

6. Balance sheet items

6.1. Intangible assets

Cost in thousands of €	Licenses, patents & similar rights	Computer software	Rights to use land	Develop- ment costs	Other	Total
As at 1 January 2014	8 691	64 791	64 684	19	16 057	154 242
Expenditure	15 021	5 138	1 149	-	443	21 752
Disposals and retirements	-	-420	-	-	-86	-506
Transfers ¹	-284	272	-	-	-	-12
New consolidations	-	2	-	-	6 010	6 012
Exchange gains and losses (-)	54	1 900	7 023	-	1 657	10 634
As at 31 December 2014	23 483	71 683	72 856	19	24 081	192 121
As at 1 January 2015	23 483	71 683	72 856	19	24 081	192 121
Expenditure	26	5 389	194	-	259	5 868
Disposals and retirements	-23	-601	-16	-	-79	-719
Transfers ¹	-	119	7 738	-	-	7 857
New consolidations	674	258	5 843	-	919	7 694
Deconsolidations	-425	-20	-2 703	-	-353	-3 501
Exchange gains and losses (-)	9	1 533	3 850	-	1 497	6 889
As at 31 December 2015	23 744	78 360	87 762	19	26 324	216 208

Accumulated amortization and impairment

As at 1 January 2014	8 138	52 854	8 788	19	13 399	83 198
Charge for the year	168	4 827	1 330	-	955	7 280
Impairment losses	-	116	-	-	-	116
Disposals and retirements	-	-420	-	-	-86	-506
Exchange gains (-) and losses	44	1 501	1 039	-	1 363	3 947
As at 31 December 2014	8 350	58 878	11 157	19	15 631	94 034
As at 1 January 2015	8 350	58 878	11 157	19	15 631	94 034
Charge for the year	1 647	4 160	1 751	-	2 154	9 712
Impairment losses	-	11	1 534	-	241	1 786
Disposals and retirements	-23	-601	-	-	-79	-703
Deconsolidations	-425	-18	-537	-	-352	-1 332
Exchange gains (-) and losses	33	1 240	719	-	1 271	3 263
As at 31 December 2015	9 582	63 670	14 624	19	18 866	106 760
Carrying amount as at 31 December 2014	15 133	12 805	61 699	-	8 450	98 087
Carrying amount as at 31 December 2015	14 162	14 690	73 138	-	7 458	109 448

¹ Total transfers equal zero when aggregating the balances of 'Intangible assets' and 'Property, plant and equipment' (see note 6.3.).

The software expenditure mainly relates to the Satellite project (sales and outbound logistics), the MES project (Manufacturing Excellence System) and ERP software (SAP).

As for the rights to use land, the new consolidations in 2015 relate to the acquisition of the Pirelli Steelcord plant in Jining (China) whereas the deconsolidations mainly relate to the loss of control of Bekaert (Xinyu) New Materials Co Ltd (see note 7.2. 'Effect of business combinations and business disposals'). The transfer relates to a reclassification of rights to use land from Property, plant & equipment.

No intangible assets have been identified as having an indefinite useful life at the balance sheet date.

6.2. Goodwill

This note relates only to goodwill on acquisition of subsidiaries. Goodwill in respect of joint ventures and associates is disclosed in note 6.4. 'Investments in joint ventures and associates'.

Cost in thousands of €	2014	2015
As at 1 January	35 566	38 018
Increases	784	16 701
Deconsolidation	-	-1 010
Exchange gains and losses (-)	1 668	268
As at 31 December	38 018	53 977

Impairment losses in thousands of €	2014	2015
As at 1 January	19 197	19 535
Deconsolidation	-	-1 010
Exchange gains (-) and losses	338	-247
As at 31 December	19 535	18 278
Carrying amount as at 31 December	18 483	35 699

In 2015, the completion of the business combination with Pirelli resulted in an additional goodwill of € 3.5 million being recognized. On the acquisition of Arrium's ropes business in Australia, a goodwill of € 13.2 million was recorded. The step acquisition of BOSFA Pty Ltd in Australia results in a negative goodwill of € 0.3 million which is recognized through income statement. The net effect on goodwill of the deconsolidation of the Carding Solutions activities in 2015 is zero, as the related goodwill was already fully impaired at the time of disposal of this cash-generating unit.

More information about the goodwill calculation is provided in note 7.2. 'Effect of business combinations and business disposals'.

In 2014, the increase of goodwill was a consequence of new business combinations which relate to the commercial partnership with Maccaferri for underground solutions (€ 0.1 million) and the acquisition of Pirelli's steel cord plants (€ 0.7 million – provisional amount). The business combination with ArcelorMittal in Costa Rica, Brazil and Ecuador resulted in a negative goodwill of € 10.9 million which was recognized through income statement.

Goodwill by cash-generating unit (CGU)

Goodwill acquired in a business combination is allocated on acquisition to the cash-generating units (CGU) that are expected to benefit from that business combination. The carrying amount of goodwill and any related movements of the period have been allocated as follows:

Segment in thousands of €	Group of cash-generating units	Carrying amount 1 Jan 2014	Increases	Impairments	Exchange differences	Carrying amount 31 Dec 2014
Subsidiaries						
EMEA	Cold Drawn Products Ltd	2 685	-	-	189	2 874
EMEA	Combustion - heating	3 027	-	-	-	3 027
EMEA	Building Products	-	71	-	-	71
EMEA	Rubber Reinforcement	-	713	-	-	713
North America	Orrville plant (USA)	8 505	-	-	1 157	9 662
Latin America	Inchalam group	876	-	-	-16	860
Latin America	Bekaert Ideal SL companies	844	-	-	-	844
Asia Pacific	Bekaert (Qingdao) Wire Products Co Ltd	385	-	-	-	385
Asia Pacific	Bekaert-Jiangyin Wire Products Co Ltd	47	-	-	-	47
Asia Pacific	Bekaert Wire Ropes Pty Ltd	-	-	-	-	-
Subtotal		16 369	784	-	1 330	18 483
Joint ventures and associates						
Latin America	Belgo Bekaert Arames Ltda	4 614	-	-	53	4 667
Subtotal		4 614	-	-	53	4 667
Total		20 983	784	-	1 383	23 150

Segment in thousands of €	Group of cash-generating units	Carrying amount			Exchange differences	Carrying amount 31 Dec 2015
		1 Jan 2015	Increases	Impairments		
Subsidiaries						
EMEA	Cold Drawn Products Ltd	2 874	-	-	176	3 050
EMEA	Combustion - heating	3 027	-	-	-	3 027
EMEA	Building Products	71	-	-	-	71
EMEA	Rubber Reinforcement	713	3 542	-	-	4 255
North America	Orrville plant (USA)	9 662	-	-	1 112	10 774
Latin America	Inchalam group	860	-	-	-40	820
Latin America	Bekaert Ideal SL companies	844	-	-	-	844
Asia Pacific	Bekaert (Qingdao) Wire Products Co Ltd	385	-	-	-	385
Asia Pacific	Bekaert-Jiangyin Wire Products Co Ltd	47	-	-	-	47
Asia Pacific	Bekaert Wire Ropes Pty Ltd	-	13 160	-	-734	12 426
Subtotal		18 483	16 702	-	514	35 699
Joint ventures and associates						
Latin America	Belgo Bekaert Arames Ltda	4 667	-	-	-1 181	3 486
Subtotal		4 667	-	-	-1 181	3 486
Total		23 150	16 702	-	-667	39 185

Cash-generating units to which goodwill has been allocated are tested for impairment at least annually on the basis of their value in use, applying the following assumptions:

- The time horizon is normally 12 years (average lifetime of equipment) but can differ case by case.
- The future free cash flows are based on the latest budgeting/planning exercises for the coming 3 years. In the budgeting exercise the key assumptions relate to sales forecasts which mainly reflect regional industrial GDP evolution, and margin evolutions taking into account agreed action plans. All cash flows thereafter are extrapolations made by the management of the cash-generating unit. Given the uncertain outlook in the mid-term, the Group takes a conservative approach on extrapolations, not exceeding the appropriate market related growth rate. No cost structure improvements are taken into account unless they can be substantiated.
- The future cash flows are based on the assets in their current condition and do not include future restructuring not yet committed or future capital expenditures improving or enhancing the assets in excess of their originally assessed standard of performance. Only that capital expenditure required to maintain the assets in good working order is included. The cash outflows relating to working capital are calculated as a percentage of incremental sales based on the past performance of the specific cash-generating unit.
- The discount factor is based on a (long-term) pre-tax cost of capital, the risks being implicit in the cash flows. A weighted average cost of capital (WACC) is determined for euro, US dollar and Chinese renminbi regions. For countries with a higher perceived risk, the WACC is raised with a country risk factor. The WACC is pre-tax based, since relevant cash flows are also pre-tax based. Similarly, it is stated in real terms (without inflation), since cash flows are also stated in real terms. In determining the weight of the cost of debt vs. the cost of equity, a target gearing (net debt relative to equity) of 50% is used. The discount factors are reviewed at least annually.

Discount rates for impairment testing		Euro region	USD region	CNY region
Group target ratio's				
Gearing: net debt/equity	50%			
% debt	33%			
% equity	67%			
% LT debt	75%			
% ST debt	25%			
Cost of Bekaert debt				
Long term interest rate		3.7%	4.1%	6.4%
Short term interest rate		2.0%	2.0%	6.0%
Cost of Bekaert equity				
	$= R_f + \beta \cdot E_m$	8.4%	9.8%	12.4%
Risk free rate= R_f		1.0%	2.3%	4.9%
Beta = β	1.2			
Market equity risk premium= E_m	6.2%			
Corporate tax rate				
	27%			
Cost of equity before tax				
		11.5%	13.4%	16.9%
WACC - nominal				
		8.9%	10.3%	13.4%
Expected inflation				
		1.3%	1.7%	2.1%
WACC in real terms				
		7.6%	8.6%	11.3%

Based on current knowledge, reasonable changes in key assumptions (including discount rate, sales and margin evolution) would not generate impairments for any of the cash-generating units for which goodwill has been allocated.

