

## ADVANCED FIRM VALUATION (2013)

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In the exam, dictionary or any other material **are not allowed**. A calculator **is allowed**.

### 1<sup>st</sup> Exam

Prof. Kallunki's lectures:

1. Calculate the present value of continuing value (also known as terminal value) of the residual earnings model at year  $t=0$  for the firm with following information:
  - Residual earnings in year  $t=5$ : 0,605
  - Growth in residual earnings: 6,5%
  - Cost of equity capital: 11,0%.
2. What research evidence do we have on the investment strategy based on book-to-market ratios?

Prof. Livne's lectures:

3. HMV is a British retailer of DVDs CDs and console games who recently filed for bankruptcy. You are provided in a separate document with its income statement and balance sheet for the period ending 28 April 2012 (and comparative numbers). Based on these you are required to:
  1. Calculate its NOA as at 30.4.2011 [15%]
  2. Calculate its NOA as at 28.4.2012 [15%]
  3. Calculate its operating income after tax for 2012 [15%]
  4. Calculate its ROE for 2012 [15%]
  5. Calculate its RNOA [15%]
  6. Use SPREAD and FLEV to reconcile (i.e., explain the link between) ROE to RNOA [25%]

### Guidance:

1. The corporation tax rate is 26%.
2. Use the "Total" column in the Income Statement.
3. The results of discontinued operations should be part of OIAT. This will entail using the information from Note 12 provided below (use the total column) and noting that in the income statement the results of discontinued operations are after tax.
4. To calculate NOA you may find it easier to use the formula  $NOA = NFO + \text{Equity}$  (inclusive of non-controlling interest, or minority interest). Financial assets only include cash and short-term deposits and financial liabilities include only interest-bearing loans and borrowing.

## 12. Discontinued operations continued

The results of the discontinued operations for 2011/12 and 2010/11 are presented below:

	2012 Waterstone's £m	2012 HMV Canada £m	2012 HMV Live £m	2012 aNobii £m	2012 Total £m
Revenue	56.1	22.3	50.1	-	128.5
Expenses	(63.8)	(24.8)	(48.3)	-	(136.9)
Operating (loss) profit before exceptional items	(7.7)	(2.5)	1.8	-	(8.4)
Net finance costs	-	-	(0.8)	-	(0.8)
Share of associate's losses	-	-	-	(0.8)	(0.8)
(Loss) profit before taxation and exceptional items	(7.7)	(2.5)	1.0	(0.8)	(10.0)
Exceptional operating items	-	-	(0.3)	-	(0.3)
Profit (loss) on disposal	11.4	(5.9)	-	-	5.5
Impairment recognised on remeasurement to fair value less costs to sell	-	-	(37.1)	(1.6)	(38.7)
Profit(loss) before tax from discontinued operations	3.7	(8.4)	(36.4)	(2.4)	(43.5)
Tax expense	-	-	(0.2)	-	(0.2)
Profit (loss) for the period from discontinued operations	3.7	(8.4)	(36.6)	(2.4)	(43.7)

## Consolidated income statement

For the 52 weeks ended 28 April 2012 and 53 weeks ended 30 April 2011

	Notes	Before exceptional items 2012 £m	Exceptional items 2012 £m	Total 2012 £m
<b>Continuing operations:</b>				
Revenue	3,4	873.1	–	873.1
Cost of sales		(838.5)	(4.9)	(843.4)
Gross profit		34.6	(4.9)	29.7
Administrative expenses		(33.3)	(11.1)	(44.4)
Trading profit (loss)	3	1.3	(16.0)	(14.7)
Share of post-tax losses of associates and joint ventures accounted for using the equity method	17	(0.3)	–	(0.3)
Operating profit (loss)	5	1.0	(16.0)	(15.0)
Finance revenue	10	1.7	–	1.7
Finance costs	10	(18.9)	(6.4)	(25.3)
Loss before taxation		(16.2)	(22.4)	(38.6)
Taxation	11	1.9	–	1.9
Loss from continuing operations		(14.3)	(22.4)	(36.7)
<b>Discontinued operations:</b>				
Loss after tax from discontinued operations	12	(10.2)	(33.5)	(43.7)
Loss for the period		(24.5)	(55.9)	(80.4)
Attributable to:				
Shareholders of the Parent Company		(25.7)	(55.9)	(81.6)
Non-controlling interests		1.2	–	1.2
		(24.5)	(55.9)	(80.4)
<b>Earnings per share for loss attributable to shareholders:</b>				
Basic	13	(6.1)p	(13.2)p	(19.3)p
Diluted		(5.9)p	(12.7)p	(18.6)p
<b>Earnings per share for loss from continuing operations attributable to shareholders:</b>				
Basic	13	(3.4)p	(5.3)p	(8.7)p
Diluted		(3.3)p	(5.1)p	(8.4)p

See Accounting Policies on pages 40 to 46 for the description of the 2012 reporting period.  
For details of the exceptional items included above, see Note 7.

