensitised.

AB InBev ROIC has seen quite some irregularities in recent years. First, the net operating result took a significant hit in 2014 and 2015 – driven by *negative FX effects* (a sharp decline in the Brazilian real had settled the company with some bad hedges). In 2016, capital turnover decreased significantly (from 47.9% to 23.0%) as a result of the *SABMiller integration* (net operating assets more than doubled). While the capital turnover ratio recovered partially to 29.9% in 2017, we expect **gradual asset rationalisation over the next eight years to revert capital turnover back to 39.9% in 2025**. We believe it is unlikely that pre-SABMiller levels of ~45-50% will be reached again as, in our view, the increased magnitude of AB InBev's makes it more difficult to manage net operating assets as efficiently as prior to the acquisition. Furthermore, we expect the **after-tax operating margin to stay relatively constant around ~26-27%**.

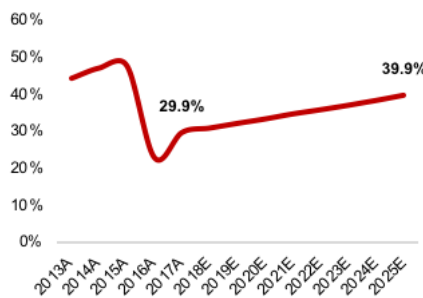
ROIC



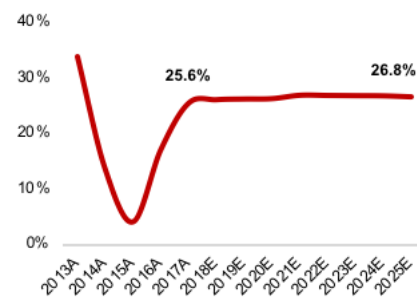
Net operating assets in billion \$



Capital turnover



After-tax operating margin



Mean ROIC 2012-2017



An analysis of the comparable companies shows that AB InBev underperformed the peer group over the period 2012-2017 (7.0% compared to 10.1%) on this metric – as we would expect given the irregularities over this period (i.e. negative FX effects and SABMiller acquisition requiring some asset rationalisation). We believe the 5-year mean to add limited value as we see no clear trend between our subsegments in the comparable peer group (i.e. no clear distinction between beer, spirits and staples). Rather, we are interested in developments over time.

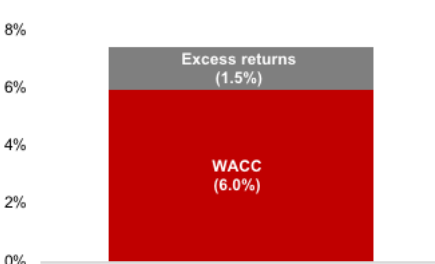
ROIC peer group (excl. AB InBev)



The ROIC should be set in accordance with expected competitive dynamics. Economic theory suggests that competition will eliminate abnormal returns over time, as profits attract new market entrants – increasing competitive dynamics which contracts margins. Mauboussin (2007) confirmed this by showing that *ROICs have a strong tendency to revert to the mean and that a persistent high ROIC (~10 years) is very rare* – both for individual companies as well as sectors as a whole. Furthermore, F.M De Bondt and R.H. Thaler (1987) demonstrated that *earnings growth itself is highly vulnerable to mean reversion*. Although we believe a five-year period to be short a sample (given the impact of temporary market distortions), our peer group – with the average ROIC decreasing from 11.8% in 2013 to 8.7% in 2017 – shows a similar trend.

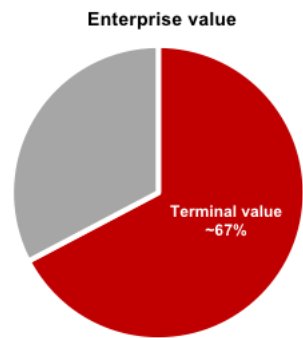
Finally, we do believe AB InBev to possess a **sustainable competitive advantage** which will allow it to earn returns on new invested capital (after the explicit forecast period) exceeding its blended cost of capital. However, we do not consider the 10.7% ROIC in 2025 to be sustainable in perpetuity. In our view, AB InBev’s *brand value* and *economies of scale* combined with *high barriers to entry* should allow the company to **earn a return on new invested capital that exceeds its cost of capital by approximately ~1.5%** - resulting in a **perpetual return on invested capital of 7.5%**. We emphasise that given the difficulty of obtaining a precise estimate for this variable, a scenario-based interpretation is crucial.