6.3. Property, plant and equipment

Cost in thousands of €	Land and buildings	Plant, machinery and equipment	Furniture and vehicles	Finance leases	Other PP&E	Assets under construc- tion	Total
As at 1 January 2014	896 869	2 223 839	90 445	8 425	5 070	67 589	3 292 237
Expenditure	21 871	89 433	5 347	1 373	833	16 390	135 247
Disposals and retirements	-3 144	-146 445	-7 055	-	-	-1 588	-158 232
New consolidations	80 544	78 597	707	-	157	2 535	162 540
Transfers ¹	-	-	-	-	-	12	12
Exchange gains and losses (-)	52 051	147 716	4 769	-61	70	5 263	209 809
Inflation effects on opening balances	1 659	1 921	206	-	-	116	3 901
Other inflation effects	-	-	-	-	-	22	22
As at 31 December 2014	1 049 850	2 395 062	94 418	9 738	6 129	90 339	3 645 537
As at 1 January 2015	1 049 850	2 395 062	94 418	9 738	6 129	90 339	3 645 537
Expenditure	31 088	125 478	7 584	2 319	2 156	4 606	173 231
Disposals and retirements	-15 242	-16 486	-8 389	-	-434	-2	-40 553
New consolidations	48 939	30 210	1 573	-	-	343	81 065
Deconsolidations	-18 299	-30 680	-1 513	-	-750	-5 638	-56 880
Transfers ¹	-	-	-	-	-	-7 857	-7 857
Exchange gains and losses (-)	27 546	108 619	3 250	-356	108	3 510	142 677
Inflation effects on opening balances	1 952	2 326	237	-	-	7	4 522
Other inflation effects	-	-	-	-	-	45	45
As at 31 December 2015	1 125 834	2 614 529	97 160	11 701	7 209	85 354	3 941 787
Accumulated depreciation and impairment							
As at 1 January 2014	388 714	1 576 692	73 835	1 421	2 855	-	2 043 516
Charge for the year	34 308	111 077	7 823	227	499	-	153 934
Impairment losses	290	17 803	176	-	-	-	18 270
Reversal impairment losses and depreciations	-9	-1 383	-32	-	-	-	-1 423
Disposals and retirements	-2 353	-143 332	-6 797	-	-	-	-152 482
Transfers ¹	2	-1	-	-	-	-	-
Exchange gains (-) and losses	24 334	101 683	3 994	38	-	-	130 049
Inflation effects on opening balances	405	931	157	-	-	-	1 493
As at 31 December 2014	445 691	1 663 470	79 156	1 686	3 354	-	2 193 357
As at 1 January 2015	445 691	1 663 470	79 156	1 686	3 354	-	2 193 357
Charge for the year	42 002	141 470	7 531	340	433	-	191 776
Impairment losses	2 064	10 750	132	-	-	-	12 946
Reversal impairment losses and depreciations	-29	-1 520	-99	-	-	-	-1 648
Disposals and retirements	-13 556	-16 855	-7 800	-	-64	-	-38 275
Transfers ¹	47	-60	16	-	-2	-	-
Deconsolidations	-3 708	-14 738	-1 229	-	-145	-	-19 820
Exchange gains (-) and losses	19 591	78 299	2 800	-23	69	-	100 736
Inflation effects on opening balances	539	1 243	207	-	-	-	1 989
As at 31 December 2015	492 641	1 862 059	80 714	2 003	3 645	-	2 441 061

¹ Total transfers equal zero when aggregating the balances of 'Intangible assets' (see note 6.1.) and 'Property, plant and equipment'. In 2015, the main part relates to a reclassification of rights to use land from Property, plant & equipment to Intangible assets.

in thousands of €	Land and buildings	Plant, machinery and equipment	Furniture and vehicles	Finance leases	Other PP&E	Assets under construction	Total
Carrying amount as at 31 December 2014 before investment grants and reclassification of leases	604 159	731 592	15 262	8 052	2 775	90 339	1 452 180
Net investment grants	-7 676	-11 701	-	-	-	-	-19 377
Finance leases by asset category	7 891	15	146	-8 052	-	-	-
Carrying amount as at 31 December 2014	604 373	719 907	15 409	-	2 775	90 339	1 432 803
Carrying amount as at 31 December 2015 before investment grants and reclassification of leases	633 193	752 470	16 447	9 698	3 564	85 354	1 500 726
Net investment grants	-7 739	-2 535	-	-	-	-	-10 274
Finance leases by asset category	7 314	2 308	76	-9 698	-	-	-

The investment programs in Belgium, Chile, China, India, Indonesia, Slovakia, and United States accounted for most of the expenditure. The net exchange gain for the year (€ 41.9 million) mainly relates to assets denominated in Chinese renminbi (€ 41.0 million), US dollar (€ 30.8 million) and Brazilian real (€ -18.2 million).

The methodology for impairment testing is consistent with the one presented in note 6.2. 'Goodwill'. For new consolidations and deconsolidations, please refer to note 7.2. 'Effect of business combinations and business disposals'. The new consolidations mainly relate to the acquisition of the Pirelli steel cord plants (€ 56.7 million) and of Arrium's ropes business in Australia (€ 32.8 million) whereas the deconsolidations relate to the disposal of the Carding Solutions activities (€ 10.9 million) and the loss of control of Bekaert (Xinyu) New Materials Co Ltd (€ 26.2 million).

Inflation effects relate to the application of inflation accounting in Venezuela.

No items of PP&E are pledged as securities.

6.4. Investments in joint ventures and associates

The Group has no investments in entities qualified as associates.

Investments excluding related goodwill

Carrying amount in thousands of €	2014	2015
As at 1 January	151 224	151 067
Result for the year	25 330	18 320
Dividends	-20 577	-18 682
Exchange gains and losses	3 339	-34 660
Deconsolidations	-8 030	-5 382
Other comprehensive income	-219	-30
As at 31 December	151 067	110 633

For an analysis of the result for the year, please refer to note 5.6. 'Share in the results of joint ventures and associates'. Substantial exchange losses in 2015 mainly originated from the depreciation of the Brazilian real. Deconsolidations in 2015 relate to the loss of significant influence in Bekaert Xinyu New Materials Co Ltd and Bekaert Xinyu Metal Products Co Ltd at year-end (see note 6.5. 'Other non-current assets') and to the step acquisition of BOSFA Pty Ltd (see note 7.2. 'Effect of business combinations and business disposals'). Deconsolidations in 2014 related to the carve-out of Bekaert Cimaf Cabos from Belgo Bekaert Arames Ltda in view of the business combination with ArcelorMittal in Costa Rica and Brazil and to the liquidation of Bekaert Faser Vertriebs GmbH.

Related goodwill

Cost in thousands of €	2014	2015
As at 1 January	4 614	4 667
Exchange gains and losses	53	-1 181
As at 31 December	4 667	3 486
Carrying amount of related goodwill as at 31 December	4 667	3 486
Total carrying amount of investments in joint ventures as at 31 December	155 734	114 119

The Group's share in the equity of joint ventures is analysed as follows:

in thousands of €		2014	2015
Joint ventures			
BOSFA Pty Ltd ¹	Australia	3 393	-
Belgo Bekaert Arames Ltda	Brazil	125 806	98 621
BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	Brazil	14 224	12 012
Bekaert (Xinyu) New Materials Co Ltd ²	China	-	-
Bekaert Xinyu Metal Products Co Ltd ³	China	7 644	-
Total for joint ventures excluding related goodwill		151 067	110 633
Carrying amount of related goodwill		4 667	3 486
Total for joint ventures including related goodwill		155 734	114 119

¹ On 12 June 2015, Bekaert acquired control in this company (see note 7.2. 'Effect of business combinations and business disposals').

² On 1 April 2015, Bekaert lost control in this company, retaining only a significant influence. As its level of influence was no longer deemed significant, Bekaert reclassified its investment from an associate to an available-for-sale financial asset at year-end.

³ On 1 April 2015, Bekaert lost joint control in this company, retaining only a significant influence. As its level of influence was no longer deemed significant, Bekaert reclassified its investment from an associate to an available-for-sale financial asset at year-end.

No major contingent assets relating to joint ventures have been identified at the balance sheet date. The main contingent liabilities identified at the balance sheet date relate to taxes at Belgo Bekaert Arames Ltda and BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda. These Brazilian joint ventures have been trying to compensate ICMS tax receivables with a total carrying amount of € 6.6 million (2014: € 9.3 million). They also have been facing claims relating to ICMS credits totaling € 9.0 million (2014: € 13.4 million), ICMS incentives: nil (2014: € 1.7 million) and several other tax claims, most of which date back several years, for a total nominal amount of € 12.9 million (2014: € 12.3 million). Evidently, any potential losses resulting from the above-mentioned contingencies would only affect the Group to the extent of their interest in the joint ventures involved (i.e. 45%).

In accordance with IFRS 12, 'Disclosures of Interests in Other Entities', following information is provided on material joint ventures. The two Brazilian joint ventures have been aggregated in order to emphasize the predominance of the partnership with ArcelorMittal when analyzing the relative importance of the joint ventures.

Name of joint venture in thousands of €	Country	Proportion of ownership interest (and voting rights) held by the Group at year-end	
		2014	2015
Belgo Bekaert Arames Ltda	Brazil	45.0% (50.0%)	45.0% (50.0%)
BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	Brazil	44.5% (50.0%)	44.5% (50.0%)

Belgo Bekaert Arames Ltda manufactures and sells a wide variety of wire products mostly for industrial customers, and BMB manufactures and sells mainly wires and cables for rubber reinforcement in tires.

Brazilian joint ventures: income statement in thousands of €	2014	2015
Sales	820 208	709 597
Operating result (EBIT)	79 084	79 665
Interest income	2 780	3 998
Interest expense	-5 752	-6 447
Other financial income and expenses	-2 405	-5 899
Income taxes	-6 801	-9 391
Result for the period	66 906	61 926
Other comprehensive income for the period	-486	-73
Total comprehensive income for the period	66 420	61 853
Depreciation and amortization	20 498	18 084
EBITDA	99 582	97 749
Dividends received from the entity	20 577	18 682

Brazilian joint ventures: balance sheet in thousands of €	2014	2015
Current assets	252 426	184 355
Non-current assets	237 101	172 056
Current liabilities	-126 689	-84 319
Non-current liabilities	-52 644	-27 363
Net assets	310 194	244 729

Brazilian joint ventures: net debt elements in thousands of €	2014	2015
Non-current interest-bearing debt	47	-
Current interest-bearing debt	14 773	14 691
Total financial debt	14 820	14 691
Non-current financial receivables and cash guarantees	-24 262	-83
Cash and cash equivalents	-16 508	-13 700
Net debt	-25 950	908

Brazilian joint ventures: reconciliation with carrying amount

in thousands of €

	2014	2015
Net assets of Belgo Bekaert Arames Ltda	278 802	218 323
Proportion of the Group's ownership interest	45.0%	45.0%
Proportionate net assets	125 461	98 245
Consolidation adjustments	345	377
Carrying amount of the Group's interest in Belgo Bekaert Arames Ltda	125 806	98 622
Net assets of BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	31 392	26 406
Proportion of the Group's ownership interest	44.5%	44.5%
Proportionate net assets	13 969	11 751
Consolidation adjustments	255	261
Carrying amount of the Group's interest in BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	14 224	12 012
Carrying amount of the Group's interest in the Brazilian joint ventures	140 030	110 634

Aggregate information of the other joint ventures

in thousands of €

	2014	2015
The Group's share in the result from continuing operations	-1 057	-5 948
The Group's share of total comprehensive income	-1 057	-5 948
Aggregate carrying amount of the Group's interests in these joint ventures	11 037	-

Furthermore, the Group has no unrecognized commitments relating to its interests in joint ventures at the balance sheet date (2014: none).

6.5. Other non-current assets

in thousands of €	2014	2015
Non-current financial receivables and cash guarantees	19 551	9 694
Reimbursement rights and other non-current amounts receivable	8 973	8 549
Derivatives (cf. note 7.3.)	5 944	5 897
Overfunded employee benefit plans - non-current	21	7
Available-for-sale financial assets	9 979	15 626
Total other non-current assets	44 468	39 773

In 2014, the non-current financial receivables were mainly due to the deferred proceeds on the sale of the Industrial Coating activity in 2012, which was fully settled in 2015.

