FINANCIAL REPORT

Financial Report Bühler Group

Consolidated income statement

	Notes	2017 CHF m	2016 CHF m
Revenue	3.1	2,671.7	2,448.6
Other operating income	3.2	21.4	22.0
Total operating income		**2,693.1**	**2,470.6**
Cost of materials		–1,226.0	–1,047.4
Changes in inventories of finished goods and work in progress		55.2	5.1
Employee benefit expenses	3.3	–825.7	–793.2
Other operating expenses	3.4	–441.3	–408.2
Net result from associates	4.3	2.0	4.6
Operating result before interest, taxes, depreciation and amortization (EBITDA)		**257.3**	**231.5**
Depreciation and amortization	4.1/4.2	–52.5	–57.9
Operating result before interest and taxes (EBIT)		**204.8**	**173.6**
Interest income and expenses	3.5	2.7	3.0
Other financial income and expenses	3.5	10.7	3.2
Financial result		**13.4**	**6.2**
Profit before taxes		**218.2**	**179.8**
Income taxes	3.6	–44.0	–36.5
Net profit		**174.2**	**143.3**
Attributable to:			
– Owners of the parent		168.3	136.3
– Non-controlling interests		5.9	7.0

Consolidated statement of other comprehensive income

	Notes	2017 CHF m	2016 CHF m
Net profit		**174.2**	**143.3**
Other comprehensive income			
Translation differences of foreign operations		6.2	–5.2
Net gain (loss) on hedge of net investment		20.9	–1.1
– Tax effect		–1.6	0.1
Cash flow hedges			
– Change in cash flow hedges		15.2	2.4
– Tax effect		–2.5	–0.4
Other comprehensive income to be reclassified to profit or loss in subsequent periods		**38.2**	**–4.2**
Remeasurements of defined benefit plans	4.12.3	101.4	–1.0
– Tax effect		–18.4	1.6
Other comprehensive income not to be reclassified to profit or loss in subsequent periods		**83.0**	**0.6**
Total other comprehensive income		**121.2**	**–3.6**
Total comprehensive income		**295.4**	**139.7**
Attributable to:			
– Owners of the parent		289.0	133.5
– Non-controlling interests		6.4	6.2

Consolidated balance sheet

Assets	Notes	2017 CHF m	2016 CHF m
Property, plant and equipment	4.1	471.8	415.1
Intangible assets	4.2	266.6	261.6
Investments in associates	4.3	27.5	33.5
Long-term financial assets	4.4	175.8	108.9
Deferred tax assets	3.6.4	46.4	43.0
Non-current assets		**988.1**	**862.1**
Assets classified as held for sale	4.3	25.7	0.0
Inventories	4.5	445.3	365.6
Net assets of production orders in progress	4.6	376.1	326.9
Trade accounts receivable	4.7	583.9	532.3
Other accounts receivable, prepayments and accrued income	4.7	137.8	131.0
Current income tax assets		3.7	6.6
Marketable securities	2.3.2	63.4	60.2
Cash and cash equivalents	4.8	832.5	431.3
Current assets		**2,468.4**	**1,853.9**
Total assets		**3,456.5**	**2,716.0**

Equity and liabilities	Notes	2017 CHF m	2016 CHF m
Share capital	4.13	15.0	15.0
Capital reserves		185.1	185.1
Other reserves/retained earnings		1,321.2	1,048.2
Equity attributable to the owners of the parent		**1,521.3**	**1,248.3**
Non-controlling interests		**28.5**	**28.2**
Total equity		**1,549.8**	**1,276.5**
Long-term financial liabilities	2.2	530.8	122.7
Deferred tax liabilities	3.6.4	108.1	78.4
Defined benefit obligations	4.12.4	76.6	156.3
Long-term provisions	4.10	27.4	24.6
Non-current liabilities		**742.9**	**382.0**
Short-term financial liabilities	2.2	33.4	29.7
Trade accounts payable	4.9	266.8	242.2
Net liabilities of production orders in progress	4.6	367.7	366.0
Short-term provisions	4.10	55.3	44.7
Other short-term liabilities, accruals and deferred income	4.11	418.4	350.7
Current income tax liabilities		22.2	24.2
Current liabilities		**1,163.8**	**1,057.5**
Total liabilities		**1,906.7**	**1,439.5**
Total equity and liabilities		**3,456.5**	**2,716.0**

Consolidated statement of changes in equity

	Notes	Share capital CHF m	Capital reserve CHF m	Retained earnings CHF m
January 1, 2016		15.0	185.1	1,121.7
Dividends paid	6.4			–15.0
Net profit				136.3
Other comprehensive income				0.6
December 31, 2016		**15.0**	**185.1**	**1,243.6**
January 1, 2017		15.0	185.1	1,243.6
Dividends paid	6.4			–18.0
Changes in non-controlling interests	1.5			2.0
Net profit				168.3
Other comprehensive income				83.0
December 31, 2017		**15.0**	**185.1**	**1,478.9**

Hedge reserve CHF m	Available-for-sale reserve CHF m	Foreign currency translation reserves CHF m	Total other reserves and retained earnings CHF m	Equity attributable to the owners of the parent CHF m	Non-controlling interests CHF m	Total equity CHF m
–3.8	0.8	–189.0	929.7	1,129.8	24.8	1,154.6
			–15.0	–15.0	–2.8	–17.8
			136.3	136.3	7.0	143.3
2.0		–5.4	–2.8	–2.8	–0.8	–3.6
–1.8	**0.8**	**–194.4**	**1,048.2**	**1,248.3**	**28.2**	**1,276.5**
–1.8	0.8	–194.4	1,048.2	1,248.3	28.2	1,276.5
			–18.0	–18.0	–4.1	–22.1
			2.0	2.0	–2.0	0.0
			168.3	168.3	5.9	174.2
12.7		25.0	120.7	120.7	0.5	121.2
10.9	**0.8**	**–169.4**	**1,321.2**	**1,521.3**	**28.5**	**1,549.8**

Consolidated statement of cash flows

	Notes	2017 CHF m	2016 CHF m
Profit before taxes		218.2	179.8
Financial result	3.5	–13.4	–6.2
Operating result before interest and taxes (EBIT)		**204.8**	**173.6**
Depreciation and amortization	4.1/4.2	52.5	57.9
Other items not affecting cash flow		5.9	1.8
Changes in provisions		8.6	–7.8
Changes in trade accounts receivable		–46.6	–25.7
Changes in inventories		–68.4	–17.4
Changes in trade accounts payable		24.1	1.2
Changes in net assets/liabilities of production orders in progress		–43.4	–14.7
Changes in other net operating assets		53.1	23.3
Gains/losses on disposal of fixed assets		2.0	0.2
Interest received		4.4	3.6
Interest paid		–1.6	–1.6
Income taxes paid		–36.9	–32.4
Cash flow from operating activities		**158.5**	**161.9**
Purchase of property, plant and equipment		–93.1	–67.7
Disposal of property, plant and equipment		7.9	9.5
Purchase of intangible fixed assets		–6.7	–3.2
Cash flow from business combinations of group companies, net of cash acquired		–18.0	–0.9
Purchase of marketable securities		–21.5	–22.4
Disposal of marketable securities		30.4	29.9
Purchase of long-term financial assets		–47.2	–6.2
Disposal of long-term financial assets		7.5	7.3
Dividends received		1.7	3.9
Cash flow from investing activities		**–139.0**	**–50.0**
Proceeds from financial liabilities		420.8	0.0
Repayment of financial liabilities		–17.6	–7.6
Dividends paid of Bühler Holding AG		–18.0	–15.0
Dividends paid to non-controlling interests		–4.1	–2.8
Acquisitions and other transactions with non-controlling interests		–1.9	0.0
Cash flow from financing activities		**379.2**	**–25.3**
Translation differences		2.5	–0.8
Changes in cash and cash equivalents		**401.2**	**85.8**
Cash and cash equivalents at the beginning of period		431.3	345.5
Cash and cash equivalents at the end of period		832.5	431.3

Notes to the financial statements

1. Group information

1.1 General information

The consolidated financial statements of the Bühler Group and its subsidiaries (collectively, the Group) for the year ended December 31, 2017, were authorized for issue in accordance with a resolution of the Board of Directors on February 6, 2018. Bühler Holding AG (the Company or the parent) is a company incorporated and domiciled in Switzerland whose shares are privately held. The registered office is located at Uzwil, Switzerland.

The Group is a globally active solutions provider for the industrial manufacturing of food and advanced materials. The worldwide solutions portfolio contains engineering, application development, manufacturing, services, and training.

These financial statements are the consolidated financial statements of Bühler Holding AG and its subsidiaries. The list of significant Group companies can be found on page 141.

The consolidated financial statements of the Bühler Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and comply with Swiss law. The consolidated financial statements are based on the single-entity financial statements of the Group companies, which are prepared in accordance with consistent accounting principles. The consolidated financial statements are prepared under the historical cost convention. Any exceptions to this general rule are outlined in the respective note. The overall accounting principles applied to the Annual Report as a whole are described below. The accounting policies related to specific line items are described in the notes to which they relate.

Due to rounding, the numbers do not necessarily correspond exactly with the totals.

1.2 Use of estimates

The preparation of the consolidated financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of revenue, expenses, assets, and liabilities and the related disclosures at the date of the financial statements. These estimates are based on management's best knowledge of current events and possible future measures. However, actual results could differ from those estimates.

If in the future such estimates and assumptions, which are based on management's best knowledge at the date of the financial statements, deviate from the actual circumstances, the original estimates and assumptions will be modified as appropriate in the year in which the circumstances change.

The estimates and assumptions that may have a higher risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial periods relate primarily to goodwill (Note 4.2) and, to a lesser extent, defined benefit obligations (Note 4.12), deferred tax assets (Note 3.6), provisions, and contingent liabilities (Note 4.10) at the end of the reporting period.

Estimates related to specific line items are described in the notes to which they relate.

1.3 Foreign currency translation

The individual financial statements of the Group companies are measured using the currency of the primary economic environment in which the entity operates (“the functional currency”) and are translated into Swiss francs for consolidation purposes. Year-end exchange rates are used for the balance sheet and the average exchange rate for the income statement, statement of other comprehensive income, and cash flow statement.

Differences resulting from the application of these different exchange rates for the balance sheet and the income statement and from equity transactions are recognized directly in the consolidated statement of other comprehensive income.

Goodwill arising on the acquisition of a foreign entity is expressed in the functional currency of the foreign operation and is translated at the closing rate.

Foreign currency transactions translated into the functional currency are accounted for at the exchange rates prevailing at the date of the transactions; gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement, except when they are deferred outside the income statement as qualifying cash flow hedges.

Foreign exchange differences arising on monetary items that form part of a company’s net investment in a foreign operation are reclassified to equity (currency translation adjustment) in the consolidated financial statements and are only fully recycled to the income statement when the Group loses control of a subsidiary or loses significant influence in an associate.

In 2016, the IASB issued IFRIC Interpretation 22, which becomes effective for annual periods beginning on or after January 1, 2018. The interpretation clarifies the date of transaction for the exchange rate to be used for considerations received or paid in advance for foreign currency-denominated contracts. This interpretation is not expected to have a material impact on the income statement or the balance sheet of the Group.

For foreign currency translation, the Bühler Group used the following exchange rates:

	Average exchange rates		Closing rates 31.12.	
	2017 CHF	2016 CHF	2017 CHF	2016 CHF
ARS	0.0597	0.0669	0.0530	0.0660
BRL	0.3086	0.2842	0.2960	0.3140
CAD	0.7589	0.7439	0.7790	0.7570
CNY	0.1458	0.1483	0.1502	0.1477
CZK	0.0423	0.0403	0.0458	0.0398
EUR	1.1116	1.0902	1.1710	1.0760
GBP	1.2684	1.3355	1.3190	1.2620
INR	0.0151	0.0147	0.0153	0.0151
JPY	0.0088	0.0091	0.0087	0.0087
MXN	0.0522	0.0528	0.0499	0.0495
SGD	0.7132	0.7137	0.7337	0.7086
THB	0.0290	0.0279	0.0301	0.0285
USD	0.9846	0.9849	0.9820	1.0270
ZAR	0.0740	0.0672	0.0797	0.0738

1.4 Principles of consolidation

Subsidiaries are all entities over which the Group 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 to direct the activities of the entity. The cost of an acquisition is measured at the fair value of the consideration transferred at the date of exchange. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed in the income statement. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at fair value at the date of acquisition, irrespective of the extent of any non-controlling interest assumed. When the Bühler Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances, and pertinent conditions as at the acquisition date.

If the business combination is achieved in stages, the acquisition date fair value of the Group's previously held equity interest in the acquiree is remeasured to fair value at the date control is obtained. Any gain or loss arising from such remeasurement is recognized in the income statement.

