

# ANNUAL REPORT 2018



# MANAGEMENT REVIEW

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## SAIL'22 GROW IN ASIA

Front page: A strategic growth priority is to continue to grow in Asia, where a key growth driver is continued premiumisation in China through growing sales of our international brands Tuborg, Carlsberg and 1664 Blanc. Supported by our targeted expansion into big cities outside our core western China provinces, our international brand portfolio in China grew by 13% in 2018.

## LETTER FROM THE CHAIRMAN &amp; THE CEO

# SHIFTING GEARS TO GROWTH

2018 was a good year for the Carlsberg Group, with strong net revenue, operating profit and cash flow. The benefits from Funding the Journey were partly reinvested to support our strategic priorities.

As a result, we are pleased to report improved financial, strategic and organisational health of our business.

## FINANCIAL HEALTH: A YEAR OF STRONG DELIVERY

With respect to our financial health, the first results of the SAIL'22 growth priorities manifested themselves in organic net revenue growth of 6.5%, driven by solid price/mix of +2% and volume growth of 4.8%, although the latter was helped by the warm summer in several European markets and the timing of the festive season in Asia.

Funding the Journey, which was a three-year profit improvement programme initiated in

November 2015, came to an end in 2018. It has been very successful, delivering significantly more benefits than initially anticipated, and allowing us to invest more than DKK 1bn in our SAIL'22 priorities. Going forward, the mindset of the programme will prevail. Now embedded in operations across the Group, the focus on efficiency, costs and cash will remain an important driver of future value creation.

During the year, we adjusted our earnings expectations twice. In August, we increased the full-year guidance from mid- to high-single-digit percentage organic growth, and in October we further increased expectations to 10-11% organic growth in operating profit.

Thanks to the higher benefits from Funding the Journey, good growth of our SAIL'22 priorities and higher volumes due to the aforementioned warm weather, operating profit grew organically by 11% and the operating margin improved by 30bp to 14.9%.

Net profit was DKK 5,309m and adjusted EPS was DKK 35.2, up 9% on 2017.

The earnings delivery was an important driver of the ROIC improvement of 120bp and the free cash flow of DKK 6.2bn. The free cash flow was also supported by a solid contribution from trade working capital of DKK 1.9bn.

During the year, we engaged in several M&A transactions, increasing our stakes in the Cambodian and Greek businesses to 75% and 100% respectively, and acquiring a stake in the controlling shareholder of the Portuguese business, bringing our total direct and indirect holding in Super Bock Group to 60%. Despite these investments, the net interest-bearing debt/EBITDA ratio at year-end was 1.29x, still well below our target of below 2.0x.

On the back of the strong results, the Supervisory Board will propose to the Annual General Meeting that the payout ratio of around 50% be maintained, resulting in a 13% increase in the ordinary dividend to DKK 18.0 per share. In addition, the Board has initiated a DKK 4.5bn share buy-back programme, leading to cash returns to shareholders of DKK 7.2bn for the year. You can read more about this on page 34.

**“Our strong performance in 2018 will result in a considerable cash return to shareholders, with the aggregated value of dividends and share buy-back for the year totalling DKK 7.2bn.”**

Flemming Besenbacher  
Chairman of the Supervisory Board

## STRATEGIC HEALTH: PROGRESS ON SAIL'22

Our strategic health also improved during 2018. Our strategy, SAIL'22, which was launched in March 2016, is now well established and understood across the Group. Among a number of positive achievements, we would like to highlight the growth rates of our craft & speciality portfolio (+26%) and alcohol-free brews in Western Europe (+33%).

Our international brands and local power brands had a very good year, and in Asia we grew further in India and China, the latter supported by our “big city” approach.

You can read about our SAIL'22 initiatives in 2018 on pages 25-34.

Part of our strategy is our ambitious sustainability programme Together Towards ZERO, based on our purpose of *brewing for a better today and tomorrow*. We are working hard to meet the programme's targets within carbon, water, responsible drinking and health & safety, and our actions and achievements in 2018 are outlined on pages 31-33 and

discussed in more detail in our Sustainability Report.

In September, we were excited to launch a series of ground-breaking sustainability innovations for the Carlsberg brand, including the new Snap Pack, which, when fully rolled out, will reduce plastic usage by up to 76%, equivalent to 1,200 tonnes of plastic – or 60 million plastic bags – per year. Less plastic means less reliance on fossil fuel-based packaging, thereby reducing carbon emissions.

### ORGANISATIONAL HEALTH: A WINNING ORGANISATION

During the past three years, there have been several changes in the top-200 management team. Today, we have a strong group of leaders across the Group's functions and markets. In 2018, we also welcomed our head of Group Commercial, Jessica Spence, to the Executive Committee.

In many areas, such as commercial, finance, supply chain, digital and data we further professionalised our ways of working. In digital, we accelerated our digital agenda with the establishment of a digital transformation team.

We also changed the incentive structure to achieve better alignment with our objectives. Overall, our winning culture has become much deeper embedded across the Group, and our people are characterised by a winning spirit.

### CHANGES TO THE SUPERVISORY BOARD

Lars Rebien Sørensen, Donna Cordner and Nina Smith have notified the Supervisory Board that they are not standing for re-election at

## SAIL'22 EXCEL IN EXECUTION

Chairman Flemming Besenbacher (left) and CEO Cees 't Hart in front of a showcase of our DraughtMaster™ system. This patented one-way 20-litre PET keg system with no added CO<sub>2</sub> and a 31-day shelf life enhances the freshness and beer experience for consumers and allows outlets to have greater on-tap variety and a more user-friendly draught beer installation.

the Annual General Meeting in 2019. In addition, Nancy Cruickshank stepped down from the Board in May to join the Group as Senior Vice President Digital Business Transformation. The Supervisory Board will propose the election of Lars Fruergaard Jørgensen, Domitille Doat-Le Bigot, Lilian Fossum Biner and Majken Schultz as new members.

### THANK YOU

We would like to thank our shareholders for their support. We would also like to express our appreciation to everyone in the Carlsberg Group for their cooperation, dedication and enthusiasm in bringing SAIL'22 to life and securing the successful delivery of Funding the Journey. Finally, we would like to acknowledge the excellent relationships that we have with our customers and suppliers, and to state our gratitude to our consumers around the world.

Flemming Besenbacher  
Chairman

Cees 't Hart  
CEO



## EXPECTATIONS

# 2019 EARNINGS EXPECTATIONS

In 2019, we will continue to execute on our SAIL'22 strategic priorities in support of top- and bottom-line growth.

Driving growth of craft & speciality and alcohol-free brews and continuing volume and value growth in Asia will remain our key growth accelerators. Additionally, we will support and further develop our core beer portfolio, which includes our local power brands and our international brands Tuborg and Carlsberg. For the Carlsberg brand in particular, an important priority for 2019 is the roll-out of the new brand design and packaging innovations.

During the course of the three-year profit improvement programme – Funding the Journey – its focus on efficiencies, costs and cash has become an integral part of our day-to-day operations, and this will remain an important driver of future value creation.

Consequently, we will continue to enforce strict cash and cost discipline to optimise processes and drive efficiencies throughout the supply chain, and to streamline SG&A costs through operating cost management (OCM).

Our regional priorities will be to increase net revenue and the operating margin in Western Europe, drive growth in Asia through premiumisation, and strengthen market leadership in Eastern Europe.

Based on these priorities, the Group expects to deliver:

- Mid-single-digit percentage organic growth in operating profit.

Based on the spot rates as at 5 February, we assume a DKK translation impact of around zero for 2019.

Other relevant assumptions are as follows:

Financial expenses, excluding currency losses or gains, are expected to be DKK 700-750m.

The effective tax rate is expected to be below 28%.

Capital expenditure at constant currencies is expected to be around DKK 4.5bn.

## FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements. Any such statements are subject to risks and uncertainties that could cause the Group's actual results to differ materially from the results discussed in such forward-looking statements. Accordingly, forward-looking statements should not be relied on as prediction of the actual results. Please see page 55 for the full forward-looking statement disclaimer.

## CARLSBERG

In 2018, we unveiled a new Carlsberg brand design alongside packaging innovations that will reduce plastic waste and increase recyclability. The innovations included the pioneering Snap Pack solution, a new coating on refillable glass bottles to extend their lifespan, new caps that remove oxygen to make the beer taste fresher for longer, and a new Cradle to Cradle Certified™ green ink to improve recyclability.



SAIL'22 REVITALISE CORE BEER

STRATEGIC PRIORITIES

# SAIL'22 DELIVERING TOP-LINE GROWTH...

Our 2018 results served as proof points for our strategic choices. Funding the Journey delivered above initial expectations and our investments in SAIL'22 supported organic top-line growth of 6.5%.



## STRONG PROGRESS OF ALCOHOL-FREE BREWS

VOLUME GROWTH OF 33%

Our alcohol-free brews delivered strong results in Western Europe, growing by 33%. Throughout the region, we successfully supported alcohol-free line extensions of our local power brands. In Russia, Baltika 0 grew by 35%. We launched Birell, a global stand-alone alcohol-free beer.

SAIL'22 ACTIVELY SHAPE ALCOHOL-FREE BREWS

## PREMIUMISING IN ASIA

Our premiumisation efforts in Asia contributed to a strong price/mix of 4%. Our international brands continued their strong performance, growing volumes by 14%. India and China delivered particularly strong results. An important initiative in 2018 was the successful expansion of our international portfolio into big cities in China.

SAIL'22 GROW IN ASIA



## CONTINUED GROWTH OF CRAFT & SPECIALITY

VOLUME GROWTH OF 26%

Our craft & speciality portfolio had another year of strong growth, supported by 1664 Blanc, which grew by 49%, and Grimbergen, which grew by 14%.

SAIL'22 GROW CRAFT & SPECIALITY



## STRONG DELIVERY OF FUNDING THE JOURNEY

Funding the Journey as a specific programme came to an end in 2018, delivering around DKK 3bn, well above initial expectations. More than DKK 1bn has been reinvested in support of our SAIL'22 priorities. The focus on efficiencies, costs and cash will continue.

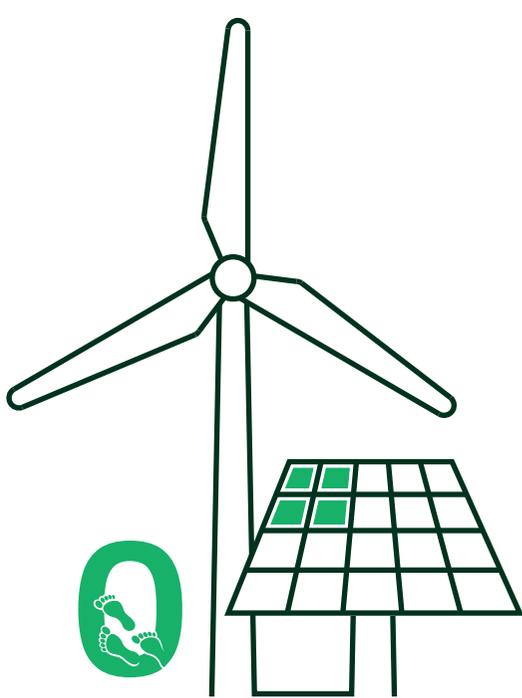
SAIL'22 FUNDING THE JOURNEY



➤ READ MORE ABOUT OUR STRATEGY AND KPIs ON PAGES 25-34

# ... AND PROGRESS TOWARDS ZERO

In 2018, we continued to work hard to deliver on our ambitious sustainability programme, Together Towards ZERO, with its clear priorities within the areas of carbon, water, responsible drinking and health & safety.



**ZERO**  
CARBON  
FOOTPRINT

## 20%

reduction in relative carbon emissions since 2015, using 46% renewable electricity in 2018. Since 2015, our coal usage has been reduced by 78%.



**ZERO**  
WATER  
WASTE

## 9%

improvement in water efficiency since our 2015 baseline. We aim to halve water usage at our breweries by 2030. With steady performance in 2018, we still have a long way to go to achieve this target.



**ZERO**  
IRRESPONSIBLE  
DRINKING

## 96%

of our products now carry responsible drinking messages advising consumers not to drink-drive and not to drink when underage or pregnant. In Western Europe, we included information on ingredients and nutritional values per 100 ml on 86% of products.



**ZERO**  
ACCIDENTS  
CULTURE

## 35%

reduction in lost-time accident rate since 2015. In 2018, we rolled out our Life Saving Rules programme, focusing on the specific areas where we have learned that people's lives can be endangered if rules are not followed.

➤ **READ MORE ON PAGES 31-33 AND IN OUR SUSTAINABILITY REPORT**

OUR BRANDS

# A COMPLETE AND ATTRACTIVE PORTFOLIO

Our core beer portfolio spans the international beer brands Tuborg and Carlsberg and local power brands. Alongside our core beer, we have great craft & speciality beers and alcohol-free brews.



**SOLID PROGRESS OF CORE BEER**

Mainstream lager beer enjoys high penetration and frequency in most markets. Core beer is the backbone of our business, representing our largest volume and profit pool. Our core beer portfolio consists of strong local power brands in combination with our international brands Tuborg and Carlsberg. Improving the brand fundamentals within core beer is an important priority of SAIL'22, and in 2018 we revealed a series of betterments and a new look & feel for the Carlsberg brand.

**SAIL'22 REVITALISE CORE BEER**

**STRONG RESULTS FOR OUR GROWING CATEGORIES**

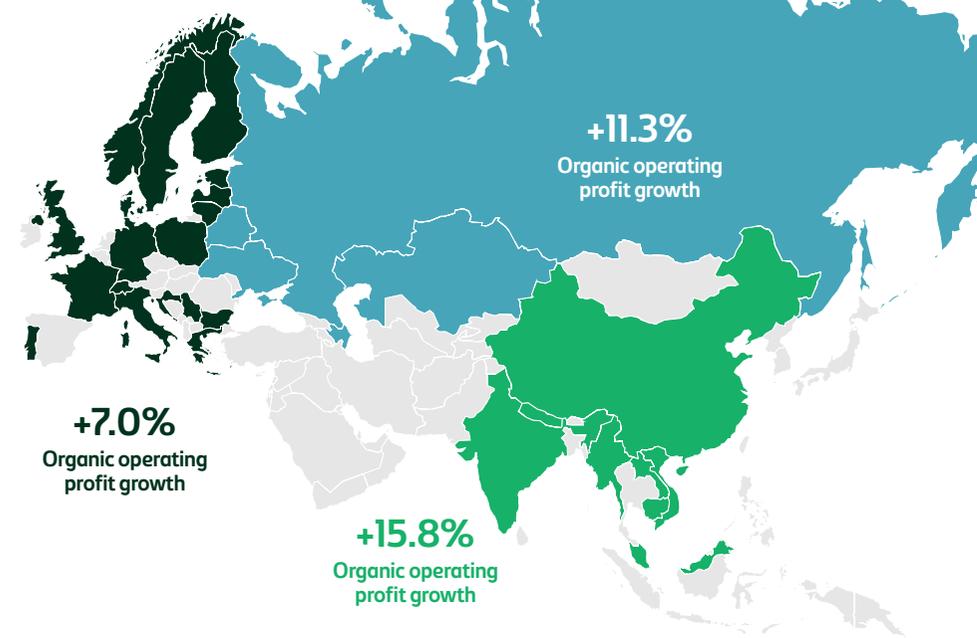
Important priorities of SAIL'22 are to strengthen our position within craft & speciality and alcohol-free brews. The popularity of these categories is on the rise in many markets, driven by consumers' desire for premium brands with varied tastes and styles as well as the interest in healthier lifestyles. Both categories offer superior margin opportunities. In 2018, we launched Birell – our first stand-alone alcohol-free brew – in Poland and Bulgaria.

**SAIL'22 WIN IN GROWING CATEGORIES**

## REGIONAL PRIORITIES

# STRONG RESULTS ACROSS OUR REGIONS

The Carlsberg Group has a well-diversified geographic footprint with strong no. 1 or 2 positions in 25 markets across Western Europe, Asia and Eastern Europe. Around 75% of volumes are sold in these markets and no market accounts for more than 16% of Group volumes.

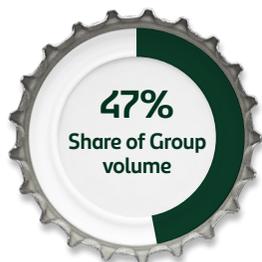


### WESTERN EUROPE

## IMPROVE MARGINS AND GROW OPERATING PROFIT ORGANICALLY

**+60bp** Operating margin expansion

Western Europe delivered organic growth in net revenue of 3.0% and in operating profit of 7.0%. Reported operating margin was 15.0% (+60bp). These results were driven by good progress on our SAIL'22 priorities, including craft & speciality and alcohol-free brews, value management and Funding the Journey, and by the warm summer in some markets.



### ASIA

## ACCELERATE ORGANIC GROWTH THROUGH PREMIUMISATION

**+13.3%** Organic growth in net revenue

Growing in Asia is a key SAIL'22 priority on which we delivered strongly in 2018. Organic net revenue growth was driven by strong volume growth of 8.6% and price/mix of +4%. Our international brands – Tuborg, Carlsberg and 1664 Blanc – were significant contributors, but we also saw good results for our local power brands. Operating profit grew organically by 15.8%.



### EASTERN EUROPE

## REBALANCE THE GOLDEN TRIANGLE TOWARDS TOP-LINE GROWTH

**+9.3%** Organic growth in net revenue

In 2018, Eastern Europe rebalanced the Golden Triangle towards volume and top-line. Organic net revenue growth was driven by volume growth of 3.1% and price/mix of +6%. In Russia, price/mix was positive, driven by price increases. The other markets in the region achieved solid revenue and earnings growth.



## GOLDEN TRIANGLE

# WELL-BALANCED GOLDEN TRIANGLE

The Golden Triangle is an important KPI in our performance management at Group, regional and market level. By focusing on our SAIL'22 priorities, we aim to optimise the balance between market share/volumes, gross profit after logistics (GPaL) margin, operating profit and cash generation, thereby creating sustainable value growth.

### VOLUMES

Total volumes grew organically by 4.8%. Volumes in Asia were up organically by 8.6%, with strong results achieved in most markets in the region. In Western Europe, the organic volume growth of 3.6% was impressive, supported by warm weather during the summer. In Eastern Europe, all markets contributed to the organic growth of 3.1%.

### GROSS PROFIT AFTER LOGISTICS MARGIN

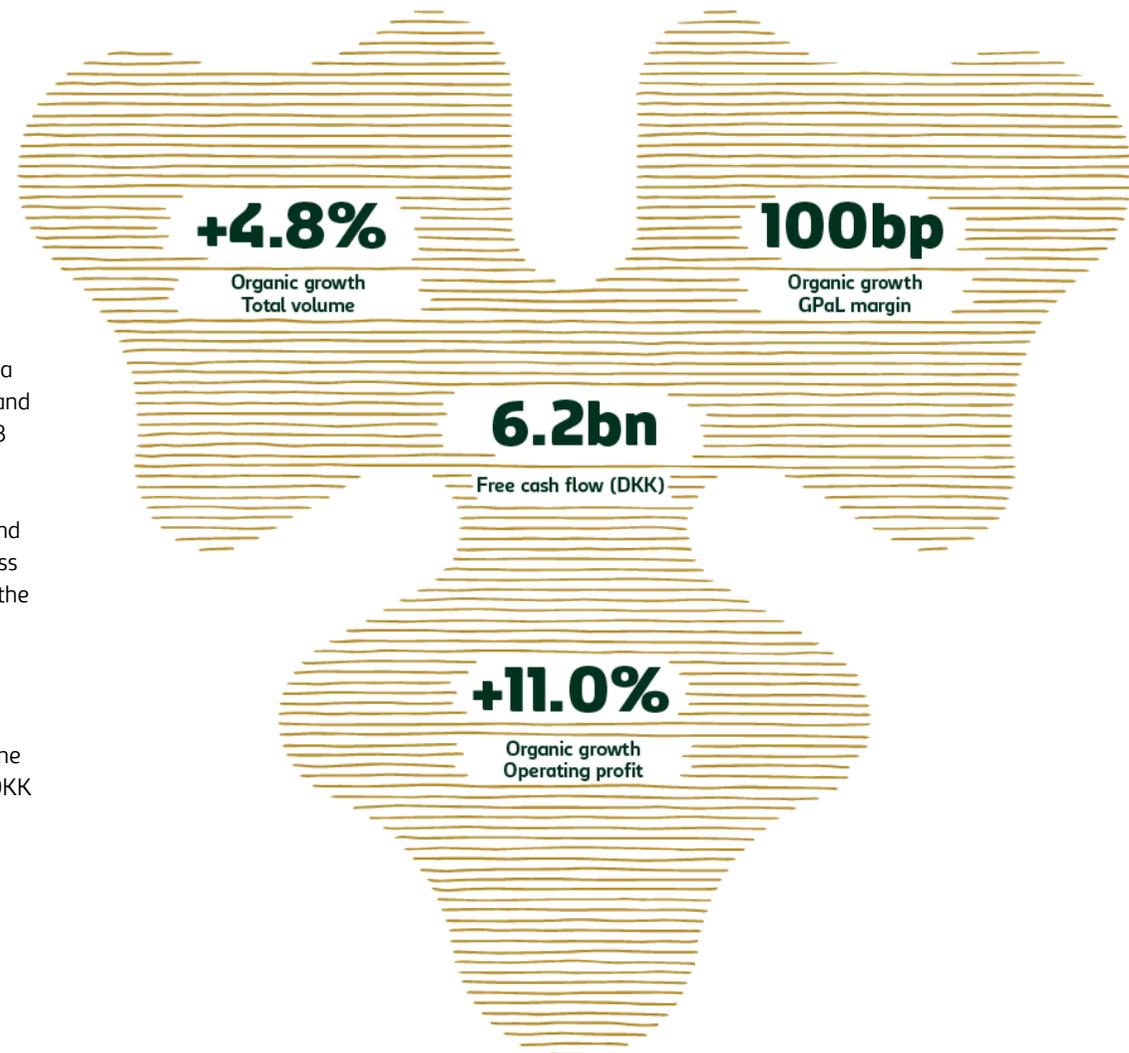
The gross profit after logistics (GPaL) margin developed favourably in 2018, growing organically by 100bp. The improvement was the result of the positive price/mix and supply chain efficiencies. All three regions saw positive development of their GPaL margins.

### OPERATING PROFIT

Operating profit grew organically by 11% as a result of volume growth, positive price/mix and the benefits from Funding the Journey. 2018 was the last year of Funding the Journey, which has delivered benefits of around DKK 3bn. The sharp focus on efficiencies, costs and cash has been embedded in our daily business processes and systems, and will continue in the years to come.

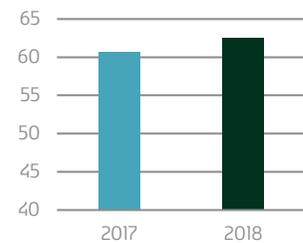
### FREE CASH FLOW

Free cash flow amounted to DKK 6.2bn, positively impacted by strict financial discipline and the change in trade working capital of DKK +1.9bn. During the year, we increased our ownership share in a number of subsidiaries and associates, with net investments amounting to a total of around DKK 2.8bn.



## FINANCIAL HIGHLIGHTS

# DELIVERING ON OUR PRIORITIES

Net revenue<sup>1</sup> (DKKbn)

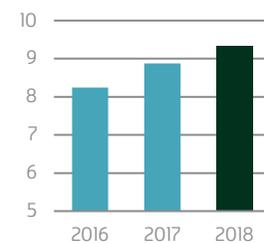
## 62.5bn

Net revenue grew organically by 6.5% as a result of volume growth of 4.8% and price/mix of 2%. Asia and Eastern Europe contributed positively to both volume and price/mix, while in Western Europe price/mix was negatively impacted by country mix.

In reported terms, net revenue grew by 3.0%, impacted by adverse currencies.

More details on operating profit are provided in section 1 of the consolidated financial statements.

Operating profit (DKKbn)

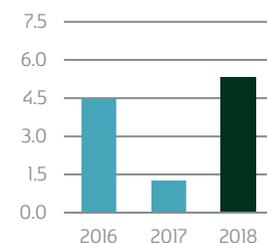


## 9.3bn

Operating profit grew organically by 11.0%, with all three regions delivering very solid results. Operating expenses were up 4% organically due to marketing investments. Excluding marketing, they declined by 1% due to Funding the Journey benefits.

Reported operating profit of DKK 9.3bn was up 5.1% due to currencies. The operating margin was 14.9% (+30bp).

Net profit (DKKbn)

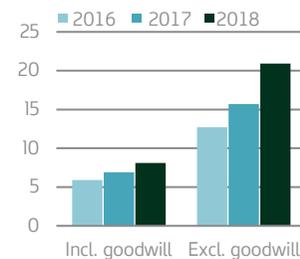


## 5.3bn

Net profit attributable to shareholders in Carlsberg A/S was up significantly on 2017. In 2017, net profit was impacted by a DKK 4.8bn impairment.

Adjusted for special items after tax, net profit increased by 9% to DKK 5.4bn. The positive development was the result of higher operating profit, lower financial expenses and a lower effective tax rate compared with 2017.

ROIC (%)



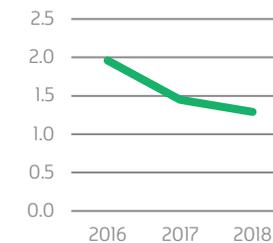
## 8.1%

Return on invested capital (ROIC) increased by 120bp to 8.1%, impacted by lower invested capital, improved profitability and a lower effective tax rate.

ROIC excluding goodwill increased by 520bp to 20.9%, with improvements achieved in all three regions.

More details on ROIC are provided in section 2.1 of the consolidated financial statements.

NIBD/EBITDA (x)



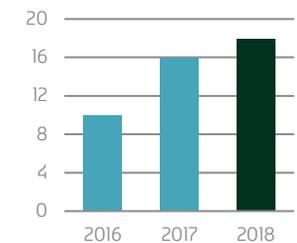
## 1.29x

Despite a higher dividend payout in the year and increased ownership of subsidiaries and associates, net interest-bearing debt (NIBD) was reduced further in 2018. NIBD/EBITDA was 1.29x, comfortably meeting our target of below 2.0x.

We have thus delivered on all our capital allocation priorities, as explained on page 34.

Find more details on NIBD, capital structure, dividends and share buy-back in section 4 of the consolidated financial statements.

Dividend/share (DKK)



## 18.0

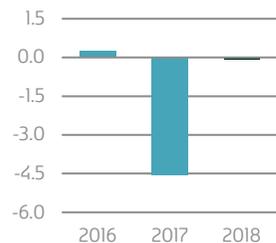
The Supervisory Board will propose to the AGM a dividend of DKK 18.0. This equals a payout ratio of 51%, in line with our dividend policy of an adjusted payout ratio of around 50%. The proposed dividend represents an increase of 13% on 2017.

In addition, the Supervisory Board has announced a DKK 4.5bn share buy-back programme (see page 34).

<sup>1</sup> Net revenue restated for 2017.

# OTHER KEY FINANCIALS

Net special items (DKKbn)



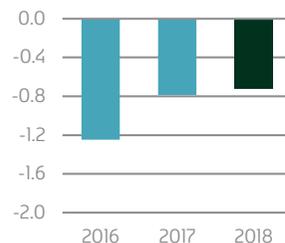
**-88m**

Net special items of DKK -88m were primarily impacted by measures related to Funding the Journey in Western Europe.

The significantly negative special items in 2017 were the result of an impairment of the Baltika brand in Russia.

More details on special items are provided in section 3.1 of the consolidated financial statements.

Net financial items (DKKbn)



**-722m**

Net financial items continued to decline and amounted to DKK -722m (2017: DKK -788m), positively impacted by the lower NIBD. Excluding foreign exchange gains, net, they amounted to DKK -758m, in line with our assumption at the beginning of the year of around DKK -800m.

More details on net financial items are provided in section 4.1 of the consolidated financial statements.

Effective tax rate (%)

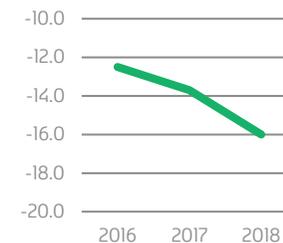


**28%**

The effective tax rate (ETR) of 28% was significantly down on 2017, when it was impacted by the impairment of the Baltika brand in Russia. Adjusted for this impairment, the effective tax rate (adj. ETR) in 2017 was 29%. At the beginning of the year, we expected an effective tax rate for 2018 of below 29%.

More details on tax are provided in section 6 of the consolidated financial statements and in the section on economic value and total tax contribution in the 2018 Sustainability Report.

TWC/net revenue (%)

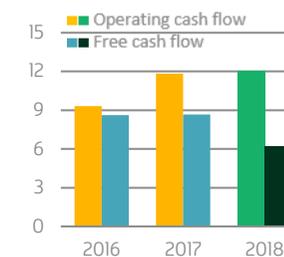


**-16.0%**

The change in trade working capital was DKK +1,908m and average trade working capital to net revenue declined further to -16.0% compared to -14.0% for 2017. The change was positively impacted by the change in trade payables, which was the result of higher volumes, our disciplined cash focus, country mix and the acquisition of Cambrew.

More details on working capital are provided in section 1.4 of the consolidated financial statements.

Cash flow (DKKbn)

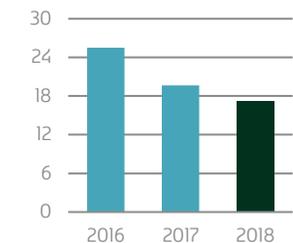


**6.2bn**

Operating cash flow was 12.0bn, up DKK 213m. The free cash flow of DKK 6.2bn was positively impacted by the strong trade working capital. The decline versus 2017 was primarily due to the increased ownership in Cambrew and Super Bock. CapEx was DKK 4.0bn, initially expected to be around DKK 4.5bn, and in October adjusted to DKK 4.0-4.5bn.

More details on the free cash flow are provided in sections 1.4 and 5.2 of the consolidated financial statements.

NIBD (DKKbn)



**17.3bn**

Net interest-bearing debt (NIBD) declined by DKK 2.3bn. Since 2015, NIBD has declined by DKK 13.6bn.

70% of the gross financial debt was long term. 96% of the net financial debt was denominated in EUR and DKK (after swaps). The duration was 4.2 years, within our target of 2-5 years.

More details on financing and capital structure are provided in section 4 of the consolidated financial statements.

## KEY FIGURES

## FIVE-YEAR SUMMARY

	2018	2017	2016	2015	2014		2018	2017	2016	2015	2014	
<b>Volumes (million hl)<sup>1</sup></b>						<b>Investments</b>						
Beer	112.3	107.1	116.9	120.3	122.8	Acquisition and disposal of property, plant and equipment and intangible assets, net	-3,773	-3,868	-3,596	-2,922	-5,647	
Other beverages	20.8	19.2	21.9	21.5	21.0	Acquisition and disposal of subsidiaries	-974	268	1,969	-33	-1,681	
<b>DKK million</b>						<b>Financial ratios</b>						
<b>Income statement</b>						Gross margin <sup>1</sup>	%	50.0	49.8	50.2	48.8	49.3
Net revenue <sup>1</sup>	62,503	60,655	62,614	65,354	64,506	Operating margin <sup>1</sup>	%	14.9	14.6	13.2	12.9	14.3
Gross profit <sup>1</sup>	31,220	30,208	31,419	31,925	31,781	Return on invested capital (ROIC)	%	8.1	6.9	5.9	5.6	5.8
Operating profit before amortisation, depreciation and impairment losses	13,420	13,583	13,006	13,213	13,338	ROIC excl. goodwill	%	20.9	15.7	12.7	11.0	10.7
Operating profit before special items	9,329	8,876	8,245	8,457	9,230	Effective tax rate for the year	%	28.0	41.4	33.0	49.0	26.1
Special items, net	-88	-4,565	251	-8,659	-1,353	Equity ratio	%	38.5	41.1	40.0	34.8	38.3
Financial items, net	-722	-788	-1,247	-1,531	-1,191	Debt/equity ratio (financial gearing)	x	0.36	0.40	0.48	0.66	0.65
Profit before tax	8,519	3,523	7,249	-1,733	6,686	NIBD/operating profit before depreciation, amortisation and impairment losses	x	1.29	1.45	1.96	2.34	2.74
Income tax	-2,386	-1,458	-2,392	-849	-1,748	Interest cover	x	12.92	11.26	6.61	5.53	7.75
Consolidated profit	6,133	2,065	4,857	-2,582	4,938	<b>Stock market ratios</b>						
<b>Attributable to</b>						Earnings per share (EPS)	DKK	34.8	8.3	29.4	-19.2	28.9
Non-controlling interests	824	806	371	344	524	Earnings per share, adjusted (EPS-A) <sup>2</sup>	DKK	35.2	32.3	25.4	28.1	36.0
Shareholders in Carlsberg A/S (net profit)	5,309	1,259	4,486	-2,926	4,414	Cash flow from operating activities per share (CFPS)	DKK	78.7	77.6	61.2	66.3	48.4
Shareholders in Carlsberg A/S, adjusted <sup>2</sup>	5,359	4,925	3,881	4,292	5,496	Free cash flow per share (FCFPS)	DKK	40.2	56.9	56.5	49.2	4.4
<b>Statement of financial position</b>						Dividend per share (proposed)	DKK	18.0	16.0	10.0	9.0	9.0
Total assets	117,700	114,251	126,906	124,901	137,458	Payout ratio	%	52	194	34	nm	31
Invested capital	82,721	84,488	96,089	94,950	108,866	Payout ratio, adjusted <sup>2</sup>	%	51	50	39	32	25
Invested capital excl. goodwill	31,792	33,991	43,225	44,680	56,319	Share price (B shares)	DKK	692.6	745.0	609.5	612.5	478.8
Interest-bearing debt, net	17,313	19,638	25,503	30,945	36,567	Market capitalisation	DKKm	104,830	112,116	92,896	93,977	74,525
Equity, shareholders in Carlsberg A/S	45,302	46,930	50,811	43,489	52,437	Number of shares (year-end, excl. treasury shares)	1,000	152,457	152,390	152,552	152,552	152,538
<b>Statement of cash flows</b>						Number of shares (average, excl. treasury shares)	1,000	152,428	152,496	152,552	152,542	152,535
Cash flow from operating activities	12,047	11,834	9,329	10,140	7,405							
Cash flow from investing activities	-5,891	-3,154	-713	-2,618	-6,735							
Free cash flow	6,156	8,680	8,616	7,522	670							

<sup>1</sup> Comparative figures for 2017 have been restated because of the change in accounting policies arising from the implementation of IFRS 15, the change in classification of certain central costs and the change in definition of volumes, all as of 1 January 2018.

<sup>2</sup> Adjusted for special items after tax.

## WESTERN EUROPE

# IMPROVED MARGIN AND GROWING PROFIT

Western Europe strengthened margins and grew operating profit. The results were driven by Funding the Journey, good progress on our SAIL'22 priorities and the very good summer.

Western Europe is our largest region, accounting for approximately half of our operating profit. We are the second largest brewer in the region, with a particularly strong presence in the central and northern parts, where we hold no. 1 and 2 positions in several markets.

In several markets, we are in competition with the large global players, although in the Nordic markets we are mainly competing against local or regional players.

Our Western Europe region also includes our global export and licence business.

### KEY PRIORITIES IN 2018

The main focus in 2018 was to improve margins and grow operating profit organically. Key to achieving these objectives was good execution of Funding the Journey, including operating cost management and delivery of supply chain efficiencies.

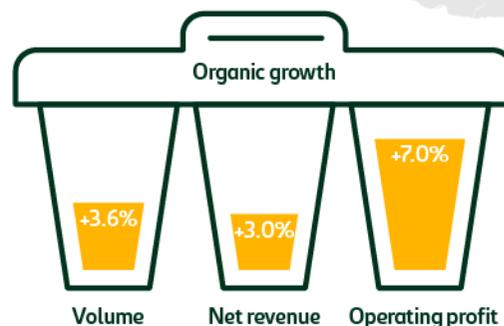
Additionally, as 2018 was the third year of SAIL'22, we also had the objective in Western Europe of delivering organic top-line growth.

This was successfully achieved through a variety of levers, including value management, top-line growth of local power brands, acceleration of craft & speciality (such as Grimbergen, 1664 Blanc, Brooklyn and authentic local craft brands), growth of the alcohol-free category and continuation of the roll-out of DraughtMaster™.

In 2018, we acquired the remaining 49% of Olympic Brewery in Greece and acquired 28.5% of the shares in Viacer, the holding company that controls Super Bock Group in Portugal. Viacer continues to be controlled by our partner and, consequently, Super Bock Group will remain an associated company. Following that transaction, the Carlsberg Group's direct and indirect ownership in Super Bock Group is 60%.

### REGIONAL RESULTS

Western Europe delivered strong results in 2018, partly supported by the warm summer in the northern part of the region, especially in Q3.



# +17%

### PIRINSKO VOLUME GROWTH

Pirinsko is our local power brand in Bulgaria and holds a market-leading position. Based on our demand space segmentation and the global health and wellness trend, we relaunched the unpasteurised sub-brand Pirinsko Young Brew in 2017 with the aim of strengthening its position as a natural and less processed brew to meet the demands of young adult consumers. The relaunch has proved very successful, supporting the brand's volume growth in 2018.



Net revenue grew organically by 3.0% as a result of 3.6% organic total volume growth and -1% price/mix. Reported net revenue grew by 1.2% due to the divestment of the German wholesaler Nordic Getränke in April 2017 and a negative currency impact.

Price/mix was positive in the majority of our Western European markets, supported by successful premiumisation efforts and some price increases, partly countered by the higher growth of non-beer products. At regional level, the positive price/mix was more than offset by country mix due to growth in licence markets, such as Turkey, and loss of volumes in high-revenue export markets in the Middle East.

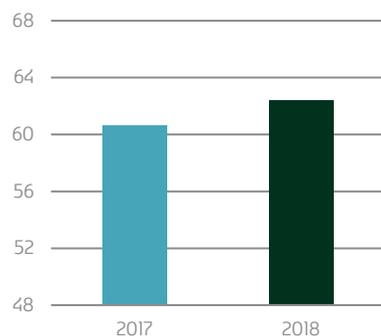
Organic operating profit grew by 7.0%, and the operating margin improved by 60bp to 15.0%. The earnings progress was driven by volume growth, value management, premiumisation,

Funding the Journey benefits and lower depreciation.

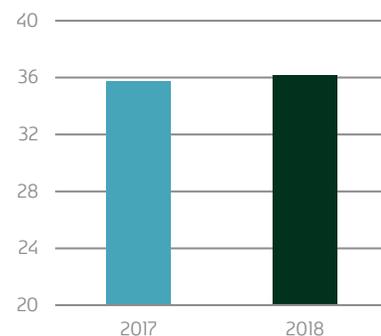
The organic operating profit growth in H2 was 6.3%, and the operating margin declined by 10bp year-on-year for the half-year due to higher investments in SAIL'22 priorities such as craft & speciality, alcohol-free brews and the DraughtMaster™ roll-out.

Total volumes increased organically by 3.6% and beer volumes by 2.9%, with a significant improvement in H2 thanks to the warm weather in Q3 after a difficult start to the year. Non-beer volumes grew by 5.9% due to good performance in the Nordics. Reported volumes grew by 3.0%, with a small net acquisition impact from the divestment of Nordic Getränke in 2017. We estimate that our regional market share grew slightly.

Total volume<sup>1</sup> (m hl)



Net revenue<sup>1</sup> (DKKbn)



Volume (million hl)	2017	Change			2018	Change Reported
		Organic	Acq., net	FX		
Beer	46.1	2.9%	-0.2%	-	47.3	2.7%
Other beverages	14.5	5.9%	-2.0%	-	15.1	3.9%
<b>Total volume</b>	<b>60.6</b>	<b>3.6%</b>	<b>-0.6%</b>	<b>-</b>	<b>62.4</b>	<b>3.0%</b>

DKK million						
Net revenue	35,716	3.0%	-0.7%	-1.1%	36,151	1.2%
Operating profit before special items	5,144	7.0%	0.2%	-1.7%	5,425	5.5%
Operating margin (%)	14.4				15.0	60bp

## PERFORMANCE BY MARKET

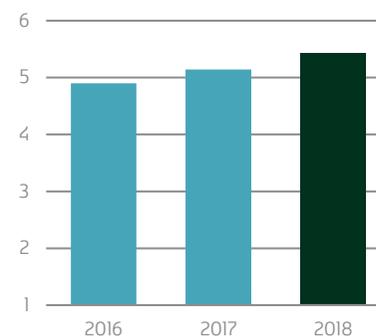
### THE NORDICS

The Nordic businesses all benefited from the extraordinarily warm weather in Q3, which positively impacted volumes, net revenue and earnings. Total volumes grew organically by 6%.

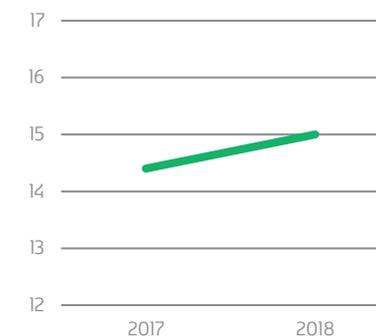
Our total volumes in Denmark grew in line with a slightly growing beer market. We saw good

performance of the Carlsberg brand as well as Tuborg Classic, Grimbergen, 1664 Blanc and alcohol-free brews such as Carlsberg Nordic, whereas Tuborg Green declined due to price increases on large-pack formats. As a result, price/mix improved by 5%. The non-beer business delivered strong growth, supported by the warm summer.

Operating profit (DKKbn)



Operating margin<sup>1</sup> (%)



<sup>1</sup> Volume and net revenue restated for 2017.

In Norway, we saw continued good business performance. Our volumes grew slightly, and price/mix strengthened, supported by growth of premium brands such as Frydenlund and 1664 Blanc. Within alcohol-free brews, we saw good traction for Munkholm and the alcohol-free variants of 1664 Blanc and Somersby. The new Snap Pack packaging was introduced for the Carlsberg brand in Q4.

In Sweden, total volumes grew, driven by strong non-beer volume growth, while beer volumes declined slightly due to the loss of distribution rights for third-party brands. Our own beer brands, such as Eriksberg, Carlsberg and 1664 Blanc, achieved good volume growth

and grew market share. Within alcohol-free brews, the Carlsberg brand continued to drive category growth and expanded its market-leading position.

In Finland, the beer market declined following a regulatory change that increased the ABV level permitted in beverages sold in the regular off-trade, thereby allowing the sale of spirit-based drinks. Our total volume growth was strong, driven by relisting at a major retailer in Q1 for the winter campaign and growth of non-beer products. Sinebrychoff, our Finnish subsidiary, will celebrate its 200th anniversary in 2019.

## Our markets in Western Europe

Market	Consumption characteristics		Our position		Our operations
	Per capita beer consumption (litres)	On-trade share of market, approx. (%)	Market position (no.)	Market share (%)	Breweries <sup>1</sup>
Denmark	59	26	1	54	1
Sweden	46	19	1	31	1
Norway	50	20	1	53	1
Finland	78	14	1	38	1
France	33	27	2	28	1
Switzerland	56	38	1	40	1
UK	66	47	4	10	1
Poland	98	9	3	18	3
Germany <sup>2</sup>	84	16	1	17	2
Italy	25	38	4	7	1
The Baltics	66-78	4-9	1-2	29-39	2
South East Europe	35-81	23-58	1-3	13-35	6
Portugal	52	58	1	47	1

<sup>1</sup> Breweries with capacity above 100,000 hl. <sup>2</sup> Northern Germany.

## FRANCE

In a growing French market, our volumes grew by 5%. Price/mix improved as a result of continued growth of our premium brands. Our craft & speciality and alcohol-free brews performed well, while the Kronenbourg brand in the mainstream segment declined. The good overall performance was achieved despite some supply issues due to the French national rail strike in Q2.

## SWITZERLAND

The positive trend in our Swiss business continued. Volumes grew slightly, and price/mix improved, driven by solid performance of our beer portfolio. Our key beer brand, Feldschlösschen, our regional brands and our alcohol-free brews all delivered good growth.

## POLAND

The Polish market grew, and our volumes increased slightly. After a slow start to the year, the business accelerated throughout the summer and towards the end of the year. We achieved price/mix of high-single-digit percentages, helped by good performance for our upper-mainstream and premium brands such as Okocim, Carlsberg, Zatec and Somersby, as well as strong performance of alcohol-free brews.

## THE UK

Our volumes declined by 3% in a slightly growing beer market. Our volumes in the premium category increased, driven by growth of brands such as Poretti and licence brands, whereas the mainstream Carlsberg brand lost market share. During the year, we completed

our exit from portering activities, which reduced net revenue.

## OTHER MARKETS

In the other Western European markets, we achieved particularly strong top-line and margin improvement in markets such as Bulgaria, Croatia, Serbia and the Baltics, where good growth of Carlsberg, Tuborg, craft & speciality and alcohol-free brews supported a positive price/mix development.

Our German business delivered solid top-line performance, driven by our local power brands Lübzer and Astra.

In our Export & Licence business, licence sales of Tuborg in Turkey increased significantly, while sales in some Middle Eastern countries declined due to significant market contraction caused by higher duties and VAT.

## ASIA

# CONTINUED GROWTH AND PREMIUMISATION

Asia had another year of strong top- and bottom-line growth, with an important driver being the continued growth of our international brands.

The importance of Asia for the Group has increased significantly over the past decade, during which we have expanded our presence in the region organically and through acquisitions. Today, we have an attractive position, with no. 1 and 2 positions in seven markets. The competitive landscape varies significantly between markets, with both global players and local brewers present.

SAIL'22 singles out Asia as a significant contributor to the Group's top- and bottom-line growth. Consequently, a significant proportion of our SAIL'22 investments has been allocated to the region.

### KEY PRIORITIES IN 2018

In 2018, our overall regional priority was to accelerate profitable top-line growth by growing our international core brands – Tuborg and Carlsberg – and our international speciality brand 1664 Blanc. In China specifically, we aimed at growing the footprint of these brands

by expanding into new channels and big cities outside our core western China provinces.

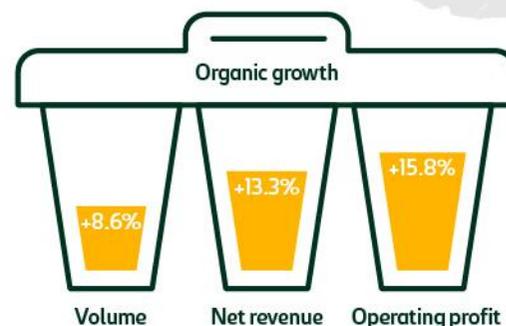
In addition to the international brands, we continued to strengthen our local power brands, which still contribute over 50% of our Asian volume.

In 2018, we further expanded our Asian footprint through the acquisition of a controlling stake in our former joint venture in Cambodia, Cambrew. Following the acquisition, our ownership share is 75%.

### REGIONAL RESULTS

The Asia region continued its good progress and delivered a strong set of results for the year. Net revenue grew organically by 13.3%, driven by 8.6% organic volume growth and +4% price/mix. Reported net revenue grew by 11.4% due to a negative currency impact in most countries in the region, which more than offset the acquisition impact of Cambrew.

The solid 4% price/mix improvement was the result of our ongoing premiumisation efforts, especially in China, where the premium portfolio performed strongly.



# +13%

### TUBORG GROWTH IN ASIA

2018 was another strong year for Tuborg in Asia. Important drivers of the continued success of Tuborg during the year included the introduction of a new visual identity, and a variety of activities on our global music platform Tuborg Open. In 2018, Tuborg Open brought together popular musicians from local markets to create a song with a single global story told in different ways, as each collaborating artist used their own unique lyrics to reflect diversity and local culture.



Volume (million hl)	2017	Change			2018	Change Reported
		Organic	Acq., net	FX		
Beer	31.2	8.3%	2.0%	-	34.4	10.3%
Other beverages	2.8	11.6%	15.7%	-	3.6	27.3%
<b>Total volume</b>	<b>34.0</b>	<b>8.6%</b>	<b>3.1%</b>	<b>-</b>	<b>38.0</b>	<b>11.7%</b>
<b>DKK million</b>						
Net revenue	13,944	13.3%	2.7%	-4.6%	15,530	11.4%
Operating profit before special items	2,905	15.8%	-1.3%	-5.6%	3,164	8.9%
Operating margin (%)	20.8				20.4	-40bp

Organic operating profit grew by 15.8%, mainly due to the revenue growth. The operating margin declined by 40bp to 20.4%. While the gross margin improved considerably, this was offset by a significant increase in marketing investments, with a sizeable proportion of our SAIL'22 investments being allocated to further strengthening our Asian business, and as a result of the consolidation of Cambrew.

The organic volume growth was broadly based, with all major markets delivering solid growth.

## PERFORMANCE BY MARKET

### CHINA

Our Chinese business achieved very strong results in 2018. Net revenue grew organically by 15%, driven by 8% organic volume growth and +7% price/mix.

We outperformed the Chinese market, which declined by an estimated 1% due to the continued decline of the mainstream segment as the premium segments continued to expand. As a result, our premium portfolio grew by 13%. Our price/mix improvement was the result of list price increases and the pronounced premiumisation trend.

### INDIA AND NEPAL

Our Indian business had an excellent year, following a challenging 2017. Our volumes grew by 19% and price/mix was +7%. The price/mix improvement was driven by strong growth of the Carlsberg brand and improved pricing. Profitability improved considerably due to volume growth, positive price/mix and supply chain efficiencies following the opening of the Karnataka brewery.

Our Nepalese business showed strong progress. Following a 30% excise tax increase in the middle of the year, retail beer prices rose

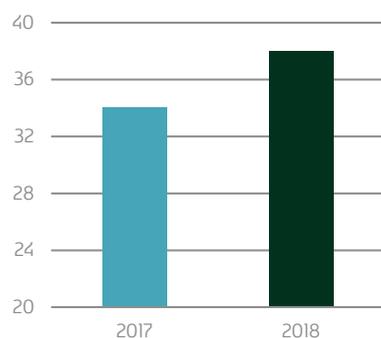
by approximately 15%, leading to a slightly declining price/mix. In H2, we revitalised the communication platform for the Tuborg brand.

### LAOS, VIETNAM AND CAMBODIA

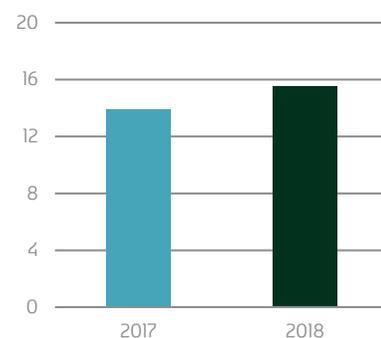
In Laos, our volumes grew by high-single-digit percentages, driven by growth of all three categories: beer, soft drinks and water. Price/mix was slightly negative due to product mix. Our Beerlao brand strengthened its position as a result of improved communication. In line with our focus on craft & speciality, we launched crafty line extensions of the Beerlao brand.

In Cambodia, we gained control of Cambrew in August after increasing our ownership from 50% to 75%. We are currently in the process of rebuilding the business and are optimistic about the prospects for the market and our business. Although the business had a challenging year with double-digit volume decline and operating loss, the first signs of the rebuild are encouraging.