Perpetual ROIC (7.5%)



**Sensitivity**

Applying the value driver formula with 2.7% perpetual growth and a return on new invested capital of 7.5% results in a **terminal value of \$ 255.4 billion** (which represents ~67% of the total enterprise value). Although we argue in favour of thorough sensitivity analysis on all variables to get a good sense of each variable’s contribution to AB InBev’s valuation, we emphasise its crucial importance here due to the significant value contribution.



Perpetual ROIC

		5.5%	6.5%	7.5%	8.5%	9.5%
Perpetual growth	0,7%	\$ 217,0 billion	\$ 221,8 billion	\$ 225,4 billion	\$ 228,1 billion	\$ 230,3 billion
	1.7%	\$ 211.7 billion	\$ 226.2 billion	\$ 236.9 billion	\$ 245.1 billion	\$ 251.5 billion
	2.7%	\$ 203.2 billion	\$ 233.3 billion	<b>\$ 255.4 billion</b>	\$ 272.3 billion	\$ 285.6 billion
	3.7%	\$ 187.3 billion	\$ 246.5 billion	\$ 289.9 billion	\$ 323.1 billion	\$ 349.3 billion
	4.7%	\$ 147.0 billion	\$ 279.9 billion	\$ 377.3 billion	\$ 451.8 billion	\$ 510.6 billion

		Perpetual ROIC				
TV % of EV		5.5%	6.5%	7.5%	8.5%	9.5%
Perpetual growth	0.7%	63.6%	64.2%	64.5%	64.8%	65.0%
	1.7%	63.1%	64.6%	65.7%	66.4%	67.0%
	2.7%	62.1%	65.3%	<b>67.3%</b>	68.7%	69.7%
	3.7%	60.2%	66.5%	70.1%	72.3%	73.8%
	4.7%	54.3%	69.3%	75.3%	78.5%	80.5%

▪ Enterprise value

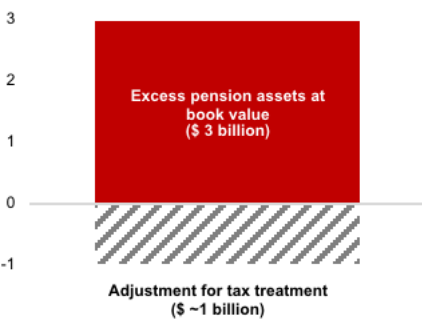
Now that we have determined our discount rate and continuing value, we are able to calculate the value of AB InBev’s core business – which we will use to compute the enterprise value by adding the value of nonoperating assets.

We have discounted our perpetual free cash flows at the expected cost of capital using a **mid-year convention** – under the assumption that the cash flows are generated evenly throughout the year (which is more or less in line with what we have learned from quarterly reporting). Doing so, values the **core business** of AB InBev at **\$ 379.3 billion**.

In the calculation of our free cash flows, we were relatively conservative in what we have defined as nonoperating assets. In our view, the *significance of AB InBev’s M&A activity defines it as a core element to its business* (together with the production and distribution activities of beer, of course) – increasing the complexity of drawing a specific boundary between what should and should not be included in our free cash flow forecasts. In case of doubt, we have opted to include it in the core activities as, in our opinion, this leaves us less vulnerable to estimation errors.

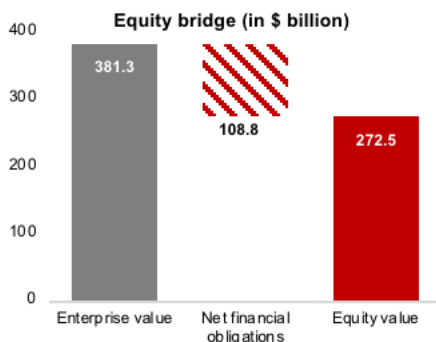
As a result, our noncore assets consist solely of **excess pension assets**. AB InBev has a surplus on its pension funds which it reports at market value – in line with IFRS guidelines – making a valuation rather easy. As these excess pension assets will lead to fewer required contributions in the future we will combine the value of the core business (\$ 379.3 billion) with the value of the excess pension asset (\$ 3.0 billion) – adjusted for tax (at the statutory marginal tax rate of 33%) to account for the tax treatment under Belgian law. Adding the value of the excess pension assets (\$ ~2 billion; represents ~0.5% of the total enterprise value) to our core business valuation results in an **enterprise value** of **\$ 381.3 billion**.