Available-for-sale financial assets - non-current

Carrying amount in thousands of €	2014	2015
As at 1 January	8 713	9 979
Expenditure	21	100
Disposals	-	-123
Fair value changes	1 405	-2 001
Impairment losses	-157	-302
New consolidations	5	-
Reclassifications	-	8 007
Exchange gains and losses	-8	-34
As at 31 December	9 979	15 626

The available-for-sale financial assets mainly consist of the investments in:

- Shougang Concord Century Holdings Ltd, a Hong Kong Stock Exchange listed company.
On this investment, an impairment loss of € 0.3 million has been recognized through income statement as well as a decrease in fair value (€ 2.0 million) recognized through equity during the year in accordance with IAS 39, 'Financial Instruments: Recognition and Measurement'.
- Bekaert Xinyu New Materials Co Ltd, formerly a subsidiary but accounted for using the equity method as from 1 April following its reclassification as an associate, and Bekaert Xinyu Metal Products Co Ltd, formerly a joint venture and reclassified as an associate as from 1 April, still accounted for using the equity method. At year-end both entities were reclassified as available-for-sale financial assets as the Group deemed the level of its retained influence as not even significant. Consequently, the remaining interest was restated to fair value (€ 8.0 million).

6.6. Deferred tax assets and liabilities

Carrying amount in thousands of €	Assets		Liabilities	
	2014	2015	2014	2015
As at 1 January	77 551	101 267	37 023	54 253
Increase or decrease via income statement	26 554	26 882	11 653	10 017
Increase or decrease via OCI	732	63	-1 355	-
New consolidations	10 487	8 174	24 580	292
Deconsolidations	-	-291	-	-
Exchange gains and losses	5 745	2 538	2 154	-3 920
Change in set-off of assets and liabilities	-19 802	-7 429	-19 802	-7 429
As at 31 December	101 267	131 204	54 253	53 213

Recognized deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following items:

in thousands of €	Assets		Liabilities		Net assets	
	2014	2015	2014	2015	2014	2015
Intangible assets	7 581	7 550	6 038	6 845	1 543	705
Property, plant and equipment	39 346	45 486	47 330	44 638	-7 984	848
Financial assets	1	7	16 065	24 804	-16 064	-24 797
Inventories	10 116	10 726	4 534	2 980	5 582	7 746
Receivables	8 072	9 296	261	3 769	7 811	5 527
Other current assets	258	977	8 292	3 428	-8 034	-2 451
Employee benefit obligations	29 286	25 685	104	105	29 182	25 580
Other provisions	4 274	5 921	2 474	5 959	1 800	-38
Other liabilities	20 744	14 180	9 436	8 395	11 308	5 785
Tax deductible losses carried forward, tax credits and recoverable income taxes	21 870	59 086	-	-	21 870	59 086
Tax assets / liabilities	141 548	178 914	94 534	100 923	47 014	77 991
Set-off of assets and liabilities	-40 281	-47 710	-40 281	-47 710	-	-
Net tax assets / liabilities	101 267	131 204	54 253	53 213	47 014	77 991

The deferred taxes on property, plant and equipment mainly relate to differences in useful lives between IFRS and tax books. The deferred tax liabilities on financial assets mainly relate to temporary differences arising from undistributed profits from subsidiaries and joint ventures.

Movements in deferred tax assets and liabilities arise from the following:

2014 in thousands of €	As at 1 January	Recognized via income statement	Recognized via OCI	Acquisitions and disposals ¹	Exchange gains and losses	As at 31 December
Temporary differences						
Intangible assets	-5 031	1 679	-	5 510	-615	1 543
Property, plant and equipment	13 417	2 200	-	-24 487	886	-7 984
Financial assets	-20 761	3 833	1 066	-	-202	-16 064
Inventories	3 550	1 433	-	1 101	-502	5 582
Receivables	8 226	-1 088	-	2	671	7 811
Other current assets	-1 321	-6 628	-	-	-85	-8 034
Employee benefit obligations	20 275	5 344	1 021	1 027	1 515	29 182
Other provisions	354	-1 549	-	2 641	354	1 800
Other liabilities	9 036	1 594	-	113	565	11 308
Tax deductible losses carried forward, tax credits and recoverable income taxes	12 783	8 083	-	-	1 004	21 870
Total	40 528	14 901	2 087	-14 093	3 591	47 014

2015 in thousands of €	As at 1 January	Recognized via income statement	Recognized via OCI	Acquisitions and disposals ¹	Exchange gains and losses	As at 31 December
Temporary differences						
Intangible assets	1 543	-178	-	-3	-657	705
Property, plant and equipment	-7 984	-3 173	-	6 485	5 520	848
Financial assets	-16 064	-9 149	-67	-	483	-24 797
Inventories	5 582	4 429	-	-1 666	-599	7 746
Receivables	7 811	-2 627	-	-3	346	5 527
Other current assets	-8 034	5 663	-	31	-111	-2 451
Employee benefit obligations	29 182	-6 378	130	1 496	1 150	25 580
Other provisions	1 800	-2 631	-	553	240	-38
Other liabilities	11 308	-5 750	-	351	-124	5 785
Tax deductible losses carried forward, tax credits and recoverable income taxes	21 870	36 659	-	347	210	59 086
Total	47 014	16 865	63	7 591	6 458	77 991

¹ Relates in 2014 to the ArcelorMittal deal in Costa Rica, Brazil and Ecuador, the commercial partnership with Maccaferri for underground solutions and the acquisition of Pirelli's steel cord plants. In 2015 it related to the business combinations and disposals as disclosed in see note 7.2. 'Effect of business combinations and business disposals'.

Deferred taxes related to other comprehensive income (OCI)

2014			
in thousands of €	Before tax	Tax impact	After tax
Exchange differences	92 868	1 355	94 223
Inflation adjustments	1 574	-	1 574
Cash flow hedges	755	-	755
Available-for-sale investments	1 405	-289	1 116
Remeasurement gains and losses on defined-benefit plans	-28 418	1 021	-27 397
Share of OCI of joint ventures and associates	-219	-	-219
Total	67 965	2 087	70 052

2015			
in thousands of €	Before tax	Tax impact	After tax
Exchange differences	-16 070	-	-16 070
Inflation adjustments	1 208	-	1 208
Cash flow hedges	175	-67	108
Available-for-sale investments	-2 001	-	-2 001
Remeasurement gains and losses on defined-benefit plans	11 321	130	11 451
Share of OCI of joint ventures and associates	-30	-	-30
Total	-5 397	63	-5 334

Unrecognized deferred tax assets

Deferred tax assets have not been recognized in respect of the following deductible items (gross amounts):

in thousands of €	2014	2015	Variance 2015 vs 2014
Deductible temporary differences	270 086	298 863	28 777
Capital losses	14 781	26 627	11 846
Trade losses and tax credits	829 911	708 929	-120 982
Total	1 114 778	1 034 419	-80 359

Capital losses, trade losses and tax credits by expiry date

2014	Expiring within 1 year	Expiring between 1 and 5 years	Expiring after more than 5 years	Not expiring	Total
in thousands of €					
Capital losses	-	-	-	14 781	14 781
Trade losses	23 501	194 696	103 823	509 839	831 859
Tax credits	-	65 978	-	10 779	76 757
Total	23 501	260 674	103 823	535 399	923 397

2015	Expiring within 1 year	Expiring between 1 and 5 years	Expiring after more than 5 years	Not expiring	Total
in thousands of €					
Capital losses	-	-	-	26 627	26 627
Trade losses	13 673	154 015	71 946	604 398	844 032
Tax credits	-	57 052	-	35 942	92 994
Total	13 673	211 067	71 946	666 967	963 653

6.7. Operating working capital

in thousands of €	2014	2015
<i>Raw materials, consumables and spare parts</i>	223 367	199 091
<i>Work in progress and finished goods</i>	312 423	323 451
<i>Goods purchased for resale</i>	105 017	106 189
Inventories	640 807	628 731
Trade receivables	707 569	686 364
Bills of exchange received	114 117	68 005
Advances paid	24 897	15 126
Trade payables	-390 943	-456 783
Advances received	-5 106	-3 137
Remuneration and social security payables	-107 432	-117 532
Employment-related taxes	-9 298	-8 016
Operating working capital	974 611	812 758

Carrying amount in thousands of €	2014	2015
As at 1 January	792 836	974 611
Organic increase or decrease	54 623	-212 266
Write-downs and write-down reversals	-4 364	-8 281
New consolidations	71 900	58 899
Deconsolidations	-	-8 465
Impact inflation accounting	647	1 241
Exchange gains and losses (-)	58 969	7 019
As at 31 December	974 611	812 758

Average operating working capital represented 24.8% of sales (2014: 26.7%).

Additional information is as follows:

- Inventories

The cost of sales includes expenses related to transport and handling of finished goods amounting to € 165.9 million (2014: € 151.6 million), which have never been capitalized in inventories. Movements in inventories include net write-downs in 2015 of € 6.8 million (2014: net write-downs of € 5.0 million).

No inventories were pledged as security for liabilities (2014: none).

- Trade receivables

The following table presents the movements in the allowance for bad debt:

Allowance for bad debt in thousands of €	2014	2015
As at 1 January	-39 371	-41 767
Losses recognized in current year	-3 128	-8 614
Losses recognized in prior years - amounts used	807	4 140
Losses recognized in prior years - reversal of amounts not used	2 933	3 013
Deconsolidations	-	52
Exchange gains and losses (-)	-3 008	-1 900
As at 31 December	-41 767	-45 076

More information about allowances and past-due receivables is provided in the following table:

Trade receivables and bills of exchange received in thousands of €	2014	2015
Gross amount	863 453	799 445
Allowance for bad debts (impaired)	-41 767	-45 076
Net carrying amount	821 686	754 369
<i>of which past due but not impaired</i>		
<i>amount</i>	97 669	93 097
<i>average number of days outstanding</i>	98	106

Regarding trade receivables that are neither impaired nor past due, there are no indications that the debtors will not meet their payment obligations. For more information on credit enhancement techniques, refer to note 7.3. 'Financial risk management and financial derivatives'.

6.8. Other receivables

Carrying amount in thousands of €	2014	2015
As at 1 January	83 781	106 627
Increase or decrease	10 517	-12 483
Write-downs and write-down reversals	-158	1 556
New consolidations	6 134	3 219
Deconsolidations	-	-3 165
Exchange gains and losses	6 353	3 532
As at 31 December	106 627	99 286

Other receivables mainly relates to income taxes (€ 40.3 million (2014: € 32.6 million)), VAT and other non-income taxes (€ 49.7 million (2014: € 45.8 million)) and social loans to employees (€ 3.0 million (2014: € 3.2 million)).

6.9. Cash & cash equivalents and short-term deposits

Carrying amount in thousands of €	2014	2015
Cash & cash equivalents	458 542	401 771
Short-term deposits	14 160	10 216

For the changes in cash & cash equivalents, please refer to the consolidated cash flow statement and to note 7.1. 'Notes to the cash flow statement'. Cash equivalents and short-term deposits do not include any listed securities or equity instruments at the balance sheet date and are all classified as loans and receivables.

