

7. Miscellaneous items

7.1. Notes to the cash flow statement

Summary in thousands of €	2015	2016
<i>EBIT</i>	219 386	259 654
<i>Non-cash items added back to EBIT</i>	221 323	221 779
EBITDA	440 709	481 433
<i>Other gross cash flows from operating activities</i>	-85 365	-105 770
Gross cash flows from operating activities	355 344	375 663
<i>Changes in operating working capital</i>	212 266	16 336
<i>Other operating cash flows</i>	15 952	7 553
Cash from operating activities	583 562	399 552
Cash from investing activities	-362 984	-99 986
Cash from financing activities	-267 808	-302 055
Net increase or decrease in cash and cash equivalents	-47 230	-2 489

The cash flow from operating activities is presented using the indirect method, whereas the direct method is used for the cash flows from other activities. The direct method focuses on classifying gross cash receipts and gross cash payments by category.

Cash from operating activities

Gross cash flows from operating activities increased by € 20.3 million thanks to better operating performance (€ +40.7 million EBITDA), higher add-backs for other non-cash items (€ +8.8 million, mainly provisions and equity-settled share-based payments) and favorable effects on investing items (€ +14.6 million), offset by higher usage of provisions (€ -4.1 million) and substantially higher cash-outs on income taxes (€-39.7 million). The gain on step acquisition and negative goodwill in 2015 relates to the step acquisition of BOSFA Pty Ltd.

Investing items included in operating result played a modest role in 2016, contrary to the previous year, when the main items consisted of gains on business disposals (net of CTA recycled) with respect to Carding Solutions and the Xinyu entities.

Further efforts to reduce working capital generated cash-ins amounting to € 16.3 million in 2016 (see organic increase in note 6.7. 'Operating working capital'). In 2015, drastic reductions in operating working capital contributed a spectacular € 212.3 million to the cash flows from operating activities. As for the 'other operating cash flows', the higher movements in other current assets and liabilities in 2015 were largely due to insurance indemnifications for the fire in Rome accrued in 2014 and received in 2015.

Income taxes paid were € 39.7 million higher than in 2015, of which € 13.5 million in Belgium, € 7.6 million in China, € 6.6 million in Chile, € 4.9 million in Indonesia and € 4.7 million in Slovakia.

The following table presents more details about selected operating items:

Details of selected operating items in thousands of €	2015	2016
Non-cash items included in operating result		
<i>Depreciation and amortization</i> ¹	208 401	203 917
<i>Impairment losses on assets</i>	13 262	17 862
<i>Negative goodwill</i>	-340	-
Non-cash items added back to EBIT	221 323	221 779
<i>Gains (-) and losses on step acquisitions</i>	1 098	-
<i>Employee benefits: set-up / reversal (-) of amounts not used</i> ²	17 500	15 606
<i>Provisions: set-up / reversal (-) of amounts not used</i>	3 752	14 393
<i>CTA recycled on business disposals</i>	393	-
<i>Equity-settled share-based payments</i>	2 906	4 449
Other non-cash items included in operating result	25 649	34 448
Total	246 972	256 227
Investing items included in operating result		
Gains (-) and losses on business disposals	-13 653	-
Gains (-) and losses on disposals of intangible assets + PP&E	102	1 034
Total	-13 551	1 034
Amounts used on provisions and employee benefit obligations		
Employee benefits: amounts used	-33 493	-37 242
Provisions: amounts used	-7 314	-7 622
Total	-40 807	-44 864
Income taxes paid		
Current income tax expense	-53 251	-93 004
Increase or decrease (-) in net income taxes payable	-3 406	-3 384
Total	-56 657	-96 388
Other operating cash flows		
Movements in other current assets and liabilities	12 748	6 321
Other	3 203	1 232
Total	15 951	7 553

¹ Including € -1.2 million (2015: € 8.3 million) write-downs / (reversals of write-downs) on inventories and trade receivables (see note 6.7. 'Operating working capital').

² See note 2.7. 'Restatement and reclassification effects'.

Cash from investing activities

The amount shown as 'new business combinations' in 2016 relates to the cash acquired in the establishment of the Bridon-Bekaert Ropes Group (cf. note 7.2. 'Effect of business combinations'). In 2015 new business combinations generated a net cash-out of € -129.8 million, mainly relating to the final acquisition phase of the Pirelli steel cord plants and Arrium's ropes business. Other portfolio investments in 2015 mainly consisted of Bekaert acquiring non-controlling interests in certain entities in order to pursue its own strategic course. In 2015, proceeds from disposals of investments (€ 30.8 million) mainly related to the Carding business disposal and deferred consideration received for the Industrial Coatings business disposed in 2012. Capital expenditure for property, plant and equipment remained quite high (€ -158.5 million), although slightly below its record level of 2015 (€ -170.7 million) that was boosted by the rebuilding of the bead wire plant in Rome (Georgia, USA) destroyed by a fire in 2014.

The following table presents more details on selected investing cash flows:

Details of selected investing items in thousands of €	2015	2016
Other portfolio investments		
Purchase of non-controlling interests in Ropes entities	-91 488	-
Purchase of non-controlling interests in Southern Wire entities	-5 270	-
Purchase of non-controlling interests in Chinese entities	-12 700	-
Other investments	-101	-41
Total	-109 559	-41
Other investing cash flows		
Proceeds from disposal of intangible assets	17	14
Proceeds from disposal of property, plant and equipment	3 789	1 172
Total	3 806	1 186

Other investing cash flows such as proceeds from sales of property, plant and equipment were rather immaterial in both 2015 and 2016.

Cash from financing activities

New long-term debt issued (€ 172.1 million) mainly related to financing transactions in Belgium, China and Australia. From the proceeds of the € 380 million convertible bond, a net amount of € 114.6 million represents new debt, while the remainder relates to the exchange of the existing convertible bond. Repayments of long-term debt (€ -375.3 million) mainly related to a maturing € 205.0 million Eurobond and an amount of € 84.3 million for the settlement of the existing convertible bond by NV Bekaert SA, and other repayments in China (€ -66.8 million) and Latin America (€ -12.9 million). There was a slight decrease (€ -5.6 million) in current interest-bearing debt in 2016. Treasury shares transactions in 2016 (€ 7.5 million) consisted of share buy-backs (€ -1.1 million) and proceeds from options being exercised (€ 8.6 million).

The following table presents more details about selected financing items:

Details of selected financing items in thousands of €	2015	2016
Other financing cash flows		
New shares issued following exercise of subscription rights	234	5 365
Capital paid in by minority interests	14 967	-
Increase (-) or decrease in current and non-current loans and receivables	2 041	17 138
Increase (-) or decrease in current financial assets	9 616	4 148
Other financial income and expenses	-16 437	-3 458
Total	10 421	23 193

As for other financing cash flows, cash-ins resulted from capital increases (€ 5.4 million) and net receipts from loans and receivables (€ 17.1 million) and from short-term deposits (€ 4.1 million). The main movement in loans and receivables relates to the settlement of loans by the Xinyu entities, in which Bekaert no longer has a significant influence since 2015. Other financial income and expenses mainly relates to taxes and bank charges on financial transactions (€ -2.5 million).

7.2. Effect of business combinations

The establishment of Bridon-Bekaert Ropes Group

On 7 December 2015, Bekaert announced the signing of an agreement with Ontario Teachers' Pension Plan (Ontario Teachers'), the owner of Bridon, to establish Bridon-Bekaert Ropes Group, a new joint venture in which Bekaert and Ontario Teachers' planned to hold respectively 67% and 33%. The new group combines the ropes and advanced cords businesses including 19 manufacturing entities across 11 countries, market-focused R&D, and a global sales and service network.

On 28 June 2016, Bekaert and Ontario Teachers' successfully closed the definitive merger of the ropes and advanced cords businesses of Bekaert and Bridon. Bekaert is contributing its advanced cords business and a well-established ropes presence in Latin America, Canada and Australia. Bridon holds strong positions in Europe and the USA with a portfolio of rope wire, strand and steel and synthetic ropes. The merger will allow for both operational and commercial synergies. The complementary geographic and sector profiles should enable growth ahead of the market; the combination of rope technology strength and wire technology strength will provide a platform for strong differentiation in the high-end rope markets. The merger creates the leading ropes group in the world with approximately USD 650 million in sales (current equivalent of € 580 million) on an annual basis in a normalized business context. This ambition explains why Bekaert was willing to pay a substantial purchase consideration, which resulted in a goodwill of € 116.2 million.

The group is estimated to add approximately USD 350 million (€ 315 million at current rates) to Bekaert's consolidated sales on an annual basis in a normalized business context. The Group projects a lower run rate over the first two years due to the current demand instability in oil and gas and mining markets.