Non-operating assets (\$ ~2 billion)





▪ Equity value



As the final step of our valuation model, we subtract our net financial obligations to determine the value of AB InBev to its equity holders (which we use to derive our target stock price) – resulting in an **equity value of \$ 272.5 billion**.

To determine an intrinsic value per share, we divide the equity value (\$ 272.5 billion) by the number of undiluted shares outstanding (~1.9 billion) – resulting in a **fair value target price of € 117.4** (after converting our values from US dollars to euros at the latest FX rate; AB InBev reports in US dollars while its primary listing is in euros). While this figure, in our view, best represents the intrinsic value per share of AB InBev at this time, we suggest a scenario-based interpretation of our key parameters to account for new developments going forward.

		WACC				
		5.0%	5.5%	6.0%	6.5%	7.0%
Perpetual growth	1,7%	€ 151.0	€ 127.5	€ 109.5	€ 95.1	€ 83.5
	2.2%	€ 161.9	€ 133.7	€ 112.9	€ 96.9	€ 84.2
	2.7%	€ 177.5	€ 142.1	€ 117.4	€ 99.1	€ 85.1
	3.2%	€ 201.8	€ 154.2	€ 123.5	€ 102.0	€ 86.1
	3.7%	€ 244.6	€ 173.0	€ 132.2	€ 106.0	€ 87.5

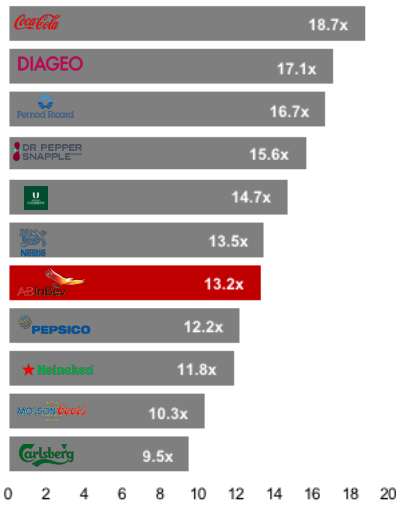
		WACC				
		5.0%	5.5%	6.0%	6.5%	7.0%
Perpetual ROIC	5,5%	€ 143.0	€ 114.7	€ 94.9	€ 80.2	€ 68.9
	6.5%	€ 162.9	€ 130.5	€ 107.9	€ 91.1	€ 78.2
	7.5%	€ 177.5	€ 142.1	€ 117.4	€ 99.1	€ 85.1
	8.5%	€ 188.6	€ 151.0	€ 124.7	€ 105.3	€ 90.3
	9.5%	€ 198.2	€ 158.6	€ 131.0	€ 110.5	€ 94.8

		Perpetual ROIC				
		5.5%	6.5%	7.5%	8.5%	9.5%
Perpetual growth	1,7%	€ 98.6	€ 104.9	€ 109.5	€ 113.0	€ 115.8
	2.2%	€ 97.0	€ 106.2	€ 112.9	€ 118.1	€ 122.1
	2.7%	€ 94.9	€ 107.9	€ 117.4	€ 124.7	€ 130.5
	3.2%	€ 92.1	€ 110.2	€ 123.5	€ 133.7	€ 141.7
	3.7%	€ 88.1	€ 113.6	€ 132.2	€ 146.6	€ 157.9

### Comparables

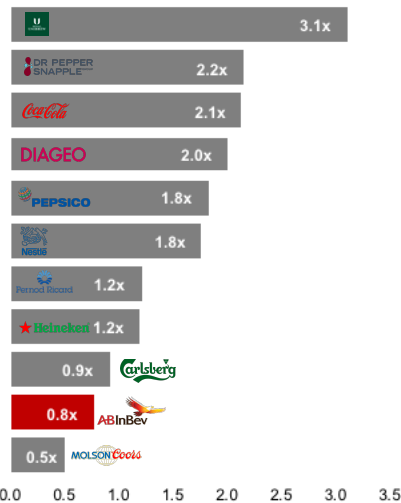
In our opinion, price-to-earnings (P/E) multiples are best suited to determine an indicative shareholders' return over short-term periods for well-established companies such as AB InBev. Based on the 2018 forward-looking P/E ratio of AB InBev's peer group (please refer to Appendix B), a stock price of € 100-110 should be feasible within the next months. This would indicate a total shareholders' return in excess of 15% over the next 6-24 months. To give a more precise example, **reiterating the median forward-looking P/E multiple on AB InBev's 2019E earnings provides a stock price of € 106.3 by 1Q19**. This would result in a total shareholders' return of 17.4% after accounting for a slight dividend reduction (dividend return of 3.6% in this scenario) to accommodate the deleveraging process.