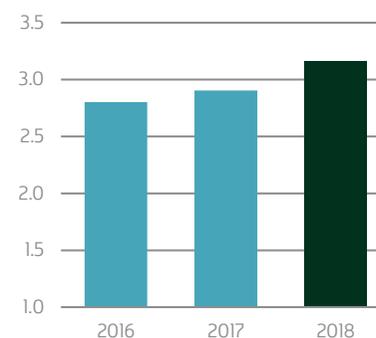
Total volume<sup>1</sup> (m hl)



Net revenue<sup>1</sup> (DKKbn)



Operating profit (DKKbn)



Operating margin<sup>1</sup> (%)



<sup>1</sup> Volume and net revenue restated for 2017.

Our volumes in Vietnam declined slightly in a flat market. We saw good growth of the Carlsberg brand.

#### MALAYSIA AND SINGAPORE

Our Malaysian and Singaporean businesses delivered another year of very good performance, driven by share gains, especially in the premium categories. Carlsberg Smooth Draught grew double-digit, following the launch in 2017. Our premium international brands, such as 1664 Blanc and Somersby, also achieved very positive growth rates.

#### SAIL '22 REVITALISE CORE BEER

# +5%

#### BEERLAO VOLUME GROWTH

The Carlsberg Group has a strong position in Laos. This is due in no small part to our local power brand, Beerlao. In order to maintain and further build consumer loyalty and premiumise the brand, we launched three crafty variants in July 2018: Beerlao White, Amber and Hoppy. While still early days, the crafty range created a lot of excitement among consumers, with a very positive initial response.

#### Our markets in Asia

Market	Consumption characteristics		Our position		Our operations
	Per capita beer consumption (litres)	On-trade share of market, approx. (%)	Market position (no.)	Market share (%)	Breweries <sup>1</sup>
China	27	46	5/1 <sup>2</sup>	6/61 <sup>2</sup>	25
Vietnam	42	40	4	8	1
Laos	44	55	1	95	2
Cambodia	59	30	3	17	1
Nepal	4	73	1	63	1
India	2	17	3	n/a	8
Myanmar	8	45	2	8	1
Malaysia	6	40	2	40	1
Singapore	22	55	2	22	-
Hong Kong SAR	23	67	1	28	-

<sup>1</sup> Breweries with capacity above 100,000 hl. <sup>2</sup> Total China/western China. Source: GlobalData, Carlsberg estimates.



## EASTERN EUROPE

# REBALANCING VOLUME AND VALUE

Eastern Europe achieved solid organic top-line growth in 2018, driven by a combination of volume growth and price/mix.

Eastern Europe is our smallest region, accounting for 21% of operating profit. Our two main markets in the region are Russia and Ukraine, accounting for approximately 65% and 20% respectively of regional volumes.

We have leading positions in all markets in Eastern Europe. In Russia and Ukraine, the competitive environment is split between a strong presence of global players and a large number of small local brewers.

### KEY PRIORITIES IN 2018

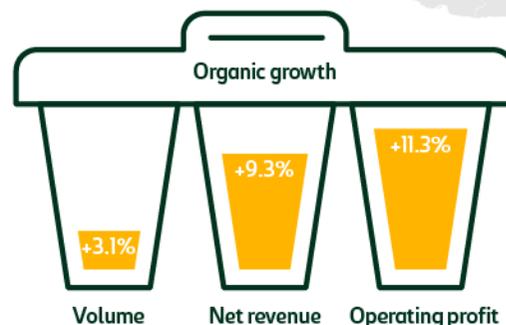
The overriding priority for Eastern Europe in 2018 was to rebalance the Golden Triangle in Russia following the significant volume decline in 2017 caused by PET downsizing.

Regaining momentum in the Russian PET segment was therefore a focus, as was further strengthening our regional and local core brand portfolios and alcohol-free brews, where Baltika 0 holds a market-leading position.

The ongoing channel shift towards modern trade and the growth of DIOT (draught in off-trade) in Russia reinforced our focus on growing in these channels.

Finally, we continued our sharp focus on costs to counter the pressure on operating margin due to the volume growth in the low-priced PET segment.

In the other Eastern European markets, the focus was on continuing the good momentum of recent years and maintaining the well-balanced Golden Triangle in these markets.



# +5%

## VOLUME GROWTH IN UKRAINE

Carlsberg Ukraine enjoyed another year of excellent results, supported by growth of our strong local power brand, Lvivske, and our international brands. Originally brewed by monks, Lvivske is the oldest Ukrainian beer brand, dating back to 1715. It is part of Ukrainian history, culture and cuisine and holds a market share of around 16%. To support the continued relevance of the brand for consumers, we expanded the range with two line extensions: Lwiwske Eksportowe and Knaypa.



Volume (million hl)	2017	Change			2018	Change Reported
		Organic	Acq., net	FX		
Beer	29.8	2.8%	-	-	30.6	2.8%
Other beverages	1.9	7.8%	-	-	2.1	7.8%
<b>Total volume</b>	<b>31.7</b>	<b>3.1%</b>	-	-	<b>32.7</b>	<b>3.1%</b>

DKK million						
Net revenue	10,925	9.3%	-	-10.6%	10,780	-1.3%
Operating profit before special items	2,220	11.3%	-	-11.2%	2,222	0.1%
Operating margin (%)	20.3				20.6	30bp

## REGIONAL RESULTS

Our Eastern European business delivered 9.3% organic net revenue growth, driven by 3.1% volume growth and +6% price/mix. Reported net revenue declined by 1.3% due to weak currencies in all markets in the region.

The drivers of the price/mix improvement differed between markets, with Russian price/mix mainly the result of higher prices, while the other markets benefited from both price increases and mix improvements.

Organic operating profit grew by 11.3%, driven by volume growth, the positive price/mix and tight cost control. The operating margin improved by 30bp to 20.6%. The H2 operating margin declined year-on-year as a result of higher packaging costs and adverse currency impact.

Volumes grew in all markets.

## PERFORMANCE BY MARKET

### RUSSIA

In 2018, the Russian beer market grew for the first time since 2007. The market growth was an estimated 3%, supported by favourable weather in Q2 and the football world cup impact in Q3.

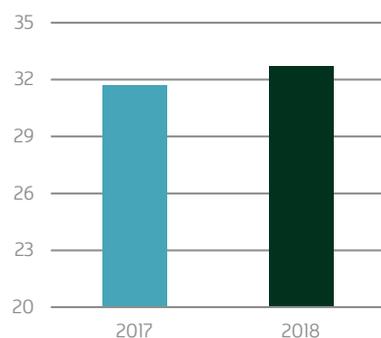
Our volumes grew organically by 2%. Price/mix improved by 2%, with an improving trend towards the end of the year, when we implemented price increases to offset input cost pressure.

Product mix remained negative due to the continued growth of the economy segment. The operating margin remained above 20%.

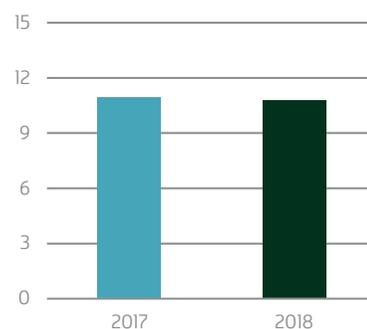
### UKRAINE

The Ukrainian market grew slightly, and our volumes grew by mid-single-digit percentages, supported by growth of our strong local power brand Lvivske and our international brands.

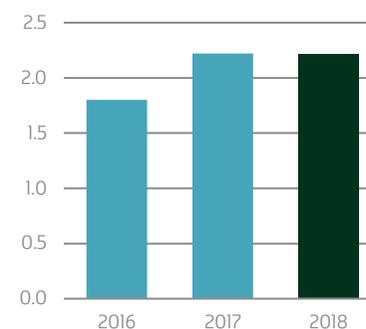
Total volume<sup>1</sup> (m hl)



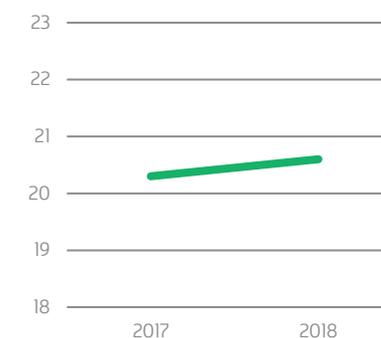
Net revenue<sup>1</sup> (DKKbn)



Operating profit (DKKbn)



Operating margin<sup>1</sup> (%)



<sup>1</sup> Volume and net revenue restated for 2017.



**Our markets in Eastern Europe**

Market	Consumption characteristics		Our position		Our operations
	Per capita beer consumption (litres)	On-trade share of market, approx. (%)	Market position (no.)	Market share (%)	Breweries <sup>1</sup>
Russia	52	19	1	30	8
Ukraine	42	12	1	33	3
Belarus	50	5	1	29	1
Kazakhstan	32	7	2	36	1
Azerbaijan	5	41	1	75	1

<sup>1</sup> Breweries with capacity above 100,000 hl.  
Source: GlobalData, Carlsberg estimates.

The growth of Lvivske was supported by the line extension Lvivske Eksportowe and an alcohol-free variant.

Price/mix developed very favourably due to price increases and growth in premium products, with particularly strong growth for 1664 Blanc, Grimbergen, Somersby and Garage.

**OTHER MARKETS**

Our businesses in Belarus, Kazakhstan and Azerbaijan all delivered solid revenue and earnings growth.

**16%**

**BALTIKA 7 VOLUME GROWTH**

Baltika 7 is a premium line extension of Baltika, the leading national brand in Russia. In 2018, Russia hosted the football world cup, and Baltika was the proud sponsor of the Russian team. To support the team, Baltika 7 carried out a successful campaign called “FootCheering”, featuring some of Russia’s top celebrities. The campaign included TV advertising and a wide range of digital media. Baltika 7 was also activated in more than 2,000 outlets in 66 cities.

**SAIL\*22 LEVERAGE OUR STRONGHOLDS**

## BEER TRENDS

# BEER TRENDS IN OUR REGIONS

Beer market trends and characteristics vary between and within our regions, although common features can be detected.

An ongoing trend in many markets is the ongoing premiumisation, supported by the growth of craft & speciality beer and, in Asia, particularly China, the increasing demand for international beer brands. The growing interest in craft & speciality has several advantages for the beer category: it sparks consumer interest in the beer category, generates a positive perception of beer.

In many Western European markets and in Russia, the alcohol-free beer segment is showing solid growth rates as a consequence of consumers' desire to consume less alcohol and pursue a more healthy lifestyle. The growth of the segment is also supported by greater choice and the significantly improved quality of alcohol-free beer.

Several Asian markets, including India, Laos, Cambodia and Vietnam, are seeing market volume growth. This is being driven by factors such as expanding populations, growing

economies, urbanisation and rising disposable income levels. It is important to note, though, that growth trends in these emerging markets are subject to volatility.

## “RE-INVENT THE BAR”

### BY DEVELOPING DIGITAL TOOLS

“Re-invent the bar” is an excellent example of our digital approach and adoption of agile ways of working. “Re-invent the bar” aims to strengthen the relationship with our on-trade customers by offering digital products that can help them grow their business. Based on a radical customer-centric way of working, including continuous testing and validation with customers in Hong Kong, Switzerland and Denmark, we work in cross-functional teams to rapidly develop, introduce and continuously improve a digital product for educating bar staff and another digital product that enables customers to make better business decisions based on insights from available data.

SAIL '22 STEP CHANGE WITH DIGITAL



BUSINESS MODEL

# A BUSINESS MODEL DRIVING VALUE

We strive to be a successful, professional and attractive brewer in our markets. This ambition is crucial for our business model with its clear priorities on markets, portfolio, customers, supply chain and sustainability.



**WE FOCUS ON THE MARKETS WHERE WE HAVE A NO. 1 OR 2 POSITION...**

Core beer is a volume business. Consequently, strong market positions are key drivers of profitability. We have particular focus on the 25 markets in Western Europe, Eastern Europe and Asia where we are no. 1 or 2.

**BREWING FOR A BETTER TODAY AND TOMORROW**

In all our markets, we aim to lead in sustainability because it is central to our purpose and because we sincerely believe it is the right thing to do – delivering tangible benefits for our business and for society as a whole.

**... WHERE WE DELIVER AN ATTRACTIVE BEER PORTFOLIO FOR ALL CONSUMER SITUATIONS...**

Beer is our core business and the strength of our portfolio lies in the strong local roots of our local brands combined with our excellent craft & speciality brands, alcohol-free brews and international core beer brands.

**BREWING FOR A BETTER TODAY AND TOMORROW**

Our brands offer us powerful opportunities for communicating with consumers. We use these opportunities to encourage moderate, responsible consumption of our products. We also increase the availability of alcohol-free brews.

**... AND STRIVE TO EXCEL IN OUR SERVICE TO ON- AND OFF-TRADE CUSTOMERS...**

Our customers range from on-trade to off-trade, from big to small. We aim to become their preferred beer supplier, providing products and services that will deliver value growth for them and us.

**BREWING FOR A BETTER TODAY AND TOMORROW**

Such products and services include sustainable packaging solutions, such as Snap Pack, and our innovative draught system, DraughtMaster™. In addition, digital solutions and services are becoming increasingly important enablers.

**... BY OPTIMISING OUR SUPPLY CHAIN AND IMPROVING PROCESSES AND SYSTEMS.**

Funding the Journey as a programme came to a successful end in 2018. It has delivered efficiencies and reduced costs across supply chain and back office. Going forward, Funding the Journey ways of working will prevail.

**BREWING FOR A BETTER TODAY AND TOMORROW**

Recognising the need for strong actions in the face of complex sustainability challenges, our sustainability programme Together Towards ZERO sets clear and ambitious targets for carbon emissions and water usage.

SAIL'22

# SHIFTING GEARS TO TOP-LINE GROWTH

SAIL'22 made good progress in 2018, delivering the remaining benefits from Funding the Journey as well as top-line growth.

When launching SAIL'22 in March 2016, we defined clear strategic priorities for how we intended to strengthen our core beer business while at the same time positioning the Company for future growth.

Our strategic priorities were defined based on analyses of the trends impacting the beer industry (see page 23).

2018 was the third year of SAIL'22. It was also the final year of Funding the Journey as a specific programme. By reinvesting part of the benefits from this programme, we have been able to invest in top-line growth.

Our results in 2018 reassure us that our strategic priorities are right. Our focus in the future will be on both delivering top-line

growth and improving the operating margin by premiumisation and continued focus on efficiencies and costs.

In the following pages, we present snapshots of initiatives carried out during the year and follow up on our performance against our strategic KPIs. Our strategic priorities are presented in the 2016 Annual Report, available on [www.carlsberggroup.com](http://www.carlsberggroup.com).

**“We’re pleased with the progress of our strategic priorities, which have been supported by Funding the Journey investments.”**

Cees 't Hart  
CEO



**STRENGTHEN THE CORE**

Leverage our strongholds  
Excel in execution  
Funding the Journey



**POSITION FOR GROWTH**

Win in growing categories  
Grow in Asia  
Target big cities



**DELIVER VALUE FOR SHAREHOLDERS**

Organic growth in operating profit  
ROIC improvement  
Optimal capital allocation



**CREATE A WINNING CULTURE**

Team-based performance  
Together Towards ZERO  
Compass (applying our codes and policies)

**+9%**

**NYA CARNEGIE VOLUME GROWTH**

Teaming up with Brooklyn Brewery, we established the Nya Carnegie brewery in Stockholm, Sweden, in 2012. The craft brewery's product line-up features seven year-round beers, seasonal releases and special limited experiments. Since its inauguration, the brewery and its restaurant have become increasingly popular with both Stockholmers and tourists from around the world. Leveraging Carlsberg's distribution set-up, Nya Carnegie's beers are sold across Sweden. In 2018, Nya Carnegie grew volumes by 9%.



## STRENGTHEN THE CORE

There were many initiatives and actions during the year to grow and further develop our core beer portfolio in our core markets, strengthen execution and deliver on Funding the Journey. These included the betterment of the Carlsberg brand, continued support of our local power brands, further roll-out of DraughtMaster™, stepping up on digital and executing strong discipline on Funding the Journey.

### CARLSBERG

The Carlsberg brand has a unique history spanning 171 years. In September, we launched a new, distinctly Danish redesign of the brand. This redesign was based on extensive research into the brand's heritage, which led to careful recrafting of famous brand elements, including bringing the Carlsberg logo closer to its original design from 1904.

We also launched a series of sustainable packaging innovations, including the Snap Pack, which is set to reduce plastic waste globally by more than 1,200 tonnes a year.

Other sustainability improvements include a new coating on refillable glass bottles to extend their lifespan and new caps that remove oxygen to make the beer taste fresher for longer.

The Carlsberg brand's green ink is also being replaced with a Cradle to Cradle Certified™ ink to improve recyclability. Read more about these sustainability initiatives on page 32.

The new design and betterments have been launched in Norway, Finland, Sweden, Denmark and the UK, and many more markets, such as China, India and Malaysia, will follow in the coming months.

### LOCAL POWER BRANDS

Our local power brands each occupy a distinct position in their respective markets. Although they differ by market, they share many common characteristics, opportunities and challenges. In order to support the continued relevance of these brands with consumers, we have developed a common brand framework, enabling markets to apply a well-tested, all-round methodology to strengthen their local brands and positions in the market.

All our markets have embraced the group-wide concepts and methodologies to further strengthen their local power brands. Examples include Okocim in Poland and Pirinsko in Bulgaria (see page 14).

### DRAUGHTMASTER™

The roll-out of our proprietary one-way keg system continued in 2018. DraughtMaster™ is an important enabler for our premiumisation efforts in the on-trade, as it allows outlets to serve a greater variety of beer on tap, including craft & speciality brands.

The system is now available in all Western European markets, and the process of converting all steel-keg installations in the Nordic markets is well under way and expected to be finalised within the next two to three years. In 2018, the number of DraughtMaster™ installations grew by around 35%.

### DIGITAL

Digital is one of the cornerstones of SAIL'22. In 2018, our digital journey took a big step forward with the establishment of a digital business transformation team responsible for assessing digital technologies and business models, and accelerating the development of digital products and services to drive future growth.

To support our digital transformation, we are applying agile ways of working in small, cross-functional teams, giving them the opportunity to develop and test new products and services in an agile and minimal way to determine what and how to upscale into meaningful solutions.

# +5%

### OKOCIM VOLUME GROWTH

In 2017, we successfully relaunched our local upper-mainstream Okocim brand in Poland with a focus on authenticity, quality and beer expertise. Following up on the relaunch, in 2018 Carlsberg Polska launched its biggest ever digital campaign for the Okocim brand, further strengthening the brand image in relation to competitors, expanded distribution and launched popular radler variants.

SAIL'22 REVITALISE CORE BEER



During the year, we focused on a series of “lighthouse projects” aimed at taking a digital-first view of different areas of the business with a view to growing top and bottom line. The initial projects focused on route-to-market and the on-trade channel, identifying promising new products and services to step-change our customer offer. The scope also included areas within supply chain, including demand planning and artificial intelligence.

We have established a digital council, chaired by our CEO and comprising the heads of digital, commercial, global business services, logistics and HR along with young “digital natives”. The council meets once a month to sponsor, accelerate and provide optimal conditions for the digital reinvention of the Group.

### FUNDING THE JOURNEY

Funding the Journey came to a successful end in 2018. The four elements of the programme – value management, supply chain efficiency, operating cost management and right-sizing of businesses – all delivered better than initially expected. The programme achieved benefits of around DKK 3bn compared with the 2015 baseline. The benefits included the incentive payment to the top-200 management team, who were enrolled in the two-year Funding the Journey cash programme.

The strong delivery has enabled us to reinvest more than DKK 1bn in the growth priorities of SAIL'22, including roll-out of DraughtMaster™,

## SAIL'22 STEP CHANGE WITH DIGITAL

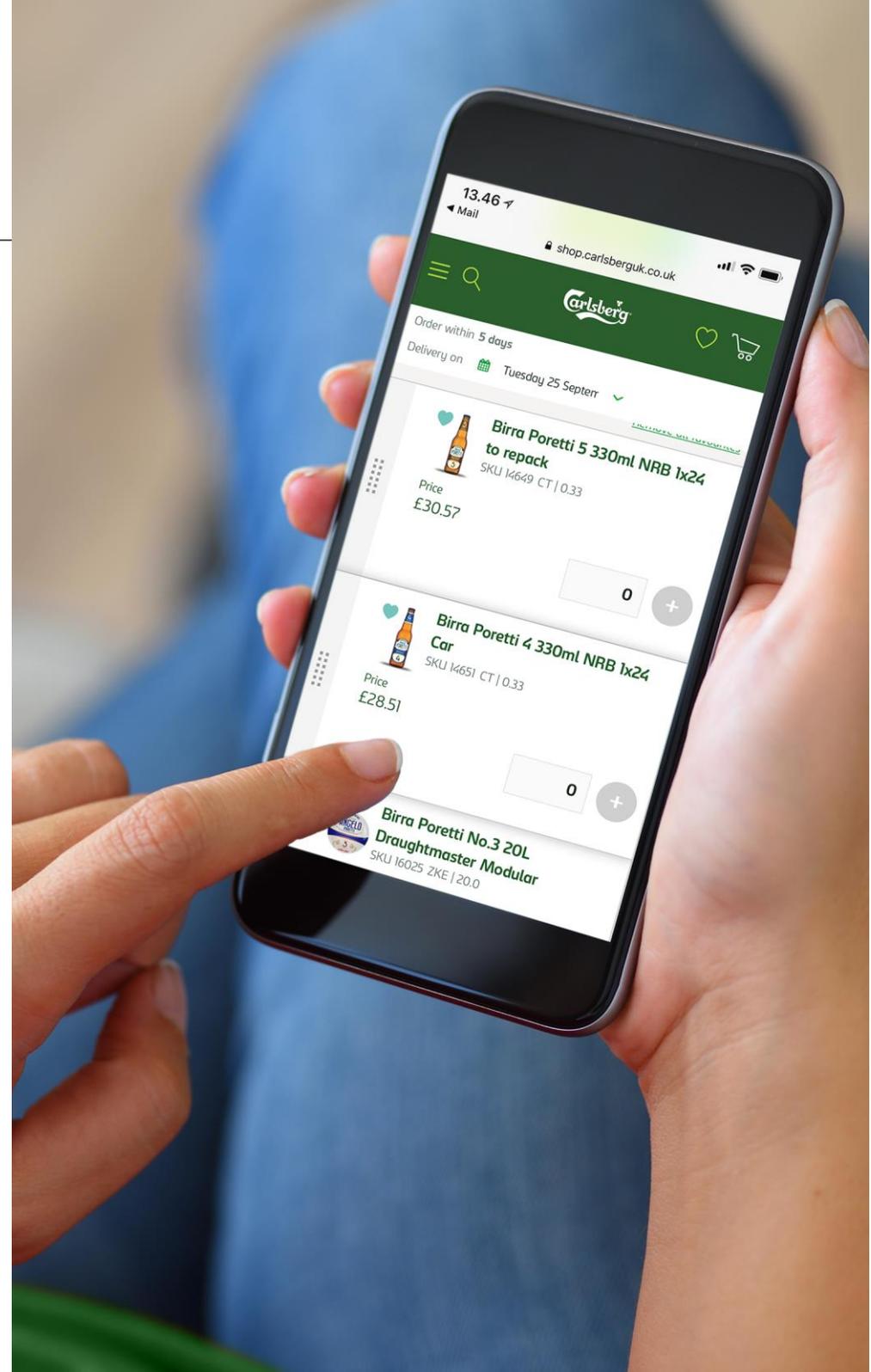
# CARL'S SHOP

In 2018, we launched Carl's Shop – an integrated online ordering platform for on-trade customers – in Western Europe. Carl's Shop will provide superior customer service and reduce costs by digitising processes, globalising platforms and scaling online solutions. It works on all devices, enabling customers to place orders at any time of the day and avoid waiting in line for telesales. The platform gives access to training and educational material and targeted promotions, and aims to provide advice on best-selling products based on similar outlets. The initial results have been promising, showing visible growth in net revenue per customer.

expansion of our international premium brands in China, growth of craft & speciality across our markets, further development of our alcohol-free brews, and stepping up on digital.

The programme has led to the implementation of new ways of working, and systems and processes are now in place to ensure continued momentum within value management, and operating cost and supply chain management.

Going forward, we will therefore continue our strict focus on efficiencies, costs and cash, and further improvement in these areas will contribute to continuous margin improvement.



## KPIs & RESULTS

### SAIL'22 STRENGTHEN THE CORE



**2017: 3% growth**  
**2018: 6% growth**

#### GROSS CONTRIBUTION FROM CORE BEER

Core beer accounts for 87% of own beer net revenue, and our core beer brands are an important prerequisite for our no. 1 and 2 positions across Western Europe, Asia and Eastern Europe. It is therefore important that we revitalise our core beer portfolio to ensure its continued relevance for consumers. We measure our success by our ability to grow the gross brand contribution from core beer. In 2018, this KPI delivered 6% organic growth as a result of both volume growth and a positive price/mix in our three regions.



**2017: 4% growth**  
**2018: 2% growth**

#### OPERATING PROFIT GROWTH IN RUSSIA

Russia remains our largest market in terms of operating profit, while on volumes China and Russia are of equal size. Recognising the challenges of past years, transforming our Russian business and ensuring a continued strong local business are a priority of SAIL'22. We measure our success in Russia by our ability to grow operating profit organically. In 2018, we rebalanced the Golden Triangle with a greater focus on volumes, though not sacrificing profits. Operating profit grew organically by 2%.



**2016-2018**  
**DKK ~3bn**

#### FUNDING THE JOURNEY

Funding the Journey as a specific programme came to an end in 2018. The programme proved more successful than initially anticipated. Following good delivery in 2016 and 2017, we upgraded the expected benefits from the programme twice during 2018, with total benefits of around DKK 3bn, of which more than DKK 1bn has been reinvested in the business. The mindset, systems and processes of Funding the Journey have been embedded in business operations, and the focus on efficiency, costs and cash will remain an important driver of future value creation.



## POSITION FOR GROWTH

Recognising our geographic footprint, a pivotal ambition of SAIL'22 was to identify the Group's organic growth drivers. We aim to achieve sustainable organic top-line growth through a combination of volume growth, premiumisation and price. Asia is expected to be the main driver of volume growth, while premiumisation will be achieved through the growth of craft & speciality and alcohol-free brews in all three regions.

#### CRAFT & SPECIALITY

In 2018, our craft & speciality portfolio delivered growth of 26%, achieved through strong growth of the international speciality brands Grimbergen and 1664 Blanc, and of authentic craft brands such as Brooklyn, Nya Carnegie in Sweden and Valaisanne in Switzerland. By the end of 2018, we had ten craft breweries in Western Europe.

#### 1664 BLANC

1664 Blanc is our sophisticated French wheat beer. In 2018, the brand achieved a significant milestone, breaking through and going well beyond the 1m hl mark. The brand is sold globally and delivered volume growth of 49% over the year.

Growth came from every corner of the world, and the brand has been successful in every market where it has been launched. In 2018, 1664 Blanc was launched in markets such as Denmark, Mexico and Chile.

#### GRIMBERGEN

Grimbergen is our abbey beer from Belgium dating back to 1128. It is an important brand in our international speciality portfolio, and in 2018 it continued its growth trajectory with brand volume up 14%.

#### NYA CARNEGIE

The Nya Carnegie brewery in Stockholm is an excellent example of our authentic craft strategy. The brewery, a cooperation with Brooklyn, was established in 2012, with the first brew coming out in 2014.

The combination of Brooklyn's superior craft brewing skills and Carlsberg's brand-building and quality expertise and distribution power has generated strong growth rates since 2014. In 2018, Nya Carnegie volumes grew by 9%.

#### ALCOHOL-FREE BREWS

Our alcohol-free brew portfolio encompasses alcohol-free line extensions of core beer brands, the alcohol-free line extension of our international speciality brand 1664 Blanc and stand-alone alcohol-free brands. Combined, these showed strong momentum in 2018 and our alcohol-free brews grew by 33% in Western Europe.

#### LOCAL ALCOHOL-FREE BREWS

Our extensive portfolio of local alcohol-free brews includes brands such as Carlsberg Nordic in Denmark, Munkholm in Norway, Feldschlösschen Alkoholfrei in Switzerland and Baltika 0 in Russia.

In 2018, Baltika 0 grew by 35%, supported by a massive communication and sampling



campaign, strong commercial focus and the successful launch of Baltika 0 Wheat in 2017.

In Sweden, we promoted our growing range of alcohol-free brews by delivering alcohol-free brews to pleasure yachtsmen in Stockholm's archipelago. Our "alcohol-free brews boat" subsequently received a five-star rating from consumers on its Facebook page. Our alcohol-free brew portfolio in Sweden grew by 34%.

In France, our alcohol-free brews grew by 21%, driven by 1664 Blonde Sans Alcool, 1664 Blanc Sans Alcool and Tourtel.

#### **BIRELL**

During the year, we launched Birell as the Group's first global alcohol-free brew. The brand was launched in Bulgaria and Poland in May.

The comprehensive launch campaign included TV commercials, cutting-edge digital marketing, outdoor advertising and extensive sampling applying various techniques.

The initial consumer response has been positive, and in Bulgaria the brand has already achieved a market share of 15% of the alcohol-free beer segment.

#### **GROW IN ASIA**

Our investments in premiumisation and expansion in Asia are delivering strong results. In 2018, total volumes grew organically by 8.6%. Our international portfolio in the region – Tuborg, Carlsberg and 1664 Blanc – delivered even better results, growing volumes by 14%.

SAIL'22 is focused in particular on China and India, as these markets have good potential for top-line growth. In China, premiumisation will be an important driver of top-line growth, while in India market volume growth is also expected to be a contributor. Our 2018 results in Asia are presented on pages 17-19.

# +49%

## **1664 BLANC VOLUME GROWTH**

1664 Blanc is a good example of SAIL'22. In 2015, it was a local French line extension of the 1664 lager. As part of SAIL'22, it was decided to turn the brand into a leading global speciality brand. Since then, 1664 Blanc has undergone a rapid transformation and is now the fastest-growing global brand in the Group. Its popularity with consumers is indisputable, not least in China, where the brand's sophisticated look and great taste led to volume growth of 51% in 2018, making China the brand's largest single market.

## KPIs & RESULTS

### SAIL'22 POSITION FOR GROWTH



**2017: 29% growth**  
**2018: 26% growth**

#### WIN IN GROWING CATEGORIES: CRAFT & SPECIALITY

Craft & speciality is an attractive category in most markets. The contribution margin of our craft & speciality portfolio significantly exceeds the core beer average, and consequently growing the portfolio's share of total beer volume contributes positively to margin progression. 2018 was another year of strong growth for our craft & speciality brands with volume growth of 26%. Our international speciality brands 1664 Blanc and Grimbergen achieved volume growth of 14% and 49% respectively.



**2017: 15% growth**  
**2018: 33% growth**

#### WIN IN GROWING CATEGORIES: ALCOHOL-FREE BREWS

The alcohol-free brews category offers excellent margin opportunities and is growing across Western Europe and also in Eastern Europe. We believe it will remain an attractive beverage category in the years to come, as it benefits from the growing global health & wellness trend among consumers. Our portfolio of alcohol-free brews had very good momentum in 2018, achieving volume growth of 33% in the Western European markets. In Russia, growth was 33%, with significant volume growth for brands such as Baltika 0 and Baltika 7 Non-Alcoholic.



**2017: 8.1% growth**  
**2018: 15.8% growth**

#### GROW IN ASIA

In 2018, Asia accounted for 29% of Group volumes and Group operating profit. Continuing the growth trajectory of this region remains a priority of SAIL'22, and in 2018 volume growth was 8.6% and organic operating profit growth 15.8%. Good growth of our international brands as well as our local power brands contributed to both top- and bottom-line growth. Particularly strong results were achieved in China and India, with organic operating profit growth of 18% and 131% respectively.

#### CHINA

During 2018, we further expanded our footprint in China by applying a "big city" approach outside our core western China provinces. By the end of the year, we were present in more than 20 large cities, where the consumer response to our international portfolio has been very positive. Our geographic expansion was a positive contributor to the price/mix of 7%.

#### INDIA

Although the Indian beer market is volatile, we continued to support and develop our Indian business. Tuborg and Carlsberg, our main brands in the country, delivered growth of 17% and 31% respectively.

# 4x1

## PREMIUMISING LOCAL CHINESE POWER BRANDS

In December 2017, we simultaneously launched a white (wheat) beer line extension of our four local Chinese power brands: ChongQing, Xixia, Wusu and Dali. All the brands have market-leading positions in their local geographies, but, following the general decline of mainstream beer in China, all were in need of a premium offering. Generally, Chinese consumers enjoy wheat beer, and core beer consumers proved willing to trade up and pay more for a local wheat beer, delivering strong results for 2018.



**SAIL'22 REVITALISE CORE BEER & GROW IN ASIA**

## WINNING CULTURE

An important element of SAIL'22 is our winning culture, which is team-based, performance-driven, characterised by a high level of integrity and sets high standards within sustainability.

### TEAM-BASED PERFORMANCE

Our team-based performance culture is based on our triple A concept (alignment, accountability and action). During the year, we maintained strict discipline on performance management and ensured a team-based, one-company approach in our monthly business performance reviews and by aligning targets across markets and regions.

### TOGETHER TOWARDS ZERO

Our ambitious sustainability programme, Together Towards ZERO (TTZ), defines our sustainability priorities and sets measurable targets for 2022 and 2030 respectively within the areas of carbon, water, responsible drinking and health & safety.

Recognising that we cannot achieve our ambitions by working in isolation, TTZ was devised with the support of experts using a science-based approach, and we are collaborating with experts to deliver on it.

We also launched the Carlsberg Young Scientist Community, where a group of postdocs will build on our scientific strength to identify and develop solutions within water and energy consumption at our breweries.

In 2018, we entered into a partnership with WWF Denmark. With its help, we will devise solutions to reduce the total – “beer-in-hand” – carbon footprint of our products and protect local water resources. We will make further announcements about this during 2019.

### ZERO CARBON FOOTPRINT

We are committed to bold climate action and the TTZ carbon targets are designed to reduce our emissions in line with the 1.5°C level of the Paris Agreement. We believe this is possible while still continuing to drive business growth.

#### At our breweries

We are acting fast to eliminate coal because it is a carbon-intensive, polluting source of energy. In 2018, we reduced our coal usage by 28% compared with 2017, representing a 78% reduction since 2015. We will continue the focus on converting our remaining coal-fuelled sites in China, India and Poland on our journey towards zero coal by 2022.

We use solar installations at our breweries in China, India and Switzerland, and in 2018 we added a new 1 MW rooftop installation at our brewery in Lithuania. Other sources of renewables include biomass and biogas. A new biomass boiler at our Čelarevo brewery in Serbia, fuelled by wood pellets, helped reduce relative carbon emissions at the site by 22% in 2018.

Moreover, in 2018 we introduced the Carlsberg Operational Manual at our breweries in order to continuously improve within our existing processes through best practice learnings from across the Group.

### Packaging

At 40%, packaging is the biggest source of carbon emissions in our value chain. As many stakeholders are involved in the development and use of packaging, we must work together to improve it. One outcome of our work in this area was the launch of several packaging innovations for the Carlsberg brand during 2018 (see next page).

### ZERO WATER WASTE

Water is an essential ingredient both in our products and for cleaning during the brewing process. Treating wastewater so that it can be reused is an essential method for cutting water usage within the brewing process. With the right equipment, it can be reused for cleaning bottles or safely discharged into the environment.

In the UK, a new project involves recovering used rinsewater from the cleaning of bottles prior to filling. After treatment, the water is used for pasteurisation, saving around 4.5 million litres of water during the year.

### ZERO IRRESPONSIBLE DRINKING

While consumers make their own decisions about how they consume our beers, we can support them in making smart choices. Our campaigns target the biggest issues in each market. In some, drink-driving is the greatest challenge, while in others it is underage or binge drinking. By working with local partners, we pinpoint the key behaviour to change at point of sale, during consumption moments and across our marketing communications.

# 20,000

## SHOPS VISITED IN UKRAINE

On Global Beer Responsibility Day, Carlsberg Ukraine employees wearing T-shirts featuring retro audio-cassettes with the headline, “Don’t know how it works? Sorry, no beer for you!” visited 20,000 shops to talk about the dangers of selling alcohol to young people. Shop-workers were given fun gifts to prompt ID requests, and two leading psychologists mentored parents on how to talk to their teenage children about the importance of not drinking alcohol while underage.

SAIL'22 TOGETHER TOWARDS ZERO – RESPONSIBLE DRINKING



## OUR NEW SNAP PACK

Our revolutionary new Snap Pack is designed to reduce waste, eliminating more than 1,200 tonnes of plastic per year.

## A GREENER GREEN

The use of Cradle to Cradle Certified™ ink on our Pilsner bottle labels allows better recycling.

## FRESHER BEER

Our new ZerO<sub>2</sub> cap is cleverly designed to remove oxygen from the bottle for fresher tasting beer every time.

**1,200**  
TONNES OF PLASTIC SAVED

In September, we launched the pioneering Snap Pack solution to reduce plastic waste. Snap Pack glues together multi-packs, thereby making it possible for the Carlsberg Group to reduce plastic waste by more than 1,200 tonnes per year – equivalent to 60 million plastic bags. In addition, a number of other betterments for the Carlsberg brand were achieved, including caps that remove oxygen to make the beer taste fresher for longer and changing the brand's green ink to a Cradle to Cradle Certified™ ink to improve recyclability.



By the end of 2018, 96% of our products carried responsible drinking messages advising consumers not to drink-drive and not to drink when underage or pregnant. In addition, we included information on ingredients and nutritional values per 100 ml on 86% of packaging in Western Europe.

### ZERO ACCIDENTS CULTURE

Protecting the lives and health of our people is a fundamental priority for us. In 2017, we achieved a significant reduction in accident rates, and in 2018 we sustained this.

During the year, we rolled out our new Life Saving Rules programme across the business. Built on industry experience, this programme focuses on the specific areas where we have learned that people's lives can be endangered if rules are not followed correctly. We are providing training for our leaders, preparing them to better model desired behaviours, communicate consistently and engage their teams with health & safety. By the end of 2018, we had reached 1,500 leaders, and we are targeting 1,200 more in 2019.

Despite the positive progress within health & safety, our performance in 2018 was not good enough, as we very sadly recorded three fatalities. These tragedies underline the need for day-to-day vigilance to create a zero accidents culture.

### LIVE BY OUR COMPASS

In order to ensure the high degree of integrity, honesty and ethical business conduct that is part of our winning culture, as well as reduce the risk of non-compliance with applicable

rules and regulations, in 2016 we launched the Live by our Compass programme.

The programme continues to provide detailed guidance on ethical behaviour, emphasising the importance of integrity at all levels of our organisation. We reinforce this with risk assessments, third-party screening, compliance training and market audits.

In December 2018, we launched a single global online platform covering all codes, policies and manuals, accompanied by a comprehensive communications package.

### REPORTING

Our 2018 Sustainability Report contains much more information on TTZ, including a detailed description of our KPIs and progress towards our 2022 and 2030 targets.

The report carries an assurance statement by PwC on selected indicators, serves as our annual Communication on Progress to the United Nations Global Compact and enables us to live up to our legal responsibility for CSR disclosure under section 99a of the Danish Financial Statements Act.

 [Download our Sustainability Report](https://www.carlsberggroup.com/reports-downloads/carlsberg-group-2018-sustainability-report/)

[www.carlsberggroup.com/reports-downloads/carlsberg-group-2018-sustainability-report/](https://www.carlsberggroup.com/reports-downloads/carlsberg-group-2018-sustainability-report/)

## KPIs & RESULTS

### SAIL '22 WINNING CULTURE



#### ZERO CARBON FOOTPRINT

We want to achieve zero carbon emissions at our breweries by 2030, with a 50% reduction by 2022. Our full value chain target is a 30% reduction in emissions by 2030, with a 15% reduction by 2022. In 2018, we had reduced relative carbon emissions by 20% since 2015.



#### ZERO WATER WASTE

We aim to halve water usage at our breweries by 2030, with a 25% reduction by 2022. At 3.1 hl/hl in 2018, we have made a 9% improvement in water efficiency from our 2015 baseline. Performance in 2018 was on a par with 2017, meaning that faster change will be required to reach our 2022 target.



#### ZERO IRRESPONSIBLE DRINKING

Our targets include 100% distribution of alcohol-free brews to expand consumer choice and 100% of our markets to improve on responsible drinking year on year. In 2018, we made steady progress on key performance indicators, including responsible drinking messages and consumer information on our packaging, and growing alcohol-free beer availability and volume.



#### ZERO ACCIDENTS CULTURE

We are determined to provide a safe working environment for our employees, and our aim is to achieve zero lost-time accidents by 2030. In 2017, we achieved a significant reduction in accident rates, a performance we sustained in 2018. However, our performance was not good enough, as we very sadly recorded three fatalities.



## DELIVERING VALUE

SAIL'22 is an organic strategy focused on improving and growing our current business in order to deliver value to shareholders.

When launching SAIL'22 in March 2016, we identified three priorities for creating value for shareholders: growing operating profit organically, improving return on invested capital, and ensuring an optimal capital allocation.

Our capital allocation principles are well-defined: 1. We invest in our business to drive long-term value creation; 2. We target a net interest-bearing debt/EBITDA ratio of below 2.0x; 3. We target a dividend payout ratio of around 50%; 4. We distribute any excess cash back to shareholders through share buy-back; and 5. We deviate from the latter principle only if value-enhancing acquisition opportunities arise.

By 2017, the second year of our seven-year strategy, we successfully delivered on the first three capital allocation principles. 2018 was another year of successful delivery on our priorities for creating shareholder value, including the first three capital allocation principles.

### SHARE BUY-BACK

As a result of recent years' healthy development of the business and the strong earnings and cash flow, the Supervisory Board has decided to use share buy-back programmes to return

excess cash to shareholders. The size of potential future share buy-back programmes will depend on the expected organic and inorganic investments needed to grow the business and the Group's intention to maintain net interest-bearing debt/EBITDA below 2.0x.

Consequently, the Group intends to buy back shares worth DKK 4.5bn during the 12-month period starting 6 February 2019. The share buy-back programme will be split into two tranches of approximately six months each. The first tranche started on 6 February at an amount of DKK 2.5bn, with a maximum of 15 million shares.

The purpose of the programme is to reduce the Company's share capital and meet obligations related to the Group's share-based incentive programmes. At the Annual General Meeting in 2020, the Supervisory Board intends to propose that shares not used for hedging of incentive programmes be cancelled.

The programme will be executed in accordance with the Safe Harbour Regulation (see section 4.3 of the consolidated financial statements). The Group is entitled to suspend or stop the programme at any time. Any such decision will be disclosed to the public by a Company announcement.

The Carlsberg Foundation will participate pro rata in the 2019 share buy-back programme at its current notional holding of 30.33% of the total shares in the Carlsberg Group.

## KPIs & RESULTS

### SAIL'22 DELIVER VALUE FOR SHAREHOLDERS



**2017: 8.4% growth**  
**2018: 11.0% growth**

#### ORGANIC GROWTH IN OPERATING PROFIT

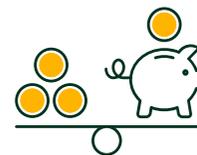
Sustainable organic growth in operating profit is testament to our ability to deliver top-line growth and margin improvement. In 2018, we delivered strongly against this KPI, achieving 11.0% organic growth in operating profit. The benefits from Funding the Journey were larger than initially expected and were the driver of the organic growth achieved in 2016, 2017 and 2018.



**2017: +100bp**  
**2018: +120bp**

#### ROIC IMPROVEMENT

In order to drive a positive development in shareholder returns, we aim to continuously improve return on invested capital (ROIC). We will do this by improving earnings and reducing invested capital. In 2018, ROIC improved by 120bp to 8.1%. The main driver of the improvement was the growth in operating profit, the lower tax rate and lower invested capital.



**2017: 1.45x**  
**2018: 1.29x**

#### OPTIMAL CAPITAL ALLOCATION

Our capital allocation targets include NIBD/EBITDA of below 2.0x and a dividend payout ratio of around 50%. We already achieved both these targets for 2017. Investing in profitable growth to secure the long-term value creation of the Group is, and will remain, our first priority, followed by maintaining a leverage of below 2.0x and a payout ratio of around 50%. As all these priorities were delivered on in 2018, the Supervisory Board announced a 12-month DKK 4.5bn share buy-back programme, starting 6 February 2019.

## RISK MANAGEMENT

# MANAGING RISKS TO REDUCE UNCERTAINTIES

We seek to manage risks in such a way that we minimise their threats while making the best use of their opportunities.

### GOVERNANCE STRUCTURE

The Supervisory Board is ultimately responsible for risk management, and it has appointed the Audit Committee to act on its behalf in monitoring the effectiveness of the Group's risk management. Monitoring is mainly performed in connection with the half-year reviews, although recurring financial risks are evaluated on a quarterly basis. The Audit Committee adopts guidelines for key areas of risk, monitors developments and ensures that plans are in place for the management of individual risks, including commercial and financial risks.

The Executive Committee (ExCom) is responsible for reviewing the overall risk exposure associated with the Group's activities. Risks are assessed according to a two-dimensional heat map rating system that estimates the impact of the risk on operating profit or brand/image and the likelihood of the risk materialising. Based on this assessment, ExCom identifies the high-risk issues for the coming year. ExCom assigns risk owners, who

are then responsible for mitigating the risks through a programme of risk management activities.

Local entities and Group functions are responsible for the identification, evaluation, qualification, recording and reporting to management of business risks at local level. Local and functional risk assessment follows the same principles and methodology as Group-level risk assessment. The responsibility for the local review lies with the risk officer, typically the local head of Finance, to ensure that risk management is incorporated into management meetings, business reviews and key decision-making. Following the risk identification, local risk owners are assigned and given responsibility for mitigating the risks through a programme of risk management activities.

Risk reporting is incorporated in regular business reviews and Group Risk Management is responsible for facilitating and following up on risk action plans for the most significant risks in the Carlsberg Group.

### RISKS IDENTIFIED FOR 2019

The identified risks for 2019 are shown in the box to the right. We rank risk according to

impact and likelihood, and the five highest ranked risks are described in the following.

#### COMMODITY AND FOREIGN EXCHANGE IMPACT

##### Description

This remains a high-impact risk for 2019. Increasing commodity prices, including barley and malt due to the poor harvest after the very warm summer in 2018, and adverse foreign exchange movements negatively affect the prices of raw materials and other inputs, thereby affecting the competitiveness of the business and the delivery of results.

Competition in most markets is generally fierce and trade term pressure from our customers remains strong, leading to a challenging pricing environment.

Foreign exchange and commodity risks, including our hedging approach, are described in more detail in the notes to the consolidated financial statements, see sections 1.2, 1.3 and 4.6.

##### Mitigation

We will continue to embed a value-based approach across all markets to achieve a positive price/mix while applying the Golden Triangle to ensure a balanced approach to

## IDENTIFIED RISKS FOR 2019

### RISKS WITH HIGHEST POTENTIAL IMPACT AND PROBABILITY

- Commodity and foreign exchange impact
- Legal and regulatory compliance
- Partnerships
- Industry consolidation
- Political and economic instability

### OTHER IDENTIFIED RISKS

- Cyber and IT security
- Income tax
- Regulatory changes, incl. duties
- Strategy execution
- Talent management
- Pensions
- Business/brewery interruption
- Quality design and execution

market share, GPaL (gross profit after logistics) margin and operating profit.

## LEGAL AND REGULATORY COMPLIANCE

### Description

Legal and regulatory compliance risks include competition law and data protection compliance as well as non-compliance with anti-bribery & corruption regulations. Failure to comply with regulations and Group policies may lead to fines, claims and brand damage.

In 2018, the Group experienced competition law dawn raids in more than one jurisdiction. Competition law is a real and growing risk. The significance of this risk is also reflected in the consolidated financial statements (see section 3.3).

### Mitigation

We are strengthening the Group-wide control framework covering all legal compliance areas, including, but not limited to, competition law, anti-bribery & corruption and data protection.

We have policies in place, and conduct regular training of relevant employees and emphasise continued awareness building for the top-60 leadership team. Employees are required to pass e-learning modules within relevant legal areas on a continuous basis to drive awareness and knowledge building.

## PARTNERSHIPS

### Description

Partnerships remain a high risk for 2019. We cooperate with partners in a number of markets, particularly the global soft drinks manufacturers in the Nordic countries and

some Asian markets as well as local partners in some Asian and European markets.

The strength of the relationships with our different partners, and in some cases the risk of partnership disagreement, may affect our ability to manage the growth of our business.

### Mitigation

We seek to have an ongoing dialogue with our partners to identify any issues at an early stage. The relevant members of ExCom are actively involved in partner relationships, participating in the ongoing dialogues to ensure constructive negotiations and effective and fast resolution of potential issues.

## INDUSTRY CONSOLIDATION

### Description

Industry consolidation has been viewed as a high risk since 2016. Consolidation within the beer industry has created bigger players with increased scale.

Although strong local market positions remain key to creating value, consolidation creates stronger competitors with increased financial strength and bargaining power, potentially impacting on the Carlsberg Group's ability to compete.

Consolidation is also taking place among our customers and suppliers, This leads to increased dependency, pricing pressure and the risk of margin pressure.

### Mitigation

The priorities and initiatives of SAIL'22 seek to position the Group in such a way that we are

able to act upon and mitigate the impact of industry consolidation. This includes improving our core beer business and driving craft & speciality and alcohol-free brews, becoming a valued partner of our customers and offering the preferred beer of our consumers.

In addition, we will seek to further develop our partnerships with suppliers and create alternative sourcing solutions.

## POLITICAL AND ECONOMIC INSTABILITY

### Description

Political and economic instability has been considered a high-impact risk since 2017.

Adverse economic conditions may result in reduced consumer demand and a higher degree of price sensitivity on the part of consumers, while major social or political changes may disrupt sales and operations.

Political and economic instability may lead to adverse exchange rate fluctuations, increased credit risk, insolvency of suppliers, impairment of goodwill or brands, operational restrictions, increases in duties and taxes imposed on beer, and possibly nationalisation of assets.

### Mitigation

We closely monitor our markets in order to be able to respond in a timely manner to any adverse developments.

Mitigating activities also include hedging and maintaining variability in the cost base. SAIL'22 also provides mitigation by further strengthening our core business in mature,

stable markets, premiumising our portfolio and expanding our geographic footprint.

 [Download our policies](#)

[www.carlsberggroup.com/sustainability/download/download-our-policies](http://www.carlsberggroup.com/sustainability/download/download-our-policies)

## CORPORATE GOVERNANCE

# CONTINUED FOCUS ON CORPORATE GOVERNANCE

Our governance framework aims to ensure active business management across the Group and reduce risk.

The Carlsberg Group seeks to develop and maintain a positive and constructive relationship with all its stakeholders. For this reason, and in order to reduce risk and promote good governance in the Carlsberg Group, the Group has policies for a number of key areas, such as communications, human resources, environment, business ethics, competition law, marketing communication, finance and responsibility to customers and society in general. The Supervisory Board is responsible for overseeing that the Executive Committee (ExCom) has an adequate system and resources in place to ensure compliance with these policies.

