3.2.2 Influence of Earnings Volatility and Sector on Financial Leverage Exercise[1]

Unit: Unit 1 – Treasury Strategy

Module: Module 3 – Financial strategy

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Summary: An exercise to see the influence of earnings volatility, other financial measures and sector on the leverage decision and financial strategy.

Keywords: revenue, earnings, volatility, EBITDA, assets / sales

This exercise explores the issue of decisions on leverage and how two major influences may play a role in that decision. Those two major influences are sector, i.e. which part of the economy the business model resides in, and secondly the volatility of earnings. We have seen that high earnings volatility is not compatible with high leverage. The two may be connected. Of course within a sector there are different business models which also need to be taken into account.

We have sourced some very basic data on 4 quoted companies in 2 sectors as follows:

Sector	Company
Industrial	Bodycote plc
	Cookson plc
Property	Hammerson plc
	The Cardiff Property plc

The data is mainly the five year (or sometimes longer or shorter) history plus a balance sheet if some basic borrowing data is not shown in the summary. The exercise is designed to take around one hour so you have around 15 minutes per company to make some simple analysis, and then some time at the end to make some overall conclusions about the leverage element of financial strategy. Note that this exercise is frozen in time, so you do not need to research any later data on these companies.

For each company make the following analysis:

1. Firstly, before looking at any accounts, and knowing the sector in which the company operates and its rough business model
   a) estimate the revenue or earnings volatility that it might face

[1] Included in this exercise is an activity requiring you to post in the online forum. This activity is indicated by the icon. You are expected to post forum exercises to the appropriate forum within the two-week timeframe of the module. Please see the study timetable for reference.

b) guess whether it might be a borrower on a consistent basis
c) if you expect the company to borrow, estimate roughly how much debt they might have and how they might measure that debt by any of the leverage measures that you have learned.

2. Secondly, and avoiding spreadsheet use, look at the following data in the accounts:
a) Volatility of earnings
b) Volatility of operating profits (i.e. before any financing and tax) and EBITDA if available
c) Volatility of margin
d) The scale of assets / sales

3. On the basis of this analysis decide if this company is a 'natural' borrower.

4. Look at the leverage in the company by any measure you consider appropriate and comment as to whether this is what you expected.

5. Make some overall conclusions.

6. Post your thoughts around what you have discovered[2] in the module forum: create a new thread in the *Forum exercise from 3.2.2 Influence of earnings volatility* category with the title U1/M3/3.2.2/Sector Study/[Your name] /[Company Name].

Student notes:
This exercise is good practice because you have to analyse some real life data very quickly, just as you would in an exam or for a meeting. The data may not be straightforward to analyse, as real life data never is – it needs sifting to find out what is important and any obvious strange numbers need more careful thought to see if they can be explained. For example, looking at a five year history in most public companies is almost certain to include some corporate activity such as acquisitions or disposals, share issues or buy backs, etc. which will distort the true trend. But as in real life, we always have to work with limited data but still come up with some answers. A five year (or shorter) period ending in the present day will include 2009, widely seen as a terrible year and so this must be navigated in the answer.

Don't be too accurate with your analysis. You have to be quick and dirty, as though you are facing the CFO across the boardroom table.

You may not find what you expect, in that case, think about it and say why that might be the case.

[2] You are expected to post forum exercises to the appropriate forum within the two-week timeframe of the module. Please see the study timetable for reference.

