



# ANNUAL REPORT 2016/17

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### WHERE IT ALL BEGAN

Chr. Hansen originates from the cheese world, but since our founder revolutionized the dairy industry through the invention of a standardized, pure enzyme for cheese making in 1874, we have come far. Today, with the most extensive culture and enzyme range for cheese in the dairy world, we combine tradition and cutting edge innovation while staying at the forefront of market trends and ensuring consumers a rich variety of taste experiences.

# ABOUT CHR. HANSEN

Chr. Hansen is a leading global bioscience company that develops natural ingredient solutions for the food, nutritional, pharmaceutical and agricultural industries. We develop and produce cultures, enzymes, probiotics and natural colors for a rich variety of foods, confectionery, beverages, dietary supplements and even animal feed and plant protection. Our product innovation is based on more than 30,000 microbial strains – we like to refer to them as "good bacteria."

Our solutions enable food manufacturers to produce more with less – while also reducing the use of chemicals and other synthetic additives – which makes our products highly relevant in today's world. We have been delivering value to our partners – and, ultimately, end consumers worldwide – for more than 140 years. We are proud that more than 1 billion people consume products containing our natural ingredients every day.

#### INTERNATIONAL ORGANIZATION



### **THREE BUSINESS AREAS - MULTIPLE PRODUCT CATEGORIES**



# IN BRIEF **HIGHLIGHTS**

**ORGANIC GROWTH** 

**OPERATING PROFIT** MARGIN (B.S.I.)

**FREE CASH FLOW** 

BEFORE SPECIAL ITEMS AND **ACQUISITIONS** 

2016/17

+10%

2016/17

28.9%

2016/17

**188** EURm

2015/16

+12%

2015/16

28.2%

2015/16

**175** EURm

## **BREAKDOWN OF REVENUE**



**464** EURm (44%)

# NORTH AMERICA

**297** EURm (28%)

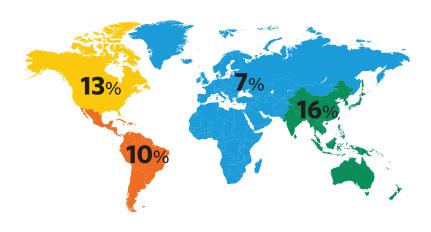
# APAC

**166** EURm (15%)

# LATAM

**136** EURm (13%)

### **ORGANIC GROWTH**





Chr. Hansen Group

Food Cultures & Enzymes



Health & Nutrition



**Natural Colors** 

+10%

**1,063** EURm

+9%

**618** EURm (**58**%)

+14%

+10%

225 EURm (21%) 220 EURm (21%)

# ANNUAL REPORT 2016/17 **IN BRIEF**

## THE BEST CHOICE



# 2016/17 IN BRIEF

# **KEY FIGURES**

EUR million	2016/17	2015/16	2014/15	2013/14	2012/13
Income statement					
Revenue	1,062.5	948.9	858.6	756.2	738.4
Gross profit	578.1	505.4	446.4	391.3	384.8
EBITDA before special items	368.1	324.0	286.4	256.6	249.0
EBIT before special items	307.1	267.8	232.5	204.8	192.5
EBIT	305.7	255.6	232.5	195.1	192.5
Net financial items	(14.8)	(16.2)	(12.8)	(13.8)	(15.8)
Profit for the year	224.0	183.8	162.5	132.2	139.8
Average number of employees (FTEs)	2,940	2,708	2,573	2,510	2,510
Financial position at 31 August					
Total assets	1,802.1	1,715.3	1,444.6	1,374.9	1,366.8
Invested capital	1,581.1	1,445.0	1,247.0	1,213.8	1,180.1
Net working capital	174.8	147.4	138.1	129.8	107.8
Equity*	768.5	730.3	600.8	656.8	680.7
Net interest-bearing debt	628.4	547.9	487.6	403.5	351.5
Cash flow and investments					
Cash flow from operating activities	283.7	244.8	221.5	176.4	190.3
Cash flow used for investing activities	(176.5)	(244.4)	(70.4)	(61.8)	(70.3)
Free cash flow	107.2	0.4	151.1	114.6	120.0
Free cash flow before special items and acquisitions	187.8	175.2	151.1	124.3	120.0
Acquisition and sale of property, plant and equipment, net	(88.4)	(56.6)	(55.0)	(49.6)	(52.0)
Earnings per share					
EPS, diluted	1.68	1.40	1.23	1.00	1.04
Key ratios					
Organic growth, %**	10	12	10	8	7
Gross margin, %	54.4	53.3	52.0	51.7	52.1
EBITDA margin before special items, %	34.6	34.1	33.4	33.9	33.7
EBIT margin before special items, %	28.9	28.2	27.1	27.1	26.1
EBIT margin, %	28.8	26.9	27.1	25.8	26.1
ROIC excl. goodwill, %	40.1	39.7	37.6	34.9	34.3
ROIC, %	20.3	19.9	18.9	17.1	16.4
NWC, %	16.5	15.5	16.1	17.2	14.6
R&D, %	7.0	7.1	6.4	6.1	6.1
Capital expenditure, %	10.0	8.2	8.2	8.3	9.6
Cash conversion, %	62.8	73.2	72.5	67.0	67.9
Net debt to EBITDA before special items	1.7x	1.7x	1.7x	1.6x	1.4x

<sup>\*</sup> Equity for 2012/13 has been restated to reflect a changed accounting policy for employee benefit obligations.

\*\* Organic growth: Increase in revenue adjusted for sales reductions, acquisitions and divestments, and measured in local currencies.

# 2016/17 IN BRIEF

# LETTER TO SHAREHOLDERS

Dear Shareholder,

2016/17 was another good financial year for Chr. Hansen. We achieved 10% organic growth, an EBIT margin before special items of 28.9% and a free cash flow before special items and acquisitions of EUR 188 million. Sales grew organically in all business areas, and profitability also improved in all business areas.

In Food Cultures & Enzymes we saw strong growth across most segments, including bioprotective solutions and cultures for cheese and yogurt production. Growth in the business was broad-based across regions, with North America and Asia-Pacific growing double digit.

The expansion of the factory in Copenhagen, which will significantly increase the capacity for Food Cultures & Enzymes, was completed shortly after the end of the financial year.

In Health & Nutrition, both human health and animal health realized double-digit organic growth. The integration of the acquired company, NPC, and the integration of  $LGG^{\circ}$  progressed as planned. Plant health also grew strongly, driven by increasing sales in Brazil from NEMIX $^{\circ}$ C and sales of new bionematicides. The human microbiome area continued to develop positively, with progress in several precommercial projects.

Natural Colors grew 10% organically, driven by all regions, as the conversion from synthetic to natural colors continued. In addition, profitability increased substantially compared to last year because of operational optimizations across the business.

#### SUPPORTING MEGATRENDS

Consumers are asking for healthier food, cleaner labels and more sustainable food production value chains. The increasing global population also makes it necessary to grow and produce more food, and this needs to happen in a sustainable manner to protect scarce resources such as water, forests and arable land. Crop farming must become more efficient, but at the same time reduce the use of pesticides and fertilizers to protect groundwater. Livestock production must be made more efficient, and the use of antibiotics as growth promoters must be decreased at the same time. Reducing food waste by extending shelf life or protecting food from spoiling is another way to provide more food for a growing population.

Chr. Hansen is well positioned at the intersection of these trends, and we are able to leverage our technological and commercial expertise to deliver value to our customers and consumers alike. We are convinced that our existing product portfolio and our three strategic lighthouses – bioprotection, plant health and the human microbiome – give us a great opportunity to continue our strong organic growth in line with our long-term targets.

#### SUSTAINABILITY

In 2016/17, Chr. Hansen focused its resources on creating awareness of natural solutions to reduce food waste. Our sustainability strategy revolves around three of the UN Sustainable Development Goals: Better farming, Less waste and Good health. Our products can advance the sustainability agenda by reducing food waste, applying natural solutions in crop farming, and improving health in humans and animals. In 2017, we introduced several new targets to anchor and measure our progress toward the three UN Sustainable Development Goals.

You can read more about our progress on sustainability in our Sustainability report 2016/17, which is available at www.chr-hansen.com/sustainability/reporting-and-disclosure.

#### **CAPITAL STRUCTURE AND DIVIDEND**

Our capital allocation principles prioritize investment in organic revenue growth and bolt-on acquisitions to support our existing business. Excess cash will be distributed to shareholders. In 2016/17, we invested more than EUR 75 million in R&D and more than EUR 100 million in capacity expansions, and also made a bolt-on acquisition of  $\mathsf{LGG}^{\$}$ .

The Company's ability to generate free cash flow remains strong. In July 2017, the Board of Directors decided to pay an extraordinary dividend of EUR 0.76 (DKK 5.64) per share, totaling EUR 100 million. To support an optimal capital structure, the Board of Directors proposes paying an ordinary dividend of EUR 0.85 (DKK 6.33) per share, or EUR 112 million, for the financial year 2016/17.

#### FOCUS 2017/18

During the coming year, we will continue to execute the Nature's no. 1 strategy to secure the long-term success of Chr.

This means that we will continue to expand the penetration of bioprotective solutions in various food applications, realize the benefit of our new capacity in food cultures, and develop the business areas of plant health and human microbiome. We will also continue to look for further bolt-on acquisitions that fit into our core business, where we can leverage our microbial platform.  $LGG^{\circ}$  is an excellent example of such an acquisition.

In Natural Colors, the focus will remain on delivering further improvements in profitability and driving the conversion from synthetic colors to natural alternatives across all regions, not least in North America.

Finally, our results in 2016/17, and the prospect of success in 2017/18, are highly dependent on the engagement and passion of our employees, their unique skill sets and their willingness to go the extra mile for Chr. Hansen and our customers. In both 2015/16 and 2016/17, we measured the company-wide engagement level of our employees. The engagement level was high in both years, but higher in the recent survey. We would like to thank all our employees for their dedicated efforts in the last year, and we look forward to continuing the journey.

Ole Andersen Chairman of the Board Cees de Jong President & CEO



# ANNUAL REPORT 2016/17 STRATEGY & AMBITIONS

## NATURE'S OWN RESOURCES KEEP DAIRY PRODUCTS FRESH



# STRATEGY AND AMBITIONS **BUSINESS MODEL**

The Chr. Hansen business model builds on the Company's unique solutions and strong innovation platform, a scalable production setup and strong customer relationships.

Maintaining market and technology leadership in established markets, and developing new markets in adjacent areas are both clear priorities.

#### ATTRACTIVE MARKETS

Chr. Hansen holds leadership positions in several attractive niche markets, supported by a number of global trends that offer promising growth opportunities based on:

- A growing population and rapid urbanization, both of which drive growth in industrially produced food & beverages
- Increased consumer awareness of food ingredients and increased transparency driving demand for innovation to meet consumer demand for healthy and nutritious, yet safe, tasty and affordable food with clean labels
- Increasing health care costs and focus on well-being driving demand for natural solutions to support the health of humans
- Concerns about the adverse impact of excessive use
  of certain antibiotics and chemicals in the agricultural
  sector driving the need to reduce the use of antibiotics
  as a productivity enhancer in livestock production and to
  substitute chemical solutions in crop protection
- A continued need for process optimization and yield improvements in production processes driving dairies around the world to convert from bulk starter to DVS® cultures and driving demand for solutions to reduce food waste

#### **UNIQUE SOLUTIONS**

Chr. Hansen's solutions offer an attractive cost-to-value ratio for customers, supporting their need for both process optimization and product innovation. Solutions are often customized to meet customer demands, such as local taste preferences and specific production setups at dairies and other food & beverage manufacturing facilities.

#### A STRONG INNOVATION PLATFORM

The majority of Chr. Hansen's innovations derive from a strong bioscience technology platform based on in-depth scientific knowledge and capabilities.

Access to around 30,000 microbial strains allows for extensive screening and selection of the best available combinations of strains for new, improved products and solutions.

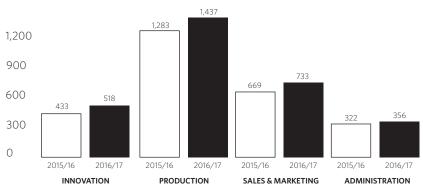
Know-how in fundamental bioprocess engineering is used to develop products that optimize customers' production efficiency, with higher yields and improved stability.

Scientific knowledge of bacterial strain properties and technical application knowledge are the key platforms enabling development of healthy and tasty new product solutions.

Chr. Hansen differentiates itself as a provider of some of the most extensively documented probiotic bacterial strains with positive health benefits, such as LGG®, BB-12®, LA-5® and L. casei 431®. The combined number of peer-reviewed papers supporting these claims exceeds 1,450.

In addition, Chr. Hansen's formulation expertise helps customers combine probiotics with other ingredients and deliver them in innovative dosage forms with documented stability.

## NO. OF EMPLOYEES



In Natural Colors, Chr. Hansen combines an understanding of formulation techniques with technical insight into customers' processes and products to develop new natural color solutions, such as coloring foodstuffs.

Approximately 520 employees are dedicated to research & development and technical application activities. Chr. Hansen also actively partners with universities, researchers and companies on innovative projects in its specialist fields.

In 2016/17, EUR 75 million, or 7.0% of revenue, was spent on research & development activities.

#### A SCALABLE PRODUCTION PLATFORM

Chr. Hansen holds significant competencies in upscaling production of bacterial strains at an industrial level. Production is managed centrally to ensure optimization of production facilities by serving the world from a consolidated production setup. Cultures for Food Cultures & Enzymes are produced at locations in Denmark, France, Germany and the US, while enzymes are produced in Denmark and Germany.

Production of cultures for Health & Nutrition takes place at facilities in Denmark (human), Germany (animal and plant) the Czech Republic (animal), and the US (animal).

In 2016/17, significant investments were made in Denmark to expand the production facilities for food cultures, effectively doubling the capacity of the main facility in Copenhagen. In addition, investments to enhance productivity or capacity were made at several other locations.

Production for Natural Colors takes place at facilities in Brazil, China, Denmark, Italy, Peru and the US.

In 2016/17, 8.6% of revenue was invested in property, plant and equipment, while approximately 1,440 employees were dedicated to production activities.

#### STRONG CUSTOMER RELATIONSHIPS

Chr. Hansen has strong and long-term strategic relationships with many of its customers, building on more than 140 years of experience.

Chr. Hansen develops and maintains relationships with existing and new customers by providing a superior customer experience that builds on strong customer and consumer insight combined with local technical competencies. In more than 140 countries, Chr. Hansen offers its customers solutions that are adapted to local preferences and can be applied under local conditions. Customer relationships are managed locally through a direct Chr. Hansen presence in key markets, supported by a global network of application and development centers.

Chr. Hansen has a diverse customer base, serving large multinationals, regional and local customers, from farmers and dairies to other food & beverage manufacturers and pharmaceutical companies.

In 2016/17, the top 25 customers accounted for approximately 30% of revenue. Sales & marketing expenses amounted to 12.6% of revenue. Approximately 730 employees were dedicated to sales & marketing activities.

# RISKS RELATED TO THE BUSINESS MODEL AND OPERATIONS

The most significant risks related to the business model, business operations and execution of the Nature's no. 1 strategy are described in the section on risk management, including progress on mitigation initiatives.

#### **ADDITIONAL INFORMATION**

Additional information on the Nature's no. 1 strategy can be found at www.chr-hansen.com/investors/business.

Read more about how sustainability is integrated in the Nature's no. 1 strategy at www.chr-hansen.com/sustainability/our-strategy.

# STRATEGY UPDATE

#### NATURE'S NO. 1

Chr. Hansen's Nature's no. 1 strategy was launched in 2013 with the aim of capturing the full potential of Chr. Hansen's core business and pursuing broader opportunities within microbial solutions by leveraging the Company's strong technology platform. The strategy was reviewed and reconfirmed in 2015/16 with minor adjustments. The next strategy review process will run in 2017/18.

Nature's no. 1 focuses on three primary objectives:

- · Fully leverage the potential of Food Cultures & Enzymes
- Develop the microbial solutions platform in Health & Nutrition
- · Creating further value in Natural Colors

As part of the Nature's no. 1 strategy, Chr. Hansen will not:

- Expand organically or through acquisitions in areas unrelated to the existing businesses within microbial solutions and natural colors
- · Attempt to become a full-fledged pharma company
- · Lose focus on cost control and operational efficiency

# FULLY LEVERAGING THE POTENTIAL OF FOOD CULTURES & ENZYMES

As a market leader, Chr. Hansen remains strongly positioned and committed to drive growth in specific niches within dairy and other food segments. Chr. Hansen's technologies cater to emerging consumer and food market trends, and deliver high impact and value to its customers.

Future growth opportunities are mainly based on fundamental market growth – not least in emerging markets – and on continuing to convert bulk starter users to DVS® formats, introducing new culture and enzyme functionalities, and expanding the use of bioprotective solutions.

Chr. Hansen has opportunities to further expand margins, mainly through the increased production capacity put in place in 2016/17, and the ability to upsell solutions that bring added value to customers' products and/or processes.

#### FOCUS AREAS IN 2017/18

The key focus areas for Food Cultures & Enzymes in 2017/18 will be further developing the bioprotection market by way of a next-generation bioprotection product for dairy, strengthening Chr. Hansen's position in emerging markets and starting to realize the benefit of the new production capacity in Copenhagen.



### Food Cultures & Enzymes



## FULLY LEVERAGING THE POTENTIAL OF FOOD CULTURES & ENZYMES

#### **FOCUS AREAS**

- Focus on innovation, including accelerating growth in bioprotection
- Secure undisputed leadership in selected emerging markets
- Develop customer-driven commercial excellence
- Reap further improvements in scalability, especially from new capacity brought into use toward the end of 2017

#### PROGRESS 2016/17

- Next generation of bioprotection developed and launched in fall 2017
- > High double-digit organic growth in bioprotection
- ▶ Further increased direct presence in emerging markets
- > High double-digit organic growth in China
- Biennial customer satisfaction survey conducted, showing strong results as well as suggestions for further improvements
- New capacity expansion completed at Copenhagen facility shortly after end of financial year
- Scalability improvements, partly offset by initiatives to enable full utilization of existing production capacity

#### LONG-TERM FINANCIAL AMBITIONS

- Average annual organic growth rate of 7-8%
- Increasing EBIT margin over the period

- > 9% organic growth
- 34.5% EBIT margin, compared to 34.3% in 2015/16

#### **DEVELOPING THE MICROBIAL SOLUTIONS PLATFORM IN HEALTH & NUTRITION**

The business areas in Health & Nutrition are supported by global trends, such as increasing awareness of the adverse effects of antibiotics and chemical pesticides, resource scarcity, increasing health costs, and a growing scientific understanding of the benefits of "good bacteria."

Chr. Hansen has opportunities to expand and grow its businesses in human and animal health through innovation in the form of new strains and new applications, and further penetration with key customers and in new geographies.

The product pipeline in plant health also offers attractive opportunities, and Chr. Hansen is currently conducting field trials to assess its potential.

Within the human microbiome area, Chr. Hansen sees significant potential to support partners in upscaling and establishing production processes, and several innovation collaborations are already well under way.

To support long-term growth in Health & Nutrition, a relatively high investment level will be maintained in innovation across all four business areas. Chr. Hansen will also pursue bolt-on acquisitions where these support existing business areas.

#### FOCUS AREAS IN 2017/18

The key focus areas for Health & Nutrition in 2017/18 will be ensuring continued value creation from the two acquisitions: LGG® in human health and NPC in animal health; expanding the commercial reach to new geographies in animal health; strengthening and progressing the pipeline of products across the four business areas; and continuing to develop existing and new partnerships in the human microbiome, while also enhancing production expertise.



### **Health & Nutrition**



# f Z developing the microbial solutions platform in health & nutrition

#### **FOCUS AREAS**

- Expand existing business in human health through differentiation
- Deeper market penetration in animal health through increased investments
- Develop medium-term opportunities in plant health
- Explore and develop long-term opportunities for human microbiome solutions, particularly through partnerships

#### LONG-TERM FINANCIAL AMBITIONS

- Average annual organic growth of above 10%, with meaningful growth from plant health by 2019/20 (previously by 2017/18)
- Increased investments in future growth opportunities mean the EBIT margin is expected to be around 30% during the period

#### PROGRESS 2016/17

- $\blacktriangleright$  Integration of LGG  $^{^{\circ}}$  on schedule, with project pipeline developing
- > Integration of NPC completed, expanding market presence in the US beef and dairy cattle market
- ▶ Innovative probiotic GalliPro® Fit for poultry introduced
- > Strengthened leadership team of animal health
- ▶ Continued adoption of NEMIX® C by sugar producers in Brazil
- Registration and launch of Quartzo<sup>™</sup> and Presence<sup>™</sup> for the Brazilian market - both are crop independent bionematicides with different applications
- > Successful process development for the first strict anaerobic bacteria with pharmaceutical potential
- > Expanded strain library by around 100 novel lead candidates targeting gastrointestinal, immune and metabolic health
- > 14% organic growth, driven by all areas
- > 29.2% EBIT margin, compared to 28.3% in 2015/16

#### **CREATING FURTHER VALUE IN NATURAL COLORS**

Increased regulation and growing consumer awareness are fueling the demand for cleaner food & beverage products, including natural ingredients. Chr. Hansen benefits from these trends, which are driving a fundamental long-term conversion from synthetic to natural colors. This trend has also started to materialize in the US market, pushed by consumer demand rather than regulation.

Chr. Hansen will ensure profitable growth, not least in the US, by strengthening the commercial organization, expanding the product offering within the FRUITMAX® coloring foodstuffs product range, improving cost-in-use solutions and optimizing the product portfolio of older products.

Profitability in Natural Colors has improved significantly – by 4.5 percentage points in two years – but is still below long-term expectations. Continued focus on optimization and simplification initiatives across the business offers opportunities to further increase profitability over the period.

#### FOCUS AREAS IN 2017/18

The key focus areas for Natural Colors in 2017/18 will be continuing to drive the conversion from synthetic colors to natural colors, particularly in the US and emerging markets; developing a stronger position in coloring foodstuffs to ensure continued growth; and optimizing products and processes to further improve profitability.





## CREATING FURTHER VALUE IN NATURAL COLORS

### **FOCUS AREAS**

- Improve cost-in-use solutions
- Address the significant potential of conversion in the US and emerging markets
- Develop an enhanced product offering, in particular by expanding the FRUITMAX $^{*}$  range of coloring foodstuffs
- LONG-TERM FINANCIAL AMBITIONS
- Average annual organic growth of around 10%
- Increased EBIT margin over the period

#### PROGRESS 2016/17

- Continued progress in improving cost-in-use through breeding programs for raw materials, optimization of production yield and better application performance
- Double-digit organic growth in the US and high single-digit organic growth in emerging markets
- > Double-digit organic growth in coloring foodstuffs
- > 10% organic growth
- ▶ 12.9% EBIT margin, compared to 10.9% in 2015/16

# LONG-TERM AMBITIONS 2019/20

# FINANCIAL AMBITIONS THROUGH 2019/20 Organic revenue growth

Revenue for the Chr. Hansen Group is expected to grow organically by 8-10% per annum.

Food Cultures & Enzymes is expected to deliver average annual organic growth of 7-8%.

Health & Nutrition is expected to deliver average annual organic growth of above 10%.

Natural Colors is expected to deliver average annual organic growth of around 10%.

#### **EBIT** margin before special items

The EBIT margin before special items is expected to improve over the period compared to the base year 2014/15 (27.1%).

This improvement will be driven by continued focus on strong cost discipline, and productivity and efficiency gains across the organization, as well as investments in innovation, emerging markets and exploring new growth opportunities.

The EBIT margins in Food Cultures & Enzymes and Natural Colors are expected to increase over the period. The EBIT margin in Health & Nutrition is expected to be around 30% during the period due to increased investment in future growth opportunities.

#### Free cash flow

Free cash flow before acquisitions, divestments and special items is expected to increase over the period compared to the base year 2014/15 (EUR 151 million).

- Free cash flow before acquisitions, divestments and special items
- and special items

  EBIT margin b.s.i.

#### EUR million 200 30,0% 187.8 175,2 180 29,0% 28,9% 160 28,0% 151,1 28,2% 140 27,0% 27,1% 120 26,0% $\cap$ 25,0% 2014/15 2015/16 2016/17

# SUSTAINABILITY AMBITIONS BY 2019/20

#### **Commercial targets**

Chr. Hansen's sustainability strategy focuses on how the Company can help address global trends and challenges with its natural products. The strategy focuses on three areas where Chr. Hansen has the biggest impact:

#### **Better farming**

Help feed the growing population by promoting sustainable agriculture using Chr. Hansen's biological plant health solutions and silage inoculants. For 2024/25, the ambition is to reach 25 million hectares of farmland with Chr. Hansen's natural solutions.

#### Less waste

Help customers reduce food waste through Chr. Hansen's bioprotection solutions and enzyme technology. For 2019/20, the ambition is to reduce global yogurt waste by 2%, or 700,000 tons.

#### Good health

Improve global health through probiotics and healthier and safer food ingredients. For 2019/20, the ambition is to have launched five new products with a documented health effect.

#### Operational targets

As part of the strategy review and to reduce the environmental footprint of its own operations, Chr. Hansen revised its 2019/20 operational targets for health and safety, energy, water, CO2 and waste recycling. Compared to the base year 2013/14, Chr. Hansen is aiming for:

- 20% energy and water efficiency improvement
- 25% CO2 efficiency improvement
- 40% waste recycling
  - •Reduction in lost-time incident frequency to 2.0

A full report on sustainability and progress on commercial and operational targets during 2016/17 can be found at www.chr-hansen.com/sustainability/reporting-and-disclosure.

# **OUTLOOK FOR 2017/18**

#### **ORGANIC REVENUE GROWTH**

For 2017/18, organic revenue growth is expected to be 8-10%.

Food Cultures & Enzymes is expected to grow slightly above the long-term ambition, while Health & Nutrition and Natural Colors are expected to grow in line with the long-term ambitions.

#### **EBIT MARGIN BEFORE SPECIAL ITEMS (B.S.I.)**

The EBIT margin b.s.i. is expected to be around the 28.9% achieved in 2016/17.

In the first half of the year, costs to start and ramp up production using the new capacity in Copenhagen will impact the EBIT margin unfavorably. The current level of the USD will also, if maintained, impact the EBIT margin unfavorably in 2017/18.

#### **FREE CASH FLOW**

Free cash flow before acquisitions, divestments and special items is expected to be around the EUR 188 million achieved in 2016/17.

#### **SENSITIVITY**

Chr. Hansen is a global company serving more than 140 countries through subsidiaries in more than 30 countries.

The most significant exchange rate exposure relates to USD, which accounts for around 30% of revenue, while the exposure to other currencies is modest.

Organic revenue growth is sensitive to exchange rate fluctuations in currencies where Chr. Hansen applies a EUR-based pricing model, and to changes in raw material prices for natural colors.

The EBIT margin is also sensitive to exchange rate fluctuations and to changes in raw material prices for natural colors.

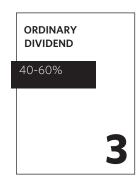
Production in the US and sourcing in USD only partly offset the impact on revenue from changes in the USD exchange rate. Therefore, the relative EBIT exposure is higher than the 30% revenue exposure.

The use of currency hedging of balance sheet exposures and future cash flows is described in note 4.3 to the Consolidated Financial Statements 2016/17.

#### **CAPITAL ALLOCATION PRIORITIES**









# ANTRUAL REPORTO2016/17

# BUSINESS PERFORMANCE

### NATURE'S OWN COLORS



# **REGIONS**

With customers in more than 140 countries and offices in more than 30 countries across the world, Chr. Hansen has organized its sales operations in four regions:

- EMEA (Europe, Middle East and Africa)
- · North America
- · APAC (Asia-Pacific)
- · LATAM (Latin America)

#### **EMEA**

The EMEA region accounted for 44% of revenue, compared to 46% in 2015/16. Chr. Hansen has offices in 17 countries.

During 2016/17, milk production and combined production of cheese and fermented milk showed modest growth overall in EMEA, however, with significant variations across countries. As an example, there was a significant increase in cheese production in Ireland and Poland, whereas fermented milk production in France declined.