The basis of our corporate governance includes in particular the Danish Companies Act, the Danish Financial Statements Act, IFRS, the EU Market Abuse Regulation, Nasdaq Copenhagen A/S' rules for issuers of shares, local legislation and the Company's Articles of Association.

### RECOMMENDATIONS ON CORPORATE GOVERNANCE

The recommendations of the Danish Committee on Corporate Governance form part of Nasdaq Copenhagen A/S' rules for issuers of shares. The Company complies with all but three of the recommendations, as explained below.

With respect to the recommendation to publish quarterly reports, the Supervisory Board finds that half-year reporting is more appropriate due to the seasonality of the Group's business and the fact that the Group historically has seen high volatility in quarterly earnings and margins as a result of phasing of costs. The Supervisory Board considers the high volatility to be potentially misleading for understanding underlying Group performance. The Company issues Q1 and Q3 trading statements, which include volume and net revenue data, along with comments on sales performance in the quarter.

With respect to diversity, the Company complies with the recommendation that the Board should discuss the Group's activities on an annual basis to ensure relevant diversity at management levels, including the adoption of a policy on diversity. However, the policy is not

published on the Group's website as recommended by the Committee.

Moreover, from May to December 2018, the Company did not comply with the recommendation that at least half of the members of the Supervisory Board elected by the general meeting should be independent. In May 2018 Nancy Cruickshank, a former tenth Supervisory Board member elected by the General Meeting, stepped down from the Supervisory Board to join the Group as Senior Vice President Digital Business Transformation. The process of identifying a new candidate for election at the next Annual General Meeting in March 2019 was immediately initiated and has been completed.

The Company's statutory report on corporate governance includes a full list of the recommendations, with comments on the Group's position on each recommendation.

### THE ANNUAL GENERAL MEETING

The 2018 Annual General Meeting (AGM) took place on 14 March. The minutes of the meeting are available on [www.carlsberggroup.com](http://www.carlsberggroup.com). Rules and deadlines applying to the AGM and other General Meetings are stipulated in the Company's Articles of Association, which are available on [www.carlsberggroup.com](http://www.carlsberggroup.com) along with other AGM-related information.

### GOVERNANCE STRUCTURE

The Supervisory Board has established three board committees: an Audit Committee, a Nomination Committee and a Remuneration Committee. For the time being, the Supervisory Board considers these committees to be sufficient; however, each year the Supervisory Board considers whether the number and scope of the committees are appropriate. The board committees prepare and facilitate Supervisory Board decisions.

The Supervisory Board hires and supervises the Executive Board, which consists of the CEO and CFO, who are not members of the Supervisory Board. The Group also has a wider Executive Committee, which, in addition to the CEO and CFO, consists of a wider group of Executive Vice Presidents, portrayed on pages 52-53. While the Executive Board members are

➤ [Download our statutory report on corporate governance](#)

[www.carlsberggroup.com/who-we-are/corporate-governance/#StatutoryReports](http://www.carlsberggroup.com/who-we-are/corporate-governance/#StatutoryReports)

formally registered as executive directors of the Company, ExCom collectively prepares and implements the Company's strategic plans.

### COMPOSITION OF THE SUPERVISORY BOARD

The Supervisory Board currently has nine members elected by the General Meeting and, in accordance with the Danish Companies Act, five members elected by the employees.

The members elected by the General Meeting are elected individually and for a term of one year. Re-election is possible.

Four of the nine members elected by the General Meeting are independent and have an international business background in addition to competences related to FMCG, finance, emerging markets and Russia. The other five members are affiliated to the Carlsberg

Foundation, the Company's principal shareholder, and have an academic background. These members are bearers of the Carlsberg Group culture, and the heritage and values stemming from founder J.C. Jacobsen, and the Supervisory Board sees these members as patrons of the same.

The employee representatives are elected for a term of four years. They hold the same rights and obligations as the members elected by the General Meeting. The current employee representatives were elected in 2018 and the next election will take place in 2022.

The Supervisory Board believes that the composition of the Board ensures an appropriate level of diversity and breadth in the members' approach to their duties, thereby helping to ensure that decisions are well considered and that the long-term perspective is duly taken into account.

Each year, the Supervisory Board considers the skills that should be represented on the Supervisory Board on the basis of a recommendation from the Nomination Committee.

These skills are described in the Specification of Competences, available on [www.carlsberggroup.com](http://www.carlsberggroup.com). The Nomination Committee and the Supervisory Board take the description of the required skills into consideration when recommending new candidates for the Supervisory Board. None of the members of the Supervisory Board are or have been involved in the executive management of the Group.

Information on the Supervisory Board members is available on pages 49-51. Detailed CVs can be found on [www.carlsberggroup.com](http://www.carlsberggroup.com).

### DIVERSITY

The Supervisory Board believes that its members should be chosen for their competences, but recognises the benefits of diversity in respect of experience, culture, international experience and gender, and has laid down the following specific objectives in relation to international experience and gender:

- With regard to international experience, the objective is that 50% or more of the Supervisory Board members elected by the General Meeting should have substantial international experience from managing large corporations or institutions. The Supervisory Board expects to fulfil this objective with the candidates nominated for election at the 2019 AGM. Furthermore, with a representation of more than 20 nationalities, the international experience of the Carlsberg Group top-60 leadership team is significant.
- The proportion of the underrepresented gender (currently women) on the Supervisory Board should reach at least 40% of the members elected by the General Meeting no later than 2021. In May 2018, Nancy Cruickshank stepped down from the Supervisory Board to join the Group as SVP Digital Business Transformation. Up to that point, three Supervisory Board members elected by the General Meeting were women. At the AGM in 2019, a new female candidate, Domitille Doat-Le Bigot, will be nominated to replace Nancy Cruickshank. Diversity remains a high priority for the Supervisory Board. The gender target applies to the boards of all

### Supervisory Board meetings

Board member	Chairmanship meetings attended	Board meetings attended
Flemming Besenbacher (Chairman) <sup>1</sup>	🍷🍷🍷🍷🍷	🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Lars Rebien Sørensen (Deputy Chairman) <sup>1,2</sup>	🍷🍷🍷🍷🍷	🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Hans Andersen <sup>3</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Carl Bache <sup>1</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Richard Burrows <sup>1,2</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Magdi Batato <sup>1,2</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Donna Cordner <sup>1,2</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Nancy Cruickshank <sup>1,2</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Eva Vilstrup Decker <sup>3</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Kees van der Graaf <sup>1,2</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Finn Lok <sup>3</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Erik Lund <sup>3</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Søren-Peter Fuchs Olesen <sup>1</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Peter Petersen <sup>3</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Nina Smith <sup>1</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷
Lars Stemmerik <sup>1</sup>		🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷🍷

<sup>1</sup> Elected by the General Meeting. <sup>2</sup> Independent. <sup>3</sup> Employee-elected.  
 🍷 Attended meeting. 🍷 Did not attend meeting. 🍷 Not a Board member at the time.

Danish Carlsberg Group companies that are required to set such objectives. This is currently Carlsberg A/S, Carlsberg Breweries A/S, Carlsberg Global Business Services A/S, Carlsberg Danmark A/S and Carlsberg Supply Company Denmark A/S. In 2018, two Supervisory Board members of Carlsberg A/S elected by the General Meeting were women, i.e. 22%, although up to May 2018, when Nancy Cruickshank stepped down, the figure was 30%. Accordingly, the objective with regard to gender diversity on the Supervisory Board has not yet been met. At Carlsberg Breweries A/S, all four Supervisory Board members elected by the General Meeting are men. The Board consists of the members of the Chairmanship and of the Executive Board of Carlsberg A/S, and it was not considered appropriate to change this approach in 2018. At Carlsberg Global Business Services A/S and Carlsberg Supply Company Denmark A/S, the three members of the respective boards are all men, which means that the target has not yet been met in either company. At Carlsberg Danmark A/S, one of the three Supervisory Board members is a woman, which means that the objective with regard to gender diversity is considered fulfilled.

Whilst the Supervisory Board is of the opinion that competences must always come first, it will consider candidates with a view to increasing the underrepresented gender on the Supervisory Board.

Currently, women are also underrepresented in senior management positions. To increase the proportion of women, the Supervisory

Board has drawn up a policy and set out specific action points for the Executive Board to implement.

In 2018, these actions included:

- As part of the Group Recruitment Policy, recruitment companies and executive search companies were asked to prepare a shortlist with at least one qualified female candidate when the Group recruits for senior management positions.
- At least one third of the participants in the Group's leadership programme should be women. This target was met in 2018, as 30% of the leadership programme nominees were women.
- Our leadership development centres support individual development towards senior leadership positions. In 2018, one third of the participants in our Development Centres Level 2 were women.

### THE WORK OF THE SUPERVISORY BOARD

The Supervisory Board monitors that the Executive Board observes the goals, strategies and business procedures established by the Board.

The Chairman and Deputy Chairman of the Supervisory Board constitute the Chairmanship. The specific duties of the Chairman – and, in his absence, the Deputy Chairman – are set out in the Rules of Procedure. In 2018, the Chairmanship and the Executive Board held six meetings. The Supervisory Board of Carlsberg A/S held eight meetings as well as a 1.5-day strategy seminar.

## SUPERVISORY BOARD 2018

### MAIN TOPICS OF DISCUSSION

#### Strategy

- Ongoing review and implementation of SAIL'22.
- Review of and debate on R&D, innovation, branding, quality and other strategic initiatives.
- Review and discussion of organic and potential inorganic opportunities.
- Monitoring of the Funding the Journey programme and the continued embedding of its principles in the Group's ways of working.
- Review and approval of the Group's capital structure and funding.

#### Organisation, people, succession planning and talent management

- Recommendation of Magdi Batato as Supervisory Board candidate for election at the 2018 AGM.
- Succession planning for the Supervisory Board and its committees, including the recommendation of Lars Fruergaard Jørgensen, Domitille Doat-Le Bigot and Lilian Fossum Biner as candidates for the Supervisory Board at the 2019 AGM.
- Succession planning for the executive management.
- Review of the Group's people agenda, including diversity.
- Organisational restructuring, management and development of the internal talent pool, and general succession planning.

- Discussion and approval of the bonus structures in the Group's incentive programme, ensuring support of and alignment with SAIL'22.

#### Compliance and core values

- Compliance and enhancing compliance efforts.
- Review of reputation survey and discussion of how to sustain and enhance the Group's strong reputation.
- Review of the progress of the Group's sustainability programme Together Towards ZERO.
- Review and discussion of how to improve the development and quality programmes.

#### Governance and risk management

- Review of the outcome of the 2017 Supervisory Board evaluation process, including follow-up on all suggestions.
- Review and discussion of the Group Internal Audit reports, working processes and continued improvement.
- Discussion of relevant issues and ways of working with the external auditor.
- Approval of the external auditor for election at the 2018 AGM.

The Executive Board always attends the Supervisory Board meetings and, in order to improve transparency, the members of ExCom are also invited to attend when it makes sense. This gives the Supervisory Board better insight into the business.

Prior to each Supervisory Board meeting, the Supervisory Board and ExCom have evening meetings at which key people from the Group present a market or other relevant topic. In 2018, these included various topics relating to SAIL'22 and to the Carlsberg organisation, such as the strategy on big cities, R&D, digital, sustainability, IT security, quality and our business in Sweden.

### SUPERVISORY BOARD EVALUATION PROCESS

Each year, the Chairman of the Supervisory Board heads a structured evaluation of the Board's work, accomplishments and composition. In addition, the Supervisory Board considers, based on input from the Nomination Committee as well as the Board evaluation process, whether its members' expertise should

be updated or strengthened with respect to their duties.

During the evaluation process in 2018, the Supervisory Board members generally expressed that they find the pre-read material and presentations of a high quality, that the topics and agendas cover relevant matters adequately, that meetings are well planned and the time and discussions well prioritised, and that they appreciate the open discussions at the Supervisory Board meetings with the Executive Board and other management members.

The Supervisory Board also expressed satisfaction with the focus on risk evaluation, strategy and direction-setting during Board discussions. The evaluation process led to a short catalogue of ideas for minor changes to the way the Supervisory Board works. These ideas were considered and, where relevant, implemented by the Supervisory Board.

### Nomination Committee meetings

#### Committee member

Flemming Besenbacher (Chairman)  
Richard Burrows  
Kees van der Graaf  
Lars Rebien Sørensen

#### Committee meetings attended



Attended meeting. Not a Committee member at the time.

### BOARD COMMITTEES

#### THE NOMINATION COMMITTEE

In 2018, the Nomination Committee consisted of three members. The Nomination Committee is appointed for one year at a time. The Chairman of the Committee does not qualify as being independent, while the other two members do.

The Nomination Committee works according to Terms of Reference, which are reviewed and approved annually by the Supervisory Board. The Terms of Reference are available on the Company's website.

In 2018, the Committee had particular focus on:

- Planning the Board's evaluation process.
- Reviewing the Specification of Competences for Board members to ensure that they reflect the skills and experiences needed to best support the execution of SAIL'22.
- Succession planning at Supervisory Board and ExCom level. A significant task in 2018 was

to identify new candidates for the vacant Supervisory Board position following the departure of Nancy Cruickshank as well as candidates for the vacant positions following the considerations of Lars Rebien Sørensen and Donna Cordner not to stand for re-election at the 2019 AGM.

- Evaluating the composition, structure and size of the Board.

#### THE REMUNERATION COMMITTEE

The work of the Remuneration Committee is described in the Remuneration report on pages 43-48.

#### THE AUDIT COMMITTEE

In 2018, the Audit Committee consisted of four members. The Audit Committee is appointed for one year at a time. Three out of the four members of the Committee qualify as being independent of the Company, and the Committee has the relevant financial expertise and necessary experience of the Company's sector.

### Audit Committee meetings

#### Committee member

Donna Cordner (Chairwoman)  
Richard Burrows  
Nina Smith  
Lars Rebien Sørensen  
Flemming Besenbacher<sup>1</sup>

#### Committee meetings attended



<sup>1</sup> Not a member of the Committee; attends meetings in his capacity as Chairman of the Supervisory Board.  
 Attended meeting. Not a Committee member at the time.

The Audit Committee works according to Terms of Reference and a detailed annual meeting plan, which are reviewed and approved by the Supervisory Board prior to the beginning of each financial year. The Supervisory Board approved the Audit Committee meeting plan for 2019 and the current Terms of Reference at the Supervisory Board meeting in December 2018. The Terms of Reference are available on the Company's website.

In 2018, the Audit Committee had particular focus on a number of other areas, including:

- Monitoring the effectiveness of the control environment and overseeing the progress on developing a new reporting system on the effectiveness of the controls over financial reporting.
- Reviewing the progress of the work of the Group Internal Audit function.
- Reviewing the Integrity Committee's work.
- Managing financial risk.
- Reviewing the risk management process.

## AUDITING

To safeguard the interests of shareholders and the general public, an independent auditor is appointed at the Annual General Meeting following a proposal from the Supervisory Board, which is based on a recommendation from the Audit Committee.

## INTERNAL CONTROL AND RISK MANAGEMENT RELATED TO THE FINANCIAL REPORTING PROCESS

### OVERALL CONTROL ENVIRONMENT

The Supervisory Board and ExCom have overall responsibility for the Carlsberg Group's control

environment. The Audit Committee is responsible for monitoring the effectiveness of the internal control and risk management systems related to the financial reporting process on an ongoing basis.

The Group has a number of policies and procedures in key areas of financial reporting, including the Finance Policy, the Accounting Manual, the Controller Manual, the Use of Auditors Policy, the Chart of Authority, the Risk Management Policy, the Financial Risk Management Policy, the Corporate Governance Policy, the Information Security and Acceptable Use Policy, the Records Management & Personal Data Protection Policy, the Stock Exchange Compliance Policy, the Tax Policy, and the Code of Ethics and Conduct. The policies and procedures apply to all subsidiaries, and similar requirements are set out in collaboration with the partners in joint ventures.

In 2018, the Group implemented a new risk and internal control framework for financial reporting. The framework defines who is responsible and where the controls are performed, and is designed to reduce and mitigate financial risks identified and ensure reliable internal and external financial reporting.

The framework has been strengthened by implementing several controls, providing assurance that key risks are covered by mitigating internal control assertions.

During the implementation and strengthening of the framework across functions and entities,

there has been continual focus on the standardisation of processes and controls. In addition, the governance has been strengthened, including through extensive education and training in risk and controls.

As a consequence of the Group's growth as a result of acquisitions, processes are not standardised across entities. The current state of the control environment is not yet, therefore, where the Group wants to be.

The Group will continue to strengthen the financial control environment through further standardisation, increased automation, strong analytics and transparent governance.

The framework is monitored through entities' self-assessment of the effectiveness of the implemented controls and continuous testing of performance by an established second-line-of-defence team. The monitoring of the performance of the controls focuses on the quality of the controls, the effectiveness with which they are performed and the efficiency of the overall controlling processes.

### RISK ASSESSMENT

With the implementation of the control framework for financial reporting, the Group has identified the risks that could have a direct or indirect material impact on the financial statements. Group entities are required to document transaction processes and the controls in place to cover the key risks identified. The minimum requirements for documenting the risks must be set out in the framework and visualised in the processes.

Group entities are required to reassess their controls biannually and must update changes to the control framework for financial reporting, including new risks and controls.

### CONTROL ACTIVITIES

The Group has implemented a formalised financial reporting process for the strategy process, budget process, estimates and monthly reporting on actual performance. The accounting information reported by all Group companies is reviewed both by controllers with regional or functional in-depth knowledge of the individual companies/functions and by technical accounting specialists.

In addition, significant Group companies have controllers with extensive commercial and/or supply chain knowledge and insight. Controllers are continuously updated on best practice relating to internal financial controls, and trained in new accounting and reporting requirements.

The entities in the Group are dependent on IT systems. Any weaknesses in the system controls or IT environment are compensated for by manual controls in order to mitigate any significant risk relating to the financial reporting.

In 2018, the Group continued the outsourcing of certain key processes and implemented various tools for standardising key processes. Furthermore, the Group has established a quality assurance team in order to ensure the quality of the controls that are part of the outsourced processes, including their performance.

**INFORMATION AND COMMUNICATION**

The Group has established information and communication systems to ensure accounting and internal control compliance. During the risk assessment periods, Group entities are required to report on missing or inadequate controls. Each entity assesses any need for compensating controls, or for design and implementation of new controls.

During implementation of the new control framework in 2018, Group entities mapped controls on segregation of duties to implement necessary compensating controls, and are now

implementing stronger remediated controls for segregation of duties in the ERP systems.

**MONITORING**

The Audit Committee’s monitoring covers both the internal control environment and business risk. Monitoring of the internal control environment is covered by the Group’s control framework for financial reporting.

The financial risks are assessed and reviewed at multiple levels in the Group, including monthly performance review meetings at ExCom level, periodic review of control documentation, and audits performed by Group Internal Audit.

**GROUP INTERNAL AUDIT**

Group Internal Audit provides objective and independent assessment of the adequacy, effectiveness and quality of the Group’s internal controls. Group Internal Audit works in accordance with a charter, which is reviewed on an annual basis and approved by the Audit Committee.

Taking into account the annual review of business risks (cf. pages 35-36), an internal audit plan is drawn up for the year. The plan is reviewed and approved by the Audit Committee. In 2018, Group Internal Audit conducted audits mainly in the areas of financial reporting

controls, compliance (internal and external regulation) and information technology.

**SPEAK UP**

The Carlsberg Group has a Speak Up system that enables employees to report misconduct. Reports typically relate to suspected violations of the Carlsberg Code of Ethics and Conduct. The Speak Up system is facilitated by an external provider and allows concerns to be brought to the attention of Group Legal and Compliance anonymously and via multiple channels. The Chief Compliance Officer is responsible for reviewing all reported Speak Up matters. Furthermore, an Integrity Committee, chaired by the CFO, oversees the follow-up of major Speak Up investigations and provides a report on this to the Audit Committee at least quarterly.

The Speak Up Manual and Misconduct Investigation Manual were updated in 2018 to reflect the roles and responsibilities of the parties involved in Speak Up investigations. The launch of these revised manuals was accompanied by a campaign to raise awareness of the various Speak Up channels available in the Group.

Since the establishment of the Speak Up system in April 2010, some reports and their subsequent investigation have led to various disciplinary sanctions, including dismissal on the basis of violation of Group policies and, in some cases, relevant criminal laws. Most of these matters related to isolated incidents of fraud carried out by individual employees in the Group. The incidents have not had any material impact on the financial results of the Group or the Group company in question.



**+12%**  
**SOMERSBY GROWTH**

First launched in Denmark in 2008, Somersby has grown to become the world’s leading international cider brand outside the UK. Today, Somersby is available in 50 markets around the globe and has a no. 1 or 2 position in more than 30 markets, including Poland, Denmark, Switzerland, Ukraine, Malaysia and Australia. In 2018, Somersby experienced 12% volume growth, driven by a new, refreshingly optimistic advertising campaign and successful innovation with the multi-market launch of Somersby Sparkling Rose and Watermelon.

**SAIL ’22 GROW CRAFT & SPECIALITY**

**SOMERSBY**

## REMUNERATION

# EXECUTIVES' REMUNERATION

We want our executives to share our shareholders' interests, and the remuneration of executive directors should support this alignment.

The Remuneration Committee has not proposed any changes to the pay structure, and the Remuneration Policy will remain unchanged in 2019.

### REMUNERATION OF THE EXECUTIVE BOARD

#### REMUNERATION POLICY

The main elements of the executive directors' remuneration arrangements are summarised in the table on page 45 and explained in more detail in the following paragraphs.

#### Fixed salary

The Committee reviews fixed salaries for the executive directors annually, taking into account a number of relevant factors, including the individual's performance, role and responsibilities. Executives make their own provision for retirement, meaning no additional pension contributions are made on their behalf.

The Committee also takes into account levels of remuneration for similar roles at comparable companies in both the beverage and FMCG sectors, as well as companies based in the Nordic region across all industry sectors.

The Committee and the Supervisory Board have decided to increase the executive directors' fixed salaries in 2019 by 2.3%.

#### Annual bonus

The annual bonus is structured to incentivise the executive directors to deliver on the Group's short-term strategic objectives.

For 2019, the potential maximum bonus will remain at 100% of fixed salary, with 60% of fixed salary payable for on-target performance.

Determination of the final bonus is subject to the discretion of the Committee and the Supervisory Board, taking into account the overall performance of the business.

For 2019, the annual bonus comprises two elements. The first element, accounting for 80% of the bonus, is based on three measures: organic net revenue growth, organic operating profit and addressable cash flow.

## OUR APPROACH TO REMUNERATION

The Carlsberg Group's remuneration is designed to enable us to recruit and retain individuals with the expertise and ability required to run a growing international company, and to do so in a way that drives our business success and rewards executives when shareholders are rewarded. Levels of fixed remuneration are set based on individuals' experience and contribution, and in the context of the external market.

While we do not seek to adhere rigidly to market benchmarks, we monitor and take into account pay levels and incentive opportunities in the principal markets from which we recruit: our European brewing and spirits peers and the global consumer goods sector, as well as companies across industry sectors in the Nordic region.

Many of our investors – including our main shareholder – are long-term holders of our shares. We want our executives to share our shareholders' perspective and believe that remuneration should align their interests accordingly. The balance between the short-term remuneration package and long-term share-based pay and shareholding requirements strengthens this alignment.

The Company's full Remuneration Policy for the Supervisory Board and Executive Board, and guidelines for incentive programmes as approved at the Annual General Meeting on 30 March 2017, are available on the Company's website.

#### MAIN ACTIVITIES IN 2018

During 2018, the main activities of the Remuneration Committee were:

- Determining levels of long-term incentive awards.
- Considering stakeholders' feedback from the 2018 Annual General Meeting and from media.
- Reviewing the Remuneration Policy for the Executive Board and agreeing to make no changes to the policy.
- Considering the achievement of performance criteria for the annual bonus plan for 2017.
- Considering the achievement of performance criteria for the Funding the Journey cash incentive award.
- Reviewing fixed salary levels, bonus targets and levels of long-term incentive awards for 2019.

#### 2019 OBJECTIVES

- Monitoring the implementation of the EU Shareholder Rights Directive and ensuring that we continue to report transparently and in line with all relevant guidelines and regulations.
- Reviewing the overall remuneration structures for 2020 and beyond as the Company enters a period of growth.

The second element, accounting for 20%, will be linked to the executives' individual performance against measures that reflect the Group's strategic priorities.

**Long-term incentive arrangements**

Since 2017, the long-term incentive arrangements for the executive directors have consisted of performance shares only.

Performance shares vest three years after the grant date, subject to performance conditions. The maximum value of awards that can be made in any single financial year, based on face value, is 300% of fixed salary.

Each year, the Committee determines the total level of the long-term incentive award to be made to each executive. All long-term incentive awards are made at the discretion of the Committee.

The vesting of any performance shares is subject to achievement of performance conditions, which were determined by the Committee prior to the grant date.

The performance share award will be subject to four performance conditions measured over three years: total shareholder return (TSR), earnings per share (EPS), organic net revenue growth and return on invested capital (ROIC).

The performance conditions increase and support alignment of the executive directors' reward with the long-term Group strategy and shareholder value. In order for any award (or part of an award) to vest, the Committee must be satisfied that underlying Group performance is at a satisfactory level.

**Reclaiming variable pay**

In the event of serious misconduct, or if an annual bonus or long-term incentive award is made on the basis of accounts that prove to be materially misstated, the Company may reclaim, in full or in part, any overpayment from the annual bonus, or cancel or withdraw unexercised or unvested long-term incentive awards made to the executive directors.

**Share ownership guidelines**

In order to strengthen the alignment between executive directors and shareholders, the CEO is expected to build up a holding of shares equivalent to 150% of fixed salary, and the CFO a holding equivalent to 120% of fixed salary.

**Executive directors' service contracts**

Service contracts for executive directors contain terms and conditions that are considered common to executive board members in Danish listed companies.

## THE COMMITTEE'S RESPONSIBILITIES

The Carlsberg Group's Remuneration Committee is responsible for the Remuneration Policy (including the general guidelines for incentive programmes) for all members of the Supervisory Board and the Executive Board, for making proposals on changes to the Remuneration Policy, and for obtaining the approval of the Supervisory Board prior to seeking shareholders' approval at the Annual General Meeting.

The Committee is responsible for making proposals to the Supervisory Board on the actual structure and content of the remuneration packages of members of the Supervisory Board and the Executive Board, in accordance with the policy approved by the shareholders.

The Committee monitors and advises the Supervisory Board on any major changes to the policy on senior employee remuneration structures for the Group, including for ExCom. The Committee's Terms of Reference, which govern how it operates, are approved by the Supervisory Board and are available on the Company's website.

**Remuneration Committee meetings**

Committee member	Committee meetings attended
Richard Burrows (Chairman)	🍷🍷🍷🍷
Magdi Batato	🍷🍷🍷🍷
Lars Rebien Sørensen	🍷🍷🍷🍷
Nancy Cruickshank	🍷🍷🍷🍷
Kees van der Graaf	🍷🍷🍷🍷
Flemming Besenbacher <sup>1</sup>	🍷🍷🍷🍷

<sup>1</sup> Not a member of the Committee; attends meetings in his capacity as Chairman of the Supervisory Board.  
 🍷 Attended meeting. 🍷 Did not attend meeting. 🍷 Not a Board member at the time.

## Remuneration Policy

Element of pay	Objective	Award level	Performance criteria	Performance period
Fixed salary	Attract and retain high-performing individuals by reflecting market value of role and executive's skills and experience. Reward day-to-day performance. Set at a level to prevent over-reliance on variable pay.	Takes into account the market rate for similar roles in comparable international companies as well as executive's skills and experience.	No performance criteria per se, but the performance of the individual is taken into account when fixed salary levels are reviewed.	Financial year.
Benefits	Operate a competitive benefits suite to aid recruitment and retention.	Perquisites and other benefits corresponding to market practices.	N/A	N/A
Pension	Executives make their own provision for retirement.	N/A	N/A	N/A
Annual bonus plan	Drive and reward delivery of short-term business objectives.	Maximum bonus opportunity is 100% of fixed salary. Bonus opportunity at target is 60% of fixed salary.	<ul style="list-style-type: none"> <li>Organic net revenue growth.</li> <li>Organic operating profit.</li> <li>Addressable cash flow.</li> <li>Strategic measures.</li> </ul>	Financial year.
Long-term incentive plan	Drive and reward delivery of longer-term business objectives. Maximise alignment with shareholder value.	The maximum level of long-term incentive awards is 300% of fixed salary based on the face value of the award at the grant date.	<ul style="list-style-type: none"> <li>Relative total shareholder return (TSR).</li> <li>Growth in adjusted EPS at constant currencies.</li> <li>Organic net revenue growth.</li> <li>ROIC at constant currencies.</li> </ul>	3 years with 3-year vesting.

## Performance share awards – performance criteria for 2019

Measure	Description	Performance condition measured over the three financial years 2019-2021	Weighting
Relative total shareholder return (TSR)	TSR measures the total return to investors. The Group's TSR performance will be measured relative to a comparator group of 16 companies <sup>1</sup> .	<ul style="list-style-type: none"> <li>25% of TSR element vests if the Group's TSR performance is at median of peer group's<sup>1</sup>.</li> <li>100% vests for upper-quartile performance.</li> <li>Straight-line vesting between median and upper quartile.</li> </ul>	25%
Adjusted EPS growth	Adjusted EPS growth targets measure the Group's underlying financial success.	<ul style="list-style-type: none"> <li>25% of the adjusted EPS at constant currencies element vests for 4% p.a. growth.</li> <li>100% vests for 9% p.a. growth.</li> <li>Straight-line vesting between 4% p.a. and 9% p.a.</li> </ul>	25%
Organic net revenue growth	Organic net revenue growth is a measure of the Group's ability to deliver on our SAIL'22 priorities.	<ul style="list-style-type: none"> <li>25% of the organic net revenue element vests for 1.5% p.a. growth.</li> <li>100% vests for 4.5% p.a. growth.</li> <li>Straight-line vesting between 1.5% p.a. and 4.5% p.a.</li> </ul>	25%
Growth in ROIC	Growing ROIC is a key financial metric reflecting our ability to drive a positive development in shareholder returns.	<ul style="list-style-type: none"> <li>25% of the ROIC in constant currencies element vests at 9.0% in 2021.</li> <li>100% vests for 10.0% in 2021.</li> <li>Straight-line vesting between 9.0% and 10.0% in 2021.</li> </ul>	25%

<sup>1</sup> TSR comparator group: Kirin Holdings, Britvic, Davide Campari-Milano, Rémy Cointreau, Asahi Group Holdings, Compañía Cervecerías Unidas, Diageo, Heineken, Ambev, Brown-Forman, Pernod-Ricard, Sapporo Holdings, Dr Pepper Snapple Group, Tsingtao Brewery, Anheuser-Busch Inbev and Molson Coors Brewing.

## REMUNERATION OF THE EXECUTIVE BOARD IN 2018

### Fixed salary

The annual fixed salary paid to Cees 't Hart in 2018 was DKK 12.3m. The annual fixed salary for Heine Dalsgaard was DKK 7.4m.

### Annual bonus

For the financial year 2018, 100% of the maximum bonus, being 100% of fixed salary, was payable for performance in 2018 for the CEO. The bonus payable amounts to DKK 12.3m for Cees 't Hart.

For the CFO, 100% of the maximum bonus was payable for performance in 2018. The bonus payable amounts to DKK 7.4m for Heine Dalsgaard.

### Long-term incentive awards

#### Granted in 2018

In the financial year 2018, the CEO and CFO were granted long-term incentive awards with a face value of 255% and 210% of fixed full-year salary respectively at the time of award. The composition of these awards is shown in the table on page 47.

### Shareholdings

The number of shares in Carlsberg A/S held by Cees 't Hart and Heine Dalsgaard and the movements during 2018 are shown in the table on page 47. The table includes the holdings of the related parties of the CEO and CFO.

None of the executive directors own shares in any of the subsidiaries or associates of Carlsberg A/S.

## SAIL '22 TEAM-BASED PERFORMANCE

# TRIPLE A

## OUR PERFORMANCE CULTURE

Our triple A (alignment – accountability – action) concept defines how we collaborate and is the cornerstone of our team-based One Carlsberg performance culture, which is integrated into our remuneration policies. The top-200 management team in the Group is eligible for the long-term incentive (LTI) scheme. In 2016 and 2017, this was a two-year cash programme with one KPI: delivering the Funding the Journey benefits.

To emphasise the increased focus on top-line growth, in 2018 we launched another two-year programme – the Fund & Grow share plan – with two KPIs: organic net revenue and operating profit growth.

Simultaneously, from 2018 the top-200 management team is also enrolled in the ordinary three-year LTI programme, the KPIs of which are identical to those for the Executive Board: TSR, EPS, net revenue growth and ROIC. Both programmes are share-based.



**Remuneration of executive directors**

The table below shows the total remuneration of the executive directors. The amount of remuneration in the form of unvested share awards does not reflect the value of shares

transferred to or cash equivalents received by the executive directors during the year. The amount only reflects the technical accounting charge to the income statement required by IFRS.

**Remuneration of executive directors**

DKK million	Cees 't Hart		Heine Dalsgaard	
	2018	2017	2018	2017
Fixed salary	12.3	12.0	7.4	7.3
Cash bonus	12.3	9.3	7.4	5.6
Other benefits	1.1	1.2	-	-
Special bonus <sup>1</sup>	-	-	-	3.1
<b>Remuneration settled in cash</b>	<b>25.7</b>	<b>22.5</b>	<b>14.8</b>	<b>16.0</b>
Other non-monetary benefits	0.1	0.1	0.3	0.3
Unvested share awards	26.7	20.6	13.3	9.0
<b>Remuneration, non-monetary and share-based</b>	<b>26.8</b>	<b>20.7</b>	<b>13.6</b>	<b>9.3</b>
Total cash and non-cash	52.5	43.2	28.4	25.3

<sup>1</sup> Special bonus covering remuneration waived from previous employer, in total DKK 15m, paid out in 2016 and 2017.

**Share ownership guidelines**

	Share ownership guideline as % of fixed salary	Actual % held at 31 Dec. 2018	Fair value of unvested options and performance shares as % of fixed salary (prior to deduction for tax and incidental costs)
Cees 't Hart	150%	41%	826%
Heine Dalsgaard	120%	70%	592%

**Executive directors' holdings of Carlsberg A/S shares**

		Number			DKK million	
		1 Jan. 2018	Additions	Sold	31 Dec. 2018	Market value
Cees 't Hart	B shares	7,200	-	-	7,200	4.99
Heine Dalsgaard	B shares	7,515	-	-	7,515	5.20

**Executive directors' granted share options and performance shares**

The table below outlines the share options and performance shares granted to the executive directors. Cees 't Hart did not exercise any share options in 2018.

The number of shares in the table is the maximum number of shares that can vest, based on an assessment of the extent to which the vesting conditions are expected to be met. The number of shares expected to vest is revised on a regular basis until vesting.

**Executive directors' granted share options and performance shares**

Grant year	Exercise year	Number		DKK million		
		1 Jan. 2018	Granted	31 Dec. 2018	For exercise 31 Dec.	Fair value 31 Dec.
<b>SHARE OPTIONS</b>						
<b>Cees 't Hart</b>						
2015	2018-2023	97,334	-	97,334	97,334	18
2016	2019-2024	17,650	-	17,650	-	2
<b>Total</b>		<b>114,984</b>	<b>-</b>	<b>114,984</b>	<b>97,334</b>	<b>20</b>
<b>PERFORMANCE SHARES</b>						
<b>Cees 't Hart</b>						
2016-2018	2019	14,709	-	14,709	-	9
2017-2019	2020	50,000	-	50,000	-	29
2018-2020	2021	-	44,263	44,263	-	27
<b>Total</b>		<b>64,709</b>	<b>44,263</b>	<b>108,972</b>	<b>-</b>	<b>65</b>
<b>Heine Dalsgaard</b>						
2016-2018	2019	10,370	-	10,370	-	7
2017-2019	2020	24,877	-	24,877	-	14
2018-2020	2021	-	22,023	22,023	-	13
<b>Total</b>		<b>35,247</b>	<b>22,023</b>	<b>57,270</b>	<b>-</b>	<b>34</b>
<b>FUNDING THE JOURNEY PERFORMANCE SHARES</b>						
<b>Cees 't Hart</b>						
2016-2018	2019	23,415	-	23,415	-	16
<b>Total</b>		<b>23,415</b>	<b>-</b>	<b>23,415</b>	<b>-</b>	<b>16</b>
<b>Heine Dalsgaard</b>						
2016-2018	2019	13,827	-	13,827	-	10
<b>Total</b>		<b>13,827</b>	<b>-</b>	<b>13,827</b>	<b>-</b>	<b>10</b>
<b>Total</b>		<b>252,182</b>	<b>66,286</b>	<b>318,468</b>	<b>97,334</b>	<b>145</b>

## REMUNERATION OF THE SUPERVISORY BOARD

### REMUNERATION POLICY

The remuneration of the Supervisory Board for 2018 was approved by the Annual General Meeting in March 2018.

The members of the Supervisory Board of Carlsberg A/S are remunerated for duties performed in the Company. The fees are reviewed, but not necessarily increased, each year, taking into account market practice with reference to an international comparator group as well as the need to attract and retain high-calibre individuals.

The remuneration of the Supervisory Board consists of a fixed annual base fee. The Chairman receives a single fee of four-and-a-half times the base fee and no additional fee for any committee work. The additional fee for committee work for other members of the Supervisory Board is shown in the table.

Members of the Supervisory Board are not included in share incentive programmes, retirement benefit plans or other schemes.

No agreements have been entered into concerning termination benefits, and no such payments were made in 2018.

### Remuneration of the Supervisory Board

DKK million	2018	2017
Flemming Besenbacher (Chairman of the Supervisory Board and of the Nomination Committee)	1.85	1.85
Lars Rebien Sørensen (Deputy Chairman)	1.09	1.09
Hans Andersen	0.41	0.41
Carl Bache	0.41	0.41
Magdi Batato	0.46	-
Richard Burrows (Chairman of the Remuneration Committee)	0.90	0.77
Donna Cordner (Chairman of the Audit Committee)	0.88	0.88
Nancy Cruickshank	0.20	0.43
Eva Vilstrup Decker	0.41	0.41
Elisabeth Fleuriot	-	0.14
Kees van der Graaf	0.15	0.73
Finn Lok	0.41	0.41
Erik Lund	0.41	0.41
Søren-Peter Fuchs Olesen	0.41	0.41
Peter Petersen	0.41	0.41
Nina Smith	0.54	0.41
Lars Stemmerik	0.41	0.41
<b>Total</b>	<b>9.35</b>	<b>9.58</b>

### REMUNERATION OF THE SUPERVISORY BOARD IN 2018

The fees for members of the Supervisory Board for the financial year 2018 are set out in the table below. The number of shares in Carlsberg A/S held by Supervisory Board members, including holdings of related parties, at the

beginning of the financial year and movements to 31 December 2018 are also shown below.

No member of the Supervisory Board owns shares or bonds in any of the subsidiaries or associates of Carlsberg A/S.

### Supervisory Board remuneration principles in 2018

	Base fee (DKK thousand)	Additional fee (as % of base fee)
All Supervisory Board members	412	
Chairman of the Supervisory Board <sup>1</sup>		350%
Deputy Chairman of the Supervisory Board		50%
Chairman of the Audit Committee		113%
Chairman of the Remuneration Committee and of the Nomination Committee		50%
Member of Board committee (per committee)		38%

<sup>1</sup> The Chairman does not receive any additional fees for committee work.

### Supervisory Board members' holdings of Carlsberg A/S shares

		Number			DKK million	
		1 Jan. 2018	Additions	Sold	31 Dec. 2018	Market value
Flemming Besenbacher	B shares	1,850	-	-	1,850	1.28
Lars Rebien Sørensen	B shares	-	-	-	-	-
Hans Andersen	B shares	1	-	-	1	-
Carl Bache	B shares	100	-	-100	-	-
Magdi Batato	B shares	-	101	-	101	0.07
Richard Burrows	B shares	2,040	-	-	2,040	1.41
Donna Cordner	B shares	-	-	-	-	-
Eva Vilstrup Decker	B shares	68	-	-	68	0.05
Finn Lok	B shares	-	-	-	-	-
Erik Lund	B shares	54	-	-	54	0.04
Søren-Peter Fuchs Olesen	B shares	652	-	-	652	0.45
Peter Petersen	B shares	-	-	-	-	-
Nina Smith	B shares	392	-	-	392	0.27
Lars Stemmerik	B shares	-	-	-	-	-
<b>Total</b>		<b>5,157</b>	<b>101</b>	<b>-100</b>	<b>5,158</b>	<b>3.57</b>

# SUPERVISORY BOARD



## FLEMMING BEISENBACHER CHAIRMAN (SINCE 2012)

Nationality: Danish  
Year of birth: 1952  
Appointed (until): 2005 (2019)

### BOARD FUNCTION

Non-executive, non-independent director.

### BOARD COMMITTEES

Nomination Committee (Chairman).

### PROFESSION

Professor, D.Sc., h.c. mult, FRSC; Chairman of the Board of Directors of the Carlsberg Foundation.

### NON-EXECUTIVE FUNCTIONS

Chairman of the Board of Directors of Aarhus Vand A/S and UNLEASH.



## LARS REBIEN SØRENSEN DEPUTY CHAIRMAN (SINCE 2015)

Nationality: Danish  
Year of birth: 1954  
Appointed (until): 2015 (2019)

### BOARD FUNCTION

Non-executive, independent director.

### BOARD COMMITTEES

Audit Committee, Remuneration Committee, Nomination Committee.

### PROFESSION

Non-executive board director.

### NON-EXECUTIVE FUNCTIONS

Chairman of the Board of Directors of the Novo Nordisk Foundation and Novo Holdings A/S. Member of the Board of Directors of Jungbunzlauer Suisse AG, Essity AB and Thermo Fisher Scientific Inc.

Lars Rebien Sørensen is not standing for re-election at the AGM in 2019.



## HANS ANDERSEN

Nationality: Danish  
Year of birth: 1955  
Appointed (until): 1998 (2022)

### BOARD FUNCTION

Employee representative.

### BOARD COMMITTEES

None.

### PROFESSION

Brewery worker, Carlsberg Supply Company Danmark A/S.

### NON-EXECUTIVE FUNCTIONS

None.



## CARL BACHE

Nationality: Danish  
Year of birth: 1953  
Appointed (until): 2014 (2019)

### BOARD FUNCTION

Non-executive, non-independent director.

### BOARD COMMITTEES

None.

### PROFESSION

Professor, Ph.D., Dr.Phil.; head of the Doctoral School of the Humanities at the University of Southern Denmark.

### NON-EXECUTIVE FUNCTIONS

Member of the Board of Directors of the Carlsberg Foundation and of the board of a publishing firm.



## MAGDI BATATO

Nationality: Swiss  
Year of birth: 1959  
Appointed (until): 2018 (2019)

### BOARD FUNCTION

Non-executive, independent director.

### BOARD COMMITTEES

Remuneration Committee.

### PROFESSION

Executive Vice President and Head of Operations at Nestlé S.A.

### NON-EXECUTIVE FUNCTIONS

Member of the Board of World Business Council for Sustainable Development.

# SUPERVISORY BOARD



**RICHARD BURROWS**

Nationality: Irish  
 Year of birth: 1946  
 Appointed (until): 2009 (2019)

**BOARD FUNCTION**

Non-executive, independent director.

**BOARD COMMITTEES**

Audit Committee, Remuneration Committee (Chairman).

**PROFESSION**

Non-executive board director.

**NON-EXECUTIVE FUNCTIONS**

Chairman of the Board of Directors of British American Tobacco and Craven House Capital. Member of the Board of Directors and Chairman of the Remuneration Committee of Rentokil Initial plc.



**DONNA CORDNER**

Nationality: American  
 Year of birth: 1956  
 Appointed (until): 2012 (2019)

**BOARD FUNCTION**

Non-executive, independent director.

**BOARD COMMITTEES**

Audit Committee (Chairman).

**PROFESSION**

Managing partner of OKM Capital.

**NON-EXECUTIVE FUNCTIONS**

Member of the Board of Directors of Lia Diagnostics.

Donna Cordner is not standing for re-election at the AGM in 2019.



**EVA VILSTRUP DECKER**

Nationality: Danish  
 Year of birth: 1964  
 Appointed (until): 2014 (2022)

**BOARD FUNCTION**

Employee representative.

**BOARD COMMITTEES**

None.

**PROFESSION**

Director, Carlsberg Breweries A/S.

**NON-EXECUTIVE FUNCTIONS**

None.



**FINN LOK**

Nationality: Danish  
 Year of birth: 1958  
 Appointed (until): 2014 (2022)

**BOARD FUNCTION**

Employee representative.

**BOARD COMMITTEES**

None.

**PROFESSION**

Ph.D., Senior Scientist, Carlsberg A/S.

**NON-EXECUTIVE FUNCTIONS**

None.



**ERIK LUND**

Nationality: Danish  
 Year of birth: 1964  
 Appointed (until): 2015 (2022)

**BOARD FUNCTION**

Employee representative.

**BOARD COMMITTEES**

None.

**PROFESSION**

Head Brewer, Carlsberg A/S.

**NON-EXECUTIVE FUNCTIONS**

None.

# SUPERVISORY BOARD



**SØREN-PETER FUCHS OLESEN**

Nationality: Danish  
Year of birth: 1955  
Appointed (until): 2012 (2019)

**BOARD FUNCTION**

Non-executive, non-independent director.

**BOARD COMMITTEES**

None.

**PROFESSION**

Professor, D.M.Sc; CEO of the Danish National Research Foundation.

**NON-EXECUTIVE FUNCTIONS**

Member of the Board of Directors of the Carlsberg Foundation.



**PETER PETERSEN**

Nationality: Danish  
Year of birth: 1969  
Appointed (until): 2010 (2022)

**BOARD FUNCTION**

Employee representative.

**BOARD COMMITTEES**

None.

**PROFESSION**

President of the Staff Association; Process Lead, Carlsberg Supply Company Danmark A/S.

**NON-EXECUTIVE FUNCTIONS**

None.



**NINA SMITH**

Nationality: Danish  
Year of birth: 1955  
Appointed (until): 2013 (2019)

**BOARD FUNCTION**

Non-executive, non-independent director.

**BOARD COMMITTEES**

Audit Committee.

**PROFESSION**

Professor, M.Sc. (Econ); non-executive director.

**NON-EXECUTIVE FUNCTIONS**

Member of the Board of Directors of the Carlsberg Foundation. Chairman of the Board of Directors of Forenet Kredit. Deputy Chairman of the Board of Directors of Nykredit Realkredit A/S and Nykredit Holding A/S.

Nina Smith is not standing for re-election at the AGM in 2019.



**LARS STEMMERIK**

Nationality: Danish  
Year of birth: 1956  
Appointed (until): 2010 (2019)

**BOARD FUNCTION**

Non-executive, non-independent director.

**BOARD COMMITTEES**

None.

**PROFESSION**

Professor, D.Sc; non-executive director.

**NON-EXECUTIVE FUNCTIONS**

Member of the Board of Directors of the Carlsberg Foundation.

## OUR MANAGEMENT TEAM

**EXECUTIVE** COMMITTEE

**CEES 'T HART**  
CEO

Nationality: Dutch  
Year of birth: 1958  
Appointed: 2015

**PRIOR EXPERIENCE**

Prior to joining the Carlsberg Group, Cees was CEO of the Dutch dairy company Royal FrieslandCampina, a position he had held since 2008. Prior to FrieslandCampina, Cees spent 25 years with Unilever, holding management positions across Eastern Europe, Western Europe and Asia. His last position at Unilever was as a member of the Europe Executive Board. Cees is a member of the Supervisory Board of KLM.



**HEINE DALSGAARD**  
CFO

Nationality: Danish  
Year of birth: 1971  
Appointed: 2016

**PRIOR EXPERIENCE**

Heine joined the Carlsberg Group in 2016 from ISS, one of the world's largest facility services companies. He went to ISS in 2013, prior to the company's IPO in 2014. Before ISS, he was Group CFO at Grundfos, a leading global pump manufacturer. Heine's previous experience includes various senior management and financial positions at companies such as Carpetland, Hewlett Packard and Arthur Andersen.



**JESSICA SPENCE**  
EXECUTIVE VICE PRESIDENT,  
GROUP COMMERCIAL

Nationality: British/Luxembourgish  
Year of birth: 1975  
Appointed: 2018

**PRIOR EXPERIENCE**

Jessica joined the Carlsberg Group in 2012 as Marketing Director, Asia region, and in 2014 was promoted to Vice President Commercial, Asia region. Since 2015, she has been globally responsible for the Group's commercial function, including marketing, sales, innovation and R&D. Jessica joined the Group from SABMiller, where she held several senior commercial positions in the UK, Russia, Slovakia and Poland.



**PHILIP HODGES**  
EXECUTIVE VICE PRESIDENT,  
GROUP SUPPLY CHAIN

Nationality: Swiss/British  
Year of birth: 1966  
Appointed: 2017

**PRIOR EXPERIENCE**

Philip joined the Carlsberg Group in February 2017. His most recent position was at Mondelēz, where he was Senior Vice President, heading up the integrated supply chain in Europe for Mondelēz International. His previous experience includes managerial positions with Kraft Foods in Europe, Asia and the USA within supply chain and finance.

# EXECUTIVE COMMITTEE



**CHRIS WARMOTH**  
EXECUTIVE VICE PRESIDENT,  
WESTERN EUROPE

Nationality: British  
Year of birth: 1959  
Appointed: 2014

#### PRIOR EXPERIENCE

Chris first joined the Carlsberg Group as Senior Vice President, Asia in 2014. During his tenure, he has headed up Funding the Journey and, most recently, Group Strategy. Previously, Chris worked for H.J. Heinz, where he held various senior management positions in Continental and Eastern Europe and the Far East, with his last position being Executive VP for Asia Pacific, Middle East and Africa. Prior to joining Heinz, Chris worked for The Coca-Cola Company and P&G.



**GRAHAM FEWKES**  
EXECUTIVE VICE PRESIDENT,  
ASIA

Nationality: British  
Year of birth: 1968  
Appointed: 2014

#### PRIOR EXPERIENCE

Graham joined the Carlsberg Group as Vice President Commercial, Asia in 2008, before becoming Senior Vice President of Group Sales, Marketing & Innovation in 2014. Graham has strong experience in the global drinks business, having served in a wide range of international sales and marketing roles for Grand Metropolitan plc, Foster's Brewing Group and S&N plc.



**JACEK PASTUSZKA**  
EXECUTIVE VICE PRESIDENT,  
EASTERN EUROPE

Nationality: Polish  
Year of birth: 1963  
Appointed: 2015

#### PRIOR EXPERIENCE

Jacek joined Carlsberg in 2009 and has been Managing Director of our businesses in Poland, Norway and, since 2015, Russia. Prior to joining the Group, Jacek was with P&G, where he held various sales positions in multiple markets, including customer team assignments with Wal-Mart in the USA and Tesco in Central Europe and Asia. Jacek has also been Commercial VP for Danone in Poland and the Baltics, and General Manager for AIG operations in Poland.