## Balance sheets

	Notes	Group as at 28 April 2012 £m	Group as at 30 April 2011 (restated) £m	Company as at 28 April 2012 £m	Company as at 30 April 2011 £m
<b>Assets</b>					
<b>Non-current assets</b>					
Property, plant and equipment	15	47.0	67.8	0.1	0.1
Intangible assets	16	2.0	55.5	-	-
Investments in subsidiaries, joint ventures and associates	17	-	-	231.5	275.3
Investments accounted for using the equity method	17	7.1	11.4	-	-
Deferred income tax asset	11	1.4	6.3	1.4	5.7
Trade and other receivables	18	2.3	11.9	-	-
		<b>59.8</b>	<b>152.9</b>	<b>233.0</b>	<b>281.1</b>
<b>Current assets</b>					
Inventories	19	79.1	106.2	-	-
Trade and other receivables	18	37.0	44.1	26.3	74.4
Current income tax recoverable		-	4.8	-	5.0
Cash and short-term deposits	20	19.1	24.1	11.0	21.4
		<b>135.2</b>	<b>179.2</b>	<b>37.3</b>	<b>100.8</b>
<b>Assets in disposal groups classified as held for sale</b>	12	<b>60.8</b>	<b>198.2</b>	<b>-</b>	<b>-</b>
<b>Total assets</b>		<b>255.8</b>	<b>530.3</b>	<b>270.3</b>	<b>381.9</b>
<b>Liabilities</b>					
<b>Non-current liabilities</b>					
Deferred income tax liabilities	11	(3.4)	(5.6)	-	-
Retirement benefit liabilities	32	(17.4)	(32.2)	(17.4)	(32.2)
Interest-bearing loans and borrowings	22	(159.2)	(7.0)	(159.2)	-
Provisions	23	(1.3)	(2.8)	-	-
		<b>(181.3)</b>	<b>(47.6)</b>	<b>(176.6)</b>	<b>(32.2)</b>
<b>Current liabilities</b>					
Trade and other payables	21	(143.7)	(196.1)	(11.5)	(4.6)
Current income tax payable		(1.4)	-	(1.4)	-
Interest-bearing loans and borrowings	22	(33.3)	(185.0)	(63.0)	(265.8)
Derivative financial instruments	24	(0.9)	(1.3)	-	(0.5)
Provisions	23	(10.6)	(10.9)	(4.8)	(2.6)
		<b>(189.9)</b>	<b>(393.3)</b>	<b>(80.7)</b>	<b>(273.5)</b>
<b>Liabilities in disposal groups classified as held for sale</b>	12	<b>(19.0)</b>	<b>(148.2)</b>	<b>-</b>	<b>-</b>
<b>Total liabilities</b>		<b>(390.2)</b>	<b>(589.1)</b>	<b>(257.3)</b>	<b>(305.7)</b>
<b>Net (liabilities) assets</b>		<b>(134.4)</b>	<b>(58.8)</b>	<b>13.0</b>	<b>76.2</b>

Balance sheets continued

	Notes	Group as at 28 April 2012 £m	Group as at 30 April 2011 (restated) £m	Company as at 28 April 2012 £m	Company as at 30 April 2011 £m
<b>Equity</b>					
Equity share capital	29	4.2	347.1	4.2	347.1
Other reserve – own shares	29.30	–	(0.6)	–	(0.6)
Hedging reserve	29	–	(0.5)	–	–
Foreign currency translation reserve	29	14.7	12.7	–	–
Other reserves	29	0.5	0.3	0.5	0.3
Retained earnings		(155.5)	(418.6)	8.3	(270.6)
Equity attributable to shareholders of the Parent Company		(136.1)	(59.6)	13.0	76.2
Non-controlling interests		1.7	0.8	–	–
<b>Total equity</b>		<b>(134.4)</b>	<b>(58.8)</b>	<b>13.0</b>	<b>76.2</b>

The financial statements were approved by the Board of Directors on 9 August 2012 and were signed on its behalf by:

**Simon Fox**  
Chief Executive Officer

**David Wolffe**  
Group Finance Director