

Euromoney Training

Gulf Capital

**Leveraged Buyouts
Cash Flow Analysis**

Dr. Ian Giddy

New York University

LBO Model

Project Giddy
Transaction Structure

Performance Case: Base
(FYE January; \$ in millions) 1/15/2006 9:36
#N/A

Uses of Funds	
Equity Purchase Price	\$19.0
Debt Retired	1.0
Debt Assumed	1.0
Cash Infusion	0.5
Transaction Costs	0.6
Total Uses	\$22.1

Sources of Funds		%
Existing Debt	\$0.0	0.0%
Bank Revolver	0.0	0.0%
Senior Bank Term "A"	12.0	54.3%
Senior Bank Term "B"	0.0	0.0%
Other Long-Term Debt	0.0	0.0%
Senior Subordinated Debt	3.0	13.6%
Junior Subordinated Debt	0.0	0.0%
Seller Note	0.0	0.0%
Preferred Stock	0.0	0.0%
Common Equity:		
Sponsor Equity	6.6	29.9%
Management Equity	0.5	2.3%
New Equity	0.0	0.0%
Excess Cash on Balance Sheet	0.0	0.0%
Total Sources	\$22.1	100.0%

IRR	Average Life
8.5%	3.68
15.1%	6.68
31.1%	
31.1%	

Acquisition Multiples	
2005 EBITDA	11.1x
EST. 2006 EBITDA	9.9x
2005 P/E	54.2x
EST. 2006 P/E	0.0x
To 2005 Book	3.5x
To EST. 2006 Book	2.8x

Exit Multiples	
Exit Year	2010
Exit EBITDA Multiple	7.0x
Exit P/E	0.0x
Exit Book Multiple	0.0x

Equity Allocation		Undiluted	Fully-Diluted
Senior Subordinated Debt	0.0%	2.0%	
Junior Subordinated Debt	0.0%	0.0%	
Seller Note	0.0%	0.0%	
Preferred Stock	0.0%	0.0%	
Sponsor Equity	93.0%	91.1%	
Management Equity	7.0%	6.9%	
New Equity	0.0%	0.0%	
Total Equity Allocation	100.0%	100.0%	

Goodwill Calculation	
Purchase Price of Equity	\$19.0
Plus:	
Existing Goodwill	0.0
Less:	
Net Worth	5.5
Asset Write-Up	0.0
Deferred Taxes	0.0
Goodwill	\$13.5