## SHARE INFORMATION

# INFORMATION FOR SHAREHOLDERS

Carlsberg A/S is listed on Nasdaq Copenhagen. The Company has around 40,000 registered shareholders.

The Company has two share classes: Carlsberg A and Carlsberg B. Each A share carries 20 votes, while each B share carries two votes and is entitled to a preferential dividend. The B share is included in the Nasdaq OMX Nordic Large Cap and OMXC20 blue-chip indices.

The Carlsberg B share price was DKK 692.6 at 31 December 2018. This was a decline of

7% during the year, while the OMXC20 share index declined by 13%.

As a supplement to its Copenhagen listing, the Company has established a sponsored level 1 ADR (American Depository Receipt) programme with J.P. Morgan. The ADRs trade over-the-counter in the USA under the symbol CABGY. More information on the ADR programme is available on our investor website.

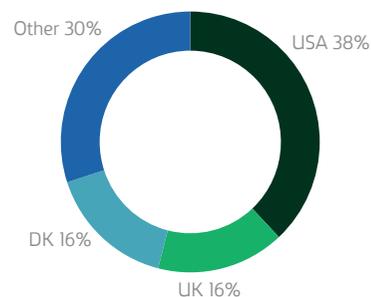
## MAJOR SHAREHOLDERS

At 31 December 2018, the Company's largest shareholder was the Carlsberg Foundation with

## Carlsberg B share and OMXC20 share index development 2018



## Shareholder geographic split (% of free float)



30% of the capital and 75% of the votes. In accordance with section 29 of the Danish Securities Trading Act, Massachusetts Financial Services Company (Boston, USA) has notified Carlsberg that it too owns more than 5% of the share capital.

## DIVIDEND POLICY

The Carlsberg Group's dividend policy stipulates an adjusted payout ratio of around 50%. In addition, the Company has launched a share buy-back programme. For more information, see page 34.

## INVESTOR RELATIONS

The Carlsberg Group aims to give shareholders and the market the best possible insight into factors considered relevant for ensuring market-efficient and fair pricing of the Company's shares. This is achieved through the quality, consistency and continuity of the information provided to the market, which is

**The Annual General Meeting of Carlsberg A/S will be held on 13 March 2019 at Ny Carlsberg Glyptotek, Dantes Plads 7, Copenhagen.**

handled by the Group's Investor Relations department.

We observe a four-week silent period prior to the publication of the annual and half-year reports, and a two-week silent period prior to the Q1 and Q3 trading statements.

## GROUP WEBSITE

www.carlsberggroup.com provides comprehensive information about the Group and its shares and bonds, including company announcements, annual and quarterly reports, share prices and financial data, investor presentations, webcasts and transcripts, and a financial and events calendar.

At the end of 2018, a total of 31 analysts had coverage of the Company. Their names and consensus estimates can be found on the website.

## Share information

Share class	A	B	Total
Number of shares	33,699,252	118,857,554	152,556,806
Carlsberg Foundation	33,061,264	13,202,708	46,263,972
Votes per share	20	2	
Par value	DKK 20	DKK 20	
Share price, year-end	DKK 670.0	DKK 692.6	
Proposed dividend per share	DKK 18.0	DKK 18.0	

## FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements, including statements about the Group's sales, revenues, earnings, spending, margins, cash flow, inventory, products, actions, plans, strategies, objectives and guidance with respect to the Group's future operating results. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate or imply future results, performance or achievements, and may contain the words "believe, anticipate, expect, estimate, intend, plan, project, will be, will continue, will result, could, may, might", or any variations of such words or other words with similar meanings. Any such statements are subject to risks and uncertainties that could cause the Group's actual results to differ materially from the results discussed in such forward-looking statements. Prospective information is based on management's then current expectations or

forecasts. Such information is subject to the risk that such expectations or forecasts, or the assumptions underlying such expectations or forecasts, may change. The Group assumes no obligation to update any such forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements. Some important risk factors that could cause the Group's actual results to differ materially from those expressed in its forward-looking statements include, but are not limited to: economic and political uncertainty (including interest rates and exchange rates), financial and regulatory developments, demand for the Group's products, increasing industry consolidation, competition from other breweries, the availability and pricing of raw materials and packaging materials, cost of energy, production- and distribution-related

issues, information technology failures, breach or unexpected termination of contracts, market-driven price reductions, market acceptance of new products, changes in consumer preferences, launches of rival products, stipulation of fair value in the opening balance sheet of acquired entities, litigation, environmental issues and other unforeseen factors. New risk factors can arise, and it may not be possible for management to predict all such risk factors, nor to assess the impact of all such risk factors on the Group's business or the extent to which any individual risk factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statement. Accordingly, forward-looking statements should not be relied on as a prediction of actual results.

# CONSOLIDATED FINANCIAL STATEMENTS

## CONSOLIDATED FINANCIAL STATEMENTS

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## INCOME STATEMENT

DKK million	Section	2018	2017
Revenue		88,970	85,789
Excise duties on beer and soft drinks		-26,467	-25,134
<b>Net revenue</b>	1.1	<b>62,503</b>	<b>60,655</b>
Cost of sales	1.2.1	-31,283	-30,447
<b>Gross profit</b>		<b>31,220</b>	<b>30,208</b>
Sales and distribution expenses	1.2.3	-17,474	-17,144
Administrative expenses		-4,615	-4,563
Other operating activities, net	1.2.4	68	113
Share of profit after tax of associates and joint ventures	5.4	130	262
<b>Operating profit before special items</b>		<b>9,329</b>	<b>8,876</b>
Special items, net	3.1	-88	-4,565
Financial income	4.1	358	511
Financial expenses	4.1	-1,080	-1,299
<b>Profit before tax</b>		<b>8,519</b>	<b>3,523</b>
Income tax	6.1	-2,386	-1,458
<b>Consolidated profit</b>		<b>6,133</b>	<b>2,065</b>
<b>Attributable to</b>			
Non-controlling interests	1.1	824	806
Shareholders in Carlsberg A/S (net profit)		5,309	1,259
<b>DKK</b>			
<b>Earnings per share</b>			
Earnings per share of DKK 20	8.1	34.8	8.3
Diluted earnings per share of DKK 20		34.7	8.2

## STATEMENT OF COMPREHENSIVE INCOME

DKK million	Section	2018	2017
<b>Consolidated profit</b>		<b>6,133</b>	<b>2,065</b>
<b>Other comprehensive income</b>			
Retirement benefit obligations	7.4	392	1,266
Share of other comprehensive income in associates and joint ventures	5.4	4	-12
Income tax	6.1	-33	-141
<b>Items that will not be reclassified to the income statement</b>		<b>363</b>	<b>1,113</b>
Foreign exchange adjustments of foreign entities	4.1	-2,754	-3,842
Fair value adjustments of hedging instruments	4.1	-640	-305
Income tax	6.1	85	25
<b>Items that may be reclassified to the income statement</b>		<b>-3,309</b>	<b>-4,122</b>
<b>Other comprehensive income</b>		<b>-2,946</b>	<b>-3,009</b>
<b>Total comprehensive income</b>		<b>3,187</b>	<b>-944</b>
<b>Attributable to</b>			
Non-controlling interests		855	499
Shareholders in Carlsberg A/S		2,332	-1,443

## STATEMENT OF FINANCIAL POSITION

DKK million	Section	31 Dec. 2018	31 Dec. 2017
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	2.2, 2.3	66,868	67,793
Property, plant and equipment	2.2, 2.3	25,394	24,325
Investments in associates and joint ventures	5.4	4,562	4,266
Receivables	1.5	1,097	952
Deferred tax assets	6.2	1,693	1,663
<b>Total non-current assets</b>		<b>99,614</b>	<b>98,999</b>
<b>Current assets</b>			
Inventories	1.2.1	4,435	3,834
Trade receivables	1.5	5,084	4,611
Tax receivables		213	181
Other receivables	1.5	1,925	2,138
Prepayments		840	1,026
Cash and cash equivalents	4.4.2	5,589	3,462
<b>Total current assets</b>		<b>18,086</b>	<b>15,252</b>
<b>Total assets</b>		<b>117,700</b>	<b>114,251</b>

DKK million	Section	31 Dec. 2018	31 Dec. 2017
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital	4.3.2	3,051	3,051
Reserves		-36,837	-33,483
Retained earnings		79,088	77,362
<b>Equity, shareholders in Carlsberg A/S</b>		<b>45,302</b>	<b>46,930</b>
Non-controlling interests		2,587	2,595
<b>Total equity</b>		<b>47,889</b>	<b>49,525</b>
<b>Non-current liabilities</b>			
Borrowings	4.2, 4.4.1	16,750	23,340
Retirement benefit obligations and similar obligations	7.4	2,908	3,351
Deferred tax liabilities	6.2	5,659	5,601
Provisions	3.2	3,827	3,611
Other liabilities	5.3	6,186	3,757
<b>Total non-current liabilities</b>		<b>35,330</b>	<b>39,660</b>
<b>Current liabilities</b>			
Borrowings	4.2, 4.4.1	7,233	849
Trade payables		16,199	13,474
Deposits on returnable packaging materials	1.2.2	1,583	1,576
Provisions	3.2	1,100	591
Tax payables		878	931
Other liabilities		7,488	7,645
<b>Total current liabilities</b>		<b>34,481</b>	<b>25,066</b>
<b>Total liabilities</b>		<b>69,811</b>	<b>64,726</b>
<b>Total equity and liabilities</b>		<b>117,700</b>	<b>114,251</b>

## STATEMENT OF CHANGES IN EQUITY

DKK million	Section	Shareholders in Carlsberg A/S					Total	Non-controlling interests	Total equity
		Share capital	Currency translation	Hedging reserves	Total reserves	Retained earnings			
<b>2018</b>									
<b>Equity at 1 January</b>		<b>3,051</b>	<b>-32,902</b>	<b>-581</b>	<b>-33,483</b>	<b>77,362</b>	<b>46,930</b>	<b>2,595</b>	<b>49,525</b>
<b>Consolidated profit</b>		-	-	-	-	<b>5,309</b>	<b>5,309</b>	<b>824</b>	<b>6,133</b>
<b>Other comprehensive income</b>		-	<b>-3,214</b>	<b>-140</b>	<b>-3,354</b>	<b>377</b>	<b>-2,977</b>	<b>31</b>	<b>-2,946</b>
<b>Total comprehensive income for the year</b>		-	<b>-3,214</b>	<b>-140</b>	<b>-3,354</b>	<b>5,686</b>	<b>2,332</b>	<b>855</b>	<b>3,187</b>
Acquisition/disposal of treasury shares	4.3.2	-	-	-	-	44	44	-	44
Settlement of share-based payments	4.3.2	-	-	-	-	-94	-94	-	-94
Share-based payments	7.3	-	-	-	-	171	171	3	174
Dividends paid to shareholders	4.3.1	-	-	-	-	-2,439	-2,439	-869	-3,308
Non-controlling interests		-	-	-	-	-1,642	-1,642	-	-1,642
Acquisition of entities	5.2	-	-	-	-	-	-	3	3
<b>Total changes in equity</b>		-	<b>-3,214</b>	<b>-140</b>	<b>-3,354</b>	<b>1,726</b>	<b>-1,628</b>	<b>-8</b>	<b>-1,636</b>
<b>Equity at 31 December</b>		<b>3,051</b>	<b>-36,116</b>	<b>-721</b>	<b>-36,837</b>	<b>79,088</b>	<b>45,302</b>	<b>2,587</b>	<b>47,889</b>
<b>2017</b>									
<b>Equity at 1 January</b>		<b>3,051</b>	<b>-29,080</b>	<b>-611</b>	<b>-29,691</b>	<b>77,451</b>	<b>50,811</b>	<b>2,839</b>	<b>53,650</b>
<b>Consolidated profit</b>		-	-	-	-	<b>1,259</b>	<b>1,259</b>	<b>806</b>	<b>2,065</b>
<b>Other comprehensive income</b>		-	<b>-3,822</b>	<b>30</b>	<b>-3,792</b>	<b>1,090</b>	<b>-2,702</b>	<b>-307</b>	<b>-3,009</b>
<b>Total comprehensive income for the year</b>		-	<b>-3,822</b>	<b>30</b>	<b>-3,792</b>	<b>2,349</b>	<b>-1,443</b>	<b>499</b>	<b>-944</b>
Acquisition/disposal of treasury shares	4.3.2	-	-	-	-	-118	-118	-	-118
Settlement of share-based payments	4.3.2	-	-	-	-	-38	-38	-	-38
Share-based payments	7.3	-	-	-	-	33	33	-	33
Dividends paid to shareholders	4.3.1	-	-	-	-	-1,525	-1,525	-738	-2,263
Non-controlling interests		-	-	-	-	-790	-790	-2	-792
Disposal of entities	5.2	-	-	-	-	-	-	-3	-3
<b>Total changes in equity</b>		-	<b>-3,822</b>	<b>30</b>	<b>-3,792</b>	<b>-89</b>	<b>-3,881</b>	<b>-244</b>	<b>-4,125</b>
<b>Equity at 31 December</b>		<b>3,051</b>	<b>-32,902</b>	<b>-581</b>	<b>-33,483</b>	<b>77,362</b>	<b>46,930</b>	<b>2,595</b>	<b>49,525</b>

## STATEMENT OF CASH FLOWS

DKK million	Section	2018	2017
Operating profit before special items		9,329	8,876
Depreciation and amortisation		4,064	4,581
Impairment losses <sup>1</sup>		27	126
<b>Operating profit before depreciation, amortisation and impairment losses<sup>1</sup></b>		<b>13,420</b>	<b>13,583</b>
Other non-cash items		143	-279
Change in trade working capital		1,908	848
Change in other working capital <sup>2</sup>		52	388
Restructuring costs paid		-238	-364
Interest etc. received		153	156
Interest etc. paid		-1,016	-564
Income tax paid		-2,375	-1,934
<b>Cash flow from operating activities</b>	1.4	<b>12,047</b>	<b>11,834</b>
Acquisition of property, plant and equipment and intangible assets		-4,017	-4,053
Disposal of property, plant and equipment and intangible assets		254	160
Change in on-trade loans <sup>2</sup>	1.4	-192	40
<b>Total operational investments</b>		<b>-3,955</b>	<b>-3,853</b>
<b>Free operating cash flow</b>		<b>8,092</b>	<b>7,981</b>
Acquisition and disposal of subsidiaries, net	5.2	-974	268
Acquisition and disposal of associates and joint ventures, net	5.2	-1,491	242
Acquisition and disposal of financial investments, net		3	10
Change in financial receivables		-36	-54
Dividends received		572	208
<b>Total financial investments</b>		<b>-1,926</b>	<b>674</b>
Other investments in property, plant and equipment		-10	-
Disposal of other property, plant and equipment		-	25
<b>Total other activities<sup>3</sup></b>		<b>-10</b>	<b>25</b>
<b>Cash flow from investing activities</b>		<b>-5,891</b>	<b>-3,154</b>
<b>Free cash flow</b>		<b>6,156</b>	<b>8,680</b>
Shareholders in Carlsberg A/S	4.3.2	-2,489	-1,681
Non-controlling interests	4.3.2	-1,186	-740
External financing	4.4.1	-123	-5,239
<b>Cash flow from financing activities</b>		<b>-3,798</b>	<b>-7,660</b>
<b>Net cash flow</b>		<b>2,358</b>	<b>1,020</b>
Cash and cash equivalents at 1 January <sup>4</sup>		3,120	2,348
Foreign exchange adjustment of cash and cash equivalents		-44	-248
<b>Cash and cash equivalents at 31 December<sup>4</sup></b>	4.4.2	<b>5,434</b>	<b>3,120</b>

<sup>1</sup> Impairment losses excluding those reported in special items, cf. section 3.1.

<sup>2</sup> Impacted by a reclassification of on-trade loans from other receivables of DKK 238m.

<sup>3</sup> Other activities cover real estate, separate from beverage activities.

<sup>4</sup> Cash and cash equivalents less bank overdrafts.

SECTION 1

# OPERATING ACTIVITIES

## 62.5bn

NET REVENUE (DKK)

Net revenue grew by 3.0%, amounting to DKK 62,503m (2017: DKK 60,655m). The net revenue growth was positively impacted by an increase in volumes, a positive price/mix development and acquisitions, with adverse currency movements partly offsetting this impact.

Net revenue growth (%)



## 50.0%

GROSS MARGIN

Cost of goods sold per hl declined by approximately 3%, negatively impacted by higher input costs and mix, while positively impacted by currencies. The solid price/mix and ongoing efficiency improvements led to a gross margin improvement of 20bp to 50.0%.

## 9.3bn

OPERATING PROFIT (DKK)

Operating expenses were impacted by investments in the SAIL'22 priorities and grew by 2%. As a percentage of net revenue, operating expenses declined by 45bp. Excluding marketing expenses, operating expenses declined by 1%.

Operating profit before special items was DKK 9,329m (2017: DKK 8,876m). The 5.1% growth was driven by organic growth of 11.0%, which was partly offset by a negative currency impact of 5.6% and a negative net acquisition impact of 0.3%. Western Europe and Asia delivered positive operating profit growth, while

growth was flat in Eastern Europe, where 11.3% organic growth was offset by adverse currencies. Reported operating margin improved by 30bp to 14.9% (2017: 14.6%).

Operating profit growth (%)



## 6.1bn

NET PROFIT (DKK)

Special items, net, amounted to DKK -88m (2017: DKK -4,565m, impacted by impairment of the Baltika brand in Russia). Special items were particularly impacted by measures related to SAIL'22 initiatives in Western Europe.

Tax totalled DKK -2,386m (2017: DKK -1,458m). The effective tax rate was 28.0% (2017: 41.4% but 29.0% adjusted for the aforementioned brand impairment).

Consolidated profit was DKK 6,133m compared to DKK 2,065m in 2017. Consolidated profit was driven by operating profit growth, reduced special items, lower financial expenses and a lower effective tax rate compared with 2017.

Non-controlling interests' share of consolidated profit totalled DKK 824m (2017: DKK 806m).

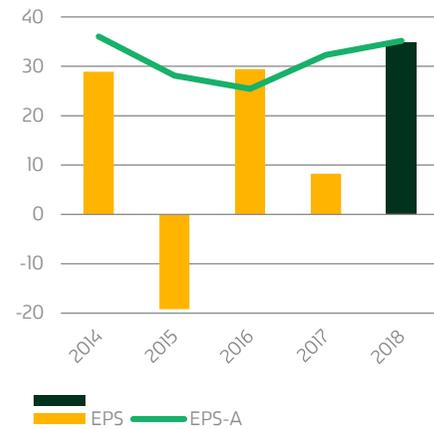
The Carlsberg Group's share of consolidated profit was DKK 5,309m (2017: DKK 1,259m).

# 34.8

## EARNINGS PER SHARE (DKK)

Earnings per share were DKK 34.8 (2017: DKK 8.3). Adjusted for special items after tax, earnings per share were DKK 35.2 (2017: DKK 32.3), corresponding to a 9% improvement.

Earnings per share (DKK)



# 6.2bn

## FREE CASH FLOW (DKK)

Free cash flow amounted to DKK 6,156m (2017: DKK 8,680m), while the operating free cash flow amounted to DKK 8,092m (2017: DKK 7,981m).

The free cash flow included financial investments of DKK 1.9bn related to the Group's increased ownership in a number of subsidiaries and associates such as Cambrew in Cambodia and Super Bock in Portugal of DKK 2.5bn less dividends received from associates of DKK 0.6bn.

Operating profit before depreciation, amortisation and impairment losses (EBITDA) grew organically by 3.6%. Reported EBITDA was adversely impacted by negative currency movements and declined by 1.2%.

The strong operating cash flow was positively impacted by the change in trade working capital of DKK +1,908m (2017: DKK +848m). Average trade working capital to net revenue improved to -16.0% compared to -14.0% for 2017 (MAT). The change in other working capital was DKK +52m (2017: DKK +388m), positively impacted by a reclassification of certain on-trade loans of DKK 238m.

Restructuring costs paid amounted to DKK -238m (2017: DKK -364m). Net interest etc. paid amounted to DKK -863m (2017: DKK -408m). The payment was higher because 2017 benefited from a large positive impact from the settlement of financial instruments.

Income tax paid was DKK -2,375m (2017: DKK -1,934m). The increase from 2017 was due to certain one-off tax payments and the consolidation of Cambrew in Cambodia.

Cash flow from operating activities was DKK 12,047m against DKK 11,834m in 2017.

Cash flow from investing activities was DKK -5,891m against DKK -3,154m in 2017. Operational investments totalled DKK -3,955m (2017: DKK -3,853m), while total financial investments amounted to DKK -1,926m (2017: DKK +674m) due to the acquisitions during the year.

Cash flow from other activities amounted to DKK -10m (2017: DKK +25m).

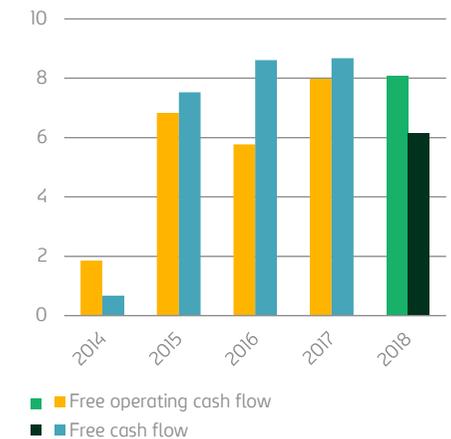
Including acquisition of non-controlling interests, cf. below, cash flow to investments in entities amounted to DKK 2.8bn.

# 1.2bn

## NON-CONTROLLING INTERESTS (DKK)

Cash flow from acquisition of non-controlling interests in Olympic Brewery in Greece and Brewery Alivaria in Belarus amounted to DKK 355m, and dividends paid to non-controlling interests amounted to DKK 831m.

Free cash flow (DKKbn)



## SECTION 1.1

## SEGMENTATION OF OPERATIONS

## REVENUE

As of 1 January 2018, the Group implemented IFRS 15 “Revenue from Contracts with Customers”. Comparative figures for 2017 have been restated accordingly.

The Group’s net revenue arises primarily from the sale of beverages to our customers. Revenue from brand licensing, sale of by-products and other revenue in aggregate accounts for around 1% of the Group’s gross revenue and is not seen as a material source of revenue. Net revenue grew by DKK 1,848m in 2018 and was positively impacted by the increase in volumes, improved price/mix across the regions and the acquisition of Cambrew.

Not allocated net revenue, DKK 42m (2017: DKK 70m), consisted of DKK 1,362m (2017: DKK 1,438m) net revenue and DKK -1,320m (2017: DKK -1,368m) from eliminations of sales between the geographical segments.

## Segmentation of income statement

## DKK million

	Western Europe	Asia	Eastern Europe	Not allocated	Beverages, total	Non-beverage	Carlsberg Group, total
<b>2018</b>							
<b>Net revenue</b>	<b>36,151</b>	<b>15,530</b>	<b>10,780</b>	<b>42</b>	<b>62,503</b>	<b>-</b>	<b>62,503</b>
Total cost	-30,847	-12,293	-8,558	-1,489	-53,187	-117	-53,304
Share of profit after tax of associates and joint ventures	121	-73	-	4	52	78	130
<b>Operating profit before special items</b>	<b>5,425</b>	<b>3,164</b>	<b>2,222</b>	<b>-1,443</b>	<b>9,368</b>	<b>-39</b>	<b>9,329</b>
Special items, net					-88	-	-88
Financial items, net					-718	-4	-722
<b>Profit before tax</b>					<b>8,562</b>	<b>-43</b>	<b>8,519</b>
Income tax					-2,395	9	-2,386
<b>Consolidated profit</b>					<b>6,167</b>	<b>-34</b>	<b>6,133</b>
Operating margin	15.0%	20.4%	20.6%		15.0%		14.9%
<b>2017</b>							
<b>Net revenue</b>	<b>35,716</b>	<b>13,944</b>	<b>10,925</b>	<b>70</b>	<b>60,655</b>	<b>-</b>	<b>60,655</b>
Total cost	-30,754	-11,088	-8,705	-1,377	-51,924	-117	-52,041
Share of profit after tax of associates and joint ventures	182	49	-	-	231	31	262
<b>Operating profit before special items</b>	<b>5,144</b>	<b>2,905</b>	<b>2,220</b>	<b>-1,307</b>	<b>8,962</b>	<b>-86</b>	<b>8,876</b>
Special items, net					-4,615	50	-4,565
Financial items, net					-774	-14	-788
<b>Profit before tax</b>					<b>3,573</b>	<b>-50</b>	<b>3,523</b>
Income tax					-1,485	27	-1,458
<b>Consolidated profit</b>					<b>2,088</b>	<b>-23</b>	<b>2,065</b>
Operating margin	14.4%	20.8%	20.3%		14.8%		14.6%

## Geographical allocation of net revenue

DKK million	2018	2017
Denmark (Carlsberg A/S' domicile)	4,614	4,366
China	7,509	6,654
Russia	7,507	8,113
Other countries	42,873	41,522
<b>Total</b>	<b>62,503</b>	<b>60,655</b>

The DKK value of net revenue in Russia was impacted by the decrease in the average RUB/DKK rate of 11.2% in 2018.

## SECTION 1.1 (CONTINUED)

## SEGMENTATION OF OPERATIONS

## OPERATING PROFIT BEFORE SPECIAL ITEMS

Not allocated operating profit before special items, DKK -1,443m (2017: DKK -1,307m), consisted of DKK -1,381m (2017: DKK -1,242m) relating to central costs not managed by the regions, including costs of developing branding activities to support the SAIL'22 initiatives, general costs of headquarter functions and DKK -62m (2017: DKK -65m) from various eliminations.

Compared with 2017, central costs increased due to investments in growth initiatives as part of SAIL'22.

## VOLUMES

As of 1 January 2018, the Group decided to change the definition of volumes to include only the Group's sales of beverages in consolidated entities. Compared with 2017, the new definition thus excludes volumes in associates and joint ventures. Comparative figures for 2017 have been restated accordingly.

Total volumes grew organically by 4.8%, driven by growth in all three regions. Reported volume growth was 5.3%, positively impacted by the increased ownership in Cambrew and negatively impacted by the fact that the German wholesaler Nordic Getränke, which was disposed of in April 2017, did not contribute to the reported volume in 2018.

## Group financial performance

Volumes (million hl)	2017	Change			2018	Change Reported
		Organic	Acq., net	FX		
Beer	107.1	4.4%	0.5%	-	112.3	4.9%
Other beverages	19.2	6.9%	0.8%	-	20.8	7.7%
<b>Total volume</b>	<b>126.3</b>	<b>4.8%</b>	<b>0.5%</b>	<b>-</b>	<b>133.1</b>	<b>5.3%</b>
<b>DKK million</b>						
Net revenue	60,655	6.5%	0.1%	-3.6%	62,503	3.0%
Operating profit before special items	8,876	11.0%	-0.3%	-5.6%	9,329	5.1%
Operating margin (%)	14.6				14.9	30bp

## NON-CONTROLLING INTERESTS

## Non-controlling interests' share of profit for the year

DKK million	2018	2017
Lao Brewery	292	304
Chongqing Brewery Group	236	230
Carlsberg Malaysia Group	229	182
Asia, other	52	79
Other regions	15	11
<b>Total</b>	<b>824</b>	<b>806</b>

## ! ACCOUNTING ESTIMATES AND JUDGEMENTS

The Group considers all terms and activities in contracts with customers in order to determine the performance obligation, the transaction price and the allocation of the transaction price and, as a result, how revenue is recognised.

If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring goods to the customer. The variable consideration is estimated at contract inception based on expected sales volumes using historical and year-to-date sales figures and other current information about trading with the individual customer or with a group of customers.

The Group estimates discounts using either the expected value method or the most likely amount method depending on which method better predicts the amount of consideration to which it will be entitled.

The most likely amount method is used for contracts with a single contract sum, while the expected value method is used for contracts with more than one threshold due to the complexity and the activities agreed with the individual customer during the year.

Certain contracts related to specific major events which are held within such a short time period that it is not possible to sell all the goods during the event (e.g. football matches) provide the customer with a right to return the goods within a specified period.

The Group uses the expected value method to estimate the goods that will not be returned, as this method best predicts the amount of variable consideration to which the Group will be entitled. For goods that are expected to be returned, the Group recognises a refund liability instead of revenue.

Management makes judgements when deciding whether supporting activities with a customer should be classified as a discount or a marketing expense. Generally, marketing activities with the individual customer should be seen as a discount, whereas costs related to broader marketing activities are classified as marketing expenses.

The classification of duties, taxes and fees paid to local authorities or brewery organisations etc. requires accounting estimates and judgements to be made by management.

Locally imposed duties, taxes and fees are typically based on product type, alcohol content, consumption of certain raw materials, such as glue, plastic or metal in caps, and energy consumption. These are classified as either sales-related duties, and deducted from revenue, or as related to the input/use of goods in production, distribution etc., and recognised in the relevant line item. The type of authority or organisation imposing the duty, tax or fee and the objective of these are key factors when determining the classification.

Whether the Group is acting as a principal or an agent is evaluated by management on a country-by-country basis. The Group has concluded that it is the principal in its revenue arrangements because it controls the goods before transferring them to the customer.

## SECTION 1.1 (CONTINUED)

**SEGMENTATION OF OPERATIONS****ACCOUNTING POLICIES****Revenue**

Revenue from contracts with customers comprises sales of goods, royalty income, rental income from non-stationary equipment, service fees and sales of by-products.

Revenue from the sale of own-produced finished goods, goods for resale (third-party products) and by-products is recognised at the point in time when the control of goods and products is transferred to the customer, which is generally upon delivery. For contracts providing the customer with a right of return within a specified period, the Group considers the timing of recognition.

Royalty and licence fees are recognised when earned according to the terms of the licence agreements.

Revenue from contracts with customers is measured at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods. Amounts disclosed as net revenue exclude discounts, VAT and other duties. Excise duties on beer and soft drinks are disclosed separately from revenue.

The Group considers whether contracts include other promises that constitute separate performance obligations and to which a portion of the transaction price needs to be allocated. In determining the transaction price, the Group considers the effects of variable consideration. No element of financing is deemed present, as payment is generally made on the basis of cash on delivery or up to 30 days of credit.

**Variable consideration**

The Group pays various discounts and fees depending on the nature of the customer and business.

Customer discounts comprise off-invoice discounts, volume- and activity-related discounts, including specific promotion prices offered, and other discounts. Furthermore, customer discounts include the difference between the present value and the nominal amount of on-trade loans to customers, cf. section 1.5.

Off-invoice discounts arise from sales transactions where the customer immediately receives a reduction in the sales price. This also includes cash discounts and incentives for early payments.

Volume- and activity-related discounts is a broad term covering incentives for customers to sustain business with the Group over a longer time and may be related to a current campaign or a sales target measured in volumes or total value. Examples include discounts paid as a lump sum, discounts for meeting all or certain sales targets or for exceeding targets, or progressive discounts offered in step with increasing sales to a customer.

Other discounts include listing fees, i.e. fees for certain listings on shelves, in coolers or in favourable store locations, as such specific promotions are closely related to the volumes sold.

**Segment information**

The Group's beverage activities are segmented according to the three geographical regions where sales take place. These regions make up the Group's reportable segments. The non-beverage activities are managed separately and therefore not segmented geographically but shown separately.

The segmentation reflects the geographical and strategic management, decision and reporting structure applied by the Executive Committee for monitoring the Group's strategic and financial targets. Segments are managed based on business performance measured as operating profit before special items.

Not allocated comprises income and expenses incurred for ongoing support of the Group's overall operations, strategic development and driving efficiency programmes. The expenses include costs of running central functions and marketing, including global sponsorships.

The geographical allocation of net revenue is based on the selling entities' domicile and comprises countries individually accounting for more than 10% of the Group's consolidated net revenue as well as the domicile country.

Decisions on restructurings, acquisition and divestment of entities included in special items as well as on financing (financial income and expenses) and tax planning (income tax) are made based on information for the Group as a whole and therefore not segmented.

**Reported figures**

Reported figures are analysed by looking at the impact of organic growth, net acquisitions and foreign exchange effects. The net acquisition effect is calculated as the effect of acquisitions and divestments, including any share obtained from an increase/decrease in ownership of associates and joint ventures, for a 12-month period from the acquisition/divestment date. The foreign exchange effect is the difference between the figures from the current reporting period translated at the exchange rates applying to the previous reporting period and the figures for the current reporting period translated at the current exchange rates. Organic growth is the remaining growth that is not related to acquisitions, divestments or foreign exchange effects.

## SECTION 1.2

# OPERATING EXPENSES, INVENTORIES AND DEPOSIT LIABILITIES

## 1.2.1 COST OF SALES AND INVENTORIES

**Cost of sales** increased by 3% and was affected by the organic increase in volumes across all three regions and by the acquisition of Cambrew. Organically, cost of sales per hl increased by approximately 1%, mainly due to higher input costs.

### Cost of sales

DKK million	2018	2017
Cost of materials	17,252	16,147
Direct staff costs	1,365	1,357
Amortisation and depreciation	2,849	3,263
Indirect production overheads	4,191	4,163
Purchased finished goods and other costs	5,626	5,517
<b>Total</b>	<b>31,283</b>	<b>30,447</b>

**Inventories** increased by 16% compared with 2017, impacted by inventory build-up prior to the festive season in Asia, which is earlier in 2019 than in 2018, and the consolidation of Cambrew. Cost of raw materials was furthermore impacted by the higher purchase price of grain in 2018.

### Inventories

DKK million	2018	2017
Raw materials	1,891	1,625
Work in progress	308	269
Finished goods	2,236	1,940
<b>Total</b>	<b>4,435</b>	<b>3,834</b>

**Commodity risks** are associated in particular with purchasing of cans (aluminium), malt (barley) and energy. The management of commodity risks is coordinated centrally, and aimed at achieving stable and predictable prices in the medium term and avoiding capital and liquidity being tied up unnecessarily.

As the underlying markets for the specified categories vary, so does the way in which they are hedged against price increases.

The most common form of hedging is fixed-price purchase agreements in local currencies with suppliers.

It is Group policy to fix the prices of 70% of malt (barley) purchases for a given year no later than at the end of the third quarter of the

### Hedging of raw material price risk

#### DKK million

	Sensitivity assuming 100% efficiency			Time of maturity		
	% change	Effect on OCI	Tonnes purchased	Average price (DKK)	2019	2020
<b>2018</b>						
Aluminium	10%	112	93,296	13,095	71,531	21,765
<b>2017</b>						
Aluminium	10%	93	66,424	13,066	66,424	-

previous year and to hedge up to around 90% early in the following year. The main part of the exposure for the Group for 2018 was therefore hedged through fixed-price purchase agreements entered into during 2017. Likewise, the majority of the exposure for 2019 was hedged during 2018. The percentage that is hedged or at fixed prices is higher for Western Europe and Eastern Europe than for Asia, which is partly due to the timing of the harvest season in the southern hemisphere.

In the majority of purchase agreements for cans, the Group's purchase price is variable and based on the global market price of aluminium (London Metal Exchange, LME). The Group is thereby able to hedge the underlying aluminium price risk applying a hedge ratio of 1:1.

In 2018, the majority of the aluminium price risk was hedged with financial instruments or with fixed prices via the suppliers to the Group. The same has been done for 2019. The fair values of the financial instruments are specified in section 4.8.

### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

At least once a year, management assesses whether the standard cost of inventories approximates the actual cost. During the year, the standard cost is revised if it deviates by more than 5% from the actual cost.

Management also assesses the impact on the standard cost of government and other grants received to fund operating activities. This includes assessing the terms and conditions of grants received and the risk of any repayment.

Funding and grants are recognised in the income statement in the same period as the activities to which they relate.

Indirect production overheads are calculated on the basis of relevant assumptions as to capacity utilisation, production time and other factors.

The calculation of the net realisable value of inventories is relevant to packaging materials, point-of-sale materials and spare parts. The net realisable value is normally not calculated for beer and soft drinks due to their limited shelf-life, which means that slow-moving goods must be scrapped instead.

### + = ACCOUNTING POLICIES

**Cost of sales** comprises cost of materials, including malt (barley), hops, glass, cans, other packaging materials, and indirect production costs. Purchased finished goods include cost of point-of-sale materials and third-party products sold to customers.

Own-produced finished goods and work in progress are measured at standard cost comprising the cost of raw materials, consumables, direct labour and indirect production overheads. Indirect production overheads comprise indirect supplies, wages and salaries, amortisation of brands and software, as well as maintenance and depreciation of machinery, plant and equipment used for production.

## SECTION 1.2 (CONTINUED)

## OPERATING EXPENSES, INVENTORIES AND DEPOSIT LIABILITIES

The cost of purchased finished goods, raw and packaging materials and point-of-sale materials includes any costs that are directly related to bringing inventories to the relevant place of sale and getting them ready for sale, for example purchase cost, insurance, freight, duties and similar costs.

**Inventories** are measured at the lower of standard cost (own-produced finished goods) and weighted average cost (other inventories), or net realisable value. The net realisable value is the estimated selling price less costs of completion and costs necessary to make the sale, also taking into account marketability, obsolescence and developments in expected selling price.

The cost of scrapped/impaired goods is expensed in the function (line item) responsible for the loss, i.e. losses during distribution are included in distribution expenses, while scrapping of products due to sales not meeting forecasts is included in sales expenses.

### 1.2.2 DEPOSITS ON RETURNABLE PACKAGING MATERIALS

Deposits on returnable packaging materials amounted to DKK 1,583m (2017: DKK 1,576m). The capitalised value of returnable packaging materials was DKK 1,898m (2017: DKK 1,855m).

The capitalised value of returnable packaging materials exceeds the deposits because each of the returnable packaging items circulates a number of times in the market and some markets have regulations that require the

deposit value to be set lower than the cost of the returnable packaging materials.

#### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

Management assesses the local business model to determine whether the Group has a legal or constructive obligation to accept returns of returnable packaging materials from the market and, accordingly, the level of control over returnable packaging materials. Returnable packaging materials controlled by the Group are capitalised as property, plant and equipment and depreciated over the expected useful life. This entails the Group considering, among others, the return rate and the annual circulation in the individual markets. These factors are assessed annually.

The deposit on returnable packaging materials is estimated based on movements during the year in recognised liabilities, loss of returnable packaging materials in the market, planned changes in packaging types and historical information about return rates.

#### +/- ACCOUNTING POLICIES

Returnable packaging materials that the Group controls through a legal or constructive obligation are capitalised as property, plant and equipment.

Returnable packaging materials are depreciated over 3-10 years. The accounting policies for property, plant and equipment are further described in section 2.3.

The obligation to refund deposits on returnable packaging materials is measured on the basis of deposit price, an estimate of the number of bottles, kegs, cans and crates in circulation, and expected return rates.

### 1.2.3 SALES AND DISTRIBUTION EXPENSES

Sales and distribution expenses increased by 2% in reported terms and by 5% organically. The reported figure was impacted by higher marketing expenses related to investments in the SAIL'22 priorities. However, the impact was partly offset by a decrease in distribution expenses of approximately 5%, which was mainly driven by a change in the UK logistics set-up during 2018.

#### Sales and distribution expenses

DKK million	2018	2017
Marketing expenses	5,345	4,730
Sales expenses	5,849	5,815
Distribution expenses	6,280	6,599
<b>Total</b>	<b>17,474</b>	<b>17,144</b>

#### +/- ACCOUNTING POLICIES

Marketing expenses consist of expenses for brand marketing and trade marketing.

Brand marketing is an investment in the Group's brands and consists of brand-specific investments in the development of communication vehicles, the use of these to drive the sale of branded products, sales campaigns and sponsorships.

Trade marketing is promotional activities directed towards customers, such as the supply of point-of-sale materials, promotional materials and trade offers.

Sales expenses comprise costs relating to general sales activities, write-downs for bad debt losses, wages and salaries as well as depreciation and impairment of sales equipment. Distribution expenses comprise costs incurred in distributing goods, wages and salaries, and depreciation and impairment of distribution equipment.

### 1.2.4 OTHER OPERATING ACTIVITIES, NET

Other operating activities are secondary to the principal activities of the Group and include income and expenses relating to rental properties, restaurants, on-trade loans, research activities, and gains and losses on the disposal of intangible assets and property, plant and equipment.

#### Other operating activities, net

DKK million	2018	2017
Gains and losses on disposal of property, plant and equipment and intangible assets, net	13	26
On-trade loans, net	21	31
Real estate, net	-15	-18
Research centres, net	-127	-120
Other, net	176	194
<b>Total</b>	<b>68</b>	<b>113</b>

#### +/- ACCOUNTING POLICIES

Gains and losses on disposal of intangible assets and property, plant and equipment are determined as the sales price less selling costs and the carrying amount at the disposal date.

On-trade loans, net, comprise the effective interest on the loans measured at amortised cost less impairment.

Expenses relating to research activities comprise research in Denmark and France less funding received from the Carlsberg Foundation for the operation of the Carlsberg Research Laboratory and grants received to fund research. The funding and grants are recognised in the income statement in the same period as the activities to which they relate. Product development costs are included in cost of sales.

SECTION 1.3

# FOREIGN EXCHANGE RISK RELATED TO EARNINGS

A significant part of the Group’s activities takes place outside Denmark and in currencies other than DKK. Foreign exchange risk is therefore a principal financial risk for the Group, and exchange rate fluctuations can have a significant impact on the income statement.

## TRANSACTION RISKS ON PURCHASES AND SALES

The Group is exposed to transaction risks on purchases and sales in currencies other than the local functional currencies. It is the Group’s intention to hedge 70-90% of future cash flows in currencies other than the local functional currency on a four-quarter rolling basis.

### Western Europe

For the entities in Western Europe, a major part of the purchases in foreign currencies is in EUR. Hedging of EUR against the local currencies will effectively eliminate a significant part of the currency risk in the entities’ operating profit in local currency. At Group level, these hedges are effectively an economic hedge of (parts of) the net revenue in the relevant currency, and they are accounted for as cash flow hedges, cf. section 4.8. The EUR/DKK exposure is considered to be limited and is not hedged.

### Asia

The transaction risk is considered to be less significant compared with the risk in the other regions because of the lower sales and purchases in currencies other than the local functional currencies as well as the high correlation between USD and most of the Asian currencies. As a consequence, the risk is not hedged.

### Eastern Europe

Baltika Breweries and the other entities in Eastern Europe have expenses in both USD and EUR, and appreciation of the RUB and other currencies vis-à-vis EUR and USD has a positive impact on operating profit, while depreciation has a negative effect. The Group has chosen not to systematically hedge the transaction risk in Eastern Europe to the same degree as in Western Europe due to the significant cost of hedging these currencies over a longer period of time. For 2018 and 2019, the Group has chosen to hedge a portion of Baltika Breweries’ expenses in USD. The volatility of the Eastern European currencies will continue to affect operating profit measured in both DKK and local currencies.

### TRANSLATION RISK

The Group is exposed to risk from translation of foreign entities into the Group’s presentation currency, DKK.

The Group’s single largest exposure in respect of operating profit continued to be the exposure to RUB. The exposure to fluctuations in EUR/DKK is considered to be limited due to Denmark’s fixed exchange rate policy towards EUR and is consequently not hedged.

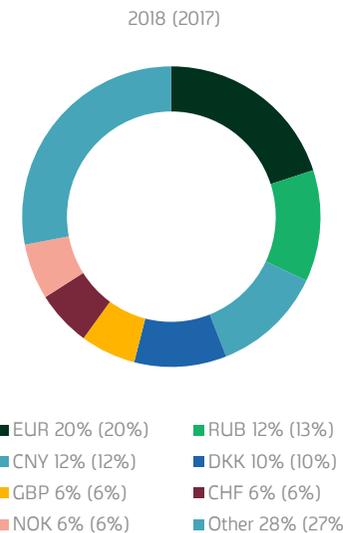
The Group has chosen not to hedge the exposure arising from translation of revenue or earnings in foreign currencies, but some of the Group’s debt is denominated in currencies in which the Group generates significant earnings and cash flow.

### Impact on operating profit

Developments in exchange rates between DKK and the functional currencies of foreign entities had a negative impact on operating profits from all regions measured in DKK. At Group level, the negative net impact was 5.6%, of which the contribution from RUB was around 2%.

Entities in	Functional currency	Change in average FX rate 2017 to 2018
Countries in the eurozone	EUR	0.19%
Russia	RUB	-11.20%
China	CNY	-2.10%
United Kingdom	GBP	-0.80%
Switzerland	CHF	-3.80%
Norway	NOK	-2.30%
Sweden	SEK	-5.90%
Laos	LAK	-7.20%

### Net revenue by functional currency (%)



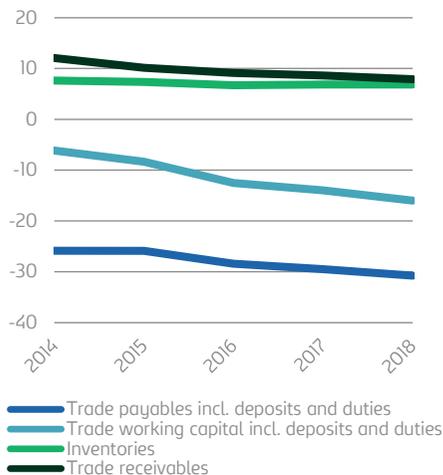
## SECTION 1.4

## CASH FLOW FROM OPERATING ACTIVITIES

Change in trade working capital amounted to DKK 1,908m (2017: DKK 848m) and was driven by higher trade payables in all regions, partly from increased volumes and focused cash discipline combined with the acquisition of Cambrew.

The decrease in other working capital amounted to DKK 52m (2017: DKK 388m). Other working capital was positively affected by a reclassification from prepaid costs to on-trade loans of DKK 238m.

### Average trade working capital (% of net revenue)



The change in on-trade loans amounted to DKK -192m (2017: DKK 40m), affected by the same reclassification.

Restructuring costs paid amounted to DKK -238m (2017: DKK -364m), a large part of which relates to termination benefits to employees made redundant due to optimisation in a number of markets, including France and the UK.

Net interest etc. paid amounted to DKK -863m (2017: DKK -408m). The increase in interest paid was driven by the liquidity effect from settlements of financial instruments, with EUR/USD and EUR/RUB foreign exchange swaps as the largest items. In 2018, the effect amounted to DKK -207m, while it was positive at DKK 491m in 2017.

Income tax paid amounted to DKK -2,375m (2017: DKK -1,934m). The increase in tax paid was mainly the result of a property sale in Germany and reduced taxes paid in France in 2017 due to refund of on-account tax paid in 2016.

Average trade working capital improved from -14.0% to -16.0% of net revenue primarily due to higher trade payables.

The calculation of average trade working capital, as a percentage of net revenue, has been impacted by the implementation of IFRS 15, which lead to a reduction of net revenue. Comparative figure for 2017 has been restated.

### Other specifications of cash flow from operating activities

DKK million	Section	2018	2017
<b>Other non-cash items</b>			
Share of profit after tax of associates and joint ventures	5.4	-130	-262
Gain on disposal of property, plant and equipment and intangible assets, net	2.3	-13	-26
Share-based payments		174	33
Other items		112	-24
<b>Total</b>		<b>143</b>	<b>-279</b>
<b>Trade working capital</b>			
Inventories	1.2.1	-586	-75
Trade receivables	1.5	-423	467
Trade payables, duties payable and deposits on returnable packaging materials		2,917	456
<b>Total</b>		<b>1,908</b>	<b>848</b>
<b>Other working capital</b>			
Other receivables		125	375
Other payables		-364	-70
Retirement benefit obligations and other liabilities related to operating profit before special items	7.4	338	108
Unrealised foreign exchange gains/losses		-47	-25
<b>Total</b>		<b>52</b>	<b>388</b>
<b>On-trade loans</b>			
Loans provided		-960	-710
Repayments		449	460
Amortisation of on-trade loans		319	290
<b>Total</b>	1.5	<b>-192</b>	<b>40</b>

## SECTION 1.5

## TRADE RECEIVABLES AND ON-TRADE LOANS

### Receivables included in the statement of financial position

DKK million	2018	2017
Trade receivables	5,084	4,611
Other receivables	1,925	2,138
<b>Total current receivables</b>	<b>7,009</b>	<b>6,749</b>
Non-current receivables	1,097	952
<b>Total</b>	<b>8,106</b>	<b>7,701</b>

The Group's non-current receivables consist mainly of on-trade loans that fall due more than one year from the reporting date. Of the total non-current receivables, DKK 171m (2017: DKK 188m) falls due more than five years from the reporting date.

### Ageing of receivables

#### 2018

	Net carrying amount at 31 Dec.	Neither impaired nor past due	Past due less than 30 days	Past due between 30 and 90 days	Past due more than 90 days
Weighted average loss rate, trade receivables		0.2%	2.7%	9.2%	100.0%
<b>DKK million</b>					
Sale of goods and services	4,605	3,924	368	126	187
On-trade loans	1,451	1,316	8	22	105
Other receivables	2,050	1,802	12	160	76
<b>Total</b>	<b>8,106</b>	<b>7,042</b>	<b>388</b>	<b>308</b>	<b>368</b>
<b>Total 2017</b>	<b>7,701</b>	<b>6,721</b>	<b>238</b>	<b>285</b>	<b>457</b>

### Receivables by origin

DKK million	2018	2017
Sale of goods and services	4,605	4,203
On-trade loans	1,451	1,251
Other receivables	2,050	2,247
<b>Total</b>	<b>8,106</b>	<b>7,701</b>

In 2018, on-trade loans increased due to a reclassification of certain prepaid discounts of DKK 238m from other receivables, which in turn declined.

The carrying amount of receivables approximates their fair value. For on-trade loans, the fair value is calculated as discounted cash flows using the interest rate at the reporting date.

### ON-TRADE LOANS

Under certain circumstances, the Group grants loans to on-trade customers in France, the UK, Switzerland, Germany and Sweden. On-trade loans are spread across a large number of customers/debtors and consist of several types of loan, including loans repaid in cash or through reduced discounts, prepaid discounts and guarantees for loans provided by third parties, cf. section 3.3. The operating entities monitor and control these loans in accordance with Group guidelines.

### On-trade loans recognised in other operating activities, net

DKK million	2018	2017
Interest and amortisation of on-trade loans	61	64
Losses and write-downs on on-trade loans	-40	-33
<b>On-trade loans, net</b>	<b>21</b>	<b>31</b>

The average effective interest rate on loans to the on-trade was 3.6% (2017: 4.1%).

## SECTION 1.5 (CONTINUED)

## TRADE RECEIVABLES AND ON-TRADE LOANS

### 1.5.1 CREDIT RISK

In 2018, 87% (2017: 87%) of the total receivables were neither impaired nor past due.

Receivables in Poland decreased due to trade receivable improvements, while receivables in France increased due to the reclassification of on-trade loans and a worsening of the trade receivables balance. Furthermore, translated into DKK, the proportionate shares of the receivables have changed due to differences in the currencies' development against DKK.

The impairment losses are related to several minor customers that have – in different ways – indicated that they do not expect to be able to pay their outstanding balances, mainly due to adverse economic developments.

