15.515 RECITATION AGENDA – SESSION 9

Long-Term Liabilities: Leases & Bonds

Agenda

- Terminology
- Criteria for Lease Capitalization
- Balance Sheet Equation Effects
- Sample Problems

LONG-TERM LIABILITIES – LEASES

Terminology

- Operating Lease - lessee rents the property. Lessee charges rent expenses as they become due in each period.

- Capital Lease - lessee essentially owns the property. Lessee records the leased asset in the balance sheet (i.e. capitalized) together with the corresponding lease obligation. During the term of the lease, lessee charges depreciation expenses and interest expenses.

Criteria for lease capitalization

A lease is considered a capital lease if ANY of the following conditions apply:

- Essential transfer of ownership at the end of lease term - No payment for leased asset, or Bargain purchase option (BPT) (Payment below market value after the lease term)

- Minimum present value of lease payments (including BPO, if any) at least 90% of asset's market value

- Lease term is 75% of asset's remaining useful life - Bargain renewal option (BRO) - renewal of the lease for a rental below the expected fair market rental value, essentially extending the life of a lease

LEASES - BALANCE SHEET EQUATION

If lease is an **Operating Lease**

At the inception of the lease, any payment in advance is recorded as prepaid rent. When the lease terminates, prepaid rent = 0.

	Assets		Liabilities	S. E.
Type of transaction	**Cash**	**Prepaid Rent**		**R. E.**
Payment in advance (if any)	(cash paid)	cash paid		
During Lease		(rent payment)		(rent payment)
	OR			
Pay when due	(rent payment)			(rent payment)

If lease is a **Capital Lease**

- Accounting is similar to acquiring an asset with a 100% debt financing.
- Any payment in advance is recorded as an immediate reduction in the lease liability.
- During the lease, interest (based on the market rate at lease inception) and depreciation expense are recognized.
- When the lease terminates, the lease obligation is zero and Leased Property - Acc. Depr. = 0

| Date | Assets | | | Liabilities | S. E. |
	Cash	Leased Property	-Acc. Depr.	Lease Obligation	Retained Earnings
Lease inception		Market Value[a]		Market Value	
Payment in advance (if any)	(amt paid)			(amt paid)	
Each lease period	(lease payment)			(reduction)[c]	(Interest Exp.)[b]
			Depr Exp		(Depr. Exp.)

- [a] Present Value of the Lease Payments (PV of an annuity due)
- [b] Interest Expense   = Interest Rate x Beginning Balance of Lease Obligation
- [c] Reduction = Lease Payment - Interest Expense   *(Plug value)*