



Financial Statement Analysis

11 Leases and off-balance sheet activities

Leases and off-balance sheet debt

Why Lease ?

Chapter 11

Companies need increasing amounts of capital.

Traditional methods:

Debt and Direct Purchase – borrow and buy

Other methods sought in recent times.

Executory contracts or arrangements more popular.

But financial reporting system is transaction based – goods or services must be exchanged.

How does one account for legal promises?

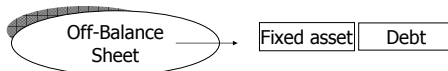
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Why do firms do it ?

Avoid showing debt on balance sheet

Assets	Operating Liabilities	Assets	Operating Liabilities
Fixed asset	Debt	Other Fixed asset	Debt
Other Fixed asset	Equity		Equity



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Why ?

Lower debt / equity ratio:

- Avoids debt covenant restrictions
- Better Wall Street Risk profile

Another reason:

- Some gains and losses are out of main financial statements
- keeps them under the control of the management.
- management can orchestrate the timing of recognition.

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Capital Lease – when?

Long term leases should be accounted for as capital leases if any one of the following conditions are met (SFAS 13):

- 1 Ownership is transferred at the end of the lease term.
- 2 Lease contains bargain purchase option.
- 3 Lease term > 75% of the economic life of asset.
- 4 Present value of minimum lease payments (MLP) > 90% of fair value of property.

IFRS

Capital Lease accounting

Balance sheet:

Asset and debt recognized

Income statement:

Depreciation and interest expenses – NO rental expense

How will ratios and picture that emerges from financial statements be affected by using operating lease accounting instead of capital lease accounting?

To compare companies, all leases should be capitalized.

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Lease - Example

Annual lease payments	\$10,000
Years	4
Interest rate	10.00%
Present Value of Lease Payments	31,699
Tax Rate	40.00%
1- tax rate	60.00%

Capital Lease Accounting

Year	Lease payment A	Interest Expense = Rate x Total Obligation B	Reduction in Total Obligation C	Lease Obligation		
				Total Obligation D	Long term E	Short term F
0				31,699	24,869	6,830
1	10,000	3,170	6,830	24,869	17,355	7,513
2	10,000	2,487	7,513	17,355	9,091	8,264
3	10,000	1,736	8,264	9,091	0	9,091
4	10,000	909	9,091	0		
Total	40,000	8,301	31,699			

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Capital Lease Accounting - Expense

Year	Expense = Depreciation 7,925 + Interest Expense H	Deferred tax Asset = Tax rate x (H - A) I
1	11,095	438
2	10,412	165
3	9,660	(136)
4	8,834	(466)
Total	40,000	0

$438 = 0.40 \times (11,095 - 10,000)$

$11,095 = 7,925 \text{ Depreciation expense} + 3,170 \text{ Interest expense}$

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Capital Lease Accounting - CFO

Year	Interest paid	Tax shield H (Expense) x 0.4	Incr. in DT Asset	= CFO = Total
1	(3,170)	4,438	(438)	830
2	(2,487)	4,165	(165)	1,513
3	(1,736)	3,864	136	2,264
4	(909)	3,534	466	3,091
Total	16,000	(0)	7,699	Total(8,301)
Present value		12,793		

$4438 = 0.4 \times 11,095$

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Capital Lease Accounting CFI and CFF

Year	CFO	CFI	CFF	CFO+CFI+CFF Total Cash Flow
0		(31,699)	31,699	0
1	830		(6,830)	(6,000)
2	1,513		(7,513)	(6,000)
3	2,264		(8,264)	(6,000)
4	3,091		(9,091)	(6,000)
Total	7,699	(31,699)	0	(24,000)

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Operating Lease Accounting

Year	Rental expense	Tax Shield 40.00%	CFO
1	(10,000)	4,000	(6,000)
2	(10,000)	4,000	(6,000)
3	(10,000)	4,000	(6,000)
4	(10,000)	4,000	(6,000)
Total	(40,000)	16,000	(24,000)
Present value	(31,699)	12,679	(19,019)

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Is leasing a good idea?

Present value of cash flows cash flows					(31,699)
PV of tax shield					
Lease [Accounting method does not matter]					
PV of [10,000, 10,000, 10,000, 10,000]					12,679
Borrow and Buy					
PV of [11,095; 10,412; 9,660; 8,834]					12,793
Loss due to leasing					113
Borrow and Buy - Cash flows (SYD for taxes)					
Year	1	2	3	4	PV
SYD	15,849	10,566	5,283		27,110
Straight Line	7,925	7,925	7,925	7,925	25,120
Difference					1,990
Tax saving	40.00%	x	1,990	=	796.0
Loss due to leasing	796	+	113	=	909.3

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Tax Shelter

Assume that CTA borrows \$31,699 and pays \$10,000 per year for the loan. It buys an asset for \$31,699 and uses it for 4 years.

You (a tax paying firm – don't even know what CTA does) go to CTA and tell them: You don't buy the asset - I will buy the asset and lease it to you. Pay me \$10,000 per year.

You borrow \$31,699 and pay \$10,000 per year for the loan. Buy the asset for \$31,699 and lease it to CTA for 4 years.

First year income $(10,000 - 11,095) \times 0.4$

After tax lease revenue PV: $(@10\%, 4 \text{ yrs})$ of $[0.6 \times 10,000] = 19,019$

Payments for the loan: PV $(@10\%, 4 \text{ yrs})$ of 10,000 = (31,699)

PV of tax shield (with SL depreciation) 12,793

Profit from the shelter 113


If SYD is used, additional tax saving: 796

Value of tax shelter 909

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Leasing companies

<http://www.pbs.org/wgbh/pages/frontline/shows/tax/>

<http://www.elaonline.com/> 

Which industries are affected by leases?

Airlines: American- book analysis

Retail: Sears, JC Penney – book example

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Off-balance sheet financial activities

Take-or-Pay and Throughput arrangements

Must be disclosed in footnotes.

Take the present value and add to assets and debt.

Joint ventures, financial subsidiaries and Affiliates

Texaco – OBS activities in book.

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Sale of receivables

Securitization – sell receivables; recognize gain or loss and use the proceeds to reduce debt

The firm continues to service the original receivables.

Qualified Special Purpose Entity (Q SPE)

Questions:

Is there a legal transfer of ownership?

Does the seller retain the effective credit risk?

Adjustments must be made

Balance sheet:

receivables and current liability should be increased.

Income statement:

Gains should be amortized.

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