- Bekaert has entered the following entities in Bridon-Bekaert Ropes Group: the WRI roperies in Canada, US and Australia, Bekaert Cimaf of Brazil, Prodinsa in Chile, Procables in Peru and its advanced cord businesses in Aalter (Belgium) and Shenyang (China). The commercialization of the ropes activities integrated in Bekaert's wire plants in Qingdao (China) and Shah Alam (Malaysia) will as from the merger date also be managed by the new group. About 1 000 people have joined Bridon-Bekaert Ropes Group.
- Ontario Teachers' has contributed its entire ownership in Bridon to Bridon-Bekaert Ropes Group, which includes the wire and steel and fiber rope manufacturing facilities in Doncaster, Newcastle, and Coatbridge (UK), in Exeter, Hanover and Wilkes Barre (PA, USA), in Gelsenkirchen (Germany), Hangzhou (China), Jakarta (Indonesia) and the ScanRope plant in Tønsberg (Norway). Also all commercial and service centers worldwide have been integrated into the new group. About 1 500 people have joined Bridon-Bekaert Ropes Group.

The initial accounting for the business combination presented in the June 2016 interim financial statements was evidently provisional, since the acquisition had only been closed at the end of the first semester. During the second semester, Bekaert has performed an extensive analysis to identify, and to assess the fair value of, the net assets acquired and the liabilities assumed.

The intangible assets acquired were identified and assessed by an external expert. The fair value assessments on property, plant and equipment are based on recent external appraisals for land and buildings and on internal appraisals for plant, machinery and equipment. Deferred tax assets and liabilities arising from any of these adjustments have been recognized at the applicable tax rates in the respective jurisdictions.

The purchase price allocation reflected negative net assets totaling € -114.6 million. The main reason for this lies with Bridon's highly leveraged financing structure, the acquired net debt amounting to € 278.7 million.

The non-controlling interests arising on the acquirees have been measured at their share in the fair value of the net assets acquired. Since the purchase consideration consisted of a 33% stake in Bekaert's advanced cords and global ropes businesses, it is measured at the fair value of the non-controlling interests disposed, which is based on the valuation of the shares in the deal, and adjusted for any additional funding arrangements that were agreed between the partners.

The table below presents the net assets acquired by balance sheet caption, showing the effect of fair value adjustments applied in accordance with IFRS 3, 'Business combinations', and the goodwill calculation for the transaction. It also clarifies the contribution of the business combination to the amount shown in the consolidated cash flow statement as 'new business combinations'.

Total in thousands of €	Acquiree's carrying amount before combination	Fair value adjustments	Fair value
Intangible assets	46 637	5 032	51 669
Property, plant and equipment	116 783	-22 542	94 241
Deferred tax assets	1 571	7 909	9 480
Non-current loans and receivables	1 319	-	1 319
Other non-current assets	4	-	4
Inventories	56 892	3 189	60 081
Trade receivables	36 583	-	36 583
Advances paid	887	-	887
Other receivables	4 261	-	4 261
Cash and cash equivalents	40 918	-	40 918
Other current assets	2 629	-	2 629
Non-current employee benefit obligations	-7 722	-	-7 722
Non-current provisions	-9 435	-4 940	-14 375
Non-current interest-bearing debt	-293 111	8 546	-284 565
Deferred tax liabilities	-20 703	-2 158	-22 861
Other non-current liabilities	-16	-	-16
Current interest-bearing debt	-35 672	-	-35 672
Trade payables	-39 243	-	-39 243
Current employee benefit obligations	-4 156	-	-4 156
Current provisions	-2 165	-	-2 165
Income taxes payable	-407	-	-407
Advances received	-1 486	-	-1 486
Other current liabilities	-4 004	-	-4 004
Total net assets acquired in a business combination	-109 636	-4 964	-114 600
Purchase consideration (NCI disposed)			-39 807
Non-controlling interests arising on the acquirees			38 162
Goodwill			116 245
Consideration paid in cash			-
Cash acquired			40 918
New business combinations			40 918

The main intangible assets include the brand name(s) (€ 45.5 million), the customer relationships (€ 4.8 million) and the order book (€ 0.4 million). As a result of the prior acquisition of Bridon by OTPP, the brand name and customer relationships were already carried on the books of Bridon. The current appraisal resulted in an increase of € 5.0 million.

The negative fair value adjustments on property, plant and equipment mainly relate to the plant, machinery and equipment in the UK (€ -7.3 million), the US (€ -12.6 million) and China (€ -4.9 million). The positive fair value adjustments on inventories mainly reflect the gross profit to be generated on work in process and finished goods upon their subsequent sales. The bad debt allowance of € -0.4 million included in the carrying amount of the trade receivables on the books of the acquiree was deemed adequate in view of the perceived credit risks.

Contingent liabilities for customer claims amounting to € 4.9 million have been identified at Bridon International Ltd.

Following table shows the effect of the business combination on consolidated sales and comprehensive income (after acquisition-related expenses):

Total in thousands of €	Date of acquisition	Net sales for the period	Comprehensive income
Bridon entities	28 June 2016	109 168	-58 136
of which			
Operating result (EBIT) acquired entities			-23 209
Acquisition-related expenses			-8 639
Total operating result (EBIT)			-31 848
Interest income and expenses			-23 401
Other financial income and expenses			2 790
Result before taxes			-52 459
Income taxes			1 571
Result for the period			-50 888
OCI			-7 248

The acquisition-related expenses, which consisted mainly of consultancy fees, amounted to € 16.7 million (of which € 8.1 million incurred in 2015) and were included in other operating expenses. If all of the Bridon entities had been acquired as from 1 January 2016, the Group would have additionally recognized € 122.7 million of net sales and a result for the period (i.e. the first semester) of € 80.3 million, including one-time debt refinancing gains amounting to € 89.7 million.

7.3. Financial risk management and financial derivatives

Principles of financial risk management

The Group is exposed to risks from movements in exchange rates, interest rates and market prices that affect its assets and liabilities. Financial risk management within the Group aims at reducing the impact of these market risks through ongoing operational and financing activities. Selected derivative hedging instruments are used depending on the assessment of risk involved. The Group mainly hedges the risks that affect the Group's cash flows. Derivatives are used exclusively as hedging instruments and not for trading or other speculative purposes. To reduce the credit risk, hedging transactions are generally only concluded with financial institutions whose credit rating is at least A.

The guidelines and principles of the Bekaert financial risk policy are defined by the Audit and Finance Committee and overseen by the Board of the Group. Group Treasury is responsible for implementing the financial risk policy. This encompasses defining appropriate policies and setting up effective control and reporting procedures. The Audit and Finance Committee is regularly kept informed as to the currency and interest-rate exposure.

Currency risk

The Group's currency risk can be split into two categories: translational and transactional currency risk.

Translational currency risk

A translational currency risk arises when the financial data of foreign subsidiaries are converted into the Group's presentation currency, the euro. The main currencies are Chinese renminbi, US dollar, Czech koruna, Brazilian real, Chilean peso, Russian ruble, Indian rupee, Pound sterling and Venezuelan bolivar (cf. cumulative translation adjustments in note 6.13. 'Retained earnings and other Group reserves'). Since there is no impact on the cash flows, the Group usually does not hedge against such risk.

Transactional currency risk

The Group is exposed to transactional currency risks resulting from its investing, financing and operating activities.

Foreign currency risk in the area of investment results from the acquisition and disposal of investments in foreign companies, and sometimes also from dividends receivable from foreign investments. If material, these risks are hedged by means of forward exchange contracts.

Foreign currency risk in the financing area results from financial liabilities in foreign currencies. In line with its policy, Group Treasury hedges these risks using cross-currency interest-rate swaps and forward exchange contracts to convert financial obligations denominated in foreign currencies into the entity's functional currency. At the reporting date, the foreign currency liabilities for which currency risks were hedged mainly consisted of intercompany loans in euro and US dollar.

Foreign currency risk in the area of operating activities arises from commercial activities with sales and purchases in foreign currencies, as well as payments and receipts of royalties. The Group uses forward exchange contracts to limit the currency risk on the forecasted cash inflows and outflows for the coming three months. Significant exposures and firm commitments beyond that time frame may also be covered.

Currency sensitivity analysis

Currency sensitivity relating to the operating, investing and financing activities

The following table summarizes the Group's net foreign currency positions of operating, investing and financing receivables and payables at the reporting date for the most important currency pairs. The net currency positions are presented before intercompany eliminations. Positive amounts indicate that the Group has a net future cash inflow in the first currency. In the table, the 'Total exposure' column represents the position on the balance sheet, while the 'Total derivatives' column includes all financial derivatives hedging those balance sheet positions as well as forecasted transactions.