The human probiotic supplement market grew strongly, mainly driven by EU countries. As animal farmer economics improved across the region during the year, the market for microbial-based animal health products normalized and grew compared to last year. All product categories in animal health contributed to growth.

Demand for natural ingredients including natural colors, remained solid during the year, and tightened regulation outside the EU continued to drive sales.

Revenue increased by 8%, with organic growth of 7%. Organic growth was driven by strong growth in human health and solid growth in cultures for cheese and meat, dairy enzymes, animal health and natural colors. Fermented milk including probiotics delivered good growth.

#### **NORTH AMERICA**

The North American region accounted for 28% of revenue, compared to 26% in 2015/16.

Fermented milk production levels in the US were in line with 2015/16, whereas growth in cheese production normalized at around 2%.

The market for probiotic dietary supplements continued to be driven by further penetration, although at a slower pace than previous years. The market for microbial-based animal health products was positively impacted by normalizing commodity prices, causing farmers to increase their use of certain feed

additives, such as probiotics and silage inoculants, over last year.

Driven by increased consumer demand to replace chemical additives with natural solutions, market growth for natural colors continued to develop favorably in 2016/17.

Revenue increased by 19%, with organic growth of 13%. Organic growth was driven by strong growth in cheese, meat, probiotics for fermented milk, animal health and natural colors. Fermented milk showed solid growth, while human health and enzymes delivered good growth.

#### APAC

The APAC region accounted for 15% of revenue, unchanged from 2015/16. Chr. Hansen has offices in six countries.

During 2016/17, dairy markets across the region developed positively, particularly the market for fermented milk in China, which continued the strong growth seen in recent years. Growth was driven by increasing dairy consumption per capita, increasing consumer demand for premium products and a high innovation rate in Chinese dairies. India continued to support regional growth as industrialization of the dairy sector increased. The Japanese and South Korean markets developed well, driven by probiotics for dairy products.

The market for probiotic supplements developed very positively as awareness of the category increased, whereas penetration of microbial-based animal health products remained limited.

Food legislation is maturing across the region, with increasing interest in natural food ingredients. The demand for natural colors varies across the region, with high penetration levels in countries such as Australia and Japan, while there are still significant opportunities for conversion from synthetic colors in China and Southeast Asia.

Revenue increased by 15%, with organic growth of 16%, mainly driven by China. Organic growth was due to strong growth in fermented milk including probiotics, enzymes and human health. Cheese and natural colors delivered solid growth, while revenue from animal health was below last year.

#### LATAM

The LATAM region accounted for 13% of revenue, unchanged from 2015/16. Chr. Hansen has offices in six countries.

A difficult economic environment persisted in important countries such as Brazil and Venezuela, but the demand for natural ingredients continued to grow, albeit at a slower pace than in previous years.

Revenue increased by 9%, with organic growth of 10%. Organic growth was driven by strong growth in cheese, meat, human health, animal health and plant health. Natural colors showed solid growth, while fermented milk and enzymes delivered good growth. Revenue from probiotics for fermented milk was unchanged from 2015/16.



HIGHLIGHTS	<b>EMEA</b>	NA	APAC	LATAM
ORGANIC GROWTH	7%	13%	<b>16</b> %	10%
SHARE OF REVENUE	44%	28%	<b>15</b> %	13%

Yogurt is becoming increasingly popular in China. A new trend is colored, as opposed to white, yogurt.

# FOOD CULTURES & ENZYMES

EUR million	2016/17	2015/16
Revenue	617.5	564.9
Organic growth	9%	12%
EBITDA	249.5	229.2
EBIT	213.1	193.9
EBIT margin	34.5%	34.3%
ROIC excluding goodwill	47.1%	46.2%

Food Cultures & Enzymes supplies cultures, probiotics and enzymes for the food industry in general and the dairy industry in particular. Chr. Hansen's ingredients help determine the taste, texture, flavor, nutritional value, health benefits and shelf life of a wide variety of end products. Chr. Hansen also assists customers in optimizing production processes, increasing yields, and improving the quality and safety of their products.

Chr. Hansen is the market leader in cultures and enzymes for the dairy market, with an estimated market share of around 50%, and has consistently outperformed end-market growth.

The dairy market continues to hold attractive growth opportunities, driven by fundamental category growth (not least in emerging markets), continued conversion, and catering to consumer and customer needs for better functionality and yield. While the dairy market remains the key market for Food Cultures & Enzymes, the introduction of bioprotective solutions to preserve and protect fresh food, such as fresh salmon and fresh cut salads, has provided new market opportunities, which we are developing.

#### **FUNDAMENTAL GROWTH**

According to the Company's own estimates and based on volume, the global market for fermented milk grew by 3-4% in 2016/17. The market for cheese is estimated to have increased by around 2%.

#### **CONVERSION**

Based on industrialized production volume, Chr. Hansen estimates that around 80% of the fermented milk market and around 50% of the cheese market had converted from bulk starter to Chr. Hansen's industrialized DVS<sup>®</sup> cultures or similar technologies by the end of 2016/17. Chr. Hansen expects attractive growth from continued conversion in the future, and remaining conversion potentials are significant, particularly in cheese

#### INNOVATION

A significant part of the growth contribution in Food Cultures & Enzymes comes from innovation. Chr. Hansen seeks new ways to create innovative products using the existing library of microbial strains. New combinations of strains can help customers to meet consumer demand for low sugar, lactose, salt or fat; distinctive texture and flavors; and clean-label products, and to adapt solutions to local taste preferences. A good example of a significant innovation is bioprotection, which continues to be a strong contributor to growth, with increasing penetration in both dairy and meat. The second generation of our FreshQ® solution will be launched in Q1 2017/18, increasing the addressable market. The new product features superior suppression of mold and yeast as well as improved control of post-acidification in yogurt.

Optimization of the customers' production processes and distribution is addressed through innovative solutions that improve yield or efficiency.

Chr. Hansen also continues to optimize its own production processes, for example by increasing fermentation yields and increasing automation of manual processes.

#### **PRODUCTION**

During 2016/17, Chr. Hansen almost finalized the expansion of fermentation and downstream capacity in Copenhagen, doubling the potential output of the facility. The expansion process has been closely monitored and executed according to plan. Commercial production is expected to start in Q1 2017/18.

#### **REVENUE**

Revenue increased by 9% to EUR 618 million, corresponding to organic growth of 9% from volume/mix. There was a positive impact from pricing, but the effect is below 1%.

Organic growth was positively impacted by strong growth in cheese, fermented milk, meat and wine, while probiotics and enzymes delivered good growth.

Growth in cheese was partly driven by the conversion of various customers in the US, while growth in fermented milk was driven by further penetration of both ambient and regular yogurts in China.

Bioprotective cultures delivered organic growth of approximately 30%, driven by the existing segments within fermented milk, cheese and meat.

#### **EBIT**

**ENZYMES** 

EBIT MARGIN

EBIT amounted to EUR 213 million, compared to EUR 194 million in 2015/16. The EBIT margin was 34.5%, up 0.2 percentage points on 2015/16, driven by scalability in production. The increase was partly offset by initiatives to enable full utilization of existing production capacity ahead of the new capacity expansion, and higher research &development expenses, driven by bioprotection and LGG®.

#### **ROIC EXCLUDING GOODWILL**

The return on invested capital excluding goodwill was 47.1%, compared to 46.2% in 2015/16. Invested capital excluding goodwill increased by EUR 39 million, or 9%, to EUR 472 million. The increase was mainly due to investments in production capacity.



Chr. Hansen's bioprotection portfolio offers solutions for both meat, cheese and fresh salad.

34.5% 34.3%

31.5%

# HEALTH & NUTRITION

EUR million	2016/17	2015/16
Revenue	224.7	184.0
Organic growth	14%	2%
EBITDA	83.5	66.9
EBIT	65.5	52.0
EBIT margin	29.2%	28.3%
ROIC excluding goodwill	29.8%	30.6%

#### **HUMAN HEALTH**

The role of beneficial bacteria in humans is increasingly acknowledged across the world, and Chr. Hansen is a global leader in the development and production of probiotics for dietary supplements and infant formula.

Market conditions for human probiotic dietary supplements remained favorable in 2016/17. Penetration of probiotic solutions in the dietary supplement market increased in all regions. Growth in the US decreased slightly compared to previous years, while growth in Asia accelerated.

Chr. Hansen continuously invests in providing clinical evidence of the health benefits of its products, strengthening its GMP manufacturing competencies, and developing innovative formats and product combinations that ensure superior stability of the live bacteria in a range of settings.

In November 2016, Chr. Hansen completed the acquisition of full rights to  $LGG^{\circ}$ , which is the most extensively documented probiotic strain in the world. Holding the full rights to  $LGG^{\circ}$  has enabled a number of new customer projects, some of which have already been initiated. Chr. Hansen continues to see strong opportunities to capture the full potential of the  $LGG^{\circ}$  brand across markets for dietary supplements, infant formula and dairy.

## **HUMAN MICROBIOME**

Based on its core competencies within microbial research and production, Chr. Hansen is exploring and developing opportunities related to the human microbiome. Chr. Hansen seeks to build relationships and collaborations with the companies and research institutions that are most advanced in this area, to identify the most attractive microbes for various health endpoints, and to find production and formulation processes for these microbes.

In 2016/17, Chr. Hansen produced and formulated the first strict anaerobic bacteria with pharmaceutical potential. Solid progress has also been made in our strain library for the human microbiome, which has been expanded by around 100 novel lead candidates targeting gastrointestinal, immune and metabolic

health. These strains are being made available for co-development with customers and partners. Both accomplishments are important milestones in developing next-generation probiotics.

#### ANIMAL HEALTH

With a growing world population, there is a long-term need to increase productivity in the agricultural industry while at the same time reducing the use of antibiotic growth promoters in the livestock industry. Chr. Hansen's microbial concepts for animal feed and silage support farmers in addressing these challenges.

In 2016/17, the market for microbial solutions in the agricultural industry normalized compared to the previous year, when extraordinarily low commodity prices caused farmers to cut down on feed additives such as microbial solutions and silage inoculants.

Growth in the US has been supported by amendments to the FDA's Veterinary Feed Directive reducing the use of antibiotics that are medically important to human health for growth promotion. Coupled with acceleration in the reduction of antibiotics in the poultry segment, the momentum has been positive. Competition is increasing slightly in parts of the market.

During the year, Chr. Hansen strengthened its position in the poultry segment with the launch of GalliPro® Fit, which is a microbial combination product containing three unique strains with complementary modes of action.

The integration of NPC has been completed, and synergies are being realized in both sales and costs. Most of the production has been insourced, with strong efficiency gains contributing positively to the margin development in the second part of the year.

#### PLANT HEALTH

Plant and crop producers also need to improve productivity and find more sustainable solutions to replace the use of chemical products.

Chr. Hansen and FMC Corporation saw continued adoption of NEMIX® C in the Brazilian sugarcane market and completed registration for two new products, Quartzo™ and Presence™, in the Brazilian market. Quartzo™ is a bionematicide applied in the soil at planting, while Presence™ is the first commercially available biological nematicide seed treatment product in the portfolio. Both products are crop independent and marketed by FMC Corporation. In addition, Chr. Hansen and FMC Corporation conducted a significant number of field trials to support the development of new biological plant health solutions.

#### **REVENUE**

Revenue increased by 22% to EUR 225 million (14% excluding NPC), corresponding to organic growth of 14%, driven by volume/mix. Human health, animal health and plant health all realized strong growth.

Organic growth in human health was driven by dietary supplements and infant formula, with strong growth for both categories in APAC and EMEA.

Animal health was positively impacted by strong growth in silage and poultry, driven by wins of customer projects. Swine, and dairy and beef cattle showed modest growth.

Plant health benefited mainly from the continued penetration of NEMIX $^{\odot}$  C in Brazil.

#### **EBIT**

EBIT amounted to EUR 66 million, compared to EUR 52 million in 2015/16. The EBIT margin was 29.2%, up 0.9 percentage points on 2015/16, driven by scalability in production, including insourcing of NPC products, and lower scrap levels in human health. The increase was partly offset by increased activity to support strategic initiatives, including commercial support for LGG®, and higher depreciation and amortization related to acquisitions.

#### **ROIC EXCLUDING GOODWILL**

The return on invested capital excluding goodwill was 29.8%, compared to 30.6% in 2015/16. Invested capital excluding goodwill increased by EUR 36 million, or 18%, to EUR 238 million, driven by intangible assets from the acquisition of LGG $^{\circ}$ .



Silage cultures are used to ferment forage for livestock. It prevents fresh fodder from decomposing and allows it to keep its nutrient quality.

# **NATURAL COLORS**

EUR million	2016/17	2015/16
Revenue	220.3	200.0
Organic growth	10%	19%
EBITDA	35.1	27.9
EBIT	28.5	21.9
EBIT margin	12.9%	10.9%
ROIC excluding goodwill	30.3%	25.8%

Natural Colors supplies natural color solutions for the food industry, in particular the beverage, confectionery, ice cream, dairy, fruit preparation and prepared food segments. The colors are extracted from natural sources, such as berries, roots and seeds, and Chr. Hansen uses a number of encapsulation techniques that help stabilize the appearance of colors in various food applications.

In recent years, consumer demand for more natural products has increased in both developed and emerging markets. Chr. Hansen is well positioned to capture these opportunities by providing improved cost-in-use solutions, addressing the significant potential in North America and emerging markets, and developing an enhanced product offering.

#### **CONVERSION**

Increased consumer demand for natural and clean-label products, combined with stricter regulation of the use of synthetic solutions in food & beverages, especially in the EU, has led to a conversion from synthetic colors to natural solutions.

In 2016/17, the conversion to natural colors continued in North America, Latin America and Asia-Pacific, while the European market experienced increasing penetration of more advanced natural color solutions. In EMEA, several non-EU countries have adopted regulations similar to those in the EU regulating the use of synthetic colors, which has driven growth. Conversion in the US delivered double-digit organic growth as food & beverage manufacturers and restaurant chains continued their conversion to natural ingredients, including colors, driven by consumer pressure.

#### PRODUCT RANGE

Chr. Hansen works continuously on improving its products, especially within the FRUITMAX® range of coloring foodstuffs. Coloring foodstuffs, processed from edible, natural sources such as fruit and vegetables, give food manufacturers the opportunity to color food with food, for example juices or concentrates. Coloring foodstuffs delivered double-digit growth in 2016/17.

#### SOURCING

Chr. Hansen sources a wide range of natural raw materials through a global sourcing network. During the year, Chr. Hansen continued its efforts to improve standards and farm yields at raw material suppliers as well as expanding the number of strategic suppliers for key pigments. This helps to ensure sustainable sourcing opportunities and deliver improved cost-in-use solutions for customers.

However, purchase prices for certain raw materials can be very volatile due to the informal nature of the markets. Annatto prices increased significantly compared to last year, while carmine prices decreased.

#### **OPERATIONAL OPTIMIZATION INITIATIVES**

As part of the Nature's no. 1 strategy review, Chr. Hansen initiated a project to ensure sustainable, profitable growth in Natural Colors. Initiatives to optimize pricing, production yields, the product portfolio and transportation costs contributed positively to the improvement in the EBIT margin in 2016/17 but, as expected, had an adverse impact on revenue growth. Over the last two years, this project has contributed significantly to the improvement in the EBIT margin in Natural Colors from 8.3% to 12.9%.

#### **REVENUE**

Revenue increased by 10% to EUR 220 million, corresponding to organic growth of 10%. Organic growth comprised approximately 6% from volume/mix and 4% from price increases in local currencies. The price increases mainly reflected increased raw material prices and, to a lesser extent, the use of EUR-based pricing to protect EBIT from depreciating currencies.

Organic volume growth was primarily driven by strong growth in the natural carotene, annatto and anthocyanin categories, while carmine volume declined due to a focused effort to improve profitability. Coloring foodstuffs showed strong growth.

Organic growth was anchored across most business areas, with strong growth in beverages, dairy and prepared food.

#### **EBIT**

EBIT amounted to EUR 29 million, compared to EUR 22 million in 2015/16. The EBIT margin was 12.9%, up 2.0 percentage points on 2015/16. The increase was mainly driven by ongoing optimization initiatives, including price and product management, operating efficiency gains and positive timing of inventories.

#### ROIC

The return on invested capital was 30.3%, compared to 25.8% in 2015/16. The invested capital increased by EUR 20 million, or 24%, to EUR 104 million, driven by property, plant and equipment, and higher working capital.



 NATURAL COLORS
 16/17
 15/16
 14/15

 ORGANIC GROWTH
 10%
 19%
 9%

 EBIT MARGIN
 12.9%
 10.9%
 8.3%

Coloring foodstuffs – natural colors made from juices and extracts from edible sources – is a product segment on the rise.

# **FINANCIAL REVIEW**

#### **REVENUE**

Revenue increased by 12% to EUR 1,063 million (10% excluding NPC and  $LGG^*$ ), corresponding to organic growth of 10%

Organic growth was primarily driven by volume/mix effects, with less than 1% coming from price increases in local currencies. Minor price increases were implemented in Food Cultures & Enzymes, while there was a net positive impact from changes in raw material prices in Natural Colors.

REVENUE	2016/17
Organic growth (vol/mix)	9%
Organic growth (price)	1%
Organic growth	10%
Currencies	0%
NPC and LGG <sup>®</sup> acquisition	2%
EUR growth	12%

#### **GROSS PROFIT**

Gross profit was EUR 578 million, up 14% on 2015/16. The gross margin increased by 1.1 percentage points to 54.4%, driven by improvements in all business areas.

#### **OPERATING EXPENSES (% OF REVENUE)**

Operating expenses totaled EUR 271 million (25.5%), compared to EUR 238 million (25.0%) in 2015/16.

Research & development (R&D) expenses, including amortization and depreciation, amounted to EUR 71 million (6.7%), compared to EUR 63 million (6.6%) in 2015/16.

The net impact from capitalization less amortization and impairment of development costs was EUR 3 million (0.3%), compared to EUR 4 million (0.5%) in 2015/16.

Total R&D expenditures incurred increased by 11% to EUR 75 million (7.0%), compared to EUR 67 million (7.1%) in 2015/16.

The increase was driven by the execution of Nature's no. 1 initiatives, including bioprotection and  $LGG^{\circ}$ , partly offset by the acquisition of a bacterial strain collection from Dairy Innovation Australia Ltd (DIAL) in 2015/16.

Sales & marketing expenses amounted to EUR 134 million (12.6%), compared to EUR 113 million (11.9%) in 2015/16. The increase was mainly driven by strategic initiatives to support

Nature's no. 1, including bioprotection and the acquisition of NPC.  $\label{eq:new_prop} % \begin{subarray}{ll} \end{subarray} % \begin{subarray$ 

Administrative expenses amounted to EUR 71 million (6.7%), compared to EUR 66 million (6.9%) in 2015/16.

Net other operating income/expenses was an income of EUR 5 million, compared to EUR 4 million in 2015/16. The income was mainly driven by the sale of a property in Argentina.

#### **OPERATING PROFIT (EBIT) BEFORE SPECIAL ITEMS**

EBIT before special items amounted to EUR 307 million, compared to EUR 268 million in 2015/16, an increase of 15%. The increase in EBIT was mainly due to higher sales volumes and operating efficiencies.

The EBIT margin before special items was 28.9%, up from 28.2% in 2015/16, driven by improvements in all business areas.

#### **SPECIAL ITEMS**

Special items of EUR 1 million concerned costs related to the acquisition and integration of  $LGG^{\circ}$ . In 2015/16, special items of EUR 12 million primarily concerned an accrual for US import tariff costs of EUR 5 million covering reclassification of certain human health products related to previous years, and costs of EUR 6 million related to the acquisition and integration of NPC.

#### **OPERATING PROFIT (EBIT)**

EBIT amounted to EUR 306 million, compared to EUR 256 million in 2015/16, an increase of 20%. The EBIT margin was 28.8%, compared to 26.9% in 2015/16.

#### **NET FINANCIALS AND TAX**

Net financial expenses amounted to EUR 15 million, compared to EUR 16 million in 2015/16. The net interest cost was EUR 12 million, unchanged from 2015/16. Better financing terms offset the impact from higher debt.

The net impact from exchange rate adjustments was a negative EUR 3 million, compared to a negative EUR 4 million in 2015/16. The negative impact related mainly to unrealized losses from the depreciation of the Argentine peso.

Income taxes were EUR 67 million, equivalent to an effective tax rate of 23.0%, compared to 23.2% in 2015/16. The lower effective tax rate is partly due to one-off tax benefits related to the acquisition of NPC.

#### PROFIT FOR THE YEAR

Profit for the year increased by 22% to EUR 224 million, up from EUR 184 million in 2015/16.

#### **ASSETS**

At 31 August 2017, total assets amounted to EUR 1,802 million, compared to EUR 1,715 million a year earlier. The increase was mainly due to the acquisition of  $LGG^{*}$  and investments in the microbial production platform.

Total non-current assets amounted to EUR 1,415 million, compared to EUR 1,307 million at 31 August 2016. Intangible assets increased by EUR 51 million, while property, plant and equipment increased by EUR 58 million.

Total current assets amounted to EUR 388 million, compared to EUR 408 million at 31 August 2016. Inventories increased by EUR 15 million, or 13%, and receivables by EUR 11 million, or 7%. Cash decreased by EUR 47 million to EUR 73 million, mainly due to the extraordinary dividend payout in July 2017.

ACQUISITION IMPACTS	2016/17
EUR million	
Intangible assets incl. goodwill	71
Property, plant and equipment	2
Inventories	1
Other receivables and payables, net	(1)
Total effect	73

#### **NET WORKING CAPITAL**

Net working capital was EUR 175 million, or 16.5% of revenue, compared to EUR 147 million, or 15.5%, in 2015/16, which was positively impacted by a more favorable development in trade payables.

#### **EQUITY**

Total equity amounted to EUR 769 million at 31 August 2017, compared to EUR 730 million a year earlier. An ordinary dividend for the financial year 2015/16 totaling EUR 92 million was paid in December 2016, and an extraordinary dividend for the financial year 2016/17 totaling EUR 100 million was paid in July 2017.

#### **NET DEBT**

Net interest-bearing debt amounted to EUR 628 million, or 1.7x EBITDA, compared to EUR 548 million, or 1.7x EBITDA, at 31 August 2016.

#### **RETURN ON INVESTED CAPITAL (ROIC)**

The return on invested capital excluding goodwill was 40.1%, compared to 39.7% in 2015/16. Invested capital excluding goodwill increased to EUR 814 million, compared to EUR 719 million at 31 August 2016. The increase was mainly due to investments in the microbial platform and the acquisition of  $LGG^*$ 

The return on invested capital including goodwill was 20.3%, compared to 19.9% in 2015/16. Invested capital including goodwill increased to EUR 1,581 million, compared to EUR 1,445 million at 31 August 2016. Goodwill increased by net EUR 41 million mainly due to the acquisition of  $LGG^{\circ}$ .

#### **CASH FLOW**

Cash flow from operating activities was EUR 284 million, compared to EUR 245 million in 2015/16. The increase was mainly due to the improved operating profit and lower tax paid following the acquisition of NPC, partly offset by a less favorable development in working capital. Special items accounted for EUR 8 million in 2016/17.

Cash flow used for operational investing activities was EUR 104 million, or 9.7% of revenue, compared to EUR 75 million, or 7.9% of revenue, in 2015/16. The increase was primarily driven by capacity expansion for culture production.

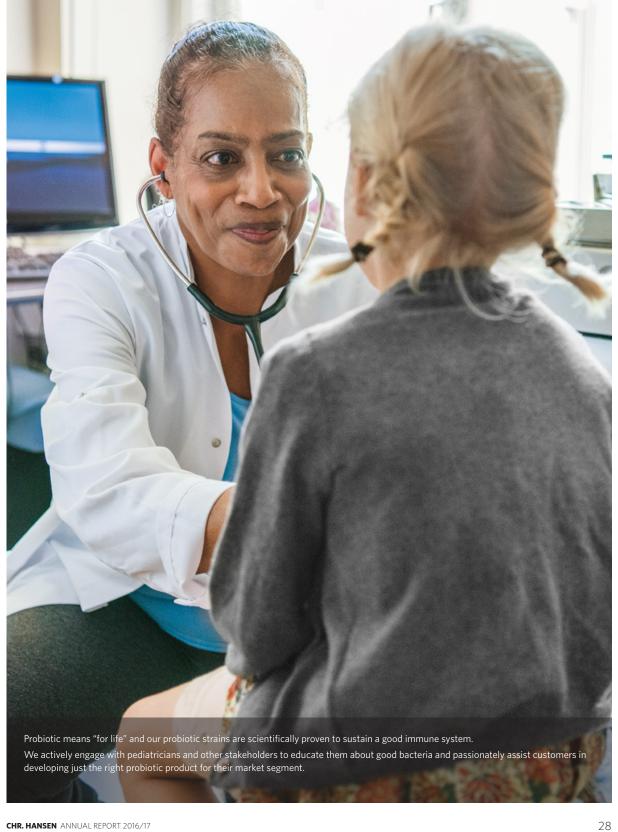
Development expenditures of EUR 11 million, or 1.1% of revenue, were capitalized, compared to EUR 13 million, or 1.4%, in 2015/16. The decrease was primarily due to the acquisition of a bacterial strain collection from DIAL in 2015/16.

Free cash flow before acquisitions, divestments and special items was EUR 188 million, compared to EUR 175 million in 2015/16.

Cash flow used for acquisitions was EUR 73 million and related to the acquisition of  $LGG^*$  in November 2016. In 2015/16, the cash flow used for acquisitions was EUR 169 million and related to the acquisition of NPC.

# ANNUAL REPORT 2016/17 RISK MANAGEMENT

## FOR LIFE



# **RISK MANAGEMENT**

Risk management is an integrated part of doing business at Chr. Hansen. Risks relate to future events or developments that can have an influence on the Company achieving its targets.

Relevant risks are identified, monitored and reported to the Executive Board and the Board of Directors through an Enterprise Risk Management process, which follows an annual schedule. Furthermore, identified risks are presented to and discussed by Management several times during the year. The purpose of this process is to ensure focus on current risks and to identify risks as early as possible, enabling Management to take a proactive approach to adapting business processes and controls to meet, manage or mitigate these risks, or to prevent any increase in the current level of exposure.

Identified risks are evaluated based on their possible impact on several criteria, including safety, business, reputational and financial impact, and the likelihood of the risk materializing. Clear roles and responsibilities are assigned in relation to major risks, and mitigation initiatives are identified, prioritized and launched. The most significant risks identified and reported to the Board of Directors are described below, including measures taken to mitigate these where necessary.

To further ensure a high-quality and consistent approach in the risk management process, the key risks have been divided into five categories where the mitigating activities are of a similar nature. These categories are:

- · Products
- Technology
- · Customers & consumers
- Partners
- Markets

There is a strong focus on the Enterprise Risk Management process within the Executive Board and the Board of Directors to ensure that risk management is an integrated element of decision-making processes. The program is under continuous development, with Chr. Hansen continuing to improve the work on identifying and evaluating relevant risks. The list below does not include all the risks that could ultimately affect the Company.

#### **PRODUCTS**

In order to continue delivering high-quality products while growing the business, Chr. Hansen is focused on improving process standards for all aspects relating to the manufacture of its products. This includes long-term planning of the production footprint to minimize the risks of a consolidated production setup, strong focus on quality and purity to meet the highest food safety standards, and ensuring a safe working environment

#### **Production footprint**

Chr. Hansen has five main production sites: two in Denmark and one each in France, Germany and the US. These sites represent the core of Chr. Hansen's business, and each site carefully monitors product safety and delivery performance to manage all potential risks. This consolidation of production allows capacity to be optimized to reduce production costs. To minimize the risk of production breakdowns or failures, Chr. Hansen has implemented a risk prevention program of regular audits, which ensures preventive maintenance and replacements.

As production processes are optimized and automated, dependence on robust IT systems and infrastructure increases. Chr. Hansen continues to reduce complexity in IT systems and conduct regular restore tests, as well as improving contingency plans.

