FINANCIAL
INSTRUMENTS
AND THE USE
OF FAIR

## NOTE 5 VALUE

### Ferd's principles in the measurement of fair value, in general

Ferd applies the valuation method that is considered to be the most representative estimate of an assumed sales value. Such a sale shall be carried out in an orderly transaction at the balance sheet date. As a consequence, all assets for which there is observable market information, or where a transaction recently has been carried out, these prices are applied (the market method). When a price for an identical asset is not observable, the fair value is calculated by another valuation method. In the valuations, Ferd applies relevant and observable data at the largest possible extent.

For all investments where the value is determined by another method than the market method, analyses of changes in value from period to period are carried out. Thorough analyses on several levels are made, both overall within the business area, by Ferd's group management and finally by Ferd's Board. Sensitivity analyses for the most central and critical input data in the valuation model are prepared, and in some instances recalculations of the valuation are made by using alternative valuation methods in order to confirm the calculated value.

Ferd is consistent in the application of valuation method and normally does not change the valuation principles. A change of principles will deteriorate the reliability of the reporting and weaken the comparability between periods. The principle for the valuation and use of method is determined for the investment before it is carried out, and is changed only exceptionally and if the change results in a measurement that under the circumstances is more representative for the fair value.

#### Valuation methods

The value of subsidiaries is determined on the basis of the companies' recorded equity and adjust for changes in value not recognised. Underlying investments are valued according to the same principles as investments directly owned by Ferd AS, as described below.

Investments in listed shares are valued by applying the market method. The quoted price for the most recent carried-out transaction on the market place is the basis.

Investments in unlisted shares managed in-house are normally valued on the basis of an earnings multiple. In calculating the value (Enterprise Value - EV), ratios like EV/EBITDA, EV/EBITA, EV/EBIT and EV / EBITDA-CAPEX) are applied. Ferd obtains relevant mutiples for comparable companies. The multiples for the portfolio companies are adjusted if the assumptions are not the same as the peer group. Such assumptions can include a control premium, a liquidity discount, growth assumptions, margins or similar. The company's result applied in the valuation is normalised for one-off effects. Finally, the equity value is calculated by deducting net interest-bearing debt. In the event that an independent transaction in the market has taken place, this is normally used as a basis for our valuation.

The valuation of investments in externally managed private equity and hedge funds is based on value reports received from the funds (NAV).

The part of the hedge funds portfolio reported under Other areas is acquired in the second-hand market, often at a considerable discount compared to the reported value from the funds (NAV). In the measurement of these hedge funds, estimates from several external brokers are obtained to evaluate at which discount these hedge funds are traded, compared to the most recently reported NAV. Ferd makes an assessment of the broker estimates, makes a best estimate for discount and uses this estimate in the valuation of the hedge funds.

Rental properties are valued by discounting future expected cash flows. The value of properties being part of building projects is valued at an assumed sales value on a continuous basis. There is often a shift in value at achieved milestones. Our calculated values are regularly compared to independent valuations.

The table below is an overview of carrying and fair value of the Company's financial instruments and how they are recognised in the financial statements. It is the starting point for additional information on the Company's financial risk and refers to notes to follow.

	Financial instruments at	Financial instruments measured at amortised cost			
NOK 1 000	fair value over profit and loss	Loans and receivables	Financial liability	Total	Fair value
Non- current assets					
Investments in subsidiaries	12 845 826	· -	-	12 845 826	12 845 826