6.10. Other current assets

Carrying amount in thousands of €	2014	2015
Current loans and receivables	13 998	33 185
Advances paid	24 897	15 126
Derivatives (cf. note 7.3.)	18 213	9 747
Deferred charges and accrued revenues	7 942	7 991
As at 31 December	65 050	66 049

The current loans and receivables mainly relate to a loan to the available-for-sale investment Bekaert Xinyu New Materials Co Ltd (€ 31.4 million), covered by a repayment plan within the year, and to various cash guarantees (€ 1.6 million). The derivatives relate to CCIRS agreements (€ 5.8 million) and forward exchange contracts (€ 3.9 million).

6.11. Assets classified as held for sale and liabilities associated with those assets

Carrying amount in thousands of €	2014	2015
As at 1 January	2 096	-
Increases and decreases (-)	-2 096	-
As at 31 December	-	-

In 2015 no individual asset or disposal groups are classified as held for sale at the balance sheet date.

The movements of 2014 relate to land and buildings in Belgium that were sold during 2014.

6.12. Ordinary shares, treasury shares, subscription rights, share options and performance shares

Issued capital in thousands of €		2014		2015	
		Nominal value	Number of shares	Nominal value	Number of shares
1	As at 1 January	176 773	60 063 871	176 914	60 111 405
	Movements in the year				
	Issue of new shares	141	47 534	43	14 120
	As at 31 December	176 914	60 111 405	176 957	60 125 525
2	Structure				
2.1	Classes of ordinary shares				
	Ordinary shares without par value	176 914	60 111 405	176 957	60 125 525
2.2	Registered shares		1 722 615		148 202
	Non-material shares		58 353 432		59 977 323
	Shares to be dematerialized		35 358		-
	Authorized capital not issued	152 176		152 175	

A total of 14 120 subscription rights were exercised under the Company's SOP1 and SOP 2005-2009 stock option plans in 2015, requiring the issue of a total of 14 120 new shares of the Company.

From the 4 275 010 treasury shares held as of 31 December 2014, the Company disposed of 26 300 shares in connection with stock option plans. No treasury shares were purchased or cancelled in 2015. As a result, the Company held an aggregate 4 248 710 treasury shares as of 31 December 2015.

Details of the stock option plans which showed an outstanding balance either at the balance sheet date or at the previous balance sheet date, are as follows:

Overview of SOP1 Stock Option Plan

Date offered	Date granted	Date of issue of subscription rights	Exercise price (in €)	Number of subscription rights			Out-standing	First exercise period	Last exercise period
				Granted	Exercised	Forfeited			
12.07.2002	10.09.2002	25.09.2002	15.825	106 152	105 432	720	-	22.05 - 30.06.2006	22.05 - 15.06.2015
				106 152	105 432	720	-		

Overview of SOP2 Stock Option Plan

Date offered	Date granted	Exercise price (in €)	Number of options			Out-standing	First exercise period	Last exercise period
			Granted	Exercised	Forfeited			
21.12.2006	19.02.2007	30.175	37 500	27 500	-	10 000	22.05 - 30.06.2010	15.11 - 15.12.2021
20.12.2007	18.02.2008	28.335	12 870	12 690	-	180	22.05 - 30.06.2011	15.11 - 15.12.2017
20.12.2007	18.02.2008	28.335	30 630	11 310	-	19 320	22.05 - 30.06.2011	15.11 - 15.12.2022
18.12.2008	16.02.2009	16.660	64 500	-	-	64 500	22.05 - 30.06.2012	15.11 - 15.12.2018
17.12.2009	15.02.2010	33.990	49 500	-	-	49 500	22.05 - 30.06.2013	15.11 - 15.12.2019
			195 000	51 500	-	143 500		

Overview of SOP 2005-2009 Stock Option Plan

Date offered	Date granted	Date of issue of subscription rights	Exercise price (in €)	Number of subscription rights				Out-standing	First exercise period	Last exercise period
				Granted	Exercised	Forfeited				
22.12.2005	20.02.2006	22.03.2006	23.795	190 698	180 567	15	10 116	22.05 - 30.06.2009	15.11 - 15.12.2020	
21.12.2006	19.02.2007	22.03.2007	30.175	153 810	143 540	600	9 670	22.05 - 30.06.2010	15.11 - 15.12.2021	
20.12.2007	18.02.2008	22.04.2008	28.335	14 100	2 100	9 900	2 100	22.05 - 30.06.2011	15.11 - 15.12.2017	
20.12.2007	18.02.2008	22.04.2008	28.335	215 100	85 650	12 700	116 750	22.05 - 30.06.2011	15.11 - 15.12.2022	
18.12.2008	16.02.2009	20.10.2009	16.660	288 150	123 750	19 500	144 900	22.05 - 30.06.2012	15.11 - 15.12.2018	
17.12.2009	15.02.2010	08.09.2010	33.990	225 450	-	52 500	172 950	22.05 - 30.06.2013	15.11 - 15.12.2019	
				1 087 308	535 607	95 215	456 486			

Overview of SOP 2010-2014 Stock Option Plan

Date offered	Date granted	Exercise price (in €)	Number of options				Out-standing	First exercise period	Last exercise period
			Granted	Exercised	Forfeited				
16.12.2010	14.02.2011	77.000	360 925	-	46 000	314 925	28.02 - 13.04.2014	Mid Nov. - 15.12.2020	
22.12.2011	20.02.2012	25.140	287 800	26 300	2 600	258 900	27.02 - 12.04.2015	Mid Nov. - 21.12.2021	
20.12.2012	18.02.2013	19.200	267 200	-	2 700	264 500	End Feb. - 10.04.2016	Mid Nov. - 19.12.2022	
29.03.2013	28.05.2013	21.450	260 000	-	-	260 000	End Feb. - 09.04.2017	End Feb. - 28.03.2023	
19.12.2013	17.02.2014	25.380	373 450	-	-	373 450	End Feb. - 09.04.2017	Mid Nov. - 18.12.2023	
18.12.2014	16.02.2015	26.055	349 810	-	-	349 810	End Feb. - 09.04.2018	Mid Nov. - 17.12.2024	
			1 899 185	26 300	51 300	1 821 585			

	2014		2015	
	Number of subscription rights	Weighted average exercise price (in €)	Number of subscription rights	Weighted average exercise price (in €)
SOP1 Stock Option Plan				
Outstanding as at 1 January	14 254	15.664	720	15.825
Exercised during the year	-13 534	15.655	-720	15.825
Outstanding as at 31 December	720	15.825	-	-

	2014		2015	
	Number of options	Weighted average exercise price (in €)	Number of options	Weighted average exercise price (in €)
SOP2 Stock Option Plan				
Outstanding as at 1 January	143 500	25.166	143 500	25.166
Outstanding as at 31 December	143 500	25.166	143 500	25.166

	2014		2015	
	Number of subscription rights	Weighted average exercise price (in €)	Number of subscription rights	Weighted average exercise price (in €)
SOP 2005-2009 Stock Option Plan				
Outstanding as at 1 January	523 401	26.068	489 386	26.720
Forfeited during the year	-15	23.795	-19 500	33.873
Exercised during the year	-34 000	16.678	-13 400	16.660
Outstanding as at 31 December	489 386	26.720	456 486	26.710

	2014		2015	
	Number of options	Weighted average exercise price (in €)	Number of options	Weighted average exercise price (in €)
SOP 2010-2014 Stock Option Plan				
Outstanding as at 1 January	1 160 625	38.640	1 498 075	34.413
Granted during the year	373 450	25.380	349 810	26.055
Exercised during the year	-	-	-26 300	25.140
Forfeited during the year	-36 000	77.000	-	-
Outstanding as at 31 December	1 498 075	34.413	1 821 585	32.942

Weighted average remaining contractual life in years	2014	2015
	SOP1	0.5
SOP2	4.7	3.7
SOP 2005-2009	5.4	4.5
SOP 2010-2014	7.7	7.1

The weighted average share price at the date of exercise in 2015 was € 26.22 for the SOP1 subscription rights (2014: € 27.82), not applicable for the SOP2 options (2014: not applicable), € 26.36 for the SOP 2005-2009 subscription rights (2014: € 27.45) and € 27.09 for the SOP 2010-2014 options (2014: not applicable). The exercise price of the subscription rights and options is equal to the lower of (i) the average closing price of the Company's share during the thirty days preceding the date of the offer, and (ii) the last closing price preceding the date of the offer. When subscription rights are exercised under the SOP1 or SOP 2005-2009 plan, equity is increased by the amount of the proceeds received. Under the terms of the SOP1 and SOP2 plans any subscription rights or options granted through 2004 were vested immediately.

Under the terms of the SOP 2010-2014 stock option plan, options to acquire existing Company shares have been offered to the members of the Bekaert Group Executive, the Senior Vice Presidents and senior executive personnel during the period 2010-2014. The grant dates of each offering were scheduled in the period 2011-2015. The exercise price of the SOP 2010-2014 options was determined in the same manner as in the previous plans. The vesting conditions of the SOP 2010-2014 grants, as well as of the SOP 2005-2009 grants and of the SOP2 grants beginning in 2006, are such that the subscription rights or options will be fully vested on 1 January of the fourth year after the date of the offer. In accordance with the Economic Recovery Act of 27 March 2009, the

exercise period of the SOP2 options and SOP 2005-2009 subscription rights granted in 2006, 2007 and 2008 was extended by five years in favor of the persons who were plan beneficiaries and subject to Belgian income tax at the time such extension was offered. The incremental fair value granted as a result of this amounts to € 0.3 million.

The members of the Bekaert Group Executive, the senior management and a limited number of management staff members of the Company and a number of its subsidiaries received during 2015 Performance Share Units entitling the beneficiary to acquire Performance Shares subject to the conditions of the Performance Share Plan 2015-2017. These Performance Share Units will vest following a vesting period of three years, conditional to the achievement of a pre-set performance target. The performance target was set by the Board of Directors, in line with the Company strategy.

The options granted under SOP2 and SOP 2010-2014, the subscription rights granted under SOP 2005-2009 and the performance shares granted under the Performance Shares Plan 2015-2017 are recognized at fair value at grant date in accordance with IFRS 2 (see note 6.13. 'Retained earnings and other Group reserves'). The fair value of the options is determined using a binomial pricing model. Inputs and outcome of this option pricing model are detailed below:

Option pricing model details	Granted in February 2014	Granted in February 2015	Granted in December 2015¹	Granted in February 2016²
Inputs to the model				
Share price at grant date (in €)	27.32	25.65	27.25	27.25
Exercise price (in €)	25.38	26.06	-	26.38
Expected volatility	39%	39%	39%	39%
Expected dividend yield	3.0%	3.0%	3.0%	3.0%
Vesting period (years)	3	3	3	3
Contractual life (years)	10	10	-	10
Employee exit rate	3%	3%	3%	3%
Risk-free interest rate	1.0%	0.05%	-0.20%	0.05%
Exercise factor	1.40	1.40	-	1.40
Outcome of the model				
Fair value (in €)	7.96	6.71	36.08	7.44

¹ Performance Share Plan 2015-2017

² See note 7.6. 'Events after the balance sheet date'.