Bodycote
Five year summary

FIVE YEAR SUMMARY

	2010 £m	2009 £m	2008 £m	2007 £m	2006 £m
Revenue					
Existing operations	**499.8**	435.4	551.8	465.2	413.9
Discontinued operations	**–**	–	164.9	175.3	144.7
Revenue – continuing and discontinued operations	**499.8**	435.4	716.7	640.5	558.6
Profit for continuing and discontinued operations:					
Headline operating profit	**52.1**	8.0	91.7	91.3	79.7
Share of results of associates' interest and tax	**–**	–	–	–	(0.6)
Amortisation and impairment of goodwill and intangible fixed assets	**(0.9)**	(32.8)	(33.8)	(9.1)	(7.0)
Impairment of investment in associate	**–**	–	(12.1)	–	(8.3)
Major facility closure costs	**–**	(25.4)	(77.6)	(5.4)	(5.0)
Change to pension scheme rules	**–**	–	–	4.1	–
Bid response costs	**–**	–	–	(2.1)	–
Profit on disposal of operations	**–**	–	199.3	–	–
Profit/(loss) before interest and tax	**51.2**	(50.2)	167.5	78.8	58.8
Net interest payable	**(6.0)**	(4.3)	(10.0)	(10.3)	(12.2)
Profit/(loss) before taxation	**45.2**	(54.5)	157.5	68.5	46.6
Taxation	**(17.5)**	3.4	(6.8)	(14.7)	(2.7)
Profit/(loss) after taxation	**27.7**	(51.1)	150.7	53.8	43.9
Non-controlling interests	**(0.1)**	1.0	(0.9)	(1.0)	(0.8)
Profit/(loss) attributable to the equity holders of the parent	**27.6**	(50.1)	149.8	52.8	43.1
Headline earnings per share (pence)	**18.3**	0.4	17.5	16.6	17.3
Dividends per share (pence)	**8.7**	8.3	8.3	8.0	7.0
Assets employed					
Intangible fixed assets	**118.1**	118.8	154.4	227.3	212.3
Tangible fixed assets	**458.0**	461.8	533.3	508.9	448.4
Other assets and liabilities	**(74.0)**	(72.5)	(126.1)	(41.4)	(45.9)
	502.1	508.1	561.6	694.8	614.8
Financed by					
Share capital	**32.8**	32.5	32.4	32.4	32.2
Reserves	**416.3**	387.8	459.6	457.6	417.3
Shareholders' funds	**449.1**	420.3	492.0	490.0	449.5
Non-controlling interests	**1.7**	2.3	4.9	6.6	4.4
Net borrowings	**51.3**	85.5	64.7	198.2	160.9
Capital Employed	**502.1**	508.1	561.6	694.8	614.8
Net assets per share (pence)	**236.5**	223.4	262.4	151.4	139.5
Return on capital employed:					
Headline operating profit (continuing and discontinued operations) divided by average capital employed	**10.1**	1.5	12.6	13.9	13.8

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Cookson
Five year summary

FIVE YEAR SUMMARY — GROUP

INCOME STATEMENT	2010 £m	2009 £m	2008 £m	2007 £m	2006 £m
Revenue					
Continuing operations	2,545.5	1,960.6	2,202.5	1,619.5	1,589.6
Discontinued operations	—	—	—	1.5	71.8
Total revenue	2,545.5	1,960.6	2,202.5	1,621.0	1,661.4
Trading profit					
Continuing operations	252.1	111.7	216.3	169.6	150.3
Discontinued operations	—	—	—	(0.2)	7.9
Total trading profit	252.1	111.7	216.3	169.4	158.2
Amortisation and impairment of intangible assets	(17.7)	(17.6)	(52.5)	—	—
Restructuring and integration charges	(17.3)	(75.6)	(39.6)	(5.8)	(34.7)
Inventory fair value adjustment	—	—	(2.6)	—	—
Profit/(loss) relating to non-current assets	0.6	(2.8)	3.4	7.0	13.1
Gains relating to employee benefits plans	5.3	9.7	6.0	1.0	8.6
Profit from operations	223.0	25.4	131.0	171.6	145.2
Net finance costs — ordinary activities	(30.4)	(37.0)	(40.8)	(21.5)	(28.4)
— exceptional items	(3.0)	(14.0)	(2.2)	—	—
Share of post-tax profit of joint ventures	0.4	1.0	0.7	1.7	1.4
Net (loss)/profit on disposal of continuing operations	(0.6)	3.7	0.9	(0.4)	(4.7)
Profit/(loss) before tax	189.4	(20.9)	89.6	151.4	113.5
Income tax costs	(37.3)	(20.4)	(40.2)	(43.4)	(43.8)
Discontinued operations	(1.2)	(3.4)	—	(0.1)	(3.3)
Profit/(loss) for the year	150.9	(44.7)	49.4	107.9	66.4