Any contingent consideration to be transferred by the Group is recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration are recognized in the income statement.

Subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

All intercompany transactions and balances between Group companies are eliminated in full.

Investments in associated companies are accounted for using the equity method of accounting. These are companies over which the Group generally holds between 20% and 50% of the voting rights and has significant influence but does not exercise control. Goodwill arising on the acquisition is included in the carrying amount of the investment in associated companies. The Group does not recognize further losses when the carrying amount of the investment together with any long-term interest in an associated company reaches zero, unless the Group has in addition either incurred or guaranteed additional obligations in respect to the associated company.

Investments below 20% are recognized at fair value and classified as available for sale. Changes in fair value are recognized directly in other comprehensive income.

1.5 Additions and disposals of Group companies

Additions

2017
Several small acquisitions are individually and in aggregate not significant.

Refer to Note 4.3 for transactions with associates.

2016
There were no significant additions in 2016.

Disposals

Any non-current assets held for sale and discontinued operations are presented separately on the face of the balance sheet. This includes all those assets associated with the discontinuation of entire lines of business or geographical areas of operation, which are to be realized through a sale transaction rather than through continued use. Reclassifications are only made if management is committed to the sale and has started seeking buyers. In addition, the asset or disposal group must be available for sale in its current condition and its sale must be highly probable within one year. Non-current assets or disposal groups classified as held for sale are no longer depreciated. If necessary, they are written down for impairment.

The income and expenses of discontinued operations are separated from ordinary income and expenses in the income statement for both the reporting period and the prior year down to the “profit after tax” level. The resulting gain or loss (after taxes) is presented separately in the income statement.

The amendments to IFRS 12 as part of the annual improvement cycle 2014–2016 became effective on January 1, 2017. These amendments do not have a material impact on the results or financial position of the Group.

There was no significant disposal in 2017 and 2016.

1.6 Significant Group companies

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding/ Financing Company	Held by
Switzerland					
Bühler Holding AG, Uzwil	CH	CHF 15.0		o	
Bühler AG, Uzwil	CH	CHF 30.0	100.0%		Bühler Holding AG, Uzwil
Bühler-Immo Betriebs AG, Uzwil	CH	CHF 0.1	100.0%		Bühler Holding AG, Uzwil
Bühler Management AG, Uzwil	CH	CHF 0.1	100.0%		Bühler Holding AG, Uzwil
UBIF AG, Uzwil	CH	CHF 4.0	100.0%		Bühler Holding AG, Uzwil
Bühler Insect Technology Solutions AG, Uzwil	CH	CHF 1.5	100.0%		Bühler Holding AG, Uzwil
Bühler + Scherler AG, St. Gallen	CH	CHF 0.8	60.0%		Bühler Holding AG, Uzwil
Europe					
Bühler CZ s.r.o., Zamberk	CZ	CZK 265.2	100.0%		Bühler Holding AG, Uzwil
Bühler Deutschland GmbH, Beilngries	DE	EUR 0.025	100.0%		Bühler AG, Uzwil
Bühler GmbH, Beilngries	DE	EUR 16.0	100.0%		Bühler Deutschland GmbH, Beilngries
Bühler Deutschland Holding GmbH, Braunschweig	DE	EUR 0.025	100.0%	o	Bühler AG, Uzwil
Bühler Barth GmbH, Freiberg a.N.	DE	EUR 1.137	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Bühler GmbH, Reichshof	DE	EUR 0.275	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Bühler GmbH, Braunschweig	DE	EUR 12.629	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Leybold Optics Verwaltungs GmbH, Alzenau	DE	EUR 0.444	100.0%	o	Bühler Deutschland Holding GmbH, Braunschweig
Bühler Alzenau GmbH, Alzenau	DE	EUR 0.05	100.0%		Leybold Optics Verwaltungs GmbH, Alzenau
Bühler GmbH, Leingarten	DE	EUR 2.432	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Buhler S.A., Madrid	ES	EUR 0.06	100.0%		Bühler Holding AG, Uzwil
Bühler Haguenau S.A.S., Haguenau	FR	EUR 0.2	100.0%		Bühler Holding AG, Uzwil
Buhler UK Holdings Ltd., London	GB	GBP 3.6	100.0%	o	Bühler Holding AG, Uzwil
Buhler UK Ltd., London	GB	GBP 1.25	100.0%		Buhler UK Holdings Ltd., London
Control Design & Development Ltd., Peterborough	GB	GBP 0.0001	100.0%		Buhler UK Holdings Ltd., London
Buhler Brescia s.r.l., Brescia	IT	EUR 0.01	100.0%		Bühler AG, Uzwil
Buhler S.p.A., Milano	IT	EUR 2.665	100.0%		Bühler Holding AG, Uzwil
Bühler B.V., Oldenzaal	NL	EUR 0.034	100.0%		Bühler Holding AG, Uzwil

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding/ Financing Company	Held by
North America					
Buhler US Holding Inc., Minneapolis	**US**	USD 0.05	100.0%	o	Bühler Holding AG, Uzwil
Buhler Aeroglide Corporation, Cary	**US**	USD 0.004	100.0%		Buhler US Holding Inc., Minneapolis
Buhler Inc., Minneapolis	**US**	USD 3.2	100.0%		Buhler US Holding Inc., Minneapolis
BuhlerPrince Inc., Holland	**US**	USD 0.375	100.0%		Buhler US Holding Inc., Minneapolis
Latin America					
Buhler S.A., Buenos Aires	**AR**	ARS 1.1	100.0%		Bühler Holding AG, Uzwil
Buhler S.A., Joinville	**BR**	BRL 20.685	100.0%		Bühler Holding AG, Uzwil
Buhler Sanmak Industria de Maquinas Ltda., Blumenau	**BR**	BRL 10.0	100.0%		Bühler Holding AG, Uzwil
Buhler S.A. de C.V., Toluca	**MX**	MXN 50.0	100.0%		Bühler Holding AG, Uzwil
Middle East and Africa					
Buhler (Private Joint Stock Co.), Teheran	**IR**	IRR 9,250.0	100.0%		Bühler Holding AG, Uzwil
Buhler Limited, Nairobi	**KE**	KES 900.0	100.0%		Bühler Holding AG, Uzwil
Buhler (Pty) Ltd., Johannesburg	**ZA**	ZAR 141.4	100.0%		Bühler Holding AG, Uzwil
Buhler Properties (Pty) Ltd., Johannesburg	**ZA**	ZAR 0.0001	100.0%		Buhler (Pty) Ltd., Johannesburg

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding/ Financing Company	Held by
Asia					
Bangsheng Bio-Technology Co. Ltd., Guangzhou	CN	CNY 8.51	100.0%		Bühler Holding AG, Uzwil
Buhler (Changzhou) Machinery Co. Ltd., Liyang City	CN	CNY 320.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (China) Holding Co. Ltd., Wuxi	CN	USD 123.6	100.0%	o	Bühler Holding AG, Uzwil
Buhler (China) Machinery Manufacturing Co. Ltd., Wuxi	CN	CNY 150.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (Guangzhou) Food Machinery Co. Ltd., Guangzhou City	CN	CNY 51.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (Wuxi) Commercial Co. Ltd., Wuxi	CN	USD 5.5	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler Sortex Optical Equipment (Hefei) Co. Ltd., Hefei	CN	CNY 18.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler Aquatic Equipment (Changzhou) Co. Ltd., Liyang City	CN	CNY 10.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Wuhan Mingbo Electromechanical Equipment Co. Ltd., Wuhan	CN	CNY 5.0	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (Changzhou) Insect Technologies Co. Ltd., Changzhou	CN	CNY 8.0	80.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler Equipment (Xian) Co. Ltd., Xi'an	CN	CNY 28.0	100.0%		Bühler Holding AG, Uzwil
Buhler Food Ingredients (Guangzhou) Co. Ltd., Guangzhou	CN	USD 3.8	100.0%		Bühler Holding AG, Uzwil
Buhler Mechanical Equipment (Shenzhen) Co. Ltd., Shenzhen	CN	USD 4.0	100.0%		Bühler Holding AG, Uzwil
Wuxi Buhler Machinery Manufacturing Co. Ltd., Wuxi	CN	USD 23.0	51.0%		Bühler Holding AG, Uzwil
Buhler Leybold Optics Equipment (Beijing) Co. Ltd., Beijing	CN	CNY 10.1	100.0%		Bühler Alzenau GmbH, Alzenau
Buhler (India) Private Ltd., Bangalore	IN	INR 100.0	100.0%		Bühler Holding AG, Uzwil
Buhler K.K., Yokohama	JP	JPY 250.0	100.0%		Bühler Holding AG, Uzwil
Buhler Asia Private Limited, Singapore	SG	USD 14.375	100.0%	o	Bühler Holding AG, Uzwil
Buhler Asia Vietnam Limited, Long An	VN	VND 149,815.5	98.0%		Buhler Asia Private Limited, Singapore
Buhler (Thailand) Ltd., Bangkok	TH	THB 110.0	100.0%		Buhler Asia Private Limited, Singapore
PT Buhler Indonesia, Jakarta	ID	IDR 68,500	100.0%		Buhler Asia Private Limited, Singapore

No significant change to prior year.

2. Financial risk management

The Board of Directors of the Group assesses corporate risks by undertaking systematic risk identification and analysis. Based on this assessment, the measures required for risk management in the Group are defined and monitored. The corresponding meeting of the Board of Directors took place on December 18, 2017.

Capital management. One of the Group's main objectives is to apply a well-managed capital management system in order to continuously secure the Group's liquidity and generate added value for all stakeholders. Another goal is to optimize the cost of capital. Group management reviews the capital structure of the Group and the equity of Group companies on a regular basis. As at December 31, 2017, the equity ratio stood at 44.8% (prior year: 47.0%).

As a result of its global activities, the Group is exposed to financial market risks (currency risk, interest rate risk, and price risk), credit risks, and liquidity risks. Financial risk management focuses on the management of currency risk, credit risk, and liquidity risk. Derivative financial instruments are used to hedge certain risks. The risk management function is exercised by the Group Treasury department in close collaboration with the operating units, as well as in accordance with treasury directives.

Market risk. The Group is exposed to market risks that relate primarily to exchange rates. The Group monitors these risks on an ongoing basis and reports to the Finance Committee every month. In order to manage the volatility associated with these risks, the Group employs financial derivative instruments such as forward contracts and options.

Exchange rate risk. The Group reports in Swiss francs and is therefore exposed to exchange rate movements primarily in European, North American, South American, and Asian currencies. Various hedging contracts are concluded with a view to offsetting exchange-rate related changes in the value of assets, liabilities, and future sales and purchase transactions. The Group uses currency forwards and options for this purpose. In prior periods hedge accounting was applied for transactions exceeding a certain threshold. To further reduce the volatility arising from exchange rate movements, beginning in 2017 the threshold was reduced to zero. The Group continues to be exposed mainly to currency risks resulting from the translation of foreign subsidiaries into Swiss francs, which are not hedged. Net investments in foreign Group companies are longterm in nature. Their fair value changes with exchange rates. Over the very long term, however, the change in the inflation rate should match the corresponding exchange rate movements, so that changes in the fair value of foreign investments will offset the exchange- rate related changes in value. For this reason, the Group only hedges its investments in foreign Group companies in exceptional cases.

The following table shows the hypothetical repercussions of changes in the key currency pairs on profit after taxes. The translation risks were for the first time considered in the volatility calculation in 2017. The comparison period was restated according to the same principles. The volatility value used in the calculation is that of one year historical volatility as per December 31.

2017	Currency pair	EUR/CHF	USD/CHF	CNY/CHF	GBP/CHF
Volatility		6.2%	7.8%	7.0%	8.3%
Effect on profit after taxes (rate increase) CHF m		0.9	0.8	3.0	1.0
Effect on profit after taxes (rate decrease) CHF m		–0.9	–0.8	–3.0	–1.0
Effect on equity (rate increase) CHF m		40.6	–7.1	5.0	–0.1
Effect on equity (rate decrease) CHF m		–34.7	7.1	–5.0	0.1

2016	Currency pair	EUR/CHF	USD/CHF	CNY/CHF	GBP/CHF
Volatility		7.5%	10.3%	10.4%	10.8%
Effect on profit after taxes (rate increase) CHF m		0.6	1.2	4.0	1.8
Effect on profit after taxes (rate decrease) CHF m		–0.6	–1.2	–4.0	–1.8
Effect on equity (rate increase) CHF m		2.9	–5.3	–0.2	–0.2
Effect on equity (rate decrease) CHF m		–2.9	5.3	0.2	0.2

Commodity risk. The Group can be exposed to a certain degree to commodity price risk due to fluctuations in the prices of commodities required in the production process. The Group does not conclude any significant futures, forwards, or options to hedge future commodity purchases.