This concentrated production setup entails the risk of a production breakdown interrupting the Company's operations and leading to loss of income in both the short and long term due to long lead times for the replacement of key equipment. The causes might be contamination of production equipment, key equipment breakdown, fire, terrorism or natural disasters.

The risk and impact of a production breakdown are mitigated through maintenance, fire safety measures, behavior-based training, continuous improvements to operational processes, insurance and business continuity plans, including alternative production possibilities.

#### **DEVELOPMENTS IN 2016/17**

Chr. Hansen successfully expanded capacity at the Copenhagen facility during 2016/17, and completed the expansion shortly after the end of the financial year. Both fermentation and downstream capacity have been installed alongside existing production equipment operating at near-full capacity utilization. The risk inherent in expanding alongside ongoing production has been closely monitored. Appropriate

mitigating actions have been put in place to enhance the standards of the risk mitigation setup.

Besides expanding production capacity, Chr. Hansen has also separated fermentation and downstream into two lines that now work independently. This mitigates the effect of equipment breakdown and allows for maintenance on one line while continuing production on the other.

Additional freezer capacity has been built to cater for the increased production in Copenhagen, further improving energy efficiency.

During the year, work started to strengthen our business recovery plans. One objective is to develop stronger links and understanding between sites to allow better and faster continuity of production if a production site is adversely impacted.

Significant volume growth in human health in recent years means that utilization of the existing facilities has reached a very high level. Installation of a new fermentation line will be completed in 2017/18.

During 2016/17, the amount of recycled waste increased significantly by 6 percentage points on last year, mainly due to product scrap being used for biogas (29% of total waste is recycled, and the 2020 target is 40%). Energy efficiency decreased slightly by 3 percentage points this year due to the installation of new equipment, which required a three-week production shutdown. Water efficiency decreased by 11 percentage points, mainly due to high water consumption at a Natural Colors sites. This will be a focus area for next year.

Completion of the capacity expansion means that close to 60% of the fermentation capacity for dairy cultures is now located at the Copenhagen site. However, separation of the production lines has reduced the risk of a total production breakdown at this site. Overall, the production risk is considered to have decreased slightly compared to last year.

#### **Product safety**

The majority of Chr. Hansen's products are sold to the food & beverage, human health, animal health and plant health industries. Most products are components in customers' end products that are consumed as food, beverages or dietary supplements.

To ensure the highest product safety, Chr. Hansen has an extensive quality assurance and food safety program covering

the entire value chain, from the sourcing of raw materials until the finished products are delivered to customers. The risk assessment performed as part of the food safety program includes an evaluation of the use of our products in customers' end products. Chr. Hansen's food safety program is certified according to internationally recognized food safety standards. All production sites are FSSC 22000 certified, and central product development functions are certified according to ISO 22000.

#### **DEVELOPMENTS IN 2016/17**

There were two product retrievals in 2016/17, compared to three in 2015/16. In both cases, the retrievals were carried out as a precautionary measure following identification of a potential risk and not as a result of an actual confirmed safety risk related to the product.

All inspections by authorities during the year have been concluded satisfactorily. The risk related to product safety is considered unchanged.

#### Health, safety and security

Chr. Hansen is committed to continuously improving both the physical and psychosocial working environment for its employees. The Company has implemented several initiatives to underline the importance of a safe working environment. Monitoring and follow-up of incidents take place at both departmental and Executive Board level. All major sites have implemented measures to increase awareness of safe behavior and site security.

In light of the increasing number of cybercrime incidents, focus on IT security has been further sharpened.

### DEVELOPMENTS IN 2016/17

The creation of a global Health and Safety Organization has sharpened focus on establishing a zero-accident mindset across the organization, so all employees can work safely, with clear instructions on how to minimize accidents at work. This has resulted in the best-ever performance within health and safety. The Lost-Time Incident Frequency (LTIF) decreased from 4.0 last year to 2.5 in 2016/17, an improvement of almost 38% on last year that keeps Chr. Hansen on track to achieve the target of  $\leq$ 2.0 in 2020. The strong focus on health and safety is also reflected in the reduced incident severity, which was down from an average of 10 to five days, equivalent to a 50% improvement on last year.

The main reasons for the positive results are a combination of a high level of Management attention, global safety

assessments, global minimum requirements and the launch of new behavior-based safety tools.

The risk of health, safety and security incidents is considered unchanged, as the risk related to health and safety has decreased, while the risk related to cybercrime has increased.

#### **TECHNOLOGY**

The increased technical complexity of new solutions demands a growing number of highly skilled employees, not only in research & development but also in sales & marketing, to ensure that continued innovation is introduced in both existing and new markets. To continue to deliver relevant innovation to customers and navigate the complex patent landscape, it is paramount that Chr. Hansen continues to attract the best resources.

#### **Human capital**

Attracting and retaining the best employees and new talents remains crucial if Chr. Hansen is to continue to excel. Human knowledge is critical to Chr. Hansen's business, and there is a strong focus on continuously building and expanding the knowledge base by actively developing employees' key skills.

The Company employs a large number of scientists and other experts in their fields. Developing their skills and knowledge is an important part of building competencies globally. Equally essential, however, are integrating these highly qualified employees into the day-to-day business and helping them become better at converting their expertise into business value. A number of tools are being utilized to retain key personnel, including appropriate incentive systems, education and succession planning.

#### DEVELOPMENTS IN 2016/17

The average number of training days per employee was 2.8 in 2016/17 (3.4 in 2015/16). Employee turnover was 12%, compared to 10% in 2015/16, which is considered an acceptable level. During 2016/17, the average number of full-time employees increased by 232. The risk related to attracting and retaining the best employees and new talents is considered unchanged.

Chr. Hansen has also conducted the second annual employee engagement survey. Employee engagement is a measure of the employees' desire to perform, be productive and have an emotional connection to their workplace. These are strong drivers of overall business performance. The overall score improved, and the improvement was twice as high as the

average improvement for companies running the survey for the second time.

#### Intellectual property rights

A strong and protected technology platform is important for Chr. Hansen. Focus on protecting intellectual property is increasing as the technical complexity increases in the industries in which Chr. Hansen operates. The Company has a proactive patent strategy and protects new knowledge created to support and protect its business. Chr. Hansen has more than 2,000 patents granted or pending.

#### DEVELOPMENTS IN 2016/17

Chr. Hansen filed 27 new patent applications in 2016/17, compared to 37 in 2015/16. New applications were filed in all business areas. Thanks to these filings, the risk related to intellectual property rights is considered unchanged.

#### **CUSTOMERS & CONSUMERS**

Chr. Hansen is highly dependent on delivering relevant and value-creating solutions to its customers and to the end consumers. The Company relies on close relationships with customers and a strong understanding of consumers and regional taste preferences. To ensure this, direct sales representation is established in all major markets.

The strong focus on customer intimacy often leads to long-term and strategic relationships that yield increased visibility. In general, Chr. Hansen becomes less dependent on individual customers as local and regional players take share from larger players. However, certain individual customers grow in importance, and if the Company fails to deliver on e.g. innovation or quality, the potential downside of losing strategic customers increases. Chr. Hansen monitors its customer dependency across business areas to understand potential vulnerabilities and to initiate mitigating activities.

#### DEVELOPMENTS IN 2016/17

A structured approach to measuring dependency and vulnerability with regard to key customers has been put in place, confirming strong relationships with key customers but also emphasizing areas where improvements can be made.

Chr. Hansen continues to see unchanged growth opportunities within dairy, confirmed by our bottom-up analysis of the industrialized market space.

The risk related to customers and consumers is considered unchanged.

#### **PARTNERS**

In some parts of its business, Chr. Hansen depends on partners to handle key areas where the Company does not possess the required key competencies. To ensure that such partners live up to the standards of Chr. Hansen, diligent evaluation of fit is performed when engaging with new partners.

Existing partnerships are also monitored to ensure a continued high standard. Chr. Hansen has various kinds of partnerships, including large farmers producing raw materials for natural colors, production and packaging partners, universities and biotech companies in the human microbiome area, and FMC Corporation in plant health.

#### DEVELOPMENTS IN 2016/17

During 2016/17, Chr. Hansen further developed relationships with existing partners in the human microbiome area and conducted dialogues with other potential partners.

Chr. Hansen and FMC Corporation continued the cooperation within plant health product development and commercialization.

#### **MARKETS**

Competing globally and having an increasing share of revenue in emerging markets can add uncertainty and obstacles in certain markets, which can impact both revenue and profitability. Examples are changes in the competitive landscape, limited or no access to markets due to sanctions, fluctuations in currencies and raw material prices, and regulatory changes. Close surveillance of the markets in which the Company operates is important in order to take any necessary mitigating actions in good time.

#### **Business environment**

With offices in more than 30 countries and sales to more than 140 countries, Chr. Hansen is from time to time affected by geopolitical uncertainties and unrest.

As a supplier of ingredients mainly to the food industry, Chr. Hansen is rarely directly affected by trade restrictions. Customers of Chr. Hansen are more likely to be affected by trade restrictions, which could potentially have an adverse effect on the Company's sales. In those instances where the Company's products are or will be affected by sanctions, Chr. Hansen acts in full compliance with these.

Political and economic unrest in countries and regions where Chr. Hansen operates or plans to operate is monitored

continuously and taken into account when making strategic decisions

#### **DEVELOPMENTS IN 2016/17**

An improving economic environment has led to stable market conditions in most business areas and markets. However, political instability in some regions has slightly increased the uncertainty related to the future business environment.

#### **Documentation**

Chr. Hansen has some of the most extensively documented probiotic strains on the market and works continuously to improve the documentation of health claims related to these probiotic strains and to respond to changing documentation requirements from authorities.

The Company's approach to the underlying studies is in line with EFSA's guidelines on the subject, meaning that the effect is evaluated on the basis of quantifiable responses in biomarkers in scientifically valid tests.

#### **DEVELOPMENTS IN 2016/17**

Chr. Hansen continues to work on better clinical data to support the health claims of existing and new strains in specific settings.

In November 2016, Chr. Hansen completed the acquisition of the rights to  $LGG^{\circ}$ , the world's most extensively documented probiotic strain, which was previously produced under a license agreement. Complete control of  $LGG^{\circ}$  has further strengthened the Company's leading position within documented probiotic strains. The risk related to documentation is therefore considered to have decreased.

#### Direct and indirect taxes and transfer pricing

Chr. Hansen is a global business operating in multiple jurisdictions with different tax rules and regulations. It is the Company's intention always to fulfill the tax requirements in all the countries where business is conducted. Chr. Hansen works constantly to create tax awareness in the organization, and has defined clear roles and responsibilities between line management, local finance and the Group Tax function. However, tax and transfer pricing disputes do arise from time to time as cross-border transactions receive increasing attention from local tax authorities.

Chr. Hansen's Group Tax function ensures compliance with the Group's tax position. Enquiries from local tax authorities are addressed in cooperation with tax advisors, and a positive dialogue with local tax authorities is pursued to prevent

disputes. The Group Tax function constantly strives to support business activities worldwide in the best possible way.

As a global business, Chr. Hansen is affected by tax legislation in many countries. Changes to tax legislation in one country may have a positive or negative impact on the Group's tax cost. For example, in 2016/17 a possible new corporate tax regulation was debated in the US that could potentially have had a significant impact on the Company's tax cost if introduced.

#### **DEVELOPMENTS IN 2016/17**

In order to minimize transfer pricing disputes regarding transactions with the US, Chr. Hansen has obtained an advance pricing agreement with the US and Danish tax authorities. The authorities concluded the agreement in Q3 2016/17, covering all years through 2019/20. Chr. Hansen does not currently pursue advance pricing agreements with other countries, but regularly evaluates the need for such agreements.

In 2015/16, Chr. Hansen received a negative ruling in the US regarding the classification of some probiotic powder products used in human health products. The ruling led to a tariff reclassification of certain human health and natural color products. The dialogue with the US customs authorities on this matter continued in 2016/17, resulting in a payment of USD 5.8 million being made to cover all unpaid tariffs for previous years. The risk related to direct and indirect taxes and transfer pricing is considered to have decreased.

#### Legal risk

From time to time, Chr. Hansen is party to legal proceedings arising in the ordinary course of its business. The Legal department is focused on analyzing possible risks in a timely manner and mitigating them in an appropriate way using both internal and, if needed, external capabilities. Despite the focus from Chr. Hansen on these matters, the outcome of legal proceedings cannot be predicted with certainty.

#### DEVELOPMENTS IN 2016/17

During 2016/17, Chr. Hansen was summoned in five diacetyl-related litigations relating to the period when products containing diacetyl were produced in the Company's former flavor business. During the same period, a few existing litigations were successfully closed. Chr. Hansen has insurance cover for potential losses on these claims. Please refer to note 3.8 to the Consolidated Financial Statements for further information on legal proceedings.

#### Financial risk

As an international business, Chr. Hansen is exposed to a number of financial risks relating to currency and interest rate fluctuations, funding, liquidity, credit and counterparty risks.

#### **DEVELOPMENTS IN 2016/17**

During 2016/17, Chr. Hansen extended its revolving credit facility by one year until August 2022 and added a new five-year loan with the Nordic Investment Bank to the loan portfolio. The objective was to support the long-term capital structure and liquidity ratio. Please refer to note 4.2 to the Consolidated Financial Statements for further information on these risks.

# ANNUAL REPORT 2016/17 GOVERNANCE

## PROBIOTICS ARE ALSO GOOD FOR ANIMALS



## GOVERNANCE

# CORPORATE GOVERNANCE

The Board of Directors of Chr. Hansen Holding A/S remains committed to following the Danish Recommendations on Corporate Governance as adopted on 1 June 2013 by Nasdaq Copenhagen in its Rules for Issuers of Shares – and complied with the recommendations in all respects in 2016/17.

Chr. Hansen is committed to being accountable to all relevant stakeholders. The Company has developed a set of policies and positions aligned with international conventions, treaties and standards. As part of this, Chr. Hansen continues to support the United Nations Global Compact's ten principles in the areas of human rights, labor, the environment and anticorruption.

# KEY DEVELOPMENTS IN 2016/17 Diversity

Over the years, the percentage of women and non-Danes in key positions has increased. In 2016/17, this trend continued for non-Danes as the percentage increased from 41% to 43%, while for women the percentage remained stable at 22%. This will be an increased focus area for top management going forward.

The percentage of diverse teams decreased by 3 percentage points to 66% in 2016/17 due to organizational restructuring.

Two out of seven members of Chr. Hansen's Board of Directors elected by the Annual General Meeting are women compared to a target of at least three women elected by the Annual General Meeting by the end of 2019/20, whilst maintaining a strong diversity of skills, experience and nationalities.

#### **Business ethics**

Chr. Hansen is committed to conducting business with the highest level of integrity to ensure fair, safe and ethical business practices. To ensure that all relevant employees are aware of, and comply with, business integrity standards, Chr. Hansen runs online anticorruption training and, in 2016/17, 100% of the invited employees completed the training. In 2016/17, Chr. Hansen also made a significant effort to ensure that all employees were reminded about the Code of Conduct they are expected to observe.

Chr. Hansen encourages employees and external stakeholders, such as suppliers and customers, to raise concerns regarding business integrity. In 2016/17, five whistleblower cases were reported, four of which were raised through the hotline. All cases were investigated; two cases were closed as unjustified, one case was justified and appropriate actions taken, and two

cases are still pending. Chr. Hansen will continue communicating about the whistleblower system to ensure that all employees and relevant stakeholders are aware of and familiar with it.

#### Annual Board of Directors review

The Chairman of the Board of Directors is responsible for conducting an annual review of the Board's performance, addressing the effectiveness of the Board, the processes supporting its work, individual members' contributions and the Chairman's performance.

In 2016/17, the evaluation was conducted by the individual directors and executives anonymously completing a comprehensive online questionnaire, which was then summarized by an external consultant.

Similar evaluations of their effectiveness have been undertaken by the Audit Committee, the Nomination Committee, the Remuneration Committee and the Scientific Committee.

The results of the assessment process were presented to the Board of Directors in September 2017 by the external consultant. The report describes a number of areas in which the Board is both effective and functions very well, and gives an overall impression of a high-performing Board of Directors. Almost all areas for improvement that were identified in last year's assessment have been complied with. This year, too, the assessment identified some minor areas in which improvements will be considered.

The Chairman will hold individual meetings with the other directors to review their performance.

#### REMUNERATION

The remuneration of the Board of Directors and Executive Board at Chr. Hansen shall contribute to the creation of value in the Company and support the Company's short- and long-term objectives. The incentive-based remuneration shall further seek to align the interests of the Executive Board and those of the shareholders and, finally, ensure that the Company is able to attract and retain highly qualified members for both its Executive Board and Board of Directors.

The following section describes the most important elements of Chr. Hansen's Remuneration Policy for the Board of Directors and Executive Board.

### GOVERNANCE

#### **Board of Directors**

The remuneration of members of the Board of Directors comprises a fixed annual base fee and fixed annual supplementary fees for the Chairman, Vice Chairman, and members and chairmen of permanent committees. Further, members of the Board of Directors may receive a fixed travel allowance in connection with overseas travel. Members of the Board of Directors do not receive any incentive-based remuneration

#### **Executive Board**

Members of the Executive Board receive an agreed base salary with addition of pension contribution which is subject to annual reassessment, and are granted certain benefits such as company car, insurance, newspaper, free telephone and internet access.

The Executive Board and other key employees are further offered incentive-based remuneration in accordance with the Board of Directors' overall guidelines for incentive-based remuneration as approved by the Company's Annual General Meeting.

In the event of change of control, members of the Executive Board do not receive any additional compensation.

#### Assessment of the remuneration

The remuneration of the Board of Directors and Executive Board is assessed annually. The Board of Directors decides on the remuneration of the Executive Board and other key employees based on a recommendation from the Board's Remuneration Committee.

#### **FURTHER INFORMATION**

For more information on remuneration, please refer to Chr. Hansen's Remuneration Policy as approved by the Annual General Meeting on 29 November 2011 and Overall Guidelines for Incentive-Based Remuneration as approved by the Annual General Meeting on 26 November 2015. The remuneration policy and guidelines, Chr. Hansen's Articles of Association, and other policies and positions are available at www.chr-hansen.com/investors/governance/remuneration.

For specific information on the remuneration of the Executive Board and Board of Directors in 2016/17, please refer to notes 2.3 and 5.1 to the Consolidated Financial Statements.

Section 107b of the Danish Financial Statements Act requires Chr. Hansen Holding A/S to prepare a statement on corporate governance for the 2016/17 financial year. This statement forms part of Management's Review and can be viewed at www.chr-hansen.com/investors/governance/corporate-governance.

For a full report on corporate social responsibility as required by sections 99a and 99b of the Danish Financial Statements Act, please refer to Chr. Hansen's Communication on Progress to the UN Global Compact, available at http://www.chr-hansen.com/sustainability/reporting-and-disclosure.

## BOARD OF DIRECTORS AND EXECUTIVE BOARD

## BOARD OF DIRECTORS OLE ANDERSEN - Chairman

Professional board member. Born 1956. Danish national. Independent. Member and Chairman of the Board since 2010; re-elected 2016; term expires 2017. Chairman of the Remuneration and Nomination Committees; member of the Audit Committee.

#### BOARD POSITIONS AND OTHER OFFICES

Chairman: Danske Bank A/S, Bang & Olufsen A/S and one group company. Member (unpaid): DenmarkBridge, Human Practice Foundation (charity), Nomination Committee of Nasdaq Nordic Ltd., and the Danish Committee on Corporate Governance. Adjunct professor: Copenhagen Business School.

#### **BOARD COMPETENCIES**

Professional experience in managing and developing large international companies. Extensive board experience, including from private equity owned and listed companies. Financial and accounting expertise.

#### **DOMINIQUE REINICHE - Vice Chairman**

Professional board member. Born 1955. French national. Independent. Member of the Board since November 2013; reelected 2016; term expires 2017. Member of the Nomination, Remuneration and Scientific Committees.

#### BOARD POSITIONS AND OTHER OFFICES

Board member: PayPal Luxembourg, Chair of the Remuneration Committee and member of the Audit Committee. Mondi plc, member of the Nomination, Remuneration and Sustainability Committees. Severn Trent plc, member of the Sustainability and Nomination Committees.

#### BOARD COMPETENCIES

Professional experience from positions in the food, beverage and hygiene/beauty care industries at, among others, Procter & Gamble and Jacobs-Suchard (now Mondelēz International). 22 years in senior leadership positions at French and European levels within Coca-Cola Enterprises and The Coca-Cola Company.

#### LUIS CANTARELL - Member

Professional board member. Born 1952. Spanish national. Independent. Member of the Board since 2016; term expires 2017. Chairman of the Scientific Committee.

#### **BOARD POSITIONS AND OTHER OFFICES**

Chairman: Froneri Ltd. Member: Grupo URIACH SL and the foundation Fundación Fero.

#### **BOARD COMPETENCIES**

Professional global experience within the food and beverage industry. Extensive board experience and over 10 years of executive leadership experience with the Nestlé Group.

#### **SVEND LAULUND - Employee representative**

Manager, Global External Affairs, Chr. Hansen A/S. Born 1954. Danish national. Member of the Board since 2006; re-elected 2013; term expires 2017.

#### BOARD POSITION AND OTHER OFFICES

Member: K/S Scandinavian Property Investment 11.

#### TIINA MATTILA-SANDHOLM - Member

Professor and Executive Advisor to the CEO and the Executive Board of Valio Oy, Finland. Born 1958. Finnish national. Independent. Member of the Board since November 2014; reelected 2016; term expires 2017. Member of the Scientific Committee

#### BOARD POSITIONS AND OTHER OFFICES

Member: Natural Resources Institute (LUKE).

#### **BOARD COMPETENCIES**

More than a dozen years of experience as CSO, HRM and Business Group Director in a fast moving consumer goods company, and 30 years of strategic leadership in international academic and industrial R&D.

#### PER POULSEN - Employee representative

Senior Technology Specialist, Chr. Hansen A/S. Born 1966. Danish national. Member of the Board since 2013; re-elected in 2017; term expires 2021.

#### FRÉDÉRIC STÉVENIN - Member

Partner at PAI Partners. Born 1966. French national. Non-independent. Member of the Board since 2005. Chairman until March 2010 and Vice Chairman 2010-2013 and 2014-2015. Re-elected 2016; term expires 2017. Member of the Audit and Nomination Committees.

#### BOARD POSITIONS AND OTHER OFFICES

Chairman of the Supervisory Board of B&B Hotels and member of the Board of Directors of one group company. Member of the Supervisory Board of Ethypharm and one group company. Member of the Board of Directors of Kaufman & Broad SA and Chairman of the Board of Directors and Managing Director/Director of two group companies. Member of the Supervisory Board of Labeyrie and Chairman/member of the Board of Directors of two group companies. Member: Marcolin

#### GOVFRNANCE

SpA and three group companies, Froneri Ltd and three group companies, PAI Europe III, PAI Partners (UK) Ltd, Koos Holding Coöperatief U.A. Managing Director and member of the Executive Committee of PAI Partners SAS. Manager: Tecfin SÁRL and TecInvest SÁRL (ELITechGroup), Alta Rocca II and Alta Rocca Investissements SCI and G.A.V.U. Gestion SPRL.

#### **BOARD COMPETENCIES**

Professional experience in investing in large international companies. Financial and accounting expertise. Extensive board experience, including from listed companies.

#### KRISTIAN VILLUMSEN - Member

Executive Vice President of Chronic Care at Coloplast A/S Born 1970. Danish national. Independent. Member of the Board since November 2014; re-elected 2016; term expires 2017. Member of the Audit Committee.

#### BOARD POSITION AND OTHER OFFICES

Board member in eight subsidiaries wholly owned by Coloplast A/S.

#### **BOARD COMPETENCIES**

Extensive knowledge of the medico and life science industry as well as solid international and managerial experience in both European and emerging markets.

#### MARK WILSON - Member

Born 1952. British national. Independent. Member of the Board since 2010; re-elected 2016; term expires 2017. Chairman of the Audit Committee; member of the Remuneration Committee.

#### BOARD COMPETENCIES

International CEO/MD with over 40 years in fast moving consumer goods companies and service/B2B industries in Asian, South American, UK, Irish and international markets. Financial and accounting experience.

#### **EXECUTIVE BOARD - CHR. HANSEN HOLDING A/S**

#### **CEES DE JONG - President & Chief Executive Officer**

Born 1961. Dutch national. Joined Chr. Hansen in 2013.

BOARD POSITIONS AND OTHER OFFICES Non-executive director on the Supervisory Board of ForFarmers N.V.

#### **FDUCATION**

Master of Business Administration from Rotterdam School of Management, Erasmus University, Netherlands. Doctor of Medicine, Erasmus University, Netherlands.

#### SØREN WESTH LONNING - Chief Financial Officer

Born 1977, Danish national, Joined Chr. Hansen in 2007.

BOARD POSITIONS AND OTHER OFFICES
CEO and sole shareholder: MNGT4 SWL ApS

#### EDUCATION

M.Sc. in Finance and Accounting (cand.merc.fir.) from Copenhagen Business School, Denmark.

#### **CORPORATE LEADERSHIP TEAM**

In addition to the Executive Board, the Company has established a Corporate Leadership Team that assists in the day-to-day management of the Company. In addition to the members of the Executive Board, the Corporate Leadership Team comprises a further eight members.

# MANAGEMENT BOARD OF DIRECTORS



**Ole Andersen** Chairman



**Dominique Reiniche** Vice Chairman



**Luis Cantarell**Board member



**Svend Laulund**Board member, employee-elected



**Tiina Mattila-Sandholm** Board member



**Per Poulsen**Board member, employee-elected



**Frédéric Stévenin**Board member



**Kristian Villumsen**Board member



**Mark Wilson**Board member

#### MANAGEMENT

# **EXECUTIVE BOARD**& CORPORATE LEADERSHIP TEAM



**Cees de Jong** President & CEO Executive Board member



**Søren Westh Lonning**Executive Vice President & CFO
Executive Board member



**Esben Laulund**Interim Chief Scientific Officer, Research & Development



**Christoffer Lorenzen** Executive Vice President, Food Cultures & Enzymes



**Christian Barker** Executive Vice President, Health & Nutrition



**Jørgen M. Erichsen**Executive Vice President,
Natural Colors



**Jacob Vishof Paulsen**Executive Vice President, EMEA & North
American regions



**Sten Estrup**Executive Vice President, APAC & LATAM regions



**Torsten Steenholt**Executive Vice President,
Global Opreations



**Winnie Bügel**Corporate Vice President, Compliance,
Corporate Communications &
Sustainability



Alice Larsen
Corporate Vice President, Human
Resources



**Erik Norström**Corporate Vice President, Strategic & Business Development

## GOVERNANCE SHAREHOLDER INFORMATION

Chr. Hansen Holding A/S is listed on Nasdaq Copenhagen and aims to provide long-term returns to shareholders through share price increases and dividend payouts.

The sole activity of Chr. Hansen Holding A/S is the general management and central administration of shareholdings in companies in the Chr. Hansen Group.

#### **TOTAL SHAREHOLDER RETURN 2016/17**

The share price developed positively in 2016/17. At the end of August 2017, the share traded at DKK 538, while the share price at 1 September 2016 was DKK 405, corresponding to an increase of DKK 133 per share.

During the year, an ordinary dividend of DKK 5.23 per share, or a total of EUR 92 million, was paid for the 2015/16 financial year, and an extraordinary dividend of DKK 5.64 per share, or a total of EUR 100 million, was paid on 13 July 2017.

The total shareholder return in 2016/17 was equal to 36%.

Chr. Hansen is included in a number of share indexes, including the Nasdaq C20CAP index, and benchmarks itself against a predefined group of companies. The Nasdaq C20CAP index returned 13%, while the predefined peer group returned 3% including dividends.

#### **CAPITAL STRUCTURE**

The Board of Directors regularly assesses whether the capital structure of Chr. Hansen is in the shareholders' best interests. The Board of Directors is committed to maintaining financial leverage consistent with a solid investment-grade credit profile, while returning excess cash to shareholders through ordinary dividends and either extraordinary dividends or share buy-back programs, in accordance with the Company's capital allocation priorities.

