

### 34. Fair value measurement

Set out below is a comparison by category of carrying amounts and fair values of the Group's and the Company's financial instruments, that are carried in the statement of the financial position:

(all amounts in Euro thousands)

	Group				Company			
	Carrying amount		Fair value		Carrying amount		Fair value	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Financial assets</b>								
Available-for-sale financial assets (note 16)	1,065	3,319	1,065	3,319	122	2,281	122	2,281
Other non-current assets (note 17)	8,274	10,252	8,274	10,252	2,727	2,768	2,727	2,768
Derivative financial instruments	1,387	-	1,387	-	-	-	-	-
<b>Financial liabilities</b>								
Long-term borrowings (note 24)	710,965	716,766	737,873	725,075	310,678	300,712	322,419	305,087
Short-term borrowings (note 24)	129,499	26,313	129,843	26,313	42,442	9,324	42,608	9,324
Derivative financial instruments	-	924	-	924	-	-	-	-
Other non-current liabilities (note 27)	1,492	964	1,492	964	142	146	-	146
Put option (note 31)	9,658	8,315	9,658	8,315	-	-	-	-

Note: Derivative financial instruments consist of cross currency interest rate swaps (CCS), interest rate swaps (IRS) and commodity swaps.

The management assessed that the cash and short-term deposits, trade receivables, trade payables, bank overdrafts and other current liabilities (excluding the put option) approximate their carrying amounts largely due to the short-term maturities of these instruments.

#### Fair value hierarchy

The Group and the Company use the following hierarchy for determining and disclosing the fair value of the assets and liabilities by valuation method:

Level 1: based on quoted (unadjusted) prices in active markets for identical assets or liabilities.

Level 2: based on valuation techniques whereby all inputs having a significant effect on the fair value are observable, either directly or indirectly and includes quoted prices for identical or similar assets or liabilities in markets that are not so much actively traded.

Level 3: based on valuation techniques whereby all inputs having a significant effect on the fair value are not observable market data.

The following table provides the fair value measurement hierarchy of the Group's and the Company's assets and liabilities as at 31 December 2016 and 2015.

(all amounts in Euro thousands)

	Group		Company		Fair value hierarchy
	Fair value		Fair value		
	2016	2015	2016	2015	
<b>Assets</b>					
Investment property	9,820	9,548	9,126	9,461	Level 3
Available-for-sale financial assets					
Quoted equity shares	-	2,110	-	2,109	Level 1
Other available-for-sale financial assets	1,065	1,209	122	172	Level 3
<b>Liabilities</b>					
Long-term borrowings	737,873	725,075	322,419	305,087	Level 2
Short-term borrowings	129,843	26,313	42,608	9,324	Level 2
Derivative financial instruments	-	924	-	-	Level 2
Put option (note 31)	9,658	8,315	-	-	Level 3

During the reporting period there were no transfers into and out of level 3.

### 34. Fair value measurement (continued)

The fair value of level 3 investment property is estimated by the Group and the Company by external, independent, certified valuers (note 12).

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced liquidation or sale. The following methods and assumptions were used to estimate the fair values:

#### Level 1

Level 1 available-for-sale financial assets are Banks' listed securities acquired by the Company through the Greek Banks Recapitalization, during 2015. Part of these shares has been disposed in the fiscal year of 2015 and the remaining part has been disposed in the 1st half of 2016.

#### Level 2

Level 2 long and short term borrowings are evaluated by the Group and the Company based on parameters such as interest rates, specific country risk factors, or price quotations at the reporting date. Especially for long-term borrowings, quoted market prices or dealer quotes for the specific or similar instruments are used.

Level 2 derivative financial instruments comprise cross currency interest rate swaps, interest rate swaps and oil swaps (note 33).

The Group and the Company use a variety of methods and make assumptions that are based on market conditions existing at each reporting date. The aforementioned contracts have been fair valued using: a) forward exchange rates that are quoted in the active market, b) forward interest rates extracted from observable yield curves, c) oil prices extracted from observable yield curves, which are quoted in the active market.

#### Level 3

Level 3 available-for-sale financial assets refer mainly to investments in foreign property funds in which the Group owns an insignificant percentage. Their valuation is made based on their financial statements, which present the assets at fair value.

Level 3 put option consists of the put option that the Group has granted to non-controlling interest shareholder of its subsidiary in Albania, ANTEA Cement SHA. The put option is valued using a discounted cash flow model. The valuation requires management to make certain assumptions about unobservable inputs to the model. Certain significant unobservable inputs are disclosed in the table below:

	2016	2015
Gross margin growth rate	26.0%	35.4%
Discount rate	8.2%	10.6%

In addition to the above, forecast cash flows for the first five years are a significant unobservable input. The management regularly assesses a range of reasonably possible alternatives for those significant unobservable inputs and determines their impact on the total fair value.

An increase of the forecast cash flows or the change in gross margin for cash flows in the subsequent periods would lead to an increase in the fair value of the put option. On the other hand, an increase in the discount rate used to discount the forecast cash flows would lead to a decrease in the fair value of the put option.

The significant unobservable inputs are not interrelated. The fair value of the put option is not significantly sensitive to a reasonable change in the forecast cash flows or the discount rate; however it is sensitive to a reasonable fluctuation of the change in gross margin, as described in the following table:

#### Sensitivity analysis of Group's gross margin growth changes:

(all amounts in Euro thousands)

	Effect on the fair value
Increase by 5 percentage points in the gross margin growth rate:	+227
Decrease by 5 percentage points in the gross margin growth rate:	-207