Currency pair - 2016

in thousands of €

	Total exposure	Total derivatives	Open position
AUD/USD	3 716	-3 634	81
EUR/BRL	-13 670	-	-13 670
EUR/CAD	-14 223	-	-14 223
EUR/CNY	-103 187	34 138	-69 049
EUR/GBP	25 170	-2 150	23 020
EUR/USD	-7 488	-	-7 488
IDR/USD	8 616	-	8 616
JPY/CNY	5 076	-4 449	627
NZD/GBP	-9 605	-	-9 605
RUB/EUR	21 649	-21 650	-1
TRY/EUR	14 256	-	14 256
USD/CAD	14 923	-	14 923
USD/CLP	8 510	-	8 510
USD/CNY	-163 998	149 531	-14 467
USD/COP	-9 854	14 153	4 299
USD/EUR	236 431	-314 559	-78 128
USD/GBP	94 265	-11 861	82 404
USD/INR	-46 915	33 522	-13 393
USD/SGD	-25 675	-	-25 675

Currency pair - 2015

in thousands of €

	Total exposure	Total derivatives	Open position
CNY/EUR	15 702	-4 249	11 453
CZK/EUR	-12 100	4 165	-7 935
EUR/CNY	-66 349	65 723	-626
EUR/USD	28 305	-30 000	-1 695
IDR/USD	9 222	-	9 222
USD/BRL	-8 120	-	-8 120
USD/CAD	12 680	-3 572	9 108
USD/CLP	74 670	-	74 670
USD/CNY	-244 088	215 519	-28 569
USD/EUR	461 769	-485 210	-23 441
USD/INR	-63 897	47 511	-16 386
USD/SGD	-24 298	-	-24 298

If rates had weakened/strengthened by reasonably possible changes with all other variables constant, the result for the period before taxes would have been € 2.7 million lower/higher (2015: € 1.6 million). The reasonably possible changes used in this calculation were based on annualized volatility relating to the daily movement of the exchange rate of the reported year, with a 95% confidence interval.

Currency sensitivity in relation to hedge accounting

At 31 December 2016 the Group only applies hedge accounting in a very limited number of cases, notably in Bridon International Ltd (UK) which hedges its currency risk on operating cash flows through foreign-exchange contracts designated as cash flow hedges. The major currency risk exposures being hedged are EUR/GBP and USD/GBP. If the GBP had weakened/strengthened by reasonably possible changes, with all other variables constant, the hedging reserve would have been € 2.5 million higher/lower at year-end 2016. No hedge accounting was applied at previous year-end.

Interest-rate risk

The Group is exposed to interest-rate risk, mainly on debt denominated in US dollar, Chinese renminbi and euro. To minimize the effects of interest-rate fluctuations in these regions, the Group manages the interest-rate risk for net debt denominated in the respective currencies of these countries separately. General guidelines are applied to cover interest-rate risk:

- The target average life of long-term debt is four years.
- The allocation of long-term debt between floating and fixed interest rates must remain within the defined limits approved by the Audit and Finance Committee.

Group Treasury uses interest-rate swaps and cross-currency interest-rate swaps to ensure that the floating and fixed portions of the long-term debt remain within the defined limits.

The following table summarizes the weighted average interest rates at the balance sheet date.

The convertible bond and the loans linked to the Bridon merger are carried at amortized cost using the effective interest method, which results in spreading the recognition of transaction fees over time via interest charges. Consequently, effective interest charges will exceed the nominal interest charges.

2016	Long-term			Short-term	Total
	Fixed rate	Floating rate	Total		
US dollar	10.60%	4.45%	5.54%	1.81%	2.65%
Chinese renminbi	6.00%	-	6.00%	3.38%	5.38%
Euro	2.78%	6.20%	3.42%	0.43%	3.27%
Other	7.74%	-	7.74%	5.14%	5.82%
Total	3.21%	5.61%	3.79%	2.28%	3.30%

2015	Long-term			Short-term	Total
	Fixed rate	Floating rate	Total		
US dollar	4.63%	-	4.63%	1.27%	1.35%
Chinese renminbi	5.81%	-	5.81%	3.24%	5.65%
Euro	2.99%	-	2.99%	0.53%	2.90%
Other	7.34%	3.00%	7.16%	4.75%	5.58%
Total	3.41%	3.00%	3.41%	1.82%	2.80%

Interest-rate sensitivity analysis

Interest-rate sensitivity of the financial debt

As disclosed in note 6.17. 'Interest-bearing debt', the total financial debt of the Group as of 31 December 2016 amounted to € 1 459.2 million (2015: € 1 293.3 million). The following table shows the currency and interest rate profile, i.e. the percentage distribution of the total financial debt by currency and by type of interest rate (fixed, floating).

Currency and interest rate profile 2016	Long-term		Short-term	Total
	Fixed rate	Floating rate	Floating rate	
US dollar	1.20%	5.50%	23.20%	29.90%
Chinese renminbi	0.70%	-	0.20%	0.90%
Euro	47.40%	10.90%	3.10%	61.40%
Other	2.00%	-	5.80%	7.80%
Total	51.30%	16.40%	32.30%	100.00%

Currency and interest rate profile 2015	Long-term		Short-term	Total
	Fixed rate	Floating rate	Floating rate	
US dollar	0.80%	-	29.70%	30.50%
Chinese renminbi	3.80%	-	0.20%	4.00%
Euro	53.90%	-	2.00%	55.90%
Other	3.20%	0.10%	6.30%	9.60%
Total	61.70%	0.10%	38.20%	100.00%

On the basis of the annualized daily volatility of the 3-month Interbank Offered Rate in 2016 and 2015, the reasonable estimates of possible interest rate changes, with a 95% confidence interval, are set out in the table below for the main currencies.

Currency	Interest rate at 31 December	Reasonably possible changes (+/-)
Chinese renminbi ¹	3.09%	0.51%
Euro	0.00%	0.00%
US dollar	1.00%	0.18%

Currency	Interest rate at 31 December	Reasonably possible changes (+/-)
Chinese renminbi ¹	2.41%	0.40%
Euro	0.00%	0.03%
US dollar	0.61%	0.19%

¹ For the Chinese renminbi, the interest rate is the PBOC benchmark interest rate for lending up to six months.

Applying the estimated possible changes in the interest rates to the floating rated debt, with all other variables constant, the result for the period before tax would have been € 1.8 million higher/lower (2015: € 0.8 million higher/lower).

Interest-rate sensitivity in relation to hedge accounting

At 31 December 2016, the Group does not apply hedge accounting and no sensitivity analysis was done.

Credit risk

The Group is exposed to credit risk from its operating activities and certain financing activities. In respect of its operating activities, the Group has a credit policy in place, which takes into account the risk profiles of the customers in terms of the market segment to which they belong. Based on activity platform, product sector and geographical area, a credit risk analysis is made of customers and a decision is taken regarding the covering of the credit risk. The exposure to credit risk is monitored on an ongoing basis and credit evaluations are made of all customers. In terms of the characteristics of some steel wire activities with a limited number of global customers, the concentration risk is closely monitored and, in combination with the existing credit policy, appropriate action is taken when needed. In accordance with IFRS 8 §34, none of the specified disclosures on individual customers (or groups of customers under common control) are required, since none of the Group's customers accounts for more than 10% of its revenues. At 31 December 2016, 57.8% (2015: 65.4%) of the credit risk exposure was covered by credit insurance policies and by trade finance techniques. In respect of financing activities, transactions are normally concluded with counterparties that have at least an A credit rating. There are also limits allocated to each counterparty which depend on their rating. Due to this approach, the Group considers the risk of counterparty default to be limited in both operating and financing activities.

Liquidity risk

Liquidity risk is the risk that the Group will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding. To ensure liquidity and financial flexibility at all times, the Group, in addition to its available cash, has several uncommitted short-term credit lines at its disposal in the major currencies and in amounts considered adequate for current and near-future financing needs. These facilities are generally of the mixed type and may be utilized, for example, for advances, overdrafts, acceptances and discounting. The Group also has committed credit facilities at its disposal up to a maximum equivalent of € 50 million (2015: € 50 million) at floating interest rates with fixed margins. At year-end, nothing was outstanding under these facilities (2015: nil). In addition, the Group has a commercial paper and medium-term note program available for a maximum of € 123.9 million (2015: € 123.9 million). At the end of 2016, € 50 million commercial paper notes were outstanding (2015: none). At year-end, the external bank debt related to Bridon-Bekaert Ropes Group for € 316 million was subject to debt covenants (2015: none). The Group (except for BBRG) has a joint factoring agreement with BNP Paribas Fortis and KBC and has the possibility to borrow up to € 77 million (2015: € 90 million) for two months withdrawals, but no withdrawals were done before year-end (2015: none).

BBRG is financed by a banking syndicate of 11 lenders. The loan structure consists of senior debt (A and B tranche), a pre-merger existing debt in Belgium and Australia (BNP debt) and a revolving credit facility (RCF) in addition to some debt with existing facilities (Other debt). The financing arrangement was put in place on June 29, 2016. For financing purposes, BBRG is ring-fenced, which implies (i) it cannot get any support (such as intercompany loans, corporate guarantees, asset-pledges, any form of collateral) from other Bekaert entities outside its consolidation perimeter to finance its activities, (ii) its banking syndicate will not have any recourse to the Bekaert Group. Consequently, BBRG acts as an independent group for financing purposes. BBRG has entered into a separate factoring agreement with BNP Paribas Fortis in the UK and Germany and has the possibility to borrow up to € 15 million (2015: nil), of which € 6 million withdrawals were taken up before year-end (2015: none).