#### **DIVIDENDS**

The Company's policy for ordinary dividends is a payout ratio of 40-60% of net profit. In addition, the Annual General Meeting has authorized the Board of Directors to distribute extraordinary dividends.

The dividends proposed depend on the Board's assessment of factors such as business development, growth strategy and financing needs, and there can be no assurance that an ordinary or extraordinary dividend will be proposed or declared in any given year.

The Board of Directors proposes that the Annual General Meeting approves an ordinary dividend for 2016/17 of EUR 0.85 (DKK 6.33) per share, or a total of EUR 112 million. The proposed ordinary dividend is equivalent to 50% of the profit for the year. The Board of Directors believes that the proposed dividend best serves the interests of the shareholders. The capital and share structure will be assessed regularly to determine whether it remains in the shareholders' best interests.

#### **AUTHORIZATION OF THE BOARD OF DIRECTORS**

Up to and including 26 November 2017, the Board of Directors has been authorized by the Annual General Meeting to:

Increase the share capital in one or more stages, with pre-emptive rights for existing shareholders, by up to a total nominal value of DKK 131,852,496 (previously DKK 134,499,976). The capital increase shall be effected by payment in cash.

Increase the share capital in one or more stages, without pre-emptive rights for existing shareholders, by up to a total nominal value of DKK 131,852,496 (previously DKK 134,499,976), provided that the increase takes place at market price. The capital increase may be effected by



payment in cash or by contribution of assets other than cash.

 Have the Company acquire up to 13,185,249 (previously 13,449,997) treasury shares, provided that the Company's holding of treasury shares at no time exceeds 10% of the Company's share capital. The consideration payable for the shares may not deviate by more than 10% from the share price listed on Nasdaq Copenhagen at the time of acquisition.

#### **SHAREHOLDERS**

At the end of August 2017, Chr. Hansen had around 23,000 institutional and private shareholders, three of which each held more than 5% of the shares:

- · Novo Holdings A/S (Denmark): 25.7%
- · Capital Group Companies Inc. (US): 10.1%
- · APG Asset Management N.V. (Netherlands): 5.2%

Other institutional investors, primarily from the UK and the US, held around 50% of the shares, while retail investors held around 5%. Chr. Hansen held 0.2% in order to meet certain obligations to deliver shares under management incentive programs.

#### AMERICAN DEPOSITARY RECEIPT PROGRAM

Chr. Hansen has a sponsored Level 1 American Depositary Receipt (ADR) program with Bank of New York Mellon acting as depositary bank. An ADR is a USD-denominated negotiable certificate that represents ownership of shares in a non-US company, facilitating the purchase, holding and sale of non-US securities by US investors. At the end of August 2017, 2.0% of the share capital was held through the ADR program.

#### ANALYST COVERAGE

The Company is currently covered by 20 analysts, including major international investment banks. A list of analysts covering Chr. Hansen can be found at www.chr-hansen.com/investors/share-info/analysts.

#### **INVESTOR RELATIONS ACTIVITIES**

Chr. Hansen seeks to ensure that relevant, accurate and timely information is made available to the capital markets to serve as a basis for regular trading and fair pricing of the Company's shares. In providing this information, Chr. Hansen aims to ensure that it is perceived as a visible, accessible, reliable and professional company by the investor community, and that it is regarded as one of the best among its peers in this area. This is to be achieved while complying with the rules and legislation

for companies listed on Nasdaq Copenhagen and Chr. Hansen's communication policy.

In 2016/17, Chr. Hansen maintained a close dialogue with investors and analysts and participated in a number of conferences hosted by various brokers.

#### **INVESTOR RELATIONS WEBSITE**

The Company's investor relations site contains both historical and current information about the Company, including company announcements, investor presentations, teleconferences including transcripts, a financial calendar and annual reports. See www.chr-hansen.com/investors.

#### CONTACT

The Investor Relations department handles daily contact with analysts and investors.

Head of IR Senior IR Officer

Martin Riise Anders Enevoldsen

Tel.: +45 5339 2250 Tel.: +45 4574 7630

dkmari@chr-hansen.com dkanen@chr-hansen.com

#### **ANNUAL GENERAL MEETING**

The Annual General Meeting will be held on Tuesday 28 November 2017 in Chr. Hansen's headquarters at Bøge Allé 10-12, 2970 Hørsholm, Denmark, at 4 p.m. CET.

#### SHARE DATA

DKK 1,318,524,960 Share capital Number of shares 131,852,496 of DKK 10 131,565,160 of DKK 10 Outstanding shares Classes of shares Voting and ownership restrictions None Stock exchange Nasdaq Copenhagen A/S ISIN code DK0060227585 CHR Ticker symbol **DKK 538** Share price at year-end Proposed dividend per share DKK 6.33

OTC ADR Level 1 program (BNY Mellon)

 DR Symbol
 CHYHY

 CUSIP
 12545M207

 DR ISIN
 US12545M2070

 Ratio
 DR:ORD 2:1

#### FINANCIAL CALENDAR 2017/2018

28 November 2017 Annual General Meeting 2017

12 January 2018 Interim Report Q1
11 April 2018 Interim Report Q2
28 June 2018 Interim Report Q3
11 October 2018 Annual Report 2017/18
29 November 2018 Annual General Meeting 2018

#### MAIN COMPANY ANNOUNCEMENTS 2016/17

13 September 2016 Agreement to acquire LGG
 10 November 2016 Closing of acquisition of LGG
 6 December 2016 New Chief Scientific Officer

appointed

6 January 2017 COO steps down

1 February 2017 Major shareholder announcement

from Blackrock, Inc.

3 February 2017 Major shareholder announcement

from Blackrock, Inc.

26 April 2017 Major shareholder announcement

from Blackrock, Inc.

8 July 2017 Major shareholder announcement

from Blackrock, Inc.

## MANAGEMENT'S STATEMENT ON THE ANNUAL REPORT

The Executive Board and the Board of Directors have today considered and adopted the Annual Report of Chr. Hansen Holding A/S for the financial year 1 September 2016 – 31 August 2017.

The Annual Report has been prepared in accordance with International Financial Reporting Standards as adopted by the EU. Moreover, the Annual Report has been prepared in accordance with additional Danish disclosure requirements for listed companies.

In our opinion, the Consolidated Financial Statements and the Parent Company Financial Statements give a true and fair view of the financial position at 31 August 2017 of the Group and the Parent Company and of the results of the Group's and Parent Company's operations and cash flows for 2016/17.

In our opinion, Management's Review includes a true and fair account of the development in the operations and financial circumstances of the Group and the Parent Company, of the results for the year, and of the financial position of the Group and the Parent Company, as well as a description of the most significant risks and elements of uncertainty facing the Group and the Parent Company.

We recommend that the Annual Report be adopted at the Annual General Meeting.

Hørsholm, 25 October 2017

#### **Executive Board**

Cees de Jong Søren Westh Lonning

President and CEO CFO

#### **Board of Directors**

Ole Andersen Dominique Reiniche Luis Cantarell

Chairman Vice Chairman

Svend Laulund Tiina Mattila-Sandholm Per Poulsen

Frédéric Stévenin Kristian Villumsen Mark Wilson

## INDEPENDENT AUDITOR'S REPORT

#### TO THE SHAREHOLDERS OF CHR. HANSEN HOLDING A/S

#### **OUR OPINION**

In our opinion, the Consolidated Financial Statements and the Parent Company Financial Statements give a true and fair view of the Group's and the Parent Company's financial position at 31 August 2017 and of the results of the Group's and the Parent Company's operations and cash flows for the financial year 1 September 2016 to 31 August 2017 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 additional report to the Audit Committee and the Board of Directors.

#### WHAT WE HAVE AUDITED

Chr. Hansen Holding A/S's Consolidated Financial Statements and Parent Company Financial Statements for the financial year 1 September 2016 to 31 August 2017 comprise income statement and statement of comprehensive income, balance sheet, statement of changes in equity, cash flow statement and notes to the financial statements, 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 International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) and the ethical requirements that are relevant to our audit of the financial statements in Denmark. We have also fulfilled our other ethical responsibilities in accordance with the IESBA Code.

To the best of our knowledge and belief, we declare that non-audit services that we have provided to the Group and the Parent Company are in accordance with the applicable law and regulations in Denmark and that we have not provided non-audit services that are prohibited under Article 5(1) of Regulation (EU) No 537/2014.

#### **APPOINTMENT**

We were appointed as auditors of Chr. Hansen Holding A/S for the first time after the initial public offering on 30 November 2010. Our appointment has been renewed annually by shareholder resolution representing a total period of uninterrupted engagement appointment of 7 years.

#### **KEY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the period 1 September 2016 to 31 August 2017. 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.

#### GOVFRNANCE

#### **KEY AUDIT MATTER**

#### HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER

VALUATION OF GOODWILL

The Group has Goodwill arising from acquisitions.

The value of Goodwill is supported by Management's assessment of the future value based on strategic plans, and value-in-use calculations which are based on future cash flow.

We focused on this area because the valuation assessment of Goodwill is dependent on complex and subjective judgements by Management as well as estimation over the future outcome, which is uncertain by nature.

Refer to note 3.1 in the Consolidated Financial Statements.

We assessed the Group's impairment methodology including the identification of CGUs.

We challenged Management's estimates and key assumptions used in the valuation of Goodwill, comprising revenue development, profit margins, proposed capital expenditure and growth expectations, etc.

Furthermore, we evaluated Management's sensitivity analysis and challenged key assumptions within the valuation calculations.

CAPITALISATION AND VALUATION OF DEVELOPMENT PROJECTS

The Group capitalises development costs in accordance with IFRS, which prescribe capitalisation when certain criteria are met. Recognition and measurement of development projects are subject to judgment and estimates based on Management's assumptions of the future, which is uncertain by nature

Completed development projects are reviewed at the time of completion and on an annual basis to determine whether there is any indication of impairment. If so, an impairment test is carried out for the individual development projects. For development projects in progress, however, an annual impairment test is always performed.

The impairment test is based on strategic plans, and either value-in-use calculation based on future cash flow forecasts or fair value less costs of disposal (i.e. "recoverable amount").

We focused on this area because of the valuation assessment of development projects is dependent on complex and subjective judgements by Management.

Refer to note 3.2 in the Consolidated Financial Statements.

We considered whether all criteria are met as basis for the capitalisation of development projects in progress. We evaluated procedures and tested relevant internal controls to ensure correct accounting for development projects and performed substantive audit procedures to verify capitalised amounts.

We have evaluated and challenged Management's assessment of indication of impairment of completed development projects. Our work was based on our understanding of the commercial prospects of the completed development projects.

For development projects in progress we have evaluated the impairment test performed by Management.

We selected a sample of projects not yet launched at the balance sheet date and challenged whether a future intent to develop the project remains and whether they will generate probable future economic benefit exceeding the expected carrying value.

We challenged the appropriateness of the key assumptions applied and the probability of key future events occurring. Our work was based on our understanding of the commercial prospects of the developments projects in progress.

We considered the appropriateness of the related disclosure provided in the Consolidated Financial Statements.

#### GOVFRNANCE

#### STATEMENT ON MANAGEMENT'S REVIEW

Management is responsible for Management's Review, pages 3-45.

Our opinion on the financial statements does not cover Management's 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's Review and, in doing so, consider whether Management's 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's Review includes the disclosures required by the Danish Financial Statements Act.

Based on the work we have performed, in our view, Management's 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's Review.

#### MANAGEMENT'S RESPONSIBILITY 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 judgment and maintain professional skepticism 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
- 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.

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.

Hellerup, 25 October 2017 PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab CVR No 33 77 12 31

Kim Füchsel State Authorized Public Accountant Rasmus Friis Jørgensen State Authorized Public Accountant

# ANNUAL REPORT 2016/17 FINANCIAL STATEMENTS GROUP

#### THE HUMAN MICROBIOME



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## **INCOME STATEMENT**

## 1 SEPTEMBER - 31 AUGUST

EUR million	Note	2016/17	2015/16
Revenue	2.1	1,062.5	948.9
Cost of sales	2.2 - 2.3	(484.4)	(443.5)
Gross profit		578.1	505.4
Research and development expenses	2.2 - 2.3	(71.4)	(62.5)
Sales and marketing expenses	2.2 - 2.3	(134.2)	(112.7)
Administrative expenses	2.2 - 2.3 - 2.4	(70.9)	(65.9)
Other operating income		5.9	3.7
Other operating expenses		(0.4)	(0.2)
Operating profit before special items		307.1	267.8
	2.5	(1.4)	(12.2)
Special items	2.5	(1.4)	(12.2)
Operating profit (EBIT)		305.7	255.6
Financial income	2.6	24.5	29.3
Financial expenses	2.7	(39.3)	(45.5)
Profit before tax		290.9	239.4
Income taxes	2.8	(66.9)	(55.6)
	2.8		
Profit for the year		224.0	183.8
Earnings per share (EUR)	2.9	1.70	1.41
Earnings per share, diluted (EUR)	2.9	1.68	1.40

## STATEMENT OF COMPREHENSIVE INCOME

1 SEPTEMBER – 31 AUGUST

EUR million	Note	2016/17	2015/16
Profit for the year		224.0	183.8
Items that will not be reclassified subsequently to the income statement:			
Remeasurements of defined benefit plans		0.3	(1.1)
Items that will be reclassified subsequently to the income statement when specific			
conditions are met:			
Currency translation of foreign Group companies		(7.1)	2.9
Deferred gains/(losses) on cash flow hedges arising during the year		(0.4)	(2.5)
Gains/(losses) on cash flow hedges expiring during the year		1.7	1.9
Tax related to cash flow hedges		0.5	0.1
Other comprehensive income for the year		(5.0)	1.3
Total comprehensive income for the year		219.0	185.1

## **BALANCE SHEET**

## AT 31 AUGUST

EUR million	Note	2017	2016
ASSETS			
Non-current assets			
Intangible assets			
Goodwill	3.1	767.2	726.5
Other intangible assets	3.2	191.9	185.3
Intangible assets in progress	3.2	36.0	32.5
Total intangible assets		995.1	944.3
Property, plant and equipment			
Land and buildings	3.3	141.6	138.9
Plant and machinery	3.3	151.8	142.5
Other fixtures and equipment	3.3	23.0	16.2
Property, plant and equipment in progress	3.3	94.8	55.7
Total property, plant and equipment		411.2	353.3
Other non-current assets			
Deferred tax	2.8	8.2	9.8
Total other non-current assets		8.2	9.8
Total non-current assets		1,414.5	1,307.4
Total non-current assets  Current assets		1,414.5	1,307.4
		1,414.5	1,307.4
Current assets		<b>1,414.5</b> 22.0	<b>1,307.4</b> 21.5
Current assets Inventories		·	
Current assets Inventories Raw materials and consumables		22.0	21.5
Current assets Inventories Raw materials and consumables Work in progress	3.4	22.0 45.3	21.5 42.4
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale	3.4	22.0 45.3 67.9	21.5 42.4 56.2
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories	3.4	22.0 45.3 67.9	21.5 42.4 56.2
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables		22.0 45.3 67.9 <b>135.2</b>	21.5 42.4 56.2 <b>120.1</b>
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables Trade receivables		22.0 45.3 67.9 <b>135.2</b>	21.5 42.4 56.2 <b>120.1</b>
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables Trade receivables Tax receivables		22.0 45.3 67.9 <b>135.2</b> 150.0 4.6	21.5 42.4 56.2 <b>120.1</b> 137.1 4.8
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables Trade receivables Tax receivables Other receivables		22.0 45.3 67.9 <b>135.2</b> 150.0 4.6 16.0	21.5 42.4 56.2 <b>120.1</b> 137.1 4.8 16.6
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables Trade receivables Tax receivables Other receivables Prepayments		22.0 45.3 67.9 <b>135.2</b> 150.0 4.6 16.0 8.8	21.5 42.4 56.2 <b>120.1</b> 137.1 4.8 16.6 9.5
Current assets Inventories Raw materials and consumables Work in progress Finished goods and goods for resale Total inventories  Receivables Trade receivables Tax receivables Other receivables Prepayments Total receivables		22.0 45.3 67.9 <b>135.2</b> 150.0 4.6 16.0 8.8 <b>179.4</b>	21.5 42.4 56.2 <b>120.1</b> 137.1 4.8 16.6 9.5 <b>168.0</b>

## **BALANCE SHEET**

## AT 31 AUGUST

EUR million	Note	2017	2016
EQUITY AND LIABILITIES			
Equity			
Share capital	4.1	177.3	177.2
Reserves		591.2	553.1
Total equity		768.5	730.3
Liabilities			
Non-current liabilities			
Employee benefit obligations	3.6	6.7	7.4
Deferred tax	2.8	72.1	66.4
Provisions	3.7	3.2	2.1
Borrowings	4.2	671.8	601.0
Tax payables		15.6	17.5
Total non-current liabilities		769.4	694.4
Current liabilities			
Provisions	3.7	0.1	6.2
Borrowings	4.2	29.6	66.7
Prepayments from customers		0.2	0.8
Trade payables		110.4	109.8
Tax payables		39.5	25.5
Other payables		84.4	81.6
Total current liabilities		264.2	290.6
Total liabilities		1,033.6	985.0
Total equity and liabilities		1,802.1	1,715.3
Commitments and contingent liabilities	3.8		
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## STATEMENT OF CHANGES IN EQUITY

1 SEPTEMBER - 31 AUGUST

EUR million						2016/17
	Note	Share capital	Currency translation	Cash flow hedges	Retained earnings	Total
Equity at 1 September 2016		177.2	(31.0)	(3.7)	587.8	730.3
Total comprehensive income for the year, cf. statement of comprehensive income		0.1	(7.2)	1.8	224.3	219.0
Transactions with owners:						
Purchase of treasury shares					(20.1)	(20.1)
Exercised share options		-	-	-	24.6	24.6
Share-based payment	5.1	-	-	-	2.5	2.5
Tax related to share-based						
payment		-	-	-	4.4	4.4
Dividend		-	-	-	(192.2)	(192.2)
Equity at 31 August 2017		177.3	(38.2)	(1.9)	631.3	768.5

During the year, an ordinary dividend for the financial year 2015/16 of EUR 0.70 (DKK 5.23) per share, corresponding to EUR 92 million, and an extraordinary dividend of EUR 0.76 (DKK 5.64) per share, corresponding to 100 million, were paid.

A dividend of EUR 0.85 (DKK 6.33), corresponding to EUR 112 million in total, is proposed for 2016/17.

EUR million						2015/16
	Note	Share capital	Currency translation	Cash flow hedges	Retained earnings	Total
Equity at 1 September 2015		176.7	(33.4)	(3.2)	460.7	600.8
Total comprehensive income for the year, cf. statement of comprehensive income		0.5	2.4	(0.5)	182.7	185.1
Transactions with owners:						
Exercised share options		-	-	-	17.5	17.5
Share-based payment	5.1	-	-	-	4.4	4.4
Tax related to share-based payment Dividend		-	-	-	4.6 (82.1)	4.6 (82.1)
Equity at 31 August 2016		177.2	(31.0)	(3.7)	587.8	730.3

During the year, an ordinary dividend for the financial year 2014/15 of EUR 0.63 (DKK 4.70) per share corresponding to 82 million was paid.

## **CASH FLOW STATEMENT**

### 1 SEPTEMBER - 31 AUGUST

EUR million	Note	2016/17	2015/16
Operating profit		305.7	255.6
Non-cash adjustments	5.2	55.6	63.4
Change in working capital		(24.2)	(5.5)
Interest payments received		0.4	0.7
Interest payments made		(10.6)	(12.0)
Taxes paid		(43.2)	(57.4)
Cash flow from operating activities		283.7	244.8
Investments in intangible assets		(15.1)	(18.4)
Investments in property, plant and equipment		(90.9)	(59.7)
Sale of property, plant and equipment		2.5	3.1
Cash flow used for operational investing activities		(103.5)	(75.0)
Free operating cash flow		180.2	169.8
Acquisition of entities, net of cash acquired	5.3	(73.0)	(169.4)
Cash flow used for investing activities		(176.5)	(244.4)
Free cash flow		107.2	0.4
Borrowings		208.0	132.8
Repayment of long-term loans		(170.8)	(24.9)
Exercise of options		24.6	17.5
Purchase of treasury shares, net		(20.1)	-
Dividends paid		(192.2)	(82.1)
Cash flow used in financing activities		(150.5)	43.3
Net cash flow for the year		(43.3)	43.7
Cash and cash equivalents at 1 September		119.8	76.4
Unrealized exchange gains/(losses) included in cash and cash equivalents		(3.5)	(0.3)
Net cash flow for the year		(43.3)	43.7
Cash and cash equivalents at 31 August		73.0	119.8

## 1.1 GENERAL ACCOUNTING POLICIES

#### **ACCOUNTING POLICIES**

#### BASIS OF PREPARATION

The Consolidated Financial Statements for the Chr. Hansen Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and as adopted by the European Union, as well as additional Danish disclosure requirements applying to entities of reporting class D.

## GENERAL INFORMATION ON RECOGNITION AND MEASUREMENT

The Consolidated Financial Statements have been prepared under the historical cost method, except for the measurement of certain financial instruments at fair value. The accounting policies set out below have been applied consistently in respect of the financial year 2016/17 and the comparative figures. The accounting policies are unchanged from 2015/16, except for the implementation of new and amended IFRS/IAS standards as stated below.

#### **NEW AND AMENDED STANDARDS**

Chr. Hansen has adopted all new or amended accounting standards and interpretations (IFRSs) issued by the IASB and endorsed by the European Union effective for the accounting year 2016/17.

The application of new IFRSs has not had any material impact on the Consolidated Financial Statements for 2016/17, and we do not anticipate any significant impact on future periods from the adoption of these new IFRSs.

The IASB has issued new or amended standards and interpretations effective for financial years beginning after 1 September 2016. Some of these have not yet been endorsed by the EU. Most relevant to the Group are the following:

IFRS 9 "Financial Instruments," which changes the
classification and measurement of financial assets and
liabilities, impairment methodology and general hedge
accounting. The standard will be effective for financial
years beginning on or after 1 January 2018. Analysis of
how the implementation of IFRS 9 will impact the
Consolidated Financial Statements is ongoing. Chr.

Hansen's preliminary assessment is that this is not expected to have a material effect.

- IFRS 15 "Revenue from Contracts with Customers," which clarifies the principles for recognizing revenue from contracts with customers, with the notion of control replacing the existing notion of risk and rewards. The principle is applied to each individual performance obligation identified in the contract. The standard requires extensive disclosures and will be effective for financial years beginning on or after 1 January 2018. Chr. Hansen's preliminary assessment concludes that IFRS 15 is not expected to have a material effect on recognition and measurement, but is expected to impact the disclosures. However, analysis of the effect is ongoing.
- IFRS 16 "Leases," which changes the requirements for capitalization of operating lease contracts resulting in the majority of operating lease contracts being capitalized. The standard will be effective for financial years beginning on or after 1 January 2019. Analysis of the effect on the Group's Consolidated Financial Statements is ongoing, but the preliminary assessment is that there will be no material effect.

The Group expects to adopt the standards and interpretations when they become effective.

#### PRESENTATION OF ACCOUNTING POLICIES

Where possible, the accounting policies for an accounting area are presented in the individual notes for that area. Accounting policies not directly related to an area covered by a note are presented below.

#### **DEFINING MATERIALITY**

The Consolidated Financial Statements are a result of processing large numbers of transactions and aggregating those transactions into classes according to their nature or function. When aggregated, the transactions are presented in classes of similar items in the Consolidated Financial Statements. If a line item is not individually material, it is aggregated with other items of a similar nature in the Consolidated Financial Statements or in the notes. There are substantial disclosure requirements throughout IFRS. Management provides specific disclosures required by IFRS unless the information is considered immaterial to the economic decision-making of the users of these financial statements or not applicable.

## 1.1 GENERAL ACCOUNTING POLICIES

(CONTINUED)

## TRANSLATION FROM FUNCTIONAL CURRENCY TO PRESENTATION CURRENCY

Items in the financial statements of each of the reporting companies of the Group are measured in the currency of the primary economic environment in which the company operates (the functional currency).

Assets, liabilities and equity items are translated from each reporting company's functional currency to EUR at the balance sheet date. The income statements are translated from the functional currency into the presentation currency based on the average exchange rate for the individual months. Differences arising on the translation of the equity at the beginning of the period and translation of the income statement from the average rates to the exchange rate at the balance sheet date are recognized in other comprehensive income and presented as a separate reserve in equity.

The functional currency of the Parent Company is the Danish krone (DKK). However, due to the Group's international relations, the Consolidated Financial Statements are presented in euros (EUR).

#### BASIS OF CONSOLIDATION

The Consolidated Financial Statements cover Chr. Hansen Holding A/S (the Parent Company) and entities over which the Parent Company has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Gains or losses on the disposal or winding up of Group companies, joint ventures and associates are stated as the difference between the sales amount and the carrying amount of net assets including goodwill at the date of disposal or winding up, foreign exchange adjustments recognized directly in equity, plus costs to sell or winding-up expenses.

Gains or losses on disposal or winding up of subsidiaries are recognized in the income statement under special items, while gains or losses on disposal or winding up of associates are recognized under financial income and expenses.

#### **BUSINESS COMBINATIONS**

Entities acquired or formed during the year are recognized in the Consolidated Financial Statements from the date of acquisition

or formation. Entities that are disposed of or wound up are recognized in the consolidated income statement until the date of disposal or winding up. The comparative figures are not restated for entities acquired, disposed of or wound up.

#### TRANSLATION OF TRANSACTIONS AND AMOUNTS

Transactions in foreign currencies are initially translated into the functional currency at the exchange rates at the transaction date.

Exchange adjustments arising due to differences between the transaction date rates and the rates at the payment date are recognized in financial income or financial expenses in the income statement. Receivables, payables and other monetary items in foreign currencies not settled at the balance sheet date are translated at the exchange rates at the balance sheet date.

Exchange adjustments arising due to differences between the rates at the balance sheet date and the transaction date are recognized in financial income or financial expenses in the income statement.

#### **REVENUE**

Revenue is recognized in the income statement if the risk has been transferred to the purchaser at the balance sheet date, the income can be measured reliably, and expenses incurred or expected to be incurred in connection with the transaction can be measured reliably. Revenue is measured at the fair value of the consideration received excluding VAT and less commission and discounts granted in connection with the sales.

Royalty and license fees are recognized when earned according to the terms of the license agreements.

#### **COST OF SALES**

Cost of sales comprises the cost of products sold. Cost comprises the purchase price of raw materials, consumables and goods for resale, direct labor costs and a share of indirect production costs, including costs of operation and depreciation of production facilities as well as operation, administration and management of factories.

#### OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses comprise income that is not related to the principal activities. This includes income from government grants, rental income, gains and losses on the disposal of intangible assets and property, plant and equipment, and other income of a secondary nature in relation to the main activities of the Group.

## 1.2 SUMMARY OF KEY ACCOUNTING ESTIMATES

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

In preparing the Consolidated Financial Statements, Management makes various accounting estimates and assumptions that form the basis of presentation, recognition and measurement of the Group's assets and liabilities. The most significant accounting estimates and judgments are presented below.

In applying the Group's accounting policies, Management makes judgments that may significantly influence the amounts recognized in the Consolidated Financial Statements. Determining the carrying amount of some assets and liabilities requires judgments, estimates and assumptions to be made concerning future events.

The judgments, estimates and assumptions made are based on historical experience and other factors that Management considers to be reliable, but which by their very nature are associated with uncertainty and unpredictability. These assumptions may prove incomplete or incorrect, and unexpected events or circumstances may arise. The most critical judgments, estimates and assumptions for the individual items are described below.

The Group is also subject to risks and uncertainties that may lead to actual results differing from these estimates, both positively and negatively.

Assumptions about the future and estimation uncertainty on the balance sheet date are described in the notes where there is a significant risk of changes that could result in material adjustments to the carrying amounts of assets or liabilities within the next financial year.

Management considers the key accounting estimates and assumptions used in the preparation of the Consolidated Financial Statements to relate to the following:

- · Note 2.8 Income taxes and deferred tax
- · Note 3.1 Goodwill
- · Note 3.2 Other intangible assets
- Note 3.4 Inventories
- · Note 5.3 Acquisition of entities

Please refer to the specific notes for further information on the key accounting estimates and assumptions applied.