### Development in impairment losses on receivables

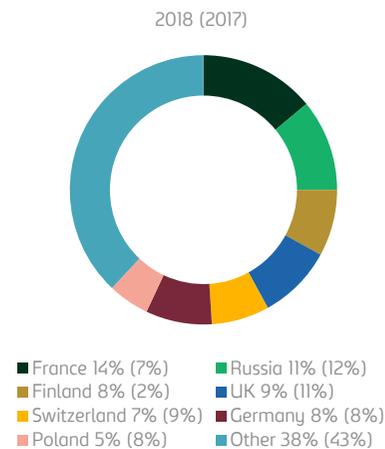
DKK million

					2017
2018	Trade receivables <sup>1</sup>	On-trade loans <sup>2</sup>	Other receivables <sup>2</sup>	Total	Total
Impairment at 1 January	-795	-237	-11	-1,043	-1,012
Impairment losses recognised	-166	-49	-	-215	-345
Realised impairment losses	90	48	2	140	160
Reversed impairment losses	151	9	1	161	80
Disposal of entities	-	-	-	-	54
Foreign exchange adjustments	20	8	1	29	20
<b>Impairment at 31 December</b>	<b>-700</b>	<b>-221</b>	<b>-7</b>	<b>-928</b>	<b>-1,043</b>

<sup>1</sup> Lifetime expected credit loss.

<sup>2</sup> 12-month expected credit loss, except for an insignificant share that is a lifetime expected credit loss.

### Trade receivables and on-trade loans (Broken down by country)



### ACCOUNTING ESTIMATES AND JUDGEMENTS

On-trade loan agreements are complex, cover several aspects of the customer relationship and may vary from agreement to agreement. Management assesses the recognition and classification of income and expenses for each agreement, including the allocation of payments from the customer between revenue, discounts, interest (other operating activities) and repayment of the loan.

Management also assesses whether developments in local conditions for on-trade customers should impact the expected credit losses both individually and on a portfolio basis.

Exposure to credit risk on receivables is managed locally, and credit limits are set as deemed appropriate for the customer, taking into account the current local market conditions.

The local entities assess the credit risk and adhere to Group guidelines, which include setting credit limits, encouraging cash payment, purchasing credit insurance and taking collateral.

In assessing credit risk, management analyses the need for impairment of trade receivables and on-trade loans due to customers' inability to pay.

Management assesses the expected credit losses (ECL) for portfolios of receivables based on customer segments, historical information on payment patterns, terms of payment, concentration maturity, and information about the general economic situation in the countries. The portfolios are based on on-trade and off-trade customers, and on-trade receivables and loans.

On-trade loans carry a higher risk than trade receivables and are concentrated in a few markets. The local entities manage and control these loans in accordance with Group guidelines.

The credit risk on on-trade loans can be reduced through collateral and pledges of on-trade movables (equipment in bars, cafés etc.). The fair value of the pledged on-trade movables cannot be estimated reliably but is assessed to be insignificant, as the movables cannot readily be used again.

### ACCOUNTING POLICIES

Receivables are recognised initially at fair value and subsequently measured at amortised cost less loss allowance or impairment losses. Trade receivables comprise sale of goods and services as well as short-term on-trade loans to customers. Other receivables comprise VAT receivables, loans to partners, associates and joint ventures, interest receivables and other financial receivables.

Regarding the on-trade loans, any difference between the present value and the nominal amount at inception is treated as a prepaid discount to the customer, and is recognised in the income statement in accordance with the terms of the agreement.

The market interest rate is used as the discount rate, corresponding to the money market rate based on the maturity of the loan with the addition of a risk premium. The effective interest on these loans is recognised in other operating activities, net. The amortisation of the difference between the discount rate and the effective interest rate is included as a discount in revenue.

The Group applies the simplified approach to measure expected credit losses. This entails recognising a lifetime expected loss allowance for all trade receivables. Loss rates are determined based on grouping of trade receivables sharing the same credit risk characteristics and past due days.

Regarding on-trade loans and loans to associates, a loss allowance is recognised based on 12-month or lifetime expected credit losses, depending on whether a significant increase in credit risk has arisen since initial recognition.

SECTION 2

# ASSET BASE AND RETURNS

**117.7bn**  
TOTAL ASSETS (DKK)

Total assets increased by DKK 3.4bn, due to an increase in property, plant and equipment, inventories, trade receivables and an improved cash position.

Intangible assets amounted to DKK 66.9bn at 31 December 2018 (2017: DKK 67.8bn), impacted among other things by the depreciation of the Russian rouble and Asian currencies.

Property, plant and equipment increased by DKK 1.1bn to DKK 25.4bn (2017: DKK 24.3bn), impacted by new investments and the consolidation of Cambrew.

Current assets increased by DKK 2.8bn to DKK 18.1bn, driven by increases in inventories of raw materials and finished goods, and trade receivables, in total amounting to DKK 1.1bn, and an increase in cash and cash equivalents of DKK 2.1bn. The DKK 0.6bn increase in inventories was caused by the inventory build-up prior to the festive season in Asia, which is earlier in 2019 than in 2018, and the consolidation of Cambrew. The increase in cash and cash equivalents to DKK 5.6bn was due to the strong free cash flow.

Asset base<sup>1</sup> (DKKm)

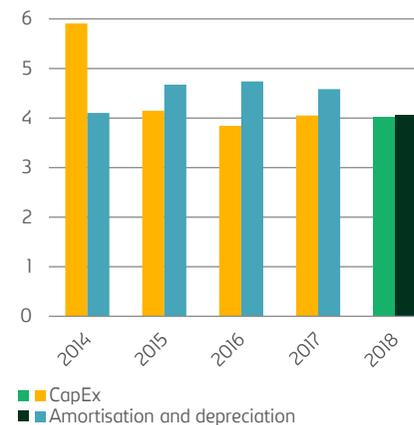


<sup>1</sup> The asset base represents the total investment in intangible assets and property, plant and equipment.

**4.0bn**  
CAPEX (DKK)

CapEx included construction of the new greenfield brewery in Germany, completion of a new brewery in India and various sales equipment. The greenfield brewery in Germany is expected to be completed by the end of 2019. The positive effect on ROIC from the relatively low CapEx is partly offset by the increase in the ratio of CapEx to amortisation and depreciation to 98% (2017: 86%).

CapEx and amortisation/depreciation (DKKbn)

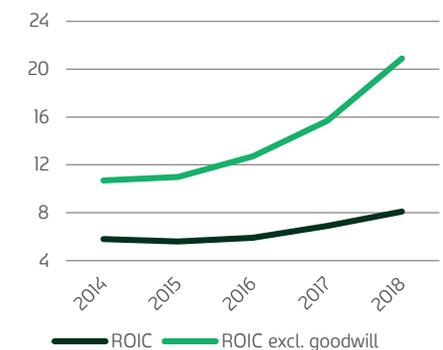


**8.1%**  
ROIC

Return on invested capital (ROIC) increased by 120bp to 8.1%, impacted by lower invested capital, improved profitability and a lower effective tax rate. ROIC excluding goodwill increased by 520bp to 20.9%, with improvements achieved in all regions.

The impairment loss on the Baltika brand recognised at year-end 2017 had a full-year impact on the average invested capital for 2018. For 2017, ROIC would have been 7.2%, compared to the reported 6.9%, if the loss had been recognised at 1 January 2017.

Return on invested capital (ROIC) (%)



## SECTION 2.1

## SEGMENTATION OF ASSETS AND RETURNS

Invested capital was down by DKK 1.8bn, affected by an increase in assets included of DKK 1.6bn, which was primarily driven by investments in associates and higher trade receivables and inventories. The increase was more than offset by the increase in trade payables. In 2017, invested capital was also impacted by the DKK 4.8bn impairment of the Baltika brand.

### Invested capital

DKK million	2018	2017
Total assets	117,700	114,251
<b>Less</b>		
Deferred tax assets	-1,693	-1,663
Financial receivables, hedging instruments and receivables sold	1,660	1,386
Cash and cash equivalents	-5,589	-3,462
<b>Assets included</b>	<b>112,078</b>	<b>110,512</b>
Trade payables	-16,199	-13,474
Deposit on returnable packaging materials	-1,583	-1,576
Provisions, excl. restructurings	-4,546	-3,709
Other liabilities, excl. hedging instruments	-7,029	-7,265
<b>Liabilities offset</b>	<b>-29,357</b>	<b>-26,024</b>
<b>Invested capital</b>	<b>82,721</b>	<b>84,488</b>
Goodwill	-50,929	-50,497
<b>Invested capital excl. goodwill</b>	<b>31,792</b>	<b>33,991</b>
<b>Invested capital, average</b>	<b>82,590</b>	<b>91,668</b>

The negative impact on total assets from foreign exchange rates attributed to Russia is DKK 4.2bn, compared with the DKK value they would have had if they had been translated at the exchange rates applied at year-end 2017.

Non-current assets comprise intangible assets and property, plant and equipment owned by the segment/country, even if the income is earned outside the segment/country that owns the asset. Furthermore, they include non-current financial assets other than financial instruments and deferred tax assets.

### Segmentation of assets and returns

#### DKK million

##### 2018

Invested capital	38,254	21,090	23,976	-1,696	81,624	1,097	82,721
Invested capital excl. goodwill	17,440	5,040	9,911	-1,696	30,695	1,097	31,792
Acquisition of property, plant and equipment and intangible assets	1,948	1,164	547	347	4,006	21	4,027
Amortisation and depreciation	1,725	1,227	667	435	4,054	10	4,064
Impairment losses	56	56	-45	-	67	-	67
Return on invested capital (ROIC)	10.8%	11.8%	7.0%	-	8.2%	-	8.1%
ROIC excl. goodwill	24.4%	44.0%	17.1%	-	21.4%	-	20.9%

##### 2017

Invested capital	37,218	20,131	27,376	-1,055	83,670	818	84,488
Invested capital excl. goodwill	16,489	6,197	11,542	-1,055	33,173	818	33,991
Acquisition of property, plant and equipment and intangible assets	1,837	1,212	716	83	3,848	205	4,053
Amortisation and depreciation	1,872	1,311	761	625	4,569	12	4,581
Impairment losses	107	-113	4,820	-	4,814	-	4,814
Return on invested capital (ROIC)	9.9%	9.9%	5.1%	-	7.0%	-	6.9%
ROIC excl. goodwill	21.9%	31.2%	10.2%	-	16.0%	-	15.7%

### Geographical allocation of non-current assets

DKK million	2018	2017
Denmark (Carlsberg A/S' domicile)	3,104	3,905
Russia	21,578	24,949
China	14,152	14,466
Other countries	57,990	53,064
<b>Total</b>	<b>96,824</b>	<b>96,384</b>

Not allocated comprises supporting companies without brewing activities and eliminations of investments in subsidiaries, receivables and loans.

### ACCOUNTING ESTIMATES AND JUDGEMENTS

The calculation of return on invested capital (ROIC) uses operating profit before special items adjusted for tax using the effective tax rate, and invested capital including assets held for sale and trade receivables sold, and excludes contingent considerations and income tax.

### ACCOUNTING POLICIES

The Group's assets and returns are segmented on the basis of geographical regions in accordance with the management reporting for the current year, cf. section 1.1.

#### Carlsberg Group, total

Western Europe	Asia	Eastern Europe	Not allocated	Beverages, total	Non-beverage	Carlsberg Group, total
38,254	21,090	23,976	-1,696	81,624	1,097	82,721
17,440	5,040	9,911	-1,696	30,695	1,097	31,792
1,948	1,164	547	347	4,006	21	4,027
1,725	1,227	667	435	4,054	10	4,064
56	56	-45	-	67	-	67
10.8%	11.8%	7.0%	-	8.2%	-	8.1%
24.4%	44.0%	17.1%	-	21.4%	-	20.9%
37,218	20,131	27,376	-1,055	83,670	818	84,488
16,489	6,197	11,542	-1,055	33,173	818	33,991
1,837	1,212	716	83	3,848	205	4,053
1,872	1,311	761	625	4,569	12	4,581
107	-113	4,820	-	4,814	-	4,814
9.9%	9.9%	5.1%	-	7.0%	-	6.9%
21.9%	31.2%	10.2%	-	16.0%	-	15.7%

## SECTION 2.2 IMPAIRMENT

### 2.2.1 RECOGNISED IMPAIRMENTS

In 2018, the impairment tests of goodwill and brands with indefinite useful life were prepared at the reporting date without this leading to recognition of impairment losses. In 2017, the Group recognised impairment losses on brands amounting to DKK 4,847m, of which DKK 4,800m related to the Baltika brand.

During the year, impairment losses of DKK 116m (2017: DKK 183m) relating to property, plant and equipment were recognised. The impairment losses in 2018 primarily related to steel keg installations and filling lines in the Nordic countries, which were impacted by the roll-out of the one-way keg system DraughtMaster™. In addition, impairment losses were recognised as a result of the closure of breweries in China.

#### Impairment of brands and other non-current assets

DKK million	2018	2017
<b>Brands and other intangible assets</b>		
Brands	-	4,847
Land use rights (reversal of impairment)	-	-80
<b>Total</b>	<b>-</b>	<b>4,767</b>
<b>Property, plant and equipment</b>		
Plant, machinery and equipment	116	183
Plant, machinery and equipment (reversal of impairment)	-49	-136
<b>Total</b>	<b>67</b>	<b>47</b>
<b>Total impairment losses</b>	<b>67</b>	<b>4,814</b>
Of which recognised in special items, net, cf. section 3.1	40	4,688

In 2017, impairment losses were recognised as a result of restructurings and other events.

In 2018, the Group recognised reversals of impairments in Eastern Europe of DKK 49m relating to assets previously impaired that have been brought back into production.

In 2017, the Group recognised reversal of impairments in Eastern Assets of other intangible assets amounting to DKK 80m and of plant and equipment amounting to DKK 136m, as the change in use of the two breweries was expected to generate future cash flows resulting in the recoverable amount exceeding that of the carrying amount of land use rights and plant and equipment had it not been written down in 2015.

#### Significant amounts of goodwill and brands

Goodwill and brands with indefinite useful life relating to Baltika Breweries, Kronenbourg, Chongqing Brewery Group, and the acquisition of the 40% non-controlling interest in Carlsberg Breweries A/S each account for 10% or more of the total carrying amount of goodwill and brands with an indefinite useful life at the reporting date.

#### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

##### Identification of cash-generating units

The Group's management structure reflects the geographical segments, cf. section 1.1, and decisions are made by the regional managements responsible for performance, operating investments and growth initiatives in their respective regions.

There is significant vertical integration of the production, logistics and sales functions, supporting and promoting optimisations across the Group or within regions.

Assets, other than goodwill and brands with regional and global presence, are allocated to individual cash-generating units (CGUs), being the level at which the assets generate largely independent cash inflows. As the Group operates with local sales and production organisations, the cash inflows are generated mostly locally, and the CGUs are therefore usually identified at country level.

Cash inflows are assessed in connection with acquisitions and the related purchase price allocation, and the determination of CGU allocation is made within 12 months from the date of acquisition.

##### Goodwill

Goodwill does not generate largely independent cash inflows on its own and is therefore allocated to the level at which it is monitored for internal management purposes, normally at regional or sub-regional level.

Goodwill allocated to CGUs that are less integrated in regions or sub-regions is tested separately. However, these are not considered significant compared with the carrying amount of goodwill.

The following groups of CGUs are considered significant compared with the carrying amount of goodwill:

- Western Europe
- China, Malaysia and Singapore
- Cambodia, Laos and Vietnam
- Eastern Europe

The structure and groups of CGUs are reassessed every year. In 2018, the Group gained control of Cambrew Group, Cambodia, cf. section 5.2. The goodwill recognised on the acquisition was allocated to the CGU that also comprises the Group's activities in Vietnam and Laos.

##### Brands

Cash flows for brands are separately identifiable, and these are therefore tested individually for impairment. This test is performed in addition to the test for impairment of goodwill.

The following brands are considered significant when comparing their carrying amount with the carrying amount of brands with indefinite useful life:

- Baltika brand
- International brands

International brands is a group of brands recognised in connection with the acquisition of the 40% non-controlling interest in Carlsberg Breweries A/S and allocated to Western Europe. The amount is not allocated to individual brands.

##### Corporate assets

The Group has identified capitalised software relating to the Group's ERP systems as corporate assets, and as such, these are peripheral to the generation of cash inflow. The Group's ERP landscape is closely linked to the internal management structure, and the identified assets are therefore tested for impairment at the CGU level to which goodwill is allocated.

## SECTION 2.2 (CONTINUED)

# IMPAIRMENT

### Other non-current assets

Other non-current assets are tested for impairment when indications of impairment exist.

For property, plant and equipment, management performs an annual assessment of the assets' future application, for example in relation to changes in production structure, restructurings or closing of breweries.

For investments in associates and joint ventures, examples of indications of impairment are loss-making activities or major changes in the business environment.

### ACCOUNTING POLICIES

Goodwill and brands with indefinite useful life are subject to an annual impairment test, performed initially before the end of the year of acquisition.

The test is performed at the level where cash flows are considered to be generated; either at CGU level or at the level of a group of CGUs. All assets are tested if an event or circumstance indicates that the carrying amount may not be recoverable. If an asset's carrying amount exceeds its recoverable amount, an impairment loss is recognised. The recoverable amount is the higher of the asset's fair value less costs of disposal and its value in use.

For all assets, the value in use is assessed based on budget and target plan with reference to the expected future net cash flows. The assessment is based on the lowest CGU affected by the changes that indicate impairment. The cash flow is discounted by a discount rate adjusted for any risk specific to the asset, if relevant to the applied calculation method.

Impairment losses on goodwill and brands, significant losses on property, plant and equipment, associates and joint ventures, and losses arising on significant restructurings of processes and structural adjustments are recognised as special items. Minor losses are

recognised in the income statement in the relevant line item.

Impairment of goodwill is not reversed. Impairment of other assets is reversed only to the extent of changes in the assumptions and estimates underlying the impairment calculation. Impairment is only reversed to the extent that the asset's new carrying amount does not exceed the carrying amount of the asset after amortisation/depreciation had the asset not been impaired.

### 2.2.2 IMPAIRMENT TEST OF GOODWILL

#### The carrying amount of goodwill allocated to groups of CGUs

DKK million	2018	2017
Western Europe	20,814	20,729
China, Malaysia and Singapore	9,391	9,424
Cambodia, Laos and Vietnam	6,110	3,941
Eastern Europe	14,065	15,834
<b>Significant groups of CGUs</b>	<b>50,380</b>	<b>49,928</b>
Other, Asia	549	569
<b>Total</b>	<b>50,929</b>	<b>50,497</b>

In 2018 and 2017, the significant groups of CGUs represented 99% of the total carrying amount.

The estimation of the expected cash flow involves developing multiple probability-weighted scenarios to reflect different outcomes in terms of timing and amount. The measurement of the forecast period growth rates reflects risk adjustments made to calculate the expected cash flows.

#### Key assumptions

2018	Forecast cash flow growth	Terminal period growth	Pre-tax discount rate
Western Europe	-8%	0.3%	1.3%
China, Malaysia and Singapore	-8%	1.0%	4.4%
Cambodia, Laos and Vietnam	-6%	0.5%	2.7%
Eastern Europe	-14%	4.0%	7.5%

The average cash flow growth in the forecast period reflects the significant risk adjustments included in the forecast specifically for the impairment test. The risk adjustment considers only negative alternative scenarios to account for the uncertainty related to the benefits expected from the strategic initiatives in SAIL'22 in Western Europe, the development in beer consumption in Asia and particularly in China, and the volatile macroeconomic situation in Eastern Europe. Potential upsides are not identified and adjusted in the cash flows used for impairment testing. The growth is projected in nominal terms and therefore does not translate into cash flow at the same growth rate in the Group's presentation currency, DKK.

#### WESTERN EUROPE

The region primarily comprises mature beer markets. While market volumes tend to be flat, the overall value of the region has seen a positive, albeit small, development in recent years. This has been driven by improving beer category dynamics through innovations, increased interest in craft & speciality beers and

alcohol-free brews, and an overall improved category perception.

The region is generally characterised by well-established retail structures and a strong tradition of beer consumption. The consumption is generally resilient but the on-trade tends to suffer in a weak macroeconomic environment.

The focus is on improving margins by driving a positive price/mix development and reducing the cost base across the value chain. This process has been started by the initiatives in SAIL'22.

#### ASIA

The importance of Asia for the Group has increased significantly over the past decade, during which the Group has expanded its presence in the region, both organically and through acquisitions.

The Asian markets are very diverse but offer considerable prospects for value growth, underpinned by young populations, urbanisation, rising disposable income levels, growing economies and, in some markets, relatively low per capita beer consumption. However, as many Asian markets are emerging markets, development is subject to volatility.

Both the on-trade and off-trade channels are characterised by a strong traditional outlet segment but with the modern outlet segment growing in most markets.

The focus is to continue the revenue growth trajectory in the region. Activities include the

## SECTION 2.2 (CONTINUED)

# IMPAIRMENT

continued expansion of our international premium brands, in particular Tuborg, and the strengthening and premiumisation of our local power brands in combination with a continued focus on costs and efficiencies.

### EASTERN EUROPE

The two main markets in the region are Russia and Ukraine, which account for around 65% and 20% respectively of regional beer volumes. The Russian beer market has been under significant pressure in the past decade, more recently due to challenging macroeconomic conditions and a ban on individual PET bottles larger than 1.5 litres. In 2018, however, the market was positively impacted by the football world cup and warmer weather.

In recent years, the modern off-trade, consisting of hypermarkets and supermarkets, has grown significantly and now accounts for approximately 50% of the market in Russia. Another growing channel is the so-called DIOT – draught in off-trade – which is estimated to account for around 10-15% of the market.

The Ukrainian beer market has shown small positive growth rates in 2017 and 2018 following the previous years' decline due to the severe macroeconomic slowdown.

The focus for Eastern Europe is to continue to strengthen our business in local currencies and mitigate the negative earnings impact from the weakening currencies. Actions include a

commercial agenda with clear priorities as well as a continued focus on costs and efficiencies.

Management expects the current macroeconomic situation and developments to continue in the short term, with inflation stabilising at the current level and, in the medium to long term, with interest rates expected to decline and stabilise at a level lower than currently observed in the market. This will ease the pressure on profitability from input costs denominated in foreign currencies.

### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

#### Goodwill

The value in use is the discounted value of the expected future risk-adjusted cash flows. This involves developing multiple probability-weighted scenarios to reflect different outcomes in terms of timing and amount.

#### Key assumptions

The cash flow is based on the budget and target plans for the next three years. Cash flows beyond the three-year period are extrapolated using the terminal period growth rate.

The probability weighting applied is based on past experience and the uncertainty of the prepared budget and target plans.

Potential upsides and downsides identified during the budget process and in the daily business are reflected in the future cash flow scenarios for each CGU.

The risk-adjusted cash flows are discounted using a discount rate reflecting the risk-free interest rate for each CGU with the addition of a spread. The interest rates used in the impairment tests are based on observable market data. Please refer to the description of discount rates in section 2.2.3.

The key assumptions on which management bases its cash flow projections are:

- Volumes
- Sales prices
- Input costs
- Operating investments
- Terminal period growth

The assumptions are determined at CGU level and are based on past experience, external sources of information and industry-relevant observations for each CGU. Local conditions, such as expected development in macroeconomic and market conditions specific to the individual CGUs, are considered. The assumptions are challenged and verified by management at CGU and Group level.

The budget and target plan process takes into account events or circumstances that are relevant in order to reliably project the short-term performance of each CGU. Examples include significant campaign activities, changes in excise duties etc., which may have a short-term impact but are non-recurring. Given their short-term nature, they are not taken into consideration when estimating the terminal period growth rate.

#### Volumes

Projections are based in part on past experience and external market data, and include planned commercial initiatives, such as marketing campaigns and sponsorships, and the expected impact on consumer demand and the level of premiumisation. The projections are, if relevant, adjusted for the expected changes in the level of premiumisation. No changes in market shares are assumed in the medium or long term.

Demographic expectations general to the industry, such as the development in population, consumption levels, generation-shift patterns, rate of urbanisation as well as macroeconomics etc., are also considered for medium- and long-term projections.

Events and circumstances can impact the timing of volumes entering the market. This can be affected by excessive stocking related to an increase in excise duties, campaign activities and the timing of national holidays and festivals. Such short-term effects are

not material to volume projections and do not impact the long-term projections.

#### Sales prices

The level of market premiumisation and the locally available portfolio are key drivers in identifying price points. When planning pricing structures, factors including price elasticity, local competition and inflation expectations can also impact the projection. Increases in excise duties are typically passed on to the customers with a delay of a few months. Since the increase is a pass-through cost and thereby compensated for by price increases at the time of implementation, it does not impact the long-term sales price growth and is therefore not taken into consideration in the projections unless circumstances specifically indicate otherwise. No changes to duties in the short or medium term are taken into consideration unless there is a firm plan to introduce changes.

#### Input costs

Input costs in the budget and target plans are based on past experience and on:

- Contracted raw and packaging materials
- Contracted services within sales, marketing, production and logistics
- Planned commercial investments
- Cost optimisations not related to restructurings
- Expected inflation

In the long term, projections follow the level of inflation unless long-term contracts are in place.

#### Operating investments

Projections are based on past experience of the level of necessary maintenance of existing production capacity, including replacement of parts. This also includes planned production line overhauls and improvements to existing equipment. Non-contracted capacity increases and new equipment are not included.

#### Terminal period growth

Growth rates are projected to be equal to or below the expected rate of general inflation and assume no nominal growth. The projected growth rates and the applied discount rates are compared to ensure a sensible correlation between the two.

## SECTION 2.2 (CONTINUED)

# IMPAIRMENT

### 2.2.3 IMPAIRMENT TEST OF BRANDS

#### Significant brands with indefinite useful life

DKK million	2018	2017
Baltika brand	5,585	6,425
International brands	3,000	3,000
<b>Significant brands</b>	<b>8,585</b>	<b>9,425</b>

In 2018, significant brands represented 60% (2017: 62%) of the total carrying amount of brands with indefinite useful life.

Other brands comprise a total of 17 brands that are not considered individually material compared with the total carrying amount.

#### BALTIKA BREWERIES

In 2018, the Russian beer market grew slightly after having experienced a continuous decline in recent years due to very challenging macroeconomic conditions.

The Baltika brand performed in line with the growth projections made when the expected future growth for the brand was reassessed in 2017. Compared with previous years, the brand's decline has stopped, and moderate growth is projected.

## ACCOUNTING ESTIMATES AND JUDGEMENTS

### Brands

The test for impairment of brands is performed using the relief from royalty method and is based on the expected future cash flows generated from the royalty payments avoided for the individual brand for the next 20 years and projections for subsequent years.

The risk-free cash flows are discounted using a discount rate reflecting the risk-free interest rate with the addition of the risk premium associated with the individual brand.

### Key assumptions

The key assumptions on which management bases its cash flow projection include the expected useful life, revenue growth, a theoretical tax amortisation benefit, the royalty rate and the discount rate.

### Expected useful life

Management has assessed that the value of brands with indefinite useful life can be maintained for an indefinite period, as these are well-established brands in their markets, some of which have existed for centuries. The beer industry is characterised as being very stable with consistent consumer demand and a predictable competitive environment, and is expected to be profitable for the foreseeable future. Control of the brands is legally established and is enforceable indefinitely.

In management's opinion, the risk of the useful life of these brands becoming finite is minimal because of their individual market positions and because current and planned marketing initiatives are expected to sustain their useful life.

### Key assumptions

2018	Average revenue growth	Terminal period growth	Pre-tax discount rate	Post-tax discount rate
Baltika brand	4%	4%	11.1%	9.7%
International brands	1%	1%	5.6%	4.4%

### Revenue growth

At the time of acquisition of any individual brand, a revenue growth curve is forecast based on a long-term strategic view of the risk and opportunities relevant to the brand. The curve is forecast for a 20-year horizon. This horizon reliably reflects the lengthy process of implementing brand strategies to support a brand occupying its intended place in the Group's portfolio. The forecast period applied is comparable with the common term of the majority of licence agreements to which the Group is party.

In the local markets, the product portfolio usually consists of local power brands and international premium brands. When projecting revenue growth for local brands, in addition to its commercial strength – such as market share and segment position – the forecast takes into consideration the demographics of the primary markets, including expected development in population, consumption levels, generation-shift patterns, rate of urbanisation, beer market maturity, level of premiumisation, circumstances generally limiting the growth opportunities for alcoholic beverages etc.

For brands with global or regional presence, enhanced investments in product development and marketing are expected. The expected growth rate for these brands is generally higher than for more localised brands, and is usually highest early in the 20-year period.

Depending on the nominal growth expectations for the individual brand, the revenue growth in individual years may be above, equal to or below the forecast inflation level in the markets where the brand is present.

When preparing budgets, consideration is given to events or circumstances that are relevant in order to reliably project the short-term performance of each brand. Examples include significant campaign activities, changes in excise duties etc., which may have a short-term impact but are non-recurring and quickly absorbed by the business. Since the impact is not material to the long-term projections, it is not taken into consideration when estimating the long-term and terminal period growth rates. Please refer to the description of the impact of increases in excise duties in section 2.2.2, Sales prices.

### Tax benefit

The theoretical tax benefit applied in the test makes use of tax rates and amortisation periods based on current legislation. The impairment test applies tax rates in the range of 15-34% and amortisation periods of 5-10 years.

### Royalty rate

Royalties generated by a brand are based on the Group's total income from the brand and are earned globally, i.e. the income is also earned outside the CGU that owns the brand. If external licence agreements for the brand already exist, the market terms of such agreements are taken into consideration when assessing the royalty rate that the brand is expected to generate in a transaction with independent parties. The royalty rate is based on the actual market position of the individual brand in the global, regional and local markets and assumes a 20-year horizon. This term is common to the beverage industry when licensing brands.

For some brands, the share of the total beer market profit exceeds the volume share to an extent that creates significant market entry barriers for competing brands and justifies a higher royalty rate.

### Royalty rates

International, premium and speciality beers	3.5-15.0%
Strong regional and national brands	3.0-5.0%
Local and mainstream brands	2.0-3.5%

## SECTION 2.2 (CONTINUED)

# IMPAIRMENT

### Discount rates

The discount rate is a weighted average cost of capital (WACC) that reflects the risk-free interest rate with the addition of a risk premium relevant to each brand.

The risk-free interest rates used in the impairment tests are based on observed market data. For countries where long-term risk-free interest rates are not observable or valid due to specific national or macroeconomic conditions, the interest rate is estimated based on observations from other markets and/or long-term expectations expressed by international financial institutions considered reliable by the Group.

The added credit risk premium (spread) for the risk-free interest rate is fixed at market price or slightly higher, reflecting the expected long-term market price. The aggregate interest rate, including spread, thereby reflects the long-term interest rate applicable to the Group's investments in the individual markets.

### Interest rates applied in Eastern Europe

In recent years, the macroeconomic situation has deteriorated significantly in Eastern Europe, resulting in interest rates and inflation increasing to a level significantly higher than the Group's long-term expectations.

The use of expected future interest rates in lieu of appropriate observable interest rates does not impact the conclusion of the impairment test because the relationship between discount rates and growth rates (the real interest rate) is expected to be constant. Expectations for the long-term real interest rate remain a key assumption for the impairment testing in general, and for CGUs with exposure to the Russian market in particular.

In recent years, the Bank of Russia has expressed its expectations of a positive future real interest rate at around 2.5-3.0% in the short term. Due to the current monetary situation in Russia, the short-term interest rate is higher than the long-term interest rate and therefore not directly comparable with the real interest rate applied by the Group. Real interest rates are expected to normalise in the future, with short-term interest rates falling to a level below the long-term interest rates.

The current economic environment in Russia indicates that a stable long-term real interest rate lower than the current level will be reached within a few years. In addition, the latest published expectations from key international financial institutions show an expected long-term real interest rate of 2.5%. Therefore, a real interest rate of 2.5% is maintained as the long-term growth expectation in the impairment test.

The impairment test of the Baltika brand is sensitive to changes in the real interest rate. Since no expected future long-term real interest rate can be directly observed, the estimate of a real interest rate is subjective and associated with risk.

## 2.2.4 SENSITIVITY TESTS

### GOODWILL

Sensitivity tests have been performed to determine the lowest forecast and terminal period growth rates and/or highest discount rates that can occur in the CGUs, groups of CGUs and brands with indefinite useful life without leading to any impairment loss.

The risk-free interest rates observable for Western Europe remained relatively low at the end of 2018. The sensitivity tests calculate the impact of higher interest rates and allow for a double-digit percentage-point increase in risk-free interest rates.

Due to a challenging macroeconomic situation in some CGUs and groups of CGUs, the Group performed additional sensitivity tests to ensure that a potential impairment was not overlooked. These additional sensitivity tests did not identify any potential impairment.

The test for impairment of goodwill did not identify any CGUs or groups of CGUs to which goodwill is allocated where a reasonably possible negative change in a key assumption would cause the carrying amount to exceed the recoverable amount.

The goodwill allocated to Eastern Europe was primarily recognised when the Group completed the step acquisition of the remaining 50% of the Baltic Beverage Holding Group from Scottish & Newcastle in 2008. However, the impairment test includes 100% of the cash flow generated by Eastern Europe, resulting in the

recoverable amount significantly exceeding the carrying amount.

### BRANDS

Following the impairment losses recognised in 2017 and 2016 for the Baltika and Chongqing Brewery Group brands, a reasonably possible negative change in a key assumption would cause the carrying amount to exceed the recoverable amount. The sensitivity to changes in the assumptions is shown in the table.

### Key assumptions

The key assumptions relevant to the assessment of the recoverable amount are:

- Volume
- Price
- Discount rate

The assumptions for volume and pricing are closely linked, which, together with the presence of multiple sub-brands in different geographies within each brand, makes individual sensitivity testing on the basis of these two assumptions highly impractical. Instead, sensitivity testing is performed for the overall revenue growth rate, both in the forecast period and the terminal period.

The sensitivity test for the maximum decline in growth rate in the forecast period assumes a year-on-year decline in the nominal growth rate, thereby estimating the accumulated effect of a negative change for the full forecast period.

## SECTION 2.2 (CONTINUED)

# IMPAIRMENT

The sensitivity tests were completed assuming all other assumptions were unchanged, as it is relevant to assess the sensitivity to, for example, a decline in the growth rate independently of changes in the discount rate. This is because the growth rate in itself might be impacted by changes in brand strategy and other market factors.

The sensitivity calculated also assumes a straight-line impact despite the fact that changes in market dynamics and adjustments to these will in practice have different impacts in the individual years and might not apply in the long term.

Western European interest rates have been very low for several years and are currently at a level that is below inflation. An increase in the interest rates without a corresponding change in inflation will result in a lower recoverable amount of brands and could potentially lead to impairment. The risk of a significant write-down is considered by management to be very low.

### Baltika brand

The Baltika brand was written down to its recoverable amount at the end of 2017. As a result, even a small negative change in the key assumptions could lead to further impairment.

At 31 December 2018, the carrying amount of the Baltika brand amounted to DKK 5,585m.

Changes in the market dynamics in Russia could have a significant negative impact on the recoverable amount. Macroeconomic recovery could lead to further premiumisation or localisation, which could drive consumers towards international brands or local/regional brands.

An increase in the real interest rate from the current 2.5%, either because of a higher interest rate or lower inflation, could significantly reduce the recoverable amount.

A 1 percentage point increase in the interest rate would result in a reduction in the recoverable amount of DKK 0.8bn, and a 1 percentage point decrease in the terminal growth rate would result in a reduction in the recoverable amount of DKK 0.3bn. The combined effect of a 1 percentage point negative change in the interest rate, the terminal growth rate and the average growth

rate in the forecast period (year-on-year) would result in a reduction in the recoverable amount of DKK 1.5bn.

### Chongqing Brewery Group brands

The Chongqing Brewery Group brands were written down to their recoverable amount in 2016, and the recoverable amount at the end of 2018 remained close to the carrying amount of DKK 895m. As a result, a reasonably possible negative change in the key assumptions would lead to further impairment.

The brands are sensitive to developments in the mainstream segment in China, where pressure from premium and upper-mainstream – in which the brands are not represented – could lead to a further drop in market share and thereby a further reduction of the recoverable amount.

Similarly, a change in consumer trends towards the discount segment could have a negative impact on the recoverable amount.

A 1 percentage point increase in the interest rate would result in a reduction in the recoverable amount of DKK 0.1bn, and a 1 percentage point decrease in the terminal growth rate would result in a reduction in the recoverable amount of less than DKK 0.1bn.

### Sensitivity test

DKKbn	Average forecast growth rate	Terminal period growth rate	Risk-free interest rate
$\Delta$	-1 %-point	-1 %-point	+1 %-point
Baltika brand	-0.6	-0.3	-0.8
Chongqing Brewery Group brands	-0.1	-0.0	-0.1

## SECTION 2.3

# INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

DKK million	Intangible assets				Property, plant and equipment			
	Goodwill	Brands	Other intangible assets	Total	Land and buildings	Plant and machinery	Other equipment, fixtures and fittings	Total
<b>2018</b>								
<b>Cost</b>								
Cost at 1 January	52,113	27,243	5,715	85,071	16,746	28,109	13,632	58,487
Acquisition of entities	2,047	-	-	2,047	1,003	438	41	1,482
Additions	-	-	127	127	159	2,490	1,251	3,900
Disposal of entities	-	-	-21	-21	-21	-5	-	-26
Disposals	-	-	-108	-108	-179	-850	-978	-2,007
Transfers	-	-	8	8	115	-582	458	-9
Foreign exchange adjustments etc.	-1,625	-2,215	-38	-3,878	-229	-640	-207	-1,076
<b>Cost at 31 December</b>	<b>52,535</b>	<b>25,028</b>	<b>5,683</b>	<b>83,246</b>	<b>17,594</b>	<b>28,960</b>	<b>14,197</b>	<b>60,751</b>
<b>Amortisation, depreciation and impairment losses</b>								
Amortisation, depreciation and impairment losses at 1 January	1,616	11,553	4,109	17,278	7,472	17,181	9,509	34,162
Disposal of entities	-	-	-21	-21	-21	-3	-	-24
Disposals	-	-	-100	-100	-129	-631	-930	-1,690
Amortisation and depreciation	-	21	516	537	469	1,374	1,684	3,527
Impairment losses	-	-	-	-	15	-3	55	67
Transfers	-	-	-	-	-13	-21	-43	-77
Foreign exchange adjustments etc.	-10	-1,269	-37	-1,316	-14	-450	-144	-608
<b>Amortisation, depreciation and impairment losses at 31 December</b>	<b>1,606</b>	<b>10,305</b>	<b>4,467</b>	<b>16,378</b>	<b>7,779</b>	<b>17,447</b>	<b>10,131</b>	<b>35,357</b>
<b>Carrying amount at 31 December</b>	<b>50,929</b>	<b>14,723</b>	<b>1,216</b>	<b>66,868</b>	<b>9,815</b>	<b>11,513</b>	<b>4,066</b>	<b>25,394</b>

Additions from acquisition of entities are described in section 5.2.



## SECTION 2.3 (CONTINUED)

## INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment under construction amounted to DKK 2,126m (2017: DKK 1,435m), impacted by the greenfield brewery in Germany and is included in plant and machinery.

Other equipment, fixtures and fittings include transport, office and draught beer equipment, coolers and returnable packaging materials.

Other intangible assets include software, land use rights and beer delivery rights.

### SERVICE AGREEMENTS

The Group has entered into service contracts of various lengths in respect of sales, logistics and IT. Costs related to the contracts are recognised as the services are received.

### LEASES

Operating lease liabilities totalled DKK 1,021m (2017: DKK 912m), with DKK 326m (2017: DKK 323m) falling due within one year from the reporting date. Operating leases relate to properties and transport equipment and contain no special purchase rights etc.

Assets held under finance leases with a carrying amount of DKK 0m (2017: DKK 23m) have been pledged as security for lease liabilities of DKK 0m (2017: DKK 19m).

### CAPITAL COMMITMENTS

The Group has entered into various capital commitments that will not take effect until after the reporting date and have therefore not been recognised in the consolidated financial statements. Capital commitments amounted to DKK 229m (2017: DKK 515m).

### ACCOUNTING ESTIMATES AND JUDGEMENTS

#### Useful lives and residual value of intangible assets with finite useful life and property, plant and equipment

Useful life and residual value are initially assessed both in acquisitions and in business combinations, cf. section 5. The value of the brands acquired and their expected useful life are assessed based on the brands' market position and profitability, and expected long-term developments in the relevant markets.

Management assesses brands and property, plant and equipment for changes in useful life. If an indication of a reduction in the value or useful life exists, the asset is tested for impairment and is written down if necessary, or the amortisation/depreciation period is reassessed and if necessary adjusted in line with the asset's changed useful life.

Reassessment of the expected future use is made in connection with changes in production structure, restructuring and brewery closures. This may result in the expected future use and residual values not being realised, which requires reassessment of useful life, residual value and recognition of impairment losses or losses on disposal of non-current assets.

When changing the amortisation or depreciation period due to a change in the useful life, the effect on amortisation/depreciation is recognised prospectively as a change in accounting estimates.

### Lease and service agreements

Management considers the substance of the service being rendered to classify the agreement as either a lease or a service contract. Particular importance is attached to whether fulfilment of the agreement depends on the use of specific assets. The Group assesses whether contracts are onerous by determining only the direct variable costs and not the costs that relate to the business as a whole.

For leases, an assessment is made as to whether the lease is a finance or an operating lease. The Group has entered into operating leases for standardised assets with a short duration relative to the life of the assets, and accordingly the leases are classified as operating leases.

Leases are classified as finance leases if they transfer substantially all the risks and rewards incident to ownership to the lessee. All other leases are classified as operating leases.

Accounting estimates and judgements related to impairment are described in section 2.2.

### Amortisation, depreciation and impairment losses

DKK million	Intangible assets		Property, plant and equipment	
	2018	2017	2018	2017
Cost of sales	216	296	2,633	2,967
Sales and distribution expenses	197	207	748	773
Administrative expenses	124	262	173	202
Special items	-	4,767	40	-79
<b>Total</b>	<b>537</b>	<b>5,532</b>	<b>3,594</b>	<b>3,863</b>

### Gain/loss on disposal of assets

DKK million	2018	2017
Gain on disposal of property, plant and equipment and intangible assets, including those held for sale, within beverage activities	36	62
Loss on disposal of property, plant and equipment and intangible assets within beverage activities	-23	-36
<b>Total</b>	<b>13</b>	<b>26</b>

## SECTION 2.3 (CONTINUED)

## INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

### ACCOUNTING POLICIES

#### Cost

Intangible assets and property, plant and equipment are initially recognised at cost and subsequently measured at cost less accumulated amortisation or depreciation and impairment losses.

Cost comprises the purchase price and costs directly attributable to the acquisition until the date when the asset is available for use. The cost of self-constructed assets comprises direct and indirect costs of materials, components, sub-suppliers, wages and salaries, and capitalised borrowing costs on specific or general borrowings attributable to the construction of the asset and is included in plant and machinery.

Research and development costs are recognised in the income statement as incurred. Development costs are recognised under other intangible assets if the costs are expected to generate future economic benefits.

For assets acquired in business combinations, including brands and property, plant and equipment, cost at initial recognition is determined by estimating the fair value of the individual assets in the purchase price allocation.

Goodwill is only acquired in business combinations and is measured in the purchase price allocation. Goodwill is not amortised but is subject to an annual impairment test, cf. section 2.2.

Where individual components of an item of property, plant and equipment have different useful lives, they are accounted for as separate items.

Subsequent costs, for example in connection with replacement of components of property, plant and equipment, are recognised in the carrying amount of the asset if it is probable that the costs will result in future economic benefits for the Group. The replaced components are derecognised from the statement of financial position and recognised as an expense in the income statement. Costs incurred for ordinary repairs and maintenance are recognised in the income statement as incurred.

#### Useful life, amortisation, depreciation and impairment losses

Useful life and residual value are determined at the acquisition date and reassessed annually. If the residual value exceeds the carrying amount, depreciation is discontinued.

Amortisation and depreciation are recognised on a straight-line basis over the expected useful life of the assets, taking into account any residual value. The expected useful life and residual value are determined based on past experience and expectations of the future use of assets.

Depreciation is calculated on the basis of the cost less the residual value and impairment losses.

Amortisation and depreciation are recognised under cost of sales, sales and distribution expenses, and administrative expenses to the extent that they are included in the cost of self-constructed assets.

#### Impairment

Impairment losses of a non-recurring nature are recognised under special items.

The expected useful life is as follows:

<b>Brands with finite useful life</b>	Normally 20 years
<b>Software</b>	Normally 3-5 years. Group-wide systems developed as an integrated part of a major business development programme: 5-7 years
<b>Delivery rights</b>	Depending on contract; if no contract term has been agreed, normally not exceeding 5 years
<b>Customer agreements/relationships</b>	Depending on contract with the customer; if no contract exists, normally not exceeding 20 years
<b>Buildings</b>	20-40 years
<b>Technical installations</b>	15 years
<b>Brewery equipment</b>	15 years
<b>Filling and bottling equipment</b>	8-15 years
<b>Technical installations in warehouses</b>	8 years
<b>On-trade and distribution equipment</b>	5 years
<b>Fixtures and fittings, other plant and equipment</b>	5-8 years
<b>Returnable packaging materials</b>	3-10 years
<b>Hardware</b>	3-5 years
<b>Land</b>	Not depreciated

#### Operating leases

Operating lease payments are recognised in the income statement on a straight-line basis over the lease term.

#### Government grants and other funding

Grants and funding received for the acquisition of assets and development projects are recognised in the statement of financial position by deducting the grant from the carrying amount of the asset. The grant is recognised in the income statement over the life of the asset as a reduced depreciation charge.

## SECTION 3

# SPECIAL ITEMS AND PROVISIONS

## 303m

### SPECIAL ITEMS, INCOME (DKK)

Impacted by gains on disposal of entities in China, gain on sale of assets that were part of a restructuring in prior years and reversal of impairment losses in Eastern Europe.

## -391m

### SPECIAL ITEMS, EXPENSES (DKK)

Primarily impacted by restructurings in Western Europe.

## SECTION 3.1

## SPECIAL ITEMS

### SPECIAL ITEMS, INCOME

In 2018, the Group recognised gains on disposal of two minor entities in China, cf. section 5.2.

In 2018, the Group completed a disposal of land and buildings in Russia impaired in 2010 and a sale of assets that were part of a

restructuring project in prior years in the UK, and also reversed provisions made for projects in prior years.

### SPECIAL ITEMS, EXPENSES

Special items, expenses consist of impairment losses on returnable steel kegs and filling lines due to the roll-out of the DraughtMaster™ one-way keg system and of restructuring projects across Western Europe. The restructuring projects are the result of the continued focus on cost and efficiency

initiatives, primarily in Kronenbourg, Carlsberg Sverige, Ringnes, certain local supply companies as well as in Asia. The restructuring projects include changes in sales and distribution operations and related organisational changes, including termination of employees. These projects typically run over several years.

2017 was impacted by a write-down of the Baltika brand, cf. section 2.2.

### Restructurings and impairment of property plant and equipment

#### Special items

DKK million	2018	2017
<b>Special items, income</b>		
Gain on disposal of entities, cf. section 5.2	42	402
Disposal of property, plant and equipment previously impaired, including adjustments to gains and reversal of provisions made in prior years	199	24
Reversal of impairment losses, cf. section 2.2	49	216
Revaluation gain on step acquisition of entities, cf. section 5.2	13	-
<b>Total</b>	<b>303</b>	<b>642</b>
<b>Special items, expenses</b>		
Impairment of brands, cf. section 2.2	-	-4,847
Restructurings and impairment of property, plant and equipment	-382	-258
Loss on disposal of entities, cf. section 5.2	-	-102
Costs related to acquisition of entities	-9	-
<b>Total</b>	<b>-391</b>	<b>-5,207</b>
<b>Special items, net</b>	<b>-88</b>	<b>-4,565</b>

DKK million	2018	2017
Restructuring in Western Europe	-263	-209
Impairment losses in Western Europe, cf. section 2.2	-60	-
Restructuring in Asia	-54	-
Other	-5	-49
<b>Total</b>	<b>-382</b>	<b>-258</b>

## SECTION 3.1 (CONTINUED)

## SPECIAL ITEMS

## ! ACCOUNTING ESTIMATES AND JUDGEMENTS

The use of special items entails management judgement in the separation from ordinary items. Management carefully considers individual items and projects (including restructurings) in order to ensure the correct distinction and split between operating activities and significant income and expenses of a special nature.

Management initially assesses the entire restructuring project and recognises all present costs of the project, but the project is also assessed on an ongoing basis with additional costs possibly being incurred during the lifetime of the project.

Management reassesses the useful life and residual value of non-current assets used in an entity undergoing restructuring. The extent and amount of onerous contracts as well as employee and other obligations arising in connection with a restructuring are also estimated.

## Impact of special items on operating profit

DKK million	2018	2017
<b>If special items had been recognised in operating profit before special items, they would have been included in the following line items:</b>		
Cost of sales	-112	-4,494
Sales and distribution expenses	-151	-86
Administrative expenses	14	-77
Other operating income	179	522
Other operating expenses	-18	-430
<b>Special items, net</b>	<b>-88</b>	<b>-4,565</b>

## + = ACCOUNTING POLICIES

Special items include significant income and expenses of a special nature in terms of the Group's revenue-generating activities that cannot be attributed directly to the Group's ordinary operating activities.

Special items also include significant non-recurring items, including termination benefits related to retirement of members of the Executive Committee, impairment of goodwill and brands, gains and losses on the disposal of activities and associates, revaluation of the shareholding in an entity held immediately before a step acquisition of that entity, and transaction costs in a business combination.

Significant restructuring of processes and structural adjustments are included in special items.

Special items are shown separately from the Group's ordinary operations to facilitate a better understanding of the Group's financial performance.

## SECTION 3.2

## PROVISIONS

Restructuring provisions relate to termination benefits to employees made redundant, primarily as a result of a restructuring project accounted for as special items.

In 2018, restructuring provisions of DKK 381m related primarily to Kronenbourg, Carlsberg Sverige, Ringnes and certain local supply companies, as described in section 3.1.

Other provisions of DKK 4,138m related primarily to profit sharing in France, employee obligations other than retirement benefits, and ongoing disputes, lawsuits etc.

## ! ACCOUNTING ESTIMATES AND JUDGEMENTS

In connection with restructurings, management assesses the timing of the costs to be incurred, which influences the classification as current or non-current liabilities. Provision for losses on onerous contracts is based on agreed terms with the other party and expected fulfilment of the contract based on the current estimate of volumes, use of raw materials etc.

Management assesses provisions, contingent assets and liabilities and the likely outcome of pending or probable lawsuits etc. on an ongoing basis. The outcome depends on future events, which are by nature uncertain. In assessing the likely outcome of lawsuits and tax disputes etc., management bases its assessment on external legal advice and established precedents.