The model allows for the effects of early exercise through an exercise factor. An exercise factor of 1.40 stands for the assumption that the beneficiaries exercise the options and the subscription rights after the vesting date when the share price exceeds the exercise price by 40% (on average).

During 2015, 349 810 options (2014: 373 450) were granted under SOP 2010-2014 at a fair value per unit of € 6.71 (2014: € 7.96). The Group has recorded an expense against equity of € 2.9 million (2014: € 2.8 million) based on a straight-line amortization over the vesting period of the fair value of options and subscription rights granted over the past three years.

An offer of 50 850 Performance Share Units was made on 17 December 2015 under the terms of the Performance Share Plan 2015-2017. The granted units represent a fair value of € 1.8 million.

6.13. Retained earnings and other Group reserves

Carrying amount in thousands of €	2014	2015
<i>Hedging reserve</i>	132	-
<i>Revaluation reserve for available-for-sale investments</i>	2 098	97
<i>Remeasurements on defined-benefit plans</i>	-79 146	-68 317
<i>Other revaluation reserves</i>	-16 905	-8 200
<i>Deferred taxes booked in OCI</i>	29 722	30 119
<i>Equity-settled share-based payment plans</i>	22 188	-
<i>Treasury shares</i>	-145 953	-144 747
Other reserves	-187 864	-191 048
Cumulative translation adjustments	-6 149	-30 451
Total other Group reserves	-194 013	-221 499
Retained earnings	1 352 197	1 397 356

The movements in the items of other reserves were as follows:

Hedging reserve in thousands of €	2014	2015
As at 1 January	-623	132
Recycled to income statement	8 651	-6 166
Fair value changes to hedging instruments	-7 896	6 034
As at 31 December	132	-
Of which		
<i>Cross-currency interest-rate swaps (on Eurobonds)</i>	132	-

Changes in the fair value of hedging instruments designated as effective cash flow hedges are calculated and recognized directly in equity on a quarterly basis. In accordance with IFRS hedge accounting policies for cash flow hedges, exchange gains or losses arising from translating the underlying debt at the closing rate are offset by recycling the equivalent amounts to the income statement on a quarterly basis. The cash flow hedging instruments have been settled when the Eurobond expired in March 2015.

Revaluation reserve for available-for-sale investments in thousands of €	2014	2015
As at 1 January	693	2 098
Recycled to income statement	157	302
Fair value changes	1 248	-2 303
As at 31 December	2 098	97
Of which		
<i>Investment in Shougang Concord Century Holdings Ltd</i>	2 001	-
<i>Other</i>	97	97

The revaluation of the investment in Shougang Concord Century Holdings Ltd is based on the closing price of the share on the Hong Kong Stock Exchange. At year-end 2015, an amount of € 0.3 million was recycled to income statement as a result of an impairment loss (€ 0.2 million at midyear 2014).

Remeasurements on defined-benefit plans in thousands of €	2014	2015
As at 1 January	-52 076	-79 146
Remeasurements of the period	-27 742	11 967
Inflation effects	-269	-430
Changes in ownership	941	-708
As at 31 December	-79 146	-68 317

The remeasurements originate from using different actuarial assumptions in calculating the defined-benefit obligation and from differences with actual returns on plan assets at the balance sheet date (see note 6.15. 'Employee benefit obligations'). This reserve does not include any remeasurements attributable to non-controlling interests.

Other revaluation reserves in thousands of €	2014	2015
As at 1 January	-5 894	-16 905
Reclassifications to retained earnings	-	8 687
Changes in ownership	-2 811	18
Put option on purchase of non-controlling interests	-8 200	-
As at 31 December	-16 905	-8 200

Part of other revaluation reserves included historical fair value adjustments relating to business combinations before 2011. The active use of revaluation reserves may suggest certain readers of our financial statements that Bekaert does apply the revaluation model to measure its fixed assets, which is not the case. Therefore, fair value adjustments relating to business combinations have been consistently recognized directly in retained earnings since 2011. Consequently, the relevant part of other revaluation reserves has been reclassified to retained earnings at year-end 2015.

As part of the initial accounting for last year's business combination with Maccaferri, a liability of € 8.2 million has been set up versus equity, which represents the initial fair value of the liability resulting from the put option granted to Maccaferri on its remaining non-controlling interests in Bekaert Maccaferri Underground Solutions BVBA. Any subsequent changes in fair value of this financial liability are recognized through income statement in accordance with IFRS.

Deferred taxes booked in equity in thousands of €	2014	2015
As at 1 January	28 014	29 722
Deferred taxes relating to other comprehensive income	1 844	-91
Inflation effects	92	146
Changes in ownership	-228	342
As at 31 December	29 722	30 119

Deferred taxes relating to other comprehensive income are also recognized in OCI (see note 6.6. 'Deferred tax assets and liabilities').

Equity-settled share-based payment plans in thousands of €	2014	2015
As at 1 January	19 343	22 188
Equity instruments granted	2 845	2 906
Reclassifications to retained earnings	-	-25 094
As at 31 December	22 188	-

Options granted under the SOP2 and SOP 2010-2014 stock option plans and subscription rights granted under the SOP 2005-2009 stock option plan (see note 6.12. 'Ordinary shares, treasury shares, subscription rights, share options and performance shares') are accounted for as equity-settled share-based payments in accordance with IFRS 2, 'Share-based Payment'. The grant date fair value of stock option plans is expensed over the vesting period, with a corresponding increase in equity. Ever since IFRS 2 was first applied, this reserve has been increasing, which may be rather confusing. Therefore, this reserve has been reclassified to retained earnings at year-end 2015.

Treasury shares in thousands of €	2014	2015
As at 1 January	-73 851	-145 953
Shares purchased	-72 102	-
Shares sold	-	1 206
As at 31 December	-145 953	-144 747

While 2.6 million shares were bought back in 2014 to anticipate any dilution resulting either from the convertible bond issued in June or from the exercise of options granted under its option plans, the only treasury shares transactions in 2015 related to a minor number of options being exercised (see note 6.12. 'Ordinary shares, treasury shares, subscription rights, share options and performance shares').

Cumulative translation adjustments		
in thousands of €	2014	2015
As at 1 January	-84 776	-6 149
Exchange differences on dividends declared	-5 606	-5 296
Recycled to income statement - relating to disposed entities or step acquisitions	1 042	393
Changes in ownership	1 766	-2 359
Movements arising from exchange rate fluctuations	81 425	-17 040
As at 31 December	-6 149	-30 451
Of which relating to entities with following functional currencies		
<i>Chinese renminbi</i>	123 304	158 720
<i>US dollar</i>	15 994	35 911
<i>Brazilian real</i>	-107 398	-170 636
<i>Chilean peso</i>	-1 677	-9 370
<i>Venezuelan bolivar</i>	-38 307	-42 344
<i>Indian rupee</i>	-5 620	-3 183
<i>Czech koruna</i>	6 587	7 557
<i>Russian ruble</i>	-1 015	-5 433
<i>Other currencies</i>	1 983	-1 673

The swings in CTA reflect both the exchange rate evolution and the relative importance of the net assets denominated in the presented currencies.

6.14. Non-controlling interests

Carrying amount in thousands of €	2014	2015
As at 1 January	157 600	199 421
Changes in Group structure	25 988	-85 152
Share of the result for the period	378	3 917
Share of other comprehensive income excluding CTA	-338	-281
Dividend pay-out	-54 663	-7 391
Capital increases	53 399	14 967
Exchange gains and losses (-)	17 057	5 731
As at 31 December	199 421	131 212

In 2015, the changes in Group structure mainly relate to Bekaert acquiring the remaining non-controlling interests held by the Chilean partners in the Ropes entities (€ -78.3 million) in December. Other changes in Group structure (totaling € -6.8 million) originated from the business combination with Pirelli, the acquisition of the remaining non-controlling interests in two Chinese companies and in the Malaysian and Indonesian 'Southern Wire' companies from Southern Steel, and the loss of control in Bekaert (Xinyu) New Materials Co Ltd. In 2014, the changes in Group structure mainly originated from the business combination with ArcelorMittal (€ 11.2 million), due to non-controlling interests of 42% arising in the new entities in Costa Rica and to an increase in non-controlling interests from 20% to 42% in the existing entity in Ecuador. Substantial increases also resulted from the business combinations with Pirelli (€ 9.2 million) and Maccaferri (€ 2.8 million).

In 2015, the share of the result for the period mainly improved due to the positive contribution from the Pirelli entities and the less negative contribution from the Southern Wire companies (after having recognized sizeable impairment losses in 2014), while the Ropes entities were hit by the sagging demand from the oil and gas sector.

In 2014, dividends paid out by Inchalam SA and Prodalam SA were used by the Chilean partners to fund capital increases totaling € 40.5 million in Acma Inversiones SA, Prodinsa SA and Procables Wire Ropes SA. These capital increases are part of a portfolio realignment initiated in 2014, through which Bekaert was to raise its interest in the ropes activities in Chile, Peru and Canada from 52% to 65% early 2015. Further capital increases in the Ropes entities were effected in 2015 (€ 15.6 million).

In accordance with IFRS 12, 'Disclosures of Interests in Other Entities', following information is provided on subsidiaries that have non-controlling interests ('NCI') that are material to the Group. The objective of IFRS 12 is to require an entity to disclose information that enables users of its financial statements evaluate (a) the nature and risks associated with its interests in other entities, and (b) the effects of those interests on its financial position, financial performance and cash flows. Bekaert has many partnerships across the world, most of which would not individually meet any reasonable materiality criterion. Therefore, the Group has identified three non-wholly owned groups of entities which are interconnected through their line of business and shareholder structure: (1) the Ropes entities, a global business in which Bekaert has recently expanded its worldwide footprint and increased its interests vs. its Chilean partners; (2) the Wire entities in Chile and Peru, where the non-controlling interests are mainly held by the Chilean partners, and (3) the Wire entities in the Andina region, where the non-controlling interests are mainly held by the Ecuadorian Kohn family and ArcelorMittal. In presenting aggregated information for these entity groups, only intercompany effects within each entity group have been eliminated, while all other entities of the Group have been treated as third parties.