#### 2.1 SEGMENT INFORMATION

#### **ACCOUNTING POLICIES**

Segment information is provided on the Group's three business units: Food Cultures & Enzymes, Health & Nutrition and Natural Colors. The information is based on the management structure and internal management reporting to the Corporate Leadership Team and the Executive Board, and constitutes our reportable segments.

The identification of the segments on which to report does not include aggregation of operating segments. The accounting policies regarding recognition and measurement used in the segment information are identical to the ones used in the Consolidated Financial Statements. The geographic distribution of revenue is based on customers' location.

When presenting segment information from the income statement and balance sheet, disclosed amounts are split according to internal management information. Some costs, assets and liabilities are not directly attributable to the three business units and have to be distributed according to allocation keys used in internal Management reporting. These allocation keys are reassessed at least annually, based on planned activity in the three business units, and are subject to Management's judgment.

#### Segment information

The reportable segments are based on the segmentation in the internal financial reporting received by the Corporate Leadership Team and the Executive Board. The reportable segments are business units offering customers different products and services.

Food Cultures & Enzymes produces and sells innovative cultures, enzymes and probiotic products that help determine the taste, flavor, texture, shelf life, nutritional value and health benefits of a variety of consumer products in the food industry, especially in the dairy industry.

Health & Nutrition produces and sells products for the dietary supplement, over-the-counter pharmaceutical, infant formula, animal feed and plant protection industries.

Natural Colors supplies natural color solutions to the food & beverage industry.

Segment performance is evaluated on the basis of EBIT before special items consistent with the Consolidated Financial Statements. Special items, financial income and expenses, and income taxes are managed at Group level and are not allocated to the business units.

## **2.1 SEGMENT INFORMATION** (CONTINUED)

EUR million	Food Cultures & Enzymes	Health & Nutrition	Natural Colors	<b>2016/17</b> Group
INCOME STATEMENT	,			
Revenue	617.5	224.7	220.3	1,062.5
EUR growth	9%	22%	10%	12%
Organic growth	9%	14%	10%	10%
EBITDA	249.5	83.5	35.1	368.1
EBITDA margin	40.4%	37.2%	16.0%	34.6%
Depreciation, amortization and impairment losses	(36.4)	(18.0)	(6.6)	(61.0)
EBIT before special items	213.1	65.5	28.5	307.1
EBIT margin before special items	34.5%	29.2%	12.9%	28.9%
Special items and net financial expenses				(16.2)
Profit before tax				290.9
ASSETS				
Goodwill	534.6	232.6	-	767.2
Other intangible assets	105.4	106.7	15.8	227.9
Intangible assets	640.0	339.3	15.8	995.1
Property, plant and equipment	271.0	93.6	46.6	411.2
Total non-current assets excluding deferred tax	911.0	432.9	62.4	1,406.3
Inventories	66.0	24.6	44.6	135.2
Trade receivables	83.6	32.6	33.8	150.0
Trade payables	(54.5)	(19.3)	(36.6)	(110.4)
Net working capital	95.1	37.9	41.8	174.8
Assets not allocated				110.6
Group assets				1,802.1
Invested capital excluding goodwill	471.5	238.2	104.2	813.9
ROIC excluding goodwill	47.1%	29.8%	30.3%	40.1%
Investment in non-current assets excluding deferred tax	68.3	26.4	11.3	106.0

## **2.1 SEGMENT INFORMATION** (CONTINUED)

EUR million				2015/16
	Food Cultures & Enzymes	Health & Nutrition	Natural Colors	Group
INCOME STATEMENT				
Revenue	564.9	184.0	200.0	948.9
EUR growth	9%	12%	14%	11%
Organic growth	12%	2%	19%	12%
EBITDA	229.2	66.9	27.9	324.0
EBITDA margin	40.6%	36.4%	13.9%	34.1%
Depreciation, amortization and impairment losses	(35.3)	(14.9)	(6.0)	(56.2)
EBIT before special items	193.9	52.0	21.9	267.8
EBIT margin before special items	34.3%	28.3%	10.9%	28.2%
Special items and net financial expenses				(28.4)
Profit before tax				239.4
Assets				
Goodwill	540.4	186.1	_	726.5
Other intangible assets	112.3	89.9	15.6	217.8
Intangible assets	652.7	276.0	15.6	944.3
Property, plant and equipment	234.6	78.4	40.3	353.3
Total non-current assets excluding deferred tax	887.3	354.4	55.9	1,297.6
Inventories	57.1	25.0	38.0	120.1
Trade receivables	80.9	29.4	26.8	137.1
Trade payables	(52.6)	(20.4)	(36.8)	(109.8)
Net working capital	85.4	34.0	28.0	147.4
Assets not allocated				160.5
Group assets				1,715.3
Invested capital excluding goodwill	432.3	202.3	83.9	718.5
ROIC excluding goodwill	46.2%	30.6%	25.8%	39.7%
Investment in non-current assets excluding deferred tax	54.4	16.3	7.4	78.1

#### **2.1 SEGMENT INFORMATION**

(CONTINUED)

EUR million				2016/17	
	EMEA*	North America**	LATAM	APAC	Group
GEOGRAPHIC ALLOCATION					
Revenue	464.0	297.2	135.5	165.8	1,062.5
EUR growth	8%	19%	9%	15%	12%
Organic growth	7%	13%	10%	16%	10%
Non-current assets excluding deferred tax***	1,201.2	158.1	33.0	14.0	1,406.3

EUR million					2015/16
	EMEA*	North America**	LATAM	APAC	Group
Revenue	431.1	249.4	124.0	144.4	948.9
EUR growth	6%	17%	3%	21%	11%
Organic growth	9%	7%	17%	24%	12%
Non-current assets excluding deferred tax***	1,087.3	162.9	33.9	13.5	1,297.6

 $<sup>^{\</sup>star}$  Includes Denmark, which accounts for 1% of total revenue corresponding to EUR 10.6 million.  $^{\star\star}$  Includes the US, which accounts for 26% of total revenue corresponding to EUR 276.3 million.  $^{\star\star\star}$  Non-current assets in Denmark amount to EUR 924.5 million.

<sup>\*</sup> Includes Denmark, which accounts for 1% of total revenue corresponding to EUR 9.5 million.

\*\* Includes the US, which accounts for 25% of total revenue corresponding to EUR 237.2 million.

\*\*\* Non-current assets in Denmark amount to EUR 822.7 million.

## 2.2 DEPRECIATION, AMORTIZATION AND IMPAIRMENT LOSSES

#### **ACCOUNTING POLICIES**

The accounting policies for depreciation, amortization and impairment losses are specified in notes 3.1, 3.2 and 3.3.

EUR million	2016/17	2015/16
AMORTIZATION AND IMPAIRMENT LOSSES		
INTANGIBLE ASSETS		
Cost of sales	(4.5)	(4.4)
Research and development expenses	(8.5)	(9.1)
Sales and marketing expenses	(13.5)	(10.3)
Administrative expenses	(1.8)	(1.5)
Total	(28.3)	(25.3)
DEPRECIATION AND WRITE-DOWN PROPERTY, PLANT AND EQUIPMENT		
Cost of sales	(25.1)	(23.3)
Research and development expenses	(3.8)	(3.9)
Sales and marketing expenses	(1.1)	(0.7)
Administrative expenses	(2.7)	(3.0)
Total	(32.7)	(30.9)
Total depreciation, amortization and impairment losses	(61.0)	(56.2)

#### 2.3 STAFF EXPENSES

Pension expenses - defined contribution plans  (16.9) (15.2)  Pension expenses - defined benefit plans (note 3.6) (0.4) (0.3)  Social security, etc. (20.8)	Average number of employees (FTE)	2,940	2,708
Pension expenses - defined contribution plans (16.9) (15.2 Pension expenses - defined benefit plans (note 3.6) (0.4)	Total	(224.2)	(211.4)
Pension expenses - defined contribution plans (16.9)	Social security, etc.	(20.8)	(21.3)
	Pension expenses - defined benefit plans (note 3.6)	(0.4)	(0.3)
Wages and salaries, etc. (186.1) (174.6	Pension expenses - defined contribution plans	(16.9)	(15.2)
	Wages and salaries, etc.	(186.1)	(174.6)
EUR million 2016/17 2015/16	EUR million	2016/17	2015/16

#### Remuneration of the Board of Directors and Executive Board

Total fees to key management personnel, comprising the Board of Directors and Executive Board, amounted to EUR 4.2 million in 2016/17 and EUR 4.6 million in 2015/16.

Members of the Executive Board receive a fixed salary, pension and bonus based on corporate and individual KPIs, the size of which is subject to certain financial and non-financial targets being met. If a member is dismissed, the ordinary salary is paid for an 18-month notice period. In the event of change of control, members of the Executive Board do not receive any additional compensation.

#### **Board of Directors**

Total fees to the Board of Directors amounted to EUR 1.0 million in 2016/17 and EUR 0.9 million in 2015/16.

Executive Board					2016/17
				Share-based	
EUR million	Salary	Bonus <sup>1</sup>	Pension	payment <sup>2</sup>	Total
Cees de Jong	(0.84)	(0.39)	(0.16)	(0.41)	(1.80)
Søren Westh Lonning	(0.34)	(0.15)	(0.06)	(0.06)	(0.61)
Knud Vindfeldt³	(0.25)	(0.21)	(0.04)	(0.33)	(0.83)
Total	(1.43)	(0.75)	(0.26)	(0.80)	(3.24)
				Г	
					2015/16
				Share-based	
	Salary	Bonus <sup>1</sup>	Pension	payment <sup>2</sup>	Total
Cees de Jong	(0.74)	(0.41)	(0.15)	(0.80)	(2.10)
Søren Westh Lonning	(0.30)	-	(0.06)	(0.04)	(0.40)
Knud Vindfeldt <sup>3</sup>			/		
Kriud virialeiat	(0.45)	(0.23)	(0.09)	(0.47)	(1.24)

- 1) The amounts express the actual bonus payments during the year.
- 2) The amounts are based on the principles set out in note 5.1.
- 3) Member of the Executive Board until 28 February 2017.

#### **2.3 STAFF EXPENSES**

(CONTINUED)

EUR million			2016/17	2015/16
Fee to the Board of Directors	Joined the Board	Left the Board		
Ole Andersen	February 2010		(0.23)	(0.20)
Dominique Reiniche	November 2013		(0.16)	(0.14)
Søren Carlsen	November 2012	November 2016	(0.02)	(80.0)
Svend Laulund	January 2006		(0.05)	(0.05)
Tiina Mattila-Sandholm	November 2014		(0.07)	(0.07)
Per Poulsen	November 2013		(0.05)	(0.05)
Luis Cantarell	November 2016		(0.07)	-
Frédéric Stévenin	November 2006		(0.09)	(0.09)
Kristian Villumsen	November 2014		(0.07)	(0.07)
Mark Wilson	October 2010		(0.12)	(0.12)
Mads Bennedsen	November 2013	January 2017	(0.02)	(0.05)
Total			(0.95)	(0.92)

#### Shares

Shares in Chr. Hansen Holding A/S held by the Board of Directors and the Executive Board:

	Beginning of	Bought during	Sold during	End of
Number of shares	the year	the year	the year	the year
Ole Andersen	16,666	-	-	16,666
Dominique Reiniche	1,462	-	-	1,462
Svend Laulund	1,416	-	(316)	1,100
Tiina Mattila-Sandholm	1,040	-	-	1,040
Per Poulsen	150	-	-	150
Luis Cantarell	-	1,400	-	1,400
Frédéric Stévenin	11,111	-	-	11,111
Kristian Villumsen	1,500	-	-	1,500
Mark Wilson	3,000	-	-	3,000
Total	36,345	1,400	(316)	37,429
Cees de Jong	20,000	228,667	(223,667)	25,000
Søren Westh Lonning	1,932	712	-	2,644
Total	21,932	229,379	(223,667)	27,644

Each director elected by the General Meeting must, no later than 12 months after appointment to the Board of Directors, purchase shares in the Company corresponding to an amount of at least one year's base fee. The director must maintain a shareholding corresponding to at least one year's base fee for as long as he/she is a member of the Company's Board of Directors.

The Executive Board has undertaken to maintain ownership of shares in Chr. Hansen, either directly or indirectly as specified in note 5.1, with a minimum value corresponding to six months of the executive officer's gross base salary.

#### 2.4 FEES TO AUDITORS

EUR million	2016/17	2015/16
PricewaterhouseCoopers		
Statutory audit	(0.7)	(0.7)
Audit-related services	-	(0.1)
Tax advisory services	(0.1)	(0.3)
Other services	(0.1)	(0.3)
Total	(0.9)	(1.4)

#### 2.5 SPECIAL ITEMS

#### **ACCOUNTING POLICIES**

Special items comprise material amounts that cannot be attributed to recurring operations, such as income and expenses related to divestment, closure or restructuring of subsidiaries and business lines from the time the decision is made. Also classified as special items are, if major, gains and losses on disposal of subsidiaries not qualifying for

recognition as discontinued operations in the income statement, as well as transaction costs and adjustments to purchase prices relating to the acquisition of entities. Material non-recurring income and expenses that originate from prior years or from projects related to the strategy for the development of the Group and process optimizations are classified as special items.

EUR million	2016/17	2015/16
Cost related to the acquisition and integration of LGG <sup>®</sup>	(1.4)	(1.0)
Cost related to the acquisition and integration of NPC	-	(6.0)
US import tariff costs related to previous years	-	(5.2)
Total	(1.4)	(12.2)

The special items for 2016/17 comprise 55% staff costs and 45% other costs (2015/16 9% staff costs and 91% other external costs).

#### **2.6 FINANCIAL INCOME**

#### **ACCOUNTING POLICIES**

Financial income and expenses comprise interest receivable and interest payable, commission, the interest component of payments under finance leases, surcharges and refunds

under Denmark's on-account tax scheme, and value adjustments of financial fixed assets, derivative financial instruments and items denominated in a foreign currency.

EUR million	2016/17	2015/16
Interest income	0.4	0.7
Foreign exchange gains	21.5	26.1
Foreign exchange gains on derivatives	2.6	2.5
Total	24.5	29.3

#### 2.7 FINANCIAL EXPENSES

#### **ACCOUNTING POLICIES**

See note 2.6 above.

EUR million	2016/17	2015/16
Interest expenses	(8.4)	(9.0)
Borrowing costs related to construction of assets	0.4	0.3
Foreign exchange losses	(25.4)	(30.0)
Foreign exchange losses on derivatives	(1.7)	(2.9)
Losses on derivatives transferred from other comprehensive income	(1.7)	(1.9)
Other financial expenses including amortized costs	(2.5)	(2.0)
Total	(39.3)	(45.5)

Effective interest expenses amounted to EUR 10.1 million (EUR 10.9 million in 2015/16).

The capitalization rate used to determine the amount of borrowing costs eligible for capitalization is 0.56%.

## 2.8 INCOME TAXES AND DEFERRED TAX

#### **ACCOUNTING POLICIES**

Current tax liabilities and receivables are recognized in the balance sheet at the amounts calculated on the taxable income for the year, adjusted for tax on taxable incomes for prior years and for taxes paid on account.

Deferred tax is measured using the balance sheet liability method in respect of all temporary differences between the carrying amount and the tax base of assets and liabilities. Apart from assets acquired as part of business combinations, deferred tax is not recognized in respect of temporary differences concerning goodwill, office premises and other items where temporary differences have arisen at the time of acquisition without affecting the profit for the year or the taxable income. In cases where the computation of the tax base may be performed according to different tax rules, deferred tax is measured on the basis of Management's intended use of the asset or settlement of the liability.

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

Tax and transfer pricing disputes arise from time to time as cross-border transactions receive increasing attention from local tax authorities. The Group recognizes tax assets and liabilities in order always to fulfil tax requirements in all the countries where business is conducted. Management assesses tax assets and liabilities at least annually, based on dialogue with local tax authorities, tax advisors, business plans and knowledge of the business.

EUR million	2016/17	2015/16
Income taxes		
Current tax on profit for the year	(61.4)	(47.4)
Change in deferred tax concerning profit for the year	(6.3)	(6.4)
Tax on profit for the year	(67.7)	(53.8)
Adjustments concerning previous years	0.8	(1.8)
Tax in the income statement	(66.9)	(55.6)
Tax on other comprehensive income	0.5	0.1

		2016/17		2015/16
Reconciliation of tax rate				
Danish tax rate	22.0%	(64.0)	22.0%	(52.6)
Deviation of non-Danish Group companies from Danish tax rate	1.5%	(4.2)	1.3%	(3.1)
Non-taxable income and non-deductible expenses	(0.3)%	0.8	(1.2)%	2.7
Adjustments concerning previous years	(0.3)%	0.8	0.8%	(1.9)
Other taxes	0.1%	(0.3)	0.3%	(0.7)
Effective tax rate	23.0%		23.2%	
Tax on profit for the year		(66.9)		(55.6)

## **2.8 INCOME TAXES AND DEFERRED TAX** (CONTINUED)

EUR million	16/17	2015/16
Deferred tax		
Deferred tax at 1 September	56.6	45.3
Currency translation	0.2	0.4
Change in deferred tax - recognized in the income statement	7.1	10.7
Change in deferred tax - recognized through equity	-	0.2
Deferred tax at 31 August	63.9	56.6
Deferred tax assets	(8.2)	(9.8)
Deferred tax liabilities	72.1	66.4
Deferred tax at 31 August	63.9	56.6
Specification of deferred tax		
Intangible assets	49.1	47.9
Property, plant and equipment	21.6	17.7
Non-current assets	(0.5)	1.0
Tax loss carryforwards	(1.3)	(2.2)
Liabilities	(5.0)	(7.8)
Total deferred tax at 31 August	63.9	56.6
Amounts due after 12 months, estimated	63.8	54.9
Tax loss carryforwards		
Total tax loss carryforwards	9.0	12.8
Tax losses expected to be utilized	4.5	7.6
Deferred tax assets from tax losses recognized in the balance sheet	1.3	2.2

#### 2.9 EARNINGS PER SHARE

EUR million	2016/17	2015/16
Profit from continuing operations	224.0	183.8
Profit for the year attributable to shareholders of Chr. Hansen Holding A/S	224.0	183.8
Average number of shares	131,852,496	131,852,496
Average number of treasury shares	(403,718)	(1,451,902)
Average number of shares excluding treasury shares	131,448,778	130,400,594
Average dilution effect of share options	1,664,764	1,332,835
Average number of shares, diluted	133,113,542	131,733,429
Earnings per share (EUR)	1.70	1.41
Earnings per share, diluted (EUR)	1.68	1.40

#### 3.1 GOODWILL

#### **ACCOUNTING POLICIES**

Goodwill represents the excess of the cost of an acquisition over the fair value of the identifiable net assets of the acquired company.

The carrying amount of goodwill is allocated to the Group's cash-generating units, which are the operating segments at the acquisition date.

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

Goodwill is tested annually for impairment, whereby an estimate is made to determine whether the parts of the entity (cash-generating units) related to the goodwill will be able to generate sufficient future positive net cash flows to support the value of goodwill, trademarks with an indefinite useful life and other net assets of the entity in question.

The estimate of future free net cash flows is based on budgets and business plans for the coming five years and on projections for subsequent years. Budgets and business plans are based on specific future business initiatives for which the risks relating to key parameters have been assessed and recognized in estimated future free cash flows. Projections for years following the five-year period are based on general expectations and risks. Key parameters are revenue development, profit margins, proposed capital expenditure and growth expectations.

The discount rate used to calculate recoverable amounts is the weighted average cost of capital before tax.

EUR million	2017	2016
Cost at 1 September	726.5	615.1
Currency translation	(6.7)	2.7
Addition	47.4	108.7
Cost at 31 August	767.2	726.5
The carrying amount of goodwill has been allocated to the identified		
cash-generating units according to the operating segments as follows:		
Food Cultures & Enzymes	534.6	540.4
Health & Nutrition	232.6	186.1
Total	767.2	726.5

# **3.1 GOODWILL** (CONTINUED)

The addition to goodwill in 2016/17 relates to the purchase of  $LGG^{\circ}$  and has been allocated in full to the Health & Nutrition business unit; refer to note 5.3 Acquisition of entities.

At 31 August 2017, Management performed an impairment test of the carrying amount of goodwill. No basis for impairment was found. The impairment tests compare the carrying amount of the assets to the discounted value of future cash flows. The future cash flows are based on budgets and Management's estimates of the expected development in the next five years. Revenue, EBIT, working capital, discount rate and growth assumptions constitute the most material parameters in the calculations.

At 31 August 2017, an average growth rate of 8% (8% in 2015/16) in the five-year period has been applied for revenue in the Food Cultures & Enzymes business unit, and an increased EBIT margin over the period with 31.5% in 2014/15 as basis is expected according to our long-term ambitions, fully leveraging the potential of Food Cultures & Enzymes in the form of new innovation for yields and functionality, reinforcing positions in emerging markets and driving scalability. In the Health & Nutrition business unit, an average growth rate above 10% (10% in 2015/16) in the five-year period has been applied for revenue in alignment with our long-term ambitions for organic growth in Health & Nutrition. An EBIT margin around 30% over the period is expected, based on developing the microbial solutions platform and reinvesting in future growth.

The expected growth rate is based on the Company's own market intelligence process through which information is collected from all key markets to form the basis for future market growth expectations. As a market leader with a global presence, the Company has a unique opportunity to assess the market through direct interactions with customers. The internal expectations are, however, then verified against available market data from external resources, including global market intelligence and research companies.

As well as market growth, the Company also assesses commercial opportunities for conversion of customers to the Company's products, pricing and upselling to existing customers within the five-year period to establish expectations for growth above the expected level of market growth. The assessment is based on the Company's current product portfolio, and ongoing and potential new projects with existing and potential new customers.

A conservative approach has been taken in applying the growth rates for revenue, using the lower range of the long-term financial ambitions set out in Nature's no. 1 – reaffirmed. Overall, an expected improvement in the EBIT margin in the five-year period of more than 1 percentage point (1 percentage point in 2015/16) has been applied, and working capital is assumed to constitute 15-16% (15-16% in 2015/16) of revenue for both business units. A pre-tax discount rate of 10% (10% in 2015/16) has been applied in the impairment test for both business units.

### **3.2 OTHER INTANGIBLE ASSETS**

#### **ACCOUNTING POLICIES**

Research expenses are recognized in the income statement as they are incurred. Development costs are recognized as intangible assets if the costs are expected to generate future economic benefits.

Costs for development and implementation of substantial software and IT systems are capitalized and amortized over their expected useful lives.

Trademarks, patents and customer lists acquired are recognized at cost and amortized over their expected useful lives.

Other intangible assets are measured at cost less accumulated amortization and impairment losses. Borrowing costs in respect of construction of assets are capitalized when it takes more than a year for them to be ready for use.

Amortization is carried out systematically over the expected useful lives of the assets:

Customer lists: 7-15 years
 Patents, trademarks and rights: 5-20 years
 Software: 5-10 years
 Development projects: 3-15 years

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

Finished development projects are reviewed at the time of completion and on an annual basis to determine whether there is any indication of impairment. If there is, an impairment test is carried out for the individual development projects. For development projects in progress, however, an annual impairment test is always performed. The impairment test is performed on the basis of various factors, including future use of the project, the fair value of estimated future earnings or savings, interest rates and risks.

For development projects in progress, Management estimates on an ongoing basis whether each project is likely to generate future economic benefits for the Group in order to qualify for recognition. The development projects are evaluated on technical as well as commercial criteria.

### **3.2 OTHER INTANGIBLE ASSETS**

(CONTINUED)

EUR million			Develop-		Develop- ment	Other intangible	2017
	Trade-	ъ	ment	<b>6</b> (1)	projects in	assets in	
	marks	Patents	projects	Software	progress	progress	Total
Cost at 1 September	165.6	85.1	64.1	49.4	25.5	7.0	396.7
Currency translation	-	(0.5)	-	(0.2)	-	-	(0.7)
Additions from acquisition	5.0	19.3	-	-	-	-	24.3
Additions for the year	-	-	0.8	0.9	10.0	3.4	15.1
Disposals for the year	-	-	(7.3)	(0.1)	(1.6)	-	(9.0)
Transferred	-	-	3.2	4.6	(3.1)	(5.2)	(0.5)
Cost at 31 August	170.6	103.9	60.8	54.6	30.8	5.2	425.9
Amortization and impairment							
at 1 September	(93.1)	(29.3)	(28.0)	(28.5)	-	-	(178.9)
Currency translation	-	0.1	-	0.2	-	-	0.3
Amortization for the year	(8.1)	(6.8)	(6.6)	(5.2)	-	-	(26.7)
Disposals for the year	-	-	7.1	0.2	1.6	-	8.9
Impairment	-	-	-	-	(1.6)	-	(1.6)
Amortization and impairment							
at 31 August	(101.2)	(36.0)	(27.5)	(33.3)	-	-	(198.0)
Carrying amount at 31 August	69.4	67.9	33.3	21.3	30.8	5.2	227.9
Salary expenses for the year included in assets	above				7.1	1.4	
Interest for the year included in assets above					0.1	-	

### 3.2 OTHER INTANGIBLE ASSETS

(CONTINUED)

EUR million							2016
			_		Develop-	Other	
	Trade-		Develop-		ment	intangible	
	marks	Patents	ment projects	Software	projects in progress	assets in progress	Total
Cost at 1 September	158.9	34.4	60.1	44.0	33.4	6.0	336.8
Currency translation	0.4	0.3	0.2	0.1	0.1	-	1.1
Additions from acquisition	6.3	48.0	-	-	-	-	54.3
Additions for the year	-	2.4	1.7	1.3	8.8	4.2	18.4
Disposals for the year	-	-	(11.9)	(0.1)	(2.8)	-	(14.8)
Transferred	-	-	14.0	4.1	(14.0)	(3.2)	0.9
Cost at 31 August	165.6	85.1	64.1	49.4	25.5	7.0	396.7
Amortization and impairment	(05.1)	(25.2)	(22.0)	(22.7)			(1(7.0)
at 1 September	(85.1)	(25.2)	(33.9)	(23.7)	-	-	(167.9)
Currency translation	(0.4)	-	-	(0.1)	-	-	(0.5)
Amortization for the year	(7.6)	(4.1)	(6.0)	(4.8)	-	-	(22.5)
Disposals for the year	-	-	11.9	0.1	2.8	-	14.8
Impairment	-	-	-	-	(2.8)	-	(2.8)
Amortization and impairment							
at 31 August	(93.1)	(29.3)	(28.0)	(28.5)	-	-	(178.9)
Carrying amount at 31 August	72.5	55.8	36.1	20.9	25.5	7.0	217.8
Salary expenses for the year included in assets	above				6.2	1.0	
Interest for the year included in assets above					0.1	-	

#### **Trademarks**

Of the trademarks, the carrying amount of the Chr. Hansen trademark alone at 31 August 2017 is EUR 19.0 million, with a remaining amortization period of eight years.

### **Development projects**

Completed development projects and development projects in progress comprise development and testing of new strains for cultures, enzymes and natural colors as well as production techniques. The value of the development projects recognized has been compared to expected sales or cost savings. In cases where indications of impairment have been identified, the relevant assets have been written down. The impairment tests have been prepared similarly to the goodwill impairment test described in note 3.1, based on the value in use of the assets.

Chr. Hansen has recognized impairment losses of EUR 1.6 million in 2016/17 in respect of capitalized development costs assessed not to be commercially feasible in light of latest knowledge of market potential (Health & Nutrition) (EUR 2.8 million in 2015/16, mainly concerning acquired technology that has proved difficult to exploit at Chr. Hansen).

#### Software

Software comprises expenses for acquiring software licenses and expenses related to internally developed software. The value of the recognized software has been compared to the expected value in use. No indications of impairment have been identified.

# 3.3 PROPERTY, PLANT AND EQUIPMENT

### **ACCOUNTING POLICIES**

Property, plant and equipment are measured at cost less accumulated depreciation and less any accumulated impairment charges. Property, plant and equipment in progress are measured at cost. Cost comprises expenses for materials, other expenses directly related to making the asset ready for use, and re-establishment expenses, provided that a corresponding provision is made at the same time. Borrowing costs in respect of construction of assets are capitalized when it takes more than a year for the assets to be ready for use.