## Provisions

DKK million	Restructurings	Onerous contracts	Other	Total
Provisions at 1 January 2018	493	451	3,258	4,202
Acquisition of entities	-	-	390	390
Additional provisions recognised	147	-	761	908
Used during the year	-211	-40	-249	-500
Reversal of unused provisions	-48	-	-27	-75
Transfers	-	-	28	28
Discounting	6	9	69	84
Foreign exchange adjustments etc.	-6	-12	-92	-110
<b>Provisions at 31 December 2018</b>	<b>381</b>	<b>408</b>	<b>4,138</b>	<b>4,927</b>
<b>Recognised in the statement of financial position</b>				
Non-current provisions	188	369	3,270	3,827
Current provisions	193	39	868	1,100
<b>Total</b>	<b>381</b>	<b>408</b>	<b>4,138</b>	<b>4,927</b>

## SECTION 3.2 (CONTINUED)

**PROVISIONS****+** **ACCOUNTING**  
**x** **POLICIES**

Provisions, including profit-sharing provisions, are recognised when, as a result of events arising before or at the reporting date, the Group has a legal or a constructive obligation and it is probable that there may be an outflow of economic benefits to settle the obligation.

Provisions are discounted if the effect is material to the measurement of the liability. The Group's average borrowing rate is used as the discount rate.

Restructuring costs are recognised when a detailed, formal restructuring plan has been announced to those affected no later than at the reporting date. On acquisition of entities, restructuring provisions in the acquiree are only included in the opening balance when the acquiree has a restructuring liability at the acquisition date.

A provision for onerous contracts is recognised when the benefits expected to be derived by the Group from a contract are lower than the unavoidable costs of meeting its obligations under the contract.

## SECTION 3.3

**CONTINGENT LIABILITIES**

The Group operates in very competitive markets where consolidation is taking place within the industry and among our customers and suppliers, all of which in different ways influences our business.

In the ordinary course of business, the Group is party to certain lawsuits, disputes etc. of various scopes, some of which are referred to below. The resolution of these lawsuits, disputes etc. is associated with uncertainty, as they depend on legal proceedings, such as negotiations between the parties affected, governmental actions and court rulings.

In 2014, the Federal Cartel Office in Germany issued a decision and imposed a fine of EUR 62m for alleged infringement of the competition rules in 2007. Management does not agree with the conclusions or findings of the Federal Cartel Office and, accordingly, Carlsberg Deutschland has appealed the decision to the relevant German court.

In 2018, the Group's associate in Portugal received a statement of objections from the local authorities, which was the next step following a previously conducted dawn raid.

Furthermore, a dawn raid was conducted in the Group's subsidiary in India in 2018 with investigations still ongoing.

At 31 December 2018, no final rulings had been made in any of the entities that have experienced dawn raids in recent years. However, there is still a significant risk related to these cases due to the inherent uncertainty.

Management and the general counsel continuously assess these risks and their likely outcome. It is the opinion of management and the general counsel that, apart from items recognised in the statement of financial position, the outcome of these lawsuits, disputes etc. cannot be reliably estimated in terms of amount or timing. The Group does not expect the ongoing lawsuits and disputes to have a material impact on the Group's financial position, net profit or cash flow.

**GUARANTEES AND COMMITMENTS**

The Group has issued guarantees for loans etc. raised by third parties (non-consolidated entities) of DKK 511m (2017: DKK 475m). Guarantees issued for loans raised by associates and joint ventures are described in section 5.4.

Certain guarantees etc. are issued in connection with disposal of entities and activities. Apart from items recognised in the statement of financial position or disclosed in the consolidated financial statements, these guarantees etc. will not have a material effect on the Group's financial position.

Capital commitments, lease liabilities and service agreements are described in section 2.3.

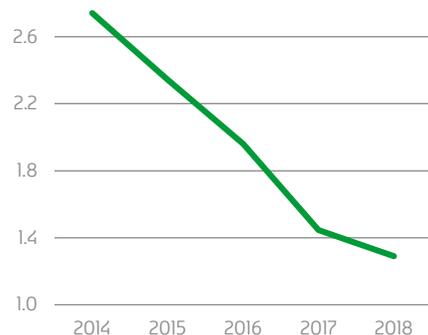
# FINANCING COSTS, CAPITAL STRUCTURE AND EQUITY

## -722m

### NET FINANCIAL ITEMS (DKK)

Financial items, net, amounted to DKK -722m against DKK -788m in 2017. Excluding currency gains and fair value adjustments, financial items, net, amounted to DKK -758m (2017: DKK -980m), positively impacted by the lower net interest-bearing debt.

### Leverage ratio (NIBD/EBITDA)



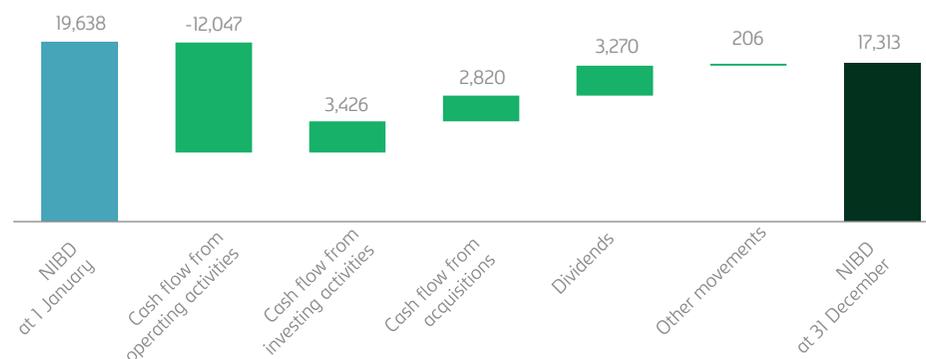
## 17.3bn

### NET INTEREST-BEARING DEBT (DKK)

At 31 December 2018, gross financial debt amounted to DKK 24.0bn (2017: DKK 24.2bn).

Net interest-bearing debt was DKK 17.3bn, a reduction of DKK 2.3bn versus year-end 2017 despite the higher dividend payout and the acquisitions made in the year.

### Changes in net interest-bearing debt (DKK m)



The difference of DKK 6.7bn between gross financial debt and net interest-bearing debt mainly comprised cash and cash equivalents of DKK 5.6bn.

The leverage ratio, measured as net interest-bearing debt to operating profit before depreciation, amortisation and impairment losses, was 1.29x (1.45x at year-end 2017).

Long-term and short-term borrowings amounted to DKK 24.0bn at 31 December 2018 (2017: DKK 24.2bn). Long-term borrowings totalled DKK 16.8bn (2017: DKK 23.3bn) and short-term borrowings totalled

DKK 7.2bn (2017: DKK 0.8bn). The shift between long-term and short-term borrowings was mainly due to the EUR 750m bond maturing on 3 July 2019.

Current liabilities excluding short-term borrowings increased by DKK 3.0bn to DKK 27.2bn. The increase was mainly due to an increase of DKK 2.7bn in trade payables. The increase in trade payables was due to increased volumes and focused cash discipline combined with the acquisition of Cambrew.

## 47.9bn

### EQUITY (DKK)

Equity amounted to DKK 47.9bn at 31 December 2018 (2017: DKK 49.5bn), of which DKK 45.3bn was attributable to shareholders in Carlsberg A/S and DKK 2.6bn to non-controlling interests.

The change in equity of DKK 1.6bn was mainly the result of the consolidated profit of DKK 6.1bn being offset by the foreign exchange loss of DKK 2.8bn and the dividend payout of DKK 3.3bn.

## SECTION 4.1

## FINANCIAL INCOME AND EXPENSES

### Financial items recognised in the income statement

DKK million	2018	2017
<b>Financial income</b>		
Interest income	153	144
Foreign exchange gains, net	36	192
Interest on plan assets, defined benefit plans	155	152
Other	14	23
<b>Total</b>	<b>358</b>	<b>511</b>
<b>Financial expenses</b>		
Interest expenses	-579	-775
Capitalised financial expenses	10	4
Interest cost on obligations, defined benefit plans	-232	-250
Other	-279	-278
<b>Total</b>	<b>-1,080</b>	<b>-1,299</b>
<b>Financial items, net, recognised in the income statement</b>	<b>-722</b>	<b>-788</b>

### Financial items recognised in other comprehensive income

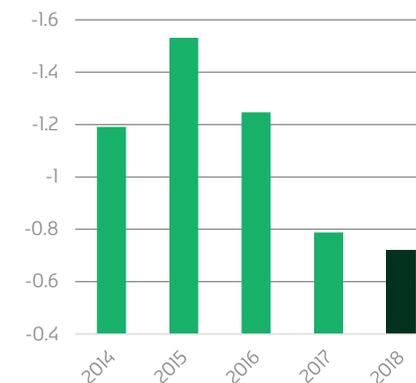
DKK million	2018	2017
<b>Foreign exchange adjustments of foreign entities</b>		
Foreign currency translation of foreign entities	-2,685	-3,785
Recycling of cumulative translation differences of entities acquired in step acquisitions or disposed of	-69	-57
<b>Total</b>	<b>-2,754</b>	<b>-3,842</b>
<b>Fair value adjustments of hedging instruments</b>		
Change in fair value of effective portion of cash flow hedges	-94	189
Change in fair value of cash flow hedges transferred to the income statement	-77	-142
Change in fair value of net investment hedges	-469	-352
<b>Total</b>	<b>-640</b>	<b>-305</b>
<b>Financial items, net, recognised in other comprehensive income</b>	<b>-3,394</b>	<b>-4,147</b>

Interest income relates to interest on cash and cash equivalents measured at amortised cost.

Foreign exchange gains, net, include fair value adjustments of fair value hedges and hedges not designated as hedging instruments of DKK -54m (2017: DKK -292m), cf. section 4.8.

Of the net change in fair value of cash flow hedges transferred to the income statement, DKK -87m (2017: DKK -146m) is included in net revenue and cost of sales and DKK 10m (2017: DKK 4m) is included in financial items.

### Financial items, net (DKKbn)



## SECTION 4.2

## NET INTEREST-BEARING DEBT

Of the gross financial debt at year-end, 70% (2017: 96%) was long term, i.e. with maturity of more than one year.

Of the net financial debt, 96% was denominated in EUR and DKK (after swaps), and 91% of the net financial debt was at fixed interest (fixed-interest period exceeding one year). The interest rate risk is measured by the duration of the net financial debt, for which our target is between two and five years. At 31 December 2018, the duration was 4.2 years (2017: 4.6 years).

### Net interest-bearing debt

DKK million	2018	2017
Non-current borrowings	16,750	23,340
Current borrowings	7,233	849
<b>Gross financial debt</b>	<b>23,983</b>	<b>24,189</b>
Cash and cash equivalents	-5,589	-3,462
<b>Net financial debt</b>	<b>18,394</b>	<b>20,727</b>
Loans to associates, interest-bearing portion	-325	-290
On-trade loans, net	-717	-764
Other receivables, net	-39	-35
<b>Net interest-bearing debt</b>	<b>17,313</b>	<b>19,638</b>

## SECTION 4.3 CAPITAL STRUCTURE

### 4.3.1 CAPITAL STRUCTURE

Management regularly assesses whether the Group's capital structure is in the interests of the Group and its shareholders.

The overall objective is to ensure a continued development and strengthening of the Group's capital structure that supports long-term profitable growth and a solid increase in key earnings and ratios. This includes assessment of and decisions on the split of financing between share capital and borrowings, which is a long-term strategic decision to be made in connection with significant investments and other transactions.

Carlsberg A/S' share capital is divided into two classes (A shares and B shares). Combined with the Carlsberg Foundation's position as majority shareholder (in terms of control), management considers that this division will remain advantageous for all of the shareholders, as this structure enables and supports the long-term development of the Group.

The Group targets a leverage ratio below 2.0x. The leverage ratio is measured as net interest-bearing debt to operating profit before depreciation, amortisation and impairment losses. At the end of 2018, the leverage ratio was 1.29x (2017: 1.45x) and, in light of the reduced financial leverage, the intention is to increase the payout to shareholders.

The Group uses share buy-back programmes to return excess cash to shareholders.

The size of any share buy-back programmes will depend on the expected organic and inorganic investments needed to grow the business and the Group's intention to maintain net interest-bearing debt to operating profit before depreciation, amortisation and impairment losses below 2.0x.

The Group is rated by Moody's Investors Service and Fitch Ratings. As an element in strategic decisions on capital structure, management assesses the risk of changes in the Group's investment-grade rating. Identification and monitoring of risks that could change the rating were carried out on an ongoing basis throughout the year.

### 4.3.2 EQUITY

#### DIVIDENDS

The Group proposes a dividend of DKK 18.00 per share (2017: DKK 16.00 per share), amounting to DKK 2,746m (2017: DKK 2,441m). The proposed dividend has been included in retained earnings at 31 December 2018.

Dividends paid out in 2018 for 2017, net of dividends on treasury shares, amounted to DKK 2,439m (paid out in 2017 for 2016: DKK 1,525m). Dividends paid out to shareholders of Carlsberg A/S do not impact taxable income in Carlsberg A/S.

Dividends paid to non-controlling interests primarily related to entities in Asia. At

31 December 2018, dividends of DKK 38m were payable to non-controlling interests.

#### SHARE BUY-BACK AND TREASURY SHARES

During the 12-month period from 6 February 2019, the Group intends to buy back shares worth up to DKK 4.5bn. The share buy-back programme will be split into two tranches of approximately six months each and will be executed in accordance with Article 5 of Regulation No 596/2014 of the European Parliament and Council of 16 April 2014 (MAR) and the Commission Delegated Regulation (EU) 2016/1052, also referred to as the Safe Harbour Regulation. The first tranche is a share buy-back programme worth up to DKK 2.5bn, with a maximum of 15 million shares. The Company is entitled to suspend or stop the programme at any time.

According to the authorisation of the Annual General Meeting, the Supervisory Board may, in the period until 13 March 2023, allow the Company to acquire treasury shares up to a total holding of 10% of the nominal share

capital at a price quoted on Nasdaq Copenhagen at the time of acquisition with a deviation of up to 10%. The permitted holding of treasury shares covers those acquired in share buy-back programmes. The Company holds no class A shares.

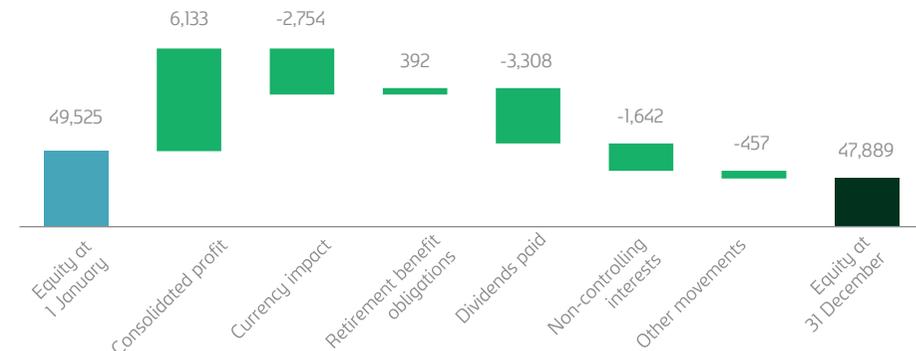
#### Transactions with shareholders in Carlsberg A/S

DKK million	2018	2017
Dividends paid to shareholders	-2,439	-1,525
Acquisition of treasury shares	-128	-266
Disposal of treasury shares	78	110
<b>Total</b>	<b>-2,489</b>	<b>-1,681</b>

#### Transactions with non-controlling interests

DKK million	2018	2017
Dividends paid to NCI	-831	-738
Acquisition of NCI	-355	-2
<b>Total</b>	<b>-1,186</b>	<b>-740</b>

#### Equity (DKK m)



## SECTION 4.3 (CONTINUED)

**CAPITAL  
STRUCTURE****Share capital**

	Class A shares		Class B shares		Total share capital	
	Shares of DKK 20	Nominal value, DKK '000	Shares of DKK 20	Nominal value, DKK '000	Shares of DKK 20	Nominal value, DKK '000
1 January 2017	33,699,252	673,985	118,857,554	2,377,151	152,556,806	3,051,136
No change in 2017	-	-	-	-	-	-
<b>31 December 2017</b>	<b>33,699,252</b>	<b>673,985</b>	<b>118,857,554</b>	<b>2,377,151</b>	<b>152,556,806</b>	<b>3,051,136</b>
No change in 2018	-	-	-	-	-	-
<b>31 December 2018</b>	<b>33,699,252</b>	<b>673,985</b>	<b>118,857,554</b>	<b>2,377,151</b>	<b>152,556,806</b>	<b>3,051,136</b>

**A shares** carry 20 votes per DKK 20 share. **B shares** carry two votes per DKK 20 share. A preferential right to an 8% non-cumulative dividend is attached to B shares. Apart from votes and dividends, all shares rank equally.

**Treasury shares**

	Fair value, DKK m	Shares of DKK 20	Nominal value, DKK m	Percentage of share capital
1 January 2017		4,401	0.1	0.0%
Acquisition of treasury shares		376,888	7.5	0.2%
Used to settle share-based payments		-214,947	-4.3	-0.1%
<b>31 December 2017</b>	<b>124</b>	<b>166,342</b>	<b>3.3</b>	<b>0.1%</b>
Acquisition of treasury shares		173,464	3.5	0.1%
Used to settle share-based payments		-240,353	-4.8	-0.2%
<b>31 December 2018</b>	<b>69</b>	<b>99,453</b>	<b>2.0</b>	<b>0.1%</b>

To facilitate settlement of share-based incentive programmes in 2018, the Company acquired class B treasury shares at an average price of DKK 740 (2017: DKK 706).

**ACCOUNTING  
POLICIES****Proposed dividends**

The proposed dividend is recognised as a liability at the date when it is adopted at the Annual General Meeting (declaration date). The dividend recommended by the Supervisory Board, and therefore expected to be paid for the year, is disclosed in the statement of changes in equity.

**Treasury shares**

Cost of acquisition, consideration received and dividends received from treasury shares are recognised directly in equity as retained earnings. Capital reductions from the cancellation of treasury shares are deducted from the share capital at an amount corresponding to the nominal value of the shares and added to retained earnings.

Proceeds from the sale of treasury shares in connection with the settlement of share-based payments are recognised directly in equity.

**4.3.3 FINANCIAL RISK MANAGEMENT**

The Group's activities give rise to exposure to a variety of financial risks, including market risk (foreign exchange risk, interest rate risk and raw material risk), credit risk and liquidity risk. These risks are described in the following sections:

- Foreign exchange risk: sections 1.3 and 4.6
- Interest rate risk: section 4.5
- Commodity risk: section 1.2.1
- Credit risk: sections 1.5.1 and 4.4.2
- Liquidity risk: section 4.7

The Group's financial risks are managed by Group Treasury in accordance with the Financial Risk Management Policy approved by the Supervisory Board and are an integrated part of the overall risk management process. The risk management governance structure is described in the Management review.

To reduce the exposure to these risks, the Group enters into a variety of financial instruments and generally seeks to apply hedge accounting to reduce volatility in the income statement.

Debt instruments and deposits in foreign currency reduce the overall risk, but do not achieve the objective of reducing volatility in specific items in the income statement.

## SECTION 4.4

**BORROWINGS  
AND CASH**

## 4.4.1 BORROWINGS

Borrowings decreased slightly in 2018. In addition, the distribution between current and non-current debt changed, as a EUR 750m bond matures in July 2019 and the certificates arising as a consequence of the prepayment received regarding the disposal of the Hamburg site mature in November 2019. Both items were reported as non-current in 2017.

**Gross financial debt**

DKK million	2018	2017
<b>Non-current</b>		
Issued bonds	16,697	22,215
Bank borrowings	35	21
Other borrowings	18	1,104
<b>Total</b>	<b>16,750</b>	<b>23,340</b>
<b>Current</b>		
Issued bonds	5,602	-
Current portion of other non-current borrowings	-	36
Bank borrowings	526	773
Other borrowings	1,105	40
<b>Total</b>	<b>7,233</b>	<b>849</b>
<b>Total borrowings</b>	<b>23,983</b>	<b>24,189</b>
Fair value	25,248	25,840

An overview of issued bonds (current and non-current) is provided in section 4.5.

**Changes in gross financial debt**

DKK million	2018	2017
<b>Gross financial debt at 1 January</b>	<b>24,189</b>	<b>30,204</b>
Proceeds from issue of bonds	-	3,684
Repayment of bonds	-	-7,444
Instalments on and proceeds from borrowings, long-term	-38	-1,157
Repayment of mortgage	-	-420
Instalments on and proceeds from borrowings, short-term	-56	147
Other	-29	-49
<b>External financing</b>	<b>-123</b>	<b>-5,239</b>
Change in bank overdrafts	-187	-812
Other, including foreign exchange adjustments and amortisation	104	36
<b>Gross financial debt at 31 December</b>	<b>23,983</b>	<b>24,189</b>


**ACCOUNTING  
POLICIES**

Borrowings are initially recognised at fair value less transaction costs and subsequently measured at amortised cost using the effective interest method. Accordingly, the difference between the fair value less transaction costs and the nominal value is recognised under financial expenses over the term of the loan.

## 4.4.2 CASH

Cash and cash equivalents include short-term marketable securities with a term of three months or less at the acquisition date that are subject to an insignificant risk of changes in value. Short-term bank deposits amounted to DKK 252m (2017: DKK 578m). The average interest rate on these deposits was 6% (2017: 6.3%).

**Cash and cash equivalents**

DKK million	2018	2017
Cash and cash equivalents	5,589	3,462
Bank overdrafts	-155	-342
<b>Cash and cash equivalents, net</b>	<b>5,434</b>	<b>3,120</b>

**ASSESSMENT OF CREDIT RISK**

The Group is exposed to credit risk on cash and cash equivalents (including fixed deposits), investments and derivative financial instruments with a positive fair value due to uncertainty as to whether the counterparty will be able to meet its contractual obligations as they fall due.

The Group has established a credit policy under which financial transactions may be entered into only with financial institutions with a solid credit rating. The credit exposure on financial institutions is managed by Group Treasury.

The Group primarily enters into financial instruments and transactions with the Group's relationship banks, i.e. banks extending loans to the Group. Group Treasury monitors the Group's gross credit exposure to banks and operates with individual limits on banks based on rating and access to netting of assets and liabilities.

**EXPOSURE TO CREDIT RISK**

The carrying amount of DKK 5,589m (2017: DKK 3,462m) represents the maximum credit exposure related to cash and cash equivalents. Of this amount, DKK 2,760m (2017: DKK 2,131m) is cash in Asia.

The credit risk on receivables is described in section 1.5.1.

## SECTION 4.5

## INTEREST RATE RISK

The Group's exposure to interest rate risk is considered limited. At the reporting date, 91% of the net financial debt consisted of fixed-rate borrowings with interest rates fixed for more than one year (2017: 113%). As 89% of the Group's net debt is in EUR, the interest rate exposure primarily relates to the development in the interest rates for EUR.

The interest rate risk is measured by the duration of the net financial debt. The target is to have a duration between two and five years. At 31 December 2018, the duration was 4.2 years (2017: 4.6). Interest rate risks are mainly managed using fixed-rate bonds.

The EUR 750m bond maturing on 3 July 2019 consists of two bond issues of EUR 250m and EUR 500m.

## Net financial debt by currency

DKK million	Net financial debt	Interest rate			
		Floating <sup>1</sup>	Fixed <sup>1</sup>	Floating <sup>2</sup> %	Fixed <sup>2</sup> %
<b>2018</b>					
EUR	16,436	-339	16,775	24%	76%
DKK	1,279	1,279	-	100%	-
PLN	-372	-372	-	100%	-
USD	986	986	-	100%	-
CHF	977	977	-	100%	-
RUB	-58	-58	-	100%	-
Other	-854	-854	-	100%	-
<b>Total</b>	<b>18,394</b>	<b>1,619</b>	<b>16,775</b>	<b>9%</b>	<b>91%</b>
<b>2017</b>					
EUR	17,591	-5,790	23,381	0%	100%
DKK	1,758	1,758	-	100%	-
PLN	-123	-123	-	100%	-
USD	1,606	1,604	2	100%	-
CHF	979	979	-	100%	-
RUB	-1,418	-1,418	-	100%	-
Other	334	336	-2	100%	-
<b>Total</b>	<b>20,727</b>	<b>-2,654</b>	<b>23,381</b>	<b>-13%</b>	<b>113%</b>

<sup>1</sup> Net financial debt consists of current and non-current items after currency derivatives less cash and cash equivalents.

<sup>2</sup> Net financial debt consists of current and non-current items less cash and cash equivalents.

## SENSITIVITY ANALYSIS

It is estimated that a 1 percentage point interest rate increase would lead to an increase in interest expenses of DKK 16m (2017: decrease of DKK 27m). The analysis assumes a parallel shift in the relevant yield curves.

If the market interest rate had been 1 percentage point higher at the reporting date, it would have led to a financial gain of DKK 766m (2017: DKK 962m), and a similar loss had the interest rate been 1 percentage point lower. However, since all fixed-rate borrowings are measured at amortised cost, there is no impact on other comprehensive income or the income statement.

The sensitivity analysis is based on the financial instruments recognised at the reporting date.

The sensitivity analysis assumes a parallel shift in interest rates and that all other variables remain constant, in particular foreign exchange rates and interest rate differentials between the different currencies. The analysis was performed on the same basis as for 2017. The Group did not enter into any new interest rate swaps in 2018.

## Interest rate risk

DKK million	Interest rate	Average effective interest rate	Fixed for	Carrying amount	Interest rate risk
<b>Issued bonds</b>					
EUR 750m maturing 3 July 2019	Fixed	2.6%	0-1 year	5,602	Fair value
EUR 750m maturing 15 November 2022	Fixed	2.7%	3-4 years	5,580	Fair value
EUR 500m maturing 6 September 2023	Fixed	0.7%	4-5 years	3,705	Fair value
EUR 1,000m maturing 28 May 2024	Fixed	2.6%	>5 years	7,412	Fair value
<b>Total issued bonds</b>		<b>2.3%</b>		<b>22,299</b>	
<b>Total issued bonds 2017</b>		<b>2.3%</b>		<b>22,215</b>	
<b>Bank borrowings and other borrowings</b>					
Floating-rate	Floating	1.5%	<1 year	1,632	Cash flow
Fixed-rate	Fixed	1.9%	>1 year	52	Fair value
<b>Total bank borrowings and other borrowings</b>				<b>1,684</b>	
<b>Total bank borrowings and other borrowings 2017</b>				<b>1,974</b>	



## SECTION 4.6 (CONTINUED)

## FOREIGN EXCHANGE RISK RELATED TO NET INVESTMENTS AND FINANCING ACTIVITIES

### 4.6.4 IMPACT ON FINANCIAL STATEMENTS AND SENSITIVITY ANALYSIS

#### IMPACT ON INCOME STATEMENT

For the impact of currency on operating profit and financial items, please refer to sections 1.3 and 4.1 respectively.

#### IMPACT ON STATEMENT OF FINANCIAL POSITION

Fluctuations in foreign exchange rates will affect the level of debt, as funding is obtained in a number of currencies. In 2018, net interest-bearing debt increased by DKK 142m (2017: increased by DKK 360m) due to changes in foreign exchange rates.

#### SENSITIVITY ANALYSIS

An adverse development in the exchange rates would, all other things being unchanged, have had the hypothetical impact on the consolidated income statement and other comprehensive income for 2018 illustrated in the tables. The calculations are made on the basis of items in the statement of financial position at 31 December 2018.

#### Income statement

The hypothetical impact ignores the fact that the subsidiaries' initial recognition of revenue, cost and debt would be similarly exposed to the exchange rate developments.

#### Other comprehensive income

Other comprehensive income is affected by changes in the fair value of currency derivatives designated as cash flow hedges of future purchases and sales.

#### Exchange rate sensitivity - other comprehensive income

2018	Average hedged rate	Notional amount	% change	Effect on OCI	2017	
					Average hedged rate	Effect on OCI
<b>DKK million</b>						
NOK/DKK	0.7707	-696	5%	-35	0.7768	-32
SEK/DKK	0.7227	-523	5%	-26	0.7734	-30
PLN/DKK	1.6865	-451	5%	-23	1.7139	-28
CHF/DKK	6.5356	-319	5%	-16	6.5354	-13
RUB/DKK	0.0894	-236	10%	-24	0.1089	-38
GBP/DKK	8.3284	-168	5%	-8	8.2152	-6
Other	-	53	5%	3	-	8
<b>Total</b>				<b>-129</b>		<b>-139</b>

#### Exchange rate sensitivity - income statement

2018	EUR receivable	EUR payable	EUR cash	Gross exposure	Exposure, net of hedging	% change	Effect on P/L	2017
								Effect on P/L
<b>DKK million</b>								
EUR/GBP	1,109	-639	-340	130	130	5%	7	33
EUR/NOK	121	-608	273	-214	-214	5%	-11	-22
EUR/PLN	276	-195	27	108	108	5%	5	3
EUR/KZT	-	-5	211	206	206	10%	21	16
EUR/RUB	7	-105	237	139	139	10%	14	10
EUR/SEK	331	-291	51	91	91	5%	5	-6
EUR/CHF	89	-209	87	-33	-33	5%	-2	-4
<b>Total</b>							<b>39</b>	<b>30</b>

2018	USD receivable	USD payable	USD cash	Gross exposure	Exposure, net of hedging	% change	Effect on P/L	2017
								Effect on P/L
<b>DKK million</b>								
USD/RUB	-	-2	327	325	325	10%	33	19
USD/UAH	-	-1	157	156	156	10%	16	10
<b>Total</b>							<b>49</b>	<b>29</b>

## SECTION 4.6 (CONTINUED)

## FOREIGN EXCHANGE RISK RELATED TO NET INVESTMENTS AND FINANCING ACTIVITIES

### APPLIED EXCHANGE RATES

The average exchange rate was calculated using the monthly exchange rates weighted according to the phasing of the net revenue per currency throughout the year.

### Applied exchange rates

DKK	Closing rate		Average rate	
	2018	2017	2018	2017
Swiss franc (CHF)	6.6512	6.3621	6.4526	6.7091
Chinese yuan (CNY)	0.9479	0.9539	0.9562	0.9764
Euro (EUR)	7.4673	7.4449	7.4529	7.4384
Pound sterling (GBP)	8.2719	8.3912	8.4234	8.4933
Laotian kip (LAK)	0.0008	0.0007	0.0007	0.0008
Norwegian krone (NOK)	0.7487	0.7566	0.7775	0.7961
Polish zloty (PLN)	1.7355	1.7824	1.7471	1.7500
Russian rouble (RUB)	0.0940	0.1081	0.1007	0.1134
Swedish krona (SEK)	0.7266	0.7563	0.7256	0.7712
Ukrainian hryvnia (UAH)	0.2355	0.2223	0.2347	0.2488

## SECTION 4.7

## LIQUIDITY RISK

Liquidity risk results from the Group's potential inability to meet the obligations associated with its financial liabilities, for example settlement of financial debt and paying suppliers. The Group's liquidity is managed by Group Treasury. The aim is to ensure effective liquidity management, which involves obtaining sufficient committed credit facilities to ensure adequate financial resources and, to some extent, tapping a range of funding sources.

### CREDIT RESOURCES AVAILABLE

The Group uses the term "credit resources available" to determine the adequacy of access to credit facilities.

Net financial debt is used internally by Group Treasury to monitor the Group's credit resources available. Net financial debt is the Group's net interest-bearing debt, excluding interest-bearing assets other than cash, as these assets are not actively managed in relation to liquidity risk. Net financial debt is shown in section 4.2.

### Committed credit facilities and credit resources available

#### DKK million

	Total committed loans and credit facilities	Utilised portion of credit facilities	Unutilised credit facilities	2017 Unutilised credit facilities
<b>2018</b>				
<b>Current</b>				
<1 year	8,764	7,233	1,531	2,079
<b>Total current committed loans and credit facilities</b>	<b>8,764</b>	<b>7,233</b>	<b>1,531</b>	<b>2,079</b>
<b>Non-current</b>				
<1 year	-	-	-7,233	-849
1-2 years	21	21	-	-
2-3 years	15,004	-5	15,009	-
3-4 years	5,595	5,595	-	18,687
4-5 years	3,712	3,712	-	-
>5 years	7,427	7,427	-	-
<b>Total non-current committed loans and credit facilities</b>	<b>31,759</b>	<b>16,750</b>	<b>7,776</b>	<b>17,838</b>
Cash and cash equivalents			5,589	3,462
<b>Credit resources available (total non-current committed loans and credit facilities - net debt)</b>			<b>13,365</b>	<b>21,300</b>

## SECTION 4.7 (CONTINUED)

**LIQUIDITY RISK**

At 31 December 2018, the Group had total credit resources available of DKK 13,365m (2017: DKK 21,300m) consisting of cash and cash equivalents of DKK 5,589m (2017: DKK 3,462m), committed unutilised non-current credit facilities of DKK 15,009m (2017: DKK 18,687m) and less utilisation of current facilities of DKK -7,233m (2017: DKK -849m). Including current credit facilities of DKK 1,531m (2017: DKK 2,079m), total committed unutilised credit facilities amounted to DKK 16,540m (2017: DKK 20,766m).

Credit resources available were reduced by DKK 7.9bn compared with 2017. This was primarily due to the net effect of an EUR 750m bond maturing in July 2019 (reducing credit resources available by DKK 5.6bn), certificates related to prepayments regarding disposal of the Hamburg site of DKK 1.1bn, and a reduction in the revolving credit facility of DKK 3.7bn. Furthermore, the reduction in net financial debt increased credit resources available by DKK 2.3bn. Credit resources are also affected by planned share buy-backs.

**Time to maturity for non-current borrowings**

DKK million						
2018	1-2 years	2-3 years	3-4 years	4-5 years	>5 years	Total
Issued bonds	-	-	5,580	3,705	7,412	16,697
Bank borrowings	21	-5	13	6	-	35
Other non-current borrowings	-	-	2	1	15	18
<b>Total</b>	<b>21</b>	<b>-5</b>	<b>5,595</b>	<b>3,712</b>	<b>7,427</b>	<b>16,750</b>
<b>Total 2017</b>	<b>6,694</b>	<b>17</b>	<b>-28</b>	<b>5,569</b>	<b>11,088</b>	<b>23,340</b>

The credit resources available and the access to unused committed credit facilities are considered reasonable in light of the Group's current needs in terms of financial flexibility.

In addition to efficient working capital management and credit risk management, the Group mitigates liquidity risk by arranging borrowing facilities with solid financial institutions.

The Group uses cash pools for day-to-day liquidity management in most of the entities in Western Europe, as well as intra-group loans between Group Treasury and subsidiaries. Eastern Europe and Asia are less integrated in terms of cash pools, and liquidity is managed via intra-group loans.

The table lists the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements, and thus summarises the gross liquidity risk.

The risk implied by the values reflects the one-sided scenario of cash outflows only. Trade payables and other financial liabilities originate from the financing of assets in ongoing

operations, such as property, plant and equipment, and investments in working capital, for example inventories and trade receivables.

The nominal amount/contractual cash flow of the gross financial debt was DKK 125m higher (2017: DKK 163m higher) than the carrying amount. The difference between the nominal amount and the carrying amount comprises differences between these amounts at initial recognition, which are treated as a cost that is capitalised and amortised over the duration of the borrowings.

The interest expense is the contractual cash flows expected on the gross financial debt existing at 31 December 2018.

The cash flow is estimated based on the notional amount of the above-mentioned borrowings and expected interest rates at year-end 2018 and 2017. Interest on debt recognised at year-end 2018 and 2017, for which no contractual obligation exists (current borrowing and cash pools), has been included for a two-year period.

**Maturity of financial liabilities**

## DKK million

2018	Contractual cash flows	Maturity <1 year	Maturity >1 year <5 years	Maturity >5 years	Carrying amount
<b>Derivative financial instruments</b>					
Derivative financial instruments, payables	281	272	9	-	263
<b>Non-derivative financial instruments</b>					
Gross financial debt	24,108	7,232	9,394	7,482	23,983
Interest expenses	1,780	437	1,266	77	N/A
Trade payables and other liabilities	17,782	17,782	-	-	17,782
Contingent liabilities	511	511	-	-	511
Contingent considerations	6,168	-	6,168	-	6,168
<b>Non-derivative financial instruments</b>	<b>50,349</b>	<b>25,962</b>	<b>16,828</b>	<b>7,559</b>	<b>-</b>
<b>Financial liabilities</b>	<b>50,630</b>	<b>26,234</b>	<b>16,837</b>	<b>7,559</b>	<b>-</b>
<b>Financial liabilities 2017</b>	<b>46,088</b>	<b>17,299</b>	<b>17,323</b>	<b>11,466</b>	<b>-</b>

## SECTION 4.8

## DERIVATIVE FINANCIAL INSTRUMENTS

The Group enters into various derivative financial instruments to hedge foreign exchange, interest rate and commodity risks and seeks to apply hedge accounting when this is possible. Hedging of future, highly probable forecast transactions is designated as cash flow hedges. Fair value adjustments of derivative financial instruments that are not designated either as net investment hedges or as cash flow hedges are recognised in financial income and expenses.

The Group monitors the cash flow hedge relationships twice a year to assess whether the hedge is still effective.

The ineffective portion primarily relates to aluminium hedges. Following the adoption of IFRS 9, there was no ineffectiveness. The change in accounting policy did not have a material impact on other comprehensive income or the income statement.

Positive fair values of derivatives are recognised as other receivables and negative values as other liabilities.

The fair value of derivatives classified as a cash flow hedge is presented in the cash flow hedge section below.

Cash flow hedges comprise aluminium hedges where the hedged item is aluminium cans that will be used in a number of Group entities in 2019 and 2020, and currency forwards entered into to cover the foreign exchange risk on transactions expected to take place in 2019 and 2020.

The impact on other comprehensive income from exchange rate instruments relates to hedges of Group entities' purchases and sales in currencies other than their functional currencies. The impact on other comprehensive income from other instruments relates to hedges of Group entities' exposure to changes in aluminium prices.

The closing balance in the equity reserve for hedging of cash flow hedges for which hedge accounting is no longer applied was DKK -837m (2017: DKK -832m).

### Cash flow hedges

DKK million

	Other comprehensive income	Fair value receivables	Fair value payables	Fair value, net	Expected recognition	
					2019	2020
<b>2018</b>						
Exchange rate instruments	-31	18	-13	5	4	1
Other instruments	-140	4	-89	-85	-74	-11
<b>Total</b>	<b>-171</b>	<b>22</b>	<b>-102</b>	<b>-80</b>	<b>-70</b>	<b>-10</b>
<b>2017</b>					<b>2018</b>	<b>2019</b>
Interest rate instruments	1	-	-	-	N/A	N/A
Exchange rate instruments	64	36	-9	27	26	1
Other instruments	-18	65	-	65	65	-
<b>Total</b>	<b>47</b>	<b>101</b>	<b>-9</b>	<b>92</b>	<b>91</b>	<b>1</b>

### Financial derivatives not designated as hedging instruments (economic hedges)

DKK million

	Income statement	Fair value receivables	Fair value payables	Fair value, net
<b>2018</b>				
Exchange rate instruments	-40	57	-55	2
Other instruments	-3	-	-	-
Ineffectiveness	-11	-	-	-
<b>Total</b>	<b>-54</b>	<b>57</b>	<b>-55</b>	<b>2</b>
<b>2017</b>				
Exchange rate instruments	-292	121	-75	46
Other instruments	4	-	-	-
Ineffectiveness	-4	-	-	-
<b>Total</b>	<b>-292</b>	<b>121</b>	<b>-75</b>	<b>46</b>

## SECTION 4.8 (CONTINUED)

# DERIVATIVE FINANCIAL INSTRUMENTS

## ! ACCOUNTING ESTIMATES AND JUDGEMENTS

When entering into financial instruments, management assesses whether the instrument is an effective hedge of recognised assets and liabilities, expected future cash flows or financial investments. The effectiveness of recognised hedging instruments is assessed at least twice a year.

Fair values of derivative financial instruments are calculated on the basis of level 2 input consisting of current market data and generally accepted valuation methods. Internally calculated values are used, and these are compared with external market quotes on a quarterly basis. For currency and aluminium derivatives, the calculation is as follows:

- a) The forward market rate is compared with the agreed rate on the derivatives, and the difference in cash flow at the future point in time is calculated.
- b) The amounts are discounted to present value.

When entering into a contract, management assesses whether the contract contains embedded derivatives and whether they meet the criteria for separate classification and recognition. The Group currently does not have any embedded derivatives that meet the criteria for separate classification and recognition.

## + = ACCOUNTING x = POLICIES

Derivative financial instruments are initially recognised at fair value on the trade date and subsequently remeasured at their fair value at the reporting date.

The accounting for subsequent changes in fair value depends on whether the derivative is designated as one of:

- Fair value hedges of the fair value of recognised assets or liabilities
- Cash flow hedges of particular risks associated with the cash flow from forecast transactions
- Net investment hedges of currency fluctuations in subsidiaries, associates or joint ventures.

The fair values of derivative financial instruments are presented in other receivables or payables, and positive and negative values are offset only when the Group has the right and the intention to settle several financial instruments net.

Changes in the fair value of a **fair value hedge** and of derivative financial instruments not designated in a hedge relationship are recognised in financial income or expenses in the income statement.

Changes in the effective portion of the fair value of derivative financial instruments that are designated and qualify as a **cash flow hedge** are recognised in the hedging reserve within equity. When the hedged transaction materialises, amounts previously recognised in other comprehensive income are transferred to the same item as the hedged item.

Derivatives designated as and qualifying for recognition as a cash flow hedge of financial investments are recognised in other comprehensive income. On complete or partial disposal of the financial investment, the portion of the hedging instrument that is recognised in other comprehensive income and relates to that financial investment is recognised in the income statement when the gain or loss on disposal is recognised.

**Hedges of net investments** in foreign subsidiaries, associates and joint ventures are accounted for in the same way as cash flow hedges.

# ACQUISITIONS, DISPOSALS, ASSOCIATES AND JOINT VENTURES

## Cambrew

Gained control of the Cambrew Group through the acquisition of an additional 25% shareholding.

## Super Bock

Increased the direct and indirect ownership of the associate Super Bock Group to 60%.

### SECTION 5.1

## INVESTMENT MODEL AND RISKS

### MARKET ACCESS

In the beer industry, access to local markets is highly dependent on establishing good relationships with customers in the on- and off-trade channels, national distributors, local suppliers of raw and packaging materials, and relevant authorities governing the beverage industry. Often, the most efficient way of establishing such relations is by acquiring a local brewer or engaging with a local partner that already has the relevant relationships.

Therefore, when the Group expands its business into new markets, it often does so in collaboration with a local partner. Such a partnership can have different legal forms and impacts the consolidated financial statements to a varying degree accordingly.

### INVESTMENT MODEL

Entering into a partnership can both reduce the financial exposure and mitigate the business risks associated with entering new markets. The financial exposure, however, varies depending on the structure of the partnership.

In some markets, the Group enters as a non-controlling shareholder and provides a degree of financing and contributes knowledge of the beer industry, but leaves the controlling influence with the partner. Other investments are structured as joint ventures, where the Group and our local partner jointly make the operational decisions and share strategic and tactical responsibility.

More commonly, the Group structures its partnerships such that it exercises management control, usually by way of a majority of the voting rights, whereby the investment is fully consolidated. Such partnerships are just as important as other types of partnership to be successful in the local markets, but mean that the Group has increased financial exposure. Investments in businesses in which the Group exercises management control often involve put and/or call options or a similar structure.

### IMPACT ON FINANCIAL STATEMENTS

Investments in partnerships where the Group is the non-controlling shareholder and joint ventures are consolidated in the financial statements using the equity method. The accounting risks associated with these governance models are limited to the investment, the proportionate share of the net profit of the business and any specific additional commitments to banks or other parties, as well as specific guarantees or loans the Group provides to the partnership.

In businesses where the Group exercises management control, the consolidated financials are impacted by the full exposure to the earnings and other financial risks. From an accounting point of view, the Group treats any put options held by partners in such entities as if they had already been exercised by the partner, i.e. anticipating that the acquisition will occur. The accounting impact is that the non-controlling interests are not recognised, and no part of net profits or equity is attributed to them. Instead, the dividends the partner receives from the business are – for accounting purposes – classified as financial expenses.

## SECTION 5.1 (CONTINUED)

## INVESTMENT MODEL AND RISKS

Common to all partnerships is the risk of disagreement and, ultimately, dissolution.

A dissolution will initially impact the accounting treatment of an investment. The accounting treatment will depend on whether the Group or our partner is exiting the business. In the long term, however, the impact can be significant to the operation of the local entity and the collaboration with customers, distributors, authorities etc. if the partner was instrumental in managing these relationships. Therefore, a risk of a partnership dissolution may have a negative impact on the underlying business and the financial performance recognised in the consolidated financial statements.

## SECTION 5.2

## ACQUISITIONS AND DISPOSALS

### ACQUISITION OF ENTITIES

In August 2018, Carlsberg gained control of Cambrew Group (Cambodia) through the acquisition of an additional 25% of the shares, giving Carlsberg a 75% ownership interest.

The step acquisition of Cambrew Group was carried out to obtain control of the business in order to further strengthen the Group's presence in the Asia region. The consideration for the acquisition is contingent on the exercise of a fixed-priced put option granted to the 25% non-controlling interests and an earn-out depending on net revenue in 2021 or 2022. The revaluation of the equity interest held before the acquisition resulted in a gain of DKK 13m being recognised in special items.

The calculated goodwill represents staff competences and synergies from expected optimisations of sales and distribution, supply chain and procurement. The Group expects to increase Cambrew's market share in a beer market that holds significant growth opportunities.

The purchase price allocation of the fair value of identified assets, liabilities and contingent liabilities is ongoing. Adjustments are therefore expected to be made to several items in the opening balance, including to brands and property, plant and equipment. The accounting treatment of the acquisition will be completed within the 12-month period required by IFRS.

The Group did not complete any acquisitions of entities in 2017.

### Entities acquired

DKK million	2018
Consideration paid	1,349
Fair value of contingent consideration	1,061
Fair value of previously held investment	843
<b>Total cost of acquisition</b>	<b>3,253</b>

### Provisional fair values

Intangible assets	2,047
Property, plant and equipment	1,482
Financial assets	46
Inventories	102
Trade and other receivables	85
Cash and cash equivalents	353
Provisions and retirement benefits	-393
Deferred tax liabilities	-129
Trade payables	-254
Other payables	-83
<b>Acquired assets and liabilities</b>	<b>3,256</b>
Non-controlling interests	-3
<b>Acquired assets and liabilities attributable to shareholders in Carlsberg A/S</b>	<b>3,253</b>

### ACQUISITION OF NON-CONTROLLING INTERESTS

In February 2018, the non-controlling interest in Olympic Brewery (Greece) exercised the put option on the remaining 49% shareholding.

In September 2018, a non-controlling interest in Brewery Alivaria (Belarus) exercised one half of a put option on 21% of the shares.

### DISPOSAL OF ENTITIES

The restructuring of the Group's Chinese activities continued in 2018 and resulted in the disposal of two minor entities (2017: five) with brewing activities.

In 2017, the Group also disposed of the subsidiaries Nordic Getränke in Germany and Carlsberg Uzbekistan as well as minor investments in associates in Romania, Russia and Sweden.

The disposals completed in both 2018 and 2017 were part of the structural changes under the Funding the Journey programme and all related to non-core assets.

### Elements of cash consideration paid and received

DKK million	2018	2017
Cash consideration received/paid, subsidiaries, net	-1,327	270
Cash consideration received/paid, associates	-1,491	242
Cash and cash equivalents acquired/disposed of	353	-2
<b>Total cash consideration received/paid, net</b>	<b>-2,465</b>	<b>510</b>
- of which consideration paid for entities acquired	-1,349	-
- of which consideration received for entities disposed	46	519

Acquisition of associates is described in section 5.4.

## SECTION 5.2 (CONTINUED)

**ACQUISITIONS AND DISPOSALS****! ACCOUNTING ESTIMATES AND JUDGEMENTS****Assessment of control**

The classification of entities where Carlsberg controls less than 100% of the voting rights is based on an assessment of the contractual and operational relationship between the parties. This includes assessing the conditions in shareholder agreements, contracts etc. Consideration is also given to the extent to which each party can govern the financial and operating policies of the entity, how the operation of the entity is designed, and which party possesses the relevant knowledge and competences to operate the entity.

Another factor relevant to this assessment is the extent to which each of the parties can direct the activities and affect the returns, for example by means of rights, exclusively reserved matters or casting votes.

**Remeasurement of shareholding held before a step acquisition**

The fair value of the shareholding already held before the acquisition is measured as the net present value of expected future cash flows (value in use). The expected cash flows are based on budgets and business plans for the next three years and projections for subsequent years as well as management's expectations for the future development following gain of control of the entity. Key parameters are revenue growth, operating margin, future capital expenditure and growth expectations beyond the next three years. As the risk associated with the timing and amount of cash flows is not included in the forecast cash flows for newly acquired entities, the forecast future cash flows are discounted using a weighted average cost of capital (WACC) of 12% and a residual growth rate of 4%.

**Purchase price allocation**

For acquisitions of entities, the assets, liabilities and contingent liabilities of the acquiree are recognised using the acquisition method. The most significant assets acquired generally comprise goodwill, brands, property, plant and equipment, receivables and inventories.

No active market exists for the majority of the acquired assets and liabilities, in particular in respect of acquired intangible assets. Accordingly, management makes estimates of the fair value of acquired assets, liabilities and contingent liabilities. Depending on the nature of the item, the determined fair value of an item may be associated with uncertainty and possibly adjusted subsequently.

The unallocated purchase price (positive amount) is recognised in the statement of financial position as goodwill and allocated to the Group's cash-generating units. Management makes estimates of the acquired cash-generating units, the cash-generating units that already exist in the Group and the allocation of goodwill, cf. section 2.2.1.

**Brands**

The value of the brands acquired and their expected useful life are assessed based on the brands' market position, expected long-term developments in the relevant markets and profitability. The estimated value of acquired brands includes all future cash flows associated with the brands, including the related value of customer relations etc.

Management determines the useful life for each brand based on its relative local, regional and global market strength, market share, and the current and planned marketing efforts that are helping to maintain and increase the value of the brand. When the value of a well-established brand is expected to be maintained for an indefinite period in the relevant markets, and these markets are expected to be profitable for a long period, the useful life of the brand is determined to be indefinite.

For each brand or group of brands, measurement is based on the relief from royalty method, under which the value is calculated from expected future cash flows for the brands. The cash flows are calculated

on the basis of key assumptions about expected useful life, royalty rate, growth rate and a theoretically calculated tax effect. A post-tax discount rate is used that reflects the risk-free interest rate with the addition of a risk premium associated with the particular brand. The model and assumptions applied are consistent with those used in impairment testing, and are described in further detail in section 2.2.3.

**Customer agreements and portfolios**

In business combinations, the value of acquired customer agreements and customer portfolios is assessed based on the local market and trading conditions. For most entities acquired, there is a close relationship between brands and sales. Consumer demand for beer and other beverages drives sales, and therefore the value of a brand is closely linked to consumer demand, while there is no separate value attached to customers (shops, bars etc.), as their choice of products is driven by consumer demand. The relationship between brands and customers is carefully considered so that brands and customer agreements are not both recognised on the basis of the same underlying cash flows.

**Property, plant and equipment**

In business combinations, the fair value of land and buildings, and standard production and office equipment is based, as far as possible, on the fair value of assets of similar type and condition that may be bought and sold in the open market.