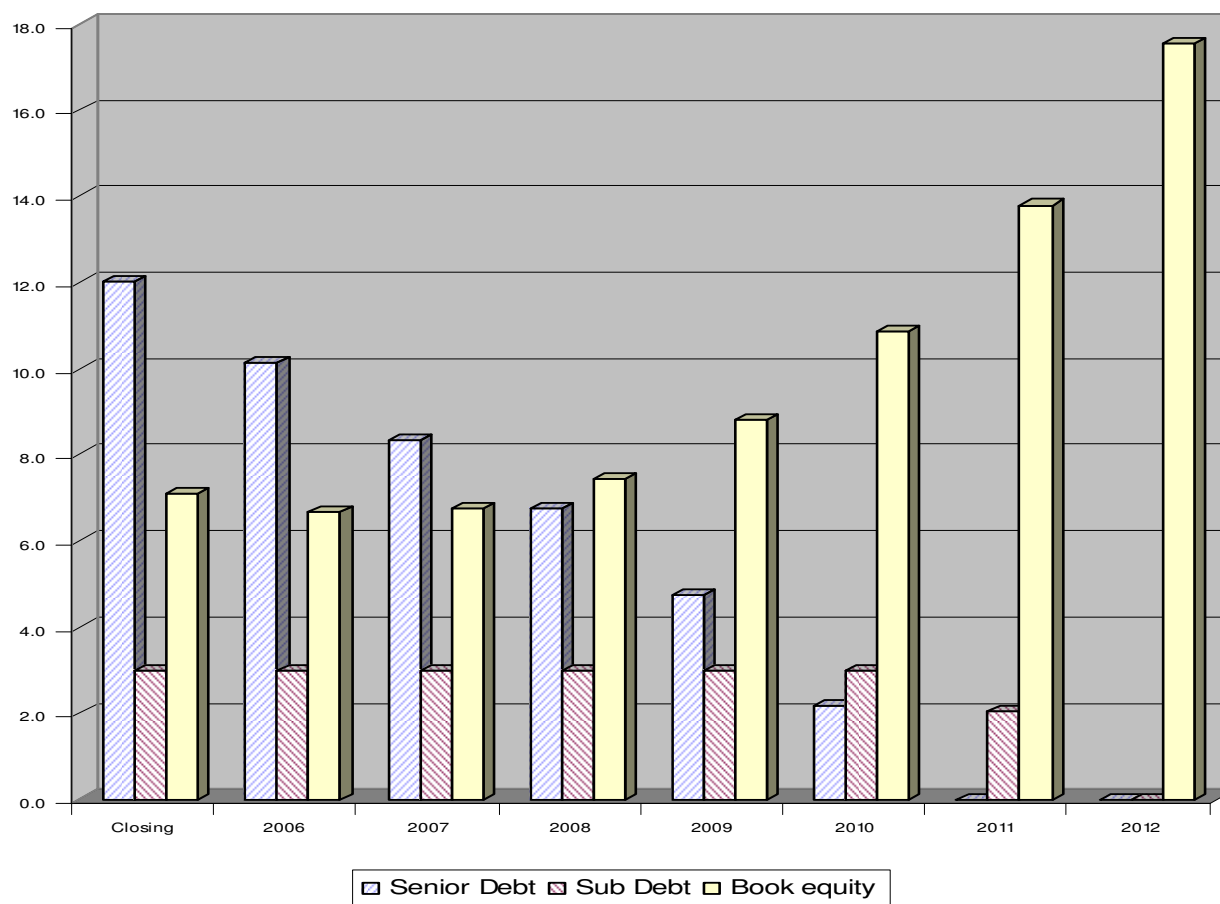
Leverage Assumptions				
	2005	2006	2007	2008
Sr. Debt / EBITDA	1.0x	4.8x	3.4x	2.3x
Sr. Debt / (EBITDA - Capex)	1.0x	4.8x	3.4x	2.3x
Total Debt / EBITDA	1.0x	6.1x	4.4x	3.2x
Total Debt / (EBITDA - Capex)	1.0x	6.1x	4.4x	3.2x

Other Assumptions / Switches		
Performance Case	1	Base
Circ Breaker	0	On
Preferred Dividend	0	% of Par
Cash Minimum	1	

Source: lbo_model1.xls

LBO Debt Paydown and Equity Buildup

Debt Amortization (US\$ millions)



Highlights

Project Giddy
Transaction Structure

Performance Case: Base
(FYE January; \$ in millions)

C:\lan\Excel files [lhc_model1.xls]Sources_Uses 1/15/2006 10:56

Uses of Funds	
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To EST. 2006 Book	2.8x

Exit Multiples	
Exit Year	2010
Exit EBITDA Multiple	7.0x
Exit P/E	0.0x
Exit Book Multiple	0.0x

Equity Allocation		Undiluted		Fully-Diluted	
Senior Subordinated Debt	0.0%	0.0%	2.0%		
Junior Subordinated Debt	0.0%	0.0%	0.0%		
Seller Note	0.0%	0.0%	0.0%		
Preferred Stock	0.0%	0.0%	0.0%		
Sponsor Equity	93.0%	93.0%	91.1%		
Management Equity	7.0%	7.0%	6.9%		
New Equity	0.0%	0.0%	0.0%		
Total Equity Allocation	100.0%	100.0%	100.0%		

Goodwill Calculation	
Purchase Price of Equity	\$19.0
Plus:	
Existing Goodwill	0.0
Less:	
Net Worth	6.6
Asset Write-Up	0.0
Deferred Taxes	0.0
Goodwill	\$13.5

Leverage Assumptions				
	2005	2006	2007	2008
Sr. Debt / EBITDA	1.0x	4.8x	3.4x	2.3x
Sr. Debt / (EBITDA - Capex)	1.0x	4.8x	3.4x	2.3x
Total Debt / EBITDA	1.0x	6.1x	4.4x	3.2x
Total Debt / (EBITDA - Capex)	1.0x	6.1x	4.4x	3.2x

Coverage Assumptions				
	2005	2006	2007	2008
EBITDA / Sr. Interest Expense	2.9x	2.2x	3.1x	4.2x
(EBITDA - Capex) / Sr. Int. Exp.	2.0x	2.2x	2.8x	3.4x
EBITDA / Total Interest Expense	2.9x	1.6x	2.1x	2.8x
(EBITDA - Capex) / Total Int. Exp.	2.0x	2.2x	2.8x	3.4x