EV/EBITDA (2018F)

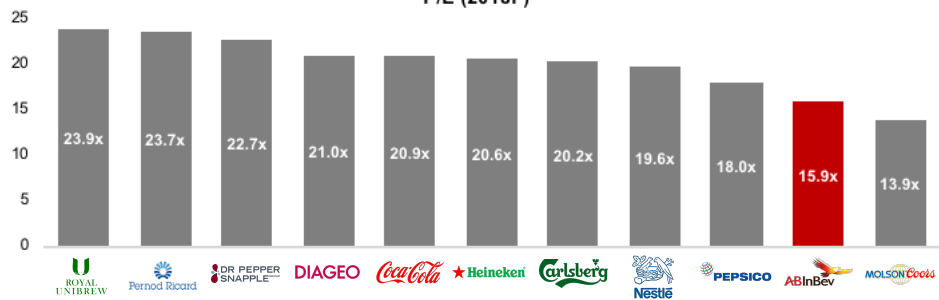


Current

P/B (2017A)

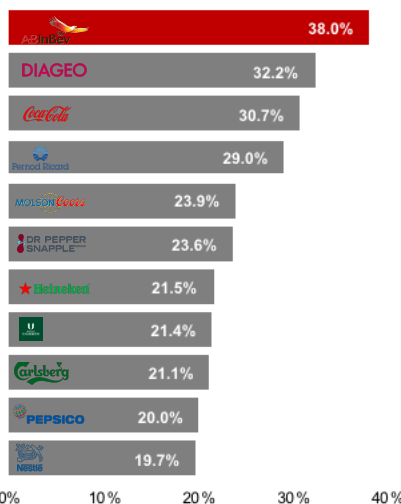


P/E (2018F)

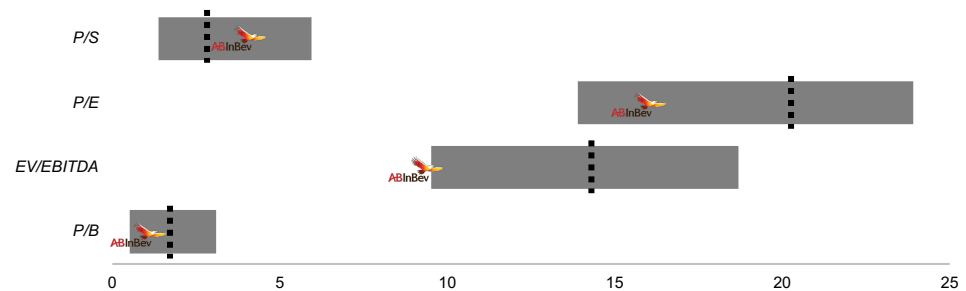


Comparing common valuation metrics with its peer group, AB InBev is priced rather conservatively – which should come as no surprise after three consecutive years of underperformance (compared to the MSCI Europe Consumers Staples Index). AB InBev trades well-below the median (represented by the dotted line in the chart below) on all included valuation metrics with the exception of the price-to-sales ratio. A logical explanation is found in AB InBev's **superior profitability**, realising a 2017A EBITDA margin of 38.0% compared to the peer group average of 24.3% and a 2017A profit margin of 16.3% compared to the peer group average of 11.7%, thus increased value of sales to its shareholders.