BALANCE SHEET	2010 £m	2009 £m	2008 £m	2007 £m	2006 £m
Property, plant and equipment	411.3	391.9	446.6	254.7	222.4
Goodwill and other intangible assets	1,137.1	1,115.6	1,187.6	430.8	429.0
Employee benefits — net surpluses	4.3	—	70.6	—	—
Other non-current assets	66.9	56.3	59.3	50.0	50.8
Total non-current assets	1,619.6	1,563.8	1,764.1	735.5	702.2
Inventories	287.5	222.0	331.6	201.4	171.2
Trade receivables	448.2	349.5	412.7	299.9	263.7
Trade payables	(232.2)	(191.0)	(188.8)	(138.8)	(131.2)
Trade working capital	503.5	380.5	555.5	362.5	303.7
Other net liabilities	(398.2)	(368.8)	(429.8)	(185.4)	(186.1)
Total capital employed	1,724.9	1,575.5	1,889.8	912.6	819.8
Equity attributable to the owners of the parent	1,253.6	1,048.2	974.6	754.0	474.8
Non-controlling interests	23.5	18.2	17.6	11.9	9.4
Net debt	329.7	371.4	731.7	50.6	180.5
Employee benefits — net liabilities	118.1	137.7	165.9	96.1	155.1
Total funding	1,724.9	1,575.5	1,889.8	912.6	819.8

FIVE YEAR SUMMARY — GROUP

STATEMENT OF CASH FLOWS	2010 £m	2009 £m	2008 £m	2007 £m	2006 £m
Profit from operations	**223.0**	25.4	131.0	171.6	145.2
Adjustments for:					
Amortisation and impairment of intangible assets	**17.7**	17.6	52.5	—	—
Restructuring and integration charges	**17.3**	75.6	39.6	5.8	34.7
Inventory fair value adjustment	—	—	2.6	—	—
(Profit)/loss relating to non-current assets	**(0.6)**	2.8	(3.4)	(7.0)	(13.1)
Gains relating to employee benefits plans	**(5.3)**	(9.7)	(6.0)	(1.0)	(8.6)
Depreciation	**54.2**	53.6	47.2	34.9	37.0
EBITDA	**306.3**	165.3	263.5	204.3	195.2
Net (increase)/decrease in trade and other working capital	**(92.4)**	152.5	(8.9)	(44.8)	(29.2)
Net operating outflow related to assets and liabilities classified as held for sale	**(1.6)**	(0.8)	—	(1.5)	(7.2)
Outflow related to restructuring and integration charges	**(23.8)**	(49.3)	(23.0)	(14.7)	(16.1)
Additional funding contributions into Group pension plans	**(11.6)**	(8.3)	(25.0)	(28.1)	(25.5)
Cash generated from operations	**176.9**	259.4	206.6	115.2	117.2
Net interest paid	**(19.1)**	(35.2)	(34.2)	(19.1)	(22.0)
Income taxes paid	**(48.2)**	(40.5)	(52.0)	(26.7)	(27.5)
Net cash inflow from operating activities	**109.6**	183.7	120.4	69.4	67.7
Additional funding contributions into Group pension plans	**11.6**	8.3	25.0	28.1	25.5
Purchase of property, plant and equipment	**(57.2)**	(35.0)	(72.8)	(59.9)	(43.2)
Proceeds from the sale of property, plant and equipment	**1.6**	1.2	2.2	10.5	16.6
Dividends received from joint ventures	**0.9**	1.1	0.4	1.3	0.9
Dividends paid to non-controlling shareholders	**(2.8)**	(2.0)	(2.1)	(1.8)	(3.0)
Free cash flow	**63.7**	157.3	73.1	47.6	64.5