Equity security risk. The Group can buy shares in other companies or make investments in stock indices or funds in order to invest its liquid funds. It does so in accordance with the treasury strategy approved by the Board of Directors. This sets precise limits, including investments in shares.

Interest rate risk. Interest rate risk arises from changes in interest rates that may affect the net assets and results. These risks are managed and monitored centrally. Commitments from the bond obligation are interest rate fixed. The exposure of the Group to interest rate changes was not material during the current and previous reporting period.

Credit risk. Credit risks arise in connection with investments of liquid funds, derivative financial instruments, and receivables from customers. In order to minimize potential losses on customers' receivables, an Operational Risk Management (ORM) guideline has been drawn up. The evaluation of our customers' financial reliability and/or the terms of payment and hedging on our deliveries are key concerns in this respect. In addition, it can be stated that none of our customers has outstanding payments accounting for more than 5% of Group sales. The nominal value of the trade accounts receivable less valuation allowances is considered an approximation of the receivables' fair value. The book values stated represent the maximum credit risk. The default risk on investments, derivative financial instruments, money market contracts, current-account deposits, and time deposits is minimized by selecting counterparties with at least an investment grade rating and adequate diversification. The risks are monitored rigorously and kept within stipulated parameters. Group guidelines ensure that the Group's credit risk vis-à-vis financial institutions is limited. The limits set are regularly monitored and adjusted. The Group does not expect to incur any material loss as a result of its counterparties being unable to meet their contractual obligations, nor does it have any cluster risks with respect to individual sectors or countries.

Information on the analysis of outstanding receivables and allowance for bad debts is disclosed in Note 4.7.

Liquidity risk. Liquidity risk refers to the risk of the Group being unable to fulfill its obligations when due or at a reasonable price. The Group Treasury department is responsible for monitoring liquidity, financing, and repayment. In addition, liquidity and financing risks and the related processes and guidelines are checked by corporate management. The Group manages its liquidity risk on a consolidated basis, taking into account business policy, tax, financial, and regulatory considerations. Free cash flow is used as a source of financing. The proceeds from the bond issued in 2017 will be used exclusively to finance the acquisition of Haas, the investments in the production and innovation site of Uzwil, and investments in digital business models. If required, the Group can use additional lines of credit from banks. Group management monitors the Group's net liquidity position by means of ongoing forecasts based on expected cash flows.

Information on the maturity analysis is disclosed in Note 2.2.

2.1 Financial assets

A distinction is made between the following three categories:

- Financial assets “at fair value through profit or loss” are generally acquired with the intention of generating a profit from short-term price fluctuations.
- “Loans and receivables” include loans granted and accounts receivable.
- All other financial assets are classified as “available for sale.”

Financial assets “at fair value through profit or loss” are recognized on acquisition at cost and subsequently measured at fair value, with fair value changes recognized in the financial result in the period in which they arise.

“Available for sale” financial assets are measured subsequent to their initial recognition at fair value, with unrealized gains and losses recognized in other comprehensive income. When the financial asset is either impaired or disposed of, the cumulative gain or loss previously recognized in the other comprehensive income is reclassified from equity to the income statement. Provided that fair value cannot be reliably determined, available-for-sale financial assets are measured at cost. This applies to financial assets that do not have a quoted market price in an active market and decisive parameters cannot be reliably estimated to be used in valuation models for the determination of fair value.

Purchases and sales are recognized at the trade date rather than at the settlement date.

In 2014, the IASB issued the final version of IFRS 9 Financial Instruments, which replaces IAS 39 and all previous versions of IFRS 9. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The Group anticipates the following impacts on the different financial statement line items:

- Cash and cash equivalents: Valuation continues to be based on amortized costs and the Group therefore does not expect any impact.
- Trade accounts receivable and net assets from production orders: The simplified approach will be used under the new impairment model. The Group expects an immaterial increase in the allowance for bad debts based on the historically low number of defaults as well as the high rate of secured receivables. The new calculation methodology has not yet been internally approved by all required approval level and the impact can therefore not be quantified at this point in time.
- Financial assets: Valuation of financial assets without a quoted market price will change from at cost to fair value through profit and loss as already applied for all other financial assets. The Group does not expect any impact due to this change.
- Financial liabilities: Valuation continues to be based on amortized costs, and the Group therefore does not expect any impact.

Valuation and recording of the Group's hedge accounting is not impacted by IFRS 9.

2017	Cash and cash equivalents CHF m	Securities CHF m	Receivables and accruals CHF m	Financial assets CHF m	Total book value CHF m	Total market value CHF m
Cash and cash equivalents	832.5				832.5	832.5
Financial assets at fair value through profit or loss		50.2			50.2	50.2
Loans and receivables			721.7	93.0	814.7	814.7
Financial assets available for sale		47.4		3.5	50.9	50.9
Derivative financial instruments held for hedging		13.2			13.2	13.2
Total financial assets	**832.5**	**110.8**	**721.7**	**96.5**	**1,761.5**	**1,761.5**

As at December 31, 2017, capital commitments of CHF 13.4 million (prior year: 13.0 million) have not yet been drawn.

2016	Cash and cash equivalents CHF m	Securities CHF m	Receivables and accruals CHF m	Financial assets CHF m	Total book value CHF m	Total market value CHF m
Cash and cash equivalents	431.3				431.3	431.3
Financial assets at fair value through profit or loss		56.9			56.9	56.9
Loans and receivables			663.3	84.1	747.4	747.4
Financial assets available for sale		14.4		3.6	18.0	18.0
Derivative financial instruments held for hedging		3.3			3.3	3.3
Total financial assets	**431.3**	**74.6**	**663.3**	**87.7**	**1,256.9**	**1,256.9**

2.2 Financial liabilities

Bond. Financial liabilities consist mainly of the dual tranche bond issued in 2017, which were initially recognized at the proceeds received, net of transaction cost incurred. Subsequently, the borrowings are measured at amortized cost using the effective interest method with any difference between net proceeds and the principal value due on redemption being recognized in the income statement over the term of the borrowings. Financial liabilities are derecognized when the contractual obligations are discharged, cancelled, or expired.

2017	Financial liabilities CHF m	Payables/accruals and deferred income CHF m	Total book value CHF m	Total market value CHF m
Financial liabilities at amortized acquisition costs	543.2	685.2	1,228.4	1,228.8
Financial liabilities at fair value through profit and loss	13.5		13.5	13.5
Financial liabilities held for hedging	7.5		7.5	7.5
Total financial liabilities	**564.2**	**685.2**	**1,249.4**	**1,249.8**

2016	Financial liabilities CHF m	Payables/accruals and deferred income CHF m	Total book value CHF m	Total market value CHF m
Financial liabilities at amortized acquisition costs	135.1	592.9	728.0	728.0
Financial liabilities at fair value through profit and loss	10.4		10.4	10.4
Financial liabilities held for hedging	6.9		6.9	6.9
Total financial liabilities	**152.4**	**592.9**	**745.3**	**745.3**

Maturity analysis

		Cash outflow			
2017	Book value Dec 31, 2017 CHF m	Total CHF m	< 1 year CHF m	1–5 years CHF m	> 5 years CHF m
Trade accounts payable to third parties	264.6	264.6	264.6		
Liabilities to associates and related parties	124.8	124.8	5.6	76.2	43.0
Liabilities others/accruals and deferred income	440.3	440.3	439.8	0.5	
Corporate bonds	420.8	433.9	1.6	186.5	245.8
Derivative financial instruments held for hedging	7.5	7.5	7.5		
Total	**1,258.0**	**1,271.1**	**719.1**	**263.2**	**288.8**

		Cash outflow			
2016	Book value Dec 31, 2016 CHF m	Total CHF m	< 1 year CHF m	1–5 years CHF m	> 5 years CHF m
Trade accounts payable to third parties	240.6	240.6	240.6		
Liabilities to associates and related parties	137.4	137.4	6.3	76.1	55.0
Liabilities others/accruals and deferred income	374.2	374.2	373.0	1.2	
Derivative financial instruments held for hedging	6.9	6.9	6.4	0.5	
Total	**759.1**	**759.1**	**626.3**	**77.8**	**55.0**

Corporate bonds

	Company	Term	Currency	Nominal value CHF m	Effective interest rate	2017 CHF m	2016 CHF m
Bond, Switzerland 0.1%	Bühler Holding AG	12/2017 – 12/2022	CHF	180.0	0.11%	179.9	0.0
Bond, Switzerland 0.6%	Bühler Holding AG	12/2017 – 12/2026	CHF	240.0	0.55%	240.9	0.0
Total corporate bonds						**420.8**	**0.0**

The corporate bonds are quoted at the SIX Swiss Exchange.

Reconciliation of liabilities arising from financing activities

			Non cash-changes			
	2016 CHF m	Cash flows CHF m	Acquisition CHF m	FX movement CHF m	Reclassification CHF m	2017 CHF m
Short-term borrowings	29.7	–7.5			11.2	33.4
Long-term borrowings	122.7	410.7			–2.6	530.8
Total liabilities from financing activities	**152.4**	**403.2**	**0.0**	**0.0**	**8.6**	**564.2**

			Non cash-changes			
	2015 CHF m	Cash flows CHF m	Acquisition CHF m	FX movement CHF m	Reclassification CHF m	2016 CHF m
Short-term borrowings	16.4	–7.1			20.4	29.7
Long-term borrowings	136.6	–0.5			–13.4	122.7
Total liabilities from financing activities	**153.0**	**–7.6**	**0.0**	**0.0**	**7.0**	**152.4**

2.3 Marketable securities and derivative financial instruments

Derivative financial instruments and hedge accounting. Derivative financial instruments with banks are mainly concluded to hedge currency risks. They are initially recognized at cost and subsequently at fair value (replacement cost). The method applied in recognizing the resulting profits or losses depends on whether a derivative was designated for hedging purposes, and if so, on the type of position being hedged. Certain derivatives may be used to hedge foreign currency risks in connection with a transaction that is highly likely to take place in future, or to hedge a fixed commitment (hedging of cash flows). When the hedge is implemented, the Group documents the relationship between the hedging instrument and the risk being hedged, as well as setting out risk management objectives and strategies. Furthermore, the Group records its assessment of the effectiveness of the hedging instrument with respect to the hedged cash flows, both when the hedging transaction is concluded and on an ongoing basis.

The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

The hedging of cash flows is undertaken for certain anticipated Group-internal transactions as well as for the foreign currency risk of firm commitments. The effective portion of the change in fair value of derivatives used for the hedging of cash flows is recognized in other comprehensive income. The ineffective portion of the hedging instrument is immediately recognized in the income statement.

Amounts accumulated in other comprehensive income are recycled in the income statement in the periods when the hedged item affects profit or loss. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that was recorded in other comprehensive income is immediately transferred to the income statement.

Derivatives not designated as hedging instruments are accounted for at fair value through profit or loss. Changes in the fair value of these derivative instruments are recognized immediately in the income statement.

Marketable securities. Marketable securities include those that are held for trading without participation features. Securities included in financial assets are categorized as available for sale.

Futures and options were entered into with banks mainly to hedge currency risks. The following positions were open as of December 31, 2017:

2.3.1 Derivative financial instruments	Contract or underlying principal amount 2017 CHF m	2016 CHF m	Positive fair values 2017 CHF m	2016 CHF m	Negative fair values 2017 CHF m	2016 CHF m
Currency-related instruments						
Forward foreign exchange rate contracts	1,599.0	951.7	16.3	6.9	21.0	16.9
– held for trading	786.0	596.1	4.2	3.6	13.5	10.0
– cash flow hedges (effective part)	813.0	355.6	12.1	3.3	7.5	6.9
Over-the-counter currency options	174.5	16.1	1.1	0.1	0.0	0.1
Total of currency-related instruments	**1,773.5**	**967.8**	**17.4**	**7.0**	**21.0**	**17.0**
Equity-related instruments						
Over-the-counter equity options	10.0	30.0	0.0	0.0	0.0	0.8
Total of equity-related instruments	**10.0**	**30.0**	**0.0**	**0.0**	**0.0**	**0.8**
Options	184.5	46.1	1.1	0.1	0.0	0.9
Futures	1,599.0	951.7	16.3	6.9	21.0	16.9
Sum of derivative financial instruments	**1,783.5**	**997.8**	**17.4**	**7.0**	**21.0**	**17.8**
Thereof included in securities and in short-term financial liabilities	1,773.5	974.8	17.3	6.7	21.0	17.3
Thereof included in other long-term financial assets and financial liabilities	10.0	23.0	0.1	0.3	0.0	0.5

	USD CHF m	EUR CHF m	Other currencies CHF m	Total 2017 CHF m	Total 2016 CHF m
Currency-related instruments					
Forward foreign exchange rate contracts	393.3	899.9	305.8	1,599.0	951.7
– held for trading	260.7	384.4	140.9	786.0	596.1
– cash flow hedges	132.6	515.5	164.9	813.0	355.6
Over-the-counter currency options	0.0	174.5	0.0	174.5	16.1
Total of currency-related instruments	**393.3**	**1,074.4**	**305.8**	**1,773.5**	**967.8**
Equity-related instruments					
Over-the-counter equity options	0.0	0.0	10.0	10.0	30.0
Total of equity-related instruments	**0.0**	**0.0**	**10.0**	**10.0**	**30.0**
Options	0.0	174.5	10.0	184.5	46.1
Futures	393.3	899.9	305.8	1,599.0	951.7
Sum of derivative financial instruments	**393.3**	**1,074.4**	**315.8**	**1,783.5**	**997.8**

Positive replacement values are included in securities or long-term financial assets and negative replacement values are included in financial liabilities.