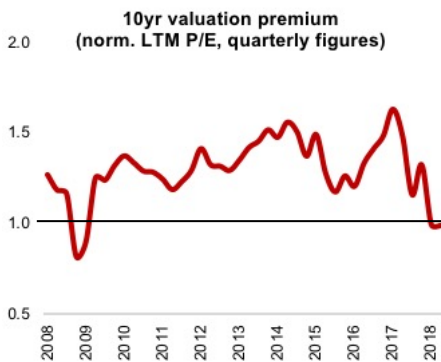
% 2017A EBITDA



AB InBev relative to the peer group ranges (2018F financials excl. P/B)



## ▪ Historical



Since the 1Q08, AB InBev has only traded at a **discount to the average normalised LTM P/E ratio of its peer group** on the last trading day of three quarters (4Q08, 1Q09 and 1Q18). While, in our view, the first two occasions can be explained by a single factor – concerns about AB InBev’s level of financial leverage during a time of turbulent credit markets – the current situation appears to be much more complex. We believe AB InBev’s recent underperformance to be a result of an ever-growing combination of *volume concerns in developed markets, economic contractions in Brazil, concerns about a high level of financial leverage in a tightening monetary environment, increased organisational complexity after the SABMiller acquisition and a loss of investor’s confidence as a result of three consecutive years of underperforming the MSCI Europe Consumer Staples Index* (AB InBev outperformed this index consistently from 2005 to 2014). However, while we agree with most concerns in the investment thesis section, we argue that **current risks are overpriced into AB InBev’s stock**.

In our opinion, AB InBev’s 10-year average valuation premium of 30.3% compared to its peer group average is a result of its *superior market positioning* (i.e. high market shares in concentrated markets), its *owner-operators culture demanding sustainable value creation* for shareholders, its *track-record of growing earnings faster than its peers* and its *persistent high cash flow conversion*. We believe a **return to a valuation premium** is justified as soon as investors get to see *more evidence of the outlook in Brazil improving and evidence that AB InBev will continue to be able to keep profit up with declining volumes in North America*. We do not expect these scenarios to uncover during the next months as investors will have to be assured over several reporting periods. However, we do believe that the first steps in the right direction have been taken and that if the trend continues, *double-digit returns for the next 3-5 years as a result of a significant rerate and improving conditions* are within reach

# Appendix

## Appendix A

Appendix A provides an overview of key transformational events and our view on M&A activity going forward.

### **Ambev**

In 2004, Interbrew merged with Ambev in an all-stock deal and continued operating as InBev. Interbrew, the Belgian-based brewing company that was formed through the merger of Stella Artois and Piedboeuf in 1988, represented the largest European brewing group at the time of the Ambev acquisition. Ambev, on the other hand, was a Brazil-based brewing company that came forward out of the merger between Brahma and Antartica in 1999. Prior to the merger, Ambev was the largest South American brewing group, InBev at once became the largest brewer in the world with an approximate market share of 13% in terms of volume, leaving Anheuser-Bush, which was the largest brewer for several decades, and SABMiller, the second largest, behind it. Prior to the transaction, Interbrew was the third largest brewer and Ambev was the fifth largest brewer.

Interbrew's acquisition of Ambev resulted in synergies of approximately \$ 300 million through a combination of technical, procurement and administrative costs reductions, as well as commercial value creation such as cross-licensing of existing brands. Due to the all-stock structure of the transaction, InBev was able to maintain its rather conservative financial structure.

### **Anheuser-Bush**

In 2008, InBev acquired Anheuser-Bush, the largest US-based brewing company (2<sup>nd</sup> largest in the world), after a long unsolicited process, for approximately \$ 52 billion, which represented an EV of 12.4x LTM EBITDA. Post transaction, the company continued operating as Anheuser-Bush InBev. The acquisition significantly strengthened AB InBev's position in the US and China, two countries where Anheuser-Bush held a dominant market position.

InBev acquisition of Anheuser-Bush resulted in total synergies of approximately \$ 2.3 billion, 53% more than the budgeted synergies of \$ 1.5 billion. The all-cash nature of the transaction increased AB InBev's net debt-to-EBITDA ratio to 4.7x. As a countermeasure, the pay-out ratio was temporarily lowered to stimulate deleveraging.

### Grupo Modelo

In 2012, AB InBev acquired Grupo Modelo, the largest Mexican brewing company, for approximately \$ 20 billion. AB InBev already owned 50% of Grupo Modelo through the acquisition of Anheuser-Busch. The transaction value represented an enterprise value of 12.9x LTM EBITDA. Post transaction, AB InBev is the largest brewer in Latin America and owner of the flagship Corona-brand.

AB InBev's acquisition of Grupo Modelo resulted in total synergies of approximately \$ 1.1 billion. The \$ 14 billion of new bank loans used to fund the all-cash transaction increased AB InBev's net debt-to-EBITDA ratio to 2.2x.