Other Assumptions / Switches		
Performance Case	1	Base
Call Breaker	0	On
Preferred Dividend	0	% of Par
Cash Minimum	1	On
Amt. Of Cash Min.	\$0.5	
Transaction Fees:		
Advisory	1.0%	
Financing	3.0%	
Use Excess Cash	0	No

Uses of Funds

Sources of Funds

Rates of Return

Exit

Leverage and coverage

Highlights: Debt Amortization

Project Giddy											
Projected Debt Repayment Schedule											
Performance Case: Base (FYE January; \$ in millions)											
Year #...	Projected										
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
	1	2	3	4	5	6	7	8	9	10	
Cash Available For Debt Repayment	\$1.4	\$1.3	\$1.6	\$2.0	\$2.5	\$3.1	\$4.0	\$6.8	\$12.5	\$19.1	
Asset-Backed Addition To Revolver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Existing Debt	1.4	1.3	1.6	2.0	2.5	3.1	4.0	6.8	12.5	19.1	
Existing Debt Mandatory Repayment	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Existing Debt Retired	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Senior Bank Term "A"	1.9	1.8	1.6	2.0	2.5	3.1	4.0	6.8	12.5	19.1	
Senior Bank Term "A" Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Senior Bank Term "A" Retired	(1.9)	(1.8)	(1.6)	(2.0)	(2.5)	(2.2)	0.0	0.0	0.0	0.0	
Cash For Retirement Of Senior Bank Term "B"	0.0	0.0	0.0	0.0	0.0	1.0	4.0	6.8	12.5	19.1	
Senior Bank Term "B" Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Senior Bank Term "B" Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Other Long-Term Debt	0.0	0.0	0.0	0.0	0.0	1.0	4.0	6.8	12.5	19.1	
Other Long-Term Debt Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Long-Term Debt Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Senior Subordinated Debt	0.0	0.0	0.0	0.0	0.0	1.0	4.0	6.8	12.5	19.1	
Senior Subordinated Debt Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Senior Subordinated Debt Retired	0.0	0.0	0.0	0.0	0.0	(1.0)	(2.0)	0.0	0.0	0.0	
Cash For Retirement Of Junior Subordinated Debt	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.8	12.5	19.1	
Junior Subordinated Debt Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Junior Subordinated Debt Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Seller Note	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.8	12.5	19.1	
Seller Note Mandatory Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Seller Note Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.8	12.5	19.1	
Preferred Stock Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash For Retirement Of Bank Revolver	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.8	12.5	19.1	
Bank Revolver Retired	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Bank Revolver Addition	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Additions To Cash	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$2.4	\$7.3	\$13.0	\$19.6	

Existing debt paydown

Senior debt paydown

Ending cash

Highlights: Operating and Financing Assumptions

Project Giddy															
Income Statement Assumptions and Historical Performance															
Performance Case: Base (FYE January; \$ in millions)															
	Historical					Projected									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Consolidated Sales Growth	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Cost Of Goods Sold / Sales	0.0%	0.0%	0.0%	0.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Gross Margin	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Operating Expenses / Sales:															
SG&A	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Other Expense #1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Expense #2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Expense #3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Expense #4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Consolidated EBITDA / Sales	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	11.1%	12.0%	12.9%	13.6%	14.3%	14.9%	15.5%	16.0%	16.4%
Consolidated EBIT (Post-Transaction) / Sales	0.0%	0.0%	0.0%	0.0%	5.0%	4.0%	2.8%	1.8%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest (Coupon) Rates															
Interest Income	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Existing Debt	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Bank Revolver	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Senior Bank Term "A"	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Senior Bank Term "B"	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Long-Term Debt	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Senior Subordinated Debt	0.0%	0.0%	0.0%	0.0%	0.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Junior Subordinated Debt	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Seller Note	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred Stock (% of Par)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred Stock (\$ Amount)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Preferred Stock Par Value	\$100.00														
Tax Rates:															
Federal Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
State Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Effective Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Highlights: Exit