2.3.2 Marketable securities	2017 CHF m	2016 CHF m
Equity securities	5.5	4.8
Bonds	6.2	9.5
Derivative financial instruments	17.3	6.7
Other securities	34.4	39.2
Total marketable securities	**63.4**	**60.2**

2.4 Estimation of fair values

The fair values of financial instruments that are actively traded on markets are based on the relevant trading exchange prices (offer prices) on the balance sheet reference date. Instruments of this nature are classified as Level 1. The fair values of financial instruments that are not actively traded on markets (e.g., derivative OTC instruments) are determined using valuation models. If all the parameters required for the valuation are based on observable market data, the instrument in question is classified as Level 2. If one or more parameters are based on unobservable market data, the instrument is classified as Level 3. In the period under review as well as in the prior year no transfer occurred within the Levels. In addition to the financial assets below, as of December 31, 2017, the Group discloses an asset held for sale which is valued at fair value (Level 3). Refer to Note 4.3 for more details.

2017 CHF m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss	46.2	4.1		50.3
Derivative financial assets held for hedging		13.2		13.2
Financial assets available for sale		36.3	14.6	50.9
Total financial assets	**46.2**	**53.6**	**14.6**	**114.4**
Derivative financial liabilities		21.0		21.0
Total financial liabilities	**0.0**	**21.0**	**0.0**	**21.0**

2016 CHF m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss	53.5	3.7		57.2
Derivative financial assets held for hedging		3.3		3.3
Financial assets available for sale		3.6	14.4	18.0
Total financial assets	**53.5**	**10.6**	**14.4**	**78.5**
Derivative financial liabilities		17.8		17.8
Total financial liabilities	**0.0**	**17.8**	**0.0**	**17.8**

3. Detailed information on consolidated income statement

3.1 Revenue

Revenue is recognized when it is probable that the economic benefits associated with the transaction will flow to the entity and the amount of the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received net of sales taxes and discounts. Revenue from the sale of goods is recognized when delivery has taken place and the transfer of risks and rewards of ownership has been completed.

The Group accounts for customer projects using the percentage-of-completion method. Revenue (including an estimated share of the outcome of the contract) is recognized by reference to the stage of completion. The stage of completion is determined according to the cost-to-cost method. The percentage-of-completion method involves the use of estimates and forecasts concerning future costs; actual costs may differ from these estimates. The forecasts are reviewed on a regular basis and adapted where necessary. These changes affect costs, the stage of completion, and both realized and anticipated profits. Any changes in estimates are recognized in the period in which they occur. Losses identified on long-term construction contracts are recognized as an expense immediately. Losses on long-term construction contracts occur when the expected contract costs exceed the expected revenue.

CHF 2,118.2 million (prior year: CHF 1,777.9 million) of the total operating income was determined using the percentage-of-completion method in the reporting period.

The Group will apply IFRS 15 (Revenue from Contracts with Customers) starting on January 1, 2018, using the full retrospective approach. Under IFRS 15, revenue is recognized as the control of the goods or services is transferred to the customer. This can occur at a point in time or over time.

For projects/plants and services/maintenance, the Group will continue to recognize revenue over time. For single machines and spare parts, the Group will recognize revenue at a point in time. The main impact of IFRS 15 is that revenue recognition for single machines changes from over time to a point in time. This will lead to a revenue shift to later periods compared to the currently applied IFRS guidance. Prior reporting periods presented will be restated and thus the effect of initial application of IFRS 15 will be recognized directly in equity of the earliest period presented.

The Group is currently finalizing the calculation of the restatement net impact on its 2017 financial statement, which is expected to increase annual revenues by +2.9%, increase EBIT by +7.6% and decrease total equity by –2.0% compared to the currently disclosed figures.

3.2 Other operating income

	2017 CHF m	2016 CHF m
Earnings from coordination of consortium business	1.4	0.0
Interest income from trade finance	1.4	2.1
Rental income	1.2	0.9
Gains from sale of fixed assets	2.4	2.3
Other operating income related parties	2.0	0.7
Dividend income	0.4	0.6
Gains from sale of scrap materials	2.7	1.5
Supplier discounts	1.4	1.1
Government grants	2.0	0.0
Others	6.5	12.8
Total	**21.4**	**22.0**

Others comprises a number of individually immaterial items.

3.3 Employee benefit expenses

	2017 CHF m	2016 CHF m
Wages and salaries	640.8	607.7
Social security and employee benefit expenses	117.1	116.9
Other personnel expenses	67.8	68.6
Total	**825.7**	**793.2**

3.4 Other operating expenses

	2017 CHF m	2016 CHF m
Administration expenses	108.1	104.0
Rental and leasing expenses, dues	31.8	31.1
Energy, maintenance and repairs	32.6	29.3
Travel expenses	82.8	79.4
Outbound freight costs	76.0	66.6
Consultancy fees	15.1	13.4
Marketing costs	21.1	17.7
Agency fees	13.3	15.5
Other operating expenses related parties (Note 6.2 Related parties)	23.9	25.2
Losses on sales of fixed assets	5.0	1.0
Fixed assets < 10 kCHF	2.3	1.6
Contributions and memberships	2.3	1.5
Others	27.0	21.9
Total	**441.3**	**408.2**

3.5 Financial result

	2017 CHF m	2016 CHF m
Interest income	3.8	4.1
Interest income from related parties	0.6	0.7
Interest expenses	–0.3	–0.3
Interest expenses from related parties	–1.4	–1.5
Total interest income and expenses	**2.7**	**3.0**
Total other financial income	**10.7**	**3.2**
Total financial result	**13.4**	**6.2**

The continuously low interest rates in most major currencies resulted in an interest result including interest from related parties of CHF 2.7 million (prior year: CHF 3.0 million). Other financial income mainly comprised foreign exchange gains of CHF 6.9 million (prior year: CHF –1.1 million).

3.6 Taxes

Income taxes comprise the tax expense in respect of all recognized profits for the reporting period. They include current and deferred income taxes. Current income taxes are calculated on taxable profit. Provisions for deferred taxes are calculated according to the liability method. Deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet and their tax base taking into account actual or substantially enacted tax rates. Changes in deferred tax balances are recognized in the income statement, except when they relate to items recognized outside the income statement, in which case the deferred tax is treated accordingly.

Current income tax relating to items recognized directly in equity is recognized in equity.

Deferred tax assets are only recognized for temporary differences and unused tax loss carry-forwards to the extent that it is probable that future taxable profit will be available against which temporary differences or unused tax losses can be utilized. This assessment is based on estimates, which could differ from actual results and require a valuation allowance.

The amendments to IAS 12 became effective on January 1, 2017. The amendments clarify the accounting for deferred taxes where an asset is measured at fair value and that fair value is below the asset's tax base. These amendments do not have a material impact on the income statement or balance sheet. The IASB issued IFRIC 23, which becomes effective on January 1, 2019. The interpretation clarifies how to apply the requirements in IAS 12 when there is uncertainty over income tax treatment. The Group does not expect a significant impact from this clarification.

3.6.1 Income taxes	**2017 CHF m**	**2016 CHF m**
Income taxes relating to the reporting period	–39.7	–40.1
Income taxes relating to prior periods	0.4	–1.1
Deferred taxes due to temporary differences	–11.0	3.4
Deferred taxes due to recognition of tax loss carry-forwards	0.9	1.4
Deferred taxes due to changes in tax rates	5.4	–0.1
Total	**–44.0**	**–36.5**
Deferred taxes recognized in other comprehensive income	–22.5	1.3

3.6.2 Reconciliation of income taxes	**2017 CHF m**	**2016 CHF m**
Profit before taxes	218.2	179.8
Components of tax expenses:		
Income taxes at anticipated tax rate	–48.6	–40.1
Income and expenses not subject to tax	1.3	0.7
Income taxes relating to prior periods	0.4	–1.1
Deferred taxes due to changes in tax rates	5.4	–0.1
Effect of tax loss carry-forwards	1.9	1.2
Effect of losses without recognition of deferred tax assets	–2.0	–2.7
Other impacts	–2.4	5.6
Income taxes disclosed (current and deferred)	**–44.0**	**–36.5**
Total income taxes in % of profit before taxes	**20.2%**	**20.3%**

The anticipated tax rate was 22.3% (prior year: 22.3%) and consisted of the weighted average of the applicable local tax rates for income taxes. The tax rate decreased slightly to 20.2% in 2017 from 20.3% in 2016. Contributory factors for the resulted tax rate included sustainable tax management and a special effect due to the US tax reform.

3.6.3 Tax loss carry-forwards	2017 CHF m	2016 CHF m
Expiry		
Unlimited	93.0	86.4
In more than five years	22.2	22.7
In two to five years	30.1	34.7
Within one year	1.9	1.3
Total	**147.2**	**145.1**
Tax loss carry-forwards accounted for in deferred taxes	116.4	110.5
Tax loss carry-forwards not accounted for in deferred taxes	30.8	34.6
Tax effect on tax loss carry-forwards unaccounted for	7.7	8.5

The change in tax loss carry-forwards results from the use of tax losses in particular in China, South Africa, and Germany, as well as from the impact of additional tax loss carry-forwards in particular in Germany, China, and Brazil.

3.6.4 Breakdown of deferred taxes per line item	2017 CHF m Assets	2017 CHF m Liabilities	2016 CHF m Assets	2016 CHF m Liabilities
Property, plant and equipment	6.5	16.2	7.8	15.8
Post-employment benefits	16.1	12.8	39.7	10.8
Provisions	3.2	7.9	3.3	13.1
Other items (mainly inventory, construction contracts and other current liabilities)	109.9	191.9	64.7	141.7
Tax loss carry-forwards	31.4	0.0	30.5	0.0
Total deferred taxes gross	**167.1**	**228.8**	**146.0**	**181.4**
Offset	–120.7	–120.7	–103.0	–103.0
Total deferred taxes net	**46.4**	**108.1**	**43.0**	**78.4**

Deferred tax assets and liabilities are offset if there is a legally enforceable right to set them off and if the calculations of income taxes relate to the same taxation authority.

3.7 Research and development costs

Research costs are recognized in the income statement in the period in which they are incurred. Development costs are capitalized only if, and to the extent that, the IFRS criteria are met and it is probable that the present value of the expected returns will exceed the development costs. Capitalized development costs are amortized on a systematic basis over the period in which the returns are expected to flow to the Group.

Research and development costs directly charged to the income statement in the reporting period amounted to CHF 119.0 million (prior year: CHF 108.5 million).

4. Detailed information on consolidated balance sheet

4.1 Property, plant and equipment

Property, plant, and equipment is valued at acquisition or construction cost less depreciation and write-downs for impairment. Items of property, plant, and equipment are depreciated on a straight-line basis over their estimated useful life, except for land, which is not depreciated. Estimated useful lives of major classes of depreciable assets are as follows:

→ Building shell:	40–80 years
→ Installations/extensions:	20–25 years
→ Machinery and technical equipment:	10 years
→ Other tangible fixed assets:	3–10 years

The estimated useful life of the assets is regularly reviewed and, if necessary, the future depreciation charge is accelerated.

Costs are only included in the asset's carrying amount when it is probable that economic benefits associated with the item will flow to the Group in future periods and the cost of the item can be measured reliably.

Borrowing costs. Borrowing costs which are directly attributable to the acquisition, construction, or production of a qualified asset are capitalized as part of the cost of that asset.

Impairment of assets. At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any. Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the smallest cash-generating unit to which the asset belongs. The recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. Impairment losses are recognized immediately in the income statement.

Where an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount. However, this increased amount cannot exceed the carrying amount that would have been determined had no impairment loss been recognized for that asset or cash-generating unit in prior periods. A reversal of an impairment loss is recognized immediately in the income statement.