### **ACCOUNTING POLICIES**

The useful lives of the individual groups of assets are estimated as follows:

Buildings: 25-50 years
 Plant and machinery: 5-20 years
 Other fixtures and equipment: 3-10 years

Land is not depreciated.

Depreciation is based on a straight-line pattern.

Gains and losses on the disposal of property, plant and equipment are recognized in the income statement under other operating income and other operating expenses.

# **3.3 PROPERTY, PLANT AND EQUIPMENT** (CONTINUED)

EUR million					2017
	Land and buildings	Plant and machinery	Other fixtures and equip- ment	Property, plant and equip- ment in progress	Total
Cost at 1 September	201.3	320.5	39.7	55.7	617.2
Currency translation	(2.3)	(3.1)	(1.1)	(0.4)	(6.9)
Additions from acquisition	-	2.0	-	-	2.0
Additions for the year	7.5	12.6	5.1	65.7	90.9
Disposals for the year	(0.6)	(2.9)	(1.6)	-	(5.1)
Transferred	3.8	16.1	6.8	(26.2)	0.5
Cost at 31 August	209.7	345.2	48.9	94.8	698.6
Depreciation and write-down at 1 September	(62.4)	(178.0)	(23.5)	-	(263.9)
Currency translation	1.4	2.4	1.0	-	4.8
Depreciation and write-down for the year*	(7.6)	(20.5)	(4.6)	-	(32.7)
Disposals for the year	0.5	2.7	1.2	-	4.4
Depreciation and write-down at 31 August	(68.1)	(193.4)	(25.9)	-	(287.4)
Carrying amount at 31 August	141.6	151.8	23.0	94.8	411.2
Salary expenses for the year included in assets above				8.4	
Interest for the year included in assets above, cf. note 2.7 for the interest rate applied				0.3	

 $<sup>^{\</sup>star}$  No write-downs have been made in 2016/17

Land and buildings includes buildings on land leased for an unlimited term from Scion DTU A/S at Hørsholm, Denmark, at EUR 18.2 million (EUR 19.2 million in 2015/16).

Value of mortgaged property, plant and equipment, cf. note 3.8 regarding other guarantees and commitments is EUR 167.4 million (EUR 163.5 million in 2015/16).

# **3.3 PROPERTY, PLANT AND EQUIPMENT** (CONTINUED)

EUR million					2016
	Land and buildings	Plant and machinery	Other fixtures and equip- ment	Property, plant and equip- ment in progress	Total
Cost at 1 September	190.3	295.1	33.6	38.9	557.9
Currency translation	0.1	0.7	0.3	0.2	1.3
Additions from acquisition	-	-	2.5	-	2.5
Additions for the year	5.1	11.1	1.9	41.6	59.7
Disposals for the year	(2.3)	(0.8)	(0.2)	-	(3.3)
Transferred	8.1	14.4	1.6	(25.0)	(0.9)
Cost at 31 August	201.3	320.5	39.7	55.7	617.2
Depreciation and write-down at 1 September	(55.0)	(158.8)	(19.2)	-	(233.0)
Currency translation	(0.1)	(0.5)	(0.3)	-	(0.9)
Depreciation and write-down for the year*	(7.4)	(19.4)	(4.1)	-	(30.9)
Disposals for the year	0.1	0.7	0.1	-	0.9
Depreciation and write-down at 31 August	(62.4)	(178.0)	(23.5)	-	(263.9)
Carrying amount at 31 August	138.9	142.5	16.2	55.7	353.3
Salary expenses for the year included in assets above				4.8	
Interest for the year included in assets above, cf. note 2.7 for the in	nterest rate ap	plied		0.2	

 $<sup>^{\</sup>star}$  No write-downs have been made in 2015/16

### 3.4 INVENTORIES

#### **ACCOUNTING POLICIES**

Inventories are measured at the lower of cost and net realizable value. Cost is determined using the first-in, first-out method.

The cost of goods for resale and raw materials and consumables comprises purchase price plus delivery costs. Finished goods and work in progress are measured at cost, comprising costs incurred to bring the product to the current completion stage and location. Costs include the cost of raw materials, consumables, direct wages and salaries, and indirect production overheads. Indirect production overheads comprise indirect materials, wages and salaries, maintenance and depreciation of production machinery, buildings and equipment, and production administration and management.

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

The calculation of indirect production costs is reviewed regularly in order to ensure that relevant assumptions such as prices, production yield and measures of utilization are incorporated correctly. Changes in the parameters, assumed production yield and utilization levels, etc. could have a significant impact on cost and, in turn, on the valuation of inventories and production costs.

EUR million	2017	2016
Direct materials	84.0	73.1
Other direct and indirect production costs	51.2	47.0
Total	135.2	120.1
Movements in inventory write-downs:		
Inventory write-downs at 1 September	4.1	3.8
Inventory write-downs during the year	2.4	3.6
Utilization of inventory write-downs	(3.4)	(3.3)
Inventory write-downs at 31 August	3.1	4.1

### **3.5 TRADE RECEIVABLES**

### **ACCOUNTING POLICIES**

Receivables are initially recognized at fair value, adjusted for any transaction costs. Subsequently, receivables are measured at amortized cost less allowances for bad debts.

Allowances for bad debts are determined on the basis of an individual assessment of each receivable, taking into consideration the period overdue and the expected likelihood of receiving payment.

EUR million	2017	2016
Aging of receivables:		
Not due	141.5	131.8
0-30 days overdue	6.0	3.5
31-60 days overdue	1.4	0.7
61-120 days overdue	0.7	1.0
> 120 days overdue	0.4	0.1
Total trade receivables	150.0	137.1
Allowances for bad debts:		
Allowances at 1 September	0.8	1.1
Additions for the year	0.8	0.6
Reversals for the year	(0.8)	(0.9)
Allowances at 31 August	0.8	0.8

# 3.6 EMPLOYEE BENEFIT OBLIGATIONS

### **ACCOUNTING POLICIES**

Contributions to defined contribution plans are charged to the income statement in the year to which they relate. In a few countries, the Group still operates defined benefit plans. The costs for the year for defined benefit plans are determined using the projected unit credit method. This reflects services rendered by employees up to the valuation dates and is based on actuarial assumptions, primarily regarding discount rates used in determining the present value of benefits and projected rates of remuneration growth. Discount rates are based on the market yields of high-rated corporate bonds in the country concerned.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income in the period in which they arise. Past service costs are recognized immediately in the income statement. Pension assets are only recognized to the extent that it is possible to derive future economic benefits such as refunds from the plan or reductions of future contributions. The Group's defined benefit plans are usually funded by payments from Group companies and by employees to funds independent of the Group. Where a plan is unfunded, a liability for the retirement obligation is recognized in the balance sheet.

### **Employee benefit plans in the Group**

Other employee benefit obligations consist of obligations regarding payments made in connection with employee service tenure, long-service benefits and other social benefits.

The Group has entered into pension agreements with a significant share of its employees. The majority of the plans are defined contribution plans, and only a small proportion are defined benefit plans.

### **Defined contribution plans**

The Group finances the plans through regular premium payments to independent insurance companies, which are responsible for the pension obligations. Once the pension contributions to the defined contribution plans have been paid, the Group has no further pension obligations toward current or resigned employees.

### Defined benefit plans

For certain groups of employees, the Group has entered into agreements on the payment of certain benefits, including pensions. These obligations are not or only partly covered by insurance. Unfunded plans have been recognized in the balance sheet, income statement and other comprehensive income as shown below.

### **3.6 EMPLOYEE BENEFIT OBLIGATIONS**

(CONTINUED)

EUR million	2017	2016
Movement in the employee benefit obligations recognized		
Obligations at 1 September	12.9	12.1
Currency translation	(0.4)	(0.7)
Current service expenses	0.3	0.2
Interest expenses	0.2	0.3
Actuarial gains/(losses)	(0.2)	1.4
Payments made	(0.4)	(0.4)
Employee benefit obligations recognized at 31 August	12.4	12.9
Movement in the fair value of plan assets		
Fair value of plan assets at 1 September	5.5	5.8
Currency translation	(0.4)	(0.7)
Expected return on plan assets	0.1	0.2
Actuarial gains/(losses)	0.4	0.5
Employer contributions	0.2	0.2
Benefits paid	(0.1)	(0.5)
Fair value of plan assets at 31 August	5.7	5.5
Net benefit obligations at 31 August	6.7	7.4
Net benefit obligations at 31 August  Net employee benefit obligations	6.7	7.4
	<b>6.7</b> 7.4	<b>7.4</b> 6.3
Net employee benefit obligations		
Net employee benefit obligations  Net obligations at 1 September	7.4	6.3
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement	7.4 0.4	6.3 0.3
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income	7.4 0.4 (0.7)	6.3 0.3 1.1
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions	7.4 0.4 (0.7) (0.4)	6.3 0.3 1.1 (0.3)
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August	7.4 0.4 (0.7) (0.4)	6.3 0.3 1.1 (0.3)
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied	7.4 0.4 (0.7) (0.4) <b>6.7</b>	6.3 0.3 1.1 (0.3) <b>7.4</b>
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate	7.4 0.4 (0.7) (0.4) <b>6.7</b>	6.3 0.3 1.1 (0.3) <b>7.4</b>
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate  Future increase in salaries	7.4 0.4 (0.7) (0.4) <b>6.7</b> 2.0% 2.9%	6.3 0.3 1.1 (0.3) <b>7.4</b> 1.8% 2.9%
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate  Future increase in salaries  Future increase in pensions	7.4 0.4 (0.7) (0.4) <b>6.7</b> 2.0% 2.9%	6.3 0.3 1.1 (0.3) <b>7.4</b> 1.8% 2.9%
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate  Future increase in salaries  Future increase in pensions  Distribution of plan assets to cover obligation	7.4 0.4 (0.7) (0.4) <b>6.7</b> 2.0% 2.9% 1.6%	6.3 0.3 1.1 (0.3) <b>7.4</b> 1.8% 2.9% 1.7%
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate  Future increase in salaries  Future increase in pensions  Distribution of plan assets to cover obligation  Shares	7.4 0.4 (0.7) (0.4) <b>6.7</b> 2.0% 2.9% 1.6%	6.3 0.3 1.1 (0.3) <b>7.4</b> 1.8% 2.9% 1.7%
Net employee benefit obligations  Net obligations at 1 September  Costs recognized in the income statement  Remeasurements recognized in other comprehensive income  Employer contributions  Net employee benefit obligations at 31 August  Weighted average actuarial assumptions applied  Discount rate  Future increase in salaries  Future increase in pensions  Distribution of plan assets to cover obligation  Shares  Bonds	7.4 0.4 (0.7) (0.4) <b>6.7</b> 2.0% 2.9% 1.6%	6.3 0.3 1.1 (0.3) <b>7.4</b> 1.8% 2.9% 1.7%

### **3.7 PROVISIONS**

### **ACCOUNTING POLICIES**

Provisions are recognized when, as a consequence of an event occurring on or before the balance sheet date, the Group has a legal or constructive obligation and it is probable

that economic benefits must be given up to settle the obligation. The obligation is measured on the basis of Management's best estimate of the discounted amount at which the obligation is expected to be met.

EUR million	2017	2016
Provisions at 1 September	8.3	2.6
Additions for the year	0.8	7.5
Used during the year	(5.8)	(1.8)
Provisions at 31 August	3.3	8.3

The provisions primarily concern US import tariff costs related to previous years and 2016/17.

# 3.8 COMMITMENTS AND CONTINGENT LIABILITIES

EUR million	2017	2016
Operating lease commitments		
Due within 1 year	5.9	2.8
Due between 1 and 5 years	16.8	6.5
Due after 5 years	0.7	-
Total	23.4	9.3
Lease commitments relate primarily to leaseholds, car and equipment rental.		
Expensed payments relating to operating leases	6.7	4.1
Individual assets directly pledged		
Land and buildings	85.8	82.3
Plant and machinery	81.6	81.2
Book value of pledged individual assets	167.4	163.5

The recognized liabilities are based on minimum lease payments.

### Pending court and arbitration cases

Certain claims have been made against the Chr. Hansen Group. Management is of the opinion that the outcome of these disputes will not have a significant effect on the Group's financial position.

At 31 August 2017, Chr. Hansen was the opposing party in four diacetyl-related lawsuits based on alleged personal injuries as a result of exposure to diacetyl vapors and the claimant in one diacetyl-related lawsuit. Management does

not believe that diacetyl lawsuits will have a material adverse effect on the Company's financial position or operating results.

### Change of control

The loan facilities are subject to change-of-control clauses. Regarding change-of-control clauses in employment contracts, please refer to note 2.3.

### **4.1 SHARE CAPITAL**

The Company's share capital has a nominal value of DKK 1,318,524,960 (equivalent to EUR 177.3 million), divided into shares of DKK 10. The share capital has been fully paid up.

The Company has not conducted a share buy-back program in the last three years. At 31 August 2017, the company held 287,336 treasury shares, corresponding to less than 1% of the total (849,916 treasury shares at 31 August 2016, less than 1% of total shares). All of the treasury shares were held to cover share option programs.

In 2014/15, the share capital was reduced by canceling 2,647,480 treasury shares.

In 2012/13, the share capital was reduced by canceling 3,534,244 treasury shares.

Further information about the Group's policy for managing its capital can be found under "Shareholder information."

Number of shares outstanding:	2017	2016
Outstanding at 1 September	131,002,580	130,260,454
Purchased during the year	(345,000)	-
Sold during the year	907,580	742,126
Outstanding at 31 August	131,565,160	131,002,580

The Company had share capital of DKK 1,380,342,200 at 1 September 2010. It was reduced by DKK 35,342,440 in 2012/13 and DKK 26,474,800 in 2014/15.

### 4.2 FINANCIAL ASSETS AND LIABILITIES

#### **ACCOUNTING POLICIES**

Cash and cash equivalents comprise cash balances and unrestricted deposits with banks.

Financial liabilities, including mortgage loans and loans from credit institutions, are initially measured at fair value less transaction costs incurred. Subsequently, the loans are measured at amortized cost. Amortized cost is calculated as original cost less instalments plus/less the accumulated amortization of the difference between cost and nominal value. Losses and gains on loans are thus allocated over the term so that the effective interest rate is recognized in the income statement over the loan period. Financial liabilities are derecognized when settled.

The portion of the debt maturing after one year is recognized as non-current debt and the remainder as current debt.

Other debts are measured at amortized cost. However, derivative financial instruments recognized under other payables are measured at fair value. See "Derivative financial instruments" below.

For accounting purposes, lease obligations are divided into finance and 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.

Operating lease payments are recognized in the income statement on a straight-line basis over the lease term.

# **4.2 FINANCIAL ASSETS AND LIABILITIES** (CONTINUED)

Maturity	EUR million				2017
ASSETS         < 1 year			Maturity	_	
Trade receivables         150.0         -         -         150.0           Other receivables         16.0         -         16.0           Cash and cash equivalents         73.0         -         -         73.0           Total         239.0         -         -         239.0           Total         Maturity         -         -         239.0           Maturity         -         Maturity         -         -         239.0           Trade receivables         137.1         -         -         137.1           Other receivables         137.1         -         -         16.6           Cash and cash equivalents         119.8         -         -         17.6           Cash and cash equivalents         119.8         -         -         17.6           Total         Cash and cas		Maturity			
Other receivables         16.0         -         -         16.0           Cash and cash equivalents         73.0         -         -         73.0           Total         239.0         -         -         239.0           Total         Maturity         1 year         Maturity         2016           Trade receivables         137.1         -         -         55 years         75 years         75 years         117.1         16.6         -         -         16.6         -         -         117.2         -         -         117.2         -         -         -         -         -         -         -         -         -         -         -	ASSETS	< 1 year	< 5 years	> 5 years	Total
Cash and cash equivalents         73.0         -         -         73.0           Total         239.0         -         239.0           Maturity         Maturity         Maturity         1016           Total receivables         137.1         -         -         55 years         Total         117.1         -         -         117.1         -         117.1         -         -         117.1         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -         -         -         117.1         -	Trade receivables	150.0	-	-	150.0
Total         239.0           2016           Maturity	Other receivables	16.0	-	-	16.0
Maturity   Maturity   Naturity	Cash and cash equivalents	73.0	-	-	73.0
Maturity   1 year   Maturity   1 year   Maturity   1 year   Maturity   1 year   1 total   1 total   1 year   1 year   1 total   1 year	Total	239.0	-	-	239.0
Maturity   1 year   Maturity   1 year   Maturity   1 year   Maturity   1 year   1 total   1 total   1 year   1 year   1 total   1 year				Γ	2016
Maturity         >1 year         Maturity         Company         Naturity         Maturity         Naturity         <			Maturity	L	2010
Trade receivables		Maturity	> 1 year	Maturity	
Other receivables         16.6         -         -         16.6           Cash and cash equivalents         119.8         -         119.8           Total         273.5         -         -         273.5           Maturity         Maturity         Maturity         Maturity         Maturity         Maturity         Maturity         Maturity         687.4         11.9         699.3         Short-term borrowings*         36.3         -         -         36.3         Trade payables         110.4         -         -         110.4         -         -         110.4         -         -         110.4         -         -         16.3         -         -         85.7         -         -         -         85.7         -         -         -         110.4         -         -         110.4         -         -         -         85.7         -         -         -         85.7         -         -         -         85.7         -         -         -         10.3         -         -         -         -         -         -         -         -         -         -         -         -		< 1 year	< 5 years	> 5 years	Total
Cash and cash equivalents         119.8         -         -         119.8           Total         273.5         -         -         273.5           Maturity         Maturity         Maturity           LIABILITIES         <1 year         <5 years         >5 years         Total           Long-term borrowings*         -         687.4         11.9         699.3           Short-term borrowings*         36.3         -         -         36.3           Trade payables         110.4         -         -         85.7           Derivative financial instruments         -         (1.3)         -         85.7           Derivative financial instruments         -         (1.3)         -         (1.3)         -         10.3           Total         232.4         686.1         11.9         930.4         -         -         85.7         -         -         85.7         -         -         85.7         -         -         85.7         -         -         85.7         -         -         85.7         -         -         85.7         -         -         85.7         -         -         -         85.7         -         -	Trade receivables	137.1	-	-	137.1
Total         273.5         -         -         273.5           Maturity         687.4         11.9         699.3         Short-term borrowings*         36.3         -         -         36.3         110.4         -         -         85.7         -         -         85.7         -         -         85.7         -         -         -         -         -         -         -         -         -         -         -         - <t< td=""><td>Other receivables</td><td>16.6</td><td>-</td><td>-</td><td>16.6</td></t<>	Other receivables	16.6	-	-	16.6
Maturity   Naturity   Signary   Maturity   Signary   Maturity   Signary   Maturity   Signary	Cash and cash equivalents	119.8	-	-	119.8
Maturity Maturity S1 year         Maturity S1 year         Maturity Maturity S1 year         Maturity Maturity S1 year         Maturity Maturity S1 year         Total S9 years         S6 years         Total S6 years         S7 years         S6 year	Total	273.5	-	-	273.5
Maturity Maturity S1 year         Maturity S1 year         Maturity Maturity S1 year         Maturity Maturity S1 year         Maturity Maturity S1 year         Total S9 years         S6 years         Total S6 years         S7 years         S6 year					2017
LIABILITIES         < 1 year         Maturity         >1 year         Maturity           Long-term borrowings*         -         687.4         11.9         699.3           Short-term borrowings*         36.3         -         -         36.3           Trade payables         110.4         -         -         85.7           Chiter payables         85.7         -         -         85.7           Derivative financial instruments         36.3         687.4         11.9         931.7           Derivative financial instruments         -         (1.3)         -         85.7           Total         232.4         686.1         11.9         930.4           * Including future interest payments.         *         Maturity         *         2016           * Maturity         1 year         Maturity         *         7         1         63.9         1         63.0         1         1         630.9         1         1         630.9         1         1         630.9         1         630.9         1         630.9         1         630.9         1         73.7         7         7         7         7         7         7         7         7         7			Maturity		2017
Cong-term borrowings*   Congress   Congres		Maturity	=	Maturity	
Short-term borrowings*         36.3         -         -         36.3           Trade payables         110.4         -         -         110.4           Other payables         85.7         -         -         85.7           232.4         687.4         11.9         931.7           Derivative financial instruments         -         (1.3)         -         (1.3)           Total         232.4         686.1         11.9         930.4           * Including future interest payments.           Maturity         2 year         2016           Maturity         > 1 year         Maturity         Solid           Long-term borrowings*         -         605.5         25.4         630.9           Short-term borrowings*         73.7         -         -         73.7           Trade payables         109.8         -         -         109.8           Other payables         85.1         -         -         85.1           Derivative financial instruments         -         (3.5)         -         (3.5)	LIABILITIES	< 1 year	< 5 years	> 5 years	Total
Trade payables         110.4         -         -         110.4           Other payables         85.7         -         -         85.7           232.4         687.4         11.9         931.7           Derivative financial instruments         -         (1.3)         -         (1.3)           Total         232.4         686.1         11.9         930.4           * Including future interest payments.         Maturity         Maturity         2016           Maturity         1 year         Maturity         Total           Long-term borrowings*         -         605.5         25.4         630.9           Short-term borrowings*         73.7         -         -         73.7           Trade payables         109.8         -         -         85.1           Other payables         85.1         -         -         85.1           Derivative financial instruments         -         (3.5)         -         (3.5)	Long-term borrowings*	-	687.4	11.9	699.3
Other payables         85.7         -         -         85.7           Derivative financial instruments         -         (1.3)         -         (1.3)           Total         232.4         686.1         11.9         930.4           Maturity         Maturity         2016           Maturity         > 1 year         Maturity         Total           Long-term borrowings*         -         605.5         25.4         630.9           Short-term borrowings*         73.7         -         -         73.7           Trade payables         109.8         -         -         85.1           Other payables         85.1         -         -         85.1           Derivative financial instruments         -         (3.5)         25.4         899.5	Short-term borrowings*	36.3	-	-	36.3
Derivative financial instruments         232.4         687.4         11.9         931.7           Total         232.4         686.1         11.9         930.4           * Including future interest payments.           Maturity         * Maturity         * Syears         * Maturity           * Long-term borrowings*         -         605.5         25.4         630.9           Short-term borrowings*         73.7         -         -         73.7           Trade payables         109.8         -         -         85.1           Other payables         85.1         -         -         85.1           Derivative financial instruments         -         (3.5)         -         (3.5)	Trade payables	110.4	=	-	110.4
Derivative financial instruments         -         (1.3)         -         (1.3)           Total         232.4         686.1         11.9         930.4           * Including future interest payments.         Maturity         Maturity         2016           Maturity         > 1 year         Maturity         Colspan="4">Maturity         Colspan="4">Maturity         Colspan="4">Maturity         Notal         Colspan="4">Colsp	Other payables	85.7	-	-	85.7
Total         232.4         686.1         11.9         930.4           * Including future interest payments.           Maturity         1 year         Maturity         2016           Maturity         1 year         Maturity         5 years         5 years         7 Total           Long-term borrowings*         -         605.5         25.4         630.9           Short-term borrowings*         73.7         -         -         73.7           Trade payables         109.8         -         -         85.1           Other payables         85.1         -         -         85.1           Derivative financial instruments         -         (3.5)         -         (3.5)		232.4	687.4	11.9	931.7
*Including future interest payments.  **Including future	Derivative financial instruments	-	(1.3)	-	(1.3)
Maturity         Maturity         Naturity					

 $<sup>^{\</sup>star}$  Including future interest payments.

### **4.2 FINANCIAL ASSETS AND LIABILITIES**

(CONTINUED)

EUR million	2017	2016
LONG-TERM BORROWINGS		
Senior bank borrowings	651.4	576.5
Mortgages	24.2	29.0
Total before amortization of financing expenses	675.6	605.5
Capitalized financing expenses	(3.8)	(4.5)
Total long-term borrowings	671.8	601.0
SHORT-TERM BORROWINGS		
Mortgages	4.8	8.2
Bank borrowings	24.8	58.5
Total	29.6	66.7

The Group's borrowings are denominated in EUR, USD and DKK.

The terms for the bank debt include a few covenants focusing on the Group's ability to generate sufficient cash flow. The financing of each Group company is monitored

and managed at Group level. In 2016/17, the covenants have been met, and estimates for the income statement, balance sheet and cash flow statement indicate that the covenants will be met by a comfortable margin in 2017/18.

EUR million				2017
	Effective interest rate	Maturity	Carrying amount	Interest rate risk
MORTGAGES				
Floating rate*	0.12%	1-10 years	20.9	Cash flow
Fixed rate*	0.84%	0-7 years	8.1	Fair value
Total mortgages			29.0	
BANK BORROWINGS				
Floating rate		0-5 years	316.6	Cash flow
Fixed rate**		0-3 years	359.6	Fair value
Total bank borrowings			676.2	

<sup>\*</sup> Interest rate excluding margin.

The fair value of mortgages is EUR 30.5 million, whereas the fair value of bank borrowings does not differ significantly from the carrying amount. The fair value is calculated on level 2 in the fair value hierarchy using direct quotes.

<sup>\*\*</sup> Interest rate swaps have been used to fix the interest rate. These are denominated in EUR and USD and have an average interest rate of 0.68%.

### **4.2 FINANCIAL ASSETS AND LIABILITIES**

(CONTINUED)

EUR million			2017
	Interest-		
CURRENCY OF THE PRINCIPAL	bearing debt	Floating rate	Fixed rate
EUR	449.2	39%	61%
USD	126.8	33%	67%
DKK	129.2	94%	6%
Total	705.2	48%	52%

				2016
	Effective		Carrying	Interest
	interest rate	Maturity	amount	rate risk
MORTGAGES				
Floating rate*	0.07%	1-11 years	26.6	Cash flow
Fixed rate*	0.81%	0-8 years	10.7	Fair value
Total mortgages			37.3	
BANK BORROWINGS				
Floating rate		0-6 years	270.1	Cash flow
Fixed rate**		0-4 years	364.8	Fair value
Total bank borrowings			634.9	

The fair value of mortgages is EUR 38.5 million, whereas the fair value of bank borrowings does not differ significantly from the carrying amount. The fair value is calculated on level 2 in the fair value hierarchy using direct quotes.

EUR million			2016
	Interest-		
CURRENCY OF THE PRINCIPAL	bearing debt	Floating rate	Fixed rate
EUR	409.8	33%	67%
USD	134.7	33%	67%
DKK	127.7	92%	8%
Total	672.2	44%	56%

<sup>\*</sup> Interest rate excluding margin.
\*\* Interest rate swaps have been used to fix the interest rate. These are denominated in EUR and USD and have an average interest rate of 0.68%.

# 4.2 FINANCIAL ASSETS AND LIABILITIES

(CONTINUED)

### **FINANCIAL RISKS**

Being an international company, Chr. Hansen is exposed to currency and interest rate fluctuations.

Chr. Hansen's corporate Treasury department monitors and manages risks related to currency exposure and interest rate levels in accordance with the corporate Treasury Procedure approved by the Board of Directors. The procedure reflects how Chr. Hansen manages financial risks and contains rules defining not only how financial instruments are used to hedge risks, but also an acceptable level of risk exposure and use of counterparties.

### **Funding and liquidity**

Funding and adequate liquidity are fundamental factors in driving an expanding business, and management of both is an integrated part of Chr. Hansen's continuous budget and forecasting process. To ensure focus on managing the risks related to funding and liquidity, Chr. Hansen's corporate Treasury department manages and monitors funding and liquidity for the entire Group and ensures the availability of the required liquidity through cash management and uncommitted as well as committed facilities.

#### Foreign exchange

To reduce exposure to exchange rate changes, Chr. Hansen trades primarily in EUR and USD. However, trading also takes place in other currencies. Currency exposure is mainly managed by having revenue and expenses in the same currency. Where this is insufficient to manage the risk, Chr. Hansen's corporate Treasury department performs hedging in accordance with the Treasury Procedure. Please refer to note 4.3 for further information.