### SABMiller

In 2016, AB InBev acquired SABMiller, the London-based brewing group with South African roots, through a tender offer for approximately \$ 107 billion, which represented an enterprise value of 14.5x LTM EBITDA, in a combined cash and stock deal. SABMiller was the second largest brewer in the world prior to the transaction. Post transaction, AB InBev is good for an approximate global market share of 28% in terms of volume.

AB InBev's acquisition of SABMiller is expected to result in total synergies of approximately \$ 3.2 billion, more than double its initial estimate. The additional debt used to finance the transaction increased AB InBev's net debt-to-EBITDA ratio to 6.4x.

### Expected M&A activity

Given the substantial deleveraging required to reach AB InBev's target net debt-to-EBITDA ratio of 2.0x, we do not expect the next megadeal to take place within the next ~5 years. However, the exceptionally ambitious 2020 Dream Incentive Plan (i.e. a \$ 350 million bonus programme paid out if annual revenue of \$ 100 billion is achieved before 2022) does not let us rule out the possibility of another transformational deal.

The Coca-Cola Company, PepsiCo, Diageo have all been rumoured to be potential targets in the media and analyst reports. In our opinion, **Diageo** seems unlikely due to the potential antitrust issues with its beer assets. **PepsiCo** seems to be a better strategical fit than **Coca-Cola** due to its greater downstream integration and longstanding relationship with Ambev, which has bottling agreements with PepsiCo in Latin America. We believe an acquisition of **Castel** is more likely in the next years as timing would largely depend on the seller. AB InBev inherited a 20% stake in Castel with a right of first refusal on the 80% controlled by the Castel family through the SABMiller acquisition. Castel is one of

the five largest brewers in Africa with a particularly strong footprint in Northern Africa, a region where AB InBev's distribution network is relatively underdeveloped and which could be crucial in the battle with Heineken for a market leading position in the African continent.

## Appendix B

Appendix B provides an overview of our selected peer group to benchmark AB InBev. In addition to global brewers, we have included global staples with significant beverage activities and global spirits. We restricted the weight of global spirits to half that of the other categories to reduce the impact of the element of substitution between spirits and beer.

### **Brewers**

#### **Heineken**

Heineken, founded in 1873, is the second largest brewing company in the world in terms of volume sold. The company produces its brands across ~165 breweries and markets its brands in over 70 countries across all continents. Its portfolio of ~250 brands includes flagship brands such as Heineken, Amstel, Desperados, Sol, Tiger and Tecate. Heineken is headquartered in the Netherlands and employs ~75 thousand FTEs.

Heineken realised € 21.9 billion of 2017A revenue on which it realised a 21.5% EBITDA margin and an 8.8% profit margin. It sold 218 million hectolitres of beer in 2017 and has a net debt-to-EBITDA ratio of 2.5x.

#### **Carlsberg**

Carlsberg, founded in 1847, is the third largest brewing company in the world in terms of volume sold. The company markets its brands in over 100 countries across Europe and Asia. Its portfolio of ~500 brands includes flagship brands such as Carlsberg, Tuborg, Kronenbourg and Somersby. Carlsberg is headquartered in Denmark and employs ~41 thousand FTEs.

Carlsberg realised DKK 61.8 billion of 2017A revenue on which it realised a 21.1% EBITDA margin and an 2.0% profit margin. It sold 112 million hectolitres of beer in 2017 and has a net debt-to-EBITDA ratio of 1.5x.

#### **Molson Coors Brewing Company**

Molson Coors, formed in 2005 through the merger of the Canadian Moors and the American Coors, is a large global brewing company. The company produces its brands across 31 breweries and markets its brands in over 50 countries across North America, Europe and APAC. Its portfolio of ~90 brands includes



flagship brands such as Coors Light, Blue Moon, Miller Lite, Leinenkugel's and Redd's Apple Ale. Molson Coors is headquartered in the US and employs ~18 thousand FTEs.

Molson Coors realised \$ 11.0 billion of 2017A revenue on which it realised a 23.9% EBITDA margin and an 12.9% profit margin. It sold 23.1 million hectolitres of beer in 2017 and has a net debt-to-EBITDA ratio of 4.2x.