The total debt at the end of December 2016 is as follows (nominal amounts):

Total debt BBRG in millions of USD	31 December 2016
Loan A	73.0
Loan B	193.3
BNP debt	33.9
RCF	24.6
Other debt	6.3
Total debt	331.2

The main requirements towards the banking syndicate are monthly, quarterly and annual reporting, communication on budget as well as the obligation to comply with two covenants.

The first one is the leverage covenant which measures the relation between the adjusted Underlying EBITDA and Net Debt. Underlying EBITDA is increased with the difference of the annualized impact of identified savings and the realized saving in any period on a last twelve month rolling basis, which is redefined as adjusted Underlying EBITDA. The second covenant measures the relation between the adjusted Underlying EBITDA and the interest cost of BBRG.

The covenants as per end of December 2016 are as follows:

2016 in millions of USD				31 December 2016	Covenant	Breach	
Leverage Covenant:	Net Debt	=	274.9	=	4.60	5.95	NO
	Adj Underlying EBITDA		59.8				
Interest Covenant:	Adj Underlying EBITDA	=	59.8	=	2.90	2.50	NO
	Interest cost		20.6				

BBRG passed the covenant tests with sufficient headroom. The adjusted Underlying EBITDA headroom at the end of December 2016 is USD 13.8 million. Based on the current trading performance, BBRG expects to have sufficient headroom going forward.

The following table shows the Group's contractually agreed (undiscounted) outflows in relation to financial liabilities (including financial liabilities reclassified as liabilities associated with assets held for sale). Only net interest payments and principal repayments are included.

2016 in thousands of €	2017	2018	2019-2021	2022 and thereafter
Financial liabilities - principal				
<i>Trade payables</i>	-563 479	-	-	-
<i>Other payables</i>	-20 060	-518	-	-
<i>Interest-bearing debt</i>	-312 864	-144 752	-830 018	-247 111
<i>Derivatives - gross settled</i>	-325 736	-11 943	-5 086	-
Financial liabilities - interests				
<i>Interest-bearing debt</i>	-47 148	-42 023	-83 147	-37 679
<i>Derivatives - net settled</i>	-346	-346	-173	-
<i>Derivatives - gross settled</i>	-5 858	-1 717	-557	-
Total undiscounted cash flow	-1 275 491	-201 299	-918 981	-284 790

2015 in thousands of €	2016	2017	2018-2020	2021 and thereafter
Financial liabilities - principal				
<i>Trade payables</i>	-456 783	-	-	-
<i>Other payables</i>	-7 590	-820	-	-
<i>Interest-bearing debt</i>	-494 714	-13 343	-778 773	-
<i>Derivatives - gross settled</i>	-512 735	-	-11 872	-
Financial liabilities - interests				
<i>Interest-bearing debt</i>	-36 401	-22 744	-39 025	-
<i>Derivatives - net settled</i>	-	-	-	-
<i>Derivatives - gross settled</i>	-7 240	-1 153	-1 153	-
Total undiscounted cash flow	-1 515 463	-38 060	-830 823	-

All instruments held at the reporting date and for which payments had been contractually agreed are included. Forecasted data relating to future, new liabilities has not been included. Amounts in foreign currencies have been translated at the closing rate at the reporting date. The variable interest payments arising from the financial instruments were calculated using the applicable forward interest rates.

Hedging

All financial derivatives the Group enters into, relate to an underlying transaction or forecasted exposure. In function of the expected impact on the income statement and if the stringent IAS 39 criteria are met, the Group decides on a case-by-case basis whether hedge accounting will be applied. The following sections describe the transactions whereby hedge accounting is applied and transactions which do not qualify for hedge accounting but constitute an economic hedge.

Hedge accounting

At 31 December 2016, the Group only applies hedge accounting in a very limited number of cases, notably in Bridon International Ltd which hedges its currency risk on operating cash flows through foreign-exchange contracts designated as cash flow hedges. Until March 2015, some derivatives were still part of effective cash flow hedges and fair value hedges relating to the € 100.0 million Eurobond issued in 2005 and expired in March 2015.

Fair value hedges

There are no fair value hedges in 2016.

During 2005, the entity reduced its floating US dollar exposure from € 50.0 million to € 30.9 million. The Group designated the portion of € 30.9 million from the 2005 Eurobond as a hedged item in a fair value hedge (the remaining € 69.1 million being treated as a hedged item in a cash flow hedge – see next section). The changes in fair values of the hedged items resulting from changes in the spot rate USD/EUR were offset against the changes in fair value of the cross-currency interest-rate swaps. Credit risks were not addressed or covered by this hedging. Fair value hedges affected the income statement of 2015 as shown below:

2015 in thousands of €	Hedged item	Hedging instrument	Recognized in income statement
	Fair value changes	Fair value changes	
Fair value hedges			
<i>Currency and interest-rate risk on financing cash flows</i>	-2 424	2 445	21
<i>Interest expense adjustments</i>	-	-	144
Total	-2 424	2 445	165

Cash flow hedges

2016 in thousands of €	Hedged item	Hedging instrument	Recognized in income statement	Recognized in equity (OCI)
	Spot price changes	Fair value changes		
Cash flow hedges				
<i>Currency risk on operating cash flows</i>	-542	1 284	-	742
Total	-542	1 284	-	742

Cash flow hedges in 2016 relate to Bridon International Ltd. which hedges its foreign currency risk on operating cash flows through foreign-exchange contracts.

2015 in thousands of €	Hedged item	Hedging instrument	Recognized in income statement	Recognized in equity (OCI)
	Spot price changes	Fair value changes		
Cash flow hedges				
<i>Currency and interest-rate risk on financing cash flows</i>	-5 873	6 034	161	-
<i>Interest expense adjustments</i>	-	-	-326	-
<i>Amortization of discontinued hedges (recycled to interest expense)</i>	-	-	-14	14
Total	-5 873	6 034	-179	14

Cash flow hedges in 2015 relate to the discontinued hedge linked to the Eurobond issued in 2005 which expired in 2015, any related amounts previously kept in the hedging reserve have then been fully recycled to the income statement.

Economic hedging and other free-standing derivatives

The Group also uses financial instruments that represent an economic hedge but for which no hedge accounting is applied, either because the criteria to qualify for hedge accounting defined in IAS 39 'Financial Instruments: Recognition and Measurement' are not met or because the Group has elected not to apply hedge accounting. These derivatives are treated as free-standing instruments held for trading.

- The Group uses cross-currency interest-rate swaps and forward exchange contracts to hedge the currency risk on intercompany loans involving two entities with different functional currencies. Until now, the Group has elected not to apply hedge accounting as defined in IAS 39. Since nearly all cross-currency interest-rate swaps are floating-to-floating, the fair value gain or loss on the financial instruments is expected to offset the foreign-exchange result arising from the remeasurement of the intercompany loans. The major currencies involved are US dollars, euros and Russian rubles.
- To manage its interest-rate exposure, the Group uses interest-rate swaps to convert its floating-rate debt to a fixed rate debt for USD 73.0 million (2015: none).
- The Group uses forward exchange contracts to limit currency risks on its various operating and financing activities. The Group only applies hedge accounting in a very limited number of cases, notably in Bridon International Ltd which designates its foreign-exchange contracts relating to hedge currency risk on operating cash flows as cash flow hedges. For all other forward exchange contracts, the fair value change is recorded immediately under other financial income and expenses.
- In June 2016, an existing € 300 million convertible bond maturing in 2018 has been early settled with the proceeds of a new € 380 million convertible bond maturing in 2021. The existing bond had a coupon interest of 0.75% while the new bond has a zero coupon interest. Existing bondholders were offered a 15.1% premium above par to trade their old bonds for new bonds, plus the accrued coupon interest. The characteristics of both the existing and the new convertible bond are such that their conversion option constitutes a non-closely related embedded derivative which, in accordance with IAS 39, is separated from the host contract. Of the new bonds, 75.9% were subscribed by existing bondholders. Under the 10% rule required by IAS 39, the terms of the new bonds were deemed not substantially different from the terms of the existing bonds, as the net present value of the cash flows under the new terms, including any fees paid and discounted using the original effective interest rate, differed less than 10 percent from the net present value of the remaining cash flows of the existing convertible bond. Consequently, 75.9% of the new bonds were accounted for as an exchange of financial liabilities, while 24.1% were accounted for as a settlement of financial liabilities. At the date that the transaction was launched, the fair value of the existing conversion derivative amounted to € 48.6 million while the fair value of the new conversion derivative amounted to € 40.5 million. The exchange scenario resulted into 75.9% of the difference in fair value being recognized as a credit of € 6.1 million to the carrying amount of the new bond. The remainder of the fair value of the existing conversion derivative resulted in a loss of € 42.7 million being recognized in other financial expenses. The fair value of the conversion derivative on the new bond amounted to € 35.2 million at 31 December 2016 (vs € 40.5 million at inception), as a result of which a gain of € 5.3 million was recognized in other financial income. Furthermore, a loss of € 2.5 million was incurred on the repurchase of the bonds that were not traded for new bonds. The host contract (the plain vanilla debt without the conversion option) is recognized at amortized cost using the effective interest method; its effective interest expense amounts to € 5.6 million (2015: € 3.3 million). Transaction costs relating to the issue of the convertible bond amounted to € 5.7 million and were allocated to the host debt liability and the conversion derivative in proportion to their respective fair values at inception. At inception, the former part of the transaction costs (€ 5.1 million) was included in the carrying amount of the liability component while the latter part (€ 0.6 million) was immediately recognized in profit or loss.
- The put option relating to the 2014 business combination with Maccaferri qualifies as a financial liability at fair value through profit or loss and is reported as a non-current derivative liability. The change in fair value recorded in other financial income and expenses amounted to a loss of € 0.3 million (2015: loss of € 0.3 million).