Acquisition cost	Land and buildings CHF m	Machinery and technical equipment CHF m	Other tangible assets CHF m	Assets under construction CHF m	Total CHF m
January 1, 2016	311.6	290.2	139.5	19.5	760.7
Additions	15.0	16.3	12.7	23.8	67.8
Disposals	–0.8	–19.6	–12.2	–2.2	–34.8
Reclassifications	11.9	0.1	1.9	–14.0	–0.1
Translation differences	–2.7	–0.2	0.2	–0.1	–2.8
December 31, 2016	**335.0**	**286.8**	**142.1**	**26.9**	**790.8**
Additions	7.8	23.7	10.9	50.6	93.0
Disposals	–1.4	–22.1	–8.5	–2.3	–34.3
Reclassifications	40.5	4.1	3.4	–48.0	0.0
Translation differences	11.9	7.6	3.9	0.0	23.4
December 31, 2017	**393.8**	**300.0**	**151.8**	**27.2**	**872.8**
Depreciation					
January 1, 2016	–84.5	–166.6	–108.8	–0.4	–360.3
Additions	–9.5	–19.2	–11.7	–0.2	–40.6
Disposals	0.4	14.3	10.5	0.0	25.2
Impairment	0.0	–0.1	0.0	0.0	–0.1
Reclassifications	–0.5	0.2	0.0	0.2	–0.1
Translation differences	0.4	0.1	–0.3	0.0	0.2
December 31, 2016	**–93.7**	**–171.3**	**–110.3**	**–0.4**	**–375.7**
Additions	–10.4	–19.4	–9.9	–0.1	–39.8
Disposals	1.3	15.5	7.7	0.0	24.4
Impairment	0.0	0.0	0.1	0.0	0.1
Reclassifications	0.2	1.1	–1.0	–0.3	0.0
Translation differences	–2.5	–5.0	–2.8	0.3	–10.0
December 31, 2017	**–105.2**	**–179.1**	**–116.2**	**–0.5**	**–401.0**
Net book values					
January 1, 2017	241.3	115.5	31.8	26.5	415.1
December 31, 2017	288.6	120.9	35.6	26.7	471.8

As in the previous year, the Group did not enter in financial lease contracts as lessee. Net loss on disposal of tangible fixed assets amounted to CHF –2.0 million (prior year: net loss CHF –0.2 million). Commitments relating to property, plant, and equipment, which are not shown in the balance sheet, amounted to CHF 33.6 million (prior year: CHF 53.8 million) and are mainly related to application centers (in Switzerland and United States).

Off-balance sheet obligations under operating leases

	2017 CHF m	2016 CHF m
Leasing obligation up to one year	20.3	16.2
Leasing obligation as of one to five years	25.5	19.7
Leasing obligation over five years	14.2	8.7
Total	**60.0**	**44.6**

Leases. Leases of property, plant, and equipment where the Group has substantially all the risks and rewards of ownership are classified as finance lease. Property, plant, and equipment acquired through a finance lease is capitalized at the date of the commencement of the lease term at the present value of the minimum future lease payment or, if lower, at the amount equal to the fair value of the leased asset as determined at the inception of the lease. The associated liabilities are recognized as either current or non-current financial liabilities, depending on their due dates.

Leases where substantially all the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Payments under operating leases are charged to the income statement on a straight-line basis over the period of the lease.

Assets under finance leases where the Bühler Group acts as lessor are recognized as receivables in the amount of the net investment. The risks and rewards incidental to ownership are transferred to the lessee. Lease income from these finance leases is subsequently recognized over the term of the lease based on the effective interest method.

In 2016, the IASB issued the final version of IFRS 16 Leases, which replaces IAS 17. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Group is currently assessing the impact of IFRS 16 and plans to adopt the new standard on the required effective date.

This item mainly includes obligations under long-term leasing agreements relating to properties in Germany, China, and Switzerland.

4.2 Intangible assets

Goodwill represents the excess of the aggregate of the consideration transferred and the amount recognized for the non-controlling interest over the fair value of the net identifiable assets acquired and liabilities assumed. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associates is included in investments in associates.

Goodwill is tested annually for impairment or whenever there are impairment indicators and is carried at cost less accumulated impairment losses.

If the consideration transferred is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the income statement.

On disposal of a subsidiary, associate, or joint venture, the related goodwill is included in the determination of profit or loss on disposal.

Goodwill on acquisitions of subsidiaries and interests in joint ventures is allocated to cash-generating units for the purpose of impairment testing. Impairment losses relating to goodwill cannot be reversed in future periods.

Acquired patents, licenses, trademarks, and similar rights are initially recorded at cost and amortized on a straight-line basis over their estimated useful life or a period not exceeding 15 years. Intangible assets acquired through business combinations are carried in the balance sheet at the fair value allocated in the acquisition accounting and amortized over their estimated useful life.

Other intangible assets mainly comprise customer relationships, technologies, patents, and software.

Acquisition cost	Goodwill CHF m	Other intangible assets CHF m	Total CHF m
January 1, 2016	258.3	154.0	412.3
Additions	0.9	3.1	4.0
Disposals	0.0	–0.6	–0.6
Reclassifications	0.0	0.4	0.4
Translation differences	1.1	0.5	1.6
December 31, 2016	**260.3**	**157.4**	**417.7**
Additions	0.0	6.8	6.8
Disposals	0.0	–4.6	–4.6
Reclassifications	0.0	–0.1	–0.1
Translation differences	11.3	7.1	18.4
December 31, 2017	**271.6**	**166.6**	**438.2**
Amortization			
January 1, 2016	–27.9	–110.7	–138.6
Additions	0.0	–17.3	–17.3
Disposals	0.0	0.6	0.6
Reclassifications	0.0	–0.2	–0.2
Translation differences	–0.3	–0.3	–0.6
December 31, 2016	**–28.2**	**–127.9**	**–156.1**
Additions	0.0	–12.7	–12.7
Disposals	0.0	4.6	4.6
Reclassifications	0.0	0.1	0.1
Translation differences	–0.9	–6.6	–7.5
December 31, 2017	**–29.1**	**–142.5**	**–171.6**
Net book values			
January 1, 2017	232.1	29.5	261.6
December 31, 2017	242.5	24.1	266.6

Goodwill impairment test

Goodwill is allocated to the identifiable cash-generating units of the Group. The Group changed its organization structure by centralizing key functions and reorganizing one of its operating segments. This change in the organization structure led to a reassessment and redefinition of the cash-generating units compared to 2016. Starting in 2017 the definition of the cash-generating unit changed from a legal entity to a business perspective.

The recoverable amounts have been determined based on a value-in-use calculation per cash-generating unit. This calculation uses cash flow projections based on financial budgets approved by management covering a five-year period.

Key assumptions used in value-in-use calculations. The calculations of values in use are most sensitive to the following assumptions:

- → Discount rate
- → Growth rate
- → Revenue growth
- → EBIT margin growth

Discount rate – The discount rates which are used to calculate the discounted present value of the future cash flows are derived from a capital asset pricing model using market data such as the yield on a 10-year government bond of the respective country or specific country risk premiums.

Growth rate – The assumptions used in the calculation reflect the long-term expected growth rate of the operational business and are based on the growth strategy of the Group.

Revenue growth – The assumptions used in the calculation reflect the expected order backlog at year-end as well as the expected market development based on the strategic priorities set by the Group.

EBIT margin growth – The EBIT margin growth used in the calculation reflects the margin goal as defined in the Group's vision and is based on the margin improvement projects initiated.

Result of the impairment test. The impairment tests performed on December 31, 2017, support the value of the carrying amount. As in prior year, no impairment was recognized.

Sensitivity to changes in assumptions. The value in use of the cash-generating unit Nutrition equals its carrying amount. For Grain Logistics the following change in key assumptions would result in a value in use equal to the carrying amount:

Key assumptions	Grain Logistics
Discount rate	+1.336%
Growth rate	–2.044%
Revenue growth	–3.998%
EBIT margin growth	–0.169%

For all other cash-generating units a possible increase in the discount rate of 1 percentage point or a drop in revenue of 5 percentage points result in the carrying amount not exceeding its recoverable amount.

Goodwill 2017	Book value CHF m	Base data used Discount rate	Long-term growth rate	Revenue growth	EBIT margin growth
Grain Milling	12.3	10.7%	1.5%	4.4%	0.9%
Grain Logistics	40.1	10.6%	2.0%	8.6%	0.9%
Sortex & Rice	7.2	13.4%	2.1%	6.9%	0.1%
Feed	3.4	11.1%	1.4%	13.2%	2.0%
Pasta & Noodles	2.5	9.5%	0.7%	7.0%	1.0%
Nutrition	6.1	10.7%	1.6%	3.5%	0.9%
Aeroglide	60.9	10.1%	1.8%	10.6%	1.1%
Consumer Foods	22.0	9.4%	1.0%	6.0%	1.6%
Die Casting	1.8	9.3%	0.8%	6.4%	0.2%
Grinding & Dispersion	0.7	9.6%	0.9%	8.1%	1.0%
Leybold Optics	85.5	9.8%	1.7%	4.9%	1.1%
Total at December 31, 2017	**242.5**				

Goodwill 2016	Book value CHF m	Base data used Discount rate	Long-term growth rate	Revenue growth	EBIT margin growth
Leybold Optics Verwaltungs GmbH, Alzenau	78.6	8.8%	1.2%	7.2%	0.6%
Buhler Aeroglide Corporation, Cary	63.7	9.6%	1.2%	11.2%	1.5%
Bühler Deutschland GmbH, Beilngries	36.9	8.8%	1.2%	5.0%	1.7%
Bühler Barth GmbH, Freiberg a.N.	15.9	8.8%	1.2%	16.8%	4.2%
Buhler Yijiete Color Sorting Machinery (Hefei) Co. Ltd., Hefei	7.0	11.2%	3.1%	14.8%	2.8%
Bangsheng Bio-Technology Co. Ltd., Guangzhou	6.7	11.2%	3.1%	13.3%	0.3%
Wuhan Mingbo Electromechanical Equipment Co. Ltd., Wuhan	6.0	11.2%	3.1%	18.3%	1.5%
Bühler Haguenau S.A.S., Haguenau	5.1	9.2%	1.2%	10.5%	2.9%
Bühler GmbH, Leingarten	4.3	8.8%	1.2%	19.0%	7.5%
Others	7.9	9.2%–11.0%	0.9%–2.5%	–2.2%–23.9%	–0.6%–7.7%
Total at December 31, 2016	**232.1**				

4.3 Investments in associates

Net book values	Share in equity CHF m	Goodwill CHF m	2017 CHF m	2016 CHF m
January 1	21.2	12.3	33.5	29.0
Reclassifications	–5.1	–4.2	–9.3	0.0
Share of net profit	2.0	0.0	2.0	4.6
Dividends received	–0.9	0.0	–0.9	0.0
Translation differences	1.5	0.7	2.2	–0.1
December 31	**18.7**	**8.8**	**27.5**	**33.5**

Translation differences are recognized in other comprehensive income. The attributable net result is shown under other operating income in the income statement. Cumulative values of the associated companies are disclosed as only one of the associated companies is material to the Group.

Cumulative values of the associated companies	2017 CHF m	2016 CHF m
Share of revenue	23.3	33.4
Share of net profit	2.0	4.6
Balance sheet values:		
Non-current assets	10.7	14.4
Current assets	11.7	23.9
Non-current liabilities	1.3	8.4
Current liabilities	2.5	8.7
Shareholders' equity	18.6	21.2

The associated companies comprise two companies located in South Europe. The Group has a shareholding of 26% and 49%, respectively. The figures are based on available preview closing data as of December 31, 2017.

On July 19, 2017, the Group acquired all remaining outstanding shares of Polymetrix Holding AG (prior year: 35%) with the intent to sell a majority stake to an engineering group active in the polymer industry. On November 10, 2017, the Group sold 80% of Polymetrix Holding AG with a put option to sell the remaining 20% by January 1, 2021. The transaction is subject to the approval of the authorities. The closing of the transaction is expected in early 2018.

The Group applied the shortcut method from IFRS 5. The interests in Polymetrix Holding AG were reclassified from investments in associates to assets classified as held for sale and valued at fair value less cost to sell as of December 31, 2017. The revaluation resulted in an immaterial loss that was recognized in the income statement.