Entities included in material NCI disclosure	Country	Proportion of NCI at year-end	
		2014	2015
Ropes entities			
Acma Inversiones SA	Chile	48.0%	0.0%
Inversiones Bekaert Andean Ropes SA	Chile	0.0%	0.0%
Procables Wire Ropes SA	Chile	48.0%	0.0%
Prodinsa SA	Chile	48.0%	0.0%
Bekaert Cimaf Cabos Ltda	Brazil	0.0%	0.0%
Procables SA	Peru	50.0%	3.9%
Bekaert Wire Rope Industry NV	Belgium	0.0%	0.0%
Wire Rope Industries Ltd	Canada	48.0%	0.0%
Wire Rope Industries USA Inc	USA	0.0%	0.0%
Bekaert Wire Ropes Pty Ltd	Australia	0.0%	0.0%
Wire entities Chile and Peru			
Acma SA	Chile	48.0%	48.0%
Acmanet SA	Chile	48.0%	48.0%
Industrias Acmanet Ltda	Chile	48.0%	48.0%
Industrias Chilenas de Alambre - Inchalam SA	Chile	48.0%	48.0%
Procercos SA	Chile	48.0%	48.0%
Prodalam SA	Chile	48.0%	48.0%
Impala SA	Panama	48.0%	48.0%
Productos de Acero Cassadó SA	Peru	62.5%	62.5%
Prodac Contrata SAC	Peru	62.5%	62.5%
Prodac Selva SAC	Peru	62.5%	62.5%
Wire entities Andina region			
Bekaert Ideal SL	Spain	20.0%	20.0%
Productora de Alambres Colombianos - Proalco SAS	Colombia	20.0%	20.0%
Bekaert Costa Rica SA	Costa Rica	41.6%	41.6%
BIA Alambres Costa Rica SA	Costa Rica	41.6%	41.6%
Ideal Alambrec SA	Ecuador	41.6%	41.6%
InverVicson SA	Venezuela	20.0%	20.0%
Vicson SA	Venezuela	20.0%	20.0%

The principal activity of the main entities listed above is manufacturing and selling wire, ropes and other wire products, mainly for the local market. Following entities are essentially holdings, having interests in one or more of the other entities listed above: Acma Inversiones SA, Inversiones Bekaert Andean Ropes SA, Procables Wire Ropes SA, Bekaert Wire Rope Industry NV, Industrias Acmanet Ltda, Procercos SA, Impala SA and Bekaert Ideal SL. The following table shows the relative importance of the entity groups with material NCI in terms of results and equity attributable to NCI.

Material and other NCI in thousands of €	Result attributable to NCI		Equity attributable to NCI	
	2014	2015	2014	2015
Ropes entities	5 050	957	33 908	250
Wire entities Chile and Peru	33 291	6 295	83 090	83 886
Wire entities Andina region	-3 229	-1 743	21 902	20 343
Consolidation adjustments on material NCI	-27 617	-1 613	-2 333	-32 003
Contribution of material NCI to consolidated NCI	7 495	3 896	136 567	72 476
Other NCI	-7 117	21	62 854	58 731
Total consolidated NCI	378	3 917	199 421	131 207

The consolidation adjustments to the result attributable to material NCI in 2014 include the elimination of a gain of € 28 million recognized by the Chilean wire entities on the transfer of Ropes investments to the Ropes entities. The substantial consolidation adjustments to the equity attributable to material NCI in 2015 are still largely due to this equity shift from the Ropes entities (the NCI of which having been repurchased in 2015) to the Chilean wire entities.

Ropes entities		
in thousands of €	2014	2015
Current assets	70 135	89 233
Non-current assets	78 810	125 131
Current liabilities	33 536	184 034
Non-current liabilities	14 557	41 618
Equity attributable to the Group	66 944	-11 538
Equity attributable to NCI	33 908	250

Bekaert raised its interest in the ropes activities in Chile, Peru and Canada from 52% to 65% in early 2015, and then acquired the ropes activities from Arrium (Australia) together with its Chilean partners (see note 7.2. Effect of business combinations and business disposals). In December 2015, Bekaert and its Chilean partners entered into an agreement to discontinue their partnership in the Ropes business, as a result of which Bekaert purchased the remaining non-controlling interests in the Ropes entities from the Chilean partners. The minor equity attributable to NCI (€ 0.3 million) held at year-end 2015 relates to the interest held by the Peruvian shareholders in Procables SA.

Ropes entities		
in thousands of €	2014	2015
Sales	107 965	144 732
Expenses	-98 029	-150 105
Result for the period	9 936	-5 373
Result for the period attributable to the Group	4 886	-6 330
Result for the period attributable to NCI	5 050	957
Other comprehensive income for the period	540	-16 531
OCI attributable to the Group	297	-11 907
OCI attributable to NCI	243	-4 624
Total comprehensive income for the period	10 476	-21 904
Total comprehensive income attributable to the Group	5 183	-18 237
Total comprehensive income attributable to NCI	5 293	-3 667
Dividends paid to NCI	-	-
Net cash inflow (outflow) from operating activities	8 819	6 398
Net cash inflow (outflow) from investing activities	-90 987	-189 666
Net cash inflow (outflow) from financing activities	85 539	184 465
Net cash inflow (outflow)	3 371	1 197

The result for the period of the Ropes entities, both in 2014 and 2015 was adversely affected by the weak economic situation in the oil and gas sector. In 2015, the result was substantially reduced by the acquisition-related expenses for Bekaert Wire Ropes Pty Ltd (€ 3.2 million) and by a current income tax charge of € 5.0 million, fully attributable to the Group, with respect to a gain on an intercompany share transfer in Chile. The result for the period attributable to NCI reflects the fact that, on average, Matco Cables SpA held about 35% (vs. 48% in 2014) in the Ropes operating entities throughout the year. The substantial cash-outs from investing activities in 2015 mainly relate to the business combination with Arrium, the repurchase of the non-controlling interests from Matco Cables SpA and capital expenditure on plant, property and equipment. In 2014, the investing cash-outs mainly related to an intercompany share transfer in anticipation of the portfolio realignment with Matco Cables SpA.

Wire entities Chile and Peru		
in thousands of €	2014	2015
Current assets	203 143	181 799
Non-current assets	136 700	140 010
Current liabilities	146 543	112 300
Non-current liabilities	34 680	51 123
Equity attributable to the Group	75 530	74 500
Equity attributable to NCI	83 090	83 886

Strict working capital control was the main reason for the decline in current assets, while the decrease in total liabilities was mainly driven by gross debt.

Wire entities Chile and Peru

in thousands of €

	2014	2015
Sales	411 655	434 933
Expenses	-343 301	-422 039
Result for the period	68 354	12 894
Result for the period attributable to the Group	35 063	6 599
Result for the period attributable to NCI	33 291	6 295
Other comprehensive income for the period	14 751	-1 273
OCI attributable to the Group	6 866	-1 428
OCI attributable to NCI	7 885	155
Total comprehensive income for the period	83 105	11 621
Total comprehensive income attributable to the Group	41 929	5 171
Total comprehensive income attributable to NCI	41 176	6 450
Dividends paid to NCI	-53 171	-5 532
Net cash inflow (outflow) from operating activities	11 196	52 954
Net cash inflow (outflow) from investing activities	63 671	-9 502
Net cash inflow (outflow) from financing activities	-87 856	-36 885
Net cash inflow (outflow)	-12 989	6 567

Sales and operating results improved, although Peru was hit by a cut in government spending. The result for the period included a one-time gain on the transfer of the ropes investments of € 58 million in 2014. OCI mainly includes exchange differences, which are affected by the weakened Chilean peso. Operating cash flows increased substantially thanks to strong operating performance and working capital reduction. Investing cash flows in 2014 included one-time proceeds from the transfer of the ropes investments (€ 78.1 million). Financing cash flows in 2014 included one-time dividends paid out and capital contributions relating to the transfer of the ropes investments.

Wire entities Andina region

in thousands of €

	2014	2015
Current assets	113 372	110 022
Non-current assets	70 104	72 584
Current liabilities	99 973	101 758
Non-current liabilities	22 553	24 444
Equity attributable to the Group	39 048	36 061
Equity attributable to NCI	21 902	20 343

The major balance sheet subtotals remained fairly constant, although the net assets of Venezuela dwindled further as a result of the staggering depreciation of the bolivar.

Wire entities Andina region

in thousands of €

	2014	2015
Sales	172 306	204 551
Expenses	-183 570	-207 911
Result for the period	-11 264	-3 360
Result for the period attributable to the Group	-8 035	-1 617
Result for the period attributable to NCI	-3 229	-1 743
Other comprehensive income for the period	4 468	-53
OCI attributable to the Group	2 551	-1 047
OCI attributable to NCI	1 917	994
Total comprehensive income for the period	-6 796	-3 413
Total comprehensive income attributable to the Group	-5 484	-2 664
Total comprehensive income attributable to NCI	-1 312	-749
Dividends paid to NCI	-1 027	-850
Net cash inflow (outflow) from operating activities	315	11 221
Net cash inflow (outflow) from investing activities	-1 624	-6 901
Net cash inflow (outflow) from financing activities	20 766	7 679
Net cash inflow (outflow)	19 457	11 999

Sales increased in all countries except Venezuela, helped by acquisition effects in Costa Rica and a stronger dollar but adversely affected by the weaker Colombian peso. Operating results slightly improved, mainly in Colombia and Ecuador. Financial results benefited from one-time exchange gains. OCI was mainly driven by exchange losses on the translation of the net assets in Colombia and Venezuela. Operating cash flows improved, mainly in Colombia and Ecuador. Investing cash-outs increased as a result of an expansion program in Ecuador. Financing cash flows showed higher interests and dividend payments and lower increases in interest-bearing debt.

Vicson SA (Venezuela) remains exposed to restrictions on the repatriation of cash due to foreign exchange regulations in Venezuela.

6.15. Employee benefit obligations

The total net liabilities for employee benefit obligations, which amounted to € 298.4 million as at 31 December 2015 (€ 297.7 million as at year-end 2014), are as follows:

in thousands of €	2014	2015
Liabilities for		
<i>Post-employment defined-benefit plans</i>	169 651	159 941
<i>Other long-term employee benefits</i>	2 779	6 077
<i>Cash-settled share-based payment employee benefits</i>	1 675	1 946
<i>Short-term employee benefits</i>	107 432	117 532
<i>Termination benefits</i>	16 170	12 915
Total liabilities in the balance sheet	297 707	298 411
of which		
<i>Non-current liabilities</i>	175 774	167 130
<i>Current liabilities</i>	121 933	131 281
Assets for		
<i>Defined-benefit pension plans</i>	-21	-7
Total assets in the balance sheet	-21	-7
Total net liabilities	297 686	298 404

Post-employment benefit plans

In accordance with IAS 19, 'Employee benefits', post-employment benefit plans are classified as either defined-contribution plans or defined-benefit plans.

Defined-contribution plans

For defined-contribution plans, Bekaert pays contributions to publicly or privately administered pension funds or insurance companies. Once the contributions have been paid, the Group has no further payment obligation. These contributions constitute an expense for the year in which they are due.

The Belgian defined-contribution pension plans are by law subject to minimum guaranteed rates of return. Pension legislation was amended at the end of 2015 and defines the minimum guaranteed rate of return as a variable percentage linked to government bond yields observed in the market as from 1 January 2016 onwards. For 2016 the minimum guaranteed rate of return becomes 1.75% on employer contributions and employee contributions.

The old rates (3.25% on employer contributions and 3.75% on employee contributions) continue to apply to the accumulated past contributions in the group insurance as at 31 December 2015. As a consequence, the defined-contribution plans have been reclassified as defined benefit plans at 31 December 2015.

Bekaert participates in a multi-employer defined-benefit plan in the Netherlands funded through the Pensioenfonds Metaal & Techniek. This plan is treated as a defined-contribution plan because no information is available with respect to the plan assets attributable to Bekaert; contributions for this plan amounted to € 0.8 million (2014: € 0.8 million).