Property, plant and equipment for which there is no reliable evidence of the fair value in the market (in particular breweries, including production equipment) are valued using the depreciated replacement cost method.

This method is based on the replacement cost of a similar asset with similar functionality and capacity. The calculated replacement cost for each asset is then reduced to reflect functional and physical obsolescence. The expected synergies and the user-specific intentions for the expected use of assets are not included in the determination of the fair value.

**Acquisition of Cambrew Group****Purchase price allocation**

Management believes that the purchase price for Cambrew Group accounted for in the consolidated financial statements reflects the best estimate of the total fair value of the business and the proportionate value of identified assets, liabilities and contingent liabilities of the non-controlling interests, and accordingly the allocation of goodwill. The goodwill is not deductible for tax purposes.

**Customer agreements and portfolios**

No customer relationships were recognised in the purchase price allocation for Cambrew Group.

**Property, plant and equipment**

The fair value and expected useful life of brewery equipment and related buildings in the acquisition of Cambrew Group has been estimated with assistance from leading external engineering experts in the brewery industry.

**Receivables**

Receivables consist primarily of trade receivables and are recognised at the amount that is expected to be collected.

**Liabilities and contingent liabilities**

Potential liabilities related to tax, duties, VAT and other disputes and lawsuits were identified and measured. Potential legal cases were evaluated and provisions recognised based on the expected outcome of any identified potential claim.

**Financial impact of acquisition**

Revenue and net profit included in the consolidated financial statements since the acquisition was DKK 0.4bn and DKK -0.1bn respectively. Had Cambrew been consolidated on 1 January 2018, the figures for consolidated revenue and net profit would have been 1.0bn and DKK -0.1bn respectively.

## SECTION 5.2 (CONTINUED)

ACQUISITIONS  
AND DISPOSALSACCOUNTING  
POLICIES

## Acquisitions

The acquisition date is the date when the Group effectively obtains control of an acquired subsidiary or significant influence over an associate or a joint venture.

The cost of a business combination comprises the fair value of the consideration agreed upon, including the fair value of consideration contingent on future events.

In a step acquisition, the Group gains control of an entity in which it already held a shareholding before gaining control. The shareholding held before the step acquisition is remeasured at fair value at the acquisition date and added to the fair value of the consideration paid for the shareholding acquired in the step acquisition and is accounted for as the total cost of the shareholding in the acquired entity. The gain or loss on the remeasurement is recognised in the income statement under special items.

Goodwill and fair value adjustments in connection with the acquisition of a foreign entity with a functional currency other than the Group's presentation currency (DKK) are treated as assets and liabilities belonging to the foreign entity and translated into the foreign entity's functional currency at the exchange rate at the transaction date.

The acquired entities' identifiable assets, liabilities and contingent liabilities are measured at fair value at the acquisition date.

Identifiable intangible assets are recognised if they are separable or arise from a contractual right. Deferred tax on revaluations is recognised.

The identifiable assets, liabilities and contingent liabilities on initial recognition at the acquisition date

are subsequently adjusted up until 12 months after the acquisition. The effect of the adjustments is recognised in the opening balance of equity, and the comparative figures are restated accordingly if the amount is material.

Except in cases of material error, changes in estimates of contingent purchase considerations are recognised in the income statement under special items, unless they qualify for recognition directly in equity.

## Disposals

Gains or losses on the disposal or liquidation of subsidiaries, associates and joint ventures are stated as the difference between the sales price and the carrying amount of net assets (including goodwill) at the date of disposal or liquidation, foreign exchange adjustments recognised in other comprehensive income, and costs to sell or liquidation expenses.

## SECTION 5.3

CONTINGENT  
CONSIDERATIONS

Contingent considerations relate to subsidiaries of the Group that are operated in cooperation with local partners who hold options to sell their shares to the Group.

The contingent consideration primarily relates to put options on the shares in Brewery Alivaria, Belarus, on the shares in Caretech Limited (the parent company in the Cambrew Group) and on the shares in Carlsberg South Asia Pte Ltd (the parent company holding 100% and 90% of the shares in the businesses in India and Nepal respectively).

In accordance with the Group's accounting policy, shares subject to put options are consolidated as if the shares had already been acquired. The ownership percentage at which these subsidiaries are consolidated therefore differs from the legal ownership interest retained by the Group. Both the legal and the consolidated ownership are stated in section 10.

The carrying amount of contingent considerations regarding the expected future exercise of put options held by non-controlling interests is determined in accordance with the terms of the agreements made with the holders of the options. Therefore, not all are measured at fair value.

Interest rates in the range of 2.5-7.5% and residual growth rates in the range of 2.0-3.0% were applied in the valuation of contingent considerations.

Movements within the year comprise acquisition of entities and fair value adjustments of contingent considerations, net of exercised put options during the year.

A loss of DKK 63m was recognised in equity on exercise of put options in 2018.

The contingent considerations are expected to fall due after more than one year.

## Contingent considerations

DKK million	2018	2017
Contingent considerations at 1 January	3,820	3,027
Movements	2,348	793
<b>Contingent considerations at 31 December</b>	<b>6,168</b>	<b>3,820</b>

## SECTION 5.3 (CONTINUED)

## CONTINGENT CONSIDERATIONS

### ACCOUNTING ESTIMATES AND JUDGEMENTS

The fair value of contingent considerations is calculated on the basis of level 3 input consisting of non-observable data, such as entity-specific discount rates and industry-specific expectations of price developments, and generally accepted valuation methods, including discounted cash flows and multiples.

Estimates are based on updated information since initial recognition of the contingent consideration, including new budgets and sales forecasts, discount rates etc. The assumptions applied are in line with those used in the impairment tests as described in section 2.2, but reflecting the different models and valuation techniques needed.

### ACCOUNTING POLICIES

On acquisition of non-controlling interests, i.e. subsequent to the Group obtaining control, acquired net assets are not measured at fair value. The difference between the cost and the non-controlling interests' share of the total carrying amount, including goodwill, is transferred from the non-controlling interests' share of equity to equity attributable to shareholders in Carlsberg A/S. The amount deducted cannot exceed the non-controlling interests' share of equity immediately before the transaction.

On disposal of shareholdings to non-controlling interests, the difference between the sales price and the share of the total carrying amount, including goodwill acquired by the non-controlling interests, is transferred from equity attributable to shareholders in Carlsberg A/S to the non-controlling interests' share of equity.

Fair value adjustments of put options granted to non-controlling interests are recognised directly in the statement of changes in equity.

## SECTION 5.4

## ASSOCIATES AND JOINT VENTURES

The decline in profit from associates is primarily related to poor performance in Myanmar, and in Cambodia prior to the acquisition.

Investments in associates and joint ventures include the businesses in Portugal (60%), Myanmar (51%) and five associates in China (each 50%). The total investment in these associates amounted to DKK 2,612m at 31 December 2018.

Investments in associates and joint ventures increased compared with 2017, primarily due to the acquisition of 28.5% of the shares in Viacer (Portugal), the controlling shareholder of Super Bock Group. The acquisition did not result in the Group gaining control of Super Bock Group, which remains an associate. Following the transaction, the Carlsberg Group's direct and indirect ownership share in Super Bock Group is 60%.

The increase was partially offset by the acquisition of an additional 25% of the shares in Cambrew Group (Cambodia), increasing our ownership share to 75%. Following this, the Group now exercises management control of the business, and it has been fully consolidated since 1 August 2018.

Despite the legal 51% ownership share in Myanmar Carlsberg, the entity is classified as an associate due to the shareholders' agreement with the partner.

For associates in which the Group holds an ownership interest of less than 20%, the Group participates in the management of the company and is therefore exercising significant influence.

### Fair value of investment in listed associates

DKK million	2018	2017
The Lion Brewery Ceylon, Sri Lanka	406	442

None of the associates and joint ventures are material to the Group.

### CONTINGENT LIABILITIES

The Group did not issue any guarantees for loans etc. raised by associates and joint ventures in 2018 or 2017.

### ACCOUNTING POLICIES

Investments in associates and joint ventures are recognised according to the equity method, which entails measurement at cost and adjustment for the Group's share of the profit or loss and other comprehensive income of the associate after the date of acquisition, calculated in accordance with the Group's accounting policies. The proportionate share of unrealised intra-group profits and losses is eliminated. Investments in associates and joint ventures with negative net asset values are measured at DKK 0.

If the Group has a legal or constructive obligation to cover a deficit in the associate or joint venture, the deficit is recognised under provisions. Any amounts owed by associates and joint ventures are written down to the extent that the amount owed is deemed irrecoverable.

### Key figures for associates and joint ventures

DKK million	Carlsberg Group share			
	Profit after tax	Other comprehensive income	Total comprehensive income	Investments in associates and joint ventures
<b>2018</b>				
Associates	131	4	135	4,564
Joint ventures	-1	-	-1	-2
<b>Total</b>	<b>130</b>	<b>4</b>	<b>134</b>	<b>4,562</b>
<b>2017</b>				
Associates	252	-12	240	3,200
Joint ventures	10	-	10	1,066
<b>Total</b>	<b>262</b>	<b>-12</b>	<b>250</b>	<b>4,266</b>

## SECTION 6

## TAX

2,386m

INCOME TAX (DKK)

Down from DKK 2,427m, excluding impairment of brands, in 2017.

28%

TAX RATE

Down from 29%, excluding impairment of brands, in 2017.

SECTION 6.1  
INCOME TAX

The nominal weighted tax rate for the Group is calculated as domestic tax rates applicable to profits in the entities as a proportion of each entity's share of the Group's profit before tax.

The effective tax rate for the Group of 28.0% was negatively impacted by withholding taxes,

particularly on dividends, and non-deductible expenses.

In 2017, the tax rate of 41.4% was negatively impacted by the impairment of brands in Russia. Excluding impairment of brands, the effective tax rate would have been 29.0%.

Valuation allowances on tax losses in 2018 and 2017 also impacted the effective tax rate of both years negatively.

Fair value adjustments of hedging instruments arise in Denmark, but it is not possible to deduct all fair value adjustments due to local thin capitalisation rules. Tax on such adjustments therefore fluctuates from year to year.

 ACCOUNTING POLICIES

Income tax comprises current tax and changes in deferred tax for the year, including changes as a result of a change in the tax rate. The tax expense relating to the profit/loss for the year is recognised in the income statement, while the tax expense relating to items recognised in other comprehensive income is recognised in the statement of comprehensive income.

If the Group obtains a tax deduction on computation of the taxable income in Denmark or in foreign jurisdictions as a result of share-based payment programmes, the tax effect of the programmes is recognised in tax on profit/loss for the year. However, if the total tax deduction exceeds the total tax expense, the tax benefit of the excess deduction is recognised directly in equity.

## Reconciliation of the effective tax rate for the year

	%	2018		2017	
		%	DKK million	%	DKK million
Nominal weighted tax rate	20.3	1,730	22.5	793	
Change in tax rate	0.0	-1	-3.6	-127	
Adjustments to tax for prior years	-0.5	-42	-0.7	-24	
Non-capitalised tax assets, net movements	2.8	235	11.2	394	
Non-taxable income	-0.2	-15	-1.0	-37	
Non-deductible expenses	2.7	230	8.6	302	
Tax incentives etc.	-0.8	-64	-1.4	-49	
Special items	0.1	13	-1.2	-41	
Withholding taxes	3.7	311	9.4	329	
Other, including tax in associates and joint ventures	-0.1	-11	-2.4	-82	
<b>Effective tax rate for the year</b>	<b>28.0</b>	<b>2,386</b>	<b>41.4</b>	<b>1,458</b>	
Tax on impairment of brands		-		969	
<b>Effective tax rate for the year adjusted for impairment of brands</b>	<b>28.0</b>	<b>2,386</b>	<b>29.0</b>	<b>2,427</b>	

## SECTION 6.1 (CONTINUED)

**INCOME TAX****Income tax expenses**

DKK million	2018			2017		
	Income statement	Other comprehensive income	Total comprehensive income	Income statement	Other comprehensive income	Total comprehensive income
<b>Tax for the year can be specified as follows</b>						
Current tax	2,356	-2	2,354	2,319	-36	2,283
Change in deferred tax during the year	73	-50	23	-710	152	-558
Change in deferred tax as a result of change in tax rate	-1	-	-1	-127	-	-127
Adjustments to tax for prior years	-42	-	-42	-24	-	-24
<b>Total</b>	<b>2,386</b>	<b>-52</b>	<b>2,334</b>	<b>1,458</b>	<b>116</b>	<b>1,574</b>

**Tax recognised in other comprehensive income**

DKK million	2018			2017		
	Recognised item before tax	Tax income/expense	After tax	Recognised item before tax	Tax income/expense	After tax
Foreign exchange adjustments	2,754	-	2,754	3,842	-	3,842
Hedging instruments	640	-85	555	305	-25	280
Retirement benefit obligations	-392	33	-359	-1,266	138	-1,128
Share of other comprehensive income in associates and joint ventures	-4	-	-4	12	-	12
Other	-	-	-	-	3	3
<b>Total</b>	<b>2,998</b>	<b>-52</b>	<b>2,946</b>	<b>2,893</b>	<b>116</b>	<b>3,009</b>

## SECTION 6.2

**DEFERRED TAX**

Of the total deferred tax assets recognised, DKK 506m (2017: DKK 531m) related to tax loss carryforwards, the utilisation of which depends on future positive taxable income exceeding the realised deferred tax liabilities. It is management's opinion that these tax loss carryforwards can be utilised.

Tax assets not recognised of DKK 1,370m (2017: DKK 1,411m) primarily related to tax losses that are not expected to be utilised in the foreseeable future. Tax losses that will not expire amounted to DKK 839m (2017: DKK 776m). Tax losses expiring within five years amounted to DKK 531m (2017: DKK 527m). Tax losses expiring after more than five years amounted to DKK 0m (2017: DKK 108m).

Deferred tax of DKK 94m (2017: DKK 115m) was recognised in respect of earnings in entities in the Eastern Europe region that are intended for distribution in the short term, as tax of 5% is payable on distributions.

For other subsidiaries where reserves are planned to be distributed, any distribution of earnings will not trigger a significant tax liability based on current tax legislation.

Deferred tax on temporary differences relating to investments in subsidiaries, associates and joint ventures amounted to DKK 0m (2017: DKK 0m).

## SECTION 6.2 (CONTINUED)

## DEFERRED TAX

! ACCOUNTING ESTIMATES  
AND JUDGEMENTS

The Group recognises deferred tax assets, including the expected tax value of tax loss carryforwards, if management assesses that these tax assets can be offset against positive taxable income in the foreseeable future. This judgement is made annually and based on budgets and business plans for the coming years, including planned commercial initiatives.

Carlsberg operates in a large number of tax jurisdictions where tax legislation is highly complex and subject to interpretation. Management makes judgements on uncertain tax positions to ensure recognition and measurement of tax assets and liabilities.

+ = ACCOUNTING  
x = POLICIES

Current tax payable and receivable are recognised in the statement of financial position as tax computed on the taxable income for the year, adjusted for tax on the taxable income of prior years and for tax paid on account.

Deferred tax on all temporary differences between the carrying amount and the tax base of assets and liabilities is measured using the balance sheet liability method. However, deferred tax is not recognised on temporary differences relating to goodwill that is not deductible for tax purposes or on office premises and other items where temporary differences, apart from business combinations, arise at the acquisition date without affecting either profit/loss for the year or taxable income. Where alternative tax rules can be applied to determine the tax base, deferred tax is measured based on management's planned use of the asset or settlement of the liability.

If specific dividend plans exist for subsidiaries, associates and joint ventures in countries levying withholding tax on distributions, deferred tax is recognised on expected dividend payments.

Deferred tax assets related to tax loss carryforwards are recognised under other non-current assets at the expected value of their utilisation, either as a set-off against tax on future income or as a set-off against deferred tax liabilities in the same legal tax entity and jurisdiction.

Deferred tax assets and tax liabilities are offset if the entity has a legally enforceable right to offset current tax liabilities and tax assets or intends either to settle current tax liabilities and tax assets or to realise the assets and settle the liabilities simultaneously. Deferred tax assets are subject to annual impairment tests and are recognised only to the extent that it is probable that the assets will be utilised.

Deferred tax is measured according to the tax rules and at the tax rates applicable in the respective countries at the reporting date and when the deferred tax is expected to materialise as current tax. The change in deferred tax as a result of changes in tax rates is recognised in the income statement. Changes to deferred tax on items recognised in other comprehensive income are, however, recognised in other comprehensive income.

## Deferred tax

DKK million	2018	2017
Deferred tax at 1 January, net	3,938	4,640
Adjustments to prior years	-7	12
Acquisition and disposal of entities	129	5
Recognised in other comprehensive income	-50	152
Recognised in the income statement	73	-710
Change in tax rate	-1	-127
Foreign exchange adjustments	-116	-34
<b>Deferred tax at 31 December, net</b>	<b>3,966</b>	<b>3,938</b>
<b>Recognised as follows</b>		
Deferred tax liabilities	5,659	5,601
Deferred tax assets	-1,693	-1,663
<b>Deferred tax at 31 December, net</b>	<b>3,966</b>	<b>3,938</b>

## Specification of deferred tax

DKK million	Deferred tax assets		Deferred tax liabilities	
	2018	2017	2018	2017
Intangible assets	358	1,107	3,413	4,736
Property, plant and equipment	343	528	1,861	1,727
Current assets	316	176	25	30
Provisions and retirement benefit obligations	1,217	1,094	8	30
Fair value adjustments	155	144	48	5
Tax losses etc.	1,037	1,233	2,037	1,692
<b>Total before offset</b>	<b>3,426</b>	<b>4,282</b>	<b>7,392</b>	<b>8,220</b>
Offset	-1,733	-2,619	-1,733	-2,619
<b>Deferred tax assets and liabilities at 31 December</b>	<b>1,693</b>	<b>1,663</b>	<b>5,659</b>	<b>5,601</b>
<b>Expected to be used as follows</b>				
Within one year	643	250	1,731	1,850
After more than one year	1,050	1,413	3,928	3,751
<b>Total</b>	<b>1,693</b>	<b>1,663</b>	<b>5,659</b>	<b>5,601</b>

SECTION 7

# STAFF COSTS AND REMUNERATION

## Pensions

Defined benefit obligations were affected by increased interest in the UK, the implementation of risk-sharing in Switzerland and by a UK High Court ruling on equalisation of pension plans.

## Remuneration

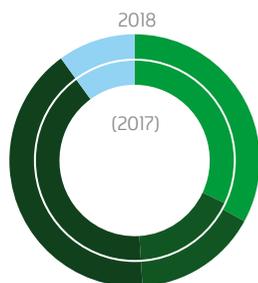
A new share-based incentive programme, Fund & Grow, was set up to improve alignment between the interests of the top-200 management team and the shareholders.

Employees By region (%)



- Western Europe 29% (31%)
- Asia 38% (38%)
- Eastern Europe 30% (29%)
- Other 3% (2%)

By function (%)



- Production 33% (32%)
- Distribution 16% (17%)
- Sales & Marketing 41% (41%)
- Administration 10% (10%)

SECTION 7.1

## STAFF COSTS

The average number of employees decreased during 2018 due to ongoing restructuring projects in the UK and the outsourcing of brand ambassadors in Vietnam. The reduction was offset by the acquisition of Cambrew, but this did

not have a full-year effect on the 2018 average, as the acquisition was completed in August. Staff costs increased for several entities due to higher performance-related payouts, but this was offset by savings generated by restructuring projects.

### Staff costs

DKK million	2018	2017
Salaries and other remuneration	8,491	7,980
Severance payments	75	415
Social security costs	1,294	1,321
Retirement benefit costs – defined contribution plans	286	275
Retirement benefit costs – defined benefit plans	203	219
Share-based payments	174	33
Other employee benefits	91	97
<b>Total</b>	<b>10,614</b>	<b>10,340</b>
<b>Average number of employees</b>	<b>40,837</b>	<b>41,430</b>

Staff costs are included in the following line items in the income statement

Cost of sales	2,720	2,653
Sales and distribution expenses	5,348	5,391
Administrative expenses	2,433	2,098
Other operating activities, net	54	57
Financial expenses (Pensions)	23	-
Special items (Restructurings)	36	141
<b>Total</b>	<b>10,614</b>	<b>10,340</b>

## SECTION 7.2 REMUNERATION

The remuneration of the Supervisory Board, the executive directors and key management personnel is described in detail in the Remuneration report in the Management review.

The remuneration of key management personnel decreased in 2018 as a result of fewer full-year members of the Executive Committee and severance payments in 2017.

Key management personnel comprise the Executive Committee, excluding the executive directors. Other management personnel included in the share-based payment schemes comprise Vice Presidents and other key employees in central functions as well as the management of significant subsidiaries.

In 2018, the Supervisory Board received total remuneration of DKK 9.35m (2017: DKK 9.58m), comprising fixed salary only.

### ACCOUNTING POLICIES

Staff costs are recognised in the financial year in which the employee renders the related service. The cost of share-based payments, which is expensed over the vesting period of the programme according to the service conditions, is recognised in staff costs and provisions or equity, depending on how the programme is settled with the employees.

### Remuneration

DKK million	Executive directors						Key management personnel	
	Cees 't Hart			Heine Dalsgaard			2018	2017
	2018	2017	2016	2018	2017	2016		
Fixed salary	12.3	12.0	12.0	7.4	7.3	4.2	25.3	30.7
Cash bonus	12.3	9.3	10.0	7.4	5.6	7.3	18.5	12.2
Other benefits	1.1	1.2	1.2	-	-	-	4.0	6.6
Special bonus <sup>1</sup>	-	-	-	-	3.1	11.9	-	-
Funding the Journey cash plan	-	-	-	-	-	-	-	10.9
Severance payments	-	-	-	-	-	-	-	15.3
<b>Remuneration settled in cash</b>	<b>25.7</b>	<b>22.5</b>	<b>23.2</b>	<b>14.8</b>	<b>16.0</b>	<b>23.4</b>	<b>47.8</b>	<b>75.7</b>
Non-monetary benefits	0.1	0.1	0.1	0.3	0.3	0.2	0.5	2.6
Share-based payments <sup>2</sup>	26.7	20.6	12.8	13.3	9.0	1.9	18.8	0.7
<b>Remuneration settled non-cash</b>	<b>26.8</b>	<b>20.7</b>	<b>12.9</b>	<b>13.6</b>	<b>9.3</b>	<b>2.1</b>	<b>19.3</b>	<b>3.3</b>
<b>Total</b>	<b>52.5</b>	<b>43.2</b>	<b>36.1</b>	<b>28.4</b>	<b>25.3</b>	<b>25.5</b>	<b>67.1</b>	<b>79.0</b>

<sup>1</sup> Special bonus covered remuneration waived from previous employer, in total DKK 15m, paid out in 2016 and 2017.

<sup>2</sup> The amount of remuneration in the form of share-based payments in the table does not reflect the value of shares transferred to or cash equivalents received by the executive director during the year. The amount reflects only the technical accounting charge to the income statement required by IFRS.

## SECTION 7.3

## SHARE-BASED PAYMENTS

The Group has set up share-based incentive programmes to attract, retain and motivate the Group's executive directors and other levels of management personnel, and to align their interests with those of the shareholders. No share-based incentive programme has been set up for Carlsberg A/S' Supervisory Board.

The Group has two forms of share-based payment: share options and performance

shares. Share options entitle the holder to purchase class B shares in Carlsberg A/S at a predetermined price after completing three years of service and are exercisable for five years. Entitlement to performance shares also requires fulfilment of service in the vesting period (2-3 years), but does not have any exercise price.

Instead, the shares are transferred to the recipients based on the achievement of the KPIs attached to the shares. Performance shares have been awarded under three programmes that differ in terms of KPI structure and vesting period.

## Performance shares

	Executive directors	Key management personnel	Other management personnel	Total
<b>31 December 2016</b>	<b>62,321</b>	<b>14,616</b>	<b>191,081</b>	<b>268,018</b>
Granted	74,877	-	-	74,877
Forfeited/adjusted	-	-4,783	-33,648	-38,431
Exercised/settled	-	-810	-10,053	-10,863
<b>31 December 2017</b>	<b>137,198</b>	<b>9,023</b>	<b>147,380</b>	<b>293,601</b>
Granted	66,286	88,919	556,614	711,819
Forfeited/adjusted	-	-2,578	-91,361	-93,939
Exercised/settled	-	-6,445	-98,972	-105,417
<b>31 December 2018</b>	<b>203,484</b>	<b>88,919</b>	<b>513,661</b>	<b>806,064</b>

## Key information

	Regular performance shares		Fund & Grow performance shares
	2018	2017	2018
<b>Assumptions</b>			
Expected volatility	20.7%	22%	N/A
Risk-free interest rate	0.0%	0.0%	0.0%
Expected dividend yield	2.2%	1.6%	2.2%
Expected life of options, years	3.0	3.0	2.0
Fair value at measurement date	DKK 610-642	DKK 524	DKK 684

## PERFORMANCE SHARES

The number of performance shares granted is the maximum number of performance shares that can vest. The number of shares outstanding at the end of the period is the estimated number of shares expected to vest, based on an assessment of the extent to which the vesting conditions are expected to be met. The number of shares expected to vest is revised on a regular basis until vesting.

## Regular performance shares

In 2018, 206 employees (2017: 2 employees) across the Group were awarded performance shares.

Vesting is subject to achievement of the four KPIs: total shareholder return, adjusted EPS growth, organic net revenue growth and growth in ROIC. The average share price at transfer was DKK 748 (2017: DKK 616). The average contractual life at the end of 2018 was 1.7 years (2017: 0.8 years).

## Fund &amp; grow performance shares

In 2018, the Fund & Grow performance share programme was set up to align the initiatives driven by Group management in the growth phase of our SAIL'22 strategy, which is aimed

at top- and bottom-line growth, with the interests of our shareholders. Shares were granted to 204 employees across the Group, not including the executive directors. Vesting is subject to achievement of two KPIs, organic growth in net revenue and in operating profit, in the two-year vesting period of the programme. The average contractual life at the end of 2018 was 1.1 years.

## Funding the Journey performance shares

Funding the Journey performance shares were granted to the executive directors in 2016 only. The average contractual life at the end of 2018 was 0.2 years (2017: 1.2 years).

In a separate long-term incentive programme based on Funding the Journey performance, the top-60 leadership team of the Group's other management personnel received a cash bonus equivalent to 120% of one year's base salary. Another 140 employees in this category received a cash bonus equivalent to 60% of one year's base salary. The total bonus payment amounted to DKK 250m. The executive directors did not participate in the cash programme.

## Performance shares disclosures

	Regular		Fund & Grow		Funding the Journey	
DKK million	2018	2017	2018	2017	2018	2017
Fair value at grant date	172	39	294	-	-	-
Cost of shares granted in the year	46	10	120	-	-	-
Total cost of performance shares	42	19	120	-	8	8
Cost not yet recognised	120	38	154	-	-	8
Fair value at 31 December	185	171	270	-	26	27

## SECTION 7.3 (CONTINUED)

**SHARE-BASED PAYMENTS****SHARE OPTIONS**

No share options have been granted since 2016. The outstanding options are all exercisable at the end of the reporting period (2017: 16,289). The average contractual life was 4.6 years (2017: 4.9 years). The average share price at exercise was DKK 766 (2017: DKK 701).

**Share option disclosures**

DKK million	Share options	
	2018	2017
Cost of share options	4	7
Cost not yet recognised	-	4
Fair value at 31 December	20	63

**ACCOUNTING ESTIMATES AND JUDGEMENTS**

The volatility of performance shares is based on the historical volatility of the price of Carlsberg A/S' class B shares over the previous three years. For share options, the volatility is based on similar data over the previous eight years.

The share price and the exercise price of share options are calculated as the average price of Carlsberg A/S' class B shares on Nasdaq Copenhagen during the first five trading days after publication of Carlsberg A/S' financial statements.

The risk-free interest rate is based on Danish government bonds of the relevant maturity. The expected life is based on exercise at the end of the exercise period.

**ACCOUNTING POLICIES**

The fair value of granted performance shares is estimated using a stochastic (quasi-Monte Carlo) valuation model and a Black-Scholes call option-pricing model, taking into account the terms and conditions upon which the performance shares were granted.

On initial recognition of performance shares, an estimate is made of the number of awards expected to vest and subsequently revised for any changes. Accordingly, recognition is based on the number of awards that ultimately vest.

Share options	Exercise price			Number
	Fixed, weighted average	Executive directors	Other management personnel	Total
<b>31 December 2016</b>	<b>249</b>	<b>114,984</b>	<b>357,043</b>	<b>472,027</b>
Forfeited	204	-	-1,599	-1,599
Exercised	536	-	-205,600	-205,600
<b>31 December 2017</b>	<b>523</b>	<b>114,984</b>	<b>149,844</b>	<b>264,828</b>
Forfeited	417	-	-2,825	-2,825
Exercised	529	-	-147,019	-147,019
<b>31 December 2018</b>	<b>518</b>	<b>114,984</b>	<b>-</b>	<b>114,984</b>

## SECTION 7.4

## RETIREMENT BENEFIT OBLIGATIONS AND SIMILAR OBLIGATIONS

A number of the Group's employees are covered by retirement benefit plans. The nature of the retirement benefit plans varies depending on labour market conditions in the individual countries. Benefits are generally based on wages and salaries and length of employment.

Retirement benefit obligations cover both present and future retirees' entitlement to retirement benefits.

### DEFINED CONTRIBUTION PLANS

A defined contribution plan is a post-employment benefit plan under which the Group pays fixed contributions into a separate independent company. The Group's legal or constructive obligation is limited to the contributions.

58% (2017: 56%) of the Group's retirement benefit costs relates to defined contribution plans. In 2018, the expense recognised in relation to these contributions was DKK 286m (2017: DKK 275m).

### DEFINED BENEFIT PLANS

The defined benefit plans guarantee employees a certain level of pension benefits for life based on seniority and the salary at the time of retirement. The Group assumes the risk associated with future developments in interest rates, inflation, mortality and disability etc.

The majority of the obligations are funded, with assets placed in independent pension funds, mainly in Switzerland and the UK. In some countries, primarily Germany, Sweden and China, the obligation is unfunded. For these unfunded plans, the retirement benefit obligations amounted to DKK 1,873m (2017: DKK 1,820m) or 15% (2017: 14%) of the gross obligation.

In 2018, the Group's defined benefit plans decreased by DKK 443m compared with 2017. The net obligation was impacted by a decrease following the implementation of risk-sharing methodology in Switzerland in December 2017 and gains on actuarial assumptions in the UK, which had a combined impact of around DKK -500m.

On 26 October 2018, the UK High Court ruled that a practice that allowed pension savings for men and women to rise at different rates was discriminatory. The High Court ordered this practice to be ended and the historical inequality to be put right. The High Court Judgment concluded that trustees are under a duty to amend pension schemes to the effect that the guaranteed minimum pension benefits are equal for men and women. The ruling has increased the pension obligation in the UK by

DKK 40m in 2018, equivalent to 0.7% of the gross obligation in the UK scheme.

Although the introduction of guaranteed minimum pension benefits impacted the UK pensions negatively, the position at year-end

had improved compared with the position in 2017. This was due to more favourable financial conditions, in particular a rise in the discount rate, which led to a total decrease in the net obligation of DKK -447m.

### Obligation, net

DKK million	2018			2017		
	Present value of obligation	Fair value of plan assets	Obligation, net	Present value of obligation	Fair value of plan assets	Obligation, net
<b>Obligation at 1 January</b>	<b>13,069</b>	<b>9,718</b>	<b>3,351</b>	<b>14,813</b>	<b>9,935</b>	<b>4,878</b>
<b>Recognised in the income statement</b>						
Current service cost	194	-	194	253	-	253
Past service cost	9	-	9	-38	-	-38
Net interest on the net defined benefit obligation (asset)	232	155	77	250	152	98
Curtailments and settlements	-	-	-	4	-	4
<b>Total</b>	<b>435</b>	<b>155</b>	<b>280</b>	<b>469</b>	<b>152</b>	<b>317</b>
<b>Remeasurements</b>						
Gain/loss from changes in demographic assumptions	-203	-	-203	-330	1	-331
Gain/loss from changes in financial assumptions	-561	-312	-249	-377	558	-935
Asset ceiling	-	-60	-60	-	-	-
<b>Total</b>	<b>-764</b>	<b>-372</b>	<b>-392</b>	<b>-707</b>	<b>559</b>	<b>-1,266</b>
<b>Other changes</b>						
Contributions to plans	-	215	-215	-	209	-209
Benefits paid	-633	-522	-111	-692	-570	-122
Acquisition and disposal of entities, net	3	-	3	-3	-	-3
Transfers	7	-	7	-17	1	-18
Foreign exchange adjustments etc.	122	137	-15	-794	-568	-226
<b>Obligation at 31 December</b>	<b>12,239</b>	<b>9,331</b>	<b>2,908</b>	<b>13,069</b>	<b>9,718</b>	<b>3,351</b>

The total return on plan assets for the year amounted to DKK -157m (2017: DKK 711m).

## SECTION 7.4 (CONTINUED)

## RETIREMENT BENEFIT OBLIGATIONS AND SIMILAR OBLIGATIONS

The Group expects to contribute DKK 76m (2017: DKK 76m) to the plan assets in 2019. Plan assets do not include shares in or properties used by Group companies.

Net actuarial gain and foreign exchange adjustment recognised in other comprehensive income for 2018 was DKK 392m (2017: DKK 1,504m), which included the asset ceiling in the UK of DKK 60m.

The accumulated actuarial loss and foreign exchange adjustment recognised at 31 December 2018 was DKK 3,029m (2017: DKK 3,421m), with actuarial net losses of DKK 3,097m (2017: DKK 3,548m).

The most significant plans are in the UK and Switzerland, representing 44% and 40% respectively (2017: 47% and 37%), while the eurozone countries represented 6% (2017: 6%) of the gross obligation at 31 December 2018.

### Assumptions applied

In 2018, the discount rate used for the defined benefit plans in Western Europe was determined by reference to market yields on corporate bonds. In the Asian countries, where no deep market in high-quality corporate bonds exists, the discount rate was determined by reference to market yields on government bonds.

The mortality tables used in Carlsberg UK are S2PMA/S2PFA tables for post-retirement and AMC00/AFC00 for pre-retirement, both with CMI\_2017 projections, while the Swiss entities use BVG 2015 GT for valuation of their retirement obligations.

### Sensitivity analysis

The sensitivity analysis is based on a change in one of the assumptions, while all other assumptions remain constant. This is highly unlikely, however, as a change in one assumption would probably affect other assumptions as well. When calculating the obligation on the basis of a changed assumption, the same method has been applied as when calculating the defined benefit obligation.

### Expected maturity and duration

Defined benefit obligations are primarily expected to mature after five years. The expected duration of the obligations at year-end 2018 was 20 years. The duration is calculated using a weighted average of the duration divided by the obligation.

### Breakdown of plan assets

	2018		2017	
	DKK million	%	DKK million	%
Shares	945	10	1,241	13
Bonds and other securities	6,165	65	6,314	65
Real estate	2,117	23	2,028	21
Cash and cash equivalents	164	2	135	1
<b>Total</b>	<b>9,391</b>	<b>100</b>	<b>9,718</b>	<b>100</b>

### Assumptions applied

	CHF	UK	EUR	Other	Weighted average
<b>2018</b>					
Discount rate	0.8%	3.1%	1.1-1.8%	0.5-7.6%	2.1%
Growth in wages and salaries	1.0%	2.4%	0.0-2.7%	2.0-10.0%	2.1%
<b>2017</b>					
Discount rate	0.6%	2.5%	0.8-1.6%	0.5-7.8%	1.8%
Growth in wages and salaries	1.0%	2.3%	0.0-2.7%	2.0-10.0%	2.1%

### Sensitivity analysis

DKK million	2018		2017	
	+0.5%	-0.5%	+0.5%	-0.5%
Discount rate	-771	942	-972	1,155
Growth in wages and salaries	90	-61	141	-110
	<b>+1 year</b>	<b>-1 year</b>	<b>+1 year</b>	<b>-1 year</b>
Mortality	429	-403	517	-484

### Maturity of retirement benefit obligations

DKK million	<1 year	1-5 years	>5 years	Total
Retirement benefits	435	1,235	3,819	5,490

## SECTION 7.4 (CONTINUED)

## RETIREMENT BENEFIT OBLIGATIONS AND SIMILAR OBLIGATIONS

### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

The value of the Group's defined benefit plans is based on valuations from external actuaries. The valuation is based on a number of actuarial assumptions, including discount rates, expected return on plan assets, expected growth in wages and salaries, mortality and retirement benefits.

The present value of the net obligation is calculated by using the projected unit credit method and discounting the defined benefit plan by a discount rate for each country. The discount rate is determined by reference to market yields on high-quality corporate bonds. Where high-quality corporate bonds are not available, the market yields on government bonds are used instead.

Mortality assumptions are based on the Group entity's best estimate of the mortality of plan members during and after employment, and include expected changes in mortality. Due to the broad range of entities comprising the retirement benefit obligation, several different mortality tables are used to calculate the future retirement benefit obligation.

### + = ACCOUNTING x = POLICIES

Contributions paid to a **defined contribution plan** are recognised in the income statement in the period during which services are rendered by employees. Any contributions outstanding are recognised in the statement of financial position as other liabilities.

The Group's net obligation recognised in the statement of financial position in respect of **defined benefit plans** is the present value of the defined benefit obligation at the reporting date less the fair value of plan assets calculated by a qualified actuary.

The present value is determined separately for each plan by discounting the estimated future benefits that employees have earned in return for their service in the current and prior years.

The costs of a defined benefit plan are recognised in the income statement and include service costs, net interest based on actuarial estimates and financial expectations at the beginning of the year.

Service costs comprise **current service cost and past service cost**. **Current service cost** is the increase in the present value of the defined benefit obligation resulting from employee services in the current period. **Past service cost** is the change in the present value of the obligation regarding employee services in prior years that arises from a plan amendment or a curtailment. Past service costs are recognised immediately, provided employees have already earned the changed benefits.

Realised gains and losses on curtailment or settlement are recognised under staff costs.

Interest on retirement benefit obligations and the interest on return on plan assets are recognised as financial income or financial expenses.

Differences between the development in retirement benefit assets and liabilities and realised amounts at year-end are designated as actuarial gains or losses and recognised in other comprehensive income. As they will never be reclassified to the income statement, they are presented in retained earnings.

If a retirement benefit plan constitutes a net asset, the asset is recognised only if it offsets future refunds from the plan or will lead to reduced future payments to the plan.

Realised gains and losses on the adjustment of retirement benefit obligations as a result of termination of a significant number of positions in connection with restructurings are recognised under special items.

## SECTION 8

# OTHER DISCLOSURE REQUIREMENTS

## 5,359m

Profit attributable to shareholders in Carlsberg A/S, adjusted for special items after tax (DKK).

## 35.2

Earnings per share, adjusted for special items after tax (DKK).

## SECTION 8.1

## EARNINGS PER SHARE

For all share-based incentive instruments, the average market price of Carlsberg B shares in 2018 and 2017 was higher than the exercise price and the fair value at the grant date.

As a result, diluted earnings per share did not exclude any share-based incentive instruments that could potentially dilute earnings in the future.

### Earnings per share

DKK	2018	2017
Earnings per share of DKK 20 (EPS)	34.8	8.3
Diluted earnings per share of DKK 20 (EPS-D)	34.7	8.2
Earnings per share, adjusted (EPS-A)	35.2	32.3

### Number of shares

1,000 shares		
Average number of shares	152,557	152,557
Average number of treasury shares	-129	-61
<b>Average number of shares outstanding</b>	<b>152,428</b>	<b>152,496</b>
Average dilutive effect of share-based incentives	683	360
<b>Diluted average number of shares outstanding</b>	<b>153,111</b>	<b>152,856</b>

### Profit attributable to shareholders

DKK million		
Consolidated profit	6,133	2,065
Non-controlling interests	-824	-806
<b>Profit attributable to shareholders in Carlsberg A/S (net profit)</b>	<b>5,309</b>	<b>1,259</b>
Special items after tax	50	3,666
<b>Profit attributable to shareholders in Carlsberg A/S, adjusted</b>	<b>5,359</b>	<b>4,925</b>

## SECTION 8.2

**RELATED PARTIES****RELATED PARTIES EXERCISING CONTROL**

The Carlsberg Foundation, H.C. Andersens Boulevard 35, 1553 Copenhagen V, Denmark, exercises control over Carlsberg A/S. The Foundation holds 30.3% of the shares and 75.4% of the voting power in Carlsberg A/S, excluding treasury shares.

The following transactions took place between the Carlsberg Foundation and the Carlsberg Group in 2018:

The Carlsberg Foundation received a dividend of DKK 16.00 per share from Carlsberg A/S, the same as every other shareholder. The dividend received amounted to DKK 740m.

Funding and grants received for research and development activities from the Carlsberg Foundation amounted to DKK 38m (2017: DKK 43m). Of the total grants, DKK 26m (2017: DKK 17m) was deferred to be used for research projects in the future. The grants related to the operation of the Carlsberg Research Laboratory.

Carlsberg Breweries A/S leases storage facilities in the Researcher Apartments. The annual lease, DKK 177 thousand, and the lease terms are on market conditions.

Carlsberg A/S leases parking spaces from the Carlsberg Foundation to provide parking for employees at the Research Centre and Visit Carlsberg. The annual lease, DKK 175

thousand, and the lease terms are on market conditions.

The Carlsberg Science to Business forum is organised by the Carlsberg Foundation and the Group. The Carlsberg Foundation pays for presenters' costs, which amount to DKK 150-200 thousand. The Group contributes the meeting room and approximately 30 working hours.

Carlsberg A/S held the Annual General Meeting at Ny Carlsberg Glyptotek at a cost of DKK 65 thousand.

Ny Carlsberg Glyptotek has received event products free of charge from the Group as part of the sponsorship of certain events. The accumulated value of the products is DKK 61 thousand.

The Group's delivery of beer and soft drinks to the Carlsberg Foundation is charged at ordinary listing price minus a discount. In 2018, the deliveries amounted to a value of DKK 277 thousand (total sales of goods) (2017: DKK 227 thousand).

In accordance with the Tuborg Foundation's rights as a partner of Unleash (a non-profit organisation working to promote young people's understanding of and contribution to the UN Sustainable Development Goals), five seats for an Unleash event were given to employees in Carlsberg Breweries. The total value of the seats is DKK 135 thousand.

It is estimated that the benefit for the Carlsberg Group corresponds to the value of the services provided to the Carlsberg Foundation, which in turn corresponds to what each party would have had to pay to have the same deliverables provided by external parties.

**OTHER RELATED PARTIES**

Related parties also comprise Carlsberg A/S' Supervisory Board and Executive Board, their close family members and companies in which these persons have significant influence.

During the year, there were no transactions between these parties and the Group, except for remuneration as disclosed in section 7.

In 2018, the Group had no significant transactions with its associates and joint ventures.

**The income statement and the statement of financial position include the following transactions**

DKK million	2018	2017
<b>Associates and joint ventures</b>		
Net revenue	62	59
Cost of sales	-622	-609
Loans	333	290
Receivables	104	239
Borrowings	-7	-22
Trade payables and other liabilities	-15	-4

## SECTION 8.3

**FEES TO AUDITORS****Fees to auditors appointed by the Annual General Meeting**

DKK million	2018	2017
Statutory audit	18	19
Assurance engagements	2	1
Tax advisory	1	-
Other services	2	5
<b>Total</b>	<b>23</b>	<b>25</b>

Fees for services other than the statutory audit of the financial statements provided by PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab amounted to DKK 3m (2017: DKK 6m), including services relating to information security, best practice for internal controls, tax advice and other assurance opinions and agreed-upon procedures, as well as accounting advice.

## SECTION 8.4

**EVENTS AFTER THE REPORTING PERIOD**

Apart from the events recognised or disclosed in the consolidated financial statements, no events have occurred after the reporting period of importance to the consolidated financial statements.

## SECTION 9

# BASIS FOR PREPARATION

## Changes in 2018

### CLASSIFICATION OF REVENUE

Adoption of the new IFRS revenue standard changed the classification of certain marketing activities from trade marketing to discounts. These are recognised as revenue as of 1 January 2018.

### IMPAIRMENT OF FINANCIAL ASSETS

Adoption of the new IFRS financial instruments standard introduces a new impairment model based on expected credit losses as of 1 January 2018.

## SECTION 9.1

## SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

In preparation of the consolidated financial statements, management makes various accounting estimates and judgements that form the basis of presentation, recognition and measurement of the Group's assets, liabilities, income and expenses. The estimates and judgements made are based on historical experience and other factors that management assesses to be reliable, but that, by nature, are associated with uncertainty and unpredictability and may therefore prove incomplete or incorrect.

Areas involving significant estimates and judgements:

Impairment testing, useful life and residual value	Section 2
Restructurings, provisions and contingencies	Section 3
Receivables	Section 1
Deferred tax assets	Section 6
Defined benefit obligations	Section 7
Acquisitions and disposals, including contingent considerations	Section 5

## SECTION 9.2

## GENERAL ACCOUNTING POLICIES

The Group's 2018 consolidated financial statements have been prepared in accordance with IFRS as adopted by the EU and further requirements in the Danish Financial Statements Act.

The consolidated financial statements are presented in Danish kroner (DKK), which is the Parent Company's functional currency, and all values are rounded to the nearest DKK million, except when otherwise stated.

The accounting policies set out below have been used consistently in respect of the financial year and the comparative figures.

### DEFINING MATERIALITY

Significant items are presented individually in the financial statements as required by IAS 1. Other items that may not be significant but are considered relevant to stakeholders and an understanding of the Group's business model, including research, real estate, geographical

diversity etc., are also presented in the financial statements.

### BASIS OF CONSOLIDATION

The consolidated financial statements are prepared as a consolidation of the financial statements of the Parent Company, Carlsberg A/S, and its subsidiaries according to the Group's accounting policies.

Entities over which the Group exercises significant influence, but which it does not control, are considered associates. Significant influence is generally obtained by direct or indirect ownership or control of less than 50% of the voting rights or participation in the management of the company. The assessment of whether Carlsberg A/S exercises control or significant influence includes potential voting rights exercisable at the reporting date. Entities that by agreement are managed jointly with one or more other parties are considered joint ventures.

On consolidation, intra-group income and expenses, shareholdings, balances and dividends, and realised and unrealised gains are eliminated. Unrealised gains on transactions with associates and joint ventures are

**SECTION 9.2 (CONTINUED)****GENERAL ACCOUNTING POLICIES**

eliminated in proportion to the Group's ownership share of the entity. Unrealised losses are eliminated in the same way as unrealised gains to the extent that impairment has not taken place.

On acquisition, investments in subsidiaries are eliminated against the proportionate share of the subsidiaries' fair value of identifiable net assets, including recognised contingent liabilities.

The accounting items of subsidiaries are included in full in the consolidated financial statements. Non-controlling interests' share of subsidiaries' profit/loss for the year and of equity are included in the Group's profit/loss and equity, but are disclosed separately. Entities acquired or established in the year are recognised in the consolidated financial statements from the date of acquisition or formation. Entities disposed of or discontinued are recognised in the consolidated income statement until the date of disposal or discontinuation. The comparative figures are not restated.

**FOREIGN CURRENCY TRANSLATION**

A functional currency is determined for each of the reporting entities in the Group. The functional currency is the primary currency used for the reporting entity's operations. Transactions denominated in currencies other

than the functional currency are considered transactions denominated in foreign currencies.

On initial recognition, transactions denominated in foreign currencies are translated to the functional currency at the exchange rates at the transaction date. Foreign exchange differences arising between the exchange rates at the transaction date and at the date of payment are recognised as financial income or expenses.

Receivables, payables and other monetary items denominated in foreign currencies are translated at the exchange rates at the reporting date. The difference between the exchange rates at the reporting date and at the date at which the receivable or payable arose or the exchange rate in the latest consolidated financial statements is recognised as financial income or expenses.

On recognition in the consolidated financial statements of entities with a functional currency other than the presentation currency (DKK), the income statement and statement of cash flows are translated at the exchange rates at the transaction date, and the statement of financial position items are translated at the exchange rates at the reporting date. Foreign exchange differences arising on translation of the opening balance of equity of foreign entities at the exchange rates at the reporting date, and on translation of the income statement from the transaction date to the reporting date, are recognised in other comprehensive income and attributed to a separate translation reserve in equity. Foreign exchange differences arising on the translation

of the proportionate share of associates and joint ventures are likewise recognised in other comprehensive income.

Foreign exchange adjustment of balances with foreign entities that are considered part of the investment in the entity is recognised in other comprehensive income. Correspondingly, foreign exchange gains and losses on the part of loans and derivative financial instruments that is designated as hedges of investments in foreign entities, and that effectively hedges against corresponding foreign exchange gains and losses on the investment in the entity, are also recognised in other comprehensive income and attributed to a separate translation reserve in equity.

On complete or partial disposal of a foreign entity or on repayment of balances that constitute part of the net investment in the foreign entity, the share of the cumulative amount of the exchange differences recognised in other comprehensive income relating to that foreign entity is recognised in the income statement when the gain or loss on disposal is recognised.

**INCOME STATEMENT**

The presentation of the Group's income statement is based on the internal reporting structure, as IFRS does not provide a specific disclosure requirement.

Special items are not directly attributable to ordinary operating activities and are shown separately in order to facilitate a better understanding of the Group's financial performance.

**CASH FLOW**

Cash flow is calculated using the indirect method and is based on operating profit before special items adjusted for depreciation, amortisation and impairment losses. Cash flow cannot be derived directly from the statement of financial position and income statement.

**FINANCIAL RATIOS AND NON-IFRS FINANCIAL MEASURES**

The Group uses certain additional financial measures to provide management, investors and investment analysts with additional measures to evaluate and analyse the Company's results. These non-IFRS financial measures are defined and calculated by the Group, and therefore may not be comparable with other companies' measures.

The non-IFRS financial measures disclosed in the Annual Report are:

- Earnings per share and payout ratio, adjusted
- Organic development

The Danish Finance Society does not acknowledge use of special items and states that adjustments of tax should be based on the marginal tax rate. When calculating financial measures, the Group uses operating profit before special items as well as the effective tax rate for measures adjusted for tax.

Other financial ratios are calculated in accordance with the Danish Finance Society's online guidelines on the calculation of financial ratios, "Recommendations and Financial Ratios", unless specifically stated.