SHAREHOLDER RETURN STATISTICS	2010	2009	2008	2007	2006
Earnings/(loss) per share from continuing operations — headline (pence)	**61.5**	18.0	88.5	81.9	64.2
— basic (pence)	**53.0**	(17.8)	32.7	80.6	46.1
Dividends per share (pence)	**11.50**	nil	8.80	19.58	15.06
Share price — year-end (pence)	**658.5**	422.2	190.9	1,049.8	945.9
— high (pence)	**659.5**	467.5	1,168.8	1,317.9	961.0
— low (pence)	**367.4**	112.5	112.6	870.6	640.1
Shares in issue — weighted average (millions)	**276.2**	252.8	140.8	130.6	127.1
— year-end (millions)	**276.4**	276.4	141.2	141.1	128.4

The figures reported above have been adjusted, where appropriate, to reflect the bonus element in the shares issued under the rights issue which completed on 4 March 2009 (the adjustment factor used was 6.6391) and to take account of the 10 for 1 share consolidation that took effect on 14 May 2009.

Cardiff Property
Five year summary

www.cardiff-property.com

Consolidated Five Year Summary

		2010	2009	2008	2007	2006
Income statement items						
Revenue						
Gross rental income	£'000	**595**	561	609	504	515
Sales of development properties	£'000	**198**	592	—	196	1,927
Total	£'000	**793**	1,153	609	700	2,442
Profit/(loss) before taxation	£'000	**500**	(656)	(1,541)	1,475	2,549
Dividends paid and proposed in respect of the year*	£'000	**165**	194	210	195	175
Dividend cover	times	**3.0**	(3.4)	(7.3)	7.6	14.6
Dividend per share	pence	**12.30**	12.30	12.30	11.25	10.05
Earnings/(loss) per share — basic	pence	**20.9**	(57.7)	(90.2)	74.5	137.6
Balance sheet items						
Total assets	£'000	**15,795**	17,608	19,221	21,624	20,706
Total liabilities	£'000	**(682)**	(840)	(814)	(983)	(1,150)
Net assets	£'000	**15,113**	16,768	18,407	20,641	19,556
Number of shares in issue at 30 September	'000	**1,339**	1,575	1,666	1,735	1,741
Net assets per share attributable to shareholders	pence	**1,129**	1,065	1,105	1,189	1,123
Gearing	per cent	**nil**	nil	nil	nil	nil

* Dividends represent the interim paid and final declared in any one financial year