Performance Case: Base (FYE January; \$ in millions)				
EXIT YEAR:	2010	Guess Rate:	10.0%	Return:
Equity Allocation				
	Investment	Dilution		
		Undiluted	Partial	Full
Sponsor Equity	\$6.6	93.0%	91.1%	91.1%
Management Equity	0.5	7.0%	6.9%	6.9%
New Equity	0.0	0.0%	0.0%	0.0%
Other Long-Term Debt	0.0		0.0%	0.0%
Senior Subordinated Debt	3.0		2.0%	2.0%
Junior Subordinated Debt	0.0		0.0%	0.0%
Preferred Stock	0.0		0.0%	0.0%
Seller Note	0.0		0.0%	0.0%
Management Performance Option				0.0%
Total Initial Equity Investment	\$7.1			
Total Overall Investment	\$10.1	100.0%	100.0%	100.0%
Exit Proceeds And Allocation				
Exit Year EBITDA	\$4.8			
x EBITDA Multiple	7.0x			
Exit Valuation	\$33.7			
Plus: Excess Cash	0.5			
Conversion Costs	0.1			
Less: Total Remaining Debt	(6.2)			
Total Preferred	0.0			
Net Proceeds To Allocate	\$28.1			
Allocation				
	%	Gross Allocation	Conversion Costs	Net Allocation
Other Long-Term Debt Share	0.0%	\$0.0	\$0.0	\$0.0
Senior Subordinated Debt Share	2.0%	0.6	(0.1)	0.4
Junior Subordinated Debt Share	0.0%	0.0	0.0	0.0
Preferred Stock Share	0.0%			0.0
Seller Note Share	0.0%			0.0
Sponsor Equity Share	91.1%			25.6
Management Equity Share	6.9%			1.9
New Equity Share	0.0%			0.0

Exit equity allocation

Exit valuation

Case Study: Jordan Cement

- ❑ The owner of Jordan Cement wants to sell his family's company for \$19 million. He is prepared to offer a vendor note at 10% p.a. for up to \$2 million of the financing.
- ❑ A preliminary agreement for the sale has been reached between the Biriqadar family and the sponsors of the acquisition, Orascom and a European development bank. Together with management, the sponsors can contribute equity capital of \$5.5 million, and banks can provide a further \$12 million.
- ❑ **Your challenge is to structure the remainder of the financing.**



Project Jordan Cement Transaction Structure									
Performance Case: Base (FY: January, \$ in millions)					2/6/2006 20:16 C:\an\Excel files\jordan.xls\Sources_Uses				
Uses of Funds					Sources of Funds				
Equity Purchase Price	\$19.0				Existing Debt	\$0.0	0.0%		
Debt Retired	1.0				Bank Revolver	0.0	0.0%	8.5%	4.20
Debt Assumed	0.0				Senior Bank Term "A"	12.0	58.5%		
Cash Infusion	0.4				Senior Bank Term "B"	0.0	0.0%		
Transaction Costs	0.2				Other Long-Term Debt	0.0	0.0%		
Total Uses	\$20.5				Senior Subordinated Debt	3.0	14.6%	15.0%	7.00
					Junior Subordinated Debt	0.0	0.0%		
					Seller Note	0.0	0.0%		
					Preferred Stock	0.0	0.0%		
Current Stock Price	\$63.25				Common Equity				
Offer Premium	0.0%				Sponsor Equity	2.0	9.9%	29.3%	
Offer Price Per Share	\$63.25				Management Equity	1.5	7.3%	29.3%	
Shares Outstanding									
Equity Purchase Price									
Acquisition					Equity Allocation				
2005 EBITDA	10.58				Senior Subordinated Debt	0.0%	2.0%		
EST. 2006 EBITDA	9.28				Junior Subordinated Debt	0.0%	0.0%		
2005 P/E	77.4x				Seller Note	0.0%	0.0%		
EST. 2006 P/E	0.0x				Preferred Stock	0.0%	0.0%		
To 2005 Book	2.9x				Sponsor Equity	36.7%	26.4%		
To EST. 2006 Book	3.7x				Management Equity	27.1%	19.5%		
					New Equity	36.2%	26.0%		
Exit Multiples					Goodwill Calculation				
Exit Year	2010				Purchase Price of Equity				\$19.0
Exit FRITDA Multiple	7.0x				Plus:				Existing Goodwill
									0.0
									Less:
									Net Worth
									6.5
									Asset Write-Up
									0.0
									Deferred Taxes
									0.0

Use the spreadsheet: jordan.xls

Contact Information

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