4.4 Long-term financial assets

December 31, 2017	Due 1–5 years CHF m	> 5 years CHF m	Total CHF m
Securities	0.0	47.5	47.5
Loans to associated companies	12.3	0.0	12.3
Other non-current financial assets	80.7	3.5	84.2
Overfunding of post-employment benefit plans	0.0	31.8	31.8
Total	**93.0**	**82.8**	**175.8**

December 31, 2016	Due 1–5 years CHF m	> 5 years CHF m	Total CHF m
Securities	0.0	14.4	14.4
Loans to associated companies	9.3	0.0	9.3
Other non-current financial assets	74.8	3.5	78.3
Overfunding of post-employment benefit plans	0.0	6.9	6.9
Total	**84.1**	**24.8**	**108.9**

4.5 Inventories

Inventories are carried at the lower of cost or net realizable value. The cost of finished goods, semi-finished goods, and work in progress includes raw materials, direct labor, and other directly attributable costs and overheads based on the normal capacity of production facilities, excluding borrowing costs. Cost is determined using the standard cost method. Standard costs are regularly reviewed and, if necessary, revised in light of current conditions. Net realizable value is the estimated selling price less cost to completion and selling expenses. Obsolete inventories and goods with a low rate of inventory turnover are written down.

In prior year, value adjustments deducted from inventories amounted to CHF –37.7 million. No material reversals of value adjustments of the prior year were recognized in the reporting year.

Advance payments to suppliers are also included in inventories.

	Gross value CHF m	Value adjustments CHF m	2017 CHF m	2016 CHF m
Raw materials and supplies	141.8	–22.2	119.6	137.8
Unfinished goods	61.5	–10.1	51.4	40.4
Finished goods and merchandise	105.1	–5.6	99.5	73.0
Work in progress	126.5	–2.1	124.4	78.0
Advance payments to suppliers	50.4	0.0	50.4	36.4
Total	**485.3**	**–40.0**	**445.3**	**365.6**

4.6 Production orders in progress

	2017 CHF m	2016 CHF m
Production orders in progress	626.0	482.0
Advance payments from customers	–249.9	–155.1
Net assets of production orders in progress	**376.1**	**326.9**
Production orders in progress	3.2	13.7
Advance payments from customers	–370.9	–379.7
Net liabilities of production orders in progress	**–367.7**	**–366.0**
Accumulated costs and recognized profits	1,923.0	1,965.9

4.7 Accounts receivable

Trade and other accounts receivable are carried at the original invoice amount less allowances made for doubtful accounts, trade discounts, volume rebates, and similar items. Financing of customer orders using the Group's own funds as part of its treasury strategy is included in this item.

Trade accounts receivable include supplier credits of CHF 60.1 million (prior year: CHF 84.4 million), which are financed in accordance with the treasury strategy.

	2017 CHF m	2016 CHF m
– from third parties	591.1	542.1
– from associates	0.1	0.3
– from related parties	1.5	0.0
Allowance for bad debts	–8.8	–10.1
Total trade accounts receivable	**583.9**	**532.3**

	2017 CHF m	2016 CHF m
Value added tax credits	47.5	36.4
Other accounts receivable		
– from third parties	52.8	56.4
– from associates	0.2	0.0
Prepayments and accrued income	37.4	38.3
Allowance for bad debts	–0.1	–0.1
Total other accounts receivable	**137.8**	**131.0**

Receivables outstanding analysis

2017	Total book value Dec 31, 2017 CHF m	Not due CHF m	Overdue < 3 months CHF m	4–6 months CHF m	7–9 months CHF m	10–12 months CHF m	> 12 months CHF m
Accounts receivable trade and other	728.8	553.1	87.3	24.5	17.8	7.9	38.2
Allowance for bad debts	–8.9	0.0	–0.5	0.0	0.0	0.0	–8.4
Associated companies and other related parties	1.8	1.8					
Total accounts receivable, net	**721.7**	**554.9**	**86.8**	**24.5**	**17.8**	**7.9**	**29.8**

2016	Total book value Dec 31, 2016 CHF m	Not due CHF m	Overdue < 3 months CHF m	4–6 months CHF m	7–9 months CHF m	10–12 months CHF m	> 12 months CHF m
Accounts receivable trade and other	668.2	527.4	64.9	32.8	11.3	7.4	24.4
Allowance for bad debts	–10.2	0.0	–0.4	0.0	–0.5	–0.2	–9.1
Associated companies and other related parties	5.3	5.3					
Total accounts receivable, net	**663.3**	**532.7**	**64.5**	**32.8**	**10.8**	**7.2**	**15.3**

Allowance for bad debts

	2017 CHF m	2016 CHF m
January 1	–10.2	–10.1
Additions	–2.1	–4.5
Consumption	2.9	1.5
Release	1.1	2.7
Translation differences	–0.6	0.2
December 31	–8.9	–10.2

4.8 Cash and cash equivalents

In the consolidated cash flow statement, cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. In the consolidated balance sheet, bank overdrafts are shown within borrowings in current liabilities.

Cash and cash equivalents include bank accounts and time deposits with an original maturity of a maximum of three months.

4.9 Trade accounts payable

	2017 CHF m	2016 CHF m
Trade accounts payable		
– to third parties	264.6	239.7
– to associates	0.7	0.7
– to related parties	1.5	1.8
Total	**266.8**	**242.2**

4.10 Provisions and contingent liabilities

Provisions are recognized when the Group has a legal or constructive obligation arising from past events, an outflow of resources embodying economic benefits to settle the obligation is probable, and a reliable estimate can be made of this amount. Actual expenses may differ from the accrued amounts.

A contingent liability is disclosed when there is a possible obligation that arises from a past event and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. A contingent liability is also disclosed when there is a present obligation that arises from past events but is not recognized, because an outflow of resources embodying economic benefits to settle the obligation is not probable, or the respective amount of the obligation cannot be measured with sufficient reliability.

When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the income statement net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Warranty provisions are created with a view to meet potential guarantee obligations arising from the sale of machinery and technical equipment. The calculation is based on historic values as well as recognized claims.

Provisions for personnel expenses mainly include long-term employee benefits, such as long-service benefits, partial retirement, jubilee benefits, and deferred compensation plans.

Among other things the other provisions include provisions for pending legal cases, other project risks as well as a provision for restructuring of CHF 0.2 million (prior year: CHF 1.8 million).

Approximately 43% (prior year: 37%) of the cash outflows of the long-term provisions are expected to materialize within the next three years.

The Group recognizes a collective valuation allowance based on its past experience of warranty costs on projects with similar conditions. Other known risks and risks related to projects with special conditions are estimated on a case-by-case basis and measured individually. The actual warranty costs incurred may differ from the costs provided for.

	Provisions for warranties CHF m	Provisions for personnel expenses CHF m	Other provisions CHF m	2017 CHF m	2016 CHF m
January 1	31.0	28.4	9.9	69.3	71.2
Additions	22.6	18.1	24.0	64.7	55.9
Utilization	–16.1	–5.7	–25.5	–47.3	–43.7
Release	–4.9	–0.4	–0.4	–5.7	–13.7
Translation differences	0.6	0.7	0.4	1.7	–0.3
December 31	**33.2**	**41.1**	**8.4**	**82.7**	**69.3**
Thereof short-term	29.2	18.9	7.2	55.3	44.7
Thereof long-term	4.0	22.2	1.2	27.4	24.6

Contingent liabilities

	2017 CHF m	2016 CHF m
Sureties, guarantees and other obligations	1.6	2.0
Total	**1.6**	**2.0**

4.11 Other short-term liabilities, accruals and deferred income

	2017 CHF m	2016 CHF m
Value added tax owed	18.3	13.3
Advance payments	168.9	140.1
Other liabilities		
– to third parties	53.7	39.0
– to related parties	0.6	0.9
Personnel-related accruals	90.4	78.6
Other accruals and deferred income	86.5	78.8
Total	**418.4**	**350.7**

4.12 Defined benefit obligations

The Group's main defined benefit pension plans are in Switzerland and Germany. The defined benefit plans in Switzerland are funded through legally separate trustee administered funds. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities. The defined benefit plans in Germany are partially unfunded.

Pension plans in Switzerland. The Group's Swiss pension plans contain a cash balance benefit formula, accounted for as a defined benefit plan. Employer and employee contributions are defined in the pension fund rules in terms of an age-related sliding scale of percentages of salary. Under Swiss law the pension fund guarantees the vested benefit amount as confirmed annually to members. Interest may be added to member balances at the discretion of the Board of Trustees. At retirement date members have the right to take their retirement benefit as a lump sum, an annuity, or part as a lump sum with the balance converted to a fixed annuity at the rates defined in the fund rules. The Board of Trustees may change the annuity at their discretion subject to the plan's funded status including sufficient free funds as determined according to Swiss statutory valuation rules.

Swiss pension law requires the Board of Trustees to take measures to resolve a statutory underfunding. The possible measures affect both employers and employees (risk sharing).

Pension plans in Germany. The Group's German pension plans have defined benefit rights based on their length of service and/or final pensionable pay. The employer gives a direct promise to the employee to pay him a certain amount once he retires. At retirement date the value of the employee's benefits is paid as an annuity. The Group is required by German law to increase pensions all three years according to price inflation, as measured by the Consumer Price Index or according to comparable pay grades. Direct pension promises are usually funded via book reserve accruals. In 2008, the Group set up a trust fund to fund their pension liabilities for Bühler GmbH, Braunschweig. No material business combinations/curtailments/settlements occurred during the reported financial period.

Status of the Group's defined benefit plans. The status of the Group's defined benefit plans using actuarial assumptions determined in accordance with IAS 19 is summarized below.

Employee benefits – defined benefit plans. These plans are generally funded through payments to legally independent pension or insurance funds.

The aggregate of the present value of the defined benefit obligation and the fair value of plan assets for each plan is recorded in the balance sheet as net defined benefit liability or net defined benefit asset under long-term financial assets. The defined benefit obligation is determined annually by independent actuaries using the projected unit credit method. If the fair value of the plan assets exceeds the present value of the defined benefit obligation, only a net pension asset is recorded, taking account of the asset ceiling.

Pension costs consist of three elements: service costs, net interest, and remeasurements of employee benefits.

Service costs are part of personnel expenses and consist of current service costs, past service costs (including gains/losses from plan amendments or curtailments) and gains/losses from plan settlements.

Net interest is recorded as part of personnel expenses and is determined by applying the discount rate to the net defined liability or net defined asset that exists at the beginning of the year.

The gains and losses resulting from the actuarial valuation are immediately recorded in other comprehensive income as remeasurements of employee benefits. The return on plan assets (excluding interest based on the discount rate) and any change in the effect of an asset ceiling are also recorded in this item. Remeasurements of employee benefits are not recycled through the income statement at any later point in time.

Pension assets and pension liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan.

Employee benefits – defined contribution plans. In addition to the defined benefit plans described above, some Group companies sponsor defined contribution plans based on local practices and regulations. The Group's contributions to defined contribution plans are charged to the income statement to which the contributions relate.

Employee benefits – other long-term employment benefits. Other long-term employment benefits include jubilee, early retirement, or other long-term service benefits, as well as deferred compensation, if not due to be settled within 12 months after the year-end.

The obligations for other long-term employment benefits are disclosed as provisions for personnel expenses. The measurement of these obligations differs from defined benefit plans in that all actuarial gains and losses are recognized immediately in the income statement.

4.12.1 Actuarial assumptions	2017	2016
Discount rate (weighted)	0.8%	0.7%
Future salary increases	1.0%	1.5%
Future pension increases	0.2%	0.2%

The discount rates are determined by referencing market yields at the end of the reporting period on AA- and AAA-rated corporate bonds. In recent years, longevity has increased in all major countries in which the Group sponsors pension plans. The Group sets mortality assumptions after considering the most recent statistics available and uses generational mortality tables to estimate probable future mortality improvements.

Risk Sharing. As in prior year the defined benefit obligation was valued using a risk sharing approach. This approach reflects the shared burden among employer and employees to keep the pension fund balanced in case this is necessary. The assumptions changed relate to the possible measures provided by Swiss pension law.

Sensitivities of significant actuarial assumptions. The discount rate and the future increase in salaries were identified as significant actuarial assumptions. The following impacts on the defined benefit obligation are to be expected:

- → 0.25% increase/decrease in the discount rate would lead to an increase of 3.3% (prior year: 3.5%)/ a decrease of 3.6% (prior year: 3.8%) in the defined benefit obligation.
- → 0.25% increase/decrease in the expected increase in salaries would lead to a decrease of less than 0.2% (prior year: 0.3%)/increase of less than 0.2% (prior year: 0.4%) in the defined benefit obligation.

The sensitivity analysis is based on realistically possible changes as of the end of the reporting year.

The average duration of the defined benefit plan obligation at the end of the reporting period is 13.8 years (prior year: 14.3 years).

The cost of defined benefit pension plans and other long-term employee benefits is determined using actuarial valuations. Actuarial valuations involve making assumptions about discount rates, future salary increases, mortality rates, and future pension increases. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty.