Current					
receivables	-	111 704	-	111 704	111 704
Total 2016	12 845 826	111 704	-	12 957 530	12 957 530
Total 2015	11 440 623	100 841	-	11 541 464	11 541 464
Current					
assets					
Short-term					
receivables					
on group	_	41 401	_	41 401	41 401
companies Other short-	-	41 401	-	41 401	41 401
term					
receivables	-	300 636	-	300 636	300 636
Listed					
shares and					
bonds	7 411 217	-	-	7 411 217	7 411 217
Unlisted					
shares and bonds	2 475 854		_	2 475 854	2 475 854
Hedge	2 473 834	-	-	2 473 034	2 473 034
funds	4 846 284	-	_	4 846 284	4 846 284
investments					
in interest-					
bearing					
debt	50 565	-	-	50 565	50 565
Bank		402.040		402.040	402.040
deposits	-	482 949	-	482 949	482 949
Total 2016	14 783 920	824 986	-	15 608 906	15 608 906
Total 2015	14 740 904	408 633	-	15 149 537	15 149 537
Short-term					
debt					
Trade					
accounts					
payable	-	-	1 697	1 697	1 697
Public			4 711	4 711	4 711
duties etc.	-	-	4 /11	4 711	4 /11
Debt to group					
companies	-	-	25 856	25 856	25 856
•					

#### Fair value herarchy - financial assets and liabilities

Other shortterm debt

**Total 2016** 

**Total 2015** 

Ferd classifies assets and liabilities measured at fair value in the balance sheet by a hierarchy based on the underlying object for the valuation. The hierarchy has the following levels:

73 578

57 840

90 104

110 539

57 840

90 104

184 117

57 840

90 104

184 117

**Level 1**: Valuation based on quoted prices in active markets for identical assets without adjustments. An active market is characterised by the fact that the security is traded with adequate frequency and volume in the market. The price information shall be continuously updated and represent expected sales proceeds. Only listed shares are considered to be level 1 investments.

**Level 2**: Level 2 comprises investments where there are quoted prices, but the markets do not meet the requirements for being characterised as active. Also included are investments where the valuation can be fully derived from the value of other quoted prices, including the value of underlying securities, interest rate level, exchange rate etc. In addition, financial derivatives like interest rate swaps and currency futures are considered to be level 2 investments. Ferd's hedge fund portfolio is assessed to meet the requirements of level 2. These funds comprise composite portfolios of shares, interest securities, raw materials and other negotiable derivatives. For such funds the value (NAV) is reported on a continuous basis, and the reported NAV is applied on transactions in the fund.

**Level 3**: All Ferd's other securities are valued on level 3. This concerns investments where all or parts of the information about value cannot be observed in the market. Ferd is also applying valuation models for investments where the share has little or no trading. Securities valued on the basis of quoted prices or reported value (NAV), but where significant adjustments are required, are assessed on level 3. For Ferd this concerns all private equity investments and funds investments reported under Other areas, where reported NAV has to be adjusted for discounts. A reconciliation of the

movements of assets on level 3 is shown in a separate table.

Ferd allocates each investment to its respective level in the hiearchy at the acquisition. Transfers from one level to another are made only exceptionally and only if there have been changes of significance for the level classification concerning the financial asset. This can be the case when an unlisted share has been listed or correspondingly. A transfer between levels will then take place when Ferd has become aware of the change.

The table shows at what level in the valuation hierarchy the different measurement methods for the Group's financial assets at fair value are considered to be:

NOK 1 000	Level 1	Level 2	Level 3	Total 2016
Investments				
in subsidiaries	_	_	12 845 826	12 845 826
Other short-			12 043 020	12 043 020
term				
receivables	-	-	-	-
Listed shares and				
bonds	7 411 217	-	-	7 411 217
Unlisted				
shares and bonds	_	_	2 475 854	2 475 854
Hedge				
funds	-	3 707 612	1 138 672	4 846 284
Investments in interest-				
bearing				
debt	-	50 565	-	50 565
Other short- term debt	_	_	_	_
Total 2016	7 411 217	3 758 177	16 460 352	27 629 746
NOK 1 000	Nivå 1	Nivå 2	Nivå 3	Sum 2015
Investments	Nivå 1	Nivå 2	Nivå 3	Sum 2015
Investments in	Nivå 1	Nivå 2		
Investments in subsidiaries	Nivå 1	Nivå 2	Nivå 3	<b>Sum 2015</b> 11 440 623
Investments in subsidiaries Other short- term	Nivå 1	Nivå 2 -		
Investments in subsidiaries Other short- term receivables	Nivå 1	Nivå 2 - -		
Investments in subsidiaries Other short- term	Nivå 1	Nivå 2 - -		
Investments in subsidiaries Other short- term receivables Listed	Nivå 1 7 283 017	Nivå 2 - -		
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted	-	Nivå 2 - -	11 440 623	11 440 623
Investments in subsidiaries Other short- term receivables Listed shares and bonds	-	Nivå 2 - - -	11 440 623	11 440 623
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and	-	-	11 440 623 - -	11 440 623 - 7 283 017
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Hedge funds	-	-	11 440 623 - -	11 440 623 - 7 283 017
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Hedge funds Investments	-	-	11 440 623 - - 2 144 721	11 440 623 - 7 283 017 2 144 721
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Hedge funds Investments in interest- bearing	-	- - - 3 887 561	11 440 623 - - 2 144 721	11 440 623 - 7 283 017 2 144 721 5 177 254
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Investments in interest- bearing debt	-	-	11 440 623 - - 2 144 721	11 440 623 - 7 283 017 2 144 721
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Hedge funds Investments in interest- bearing debt Other short-	- 7 283 017 - -	- - 3 887 561 135 912	11 440 623 - - 2 144 721	11 440 623 - 7 283 017 2 144 721 5 177 254 135 912
Investments in subsidiaries Other short- term receivables Listed shares and bonds Unlisted shares and bonds Hedge funds Investments in interest- bearing debt	- 7 283 017 - -	- - - 3 887 561	11 440 623 - - 2 144 721 1 289 693 - -	11 440 623 - 7 283 017 2 144 721 5 177 254 135 912 -73 578

## Reconciliation of movements in assets on level 3

	OB 1. Jan. Purchas	es/share	•	Unrealised gains and losses, recognised in the	Gains and loss recognised	CB 31. Dec,
NOK 1 000	2016	issues	investments	result	in the result	2016
Investments in subsidiaries	11 440 623	594 803	-372 964	1 183 363	-	12 845 826

Unlisted shares and bonds	2 144 721	613 880	-299 135	-9 958	26 346	2 475 854
Hedge funds	1 289 693	179 113	-384 131	-56 228	110 224	1 138 672
Total 2016	14 875 038	1 387 796	-1 056 230	1 117 177	136 570	16 460 352

			•	Unrealised gains and losses, recognised	Gains and loss	
NOK 1 000	OB 1. Jan. Purc 2015		from nvestments		recognised in the result	
Investments in subsidiaries	10 824 395	117 630	-	498 597	-	11 440 622
Unlisted shares and bonds	2 215 184	486 274	-358 003	-243 420	44 687	2 144 722
Hedge funds	1 759 410	199 069	-730 396	-445 596	507 206	1 289 693
Total 2015	14 798 989	802 973	-1 088 399	-190 419	551 893	14 875 038

# Specification of applied indata and sensitivity analysis

The table below gives an overview over the most central assumptions used when measuring the fair value of Ferd's investments, allocated to level 3 in the hierarchy. We also show how sensitive the value of the investments is for changes in the assumptions.

NOK 1 000	Balance sheet value at 31 Dec. 2016	Applied and implicit EBITDA multiples	Value, if the multiple is t reduced by 10 i	•	Applied discount rate	Value, if the interest is increased by 1 percentage	interest is reduced by 1 percentage
Investment	2010	multiples	/6	By 10 /6	Tate	polit	point
in Ferd Eiendom AS							
1)	3 037 765	-	-	-	6.6 %-13.0 %	3 124 700	4 232 119
Other investments in							
subsidiaries	9 808 061	8.8 - 13.9	8 054 000	10 745 000	-	-	-
					Estimated discounts acc. to broker	Value if discount increased	Value if discount reduced by
NOK 1 000					(inverval)	by 10%	10%
Hedge							
funds <sup>2)</sup>	1 138 672				20 % - 88 %	1 074 401	1 199 765

<sup>1)</sup> Appr. 77 % of Ferd Eiendom AS' portfolio constitutes rental property sensitive for changes in the discount interest rate.

<sup>2)</sup> Appr. 50 % of the hedge funds on level 3 are sensitive for changes in discount.