### **Royal Unibrew**

Royal Unibrew, formed in 1989 through the merger of the Danish Faxe, Ceres and Thor breweries, is a European brewing and beverages company. The company markets its brands across Scandinavia and Europe. Its portfolio includes flagship brands such as Royal, Lapin Kulta, Ceres and Faxe. Royal Unibrew is headquartered in Denmark and employs ~2.4 thousand FTEs.

Royal Unibrew realised DKK 6.3 billion of 2017A revenue on which it realised a 21.4% EBITDA margin and an 13.0% profit margin. It sold 9.7 million hectolitres of beer in 2017 and has a net debt-to-EBITDA ratio of 0.8x.

### **Staples**

#### **Nestlé**

Nestlé, formed in 1905 through the merger of the Anglo-Swiss Milk Company and Farine Lactée Henri Nestlé, is the largest food and beverages company in the world in terms of revenue. The company produces its brands across ~447 production facilities and markets its brands in over 190 countries across all continents. Its portfolio of ~2 thousand brands includes flagship brands such as Kit Kat, Nescafe, Purina and San Pellegrino. Nestlé is headquartered in Switzerland and employs ~335 thousand FTEs.

Nestlé realised CHF 89.8 billion of 2017A revenue on which it realised a 19.7% EBITDA margin and an 8.0% profit margin. It has a net debt-to-EBITDA ratio of 1.5x.

#### **The Coca-Cola Company**

Coca-Cola, founded in 1892, is a global beverages company. The company markets its brands in over 200 countries across all continents. Its portfolio of ~200 brands includes flagship brands such as Coca-Cola, Sprite, Fanta and Minute Maid. Coca-Cola is headquartered in the US and employs ~62 thousand FTEs.

Coca-Cola realised \$ 35.4 billion of 2017A revenue on which it realised a 30.7% EBITDA margin and an 3.5% profit margin. It has a net debt-to-EBITDA ratio of 1.3x.

### **PepsiCo**

PepsiCo, formed in 1965 through the merger of the Pepsi-Cola Company and Frito-Lay, is the second largest food and beverages company in the world in terms of revenue. The company markets its brands in over 200 countries across all continents. Its portfolio includes flagship brands such as Pepsi, Mountain Dew, Lay's, Gatorade, Tropicana, Doritos and Cheetos. PepsiCo is headquartered in the US and employs ~264 thousand FTEs.

PepsiCo realised \$ 63.5 billion of 2017A revenue on which it realised a 20.0% EBITDA margin and an 7.6% profit margin. It has a net debt-to-EBITDA ratio of 3.0x.

### **Dr Pepper Snapple Group**

Dr Pepper Snapple, formed in 2008 as a Cadbury Schweppes spin-off, is a multinational beverages company. The company produces its brands across 22 production facilities and markets its brands in across North and Latin America. Its portfolio of ~50 brands includes flagship brands such as A&W Root Beer, Crush, Canada Dry and Orangina. Dr Pepper Snapple is headquartered in the US and employs ~21 thousand FTEs.

Dr Pepper Snapple realised \$ 6.7 billion of 2017A revenue on which it realised a 23.6% EBITDA margin and an 16.1% profit margin. It has a net debt-to-EBITDA ratio of 2.8x.

### ***Spirits***

#### **Diageo**

Diageo, formed in 1997 through the merger of Guinness and Grand Metropolitan, is a global distiller with significant beer assets. The company operates across ~80 offices and markets its brands in over 180 countries across all continents. Its portfolio of ~200 brands includes flagship brands such as Johnnie Walker, Smirnoff, Captain Morgan, Baileys and Guinness. Diageo is headquartered in the UK and employs ~30 thousand FTEs.

Diageo realised £ 18.1 billion of 2017A revenue on which it realised a 32.2% EBITDA margin and an 26.6% profit margin. It has a net debt-to-EBITDA ratio of 2.7x.

#### **Pernod Ricard**

Pernod Ricard, founded in 1975, is a global distiller. The company produces its brands across ~100 production facilities and markets its brands in over 80 countries across all continents. Its portfolio includes flagship brands such as

Absolut, Havana Club, Ricard and Royal. Pernod Ricard is headquartered in France and employs ~20 thousand FTEs.

Pernod Ricard realised € 9.0 billion of 2016-2017A revenue on which it realised a 29.0% EBITDA margin and an 18.0% profit margin. It has a net debt-to-EBITDA ratio of 3.0x.

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

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