4.12.2 Reconciliation of defined benefit obligation and fair value of plan assets	2017 CHF m	2016 CHF m
Defined benefit obligation at January 1	1,391.1	1,341.5
Interest costs	9.4	20.6
Current service costs (employer)	22.6	24.1
Contributions by plan participants	17.6	17.9
Past service costs	–2.6	0.0
Benefits (paid)/deposited	–71.1	–63.5
Other effects	0.9	0.7
Remeasurements on obligations	17.6	54.9
Currency translation adjustments	8.6	–5.1
Defined benefit obligation at December 31	**1,394.1**	**1,391.1**
Reconciliation of the fair value of plan assets		
Fair value of plan assets at January 1	1,241.7	1,190.7
Interest	8.1	18.1
Contributions by the employer	28.1	28.9
Contributions by plan participants	17.6	17.8
Benefits (paid)/deposited	–71.1	–63.5
Return on plan assets (excluding interest)	119.0	53.9
Currency translation adjustments	5.9	–4.2
Fair value of plan assets at December 31	**1,349.3**	**1,241.7**
Actual return on plan assets	127.1	72.0

4.12.3 Remeasurements of employee benefits	2017 CHF m	2016 CHF m
Return on plan assets excluding interest income	–119.0	–53.9
Current-year actuarial loss (gain) on benefit obligation:		
– change in demographic assumptions	–0.2	–5.3
– change in financial assumptions	–29.7	133.2
– experience adjustments	47.5	–73.0
Remeasurements recognized in other comprehensive income	**–101.4**	**1.0**
Cumulative amount recognized in other comprehensive income	**184.6**	**286.0**

4.12.4 Reconciliation of the amount recognized in the statement of financial position at year-end	2017 CHF m	2016 CHF m
Present value of funded defined benefit obligation	1,394.1	1,391.1
Fair value of plan assets	1,349.3	1,241.7
Deficit/(surplus)	44.8	149.4
Liability (asset) recognized in the statement of financial position	**44.8**	**149.4**
Thereof recognized as separate asset	–31.8	–6.9
Thereof recognized as separate liability	76.6	156.3

4.12.5 Pension expenses recognized in the statement of income	2017 CHF m	2016 CHF m
Current service costs (employer)	22.6	24.1
Net interest employee benefit	1.3	2.6
Past service costs	–2.6	0.0
Other effects	0.8	0.7
Expenses recognized in the statement of income	**22.1**	**27.4**
Thereof service costs and administration costs	20.8	24.8
Thereof net interest on the net defined benefit liability (asset)	1.3	2.6

4.12.6 Best estimate of contributions	2018 CHF m
Contributions by the employer	**29.5**

4.12.7 Plan assets at fair value consist of	2017 CHF m	2016 CHF m
Equity instruments third parties	391.9	337.7
Debt instruments third parties	374.5	368.8
Real estate	378.2	369.8
Cash and cash equivalents	63.2	38.8
Others	141.5	126.6
Total plan assets at fair value	**1,349.3**	**1,241.7**
Thereof quoted	1,349.2	1,241.5
Thereof unquoted	0.1	0.2

4.12.8 Information about significant plans	2017 Switzerland	2017 Germany	2016 Switzerland	2016 Germany
Discount rate	0.7%	1.9%	0.6%	1.3%
Future salary increases	1.0%	1.5%	1.5%	1.5%
Costs of defined benefit plans	19.8	1.5	25.1	1.7
Remeasurements employee benefits	–82.1	–15.0	–13.4	10.0

4.12.9 Defined contribution plan	2017 CHF m	2016 CHF m
Expenses for defined contribution plan	**6.2**	**6.3**

4.13 Share capital

As of December 31, 2017, share capital amounted to CHF 15.0 million (prior year: CHF 15.0 million) and consisted of 105,000 (prior year: 105,000) registered shares with nominal value of CHF 100 each and 112,500 (prior year: 112,500) with nominal value of CHF 40 each.

5. Segment reporting

Segment information. The Group consists of two reportable segments which are identified on the basis of internal business updates that are regularly reviewed by the Chief Executive Officer (CEO). The CEO, being the Chief Operating Decision Maker, regularly reviews the allocation of resources to the two operating segments. The group is managed under its businesses Grains & Food and Advanced Materials.

Grains & Food: Engineering and sale of industrial process technologies and solutions for the food and feed industry, such as the processing of grains, rice, cocoa, coffee, and other raw materials for intermediate and finished products.

Advanced Materials: Engineering and sale of solutions for die-casting, grinding and dispersion, and surface-coating technologies in high-volume application areas such as automotive, optics, inks, and batteries.

5.1 Segment reporting

Segment reporting 2017	Grains & Foods CHF m	Advanced Materials CHF m	Corporate Functions CHF m	Group CHF m
Segment revenue	2,000.2	640.4	32.7	2,673.3
Less intersegment revenue	–0.8	–0.8	0.0	–1.6
Total segment revenue third parties	**1,999.5**	**639.6**	**32.7**	**2,671.7**
EBIT	136.5	57.5	10.8	204.8
in % of revenue	6.8%	9.0%	32.9%	7.7%
Non-current assets	**532.7**	**173.0**	**60.2**	**765.9**

Segment reporting 2016	Grains & Foods CHF m	Advanced Materials CHF m	Corporate Functions CHF m	Group CHF m
Segment revenue	1,874.5	537.5	38.3	2,450.2
Less intersegment revenue	–1.3	–0.3	0.0	–1.6
Total segment revenue third parties	**1,873.2**	**537.1**	**38.3**	**2,448.6**
EBIT	121.0	45.4	7.2	173.6
in % of revenue	6.5%	8.4%	18.9%	7.1%
Non-current assets	**488.4**	**160.2**	**61.5**	**710.2**

Internal and external reporting are both based on the same valuation and accounting principles, and there is therefore no need to provide a reconciliation.

The business results are carried over to the Group's consolidated figures by including the results of units with no market operations as well as consolidation effects.

5.2 Geographical information

Segment revenue	2017 CHF m	2016 CHF m
North America	426.6	422.5
South America	171.1	147.4
Europe	773.8	746.4
Middle East & Africa	413.1	370.2
South Asia	147.7	148.0
Asia	739.4	614.1
Total	**2,671.7**	**2,448.6**
– thereof Switzerland	46.9	80.0
– thereof USA	283.6	306.9
– thereof China	436.7	339.9

Segment non-current assets	2017 CHF m	2016 CHF m
North America	101.4	111.1
South America	3.9	3.4
Europe	443.5	410.3
Middle East & Africa	16.6	16.9
South Asia	12.6	13.3
Asia	187.9	155.2
Total	**765.9**	**710.2**
– thereof Switzerland	134.8	128.6
– thereof USA	100.7	110.5
– thereof China	178.8	147.2

The information about geographical areas is determined based on the Group's operations. The Group operates in six geographical areas: North America, South America, Europe, Middle East & Africa, South Asia, and Asia. Revenues are shown based on the physical location of the equipment.

6. Other disclosures

6.1 Assets pledged or assigned to secure own liabilities

In connection with the long-term loan from related parties of CHF 43.0 million and open legal cases, assets of CHF 45.0 million and CHF 1.2 million, respectively (prior year: CHF 45.0 million and CHF 1.4 million) serve as collateral for own liabilities where the right of disposal is limited.

6.2 Related parties

Related-party transactions. A loan toward the shareholders in the amount of CHF 74.5 million (prior year: CHF 70.0 million) is disclosed under other non-current financial assets. Loans from the shareholders of CHF 109.5 million (prior year: CHF 121.5 million) are disclosed under long-term financial liabilities and of CHF 12.4 million (prior year: CHF 12.4 million) under short-term financial liabilities.

Lease payments to related parties amounted to CHF 23.9 million (prior year: 25.2 million) and are included in other operating expenses. Other related-party positions are disclosed separately in the notes.

Liabilities to pension plans amounted to CHF 0.2 million as per 2017 (prior year: CHF 0.2 million). This amount is included in other short-term liabilities.

Key management compensation. Key management (defined as Group Management and Board of Directors) received a total short-term compensation of CHF 7.7 million (prior year: CHF 8.2 million). In addition, pension and social security contributions of CHF 1.0 million (prior year: CHF 1.0 million) are recorded as expense. The provisions for other long-term benefits amount to CHF 17.5 million (prior year: CHF 5.6 million).

The Bühler Group operates deferred compensation plans for members of the management. The deferred compensation plans comprise a vesting period of 3 years and an execution period of 10 years from the grant date. The amounts are charged to the income statement over the relevant vesting periods and are adjusted to reflect actual and expected levels of vesting. The value of the deferred compensation is determined annually based on the Group's net profit for the 3 preceding years and equity at year-end.

6.3 Government grants

Government grants are offset with the items of expense which they finance. Government grants related to assets are deducted from the assets in deriving the carrying amount of the asset. In 2017 the Group received government grants of CHF 2.0 million (prior year: nil).

6.4 Proposal of the Board of Directors

At the General Meeting, the Board of Directors proposes a dividend of CHF 21.0 million (prior year: CHF 18.0 million) or CHF 140 (prior year: CHF 120) per registered share with a nominal value of CHF 100 and CHF 56 (prior year: CHF 48) per registered share with a nominal value of CHF 40. The dividend payment to the shareholders of Bühler Holding AG amounted to CHF 18.0 million in the financial year 2017 (prior year: CHF 15.0 million).

6.5 Release for publication of the consolidated financial statements

The consolidated financial statements were released for publication by the Board of Directors of Bühler Holding AG on February 6, 2018.

6.6 Subsequent events

Acquisition of Haas Group, Vienna, Austria.
On January 9, 2018, the Group acquired 100% of the Haas Group, a privately owned world market leader of wafer, biscuits, and confectionery production systems. Total revenue of the Haas Group in 2016 amounted to EUR 305 million. Updated financial figures are not yet available.

Report of the statutory auditor

to the General Meeting of Bühler Holding AG

Uzwil

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Bühler Holding AG and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the year ended 31 December 2017, the consolidated balance sheet as at 31 December 2017, the consolidated statement of cash flows and consolidated statement of changes in equity for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 131 - 181) give a true and fair view of the consolidated financial position of the Group as at 31 December 2017 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall Group materiality: CHF 10,900,000

- We concluded full scope audit work at 17 Group companies in 11 countries.
- These group companies represented 79% of the Group's revenue.

As key audit matters the following areas of focus have been identified:

- Accounting of production orders
- Impairment testing of goodwill

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Audit scope
We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The audit strategy for the audit of the consolidated financial statements was determined taking into account the work performed by the component auditors. As Group auditor, we performed the audit of the consolidation, disclosures and presentation of the consolidated financial statements and of the impairment testing of goodwill. Where audits were performed by component auditors, we ensured that, as Group auditor, we were adequately involved in the audit in order to assess whether sufficient appropriate audit evidence was obtained from the work of the component auditors to provide a basis for our opinion. Our involvement comprised communicating the risks identified at Group level, specifying the audit procedures relating to the accounting of production orders, specifying the materiality thresholds to be applied, making visits to selected subsidiaries and component auditors abroad, conducting telephone calls with the component auditors during the interim audit and the year-end audit and analysing the reporting.

Materiality
The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	CHF 10,900,000
How we determined it	5% of profit before taxes
Rationale for the materiality benchmark applied	We chose profit before taxes as the benchmark because, in our view, it is the benchmark against which the performance of the Group is most commonly measured, and it is a generally accepted benchmark for materiality considerations.

We agreed with the Audit Committee that we would report to them misstatements above CHF 450,000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Key audit matters
Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the period under review. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Accounting of production orders

Key audit matter	*How our audit addressed the key audit matter*
The Bühler Group has production orders, which are accounted for using the percentage-of-completion (PoC) method in accordance with IAS 11 'Construction Contracts'. In the year under review, revenue from production orders in the amount of CHF 2,118.2 million were recorded on the basis of the PoC method. The percentage of completion is determined based on the incurred direct costs attributable to the contracts. Management estimates the progress of projects as of the balance sheet date and the costs to be incurred until their completion. An incorrect estimate could have a significant impact on the recorded revenue and the net profit of the Group. Please refer to pages 137 (Use of estimates), page 153 (Revenue) and page 168 (Production orders in progress) in the notes to the consolidated financial statements.	Our audit of the production orders using the PoC method mainly comprised of the following procedures: • We assessed the design and the existence of the key controls regarding the production orders and tested the effectiveness of selected controls. • We assessed whether the internal guidelines regarding the approval of the costs and margins had been respected. • We selected various production orders (sample testing based on the contract volumes, the contribution margin and changes in the margin compared with prior year and the planning phase) and focussed our testing on the following, in particular: – We assessed the contract-related calculations to determine whether the contractual terms and the approved planned costs had been recorded appropriately. – We discussed with the project controllers and project managers the progress of the projects based on the latest project accounts, the costs still to be incurred until their completion and changes in the margin. – We obtained written information from the legal representatives of the Group. We inspected this written information with regard to indications of potential quality deficiencies or penalties for non-performance and assessed whether these matters were presented appropriately in the consolidated financial statements. • For the production orders completed during the year under review, we compared various final parameters with the estimates made in the planning phase or those as of the previous balance sheet date in order to assess, with hindsight, the accuracy of the estimates made by Management. • In addition, we examined and discussed the results of the reviews performed by Internal Audit of the production orders. Our audit approach allowed us to make an adequate assessment of the accounting applied to the production orders.