Hammerson plc
Ten year summary

Ten-year financial summary

							IFRS			UK GAAP
	2010 £m	2009 £m	2008 £m	2007 £m	2006 £m	2005 £m	2004 £m	2003 £m	2002 £m	2001 £m
Income statement										
Net rental income	284.7	293.6	299.8	275.7	237.4	210.3	189.5	189.5	175.9	159.9
Operating profit before other net gains/(losses)	248.8	252.6	257.5	234.5	201.3	178.9	162.9	164.6	151.6	141.6
Other net gains/(losses)	469.9	(590.4)	(1,698.3)	25.2	748.0	607.6	330.2	(18.8)	5.3	(8.2)
Cost of finance (net)	(100.0)	(114.5)	(170.7)	(149.3)	(156.9)	(87.9)	(79.7)	(78.7)	(66.0)	(64.3)
Profit/(Loss) before tax	620.2	(453.1)	(1,611.5)	110.4	792.4	698.6	413.4	67.1	90.9	69.1
Current tax	(0.6)	(0.9)	(0.6)	(16.4)	(99.4)	1.0	(80.9)	(1.7)	(2.5)	(7.9)
Deferred tax	(0.1)	103.6	38.3	17.6	333.8	(133.9)	104.2	(13.1)	(11.1)	15.9
Equity minority interests	(4.1)	5.9	1.2	(10.6)	(9.9)	(11.3)	(5.3)	(2.0)	(1.7)	(0.9)
Profit/(Loss) for the year attributable to equity shareholders	615.4	(344.5)	(1,572.6)	101.0	1,016.9	554.4	431.4	50.3	75.6	76.2
Balance sheet										
Investment and development properties	5,331.1	5,141.5	6,456.8	7,275.0	6,716.0	5,731.7	4,603.0	3,997.5	3,948.2	3,517.4
Cash and short-term deposits	126.2	182.9	119.9	28.6	39.4	45.5	53.7	187.0	242.2	218.4
Borrowings	(1,920.6)	(2,319.0)	(3,452.6)	(2,524.2)	(2,282.6)	(2,094.8)	(1,799.5)	(1,772.2)	(1,883.6)	(1,552.9)
Other assets	323.1	342.0	319.5	318.7	301.1	278.1	194.0	138.6	162.5	95.8
Other liabilities	(307.6)	(323.9)	(425.3)	(573.5)	(448.9)	(378.4)	(385.9)	(289.8)	(356.2)	(195.3)
Net deferred tax provision	(0.5)	(0.4)	(108.4)	(99.6)	(103.3)	(406.4)	(213.4)	(54.8)	(34.8)	(7.6)
Equity minority interests	(71.7)	(73.4)	(89.3)	(70.4)	(56.6)	(49.9)	(41.7)	(38.1)	(40.1)	(37.1)
Equity shareholders' funds	3,480.0	2,949.7	2,820.6	4,354.6	4,165.1	3,125.8	2,410.2	2,168.2	2,038.2	2,038.7
Cash flow										
Operating cash flow after tax	132.7	105.3	29.8	(29.2)	5.5	44.9	60.5	68.4	57.6	54.1
Dividends	(95.4)	(64.5)	(86.7)	(73.1)	(57.7)	(51.0)	(47.4)	(44.4)	(42.0)	(39.7)
Property and corporate acquisitions	(218.6)	(39.5)	(123.5)	(163.3)	(219.5)	(308.1)	(320.8)	(183.7)	(461.8)	(196.8)
Developments and major refurbishments	(60.8)	(164.1)	(376.7)	(335.5)	(250.5)	(186.3)	(203.3)	(188.8)	(161.8)	(138.2)
Other capital expenditure	(25.5)	(23.7)	(13.9)	(44.6)	(29.6)	(36.9)	(20.2)	(68.5)	(43.9)	(50.9)
Disposals	554.6	394.2	245.3	537.2	628.0	224.4	398.7	556.2	519.6	313.0
Other cash flows	(0.8)	–	–	(10.9)	(10.2)	17.7	5.6	–	–	–
Net cash flow before financing	286.2	207.7	(325.7)	(119.4)	66.0	(295.3)	(126.9)	139.2	(132.3)	(58.5)
Per share data*										
Basic earnings/(loss) per share	87.2p	(54.1)p	(368.9)p	23.7p	242.6p	134.4p	106.0p	12.4p	18.4p	18.4p
Adjusted earnings per share	19.9p	19.7p	25.8p	27.3p	22.3p	21.2p	19.5p	20.2p	19.8p	16.5p
Dividend per share	15.95p	15.45p	18.9p	18.5p	14.7p	13.4p	12.2p	11.4p	10.7p	10.1p
Diluted net asset value per share	£4.93	£4.20	£6.61	£10.22	£9.91	£7.44	£5.90	£5.32	£5.01	£4.93
Adjusted net asset value per share, EPRA basis	£4.95	£4.21	£7.03	£10.49	£10.18	£8.39	£6.41	£5.45	£5.10	£4.95
Financial ratios										
Return on shareholders' equity	21.1%	-16.9%	-32.5%	4.5%	25.3%	34.0%	21.7%	9.3%	4.3%	8.3%
Gearing	52%	72%	118%	57%	54%	66%	72%	73%	81%	65%
Interest cover	2.6x	2.2x	1.7x	1.9x	1.8x	1.9x	1.9x	1.8x	1.9x	1.9x
Dividend cover	1.2x	1.3x	1.4x	1.5x	1.5x	1.6x	1.6x	1.8x	1.9x	1.6x

The financial information shown above for the years 2004 to 2010 was prepared under IFRS. The information for prior years was prepared under UK GAAP. Consequently, certain data may not be directly comparable from one year to another.

*Comparative per share data was restated following the rights issue in March 2009.