## SECTION 9.2 (CONTINUED)

# GENERAL ACCOUNTING POLICIES

## Calculation of key figures and financial ratios disclosed in the Annual Report

<b>Cash flow from operating activities per share (CFPS)</b>	Cash flow from operating activities <sup>1</sup> divided by the number of shares outstanding, fully diluted for share options and performance shares in the money in accordance with IAS 33 <sup>2</sup> .
<b>Debt/operating profit before depreciation, amortisation and impairment losses<sup>3</sup> (NIBD/EBITDA)</b>	Net interest-bearing debt <sup>4</sup> divided by operating profit before special items adjusted for depreciation, amortisation and impairment losses.
<b>Earnings per share (EPS)</b>	Consolidated profit for the year, excluding non-controlling interests, divided by the average number of shares outstanding in accordance with IAS 33.
<b>Earnings per share, adjusted (EPS-A)<sup>5</sup></b>	Consolidated profit for the year adjusted for special items after tax, excluding non-controlling interests, divided by the average number of shares outstanding.
<b>Earnings per share, diluted (EPS-D)</b>	Consolidated profit for the year, excluding non-controlling interests, divided by the average number of shares outstanding, fully diluted for share options and performance shares in the money in accordance with IAS 33 <sup>2</sup> .
<b>Effective tax rate</b>	Income tax as a percentage of profit before tax.
<b>Equity ratio</b>	Equity attributable to shareholders in Carlsberg A/S at year-end as a percentage of total assets at year-end.
<b>Financial gearing</b>	Net interest-bearing debt <sup>4</sup> at year-end divided by total equity at year-end.
<b>Free cash flow per share (FCFPS)</b>	Free cash flow <sup>1</sup> divided by the average number of shares outstanding, fully diluted for share options and performance shares in the money in accordance with IAS 33 <sup>2</sup> .
<b>Gross margin</b>	Gross profit as a percentage of net revenue.
<b>Interest cover<sup>3</sup></b>	Operating profit before special items divided by interest expenses, net.

<b>Number of shares, average</b>	Number of issued shares, excluding treasury shares, as an average for the year (= average number of shares outstanding).
<b>Number of shares, year-end</b>	Total number of issued shares, excluding treasury shares, at year-end (= number of shares outstanding at year-end).
<b>Operating margin<sup>3</sup></b>	Operating profit before special items as a percentage of net revenue.
<b>Operating profit<sup>3</sup></b>	Expression used for operating profit before special items.
<b>Organic development<sup>5</sup></b>	Measure of growth excluding the impact of acquisitions, divestments and foreign exchange from year-on-year comparisons.
<b>Payout ratio</b>	Dividend for the year as a percentage of consolidated profit, excluding non-controlling interests.
<b>Payout ratio, adjusted<sup>5</sup></b>	Dividend for the year as a percentage of consolidated profit, adjusted for special items after tax, excluding non-controlling interests.
<b>Return on invested capital including goodwill (ROIC)<sup>3</sup></b>	Operating profit before special items adjusted for tax as a percentage of average invested capital <sup>6</sup> calculated as a 12-month rolling average, (MAT).
<b>Return on invested capital excluding goodwill (ROIC excl. goodwill)<sup>3</sup></b>	Operating profit before special items adjusted for tax as a percentage of average invested capital excluding goodwill <sup>6</sup> calculated as a 12-month rolling average, (MAT).
<b>Volumes<sup>5</sup></b>	The Group's sale of beverages in consolidated entities and sale of the Group's products under licence agreements.

<sup>1</sup> The calculation of cash flow from operating activities and free cash flow is specified in the statement of cash flows.

<sup>2</sup> The dilutive effect is calculated as the difference between the number of shares that could be acquired at fair value for the proceeds from exercise of the share options and performance shares, and the number of shares that could be issued assuming these are exercised.

<sup>3</sup> The calculation is based on operating profit before special items, whereas the Danish Finance Society defines the ratio using operating profit.

<sup>4</sup> The calculation of net interest-bearing debt is specified in section 4.2.

<sup>5</sup> This key figure or ratio is not defined by the Danish Finance Society.

<sup>6</sup> The calculation of invested capital is specified in section 2.1.

## SECTION 9.3

## CHANGES IN ACCOUNTING POLICIES

### 9.3.1 CHANGED ACCOUNTING POLICIES AND CLASSIFICATION IN THE ANNUAL REPORT 2018

The Annual Report has been prepared using the same accounting policies for recognition and measurement as those applied to the consolidated financial statements for 2017, except for the following new IFRS Standards, Improvements, Amendments and Interpretations that were adopted as of 1 January 2018:

- IFRS 9 “Financial Instruments”
- IFRS 15 “Revenue from Contracts with Customers”, including clarifications and amendments to IFRS 15
- Annual Improvements to IFRS Standards 2014-2016 Cycle
- IFRIC Interpretation 22 “Foreign Currency Transactions and Advance Consideration”
- Amendments to IFRS 2 “Classification and Measurement of Share-based Payment Transactions”

#### IFRS 9 “FINANCIAL INSTRUMENTS”

The Group has implemented the new classifications and hedging and impairment rules under IFRS 9. The impact of reclassifications and the calculation of expected credit losses arising from these are not material to the consolidated financial statements, and the standard has thus been implemented

without adjusting the opening balance at 1 January 2018.

The new IFRS 9 hedging rules have primarily had an impact on the effectiveness of aluminium hedges. The ineffective portion at the end of 2017 related to aluminium hedges. Following the adoption of IFRS 9, there was no ineffectiveness. The change in accounting policy did not have a material impact on other comprehensive income or the income statement.

#### IFRS 15 “REVENUE FROM CONTRACTS WITH CUSTOMERS”

The Group has implemented IFRS 15 using the fully retrospective approach. The implementation has impacted the Group’s financials and revenue stream, as the standard requires certain payments to customers, such as those supporting marketing activities and listing fees, to be deducted from revenue. Previously, these activities were recognised as marketing expenses. For the Group, the implementation of IFRS 15 was material to the consolidated financial statements. However, the implementation resulted only in changes in the classification between revenue and marketing expenses, and did not impact operating profit before special items or the consolidated profit, nor did it have an impact on the timing of revenue recognition.

The comparative figures have been restated as disclosed in the consolidated financial statements for 2017. The impact in 2017 was a reduction of net revenue of DKK 1.2bn.

#### OTHER CHANGES

Apart from the implementation of IFRS 15, the implemented Standards, Improvements, Amendments and Interpretations had no impact on the Group’s accounting policies, as they cover areas that are not material and/or relevant to the Group.

Furthermore, as of 1 January 2018, the Group changed:

- The definition of volume to include only the Group’s sales of beverages in consolidated entities.
- The classification of certain costs in the central supply chain and IT functions from administrative expenses to the functions they support, primarily production, logistics and sales.

The effect of changes in the accounting policies and the classifications for 2017 is disclosed in the consolidated financial statements for 2017, sections 9.3 and 9.5.

### 9.3.2 NEW AND AMENDED IFRS STANDARDS AND INTERPRETATIONS NOT YET APPLICABLE WITHIN THE EU

The following new or amended IFRS Standards and Interpretations of relevance to the Group became effective as of 1 January 2019:

- IFRS 16 “Leases”.
- Annual Improvements to IFRS Standards 2015-2017 Cycle.
- Amendments to IFRS 9 “Prepayment Features with Negative Compensation”.
- Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”.
- Amendments to IAS 28 “Long-term Interests in Associates and Joint Ventures”.
- IFRIC Interpretation 23 “Uncertainty over Income Tax Treatments”.

The impact of these changes is described in section 9.3.3.

The Annual Improvements to IFRS Standards 2015-2017 Cycle and amendments to IAS 19 and IAS 28 are expected to be adopted by the EU in early 2019. The Group will adopt these Improvements and Amendments when they become mandatory.

**SECTION 9.3 (CONTINUED)****CHANGES IN ACCOUNTING POLICIES****9.3.3 IMPACT OF AND CHANGES IN ACCOUNTING POLICIES FOR 2019****IFRS 16 “LEASES”**

The implementation of IFRS 16 “Leases” will result in almost all leases being recognised in the statement of financial position, as the distinction between operating and finance leases has been removed. The only exceptions are short-term leases and leases of low-value assets.

The Group has reviewed its leasing arrangements, which mainly comprise leases of cars and trucks, where the value of the assets is low and the contract periods are short. The impact for the Group in respect of operating leases is an increase in property, plant and equipment and in financial liabilities. Information on current lease agreements is disclosed in section 2.3.

Furthermore, operating profit before special items will be increased by approximately DKK 10m, as the lease cost includes an interest element, which will be recognised as a financial item. In the cash flow statement, the interest element will be presented as interest etc. paid.

The identified right-of-use assets are expected to increase the Group’s assets and liabilities by approximately DKK 1.3bn. The expected impact is calculated based on the Group’s incremental borrowing rate of 0.75% and use of the latest available knowledge for determining the lease term at the time of the calculation.

The Group will apply the practical expedient to leases retrospectively, with the cumulative effect from the date of the initial application recognised as an adjustment to the opening balance of retained earnings, and will not restate comparative figures for the year prior to first adoption.

**IMPACT OF OTHER CHANGES**

Apart from the implementation of IFRS 16, the implemented Standards, Improvements, Amendments and Interpretations are not expected to have any significant impact on the financials or the Group’s accounting policies, as they cover areas that are not material and/or relevant for the Group.

**SECTION 9.4****NEW LEGISLATION****NEW AND AMENDED IFRS STANDARDS AND INTERPRETATIONS NOT YET ADOPTED BY THE EU**

The following new or amended IFRS Standards and Interpretations of relevance to the Group have been issued but not yet adopted by the EU:

- IFRS 17 “Insurance Contracts”, effective for financial years beginning on or after 1 January 2021.
- Amendments to IAS 1 and IAS 8 “Definition of Material” (issued on 31 October 2018), effective for financial years beginning on or after 1 January 2020.
- Amendments to IFRS 3 “Business Combinations” (issued on 22 October 2018), effective for financial years beginning on or after 1 January 2020.
- Amendments to “References to the Conceptual Framework in IFRS Standards”, effective for financial years beginning on or after 1 January 2020.

The new and amended Standards and Interpretations are not mandatory for the financial reporting for 2018. The Group expects to adopt the new Standards and Interpretations when they become mandatory.

## SECTION 10

# GROUP COMPANIES

This section lists the subsidiaries, associates and joint ventures in the Group. Parent direct ownership shows the legal ownership held by the immediate holding company in the Group. Cross holdings held by fully owned companies in the Group are aggregated. Consolidated ownership shows the share of the result of the entity that is attributed to the shareholders of Carlsberg A/S in the consolidated financial statements.

	Market	Reference	Number of subsidiaries	Parent direct ownership	Consolidated ownership
Carlsberg Breweries A/S	Denmark		5	100%	100%
<b>Western Europe</b>					
Carlsberg Danmark A/S	Denmark			100%	100%
Carlsberg Supply Company Danmark A/S	Denmark			100%	100%
Carlsberg Sweden Holding 2 AB	Sweden			100%	100%
Carlsberg Sverige AB	Sweden			100%	100%
Carlsberg Supply Company Sverige AB	Sweden			100%	100%
Ringnes Norge AS	Norway		1	100%	100%
Ringnes AS	Norway			100%	100%
Ringnes Bryggerhus AS	Norway			100%	100%
Ringnes Supply Company AS	Norway			100%	100%
Ringnes Farris Eiendom AS	Norway			100%	100%
Ringnes Imsdal Eiendom AS	Norway			100%	100%
Ringnes Bodø Eiendom AS	Norway			100%	100%
Ringnes EC Dahls Eiendom AS	Norway			100%	100%
Ringnes Administrasjon Eiendom AS	Norway			100%	100%
Ringnes Gjelleråsen Eiendom AS	Norway			100%	100%
Solo AS	Norway			91%	91%
Oy Sinebrychoff Ab	Finland			100%	100%
Sinebrychoff Supply Company Oy	Finland			100%	100%
Carlsberg Deutschland Holding GmbH	Germany			100%	100%
Holzmarkt Brewing Company GmbH	Germany			100%	100%
Tuborg Deutschland GmbH	Germany			100%	100%



	Market	Reference	Number of subsidiaries	Parent direct ownership	Consolidated ownership
<b>Western Europe</b>					
Carlsberg Deutschland GmbH	Germany		5	100%	100%
Duckstein GmbH	Germany			100%	100%
Holzmarkt Beteiligungsgesellschaft mbH	Germany			100%	100%
Holsten-Brauerei AG	Germany			100%	100%
Carlsberg Supply Company Deutschland GmbH	Germany			100%	100%
Carlsberg Deutschland Logistik GmbH	Germany			100%	100%
Carlsberg Polska Sp. z o.o.	Poland			100%	100%
Carlsberg Supply Company Polska SA	Poland			100%	100%
Saku Õlletehase AS	Estonia			100%	100%
Aldaris JSC	Latvia			100%	100%
Svyturys-Utenos Alus UAB	Lithuania			99%	99%
Carlsberg UK Holdings Limited	UK		1	100%	100%
Carlsberg UK Limited	UK		3	100%	100%
Carlsberg Supply Company UK Limited	UK			100%	100%
LF Brewery Holdings Limited	UK		4	100%	100%
Emeraude S.A.S.	France		9	100%	100%
Kronenbourg S.A.S.	France			100%	100%
Kronenbourg Supply Company S.A.S.	France			100%	100%
Kronenbourg Breweries Canada Inc.	Canada			100%	100%
Association Fondation D'Entreprise Brasseries Kronenbourg	France			100%	100%
S.A.S. Onyx	France			100%	100%



<u>Eastern Europe</u>	<u>Market</u>	<u>Reference</u>	<u>Number of subsidiaries</u>	<u>Parent direct ownership</u>	<u>Consolidated ownership</u>
Carlsberg EE LLC	Russia			100%	100%
Baltika Breweries LLC	Russia	<b>G</b>	3	100%	100%
Carlsberg Azerbaijan LLC	Azerbaijan			100%	100%
Baku Piva JSC	Azerbaijan			91%	91%
PJSC Carlsberg Ukraine	Ukraine		2	99%	99%
OJSC Brewery Alivaria	Belarus	<b>F</b>		78%	89%
Carlsberg Kazakhstan Ltd	Kazakhstan		1	100%	100%
Baltic Beverages Invest AB	Sweden			100%	100%
Baltic Beverages Holding AB	Sweden		1	100%	100%

**G** Baltika Breweries is owned by Carlsberg Sverige AB.

<u>Not allocated</u>	<u>Market</u>	<u>Reference</u>	<u>Number of subsidiaries</u>	<u>Parent direct ownership</u>	<u>Consolidated ownership</u>
Carlsberg Finans A/S	Denmark			100%	100%
Carlsberg International A/S	Denmark			100%	100%
Carlsberg Invest A/S	Denmark			100%	100%
Carlsberg Global Business Services A/S	Denmark			100%	100%
Carlsberg Insurance A/S	Denmark			100%	100%
Investeringsaktieselskabet af 02.12.2005	Denmark			100%	100%
Carlsberg Shared Services Sp. z o.o.	Poland			100%	100%

<u>Non-beverage</u>	<u>Market</u>	<u>Reference</u>	<u>Number of subsidiaries</u>	<u>Parent direct ownership</u>	<u>Consolidated ownership</u>
Ejendomsaktieselskabet Tuborg Nord C	Denmark			100%	100%
Ejendomsaktieselskabet af 4. marts 1982	Denmark			100%	100%
Carlsberg Ejendom Holding A/S	Denmark			100%	100%
Boliginteressentskabet Tuborg	Denmark	<b>H</b>		100%	100%

**H** A separate annual report is not prepared.

<u>Associates and joint ventures</u>	<u>Market</u>	<u>Reference</u>	<u>Number of subsidiaries</u>	<u>Parent direct ownership</u>	<u>Consolidated ownership</u>
Carlsberg Byen P/S	Denmark	<b>E</b>	7	25%	25%
Sicera AG	Switzerland	<b>I</b>	3	65%	65%
Nya Carnegiebryggeriet AB	Sweden			98%	63%
E. C. Dahls Bryggeri AS	Norway			100%	65%
HK Yau Limited	Hong Kong			100%	65%
UAB "Svyturys Brewery"	Lithuania			100%	65%
London Fields Brewery Opco Ltd	UK			100%	65%
Sinergie Proattive Srl	Italy			50%	50%
Viacer S.G.P.S., Lda	Portugal	<b>J</b>		29%	29%
Super Bock Group, S.G.P.S., S.A.	Portugal		16	60%	60%
Nuuk Imeq A/S	Greenland	<b>E</b>		32%	32%
Chongqing Jiawei Beer Co. Ltd	China			33%	26%
Tibet Lhasa Brewery Company Limited	China			50%	50%
Lanzhou Huanghe Jianiang Brewery Company Limited	China			50%	50%
Qinghai Huanghe Jianiang Brewery Company Ltd	China			50%	50%
Jiuquan West Brewery Company Limited	China			50%	50%
Tianshui Huanghe Jianiang Brewery Company Ltd	China			50%	50%
Lion Brewery (Ceylon) PLC	Sri Lanka	<b>A, E, K</b>		25%	13%
Hanoi Beer Alcohol and Beverage Joint Stock Corporation	Vietnam	<b>E</b>		17%	17%
Carlsberg Distributors Taiwan Limited	Taiwan		1	50%	50%
NCC Crowns Private Limited	India			33%	33%
Bottlers Nepal Limited	Nepal		1	22%	20%
Myanmar Carlsberg Co. Ltd	Myanmar	<b>E</b>	1	51%	51%

**I** Sicera AG is legally owned 65% by the Group but recognised as a joint venture, as the shareholders' agreement stipulates joint control by the shareholders of the company.

**J** Viacer S.G.P.S (Viacer) is the controlling shareholder of Super Bock Group, S.G.P.S. (Super Bock) with a 56% shareholding, with Carlsberg Breweries A/S owning the remaining 44%. In addition, Carlsberg Breweries A/S has a direct ownership in Viacer of 29% without exercising control. Therefore, both Viacer and Super Bock are considered associates of the Group. The Group's direct and indirect ownership of Super Bock totals 60%.

**K** Lion Brewery (Ceylon) PLC is owned by Carlsberg Brewery Malaysia Berhad (25%). Carlsberg owns 51% of Carlsberg Brewery Malaysia Berhad, resulting in 13% of the result being attributed to the shareholders in Carlsberg A/S.

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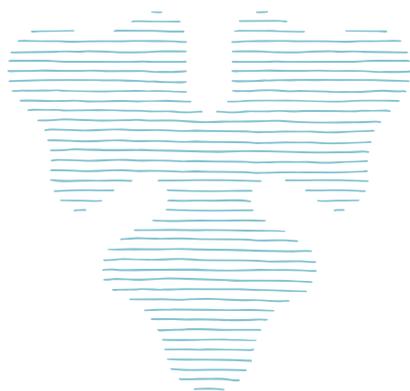
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## INCOME STATEMENT

DKK million	Section	2018	2017
Administrative expenses		-64	-75
Other operating activities, net	4.1	-56	-48
<b>Operating profit before special items</b>		<b>-120</b>	<b>-123</b>
Special items	4.3	-	50
Financial income	2.1	2,448	1,530
Financial expenses	2.1	-12	-6
<b>Profit before tax</b>		<b>2,316</b>	<b>1,451</b>
Income tax	4.6	29	31
<b>Profit for the year</b>		<b>2,345</b>	<b>1,482</b>
<b>Attributable to</b>			
Dividend to shareholders		2,746	2,441
Reserves		-401	-959
<b>Profit for the year</b>		<b>2,345</b>	<b>1,482</b>

## STATEMENT OF COMPREHENSIVE INCOME

DKK million	Section	2018	2017
<b>Profit for the year</b>		<b>2,345</b>	<b>1,482</b>
<b>Other comprehensive income</b>			
Retirement benefit obligations	3.2	-3	3
Income tax	4.6	1	-1
<b>Items that will not be reclassified to the income statement</b>		<b>-2</b>	<b>2</b>
<b>Other comprehensive income</b>		<b>-2</b>	<b>2</b>
<b>Total comprehensive income</b>		<b>2,343</b>	<b>1,484</b>

## STATEMENT OF FINANCIAL POSITION

DKK million	Section	31 Dec. 2018	31 Dec. 2017
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	4.4	6	8
Property, plant and equipment	4.4	205	454
Investments in subsidiaries	1.1	45,238	45,340
Receivables		514	490
Deferred tax assets	4.6	117	127
<b>Total non-current assets</b>		<b>46,080</b>	<b>46,419</b>
<b>Current assets</b>			
Receivables from subsidiaries	1.2	192	98
Tax receivables		7	12
Other receivables	1.2	647	215
<b>Total current assets</b>		<b>846</b>	<b>325</b>
<b>Total assets</b>		<b>46,926</b>	<b>46,744</b>

DKK million	Section	31 Dec. 2018	31 Dec. 2017
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital	2.3	3,051	3,051
Retained earnings		41,937	41,908
<b>Total equity</b>		<b>44,988</b>	<b>44,959</b>
<b>Non-current liabilities</b>			
Retirement benefit obligations and similar obligations	3.2	34	34
Provisions	4.2	50	51
<b>Total non-current liabilities</b>		<b>84</b>	<b>85</b>
<b>Current liabilities</b>			
Borrowings	1.2	1,647	1,477
Trade payables		113	122
Provisions	4.2	35	54
Other liabilities		59	47
<b>Total current liabilities</b>		<b>1,854</b>	<b>1,700</b>
<b>Total liabilities</b>		<b>1,938</b>	<b>1,785</b>
<b>Total equity and liabilities</b>		<b>46,926</b>	<b>46,744</b>

## STATEMENT OF CHANGES IN EQUITY

DKK million	Section	Shareholders in Carlsberg A/S		
		Share capital	Retained earnings	Total equity
<b>2018</b>				
<b>Equity at 1 January</b>		<b>3,051</b>	<b>41,908</b>	<b>44,959</b>
<b>Profit for the year</b>		-	<b>2,345</b>	<b>2,345</b>
<b>Other comprehensive income</b>		-	<b>-2</b>	<b>-2</b>
<b>Total comprehensive income for the year</b>		-	<b>2,343</b>	<b>2,343</b>
Acquisition/disposal of treasury shares	2.3	-	44	44
Settlement of share-based payments	2.3	-	-94	-94
Share-based payments	3.1	-	14	14
Share-based payments to employees in subsidiaries		-	161	161
Dividends paid to shareholders	2.3	-	-2,439	-2,439
<b>Total changes in equity</b>		-	<b>29</b>	<b>29</b>
<b>Equity at 31 December</b>		<b>3,051</b>	<b>41,937</b>	<b>44,988</b>
<b>2017</b>				
<b>Equity at 1 January</b>		<b>3,051</b>	<b>42,072</b>	<b>45,123</b>
<b>Profit for the year</b>		-	<b>1,482</b>	<b>1,482</b>
<b>Other comprehensive income</b>		-	<b>2</b>	<b>2</b>
<b>Total comprehensive income for the year</b>		-	<b>1,484</b>	<b>1,484</b>
Acquisition/disposal of treasury shares	2.3	-	-118	-118
Settlement of share-based payments	2.3	-	-38	-38
Share-based payments	3.1	-	9	9
Share-based payments to employees in subsidiaries		-	24	24
Dividends paid to shareholders	2.3	-	-1,525	-1,525
<b>Total changes in equity</b>		-	<b>-164</b>	<b>-164</b>
<b>Equity at 31 December</b>		<b>3,051</b>	<b>41,908</b>	<b>44,959</b>

## STATEMENT OF CASH FLOWS

DKK million	Section	2018	2017
		Operating profit before special items	-120
Depreciation and amortisation	10	17	
<b>Operating profit before depreciation and amortisation</b>	<b>-110</b>	<b>-106</b>	
Other non-cash items	8	-12	
Change in working capital <sup>1</sup>	17	101	
Interest etc. received	6	3	
Interest etc. paid	-11	-6	
Income tax paid	45	25	
<b>Cash flow from operating activities</b>	<b>-45</b>	<b>5</b>	
Acquisition of property, plant and equipment and intangible assets	-11	-205	
Disposal of property, plant and equipment and intangible assets	5	-	
<b>Total operational investments</b>	<b>-6</b>	<b>-205</b>	
Dividends from subsidiaries and joint ventures	1.2	2,441	
<b>Total financial investments</b>	<b>2,441</b>	<b>1,526</b>	
Other investments in property, plant and equipment	-10	-	
Disposal of other property, plant and equipment	-	25	
<b>Total other activities<sup>2</sup></b>	<b>-10</b>	<b>25</b>	
<b>Cash flow from investing activities</b>	<b>2,425</b>	<b>1,346</b>	
<b>Free cash flow</b>	<b>2,380</b>	<b>1,351</b>	
Shareholders in Carlsberg A/S	2.3	-2,489	
External financing	109	330	
<b>Cash flow from financing activities</b>	<b>-2,380</b>	<b>-1,351</b>	
<b>Net cash flow</b>	<b>-</b>	<b>-</b>	
Cash and cash equivalents at 1 January	-	-	
<b>Cash and cash equivalents at 31 December</b>	<b>-</b>	<b>-</b>	

<sup>1</sup> Change in working capital consists of other receivables of DKK 7m (2017: DKK 16m), trade payables and other liabilities of DKK 33m (2017: DKK 112m) and retirement benefit obligations and other provisions of DKK -23m (2017: DKK -27m).

<sup>2</sup> Other activities cover real estate activities.

## SECTION 1

# SUBSIDIARIES AND RELATED PARTIES

## SECTION 1.1

## INVESTMENTS IN SUBSIDIARIES

The carrying amount includes goodwill of DKK 11,206m (2017: DKK 11,206m) on acquisition of subsidiaries. Share-based payments to employees in subsidiaries comprise exercised as well as outstanding share-based incentive instruments.

### Investments in subsidiaries

DKK million	2018	2017
<b>Cost</b>		
Cost at 1 January	45,340	45,513
Capital injection	261	-
Share-based payments to employees, net	-363	-173
<b>Cost at 31 December</b>	<b>45,238</b>	<b>45,340</b>
<b>Carrying amount at 31 December</b>	<b>45,238</b>	<b>45,340</b>

Please see section 10 in the consolidated financial statements for a list of companies in the Carlsberg Group.

### ! ACCOUNTING ESTIMATES AND JUDGEMENTS

Management performs an annual test on investments in subsidiaries for indications of impairment.

Impairment tests are conducted in the same way as for goodwill in the Group, cf. section 2.2 in the consolidated financial statements.

It is management's assessment that no indications of impairment existed at year-end 2018. Impairment tests have therefore not been carried out for subsidiaries.

### ACCOUNTING POLICIES

Dividends on investments in subsidiaries are recognised in the income statement of the Parent Company in the financial year in which the dividend is declared.

Investments in subsidiaries are measured at the lower of cost and recoverable amount.

Share-based payments granted to employees of the Company's subsidiaries and the recharge of losses to the subsidiaries in connection with the employees' exercise of share-based awards are recognised as contributions to and reductions of the investment in the subsidiaries respectively.

## SECTION 1.2

## RELATED PARTIES

The Carlsberg Foundation, H.C. Andersens Boulevard 35, 1553 Copenhagen V, Denmark, exercises control over Carlsberg A/S. The Foundation holds 30.3% of the shares and

75.4% of the voting power in Carlsberg A/S, excluding treasury shares.

The following transactions took place between the Carlsberg Foundation and the Carlsberg Group in 2018:

- The Carlsberg Foundation received a dividend from Carlsberg A/S.
- Funding and grants for research and development activities were received from the Carlsberg Foundation.
- Carlsberg A/S leased parking spaces from the Carlsberg Foundation.
- The Carlsberg Science to Business forum was organised by the Carlsberg Foundation and the Group.
- Carlsberg A/S held the Annual General Meeting at Ny Carlsberg Glyptotek.

The transactions are described in further detail in section 8.2 of the consolidated financial statements.

It is estimated that the benefit for the Carlsberg Group corresponds to the value of the services provided to the Carlsberg Foundation, which in turn corresponds to what each party would have had to pay to have the same deliverables provided by external parties.

### OTHER RELATED PARTIES

Related parties also comprise Carlsberg A/S' Supervisory Board and Executive Board, their close family members and companies in which these persons have significant influence. During the year, there were no transactions between these parties and the Group, except for remuneration as disclosed in section 3.

No losses on loans to or receivables from subsidiaries or joint ventures were recognised or provided for in either 2018 or 2017.

### Transactions with subsidiaries

DKK million	2018	2017
Other operating activities, net	25	10
Interest income	6	3
Interest expenses	-8	-6
Dividends received	2,441	1,526
Capital injection	261	-
Loans	560	500
Receivables	144	86
Borrowings	-1,647	-1,477
Trade payables	-9	-13

The fair value of receivables and borrowings in subsidiaries corresponds to the carrying amount in all material respects.

## SECTION 2

## CAPITAL STRUCTURE

## SECTION 2.1

## FINANCIAL INCOME AND EXPENSES

Interest income relates to interest from cash and cash equivalents and loans to subsidiaries, whereas interest expenses relate to interest on borrowings.

No financial items were recognised in other comprehensive income.

The average effective interest rate on loans to subsidiaries was 0.6% (2017: 0.7%) and on loans from subsidiaries 0.5% (2017: 0.5%).

## Financial items recognised in the income statement

DKK million	2018	2017
<b>Financial income</b>		
Interest income	7	3
Dividends from subsidiaries	2,441	1,526
Other	-	1
<b>Total</b>	<b>2,448</b>	<b>1,530</b>
<b>Financial expenses</b>		
Interest expenses	-8	-6
Other	-4	-
<b>Total</b>	<b>-12</b>	<b>-6</b>
<b>Financial items, net</b>	<b>2,436</b>	<b>1,524</b>

## SECTION 2.2

## NET INTEREST-BEARING DEBT

## Net interest-bearing debt

DKK million	2018	2017
Current borrowings	1,647	1,477
<b>Gross interest-bearing debt</b>	<b>1,647</b>	<b>1,477</b>
Receivables	-2	-1
Loans to subsidiaries	-560	-500
<b>Net interest-bearing debt</b>	<b>1,085</b>	<b>976</b>
<b>Changes in net interest-bearing debt</b>		
<b>Net interest-bearing debt at 1 January</b>	<b>976</b>	<b>646</b>
Cash flow from operating activities, excluding interest-bearing part	45	-5
Cash flow from investing activities	-2,425	-1,346
Dividends to shareholders	2,439	1,525
Acquisition/disposal of treasury shares and settlement of share-based payments	50	156
<b>Total change</b>	<b>109</b>	<b>330</b>
<b>Net interest-bearing debt at 31 December</b>	<b>1,085</b>	<b>976</b>

## SECTION 2.3 SHARE CAPITAL

### DIVIDENDS

The proposed dividend of DKK 18.00 per share, in total DKK 2,746m (2017: DKK 16.00 per share, in total DKK 2,441m), is included in retained earnings at 31 December 2018.

Dividends paid out in 2018 for 2017, net of dividends to treasury shares amount to DKK 2,439m (paid out in 2017 for 2016: DKK 1,525m). Dividends paid out to shareholders of Carlsberg A/S do not impact taxable income in Carlsberg A/S.

### SHARE BUY-BACK AND TREASURY SHARES

During the 12-month period from 6 February 2019, the Group intends to buy back shares worth up to DKK 4.5bn. The share buy-back programme will be split into two tranches of approximately six months each and will be executed in accordance with Article 5 of Regulation No 596/2014 of the European Parliament and Council of 16 April 2014 (MAR) and the Commission Delegated Regulation (EU) 2016/1052, also referred to as the Safe Harbour Regulation. The first tranche is a share buy-back programme worth up to DKK 2.5bn, with a maximum of 15 million shares. The Company is entitled to suspend or stop the programme at any time.

According to the authorisation of the Annual General Meeting, the Supervisory Board may, in the period until 13 March 2023, allow the Company to acquire treasury shares up to a total holding of 10% of the nominal share capital at a price quoted on Nasdaq Copenhagen at the time of acquisition with a deviation of up to 10%.

The permitted holding of treasury shares covers those acquired in share buy-back programmes.

In the financial year, the Company acquired class B treasury shares of a nominal amount of DKK 4m (2017: DKK 8m) at an average price of DKK 740 (2017: DKK 706). Class B treasury shares are primarily acquired and disposed of to facilitate settlement of the share-based incentive programmes. The Company holds no class A shares.

At 31 December 2018, the fair value of treasury shares amounted to DKK 69m (2017: DKK 124m). The holdings of treasury shares are specified in section 4.3 in the consolidated financial statements.

### Share capital

	Class A shares		Class B shares		Total share capital	
	Shares of DKK 20	Nominal value, DKK '000	Shares of DKK 20	Nominal value, DKK '000	Shares of DKK 20	Nominal value, DKK '000
1 January 2017	33,699,252	673,985	118,857,554	2,377,151	152,556,806	3,051,136
No change in 2017	-	-	-	-	-	-
<b>31 December 2017</b>	<b>33,699,252</b>	<b>673,985</b>	<b>118,857,554</b>	<b>2,377,151</b>	<b>152,556,806</b>	<b>3,051,136</b>
No change in 2018	-	-	-	-	-	-
<b>31 December 2018</b>	<b>33,699,252</b>	<b>673,985</b>	<b>118,857,554</b>	<b>2,377,151</b>	<b>152,556,806</b>	<b>3,051,136</b>

A shares carry 20 votes per DKK 20 share. B shares carry two votes per DKK 20 share. A preferential right to an 8% non-cumulative dividend is attached to B shares. Apart from votes and dividends, all shares rank equally.

### Transactions with shareholders in Carlsberg A/S

DKK million	2018	2017
Dividends to shareholders	-2,439	-1,525
Acquisition of treasury shares	-128	-266
Disposal of treasury shares	78	110
<b>Total</b>	<b>-2,489</b>	<b>-1,681</b>

## SECTION 3

# STAFF COSTS AND REMUNERATION

## SECTION 3.1

## STAFF COSTS AND REMUNERATION

The remuneration of the Supervisory Board, the executive directors and key management personnel is described in detail in the Remuneration report in the Management review.

In 2018, the Supervisory Board received total remuneration of DKK 9.35m (2017: DKK 9.58m), comprising fixed salary only.

### Staff costs and remuneration

DKK million	2018	2017
Salaries and other remuneration	104	104
Retirement benefit costs - defined contribution plans	5	5
Share-based payments	40	30
<b>Total</b>	<b>149</b>	<b>139</b>

### Staff costs are included in the following items in the income statement

Administrative expenses	43	39
Other operating activities, net	54	57
<b>Total staff costs recognised by the Parent Company</b>	<b>97</b>	<b>96</b>
Staff costs recognised by other Group companies	52	43
<b>Total</b>	<b>149</b>	<b>139</b>

The Company had an average of 80 (2017: 81) full-time employees during the year.

### SHARE-BASED INCENTIVE PROGRAMMES

The executive directors in the Parent Company are the same as for the Carlsberg Group. Please refer to section 7.3 in the consolidated financial statements for share-based incentive programmes for the executive directors.

### PERFORMANCE SHARES

Besides the executive directors, one employee in the Parent Company participates in the Group's performance share programmes as described in section 7.3 in the consolidated financial statements. Refunds etc. between Carlsberg A/S and its subsidiaries are recognised directly in equity.

### ACCOUNTING POLICIES

Staff costs are recognised in the financial year in which the employee renders the related service. The fair value of share-based incentives, which is expensed over the vesting period of the programme according to the service conditions, is recognised in staff costs and offset directly against equity.

The fair value of share-based incentives granted to employees in subsidiaries is recognised as investments in subsidiaries, and offset directly against equity.

The difference between the purchase price and the selling price for the exercise of share-based incentives is settled between Carlsberg A/S and the individual subsidiary and offset directly against investments in subsidiaries.

The difference between the fair value of the Parent Company's equity instruments and the exercise price of outstanding share-based incentives is recognised as a receivable and offset directly against investments in subsidiaries.

Share-based incentives granted to the Parent Company's own employees are recognised and measured in accordance with the accounting policies used by the Group.

## SECTION 3.2

## RETIREMENT BENEFIT OBLIGATIONS

Retirement benefit obligations and similar obligations comprise payments to retired directors that are not covered by an insurance company. The plan is unfunded.

Total obligations amounted to DKK 34m (2017: DKK 34m) and include actuarial losses of DKK 3m (2017: DKK 3m gain) and benefits paid in the year of DKK 3m (2017: DKK 4m).

Of the expected payment obligation, DKK 3m is due within one year and DKK 17m after more than five years from the reporting date.

The underlying actuarial assumptions are based on local economic and labour market conditions. The discount rate was 0.5%, the same as in 2017. The rate of increase in future retirement obligations was 1% (2017: -2%).

During the year, DKK 0m (2017: DKK 0m) was recognised in the income statement, and DKK -3m (2017: DKK 3m) was recognised in other comprehensive income.

## SECTION 4

# OTHER DISCLOSURE REQUIREMENTS

## SECTION 4.1

## OTHER OPERATING ACTIVITIES, NET

Other operating activities are secondary to the principal activities of the Group and include income and expenses relating to rental properties, research activities, and gains and losses on the disposal of intangible assets and property, plant and equipment.

### Other operating activities, net

DKK million	2018	2017
Gains on disposal of real estate	5	22
Real estate, net	-21	-23
Research activities, including the Carlsberg Research Laboratory, net	-40	-47
<b>Total</b>	<b>-56</b>	<b>-48</b>

Research expenses are partially financed through funding received from the Carlsberg Foundation for the operation of the Carlsberg Research Laboratory and other grants. The funding and grants are recognised in the income statement in the same period as the activities to which they relate.

## SECTION 4.2

## PROVISIONS

Provisions primarily comprise warranty provisions regarding real estate disposed of and provisions for ongoing disputes and lawsuits etc.

At 31 December 2018, provisions amounted to DKK 85m (2017: DKK 105m). Provisions amounting to DKK 20m (2017: DKK 27m) were utilised during the year. Reversal of provisions amounted to DKK 0m (2017: DKK 53m).

Of total provisions, DKK 35m (2017: DKK 54m) falls due within one year and DKK 0m (2017: DKK 0m) after more than five years from the end of the reporting period.

## SECTION 4.3

## SPECIAL ITEMS

No special items were recognised in 2018. In 2017, special items amounted to DKK 50m and related to reversal of provisions related to disposal of property, plant and equipment in prior years.

## SECTION 4.4

## ASSET BASE AND LEASES

The carrying amount of intangible assets was DKK 6m (2017: DKK 8m), and the carrying amount of property, plant and equipment was DKK 205m (2017: DKK 454m). Property, plant and equipment comprised mainly land and buildings of DKK 176m (2017: DKK 182m), and property, plant and equipment under construction of DKK 18m (2017: DKK 262m). The decrease in property, plant and equipment is due to injection of property under development into a subsidiary.

Depreciation and amortisation of DKK 10m (2017: DKK 17m) were included in administrative expenses.

Carlsberg A/S has entered into an operating lease agreement relating to transport equipment. The lease does not contain any special purchase rights etc. Future lease payments total DKK 2m (2017: DKK 1m). Operating lease payments recognised in the income statement in 2018 amounted to DKK 2m (2017: DKK 1m).

## SECTION 4.5

## FEES TO AUDITORS

### Fees to auditors appointed by the Annual General Meeting

DKK million	2018	2017
Statutory audit	0.3	0.3
Assurance engagements	-	-
Tax advisory	-	-
Other services	-	-
<b>Total</b>	<b>0.3</b>	<b>0.3</b>

## SECTION 4.6

## TAX

Deferred tax assets amounted to DKK 117m (2017: DKK 127m) and primarily comprised tax on property, plant and equipment of DKK 41m (2017: DKK 41m), provisions and retirement benefit obligations of DKK 20m (2017: DKK 20m) and tax losses etc. of DKK 69m (2017: DKK 76m). The utilisation of tax loss carryforwards depends on future positive taxable income exceeding the realised deferred tax liabilities. Deferred tax liabilities amounted to DKK 13m (2017: DKK 10m) and were offset against the deferred tax asset.

The net changes in deferred tax assets of DKK 10m comprised tax recognised in total comprehensive income of DKK 29m (2017: DKK 24m) and a joint taxation contribution of DKK -39m (2017: DKK -33m).

Together with changes to tax for prior years, the total tax for the year recognised in the income statement comprised income of DKK -29m (2017: DKK -31m). Of the deferred tax assets, DKK 5m (2017: DKK 1m) is expected to be used within one year. All tax assets have been recognised.

The administration company, Carlsberg A/S, has unlimited and joint legal responsibility with the other companies under the joint taxation scheme for withholding taxes on dividends, interest and royalties.

## Reconciliation of tax for the year

DKK million	2018	2017
Calculated tax on profit	510	319
Adjustments to tax for prior years	-4	-15
Non-deductible expenses	2	5
Tax-free dividend and tax-exempted items	-537	-340
<b>Tax for the year</b>	<b>-29</b>	<b>-31</b>

 ACCOUNTING ESTIMATES AND JUDGEMENTS

Carlsberg A/S recognises deferred tax assets, including the tax base of tax loss carryforwards, if management assesses that these tax assets can be offset against positive taxable income in the foreseeable future. This judgement is made annually and based on budgets and business plans for the coming years.

 ACCOUNTING POLICIES

Carlsberg A/S is the administration company and is subject to the Danish rules on mandatory joint taxation of the Carlsberg Group's Danish companies. Carlsberg A/S accordingly pays all income taxes to the tax authorities under the joint taxation scheme.

Danish subsidiaries are included in the joint taxation from the date when they are included in the consolidated financial statements and up to the date when they are excluded from the consolidation. The jointly taxed Danish companies are taxed under the on-account tax scheme.

On payment of joint taxation contributions, the current Danish income tax is allocated between the Danish jointly taxed companies in proportion to their taxable income. Companies with tax losses receive joint taxation contributions from other companies that have used the tax losses to reduce their own taxable profit (full absorption).

Tax on profit/loss for the year comprises profit/loss from real estate partnerships (joint ventures), as these are not individually taxed but included in the taxable income of the partners. In addition, tax on profit/loss and deferred tax are calculated and recognised as described in section 6 in the consolidated financial statements.

## Income tax expenses

DKK million	2018			2017		
	Income statement	Other comprehensive income	Total comprehensive income	Income statement	Other comprehensive income	Total comprehensive income
<b>Tax for the year</b>						
Change in deferred tax during the year	-25	-1	-26	-16	1	-15
Adjustments to current tax for prior years	-1	-	-1	-6	-	-6
Adjustments to deferred tax for prior years	-3	-	-3	-9	-	-9
<b>Total</b>	<b>-29</b>	<b>-1</b>	<b>-30</b>	<b>-31</b>	<b>1</b>	<b>-30</b>

## SECTION 5

# GENERAL ACCOUNTING POLICIES

## SECTION 4.7

## CONTINGENT LIABILITIES AND OTHER COMMITMENTS

Carlsberg A/S has issued guarantees to subsidiaries for pension obligations of DKK 339m (2017: DKK 349m).

Carlsberg A/S is jointly registered for Danish VAT and excise duties with Carlsberg Breweries, Carlsberg Danmark and various other minor Danish subsidiaries, and Carlsberg A/S is jointly and severally liable for payment of VAT and excise duties.

Carlsberg A/S is party to certain lawsuits, disputes etc. of various scopes. In management's opinion, apart from items recognised in the statement of financial position or disclosed in the financial statements, the outcome of these lawsuits, disputes etc. will not have a material negative effect on the Company's financial position.

Carlsberg A/S has issued a guarantee in respect of rental obligations of DKK 32m (2017: DKK 63m).

## SECTION 4.8

## EVENTS AFTER THE REPORTING PERIOD

Apart from the events recognised or disclosed in the financial statements, no events have occurred after the reporting date of importance to the financial statements.

The 2018 financial statements of Carlsberg A/S have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and further requirements in the Danish Financial Statements Act.

The financial statements are presented in Danish kroner (DKK), which is the presentation currency.

The accounting policies for the Parent Company are the same as for the Group, cf. section 9 in the consolidated financial statements and the individual sections.

### SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

In preparing Carlsberg A/S' financial statements, management makes various accounting estimates and judgements that form the basis of presentation, recognition and measurement of the Company's assets and liabilities.

The estimates and judgements made are based on historical experience and other factors that management assesses to be reliable, but that by their very nature are associated with uncertainty and unpredictability. These estimates and judgements may therefore prove incomplete or incorrect, and unexpected events or circumstances may arise.

The significant accounting estimates and judgements made and accounting policies specific to the Parent Company are presented in the explanatory notes.

## REPORTS

# MANAGEMENT STATEMENT

The Supervisory Board and the Executive Board have today discussed and approved the Annual Report of the Carlsberg Group and the Parent Company for 2018.

The Annual Report has been prepared in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

In our opinion, the consolidated financial statements and the Parent Company's financial statements give a true and fair view of the Carlsberg Group's and the Parent Company's assets, liabilities and financial position at 31 December 2018 and of the results of the Carlsberg Group's and the Parent Company's operations and cash flows for the financial year 2018.

Further, in our opinion the Management review includes a fair review of the development in the Carlsberg Group's and the Parent Company's operations and financial matters, of the result for the year, and of the Carlsberg Group's and the Parent Company's financial position as well as describing the significant risks and uncertainties affecting the Carlsberg Group and the Parent Company.

We recommend that the Annual General Meeting approve the Annual Report.

Copenhagen, 6 February 2019

**Executive Board of Carlsberg A/S**

Cees 't Hart  
President & CEO

Heine Dalsgaard  
CFO

**Supervisory Board of Carlsberg A/S**

Flemming Besenbacher  
Chairman

Lars Rebie Sørensen  
Deputy Chairman

Hans Andersen

Carl Bache

Richard Burrows

Donna Cordner

Magdi Batato

Eva Vilstrup Decker

Erik Lund

Finn Lok

Peter Petersen

Søren-Peter Fuchs Olesen

Lars Stemmerik

Nina Smith

## REPORTS

# INDEPENDENT AUDITOR'S REPORT

### TO THE SHAREHOLDERS OF CARLSBERG A/S

#### OUR OPINION

In our opinion, the Consolidated Financial Statements and the Parent Company Financial Statements (pp 56-134) give a true and fair view of the Group's and the Parent Company's financial position at 31 December 2018 and of the results of the Group's and the Parent Company's operations and cash flows for the financial year 1 January to 31 December 2018 in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

Our opinion is consistent with our Auditor's Long-form Report to the Audit Committee and the Supervisory Board.

#### What we have audited

The Consolidated Financial Statements and Parent Company Financial Statements of Carlsberg A/S for the financial year 1 January to 31 December 2018 comprise income statement, statement of comprehensive income, statement of financial position, statement of changes in equity, statement of cash flows and notes, including summary of significant accounting policies for the Group as well as for the Parent Company. Collectively referred to as the "Financial Statements".

#### BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (ISAs) and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the Auditor's responsibilities for the audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Independence

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) and the additional requirements applicable in Denmark. We have also fulfilled our other ethical responsibilities in accordance with the IESBA Code.

To the best of our knowledge and belief, prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 were not provided.

#### Appointment

We were first appointed auditors of Carlsberg A/S on 30 March 2017 for the financial year 2017. We have been reappointed annually by shareholder resolution for a total period of uninterrupted engagement of two years including the financial year 2018.

#### KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Statements for 2018. These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

**Key audit matter****How our audit addressed the key audit matter****Revenue recognition**

Recognition of revenue is complex due to the extent of different revenue streams ranging from sales of goods, royalty income, portage income and sales of by-products recognised when all significant risks and rewards have been transferred to the customer or in terms of the licence agreement.

Complexity further includes the implementation of IFRS 15 Revenue from Contracts with Customers in 2018.

We focused on this area, as there is a risk of non-compliance with accounting policies due to complexity originating from different customer behaviour, structures, market conditions and terms in the various countries.

Furthermore, the various discounts and locally imposed duties and fees in regard to revenue recognition are complex and introduce an inherent risk to the revenue recognition process.

Revenue recognition and accounting treatment are described in section 1.1 "Segmentation of operations–Accounting estimates and judgements" of the Consolidated Financial Statements.

Our audit procedures included considering the appropriateness of the revenue recognition accounting policies and assessing compliance with IFRS 15.

We tested the relevant controls, including applicable information systems and Management's monitoring of controls used to ensure the completeness, accuracy and timing of revenue recognised.

We discussed the key assumptions related to the recognition and classification of revenue with Management. Further, we performed substantive procedures regarding invoicing, significant contracts, significant transactions (including discounts) and locally imposed duties and fees in order to assess the accounting treatment and principles applied. In testing contracts and discounts the implementation of IFRS 15 was assessed.

We applied data analysis in our testing of revenue transaction in order to identify transactions outside the ordinary transaction flow, including journal entry testing and cut-off testing at year-end.

**Key audit matter****How our audit addressed the key audit matter****Recoverability of the carrying amount of goodwill and brands**

The principal risks relate to Management's assessment of the future timing and amount of cash flows, which are used to project the recoverability of the carrying amount of goodwill and brands. There are specific risks related to macroeconomic conditions and volatile earnings caused by volume decline, intensified competition and changed regulations in key markets – conditions that could also result in Management deciding to change brand strategy to drive business performance.

Bearing in mind the generally long-lived nature of the assets, the most critical assumptions are Management's view of cash-generating units, prices, volumes, discount rates, growth rates, royalty rates, expected useful life and costs, and future free cash flows.

We focused on this area, as Management is required to exercise considerable judgement because of the inherent complexity in estimating future cash flows.

The key assumptions and accounting treatment are described in section 2.2 "Impairment" of the Consolidated Financial Statements.

In addressing the risks, we walked through and tested relevant controls designed and operated relating to the assessment of the carrying amount of goodwill and brands.

We considered the appropriateness of Management's defined cash-generating units (CGUs) within the business. We evaluated whether there were factors requiring Management to change their definition. We examined the methodology used by Management to assess the carrying amount of goodwill and brands assigned to CGUs and the process for identifying CGUs that require impairment testing to determine compliance with IFRS.

We performed detailed testing for the assets where an impairment review was required or indications of impairment were identified. For those assets, we analysed the reasonableness of key assumptions in relation to the ongoing operation of the assets.

We corroborated estimates of future cash flows and challenged whether they are reasonable and supported by the most recent approved Management budgets, including expected future performance of the CGUs, and challenged whether these are appropriate in light of future macroeconomic expectations in the markets.

We used our internal valuation specialists and evaluated the assumptions used by Management, including assessment of price and volume forecasts, discount rates and long-term growth rates, and tested the mathematical accuracy of the relevant value-in-use models prepared by Management.

Further, we assessed the appropriateness of disclosures including sensitivity analyses prepared for the key assumptions.

**STATEMENT ON THE MANAGEMENT REVIEW**

Management is responsible for Management Review (pp 3-55).

Our opinion on the Financial Statements does not cover Management Review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Statements, our responsibility is to read Management Review and, in doing so, consider whether Management Review is materially inconsistent with the Financial Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

Moreover, we considered whether Management Review includes the disclosures required by the Danish Financial Statements Act.

Based on the work we have performed, in our view, Management Review is in accordance with the Consolidated Financial Statements and the Parent Company Financial Statements and has been prepared in accordance with the requirements of the Danish Financial Statements Act. We did not identify any material misstatement in Management Review.

**MANAGEMENT'S RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS**

Management is responsible for the preparation of consolidated financial statements and parent company financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, Management is responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate the Group or the Parent Company or to cease operations, or has no realistic alternative but to do so.

**AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS**

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with ISAs and the additional requirements applicable in Denmark, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Parent Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Parent Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group or the Parent Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the Consolidated Financial Statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Copenhagen, 6 February 2019

PricewaterhouseCoopers  
Statsautoriseret Revisionspartnerselskab  
CVR no 3377 1231

Mogens Nørgaard Mogensen  
State Authorised Public Accountant  
mne21404

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Gert Fisker Tomczyk  
State Authorised Public Accountant  
mne9777