Impairment testing of goodwill

Key audit matter	*How our audit addressed the key audit matter*
The impairment testing of goodwill was deemed a key audit matter for the following two reasons: Goodwill is a significant item on the consolidated balance sheet (CHF 242.5 million); it is not amortised but tested for impairment at least annually. In calculating the value-in-use for these tests, the Board of Directors and Management have significant scope for judgement in defining the cash-generating units (CGUs), in allocating the goodwill and net operating assets to the CGUs and in determining the underlying assumptions (discount rate, growth rates, revenue growth and EBIT margin growth). Management adopted an established process in order to forecast the cash flows. The Board of Directors monitored adherence to this process and approved the impairment tests conducted by Management. Please refer to page 137 (Use of estimates) and pages 162 - 165 (Intangible assets) in the notes to the consolidated financial statements.	In our audit of the impairment testing of goodwill, we performed the following main audit procedures: • We assessed the design and the existence of the key controls regarding the impairment testing of goodwill. Further, we checked whether the Board of Directors approved the impairment tests. • We assessed how the CGUs were defined, taking into account the accounting standards and our knowledge of the organisation of the Group. • We assessed the appropriateness of the procedure for allocating goodwill and net operating assets to the CGUs. • We compared the revenue and the EBIT of the year under review with the budget approved by the Board of Directors in order to identify, in retrospect, any forecasts that were too optimistic and to assess the accuracy of the estimates that were made. • We performed plausibility checks on the key assumptions Management used for the impairment tests as well as on the changes in net working capital resulting from the application of these assumptions. To this end, we involved our internal valuation experts, who compared the assumptions with data from analogous companies and market data. Further, we assessed the technical and arithmetical correctness of the valuation model. • In addition, we assessed the sensitivity analyses carried out by Management. Further, we performed our own sensitivity analyses using different discount rates, revenues and gross profit margins. These analyses enabled us to assess any potential impairment of the goodwill. • We assessed the appropriateness of the disclosures in the notes to the financial statements in accordance with IAS 36 'Impairment of Assets'. We consider the valuation process and the assumptions applied by Management to be an appropriate and adequate basis for the impairment testing of the goodwill.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of Bühler Holding AG and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group'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 the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 Swiss law, ISAs and Swiss Auditing Standards 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 consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

René Rausenberger	Philipp Gnädinger
Audit expert Auditor in charge	Audit expert

Zürich, 6 February 2018

Financial Statements Bühler Holding AG

Income statement Bühler Holding AG

	Notes	2017 CHF m	2016 CHF m
Investment income	11	58.3	48.2
Financial income	12	19.8	16.4
Exchange gains on foreign currency valuation	13	16.7	0.0
Other operating income	14	10.3	4.4
Total operating income		**105.1**	**69.0**
Investment expenses	15	–11.6	0.0
Financial expenses	16	–7.1	–0.8
Exchange losses on foreign currency valuation	13	0.0	–8.6
Other operating expenses	17	–8.0	–11.3
Operating expenses		**–26.7**	**–20.7**
Profit before taxes		**78.4**	**48.3**
Taxes		–1.8	–0.6
Net profit		**76.6**	**47.7**

Balance sheet Bühler Holding AG

Assets	Notes	2017 CHF m	2016 CHF m
Cash and cash equivalents		440.4	26.1
Other accounts receivable third parties		0.2	0.2
Other accounts receivable group	5	97.7	81.6
Current loans third parties		0.2	0.3
Current loans group	5	49.4	52.4
Accrued income and prepaid expense		0.1	0.0
Current assets		**588.0**	**160.6**
Non-current securities		4.3	0.0
Other financial assets third parties		2.3	0.0
Other financial assets related parties	8	82.3	79.3
Other financial assets group	6	377.2	346.3
Investments	18	706.3	697.1
Non-current assets		**1,172.4**	**1,122.7**
Total assets		**1,760.4**	**1,283.3**

Equity and liabilities	Notes	2017 CHF m	2016 CHF m
Financial liabilities group	7	22.2	48.7
Accounts payables related parties		0.6	0.6
Accounts payables group	7	134.2	120.3
Short-term provisions	10	26.0	20.0
Other liabilities group	7	0.0	0.1
Deferred income and accrued expense		3.0	0.3
Current liabilities		**186.0**	**190.0**
Financial liabilities third parties	9	420.0	0.0
Financial liabilities related parties	8	66.5	66.5
Long-term provisions	10	2.5	0.0
Non-current liabilities		**489.0**	**66.5**
Total liabilities		**675.0**	**256.5**
Share capital		15.0	15.0
Legal reserves		7.5	7.5
Other free reserves		275.6	275.6
Available earnings brought forward from prior year		710.7	681.0
Net profit		76.6	47.7
Shareholders’ equity		**1,085.4**	**1,026.8**
Total shareholders’ equity and liabilities		**1,760.4**	**1,283.3**

Notes to the financial statements Bühler Holding AG

1 General information

The financial statements of Bühler Holding AG, domiciled in Uzwil SG, were prepared in accordance with the regulations of Swiss financial reporting law.

Bühler Group prepares consolidated financial statements on a Group level according to International Financial Reporting Standards (IFRS). Therefore, Bühler Holding AG does not publish additional notes, a cash flow statement, and management reporting according to article 961d Swiss Code of Obligations.

2 Valuation principles

The financial statement accounting policies meet the requirements of Swiss financial reporting law. The main financial statement line items are accounted for as described below.

The balance sheet positions in foreign currency have been valued at the following closing rates:

	2017 CHF	2016 CHF
CNY	0.1502	0.1477
EUR	1.1710	1.0760
GBP	1.3190	1.2620
USD	0.9820	1.0270

Loans to Group subsidiaries are recorded at their nominal value. If necessary, value adjustments are made for potential impairment losses.

3 Number of full-time equivalents

The number of full-time equivalents is on average less than 10 employees (prior year: less than 10 employees).

4 Definition of related parties and Group companies

Related parties are companies which are directly or indirectly owned by the Bühler family. Also included are members of the Bühler family as well as the Board of Directors and companies owned by members of the Board of Directors of the Bühler Group.

Group companies are companies in which Bühler Group holds direct or indirect investments and are included in the consolidated Group financial statements.

5 Other accounts receivable and current loans group

Accounts receivable and current loans Group mainly include short-term loans to Group companies for working capital financing purposes.

6 Other financial assets group

Financial assets mainly include loans to Group companies, which are granted at market conditions and are long-term (more than one year).

7 Liabilities group

Liabilities Group consist primarily of short-term liabilities related to cash pooling (mainly Bühler AG, Uzwil) as part of the Groups' cash management.

8 Other financial assets/liabilities related parties

These loans are owed from and to the shareholders as well as from other related parties (associates).

9 Financial liabilities third parties

This position contains corporate bonds issued to third parties.

Nominal amount in CHF	Valor	Interest rate	Period of validity	Expiration nominal value
180 Mio.	38‘960‘607	0.10%	12/21/2017 – 12/21/2022	12/21/2022
240 Mio	38‘960‘608	0.60%	12/21/2017 – 12/21/2026	12/21/2026

10 Provisions

This item mainly includes provisions for currency risks relating to loans to Group companies and accounts receivable from Group companies.

11 Investment Income

This position mainly contains dividend income from subsidiaries and other participations.

12 Financial income

Financial income mainly includes interest income on loans to Group companies.

13 Exchange gains/losses on foreign currency valuation

Exchange gains/losses on foreign currency valuation contains currency gains and losses. In previous years gains were shown in financial income and expense.

14 Other operating income

Other operating income contains licence fee income.

15 Investment expenses
Investment expenses include the liquidation loss of a Group company and impairments.

16 Financial expenses
Financial expenses primarily include interest on foreign expenses paid to Group companies.

17 Other operating expenses
Other operating expenses predominantly include negative value adjustments of loans as well as service fee expenses.

18 Investments
Investments are recorded at cost less economically necessary adjustments. The principal investments that are held directly or indirectly by Bühler Holding AG are shown in the table on page 141. The participation rate is equal to the voting rights and share in capital.

19 Contingent liabilities

	2017 CHF m	2016 CHF m
Sureties, guarantees and other obligations in favor of Group companies	548.4	487.0
Sureties, guarantees and other obligations in favor of third parties	84.4	70.8

20 Proposal of the Board of Directors for the appropriation of available earnings

	2017 CHF m	2016 CHF m
Balance brought forward from prior year	710.7	681.0
Net profit of the year	76.6	47.7
Available earnings at the disposal of the General Meeting	**787.3**	**728.7**
The Board of Directors proposes to the General Meeting:		
– The distribution of a dividend	21.0	18.0
– Allocation to other reserves	0.0	0.0
– Carry forward to new accounting period	766.3	710.7

The statutory obligation of appropriation to reserves is waived as the legal reserve amounts to 50% of the paid-in share capital.

21 Deviation from the continuity of the presentation
In 2017 exchange gains/losses on foreign currency valuation are disclosed net in one financial statement account line item. In previous year's gains were reflected in financial Income and the losses in financial expenses.

22 Letter of comfort
Bühler Holding AG issued a letter of comfort for Bühler Barth GmbH, Germany on 17 August 2017. With this letter of comfort, Bühler Holding AG commits itself to financially support Bühler Barth GmbH in order that Bühler Barth GmbH is able to meet its current and future obligations at all times. The issued letter of comfort is valid as long as Bühler Barth GmbH belongs to the Bühler Group, at the latest until December 31, 2020.

23 Significant events after the balance sheet date
On January 9, 2018, Bühler Holding AG acquired 20% of the Haas Group, a privately owned world market leader in wafer, biscuits, and confectionery production systems.

Report of the statutory auditor
to the General Meeting of Bühler Holding AG
Uzwil

Report on the audit of the financial statements

Opinion
We have audited the financial statements of Bühler Holding AG, which comprise the income statement for the year ended December 31, 2017, the balance sheet as at 31 December 2017 and notes, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 188 - 191) as at 31 December 2017 comply with Swiss law and the company's articles of incorporation.

Basis for opinion
We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall materiality: CHF 17,600,000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

Impairment testing of investments in subsidiaries

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Audit scope
We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Materiality
The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 17,600,000
How we determined it	1% of total assets
Rationale for the materiality benchmark applied	We chose total assets as the benchmark because, in our view, it is a relevant benchmark against which holding companies can be assessed, and it is a generally accepted benchmark with regard to materiality considerations in holding companies.

We agreed with the Audit Committee that we would report to them misstatements above CHF 450,000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority
Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the period under review. 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.

Impairment testing of investments in subsidiaries

Key audit matter	*How our audit addressed the key audit matter*
Investments in subsidiaries represent a significant balance sheet line item (CHF 706.3 million). The Board of Directors uses business valuations in order to test these investments for impairment. The business valuations are calculated using the 'practitioner's method'. In cases were indications of impairment exist, the book values of the investments are compared with the impairment test applied to assess the goodwill at the Group level. In calculating these business valuations, there is significant scope for judgement in determining the underlying assumptions, particularly with regard to the future business results and the discount rate to apply to the forecast cash flows. Management adopts a specified impairment testing process to identify the potential need for the impairment of investments. Please refer to pages 191 (investments) in the notes to the financial statements.	In our audit of the investments in subsidiaries, we performed the following main audit procedures: • We assessed the design and the existence of the key controls regarding the valuation of the investments. • We compared the book value of the investments in the year under review with the results from using the practitioner's method of valuation. If there were indications of impairment, we compared the book values of the investments with the impairment test applied to assess the goodwill at the Group level. • We performed plausibility checks on the key assumptions applied by Management used for the impairment tests (discount rate, growth rates, revenue growth and EBIT margin growth). To this end, we involved our internal valuation experts, who compared the assumptions with data from analogous companies and market data. Further, we assessed the technical and arithmetical correctness of the valuation model. We consider the valuation process and the assumptions used to be an appropriate and adequate basis for the impairment testing of investments in subsidiaries as at 31 December 2017.

Responsibilities of the Board of Directors for the financial statements
The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors 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, the Board of Directors is responsible for assessing the entity'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 the Board of Directors either intends to liquidate the entity 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 Swiss law and Swiss Auditing Standards 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.

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A further description of our responsibilities for the audit of the financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

René Rausenberger	Philipp Gnädinger
Audit expert Auditor in charge	Audit expert

Zürich, 6 February 2018