Derivatives

The following table analyzes the notional amounts of the derivatives according to their maturity date. For derivatives designated for hedge accounting as set out in IAS 39, a distinction is made depending on whether these are part of a fair value hedge (FVH) or cash flow hedge (CFH):

2016 in thousands of €	Due within one year	Due between one and 5 years	Due after more than 5 years
Hedge accounting			
Forward exchange contracts (CFH)	18 487	-	-
Held for trading			
Forward exchange contracts	278 239	-	-
Interest-rate swaps	-	69 253	-
Cross-currency interest-rate swaps	355 810	5 086	-
Conversion derivative	-	380 000	-
Total	652 536	454 339	-

2015 in thousands of €	Due within one year	Due between one and 5 years	Due after more than 5 years
Held for trading			
Forward exchange contracts	370 847	-	-
Cross-currency interest-rate swaps	561 109	11 872	-
Conversion derivative	-	300 000	-
Total	931 956	311 872	-

The following table summarizes the fair values of the various derivatives carried. For derivatives designated for hedge accounting as set out in IAS 39, a distinction is made depending on whether these are part of a fair value hedge (FVH) or cash flow hedge (CFH):

Fair value of current and non-current derivatives in thousands of €	Assets		Liabilities	
	2015	2016	2015	2016
Financial instruments				
Hedge accounting				
Forward exchange contracts (CFH)	-	-	-	595
Held for trading				
Forward exchange contracts	3 900	5 712	4 525	865
Interest-rate swaps	-	436	-	-
Interest-rate caps	-	-	-	19
Cross-currency interest-rate swaps	11 744	889	17 711	6 591
Put options relating to non-controlling interests ¹	-	-	8 559	8 845
Conversion derivative	-	-	5 825	35 207
Total	15 644	7 037	36 620	52 122
Non-current	5 897	436	14 384	44 374
Current	9 747	6 601	22 236	7 748
Total	15 644	7 037	36 620	52 122

¹ Liability relating to the commercial partnership with Maccaferri for underground solutions announced in June 2014.

The Group has no financial assets and financial liabilities that are presented net in the balance sheet due to set-off in accordance with IAS 32. The Group enters into ISDA master agreements with its counterparties for all of its derivatives, allowing the counterparties to net derivative assets with derivative liabilities when settling in case of default. Under these agreements, no collateral is being exchanged, neither in cash nor in securities.

The potential effect of the netting of derivative contracts is shown below:

Effect of enforceable netting agreements in thousands of €	Assets		Liabilities	
	2015	2016	2015	2016
Total derivatives recognized in balance sheet	15 644	7 037	36 620	52 122
Enforceable netting	-5 847	-889	-5 847	-889
Net amounts	9 797	6 148	30 773	51 233

Additional disclosures on financial instruments by class and category

The following tables list the different classes of financial assets and liabilities with their carrying amounts and their respective fair values, analyzed by their measurement category in accordance with IAS 39, 'Financial Instruments: Recognition and Measurement'.

Cash and cash equivalents, short-term deposits, trade and other receivables, bills of exchange received, loans and receivables primarily have short terms to maturity; hence, their carrying amounts at the reporting date approximate the fair values. Trade and other payables also generally have short terms to maturity and, hence, their carrying amounts also approximate their fair values. The Group has no exposure to collateralized debt obligations (CDOs).

The following abbreviations are used for IAS 39 categories:

Abbreviation	Category in accordance with IAS 39
L&R	Loans & Receivables
AfS	Available for Sale
FAFVTPL	Financial Assets at Fair Value Through Profit or Loss
FLMaAC	Financial Liabilities Measured at Amortized Cost
Hedge accounting	Hedge accounting
FLFVTPL	Financial Liabilities at Fair Value Through Profit or Loss
n.a.	Not applicable

2016 in thousands of €	Category in accordance with IAS 39	Carrying amount 2016	Fair value 2016
Assets			
Cash and cash equivalents	L&R	365 546	365 546
Short-term deposits	L&R	5 342	5 342
Trade receivables	L&R	739 145	739 145
Bills of exchange received	L&R	60 182	60 182
Other receivables	L&R	38 239	38 239
Loans and receivables	L&R	28 020	28 020
Available-for-sale financial assets	AfS	17 499	17 499
Derivative financial assets			
- without a hedging relationship	FAFVTPL	7 037	7 037
- with a hedging relationship	Hedge accounting	-	-
Liabilities			
Interest-bearing debt			
- finance leases	n.a.	3 855	3 855
- credit institutions	FLMaAC	781 915	781 915
- bonds	FLMaAC	673 455	715 186
Trade payables	FLMaAC	556 361	556 361
Other payables	FLMaAC	20 572	20 572
Derivative financial liabilities			
- without a hedging relationship	FLFVTPL	51 528	51 528
- with a hedging relationship	Hedge accounting	595	595
Aggregated by category in accordance with IAS 39			
Loans and receivables	L&R	1 236 474	1 236 474
Available-for-sale financial assets	AfS	17 499	17 499
Financial assets at fair value through profit or loss	FAFVTPL	7 037	7 037
Financial liabilities measured at amortized cost	FLMaAC	2 032 303	2 074 034
Financial liabilities - hedge accounting	Hedge accounting	595	595
Financial liabilities at fair value through profit or loss	FLFVTPL	51 528	51 528
2015 in thousands of €			
Assets			
Cash and cash equivalents	L&R	401 771	401 771
Short-term deposits	L&R	10 216	10 216
Trade receivables	L&R	686 364	686 364
Bills of exchange received	L&R	68 005	68 005
Other receivables	L&R	28 418	28 418
Loans and receivables	L&R	51 428	51 428
Available-for-sale financial assets	AfS	15 626	15 626
Derivative financial assets			
- without a hedging relationship	FAFVTPL	15 644	15 644
Liabilities			
Interest-bearing debt			
- finance leases	n.a.	3 764	3 764
- credit institutions	FLMaAC	458 536	458 536
- bonds	FLMaAC	831 040	869 422
Trade payables	FLMaAC	456 783	456 783
Other payables	FLMaAC	8 411	8 411
Derivative financial liabilities			
- without a hedging relationship	FLFVTPL	36 620	36 620
Aggregated by category in accordance with IAS 39			
Loans and receivables	L&R	1 246 202	1 246 202
Available-for-sale financial assets	AfS	15 626	15 626
Financial assets at fair value through profit or loss	FAFVTPL	15 644	15 644
Financial liabilities measured at amortized cost	FLMaAC	1 754 770	1 793 152
Financial liabilities at fair value through profit or loss	FLFVTPL	36 620	36 620

Financial instruments by fair value measurement hierarchy

The fair value measurement of financial assets and financial liabilities can be characterized in one of the following ways:

- 'Level 1' fair value measurement: the fair values of financial assets and liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices in these active markets for identical assets and liabilities. This mainly relates to available-for-sale financial assets such as the investment in Shougang Concord Century Holdings Ltd (see note 6.5. 'Other non-current assets').
- 'Level 2' fair value measurement: the fair values of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions and dealer quotes for similar instruments. This mainly relates to derivative financial instruments. Forward exchange contracts are measured using quoted forward exchange rates and yield curves derived from quoted interest rates with matching maturities. Interest-rate swaps are measured at the present value of future cash flows estimated and discounted using the applicable yield curves derived from quoted interest rates. The fair value measurement of cross-currency interest-rate swaps is based on discounted estimated cash flows using quoted forward exchange rates, quoted interest rates and applicable yield curves derived therefrom.
- 'Level 3' fair value measurement: the fair value of the remaining financial assets and financial liabilities is derived from valuation techniques which include inputs that are not based on observable market data. The share conversion option in the convertible bond issued in June 2014 and the one issued in June 2016 is a non-closely related embedded derivative that has to be separated from the host debt instrument and measured at fair value through profit or loss. The fair value of the conversion option is determined as the difference between the fair value of the convertible bond as a whole (mid – source: Bloomberg) and the fair value of the host debt contract using a valuation model based on the prevailing market interest rate for similar plain vanilla debt instruments. The main factors determining the fair value of the conversion option are the Bekaert share price (level 1), the reference swap rate (level 2), the volatility of the Bekaert share (level 3) and the credit spread (level 3). Consequently, the conversion option is classified as a level-3 financial instrument. Similarly, the fair value of the put option relating to non-controlling interests has not been based on observable market data, but on the business plan that was agreed between the partners in the business combination with Maccaferri. The fair value was established using discounted cash flows.