#### Interest rates

Interest rate risk mainly relates to interest on debt. Debt is financed at the market rate plus a margin. The risk is limited by entering into interest-hedging agreements in accordance with the Treasury Procedure (note 4.3).

#### Credit

Credit risks mainly relate to trade receivables and other receivables. The risk is limited due to Chr. Hansen's diverse customer base representing multiple industries and businesses on international markets where the Company cooperates with many large and medium-sized partners. When dealing with smaller businesses, the Company sells mainly through distributors, thus reducing the credit risk regarding these customers.

### Counterparty risk

Counterparty risk for cash, deposits and financial instruments is handled by working only with financial institutions that have a satisfactory long-term credit rating. Chr. Hansen's core financial counterparties currently have long-term credit ratings of AA or A. Chr. Hansen's Treasury Procedure also defines a credit limit for each counterparty.

## 4.3 DERIVATIVE FINANCIAL INSTRUMENTS

### **ACCOUNTING POLICIES**

Derivative financial instruments are initially recognized at fair value on the date the derivative contract is entered into and are subsequently remeasured at fair value. The fair values of derivative financial instruments are included in other receivables and other payables respectively, and positive and negative values are offset only when the Group has the right and the intention to settle financial instruments net. Fair values of derivative financial instruments are computed on the basis of current market data and generally accepted valuation methods.

Certain derivative financial instruments are designated as one of the following:

- Hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedges)
- Hedges associated with highly probable forecasted transactions (cash flow hedges)
- Hedges of a net investment in a foreign operation (net investment hedges)

Changes in the fair value of derivative financial instruments designated as and qualifying for recognition as a fair value hedge of recognized assets and liabilities are recognized in the income statement together with changes in the value of

the hedged asset or liability with respect to the hedged portion.

The effective part of changes in the fair value of derivative financial instruments used for cash flow hedges is recognized in other comprehensive income and presented as a separate reserve in equity. The reserve is transferred to the income statement on realization of the hedged transactions. If a derivative financial instrument used to hedge expected future transactions expires, is sold or no longer qualifies for hedge accounting, any accumulated fair value reserve remains in equity until the hedged transaction is concluded. If the transaction is no longer expected to be concluded, any fair value reserve accumulated under equity is transferred to the income statement.

Changes in the fair value of derivative financial instruments used for net investment hedges that effectively hedge currency fluctuations in these entities are recognized directly in the Consolidated Financial Statements in a separate translation reserve in equity.

Realized gains and losses on derivative financial instruments are recognized in the income statement as financial income or financial expenses.

#### Derivative financial instruments in the Group

The Group is exposed to market risk, primarily risks relating to currency and interest rates, and uses financial instruments to hedge recognized and future transactions. The Group only enters into hedging agreements that relate to the underlying business.

#### Interest rate risk

Interest rate swaps are used for cash flow hedging where the underlying floating interest rates are hedged. At 31 August 2017, the outstanding interest swaps had the following market value:

# **4.3 DERIVATIVE FINANCIAL INSTRUMENTS** (CONTINUED)

EUR million					2017
	Expiry	Contract amount	Gain/(loss)	Recognized in income statement	Recognized in fair value reserve
USD 100 million interest rate swaps	Nov. 2018	84.6	0.4	-	0.4
EUR 200 million interest rate swaps	Aug. 2018	200.0	(1.7)	-	(1.7)
Total		284.6	(1.3)	-	(1.3)

					2016
	Expiry	Contract amount	Gain/(loss)	Recognized in income statement	Recognized in fair value reserve
USD 100 million interest rate swaps	Nov. 2018	89.8	-	-	-
EUR 200 million interest rate swaps	Aug. 2018	200.0	(3.5)	-	(3.5)
Total		289.8	(3.5)	-	(3.5)

The fair value is calculated using a validation model, based primarily on observable market data, corresponding to level 2 in the fair value hierarchy. There is no currency risk related to the swaps for the Group.

The interest on the Group's financing facilities is based on a floating interest rate plus a margin.

EUR million	2017	2016
Outstanding debt with fixed interest rate or hedged through interest rate swaps  Total debt, average maturity in years	52% 4.4	56% 4.3
Effect on total debt of a 1 percentage point increase in interest rates	(5.5)	(5.2)
Effect on interest rate swaps of a 1 percentage point increase in interest rates	2.7	2.3
Net effect	(2.8)	(2.9)

An increase of 1 percentage point in the average interest rate on the Group's interest-bearing debt including swaps would reduce the Group's earnings before tax by EUR 2.8 million (EUR 2.9 million for 2015/16) over the next 12-

month period and have a positive effect on equity of EUR 1.7 million (EUR 3.9 million in 2015/16).

# **4.3 DERIVATIVE FINANCIAL INSTRUMENTS** (CONTINUED)

Currency hedging of balance sheet position and future cash flows

Net outstanding forward exchange contracts					2017
EUR million	Nominal principal	Gain/loss in income statement	Recognized in fair value reserve	Fair value of principal	Maximum maturity (months)
USD	17.8	0.1	-	17.7	2.0
AUD	5.3	-	-	5.3	3.0
SGD	1.9			1.9	2.0
CZK	2.1	-	-	2.1	1.0
GBP	1.6			1.6	2.0
DKK	(28.7)	-	-	(28.7)	
Total		0.1	-	(0.1)	

					2016
	Nominal principal	Gain/loss in income statement	Included in fair value reserve	Fair value of principal	Maximum maturity (months)
USD	9.9	-	-	9.9	1.0
AUD	7.1	-	-	7.1	3.0
CZK	0.7	-	-	0.7	1.0
DKK	(17.7)	-	-	(17.7)	
Total		-	-	-	

The fair value is calculated using a validation model, based primarily on observable market data, corresponding to level 2 in the fair value hierarchy. All contracts are used for fair value hedges.

The overall purpose of managing currency risk is to minimize the effect of short-term currency movements on earnings and cash flow. The Group's main currencies are EUR, USD and USD-related currencies. Exposure is limited by assets, debt and expenses to a certain degree matching the geographic segmentation of sales. Investments in subsidiaries are not hedged. The fair value is calculated using direct quotes corresponding to level 1 in the fair value hierarchy.

### FOREIGN EXCHANGE SENSITIVITY ANALYSIS

Net profit effect	2016/17	2015/16
Increase of 5%	1.2	1.3
Decrease of 5%	(1.2)	(1.3)

Financial instruments are defined as cash, trade receivables, trade payables, current and non-current loans and foreign exchange forwards.

### **5.1 SHARE-BASED PAYMENT**

#### **ACCOUNTING POLICIES**

The share programs are accounted for on an accrual basis over the service period. Share options issued are measured at fair value at the date of granting times the probability of vesting. Matching shares are measured as the value of the maximum number of matching shares to be granted times the probability of vesting. The probabilities are adjusted every year until vesting.

#### Share option programs

Long-term share option programs are granted to the Executive Board and certain key employees. Vesting is subject to fulfillment of certain key performance indicators

and continued employment at the vesting date. Each option gives the right to purchase one existing share in Chr. Hansen Holding A/S.

No share option programs were granted in 2016/17 (EUR 0 million in 2015/16).

EUR 0.2 million was expensed in 2016/17 relating to the long-term share option programs, including accelerations and reversals (EUR 1.6 million in 2015/16).

There were 44,100 outstanding exercisable share options (vested) at 31 August 2017. The average exercise price of outstanding share options is DKK 211.

Share option programs		Program 4	Program 5	Program 6
Year allocated		2012/13	2012/13	2013/14
Vesting conditions (KPIs)		EBIT and EPS	EBIT and EPS	EBIT and EPS
Exercise price		DKK 196	DKK 228	DKK 219
Vesting		Nov. 2015	April 2016	Nov. 2016
Weighted average share price during exercise period		DKK 427	DKK 413	DKK 400
Average Black-Scholes value of options		EUR 3.5	EUR 3.8	EUR 2.9
Assumptions:				
Risk-free interest rate		0.04%	0.23%	0.23%
Volatility		25.7%	23.0%	19.9%
Dividend		1.5%	1.5%	1.5%
Period		3-5 years	3-5 years	3-5 years
	Executive	Key	Former	
Number of share options	Board	employees	employees	Total
Outstanding at 31 August 2015	612,075	876,830	75,120	1,564,025
Transferred	-	(436,445)	436,445	-
Forfeited	-	-	(102,360)	(102,360)
Exercised	(250,710)	(99,660)	(214,630)	(565,000)
Outstanding at 31 August 2016	361,365	340,725	194,575	896,665
Exercised	(361,365)	(296,625)	(194,575)	(852,565)
Outstanding at 31 August 2017	-	44,100	-	44,100

# **5.1 SHARE-BASED PAYMENT** (CONTINUED)

### Matching shares program

Long-term matching shares programs are granted to the Executive Board and certain key employees.

Under the program, the participants are required to acquire a number of existing shares in Chr. Hansen Holding A/S (investment shares) and retain ownership of such shares for a predefined holding period of three years. Upon expiration of the holding period and subject to fulfillment of certain predefined performance targets and continued employment at the vesting date, the participants will be entitled to receive up to 5.5 additional shares in Chr. Hansen Holding A/S (matching shares) per investment share for no consideration.

The theoretical market value of the program in 2016/17 was EUR 2.9 million, based on fulfillment of all predefined performance targets (EUR 2.1 million in 2015/16). The fair value at grant was EUR 2.4 million, taking into consideration the assessed likelihood of meeting the no-market condition (EUR 1.6 million in 2015/16).

EUR 1.4 million was expensed in 2016/17 relating to the matching shares programs, including accelerations and reversals (EUR 0.9 million in 2015/16).

Matching shares programs		Program 1	Program 2	Program 3
Year allocated		2014/15	2015/16	2016/17
Vesting conditions (KPIs)		Org. growth, EBIT, TSR	Org. growth, EBIT, TSR	Org. growth, EBIT, TSR
Vesting		Nov. 2017	Nov. 2018	Nov. 2019
Average fair market value of matching shares		EUR 26.4	EUR 36.8	EUR 44.2
Assumptions:				
Dividend		1.5%	1.5%	1.5%
Period		3 years	3 years	3 years
TSR peer group likelihood		50.0%	50.0%	50.0%
	Executive	Key	Former	<b>+</b>
Number of matching shares	Board	employees	employees	Total
Outstanding at 31 August 2015	22,632	33,584	-	56,216
Allocated	18,892	23,424	5,064	47,380
Transferred	-	(11,684)	11,684	-
Outstanding at 31 August 2016	41,524	45,324	16,748	103,596
Allocated	22,012	29,680	2,393	54,085
Transferred	(19,728)	-	19,728	-
Outstanding at 31 August 2017	43,808	75,004	38,869	157,681

### **5.1 SHARE-BASED PAYMENT**

(CONTINUED)

**RSU** programs

#### Short-term restricted stock unit (RSU) programs

The short-term RSU programs are granted to the Executive Board and other key employees based on fulfillment of individual key performance indicators. The RSUs are granted as share options with an exercise price of DKK 1 and vest gradually over a three-year period. Subject to the person still being employed with Chr. Hansen, each share option may be exercised to purchase one existing share in Chr. Hansen Holding A/S.

Program 3

Program 4

Program 5

The value of RSUs allocated in 2016/17 (RSU program 8) is estimated to be EUR 2.9 million (EUR 2.9 million in 2015/16). The number of RSUs allocated, their value and assumptions will be finally determined in November 2017.

EUR 2.9 million was expensed in 2016/17 relating to the short-term RSU programs (EUR 2.4 million in 2015/16).

Program 7

Program 8

There were no outstanding exercisable RSUs at 31 August 2017.

Program 6

K30 programs	i iografii 5	110graili 4	i i ografii 3	Tiogramio	i iogiaiii /	Trogramo
Year allocated	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
	Nov. 2013,	Nov. 2014,	Nov. 2015,	Nov. 2016,	Nov. 2017,	Nov. 2018,
Vesting	2014 & 2015	2015 & 2016	2016 & 2017	2017 & 2018	2018 & 2019	2019 & 2020
Weighted average share price						
during exercise period	EUR 27.0	EUR 32.9	EUR 56.3	EUR 52.1	Not vested	Not granted
Average Black-Scholes value						
of options	EUR 24.2	EUR 25.8	EUR 33.8	EUR 53.5	EUR 52.3	EUR 66.7*
Assumptions:						
Risk-free interest rate,						
average	(0.21)%	(0.22)%	(0.01)%	(0.35)%	(0.57)%	
Volatility, average	21.5%	23.0%	18.8%	24.2%	21.3%	
Dividend	1.5%	1.5%	1.5%	1.0%	1.0%	
Period	2-5 years	2-5 years	2-5 years	2-5 years	2-5 years	2-5 years
* Estimated value.						
			Executive	Key	Former	
				•		
RSUs (number)			Board	employees	employees	Total
RSUs (number) Outstanding at 31 August 201	L5			•		Total <b>200,964</b>
•	L <b>5</b>		Board	employees	employees	
Outstanding at 31 August 201	L5		Board <b>21,717</b>	employees 174,529	employees	200,964
Outstanding at 31 August 201 Adjustment to allocation	1.5		<b>Board 21,717</b> 918	employees 174,529 (5,485)	employees	<b>200,964</b> (4,567)
Outstanding at 31 August 201 Adjustment to allocation Allocated	L <b>5</b>		<b>Board 21,717</b> 918 6,339	employees 174,529 (5,485) 37,322	employees 4,718	<b>200,964</b> (4,567)
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred	L <b>5</b>		Board 21,717 918 6,339	employees 174,529 (5,485) 37,322 (20,483)	employees 4,718 20,483	<b>200,964</b> (4,567) 43,661
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised			Board 21,717 918 6,339	employees 174,529 (5,485) 37,322 (20,483)	employees 4,718 20,483 (14,993)	<b>200,964</b> (4,567) 43,661 - (74,766)
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited			Board 21,717 918 6,339 - (6,782)	employees 174,529 (5,485) 37,322 (20,483) (52,991)	employees 4,718 - - 20,483 (14,993) (5,065)	200,964 (4,567) 43,661 - (74,766) (5,065)
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited Outstanding at 31 August 201			Board 21,717 918 6,339 - (6,782) - 22,192	employees 174,529 (5,485) 37,322 (20,483) (52,991) - 132,892	employees 4,718 - - 20,483 (14,993) (5,065)	200,964 (4,567) 43,661 - (74,766) (5,065) 160,227
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited Outstanding at 31 August 201 Adjustment to allocation			Board 21,717 918 6,339 - (6,782) - 22,192 342	employees 174,529 (5,485) 37,322 (20,483) (52,991) - 132,892 6,576	employees 4,718 - - 20,483 (14,993) (5,065)	200,964 (4,567) 43,661 - (74,766) (5,065) 160,227 6,918
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited Outstanding at 31 August 201 Adjustment to allocation Allocated			Board 21,717 918 6,339 - (6,782) - 22,192 342 4,386	employees 174,529 (5,485) 37,322 (20,483) (52,991) - 132,892 6,576 38,741	employees 4,718 20,483 (14,993) (5,065) 5,143	200,964 (4,567) 43,661 - (74,766) (5,065) 160,227 6,918 43,127
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred			Board 21,717 918 6,339 - (6,782) - 22,192 342 4,386 (4,558)	employees  174,529 (5,485) 37,322 (20,483) (52,991) - 132,892 6,576 38,741 (15,215)	employees 4,718 - 20,483 (14,993) (5,065) 5,143 - 19,773	200,964 (4,567) 43,661 - (74,766) (5,065) 160,227 6,918 43,127 - (55,015)
Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Forfeited Outstanding at 31 August 201 Adjustment to allocation Allocated Transferred Exercised Exercised	L <b>6</b>		Board 21,717 918 6,339 - (6,782) - 22,192 342 4,386 (4,558)	employees  174,529 (5,485) 37,322 (20,483) (52,991) - 132,892 6,576 38,741 (15,215)	employees  4,718  - 20,483 (14,993) (5,065)  5,143  - 19,773 (5,296)	200,964 (4,567) 43,661 - (74,766) (5,065) 160,227 6,918 43,127 - (55,015)

### **5.2 NON-CASH ADJUSTMENTS**

EUR million	2016/17	2015/16
Depreciation, amortization and impairment losses	61.0	56.2
Gains and losses from disposal of assets	(1.6)	(0.8)
Share-based payment	2.5	2.4
Change regarding employee benefits	0.3	(1.2)
Change in provisions	(6.6)	6.8
Total	55.6	63.4

### **5.3 ACQUISITION OF ENTITIES**

### **ACCOUNTING POLICIES**

On acquisition of subsidiaries, joint ventures and associates, the acquisition method is applied, and acquired assets, liabilities and contingent liabilities are measured on initial recognition at fair value at the time control is deemed to exist. Identifiable intangible assets are recognized if they can be separated and the fair value can be reliably measured. Deferred tax on revaluations is recognized.

Any positive differences between cost and fair value of the assets, liabilities and contingent liabilities acquired on acquisition of subsidiaries are recognized as goodwill under intangible assets. The cost is stated at the fair value of shares, debt instruments, and cash and cash equivalents. Goodwill is not amortized, but is tested annually for impairment. Negative balances (negative goodwill) are recognized in the income statement on the date of acquisition. Positive differences on acquisition of joint ventures and associates are recognized in the balance sheet under investments in joint ventures and associates.

If the initial accounting for a business combination can be determined only provisionally by the end of the period in which the combination is effected, adjustments made to the provisional fair value of acquired assets, liabilities and contingent liabilities or cost of the acquisition within 12 months of the acquisition date are reflected in the initial goodwill. The adjustment is calculated as if it had been

recognized at the acquisition date, and comparative figures are restated.

Changes in estimates of the cost of the acquisition that are contingent on future events are recognized in the income statement.

Acquired entities are recognized in the Consolidated Financial Statements from the time of the acquisition.

### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

For acquisitions of entities, the assets, liabilities and contingent liabilities of the acquiree are recognized using the acquisition method. The most significant assets acquired generally comprise goodwill, trademarks, non-current assets, 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.

### **5.3 ACQUISITION OF ENTITIES**

### (CONTINUED)

On 10 November 2016, Chr. Hansen acquired full ownership of the LGG® strain, including trademarks and related business, from Valio, Finland. The acquired business includes the LGG® trademarks and related royalties, a collection of around 3,200 strains and a small production site in Tikkurila, Finland, which currently produces the LGG® strain and a number of specialty strains for cheese, etc. The purchase consideration was paid in cash. The acquisition expands Chr. Hansen's business within microbial solutions for human health, allowing us to capture the full potential of the LGG® brand across markets for dietary supplements and infant formula offerings, as well as pursuing new opportunities in dairy. As announced, it has been decided to close down the acquired factory and move the production to other production facilities in Denmark and France.

Details of the purchase consideration, net assets acquired and goodwill are as follows:

EUR million	2016/17
PURCHASE CONSIDERATION	
Cash paid	73.0
Net assets acquired	25.6
Goodwill from acquisition	47.4

Goodwill represents synergies from innovation, sales and technology.

In accordance with IFRS 3, the acquired assets are recognized at fair value in the opening balance based on market participants' use of assets, even if the acquirer does not intend to use them or does not intend to use them in a way that is similar to what would be expected. The fair value of the assets acquired is estimated using generally accepted valuation methods, e.g. the relief-from-royalty method for trademarks and MEEM (Multi-period Excess Earnings Method) and the allowed-earnings models for technology and customer relationships.

EUR million	2016/17
FAIR VALUE OF NET ASSETS ACQUIRED	
Trademarks	5.0
Technology (patents and other rights)	16.9
Customer relations	2.4
Property, plant and equipment	2.0
Inventories	0.6
Other receivables and payables, net	(1.3)
Cash	-
Net identifiable assets acquired	25.6

The costs totaling EUR 1.4 million relating to the acquisition and integration of LGG are recognized as special items.

The acquisition of  $LGG^{\circ}$  contributed EUR 7.3 million to revenue and EUR (0.3) million to profit, including special items for the year in 2016/17. A full-year contribution from  $LGG^{\circ}$  would have resulted in EUR 1,064.0 million in revenue and EUR 223.9 million in profit for the year in 2016/17.

### **5.3 ACQUISITION OF ENTITIES**

### (CONTINUED)

On 18 February 2016, Chr. Hansen acquired full ownership and control of Nutrition Physiology Holdings LLC and Guardian Food Tech. LLC in the US (collectively NPC) in a membership deal. NPC is a US-based provider of microbial solutions to the US livestock industry. The purchase consideration was paid in cash. The acquisition expands Chr. Hansen's business within microbial solutions for animal health, particularly in the US beef cattle segment, and complements the Company's existing market position within dairy cattle, swine and poultry.

Details of the purchase consideration, net assets acquired and goodwill are as follows:

EUR million	2015/16
PURCHASE CONSIDERATION	
Cash paid	169.6
Net assets acquired	60.9
Goodwill from acquisition	108.7

Goodwill represents competencies and synergies from innovation, optimization of sales and supply chain.

In accordance with IFRS 3, the acquired assets are recognized at fair value in the opening balance based on market participants' use of assets, even if the acquirer does not intend to use them or does not intend to use them in a way that is similar to what would be expected. The fair value of the assets acquired is estimated using generally accepted valuation methods, e.g. the relief-from-royalty method for trademarks and MEEM (Multi-period Excess Earnings Method) and the allowed-earnings models for technology and customer relationships.

EUR million	2015/16
FAIR VALUE OF NET ASSETS ACQUIRED	
Trademarks	6.3
Technology (patents and other rights)	38.3
Customer relations	9.7
Property, plant and equipment	2.5
Inventories	3.0
Trade receivables (gross contractual amounts receivable: EUR 2.5 million)	2.5
Trade payables	(0.8)
Other receivables and payables, net	(0.8)
Cash	0.2
Net identifiable assets acquired	60.9

The costs totaling EUR 6.0 million relating to the acquisition and integration of NPC are recognized as special items.

The acquisition of NPC contributed EUR 13.6 million to revenue and EUR (3.4) million to profit including special items for the year in 2015/16. A full-year contribution from NPC would have resulted in EUR 962.5 million in revenue and EUR 186.4 million in profit for the year in 2015/16.

### **5.4 RELATED PARTIES**

Related parties are defined as parties with control or significant influence, including Group companies.

At 31 August 2017, Novo Holdings A/S, Denmark, held 25.7% of the share capital in Chr. Hansen Holding A/S (significant influence).

In addition, Capital Group Companies Inc., US, held 10.1% and APG Asset Management N.V., Netherlands, held 5.2%.

Other related parties include members of the Group's Executive Board and Board of Directors together with their immediate families.

All agreements relating to transactions with these parties are based on market price (arm's length). The majority of the agreements are renegotiated regularly. The Group had the following transactions with related parties:

EUR million		2016/17
TRANSACTIONS WITH RELATED PARTIES	Purchases of goods, materials and services	Financial liabilities
Novo Holdings A/S Group	4.1	0.6
		2015/16
	Purchases of goods,	Financial
	materials and services	liabilities
Novo Holdings A/S Group	3.5	1.6

Fees and other considerations to the Executive Board and Board of Directors are specified in note 2.3. Share-based payment is specified in note 5.1.

# 5.5 EVENTS AFTER THE BALANCE SHEET DATE

No events of importance to the Annual Report have occurred after the balance sheet date.

# **5.6 LIST OF GROUP COMPANIES AT 31 AUGUST 2017**

Entity	Country	Currency	Nominal capital (000)	Chr. Hansen share in %	Production	Sales	Other
Chr. Hansen Argentina S.A.I.C.	Argentina	ARS	648	98		X	
Paprika S.A.	Argentina	ARS	1,300	70			Х
Chr. Hansen Pty Ltd	Australia	AUD	1,004	100		X	
Hale-Bopp Australia Pty Ltd	Australia	AUD	30,686	100			X
Chr. Hansen Ind. e Com. Ltda.	Brazil	BRL	17,499	100	Х	X	
Chr. Hansen Limited	Canada	CAD	24	100		X	
Chr. Hansen Chile SpA	Chile	CLP	4,680	100		X	
Chr. Hansen (Tianjin) Food Ingredients							
Co. Ltd.	China	CNY	7,995	100	Х	X	
Chr. Hansen (Beijing) Trading Co., Ltd.	China	CNY	5,000	100		X	
Chr. Hansen Colombia S.A.S.	Colombia	COP	3,856,597	100		X	
	Czech						
Chr. Hansen Czech Republic s.r.o.	Republic	CZK	470	100	Х	X	
Chr. Hansen A/S	Denmark	DKK	194,101	100	Х	X	Х
Chr. Hansen Natural Colors A/S	Denmark	DKK	10,000	100	Х	X	
Chr. Hansen Properties A/S	Denmark	DKK	500	100			X
Chr. Hansen Finland Oy	Finland	EUR	3	100	Χ	X	
Chr. Hansen France SAS	France	EUR	11,100	100	Х	X	
Chr. Hansen GmbH	Germany	EUR	383	100	X	X	
Halley GmbH	Germany	EUR	25	100			X
Hansen Hellas ABEE	Greece	EUR	1,057	100		X	
Chr. Hansen India Pvt. Ltd	India	INR	24,992	99.6		X	
Chr. Hansen Ireland Limited	Ireland	EUR	1	100		X	
Chr. Hansen Italia S.p.A.	Italy	EUR	500	100	X	X	
Chr. Hansen Japan Co., Ltd.	Japan	JPY	10,000	100		X	
Chr. Hansen Malaysia SDN. BHD.	Malaysia	MYR	1,000	100		X	
Chr. Hansen de Mexico S.A. de C.V.	Mexico	MXN	25,878	100		X	
Chr. Hansen S.A.	Peru	PEN	1,842	100	X	X	
Chr. Hansen Poland Sp. z o.o.	Poland	PLN	8,950	100		X	
Chr. Hansen SRL	Romania	RON	4	100		X	
Chr. Hansen LLC	Russia	RUB	10,972	100		X	
Chr. Hansen Singapore Pte Ltd.	Singapore	SGD	1,000	100			Х
Chr. Hansen, S.L.	Spain	EUR	8,926	100		X	
Chr. Hansen Sweden AB	Sweden	SEK	1,000	100		X	
Chr. Hansen Gida Sanayi ve Ticaret A.S.	Turkey	TRY	140	100		X	
Chr. Hansen Ukraine L.L.C.	Ukraine	UAH	32	100		X	
Chr. Hansen Middle East FZ-LLC	UAE	AED	500	100		X	
Chr. Hansen (UK) Limited	UK	GBP	250	100		X	
Chr. Hansen Inc.	US	USD	-	100	X	Х	

# ANNUAL REPORT 2016/17 FINANCIAL STATEMENTS PARENT COMPANY

### THE INGREDIENT THAT FIRST MEETS THE EYE



### FINANCIAL STATEMENTS - PARENT

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# FINANCIAL STATEMENTS - PARENT INCOME STATEMENT

### 1 SEPTEMBER - 31 AUGUST

EUR million	Note	2016/17	2015/16
Revenue		-	-
Cost of sales		-	-
Gross profit		-	-
Sales and marketing expenses	2.1	(3.2)	(3.0)
Administrative expenses	2.1 - 2.2 - 2.3	(15.3)	(17.1)
Other operating income		19.5	22.9
Other operating expenses		(0.1)	-
Operating profit before special items		0.9	2.8
Special items	2.4	-	(1.7)
Operating profit		0.9	1.1
Dividends received from Group companies		138.7	137.4
Impairment loss, Group companies	3.2	-	(15.0)
Financial income	2.5	17.4	13.5
Financial expenses	2.6	(21.3)	(17.1)
Profit before tax		135.7	119.9
Income taxes	2.7	(1.1)	(0.4)
Profit for the year		134.6	119.5

# FINANCIAL STATEMENTS - PARENT **STATEMENT OF COMPREHENSIVE INCOME**

### 1 SEPTEMBER - 31 AUGUST

EUR million	Note	2016/17	2015/16
Profit for the year		134.6	119.5
Items that will be reclassified subsequently to the income statement when specific conditions are met:			
Currency translation to presentation currency		1.3	2.2
Deferred gains/(losses) on cash flow hedges arising during the year		(0.4)	(2.5)
Gains/(losses) on cash flow hedges expiring during the year		1.7	1.9
Tax related to cash flow hedges		0.5	0.1
Other comprehensive income for the year		3.1	1.7
Total comprehensive income for the year		137.7	121.2

# FINANCIAL STATEMENTS - PARENT BALANCE SHEET

### AT 31 AUGUST

EUR million	Note	2017	2016
ASSETS			
Non-current assets			
Intangible assets			
Software	3.1	0.5	0.3
Intangible assets in progress	3.1	-	0.3
Total intangible assets		0.5	0.6
Fixed asset investments			
Investments in Group companies	3.2	948.9	944.5
Receivables from Group companies	3.3	169.2	197.9
Total fixed asset investments		1,118.1	1,142.4
Other non-current assets			
Deferred tax	2.7	2.7	2.3
Total other non-current assets		2.7	2.3
Total non-current assets		1,121.3	1,145.3
Current assets			
Receivables			
Receivables from Group companies		82.8	73.1
Tax receivables		45.6	55.3
Other receivables		0.7	0.2
Prepayments		0.1	0.1
Total receivables		129.2	128.7
Cash and cash equivalents		4.4	7.4
Total current assets		133.6	136.1
Total assets		1,254.9	1,281.4

# FINANCIAL STATEMENTS - PARENT BALANCE SHEET

### AT 31 AUGUST

EUR million	Note <b>2017</b>	2016
EQUITY AND LIABILITIES		
Equity		
Share capital	4.1 177.3	177.2
Reserves	399.8	444.1
Total equity	577.1	621.3
Liabilities		
Non-current liabilities		
Borrowings	647.7	573.3
Payables to Group companies	-	19.8
Total non-current liabilities	647.7	593.1
Current liabilities		
Borrowings	22.4	56.0
Trade payables	0.8	3.9
Other payables	6.9	7.1
Total current liabilities	30.1	67.0
Total liabilities	677.8	660.1
Total equity and liabilities	1,254.9	1,281.4
Commitments and contingent liabilities	3.4	
Derivative financial instruments	4.2	
Credit, currency and interest rate risk	4.3	
Related parties	5.3	
Events after the balance sheet date	5.4	

# FINANCIAL STATEMENTS - PARENT STATEMENT OF CHANGES **IN EQUITY**

### 1 SEPTEMBER - 31 AUGUST

EUR million					2016/17
	Note	Share capital	Cash flow hedges	Retained earnings	Total
Equity at 1 September 2016		177.2	(3.7)	447.8	621.3
Total comprehensive income for the year, cf. statement of comprehensive income		0.1	1.8	135.8	137.7
Transactions with owners:					
Purchase of treasury shares		-	-	(20.1)	(20.1)
Exercised share options		-	-	23.5	23.5
Share-based payment	5.1	-	-	2.5	2.5
Tax related to share-based payment		-	-	4.4	4.4
Dividend		-	-	(192.2)	(192.2)
Equity at 31 August 2017		177.3	(1.9)	401.7	577.1

During the year, an ordinary dividend for the financial year 2015/16 of EUR 0.70 (DKK 5.23) per share, corresponding to EUR 92 million, and an extraordinary dividend of EUR 0.76 (DKK 5.64) per share, corresponding to EUR 100 million, were paid. A dividend of EUR 0.85 (DKK 6.33), corresponding to EUR 112 million in total, is proposed for 2016/17.