Defined-contribution plans	2014	2015
in thousands of €		
Expenses recognized	12 304	18 545

Expenses recognized for Belgian pension plans amounted to € 6.0 million (2014: € 4.7 million).

Defined-benefit plans

Several Bekaert companies operate retirement benefit and other post-employment benefit plans. These plans generally cover all employees and provide benefits which are related to salary and length of service.

The latest actuarial valuations under IAS 19 were carried out as of 31 December 2015 for all significant post-employment defined-benefit plans by independent actuaries. The Group's largest defined-benefit obligations are in Belgium and the United States. They account for 85.4% (2014: 83.6%) of the Group's defined-benefit obligations and 99.8% (2014: 99.7%) of the Group's plan assets.

Plans in Belgium

The funded plans in Belgium mainly relate to retirement plans representing a defined-benefit obligation of € 164.1 million (2014: € 114.2 million) and € 147.3 million assets (2014: € 93.1 million). They foresee in a lump sum payment upon retirement and in risk benefits in case of death or disability prior to retirement. The plans are externally funded through two self-administrated institutions for occupational retirement provision (IORP). On a regular basis, an Asset Liability Matching (ALM) study is performed in which the consequences of strategic investment policies are analyzed in terms of risk-and-return profiles. Statement of investment principles and funding policy are derived from this study. The purpose is to have a well-diversified asset allocation to control the risk. Investment risk and liability risk are monitored on a quarterly basis. Funding policy targets to be at least fully funded in terms of the technical provision (this is a prudent estimate of the pension liabilities). As 31 December 2015, the defined-benefit obligation increased by € 51.9 million and the plan assets by € 50.3 million due to the reclassification of the defined-contribution plans.

Unfunded plans mainly relate to pre-retirement pensions (defined-benefit obligation € 23.2 million (2014: € 28.8 million)) which are not externally funded. An amount of € 8.5 million (2014: € 8.6 million) relates to employees in active service who have not yet entered into any pre-retirement agreement.

Plans in the United States

The funded plans in the United States mainly relate to pension plans representing a defined-benefit obligation of € 142.2 million (2014: € 134.7 million) and assets of € 92.4 million (2014: € 84.5 million). The plans provide for benefits for the life of the plan members but have been closed for new entrants. Plan assets are invested, in fixed-income funds and in equities. Based on an Asset Liability Matching study the strategic asset allocation has been shifted more towards long duration fixed income funds. Funding policy targets to be sufficiently funded in terms of Pension Protection Act requirements and thus to avoid benefit restrictions or at-risk status of the plans.

Unfunded plans mainly relate to medical care (defined-benefit obligation € 5.5 million (2014: € 5.2 million)) and are not externally funded.

The amounts recognized in the balance sheet are as follows:

in thousands of €	2014	2015
Belgium		
Present value of funded obligations	114 166	164 091
Fair value of plan assets	-93 145	-147 325
Deficit / surplus (-) of funded obligations	21 021	16 766
Present value of unfunded obligations	32 154	25 618
Total deficit / surplus (-) of obligations	53 175	42 384
United States		
Present value of funded obligations	134 726	142 225
Fair value of plan assets	-84 489	-92 386
Deficit / surplus (-) of funded obligations	50 237	49 839
Present value of unfunded obligations	9 611	9 884
Total deficit / surplus (-) of obligations	59 848	59 723
Other		
Present value of funded obligations	868	666
Fair value of plan assets	-512	-458
Deficit / surplus (-) of funded obligations	356	208
Present value of unfunded obligations	56 251	57 619
Total deficit / surplus (-) of obligations	56 607	57 827
Total		
Present value of funded obligations	249 760	306 982
Fair value of plan assets	-178 146	-240 169
Deficit / surplus (-) of funded obligations	71 614	66 813
Present value of unfunded obligations	98 016	93 121
Total deficit / surplus (-) of obligations	169 630	159 934

The movement in the defined-benefit obligation, plan assets, net liability and asset over the year is as follows:

in thousands of €	Defined-benefit obligation	Plan assets	Net liability / asset (-)
As at 1 January 2014	283 419	-149 330	134 089
Current service cost	10 777	-	10 777
Past service cost	2 203	-	2 203
Interest expense / income (-)	11 130	-5 856	5 274
Net benefit expense / income (-) recognized in profit and loss	24 110	-5 856	18 254
<i>Components recognized in EBIT</i>	-	-	12 980
<i>Components recognized in financial result</i>	-	-	5 274
Remeasurements			
<i>Return on plan assets, excluding amounts included in interest expense / income (-)</i>	-	-10 288	-10 288
<i>Gain (-) / loss from change in demographic assumptions</i>	7 699	-	7 699
<i>Gain (-) / loss from change in financial assumptions</i>	30 134	-	30 134
<i>Experience gains (-) / losses</i>	873	-	873
Changes recognized in equity	38 706	-10 288	28 418
Contributions			
Employer contributions / direct benefit payments	-	-28 482	-28 482
Employee contributions	132	-132	-
Payments from plans			
Benefit payments	-25 722	25 722	-
Acquisitions	8 991	-	8 991
Foreign-currency translation effect	18 140	-9 779	8 360
As at 31 December 2014	347 776	-178 146	169 630
As at 1 January 2015	347 776	-178 146	169 630
Current service cost	13 457	-	13 457
Past service cost	2 787	-	2 787
Gains (-) / losses from settlements	169	-	169
Interest expense / income (-)	11 270	-5 299	5 971
Net benefit expense / income (-) recognized in profit and loss	27 683	-5 299	22 384
<i>Components recognized in EBIT</i>	-	-	16 413
<i>Components recognized in financial result</i>	-	-	5 971
Remeasurements			
<i>Return on plan assets, excluding amounts included in interest expense / income (-)</i>	-	3 025	3 025
<i>Gain (-) / loss from change in demographic assumptions</i>	-6 660	-	-6 660
<i>Gain (-) / loss from change in financial assumptions</i>	-9 903	-	-9 903
<i>Experience gains (-) / losses</i>	2 217	-	2 217
Changes recognized in equity	-14 346	3 025	-11 321
Contributions			
Employer contributions / direct benefit payments	-	-30 053	-30 053
Employee contributions	162	-162	-
Payments from plans			
Benefit payments	-30 438	30 438	-
Reclassifications	48 861	-50 321	-1 460
Acquisitions	3 446	-	3 446
Disposals	-164	81	-83
Foreign-currency translation effect	17 122	-9 731	7 391
As at 31 December 2015	400 102	-240 168	159 934

The past service cost mainly relates to the introduction of a retirement gratuity in Peru and reflects the impact of the reclassification of the Belgian defined-contribution plans. In the income statement, current and past service cost, including gains or losses from settlements are included in the operating result (EBIT), and interest expense or income is included in interest expense, under interest element of interest-bearing provisions.

Reimbursement rights arising from reinsurance contracts covering retirement pensions, death and disability benefits in Germany amount to € 0.3 million (2014: € 0.3 million).

Estimated contributions and direct benefit payments for 2016 are as follows:

Estimated contributions and direct benefit payments	
in thousands of €	2016
Pension plans	28 247
Total	28 247

Fair values of plan assets at 31 December were as follows:

in thousands of €	2014	2015
Belgium		
Bonds	42 670	33 032
Equity	46 080	55 165
Cash	4 395	8 807
Insurance contract	-	50 321
Total Belgium	93 145	147 325
United States		
Bonds		
USD Long Duration Bonds	45 711	49 132
USD Fixed Income	8 367	9 358
USD Guaranteed Deposit	5 445	5 937
Equity		
USD Equity	17 726	20 084
Non-USD Equity	7 241	7 875
Total United States	84 489	92 386
Other		
Bonds	512	609
Total Other	512	609
Total	178 146	240 320

In the USA, investments are primarily made through mutual fund investments and insurance company separate accounts, in quoted equity and debt instruments. In Belgium, the investments of the institutions for occupational retirement provision are made through mutual fund investments in quoted equity and debt instruments. Investments are well-diversified so that the failure of any single investment would not have a material impact on the overall level of assets. The insurance contracts benefit from guaranteed interest rates, i.e. the weighted average equals 3.16% at 31 December 2015. The Group's plan assets include no direct positions in Bekaert shares or bonds, nor do they include any property used by a Bekaert entity.

The principal actuarial assumptions on the balance sheet date (weighted averages based on outstanding DBO) were:

Actuarial assumptions	2014	2015
Discount rate	3.1%	3.4%
Future salary increases	3.3%	3.4%
Underlying inflation rate	2.5%	2.8%
Health care cost increases (initial)	6.5%	6.3%
Health care cost increases (ultimate)	5.0%	4.5%
Health care (years to ultimate rate)	6	8

The discount rate for the USA and Belgium is reflective both of the current interest rate environment and the plan's distinct liability characteristics. The plan's projected cash flows are matched to spot rates, after which an associated present value is developed. A single equivalent discount rate is then determined that produces that same present value. The underlying yield curve for deriving spot rates is based on high quality AA-credit rated corporate bonds issues denominated in the currency of the applicable regional market. This resulted into the following discount rates:

Discount rates	2014	2015
Belgium	1.8%	2.0%
United States	3.9%	4.2%
Other	4.7%	4.6%

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each territory. These assumptions translate into the following average life expectancy in years for a pensioner retiring at age 65:

	2014	2015
Life expectancy of a man aged 65 (years) at balance sheet date	21.5	20.9
Life expectancy of a woman aged 65 (years) at balance sheet date	23.9	23.1
Life expectancy of a man aged 65 (years) ten years after balance sheet date	22.4	21.7
Life expectancy of a woman aged 65 (years) ten years after balance sheet date	24.8	24.0

Sensitivity analyses show the following effects:

Sensitivity analysis in thousands of €	Change in assumption	Impact on defined-benefit obligation	
Discount rate	-0.50%	Increase by	21 379 5.3%
Salary growth rate	0.50%	Increase by	6 028 1.5%
Health care cost	0.50%	Increase by	214 0.1%
Life expectancy	Increase by 1 year	Increase by	3 968 1.0%

The above analyses were done on a mutually exclusive basis, and holding all other assumptions constant.

Through its defined-benefit plans, the Group is exposed to a number of risks, the most significant of which are detailed below:

Asset volatility	The plan liabilities are calculated using a discount rate set with reference to corporate bond yields; if plan assets underperform this yield, this will create a deficit.
Changes in bond yields	A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.
Salary risk	The majority of the plans' benefit obligations are calculated by reference to the future salaries of plan members. As such, a salary increase of plan members higher than expected will lead to higher liabilities.
Longevity risk	Belgian pension plans provide for lump sum payments upon retirement. As such there is limited or no longevity risk. Pension plans in the USA provide for benefits for the life of the plan members, so increases in life expectancy will result in an increase in the plans' liabilities.

The weighted average durations of the defined-benefit obligations are as follows:

Belgium	12.6
United States	12.4
Other	9.9
Total	12.1

Other long-term employee benefits

The other long-term employee benefits relate to service awards. The increase of the liabilities is due to acquisitions and a reclassification of one plan in Italy.