Convertible bond issued in 2014	At issue date	At 31 Dec 2015	At 19 May 2016 ¹
Level 1 inputs			
Share price	€ 27.97	€ 28.39	€ 37.97
Level 2 inputs			
Reference swap rate	0.54%	0.01%	-0.15%
Level 3 inputs			
Volatility	25.40%	20.00%	30.00%
Credit spread	210 bps	200 bps	175 bps

Outcome of the model

in thousands of €

Fair value of the convertible debt	300 000	298 014	345 281
Fair value of the plain vanilla debt	278 700	292 189	296 730
Fair value of the conversion option	21 300	5 825	48 551

¹ Announcement date of early - settlement offer.

Convertible bond issued in 2016	At issue date	At 31 Dec 2016
Level 1 inputs		
Share price	€ 37.97	€ 38.49
Level 2 inputs		
Reference swap rate	0.03%	0.02%
Level 3 inputs		
Volatility	29.00%	29.15%
Credit spread	225 bps	175 bps

Outcome of the model

in thousands of €

Fair value of the convertible debt	380 000	386 734
Fair value of the plain vanilla debt	339 509	351 527
Fair value of the conversion option	40 491	35 207

The carrying amount (i.e. the fair value) of the level-3 liabilities has evolved as follows:

Level-3 Financial liabilities

in thousands of €

	2015	2016
At 1 January	7 921	14 384
Reclassifications	8 272	-
At issue of the convertible debt (14 June 2016)	-	40 491
(Gain) /loss in fair value	-1 809	-10 823
At 31 December	14 384	44 052

The following table shows the sensitivity of the fair value calculation to the most significant level-3 inputs for the conversion option.

Sensitivity analysis

in thousands of €

	Change Impact on derivative liability	
Volatility	3.5% increase by	13 292
	-3.5% decrease by	-13 308
Credit spread	25 bps increase by	3 810
	-25 bps decrease by	-3 861

The fair value of all financial instruments measured at amortized cost in the balance sheet has been determined using level-2 fair value measurement techniques. The following table provides an analysis of financial instruments measured at fair value in the balance sheet, in accordance with the fair value measurement hierarchy described above:

2016

in thousands of €

	Level 1	Level 2	Level 3	Total
Financial assets - hedge accounting				
<i>Derivative financial assets</i>	-	-	-	-
Financial assets at fair value through profit or loss				
<i>Derivative financial assets</i>	-	7 037	-	7 037
Available-for-sale financial assets				
<i>Equity investments</i>	7 951	8 514	-	16 465
Total assets	7 951	15 551	-	23 502
Financial liabilities - hedge accounting				
<i>Interest-bearing debt</i>	-	-	-	-
<i>Derivative financial liabilities</i>	-	595	-	595
Financial liabilities at fair value through profit or loss				
<i>Put option relating to non-controlling interests</i>	-	-	8 845	8 845
<i>Derivative financial liabilities</i>	-	7 476	35 207	42 683
Total liabilities	-	8 071	44 052	52 123

2015				
in thousands of €	Level 1	Level 2	Level 3	Total
Financial assets - hedge accounting				
<i>Derivative financial assets</i>	-	-	-	-
Financial assets at fair value through profit or loss				
<i>Derivative financial assets</i>	-	15 644	-	15 644
Available-for-sale financial assets				
<i>Equity investments</i>	6 193	8 514	-	14 707
Total assets	6 193	24 158	-	30 351
Financial liabilities - hedge accounting				
<i>Interest-bearing debt</i>	-	-	-	-
<i>Derivative financial liabilities</i>	-	-	-	-
Financial liabilities at fair value through profit or loss				
<i>Put option relating to non-controlling interests</i>	-	-	8 559	8 559
<i>Derivative financial liabilities</i>	-	22 236	5 825	28 061
Total liabilities	-	22 236	14 384	36 620

There were no transfers between level 1 and 2 in the period.

Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the return to shareholders through the optimization of the net debt and equity balance. The Group's overall strategy remains unchanged from 2015.

The capital structure of the Group consists of net debt, as defined in note 6.17. 'Interest-bearing debt', and equity (both attributable to the Group and to non-controlling interests).

Gearing ratio

The Group's Audit and Finance Committee reviews the capital structure on a semi-annual basis. As part of this review, the committee assesses the cost of capital and the risks associated with each class of capital. The Group has a target gearing ratio of 50% determined as the proportion of net debt to equity.

Gearing		2015	2016
in thousands of €			
Net debt ¹		836 886	1 067 683
Equity ¹		1 511 651	1 597 893
Net debt to equity ratio		55,4%	66,8%

¹ See note 2.7. 'Restatement and reclassification effects'.

7.4. Contingencies and commitments

As at 31 December, the important contingencies and commitments were:

in thousands of €	2015	2016
Contingent liabilities	29 031	27 659
Commitments to purchase fixed assets	13 796	30 177
Commitments to invest in venture capital funds	3 644	2 051

The contingent liabilities mainly relate to environmental obligations. Most of them are covered by corporate guarantees.

The entities of the Group are subjected to regular tax audits in their jurisdictions. While the ultimate outcome of tax audits is not certain, Bekaert has considered the merits of its filing positions in an overall evaluation of potential tax liabilities and concludes that the Group has adequate liabilities recorded in its consolidated financial statements for exposures on these matters. Accordingly, Bekaert also considers it unlikely that potential tax exposures over and above the amounts currently recorded as liabilities in the consolidated financial statements will be material to its financial condition (see note 6.4. 'Investments in joint ventures and associates' for tax contingencies relating to the Brazilian joint ventures).

The Group has entered into several rental contracts classified as operating leases mainly with respect to vehicles and buildings, predominantly in Europe. A large portion of the contracts contain a renewal clause, except those relating to most of the vehicles and the equipment. The assets are not subleased to a third party.

Lease commitments increased sharply as a consequence of the Bridon entities being included for the first time (€ 54.6 million).

Future payments in thousands of €	2015	2016
Within one year	17 101	22 498
Between one and five years	30 488	42 796
More than five years	749	35 161
Total	48 338	100 455

Expenses in thousands of €	2015	2016
Vehicles	10 369	10 103
Industrial buildings	4 228	8 463
Equipment	3 809	5 114
Offices	3 528	4 722
Land	18	132
Other	1 306	1 562
Total	23 258	30 096

2016 in years	Weighted average lease term
Vehicles	4
Industrial buildings	16
Equipment	3
Offices	3
Land	1
Other	1

2015 in years	Weighted average lease term
Vehicles	4
Industrial buildings	5
Equipment	3
Offices	4
Land	1
Other	1

7.5. Related parties

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated in the consolidation and are accordingly not disclosed in this note. Transactions with other related parties are disclosed below.

Transactions with joint ventures in thousands of €	2015	2016
Sales of goods	15 224	5 527
Purchases of goods	17 916	19 885
Services rendered	237	263
Royalties and management fees received	8 956	8 957
Interest and similar income	690	-
Dividends received	17 674	22 491

Outstanding balances with joint ventures in thousands of €	2015	2016
Trade receivables	2 542	3 795
Other current receivables	869	1 861
Trade payables	2 411	4 633
Other current payables	-	51

None of the related parties have entered into any other transactions with the Group that meet the requirements of IAS 24, 'Related Party Disclosures'.

Key Management includes the Board of Directors, the CEO, the members of the Bekaert Group Executive and the Senior Vice Presidents (see last page of the Financial Review).

Key Management remuneration in thousands of €	2015	2016
Number of persons	41	35
Short-term employee benefits		
<i>Basic remuneration</i>	6 887	7 156
<i>Variable remuneration</i>	2 349	4 422
<i>Remuneration as directors of subsidiaries</i>	679	624
Post-employment benefits		
<i>Defined-benefit pension plans</i>	518	533
<i>Defined-contribution pension plans</i>	608	687
Share-based payment benefits	2 376	3 783
Total gross remuneration	13 417	17 205
Average gross remuneration per person	327	492
Number of options and stock appreciation rights granted	267 000	163 750
Number of cash and equity settled performance share units granted	-	55 250
Number of matching shares granted	-	20 327

The disclosures relating to the Belgian Corporate Governance Code are included in the Corporate Governance Statement of this annual report.

7.6. Events after the balance sheet date

- An offer of 285 750 options was made on 15 December 2016 under the terms of the SOP 2015-2017 stock option plan. 273 325 of those options were accepted, and were granted on 13 February 2017. Their exercise price is € 39.43. The granted options represent a fair value of € 2.8 million.
- Under the terms of the USA SAR plans, a regular offer of 25 375 Stock Appreciation Rights was made on 15 December 2016. All of those rights were accepted, and will be granted when the acceptance term expires on 25 March 2017. Their exercise price is € 38.86. The granted rights represent a fair value of € 0.3 million.
- Under the terms of the other SAR plans, a regular offer of 53 000 Stock Appreciation Rights was made on 15 December 2016. 51 750 of those rights were accepted, and were granted on 13 February 2017. Their exercise price is € 39.43. The granted rights represent a fair value of € 0.5 million.
- On 6 March 2017 an exceptional grant of 10 000 Performance Share Units was made for the Chief Executive Officer. The granted rights represent a fair value of € 0.5 million.
- A total of 303 350 treasury shares have been disposed of as a result of stock options under the terms of the SOP 2010-2014 stock option plan being exercised since 1 January 2017.