					2015/16
			Cash flow	Retained	
	Note	Share capital	hedges	earnings	Total
Equity at 1 September 2015		176.7	(3.2)	382.2	555.7
Total comprehensive income for the year, cf. statement of comprehensive income		0.5	(0.5)	121.2	121.2
Transactions with owners:					-
Exercised share options		-	-	17.5	17.5
Share-based payment	5.1	-	-	4.4	4.4
Tax related to share-based payment		-	-	4.6	4.6
Dividend		-	-	(82.1)	(82.1)
Equity at 31 August 2016		177.2	(3.7)	447.8	621.3

During the year, an ordinary dividend for the financial year 2014/15 of EUR 0.63 (DKK 4.70) per share, corresponding to EUR 82 million, was paid.

# FINANCIAL STATEMENTS - PARENT CASH FLOW STATEMENT

## 1 SEPTEMBER - 31 AUGUST

EUR million	Note	2016/17	2015/16
Operating profit		0.9	1.1
Non-cash adjustments	5.2	2.7	(12.4)
Change in working capital		(3.8)	5.5
Interest payments received		6.7	6.7
Interest payments made		(8.1)	(9.4)
Dividends received		138.7	137.4
Taxes paid		(27.1)	(42.3)
Cash flow from operating activities		110.0	86.6
Investments in intangible assets		(0.1)	-
Investments in Group companies	3.2	(4.1)	(151.4)
Cash flow used for investing activities		(4.2)	(151.4)
Free cash flow		105.8	(64.8)
Repayment to/from Group companies		34.2	21.1
Borrowings		208.0	132.8
Repayment of long-term loans		(163.3)	(18.7)
Exercise of options		24.6	17.5
Purchase of treasury shares, net		(20.1)	-
Dividends paid		(192.2)	(82.1)
Cash flow used for financing activities		(108.8)	70.6
Net cash flow for the year		(3.0)	5.8
Cash and cash equivalents at 1 September		7.4	1.6
Net cash flow for the year		(3.0)	5.8
Cash and cash equivalents at 31 August		4.4	7.4

## 1.1 GENERAL ACCOUNTING POLICIES

#### **ACCOUNTING POLICIES**

The Financial Statements of Chr. Hansen Holding A/S as Parent Company have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and additional further requirements in the Danish Financial Statement act applying to entities of reporting class D.

The accounting policies for the Company are the same as for the Chr. Hansen Group, cf. notes to the Consolidated Financial Statements, with the exception of the following.

#### Other income and expenses

Other income and expenses comprise income that is of a secondary nature to the activities of the Company, including income from management and service agreements.

#### **Investments in Group companies**

Accounting policies for investments in Group companies and related transactions are presented in note 3.2.

## 1.2 SUMMARY OF KEY ACCOUNTING ESTIMATES

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

In preparing the Financial Statements for Chr. Hansen Holding A/S, Management makes various accounting estimates and assumptions that form the basis of recognition and measurement of the Parent Company's assets and liabilities.

The most significant accounting estimates and judgments for the Chr. Hansen Group are presented in notes to the Consolidated Financial Statements.

Other accounting estimates and judgments considered key for the Company are:

· Investments in Group companies (note 3.2)

#### **Estimation uncertainty**

Determining the carrying amount of some assets and liabilities requires judgments, estimates and assumptions to be made concerning future events.

The judgments, estimates and assumptions made are based on historical experience and other factors that Management assesses to be reliable, but which by their very nature are associated with uncertainty and unpredictability. These assumptions may prove incomplete or incorrect, and unexpected events or circumstances may arise.

Assumptions about the future and estimation uncertainty on the balance sheet date are described in the notes where there is a significant risk of changes that could result in material adjustments to the carrying amount of assets or liabilities within the next financial year.

#### Judgments in applying accounting policies

In applying the Group's accounting policies, Management makes judgments that may significantly influence the amounts recognized in the Financial Statements.

## 2.1 DEPRECIATION, AMORTIZATION AND IMPAIRMENT LOSSES

EUR million	2016/17	2015/16
AMORTIZATION		
Intangible assets		
Administrative expenses	(0.2)	(0.2)
Total depreciation, amortization and impairment losses	(0.2)	(0.2)

### **2.2 STAFF EXPENSES**

EUR million	2016/17	2015/16
Wages and salaries, etc.	(12.7)	(12.6)
Pension expenses - defined contribution plans	(0.6)	(0.7)
Social security, etc.	(0.1)	-
Salaries and other remuneration of the Executive Board and		
Board of Directors of Chr. Hansen Holding A/S	(4.2)	(4.6)
Total	(17.6)	(17.9)
Average number of employees	50	49
Remuneration of the Executive Board and Board of Directors:		
Executive Board  Executive Board		
	(2.1)	(2.1)
Executive Board	(2.1) (0.3)	(2.1) (0.3)
Executive Board Salaries, etc.		
Executive Board Salaries, etc. Pension - defined contribution plans	(0.3)	(0.3)
Executive Board Salaries, etc. Pension - defined contribution plans Share-based payment Total	(0.3) (0.8)	(0.3) (1.3)
Executive Board Salaries, etc. Pension - defined contribution plans Share-based payment	(0.3) (0.8)	(0.3) (1.3)

### 2.3 FEES TO AUDITORS

EUR million	2016/17	2015/16
PricewaterhouseCoopers		
Statutory audit	(0.1)	(0.2)
Tax advisory services	-	(0.1)
Total	(0.1)	(0.3)

### **2.4 SPECIAL ITEMS**

EUR million	2016/17	2015/16
Cost related to the acquisition and integration of NPC	_	(0.9)
Other	-	(0.8)
Total	-	(1.7)

## **2.5 FINANCIAL INCOME**

EUR million	2016/17	2015/16
Interest from Group companies	6.8	6.7
Foreign exchange gains on derivatives	1.9	2.0
Foreign exchange gains	8.7	4.8
Total	17.4	13.5
F(( ))		

Effective interest income amounted to EUR 0.0 million (EUR 0.0 million in 2015/16).

## **2.6 FINANCIAL EXPENSES**

EUR million	2016/17	2015/16
Interest paid to Group companies	(0.4)	(0.2)
Foreign exchange losses on derivatives	(1.2)	(2.6)
Interest expenses	(7.0)	(7.3)
Foreign exchange losses	(8.9)	(2.9)
Losses on derivatives transferred from other comprehensive income	(1.7)	(1.9)
Other financial expenses including amortized costs	(2.1)	(2.2)
Total	(21.3)	(17.1)

Effective interest expenses amounted to EUR 9.5 million (EUR 10.3 million in 2015/16).

## 2.7 INCOME TAXES AND DEFERRED TAX

EUR million	2016/17	2015/16
Current tax on profit for the year	(1.1)	-
Change in deferred tax concerning profit for the year	0.5	0.3
Tax on profit for the year	(0.6)	0.3
Adjustments concerning previous years	(0.5)	(0.7)
Tax in the income statement	(1.1)	(0.4)
Tax on other comprehensive income	0.5	0.1

		2016/17		2015/16
Reconciliation of tax rate				
Danish tax rate	22.0%	(29.9)	22.0%	(26.4)
Non-taxable income and non-deductible expenses	(21.8)%	29.5	(22.5)%	27.0
Adjustments concerning previous years	0.4%	(0.5)	0.6%	(0.7)
Other taxes	0.2%	(0.2)	0.3%	(0.3)
Effective tax rate	0.8%		0.3%	
Tax on profit for the year		(1.1)		(0.4)

#### Deferred tax

EUR million	2016/17	2015/16
Deferred tax at 1 September	2.3	2.2
Change in deferred tax - recognized in the income statement	0.3	0.3
Adjustment concerning previous years	0.1	(0.2)
Deferred tax asset at 31 August	2.7	2.3
Specification of deferred tax		
Intangible assets	(0.1)	(0.1)
Current assets	0.3	-
Liabilities	2.5	2.4
Total deferred tax at 31 August	2.7	2.3

### **3.1 INTANGIBLE ASSETS**

EUR million			2017
		Intangible assets in	
	Software	progress	Total
Cost at 1 Santagehay	2.1	0.3	2.4
Cost at 1 September			
Additions for the year	0.1	- (0.2)	0.1
Transferred	0.3	(0.3)	-
Cost at 31 August	2.5	-	2.5
Amortization at 1 September	(1.8)	-	(1.8)
Amortization for the year	(0.2)	-	(0.2)
Carrying amount at 31 August	0.5	-	0.5
			2016
Cost at 1 September	2.1	0.3	2.4
Cost at 31 August	2.1	0.3	2.4
Amortization at 1 September	(1.6)	-	(1.6)
Amortization for the year	(0.2)	-	(0.2)
Amortization at 31 August	(1.8)	-	(1.8)
Carrying amount at 31 August	0.3	0.3	0.6

#### Software

Software comprises expenses for acquiring software licenses and expenses related to internal development of software within the Group.

The value of the recognized software has been compared to the expected value in use. No indications of impairment have been identified.

## 3.2 INVESTMENTS IN GROUP COMPANIES

#### **ACCOUNTING POLICIES**

#### **Dividends from Group companies**

Dividends from Group companies are recognized as income in the income statement of the Parent Company in the financial year in which the dividend is declared. If the carrying amount of an investment in a subsidiary exceeds the carrying amount of the net assets in the subsidiary's financial statements, or the dividend exceeds the total comprehensive income of the subsidiary in the period in which the dividend is declared, the carrying amount of the subsidiary is tested for impairment.

#### **Investments in Group companies**

Investments in Group companies are measured at cost. If the cost exceeds the recoverable amount, it is written down.

#### KEY ACCOUNTING ESTIMATES AND JUDGMENTS

Management performs an annual test for indications of impairment of investments in Group companies. Impairment tests are conducted in the same way as for goodwill in the Chr. Hansen Group, cf. note 3.1 to the Consolidated Financial Statements.

There were no indications of impairment of the investments in 2016/17. (An impairment loss of EUR 15.0 million related to the investments in the Turkish subsidiary was recognized in the income statement at 31 August 2016.)

EUR million	2017	2016
Cost at 1 September	944.5	805.6
Currency translation	0.3	2.5
Additions for the year	4.1	151.4
Impairment losses	-	(15.0)
Cost at 31 August	948.9	944.5

See note 5.6 to the Consolidated Financial Statements for a list of Group companies.

The additions relate to a capital contribution in Chr. Hansen Finland Oy to finance the acquisition and integration of LGG<sup>®</sup>. (In 2015/16, most of the additions related to a capital contribution in Chr. Hansen A/S to finance the NPC acquisition.) In August 2016, Chr. Hansen Holding A/S

acquired 100% of the shares in Chr. Hansen Finland Oy. The purchase consideration was paid in cash. There was no activity in the Finnish company in 2015/16.

## 3.3 RECEIVABLES FROM GROUP COMPANIES

EUR million	2017	2016
Due between 1 and 5 years		
Loans to Group companies	169.2	197.9
Total	169.2	197.9

## 3.4 COMMITMENTS AND CONTINGENT LIABILITIES

#### Operating leases

Lease commitments primarily relate to car and equipment rental; EUR 0.2 million is due within 1 year and EUR 0.2 million is due between 1 and 5 years (EUR 0.2 million due within 1 year and EUR 0.3 million due between 1 and 5 years in 2015/16). Payments of EUR 0.3 million were expensed in 2016/17 (EUR 0.3 million in 2015/16).

#### Other guarantees and liabilities

Chr. Hansen Holding A/S is jointly and severally liable for Chr. Hansen A/S's drawings on the Group's credit facility. Chr. Hansen A/S had no drawings at 31 August 2017 or at 31 August 2016.

#### Pending court and arbitration cases

Certain claims have been made against Chr. Hansen Holding A/S. Management is of the opinion that the outcome of these disputes will not have a significant impact on the Company's financial position.

#### Change of control

The loan facilities are subject to change-of-control clauses. Regarding change-of-control clauses in Management contracts, please see note 2.3 to the Consolidated Financial Statements.

#### **4.1 SHARE CAPITAL**

The Company's share capital has a nominal value of DKK 1,318,524,960 (equivalent to EUR 177.3 million), divided into shares of DKK 10. The share capital has been fully paid up.

The Company has not conducted a share buy-back program in the last three years. At 31 August 2017, the Company held 287,336 treasury shares (849,916 treasury shares at 31 August 2016). All of the treasury shares were held to cover share option programs.

In 2014/15, the share capital was reduced by canceling 2,647,480 treasury shares.

In 2012/13, the share capital was reduced by canceling 3,534,244 treasury shares.

Further information about the Group's policy for managing its capital can be found under "Shareholder information."

Number of shares outstanding:	2017	2016
Outstanding at 1 September	131,002,580	130,260,454
Purchase of treasury shares	(345,000)	-
Sold during the year	907,580	742,126
Outstanding at 31 August	131,565,160	131,002,580

The Company had share capital of DKK 1,380,342,200 at 1 September 2010. It was reduced by DKK 35,342,440 in 2012/13 and by DKK 26,474,800 in 2014/15.

#### **4.2 DERIVATIVE FINANCIAL INSTRUMENTS**

Chr. Hansen Holding A/S is exposed to market risks, primarily risks relating to currency and interest, and uses financial instruments to hedge recognized and future transactions. Chr. Hansen Holding A/S only enters into hedging agreements that relate to the underlying business.

#### Interest rate risk

Interest rate swaps are used for cash flow hedging by hedging the underlying floating interest rates. At 31 August 2017, the outstanding interest swaps had the following market value:

EUR million					2017
Market value of open interest rate swaps	Expiry	Contract amount	Gain/(loss)	Recognized in income statement	Recognized in fair value reserve
USD 100 million interest rate swaps	Nov. 2018	84.6	0.4	-	0.4
EUR 200 million interest rate swaps	Aug. 2018	200.0	(1.7)	-	(1.7)
Total		284.6	(1.3)	-	(1.3)
					2016
		Contract		Recognized in income	Recognized in fair value
	Expiry	amount	Gain/(loss)	statement	reserve
USD 100 million interest rate swaps	Nov. 2018	89.8	-	-	-
EUR 200 million interest rate swaps	Aug. 2018	200.0	(3.5)	-	(3.5)
Total		289.8	(3.5)	-	(3.5)

The fair value is calculated using a valuation model, based primarily on observable market data, corresponding to level 2 in the fair value hierarchy. There is no currency risk related to the swaps for the Company.

The interest on the Company's financing facilities is based on a floating interest rate plus a margin. At 31 August 2017, 52% of outstanding debt was hedged through interest rate swaps or loans at fixed interest rates (58% at 31 August 2016). The total debt had an average maturity of 4.3 years at 31 August

2017 (4.3 years at 31 August 2016). An increase of 1 percentage point in the average interest rate on the Company's interest-bearing debt excluding swaps would reduce the Company's earnings before tax by EUR 5.3 million over the next 12-month period (EUR 4.9 million in the financial year 2015/16). The effect of a 1 percentage point interest rate change on the swaps entered into would be EUR 2.6 million (EUR 2.9 million in 2015/16).

## **4.2 DERIVATIVE FINANCIAL INSTRUMENTS** (CONTINUED)

EUR million	2017	2016
Financial assets		
Receivables from Group companies	82.8	73.1
Tax receivables	45.6	55.3
Other receivables and prepayments	0.8	0.3
Cash and cash equivalents	4.4	7.4
Total financial assets	133.6	136.1
Financial liabilities		
Borrowings	670.1	629.3
Trade payables	0.8	3.9
Other financial liabilities	6.9	26.9
Financial liabilities	677.8	660.1
Classification of financial assets		
Loans and receivables	133.6	136.1
Total	133.6	136.1
Classification of financial liabilities		
Financial liabilities measured at amortized cost	677.8	660.1
Total	677.8	660.1
EUR million	2017	2016
Maturity analysis for financial liabilities		
Borrowings		
0-1 year	22.4	56.0
1-5 years	647.7	562.2
> 5 years	-	11.1
Trade payables		
0-1 year	0.8	3.9
Other financial liabilities		
0-1 year	6.9	7.1
1-5 years	-	19.8
Total	677.8	660.1
Average interest rate	0.9%	1.2%
Borrowings have been reduced by amortization and financing expenses.		
Amortization expenses offset under non-current debt	3.7	4.4

## 4.3 CREDIT, CURRENCY AND INTEREST RATE RISK

#### Credit risk

Credit risk for cash and cash equivalents and financial instruments is managed by working only with financial institutions that have a satisfactory credit rating. In general, the risk is considered limited.

#### **Currency risk**

The overall purpose of managing currency risk is to minimize the impact of short-term currency movements on earnings and cash flow. The main exchange rate risk for the Company is loans denominated in USD.

It is the policy of the Company not to hedge investments in subsidiaries.

#### Interest risk

The interest on the Company's multicurrency loan facility is based on a floating interest rate plus a margin. Interest rate swaps are utilized to reduce the risk relating to the income statement. 52% of the outstanding debt was hedged through interest rate swaps at 31 August 2017 (58% at 31 August 2016).

#### Cash flow risk

Chr. Hansen Holding A/S's interest-bearing debt amounted to EUR 673.8 million at 31 August 2017 (EUR 626.3 million at 31 August 2016).

#### **5.1 SHARE-BASED PAYMENT**

#### Share option programs

Long-term share option programs are granted to the Executive Board and certain key employees. Vesting is subject to fulfillment of certain key performance indicators and continued employment at the vesting date. Each option gives the right to purchase one existing share in Chr. Hansen Holding A/S.

No share option programs were granted in 2016/17 or in 2015/16.

EUR 0.1 million was expensed in 2016/17 relating to the long-term share option programs, including accelerations and reversals (EUR 1.3 million in 2015/16).

There were 19,100 outstanding exercisable share options at 31 August 2017. The average exercise price of outstanding share options is DKK 211.

Share option programs	Program 4	Program 5	Program 6
Year allocated	2012/13	2012/13	2013/14
Vesting conditions (KPIs)	EBIT and EPS	EBIT and EPS	EBIT and EPS
Exercise price	DKK 196	DKK 228	DKK 219
Vesting	Nov. 2015	Apr. 2016	Nov. 2016
Weighted average share price during exercise period	DKK 427	DKK 413	DKK 400
Average Black-Scholes value of options	EUR 3.5	EUR 3.8	EUR 2.9
Assumptions:			
Risk-free interest rate	0.04%	0.23%	0.23%
Volatility	25.7%	23.0%	19.9%
Dividend	1.5%	1.5%	1.5%
Period	3-5 years	3-5 years	3-5 years

Number of share options	Executive Board	Key employees	Former employees	Total
Outstanding at 31 August 2015	612,075	670,785	75,120	1,357,980
Transferred	-	(436,445)	436,445	-
Forfeited	-	-	(102,360)	(102,360)
Exercised	(250,710)	(99,660)	(214,630)	(565,000)
Outstanding at 31 August 2016	361,365	134,680	194,575	690,620
Transferred	-	-	-	-
Forfeited	-	-	-	-
Exercised	(361,365)	(115,580)	(194,575)	(671,520)
Outstanding at 31 August 2017	-	19,100	-	19,100

### **5.1 SHARE-BASED PAYMENT**

(CONTINUED)

#### Matching shares programs

Long-term matching shares programs are granted to the Executive Board and certain key employees. Under the programs, the participants are required to acquire a number of existing shares in Chr. Hansen Holding A/S (investment shares) and retain ownership of such shares for a predefined holding period of three years (the holding period). Upon expiration of the holding period and subject to fulfillment of certain predefined performance targets and continued employment at the vesting date, the participants will be entitled to receive up to four additional shares in Chr. Hansen Holding A/S (matching shares) per investment share for no consideration.

The theoretical market value of the program in 2016/17 was EUR 2.5 million based on fulfillment of all predefined performance targets (EUR 1.7 million in 2015/16). The fair value at grant was EUR 2.1 million, taking into consideration the assessed likelihood of meeting the no-market condition (EUR 1.3 million in 2015/16).

EUR 1.1 million was expensed in 2016/17 relating to the matching shares programs, including accelerations and reversals (EUR 0.7 million in 2015/16).

Matching shares programs		Program 1	Program 2	Program 3
Year allocated		2014/15	2015/16	2015/16
		Org. growth,	Org. growth,	Org. growth,
Vesting conditions (KPIs)		EBIT, TSR	EBIT, TSR	EBIT, TSR
Vesting		Nov. 2017	Nov. 2018	Nov. 2019
Average fair market value of matching shares		EUR 26.4	EUR 36.8	EUR 44.17
Assumptions:				
Dividend		1.5%	1.5%	1.5%
Period		3 years	3 years	3 years
TSR peer group likelihood		50.0%	50.0%	50.0%
	Executive	Key	Former	
Number of matching shares	Board	employees	employees	Total
Outstanding at 31 August 2015	22,632	20,428	-	43,060
Allocated	18,892	8,796	5,064	32,752
Transferred	-	(11,684)	11,684	-
Outstanding at 31 August 2016	41,524	17,540	16,748	75,812
Allocated	22,012	12,887	2,393	37,292
Transferred	(19,728)	-	19,728	-
Outstanding at 31 August 2017	43,808	30,427	38,869	113,104

### **5.1 SHARE-BASED PAYMENT**

(CONTINUED)

#### Short-term restricted stock unit (RSU) programs

Short-term RSU programs are granted to the Executive Board and other key employees based on fulfillment of individual key performance indicators and continued employment at the vesting date. The RSUs are granted as share options with an exercise price of DKK 1 and vest gradually over a three-year period. Subject to the person still being employed with Chr. Hansen, each share option may be exercised to purchase one existing share in Chr. Hansen Holding A/S.

The value of RSUs allocated in 2016/17 (RSU program 8) is estimated to be EUR 0.7 million (EUR 0.8 million in 2015/16). The number of RSUs allocated, their value and assumptions behind this will be finally determined in November 2017.

EUR 0.9 million was expensed in 2016/17 relating to the short-term RSU programs (EUR 0.8 million in 2015/16).

There were no outstanding exercisable RSUs at 31 August 2017.

RSU programs	Program 3	Program 4	Program 5	Program 6	Program 7	Program 8
Year allocated	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
	Nov. 2013,	Nov. 2014,	Nov. 2015,	Nov. 2016,	Nov. 2017,	Nov. 2018,
Vesting	2014 & 2015	2015 & 2016	2016 & 2017	2017 & 2018	2018 & 2019	2019 & 2020
Weighted average share price						
during exercise period	EUR 27.0	EUR 32.7	EUR 55.3	EUR 52.8	Not vested	Not granted
Average Black-Scholes value						
of options	EUR 24.2	EUR 25.8	EUR 33.8	EUR 53.5	EUR 52.3	EUR 66.7*
Assumptions:						
Risk-free interest rate,						
average	(0.21)%	(0.22)%	(0.01)%	(0.35)%	(0.57)%	
Volatility, average	21.5%	23.0%	18.8%	24.2%	21.3%	
Dividend	1.5%	1.5%	1.5%	1.0%	1.0%	
Period	2-5 years					

<sup>\*</sup> Estimated value.

	Executive	Key	Former	
RSUs (number)	Board	employees	employees	Total
Outstanding at 31 August 2015	21,717	32,919	1,273	55,909
Adjustment to allocation	918	(2,380)	=	(1,462)
Allocated	6,339	8,542	=	14,881
Transferred	-	(12,796)	12,796	-
Exercised	(6,782)	(5,173)	(9,565)	(21,520)
Forfeited	-	-	(1,367)	(1,367)
Outstanding at 31 August 2016	22,192	21,112	3,137	46,441
Adjustment to allocation	342	(3,504)	5	(3,157)
Allocated	4,386	5,897	-	10,283
Transferred	(4,558)	-	4,558	-
Exercised	(7,754)	(5,487)	(2,125)	(15,366)
Outstanding at 31 August 2017	14,608	18,018	5,575	38,201

#### **5.2 NON-CASH ADJUSTMENTS**

EUR million	2016/17	2015/16
Depreciation, amortization and impairment losses	0.2	0.2
Share-based payment	2.5	2.4
Impairment of subsidiaries	-	(15.0)
Total	2.7	(12.4)

### **5.3 RELATED PARTIES**

Related parties are defined as parties with control or significant influence, including Group companies.

At 31 August 2017, Novo Holdings A/S, Denmark, held 25.7% of the share capital in Chr. Hansen Holding A/S (significant influence).

In addition, Capital Group Companies Inc., US, held 10.1% and APG Asset Management N.V., Netherlands, held 5.2%.

Other related parties include members of the Group's Executive Board and Board of Directors together with their immediate families.

#### Transactions with Group companies

EUR million	2016/17	2015/16
Sale of services	19.5	22.9
Interest income	6.8	6.7
Interest expenses	(0.4)	(0.2)
Total	25.9	29.4
Amounts receivable at 31 August	252.0	271.0
Amounts payable at 31 August	-	19.8

Transactions with other related parties are specified in note 5.4 to the Consolidated Financial Statements.

## 5.4 EVENTS AFTER THE BALANCE SHEET DATE

No events have occurred after the balance sheet date of importance to the Annual Report.