Cash-settled share-based payment employee benefits

Stock appreciation rights

The Group issues stock appreciation rights (SARs) to certain management employees, granting them the right to receive the intrinsic value of the SARs at the date of exercise. These SARs are accounted for as cash-settled share-based payments in accordance with IFRS 2. The fair value of each grant is recalculated at balance sheet date, using the same binomial pricing model as for the equity-settled share-based payments (see note 6.12. 'Ordinary shares, treasury shares, subscription rights, share options and performance shares'). Based on local regulations, the exercise price for any grant under the USA SAR plan is equal to the average closing price of the Company's share during the thirty days following the date of the offer. The exercise price for the other SAR plans is determined in the same way as for the equity-settled stock option plans: it is equal to the lower of (i) the average closing price of the Company's share during the thirty days preceding the date of the offer, and (ii) the last closing price preceding the date of the offer.

Following inputs to the model are used for all grants: share price at balance sheet date: € 28.39 (2014: € 26.35), expected volatility of 39% (2014: 39%), expected dividend yield of 3.0% (2014: 3.0%), vesting period of 3 years, contractual life of 10 years, employee exit rate of 4% in Asia (2014: 4%) and 4% in other countries (2014: 3%), and an exercise factor of 1.40 (2014: 1.40). Inputs for risk-free interest rates vary by grant and are based on the return of Belgian OLO¹'s with a term equal to the maturity of the SAR grant under consideration.

Exercise prices and fair values of outstanding SARs by grant are shown below:

USA SAR Plan details by grant in €	Exercise price	Fair value as at 31 Dec 2014	Fair value as at 31 Dec 2015
Grant 2008	28.76	2.66	-
Grant 2009	16.58	9.60	11.20
Grant 2010	37.05	2.83	2.69
Grant 2011	83.43	1.21	1.16
Grant 2012	27.63	5.73	6.44
Grant 2013	22.09	7.88	8.36
Exceptional grant 2013	22.51	8.80	9.45
Grant 2014	25.66	7.18	7.85
Grant 2015	25.45	7.46	8.39
Grant 2016 ²	28.38	-	7.80

Other SAR Plans details by grant in €	Exercise price	Fair value as at 31 Dec 2014	Fair value as at 31 Dec 2015
Grant 2007	30.17	3.37	3.06
Grant 2008	28.33	4.52	4.83
Grant 2009	16.66	9.73	11.37
Grant 2010	33.99	4.17	4.56
Grant 2011	77.00	1.34	1.31
Grant 2012	25.14	6.23	7.08
Grant 2013	19.20	9.02	9.84
Exceptional grant 2013	21.45	9.11	9.93
Grant 2014	25.38	7.08	7.84
Grant 2015	26.06	7.05	7.96
Grant 2016 ²	26.38	-	8.01

At 31 December 2015, the total liability for the USA SAR plan amounted to € 0.9 million (2014: € 0.8 million), while the total liability for the other SAR plans amounted to € 1.1 million (2014: € 0.9 million).

The Group recorded a total loss of € 0.3 million (2014: loss of € 0.2 million) during the year in respect of SARs.

¹ *Obligation Linéaire / Lineaire Obligatie*

² *The fair value of this grant has been determined at grant date. See note 7.6. 'Events after the balance sheet date'.*

Performance Share Units

Certain management employees received cash-settled Performance Share Units during 2015 entitling the beneficiary to receive the value of Performance Share Units subject to the conditions of the Performance Share Plan 2015-2017. These Performance Share Units will vest following a vesting period of three years, conditional to the achievement of a pre-set performance target. The performance target was set by the Board of Directors, in line with the Company strategy.

Under the terms of the cash-settled performance share plan, a regular offer of 11 850 performance share units was made on 17 December 2015. The granted units represent a fair value of € 0.5 million.

These performance share units are accounted for as cash-settled share-based payments in accordance with IFRS 2. The fair value of each grant is recalculated at balance sheet date, using the same binomial pricing model as for the equity-settled share-based payments (see note 6.12. 'Ordinary shares, treasury shares, subscription rights, share options and performance shares').

Following inputs to the model are used for all grants: share price at balance sheet date: € 28.39, expected volatility of 39%, expected dividend yield of 3.0%, vesting period of 3 years and an employee exit rate of 4%. Inputs for risk-free interest rates vary by grant and are based on the return of Belgian OLO¹s with a term equal to the maturity of the SAR grant under consideration.

The fair value of outstanding performance share units by grant is shown below:

Performance Share Plan details by grant in €	Fair value as at 31 Dec 2015
Grant 2015 ²	38,29

Short-term employee benefit obligations

Short-term employee benefit obligations relate to liabilities for remuneration and social security that are due within twelve months after the end of the period in which the employees render the related service.

¹ *Obligation Linéaire / Lineaire Obligatie*

² *The fair value of this grant has been determined at grant date. See note 7.6. 'Events after the balance sheet date'.*

6.16. Provisions

in thousands of €	Restructuring	Claims	Environment	Other	Total
As at 1 January 2015	5 789	5 216	33 089	32 143	76 237
Additional provisions	3 094	1 809	149	9 039	14 091
Unutilized amounts released	-1 563	-1 288	-2 358	-5 128	-10 337
Increase in present value	-	-	-	1 092	1 092
Charged to the income statement	1 531	521	-2 209	5 003	4 846
New consolidations	-	1 200	-	3 602	4 802
Deconsolidations	-	-87	-	-20	-107
Amounts utilized during the year	-1 985	-2 067	-848	-2 413	-7 313
Transfers	-78	1 297	78	-2 403	-1 106
Exchange gains (-) and losses	9	-173	-181	157	-188
As at 31 December 2015	5 266	5 907	29 929	36 069	77 171
Of which					
<i>current</i>	<i>2 403</i>	<i>2 341</i>	<i>3 040</i>	<i>19 189</i>	<i>26 973</i>
<i>non-current - between 2 and 5 years</i>	<i>2 863</i>	<i>3 236</i>	<i>6 415</i>	<i>9 303</i>	<i>21 817</i>
<i>non-current - more than 5 years</i>	<i>-</i>	<i>330</i>	<i>20 474</i>	<i>7 577</i>	<i>28 381</i>

The decrease of provisions for restructuring mainly relates to previously announced programs in Belgium whereas the further integration program of the Italian ex-Pirelli plant mainly explains the increase.

Provisions for claims mainly relate to product warranty programs and various product quality claims in several entities.

The environmental provisions mainly relate to sites in EMEA. The expected soil sanitation costs are reviewed at each balance sheet date. Based on external expert assessments, the main decrease in 2015 relates to the plant in Hlohovec (Slovakia). Timing of settlement is uncertain as it is often triggered by decisions on the destination of the premises.

Other provisions include bank guarantees for a subsidiary in Venezuela. In 2014, part of these guarantees was recognized as a financial liability; additional guarantees have been recorded in 2015 and the entire amount is now recognized as other provisions (€ 16.3 million). As part of the opening balance on the acquisition of the Pirelli steel cord plants, a contingent liability has been recognized for stamp duty and a contractor pension cost. A provision of € 8.3 million relating to a put option for a non-controlling interest in an investment has been transferred to derivative liabilities in 2015. Furthermore, other provisions also include the effects of the long-term secured wire rod supply contract (expiring in 2022) with ArcelorMittal (€ 7.9 million) and a tax provision for the plant in Sumaré (Brazil) (€ 2.4 million).

6.17. Interest-bearing debt

Information concerning the contractual maturities of the Group's interest-bearing loans and borrowings (current and non-current) is given below:

2015 in thousands of €	Due within 1 year	Due between 1 and 5 years	Due after 5 years	Total
Interest-bearing debt				
<i>Finance leases</i>	219	3 545	-	3 764
<i>Credit institutions</i>	288 289	163 737	-	452 026
<i>Bonds</i>	205 000	340 614	-	545 614
<i>Convertible bonds</i>	1 206	284 220	-	285 426
Carrying amount	494 714	792 116	-	1 286 830
Value adjustments	-	-	-	-
Total financial debt	494 714	792 116	-	1 286 830

2014 in thousands of €	Due within 1 year	Due between 1 and 5 years	Due after 5 years	Total
Interest-bearing debt				
<i>Finance leases</i>	76	513	959	1 548
<i>Credit institutions</i>	341 293	84 353	508	426 154
<i>Bonds</i>	100 183	500 000	45 614	645 797
<i>Convertible bonds</i>	-	278 127	-	278 127
Carrying amount	441 552	862 993	47 081	1 351 626
Value adjustments	7 584	-	-	7 584
Total financial debt	449 136	862 993	47 081	1 359 210

Total financial debt decreased slightly. No new bonds were issued in 2015. During 2015, the Group has more actively used its short-term credit facilities (committed credit facility, factoring program and uncommitted credit facilities).

As a general principle, loans are entered into by Group companies in their local currency to avoid currency risk. If funding is in another currency without an offsetting position on the balance sheet, the companies hedge the currency risk through derivatives (cross-currency interest-rate swaps or forward exchange contracts). Bonds, commercial paper and debt towards credit institutions are unsecured, except for the factoring program that has been set up with KBC and BNP Paribas Fortis.

For further information on financial risk management, we refer to note 7.3. 'Financial risk management and financial derivatives'.

Net debt calculation

The derivative representing the conversion option (€ 5.8 million vs. € 7.9 million in 2014) embedded in the convertible bond is not included in the net debt. The table below summarizes the calculation of the net debt.

in thousands of €	2014	2015
Non-current interest-bearing debt	910 074	792 116
Value adjustments	7 584	-
Current interest-bearing debt	441 552	494 714
Total financial debt	1 359 210	1 286 830
Non-current financial receivables and cash guarantees	-19 551	-9 694
Current loans	-13 998	-33 185
Short-term deposits	-14 160	-10 216
Cash and cash equivalents	-458 542	-401 771
Net debt	852 959	831 964

6.18. Other non-current liabilities

Carrying amount in thousands of €	2014	2015
Other non-current amounts payable	815	820
Derivatives (cf. note 7.3.)	7 921	14 384
Total	8 736	15 204

The derivatives relate to the embedded financial instrument (€ 5.8 million (2014: € 7.9 million)) of the convertible bond which was issued in the course of 2014 (cf. notes 6.17. and 7.3.) and the put option (€ 8.6 million) for a non-controlling interest in an investment which has been reclassified from provisions in 2015.

6.19. Other current liabilities

Carrying amount in thousands of €	2014	2015
Other amounts payable	5 849	4 453
Derivatives (cf. note 7.3.)	49 240	22 236
Advances received	5 106	3 137
Other taxes	34 303	28 117
Accruals and deferred income	20 078	13 820
Total	114 576	71 763

The derivatives include mainly forward exchange contracts (€ 4.5 million (2014: € 7.6 million)) and CCIRs (€ 17.7 million (2014: € 41.4 million)). Other taxes mainly relate to VAT payable, employment-related taxes withheld and other non-income taxes payable. Accruals and deferred income contain accrued interest on outstanding interest-bearing debt for € 6.5 million (2014: € 13.1 million) and other accrued charges and deferred income for € 7.3 million (2014: € 7.0 million).