7.7. Services provided by the statutory auditor and related persons

During 2016, the statutory auditor and persons professionally related to him performed additional services for fees amounting to € 1 111 447.

These fees essentially relate to further assurance services (€ 71 500), tax advisory services (€ 997 624) and other non-audit services (€ 42 323). The additional services were approved by the Audit and Finance Committee.

The audit fees for NV Bekaert SA and its subsidiaries amounted to € 2 482 464.

7.8. Subsidiaries, joint ventures and associates

Companies forming part of the Group as at 31 December 2016

Subsidiaries

<i>Industrial companies</i>	<i>Address</i>	<i>FC¹</i>	<i>%</i>
EMEA			
Bekaert Advanced Cords Aalter NV	Aalter, Belgium	EUR	60
Bekaert Bohumín sro	Bohumín, Czech Republic	CZK	100
Bekaert Combustion Technology BV	Assen, Netherlands	EUR	100
Bekaert Figline SpA	Milano, Italy	EUR	100
Bekaert Hlohovec as	Hlohovec, Slovakia	EUR	100
Bekaert Izmit Çelik Kord Sanayi ve Ticaret AS	Izmit, Turkey	EUR	100
Bekaert Kartepe Çelik Kord Sanayi ve Ticaret AS	Kartepe, Turkey	EUR	100
Bekaert Petrovice sro	Petrovice, Czech Republic	CZK	100
Bekaert Sardegna SpA	Assemini, Italy	EUR	100
Bekaert Slatina SRL	Slatina, Romania	RON	80
Bekaert Slovakia sro	Sládkovičovo, Slovakia	EUR	100
Bekintex NV	Wetteren, Belgium	EUR	100
Bridon International GmbH	Gelsenkirchen, Germany	EUR	60
Bridon International Ltd	Doncaster, United Kingdom	GBP	60
Bridon Scanrope AS	Tonsberg, Norway	NOK	60
Cold Drawn Products Ltd	Bradford, United Kingdom	GBP	100
Industrias del Ubierna SA	Burgos, Spain	EUR	100
OOO Bekaert Lipetsk	Gryazi, Russian Federation	RUB	100
Solaronics SA	Armentières, France	EUR	100
North America			
Bekaert Corporation	Wilmington (Delaware), United States	USD	100
Bridon-American Corporation	New York, United States	USD	60
Wire Rope Industries Ltd/Industries de Câbles d'Acier Ltée	Pointe-Claire, Canada	CAD	60
Wire Rope Industries USA Inc	Wilmington (Delaware), United States	USD	60
Latin America			
Acma SA	Santiago, Chile	CLP	52
Acmanet SA	Talcahuano, Chile	CLP	52
Bekaert Cimaf Cabos Ltda	São Paulo, Brazil	BRL	60
Bekaert Costa Rica SA	San José-Santa Ana, Costa Rica	USD	58
Bekaert Sumaré Ltda	Sumaré, Brazil	BRL	100
BIA Alambres Costa Rica SA	San José-Santa Ana, Costa Rica	USD	58
Ideal Alambrec SA	Quito, Ecuador	USD	58
Industrias Chilenas de Alambre - Inchalam SA	Talcahuano, Chile	CLP	52
Procables SA	Callao, Peru	PEN	58
Prodinsa SA	Maipú, Chile	CLP	60
Productora de Alambres Colombianos Proalco SAS	Bogotá, Colombia	COP	80
Productos de Acero Cassadó SA	Callao, Peru	USD	38
Vicson SA	Valencia, Venezuela	VEF	80
Asia Pacific			
Bekaert Ansteel Tire Cord (Chongqing) Co Ltd	Chongqing, China	CNY	50
Bekaert Applied Material Technology (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Binjiang Steel Cord Co Ltd	Jiangyin (Jiangsu province), China	CNY	90
Bekaert (China) Technology Research and Development Co Ltd	Jiangyin (Jiangsu province), China	CNY	100
Bekaert (Huizhou) Steel Cord Co Ltd	Huizhou (Guangdong province), China	CNY	100
Bekaert Industries Pvt Ltd	Taluka Shirur, District Pune, India	INR	100
Bekaert Ipoh Sdn Bhd	Kuala Lumpur, Malaysia	MYR	100
Bekaert (Jining) Steel Cord Co Ltd	Jining City, Yanzhou district (Shandong Province), China	CNY	80
Bekaert Jiangyin Wire Products Co Ltd	Jiangyin (Jiangsu province), China	CNY	100
Bekaert Mukand Wire Industries Pvt Ltd	Pune, India	INR	100
Bekaert New Materials (Suzhou) Co Ltd	Suzhou (Jiangsu province), China	CNY	100

¹ Functional currency

Bekaert (Qingdao) Wire Products Co Ltd	Qingdao (Shandong province), China	CNY	100
Bekaert Shah Alam Sdn Bhd	Kuala Lumpur, Malaysia	MYR	100
Bekaert (Shandong) Tire Cord Co Ltd	Weihai (Shandong province), China	CNY	100
Bekaert (Shenyang) Advanced Cords Co Ltd	Shenyang (Liaoning province), China	CNY	60
Bekaert Shenyang Advanced Products Co Ltd	Shenyang (Liaoning province), China	CNY	100
Bekaert Toko Metal Fiber Co Ltd	Tokyo, Japan	JPY	70
Bekaert Wire Ropes Pty Ltd	Mayfield East, Australia	AUD	60
Bridon (Hangzhou) Ropes Co Ltd	Hangzhou (Zhejiang province), China	CNY	60
China Bekaert Steel Cord Co Ltd	Jiangyin (Jiangsu province), China	CNY	90
PT Bekaert Indonesia	Karawang, Indonesia	USD	100
PT Bekaert Southern Wire	Karawang, Indonesia	USD	100
PT Bridon	Bekasi, West Java, Indonesia	USD	60

Sales offices, warehouses and others	Address	FC¹	%
EMEA			
Bekaert AS	Vejle, Denmark	DKK	100
Bekaert Emirates LLC	Dubai, United Arab Emirates	AED	49
Bekaert France SAS	Armentières, France	EUR	100
Bekaert Ges mbH	Vienna, Austria	EUR	100
Bekaert GmbH	Neu-Anspach, Germany	EUR	100
Bekaert Ltd	Bradford, United Kingdom	GBP	100
Bekaert Maccaferri Underground Solutions BVBA	Aalst (Erembodegem), Belgium	EUR	50
Bekaert Maccaferri Underground Solutions Srl	Zola Predosa, Bologna, Italy	EUR	50
Bekaert Middle East LLC	Dubai, United Arab Emirates	AED	49
Bekaert Norge AS	Oslo, Norway	NOK	100
Bekaert Poland Sp z oo	Warsaw, Poland	PLN	100
Bekaert (Schweiz) AG	Baden, Switzerland	CHF	100
Bekaert Svenska AB	Gothenburg, Sweden	SEK	100
Bridon Coatbridge Ltd	Doncaster, United Kingdom	GBP	60
Bridon Pension Trust (No Two) Ltd	Doncaster, United Kingdom	GBP	60
Bridon Scheme Trustees Ltd	Doncaster, United Kingdom	GBP	60
British Ropes Ltd	Doncaster, United Kingdom	GBP	60
Gloucester Rope & Tackle Company Ltd	Doncaster, United Kingdom	GBP	60
Leon Bekaert SpA	Milano, Italy	EUR	100
NV Bridon Ropes SA	Brussels, Belgium	EUR	60
OOO Bekaert Wire	Moscow, Russian Federation	RUB	100
Rylands-Whitecross Ltd	Bradford, United Kingdom	GBP	100
Scheldestroom NV	Zwevegem, Belgium	EUR	100
Twil Company	Bradford, United Kingdom	GBP	100
North America			
Bekaert Carding Solutions Inc / Bekaert Solutions de Cardage Inc	Saint John, Canada	CAD	100
Bekaert Specialty Films de Mexico SA de CV	Monterrey, Mexico	MXN	100
Bekaert Trade Mexico S de RL de CV	Mexico City, Mexico	MXN	100
Specialty Films de Services Company SA de CV	Monterrey, Mexico	MXN	100
Latin America			
Bekaert Guatemala SA	Ciudad de Guatemala, Guatemala	GTQ	100
Bekaert Trade Latin America NV	Curaçao, Netherlands Antilles	USD	100
Bridon do Brasil Representações Comércio e Indústria de Cabos Ltda	Rio de Janeiro, Brazil	BRL	60
Prodac Contrata SAC	Callao, Peru	USD	38
Prodac Selva SAC	Ucayali, Peru	USD	38
Prodalam SA	Santiago, Chile	CLP	52
Prodinsa Ingeniería y Proyectos SA	Santiago, Chile	CLP	60
Asia Pacific			
Bekaert Advanced Products (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Japan Co Ltd	Tokyo, Japan	JPY	100
Bekaert Korea Ltd	Seoul, Korea	KRW	100
Bekaert Management (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Singapore Pte Ltd	Singapore	SGD	100
Bekaert Taiwan Co Ltd	Taipei, Taiwan	TWD	100

¹ Functional currency

BOSFA Pty Ltd	Port Melbourne, Australia	AUD	100
Bridon Australia Pty Ltd	Sydney, Australia	AUD	60
Bridon Hong Kong Ltd	Hong Kong, China	HKD	60
Bridon New Zealand Ltd	Auckland, New Zealand	NZD	60
Bridon Singapore (Pte) Ltd	Singapore	SGD	60
PT Bekaert Trade Indonesia	Karawang, Indonesia	USD	100

Financial companies	Address	FC¹	%
Acma Inversiones SA	Maipú, Chile	CLP	60
BBRG Finance (UK) Ltd	Doncaster, United Kingdom	EUR	60
BBRG Holding (UK) Ltd	Doncaster, United Kingdom	EUR	60
BBRG Operations (UK) Ltd	Doncaster, United Kingdom	EUR	60
BBRG Production (UK) Ltd	Doncaster, United Kingdom	EUR	60
BBRG (Purchaser) Ltd	Doncaster, United Kingdom	EUR	60
BBRG (Subsidiary) Ltd	Doncaster, United Kingdom	EUR	60
Becare DAC	Dublin, Ireland	EUR	100
Bekaert Building Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Carding Solutions Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Coördinatiecentrum NV	Zwevegem, Belgium	EUR	100
Bekaert do Brasil Ltda	Contagem, Brazil	BRL	100
Bekaert Holding Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Ibérica Holding SL	Burgos, Spain	EUR	100
Bekaert Ideal SL	Burgos, Spain	EUR	80
Bekaert Investments NV	Zwevegem, Belgium	EUR	100
Bekaert Investments Italia SpA	Milano, Italy	EUR	100
Bekaert North America Management Corporation	Wilmington (Delaware), United States	USD	100
Bekaert Services Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Singapore Holding Pte Ltd	Singapore	SGD	100
Bekaert Specialty Wire Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Stainless Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Steel Cord Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Strategic Partnerships Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Wire Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Wire Rope Industry NV	Aalst (Erembodegem), Belgium	EUR	60
Bekaert Xinyu Hong Kong Ltd	Hong Kong, China	EUR	100
Bridge Finco LLC	Wilmington (Delaware), United States	USD	60
Bridon-Bekaert Ropes Group Ltd	Doncaster, United Kingdom	EUR	60
Bridon-Bekaert Ropes Group (UK) Ltd	Doncaster, United Kingdom	EUR	60
Bridon Holdings Ltd	Doncaster, United Kingdom	GBP	60
Bridon Ltd	Doncaster, United Kingdom	GBP	60
Bridon (South East Asia) Ltd	Hong Kong, China	HKD	60
Impala SA	Panama, Panama	USD	52
Industrias Acmanet Ltda	Talcahuano, Chile	CLP	52
Inversiones Bekaert Andean Ropes SA	Santiago, Chile	CLP	100
InverVicson SA	Valencia, Venezuela	VEF	80
Procables Wire Ropes SA	Maipú, Chile	CLP	60
Procercos SA	Talcahuano, Chile	CLP	52

Joint ventures

Industrial companies	Address	FC¹	%
Latin America			
Belgo Bekaert Arames Ltda	Contagem, Brazil	BRL	45
BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	Vespasiano, Brazil	BRL	45

Sales offices, warehouses and others	Address	FC¹	%
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EMEA

Netlon Sentinel Ltd	Blackburn, United Kingdom	GBP	50
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Asia Pacific

Bekaert Engineering (India) Pvt Ltd	New Delhi, India	INR	40
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Changes in 2016

1. New investments

<i>Subsidiaries</i>	<i>Address</i>	<i>%</i>
BBRG (Purchaser) Ltd	Doncaster, United Kingdom	60
Bekaert Advanced Cords Aalter NV	Aalter, Belgium	60
Bekaert (Shenyang) Advanced Cords Co Ltd	Shenyang (Liaoning province), China	60

2. Subsidiaries acquired through business combinations

<i>Subsidiaries</i>	<i>Address</i>	<i>%</i>
BBRG Finance (UK) Ltd	Doncaster, United Kingdom	From 0% to 60%
BBRG Operations (UK) Ltd	Doncaster, United Kingdom	From 0% to 60%
BBRG Production (UK) Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridge Finco LLC	Wilmington (Delaware), United States	From 0% to 60%
Bridon-American Corporation	New York, United States	From 0% to 60%
Bridon Australia Pty Ltd	Sydney, Australia	From 0% to 60%
Bridon-Bekaert Ropes Group Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon-Bekaert Ropes Group (UK) Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon Coatbridge Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon do Brasil Representações Comércio e Indústria de Cabos Ltda	Rio de Janeiro, Brazil	From 0% to 60%
Bridon (Hangzhou) Ropes Co Ltd	Hangzhou (Zhejiang province), China	From 0% to 60%
Bridon Holdings Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon Hong Kong Ltd	Hong Kong, China	From 0% to 60%
Bridon International GmbH	Gelsenkirchen, Germany	From 0% to 60%
Bridon International Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon New Zealand Ltd	Auckland, New Zealand	From 0% to 60%
Bridon Pension Trust (No Two) Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon Scanrope AS	Tonsberg, Norway	From 0% to 60%
Bridon Scheme Trustees Ltd	Doncaster, United Kingdom	From 0% to 60%
Bridon Singapore (Pte) Ltd	Singapore	From 0% to 60%
Bridon (South East Asia) Ltd	Hong Kong, China	From 0% to 60%
British Ropes Ltd	Doncaster, United Kingdom	From 0% to 60%
Gloucester Rope & Tackle Company Ltd	Doncaster, United Kingdom	From 0% to 60%
NV Bridon Ropes SA	Brussels, Belgium	From 0% to 60%
PT Bridon	Bekasi, West Java, Indonesia	From 0% to 60%

3. Changes in ownership without change in control

<i>Subsidiaries</i>	<i>Address</i>	<i>%</i>
Acma Inversiones SA	Maipú, Chile	From 100% to 60%
BBRG Holding (UK) Ltd	Doncaster, United Kingdom	From 100% to 60%
BBRG (Subsidiary) Ltd	Doncaster, United Kingdom	From 100% to 60%
Bekaert Canada Ltd	Vancouver, Canada	From 100% to 60%
Bekaert Cimaf Cabos Ltda	São Paulo, Brazil	From 100% to 60%
Bekaert Wire Rope Industry NV	Aalst (Erembodegem), Belgium	From 100% to 60%
Bekaert Wire Ropes Pty Ltd	Mayfield East, Australia	From 100% to 60%
Procables SA	Callao, Peru	From 96% to 58%
Procables Wire Ropes SA	Maipú, Chile	From 100% to 60%
Prodinsa Ingeniería y Proyectos SA	Santiago, Chile	From 100% to 60%
Prodinsa SA	Maipú, Chile	From 100% to 60%
Wire Rope Industries Ltd/Industries de Câbles d'Acier Ltée	Pointe-Claire, Canada	From 100% to 60%
Wire Rope Industries USA Inc	Wilmington (Delaware), United States	From 100% to 60%

4. Mergers / conversions

<i>Subsidiaries</i>	<i>Merged into</i>
Bekaert Binjiang Advanced Products Co Ltd	Bekaert Binjiang Steel Cord Co Ltd
Bekaert Canada Ltd	Wire Rope Industries Ltd/Industries de Câbles d'Acier Ltée

5. Name changes

New name	Former name
BBRG Holding (UK) Ltd	Blue Topco Ltd
BBRG (Subsidiary) Ltd	Blue Subsidiary Ltd
Becare DAC	Becare Ltd
Bekaert Jiangyin Wire Products Co Ltd	Bekaert-Jiangyin Wire Products Co Ltd

6. Closed down

Companies	Address
Cempaka Raya Sdn Bhd	Kuala Lumpur, Malaysia

In accordance with Belgian legislation, the table below lists the registered numbers of the Belgian companies.

Companies	Company number
Bekaert Advanced Cords Aalter NV	BTW BE 0645.654.071 RPR Gent
Bekaert Coördinatiecentrum NV	BTW BE 0426.824.150 RPR Kortrijk
Bekaert Investments NV	BTW BE 0406.207.096 RPR Kortrijk
Bekaert Maccaferri Underground Solutions BVBA	BTW BE 0561.750.457 RPR Dendermonde
Bekaert Wire Rope Industry NV	BTW BE 0550.983.358 RPR Dendermonde
Bekintex NV	BTW BE 0452.746.609 RPR Dendermonde
NV Bekaert SA	BTW BE 0405.388.536 RPR Kortrijk
NV Bridon Ropes SA	BTW BE 0401.637.507 RPR Brussels
Scheldestroom NV	BTW BE 0403.676.188 RPR Kortrijk