

Midterm II Review



15.501/516 **Accounting**
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Exam Structure



- Ques 1:
Long Lived Assets
- Ques 2:
Marketable Securities
- Ques 3
Bond Accounting
- Ques 4
Lease Accounting
- Expect to be tested on anything discussed in class

2

Key Issues in Long-Lived Assets



- Determining acquisition cost
- Setting up depreciation schedule
 - Estimating Salvage Value
 - Estimating useful life
 - Determining a depreciation method, in most cases, straight line for financial reporting purposes
 - Depreciation per year =
 $(\text{Acquisition Cost} - \text{Salvage Value}) / (\text{Useful Life})$
- Changes in depreciation estimates
- Asset disposal
- Deferred taxes

3

Change in Depreciation Estimates



- Apply the change prospectively, i.e., to future years (no restatement of past years' results)
- Check example already done in class

4

Disposal (retirement): Gain or Loss



- **Computation:**
 - Gain (Loss) = Proceeds from selling the asset - book value,
 - where $BV = \text{Acquisition cost} - \text{Accumulated Depreciation associated with the asset}$
- **Bookkeeping:** Remove asset's historical cost and accumulated depreciation from the balance sheet and record Gain (Loss).
- Gain/Loss on sale of asset included in Income Statement, often as part of Other Income
- In Indirect Cash Flow statement, gain/loss on asset sale is explicitly subtracted/added back to Net Income, respectively, to arrive at Cash Flow from Operations.
- Proceeds from sale are reported in the "Investing" section of Cash Flow Statement

Deferred Tax Accounting



- Differences between the tax rate of depreciation and the book rate of depreciation will give rise to deferred tax liabilities
- In any year, change in deferred tax liability = $(\text{Tax depreciation} - \text{Book depreciation}) * \text{tax rate}$
- Above also called deferred tax expense
- Income tax expense = Tax expense recorded in income statement
- Income tax payable = actual taxes that have to be paid to government

6

Marketable Securities



- Three classes of securities
- Held to maturity (debt only)
 - Acquired with ability and intent to hold to maturity
 - No changes in market value reported in the income statement, thus investment carried at historical cost in the balance sheet
 - Interest income reported in operating section of SCF
- Trading securities (debt and equity)
 - Acquired for short-term profit potential
 - Changes in market value reported in the income statement (net of taxes), investment marked to market in the balance sheet
 - Purchases and disposals reported in operating section of SCF
- Available for sale (debt and equity)
 - Securities not classified as either of above
 - Changes in market value reported in "Other Equity" (net of taxes), instead of the income statement!
 - Purchases and disposals reported in investing section of SCF

7

Marking to market



- For both Trading and AFS securities
 - Book value of security investments tracks market value
 - Done via a Marketable Securities Adjunct Account
 - Balance sheet effects are the same! Marketable Securities and total Stockholders Equity will be the same.
 - Balance in Deferred Tax Liability Account will be the same
- What is different?
 - Income statement effects
 - For trading securities, gains or losses recognized in Income Statement track changes in market value
 - For AFS securities, gains or losses *net of taxes* are cumulatively recorded in "Other Equity" till securities are sold
 - At that time, all gains and losses are recognized in Income Statement and the "Other Equity" account as well as "Deferred Tax Liability" account is cleared off.
- Important – work through detailed numerical example done in class

8

Present Values and Bonds



- Present Value Concepts will not be tested directly, only through bond and lease accounting
- Three kinds of bond structure discussed in class
 - Coupon Bond
 - At par, discount or premium
 - Zero Coupon Bond
 - Bond structured as mortgage/annuity – relatively infrequent

9

Key Common Features of Bond Accounting



- **Net Bonds Payable** issued by a company is always recorded at the present value of future cash outflows promised to bond investors – or the market value at issuance
- **Bonds Payable** is recorded at Face Value. A **Discount/Premium** account is set up to capture the difference between market value at time of issuance and Face Value
- Cash payment before and at maturity is as specified in the terms of the bond – will vary by bond structure (see last slide)
- Interest payment in any year = (Market interest rate at time of issuance) * (Net Bonds Payable at the beginning of the year)
- The difference between Cash Payment and Interest Expense reduces the Discount/Premium Account

10

Early Retirement of Debt



You repurchase Zero-Coupon bonds (Face Value = \$ 11,910) in the open market at the start of 2002 (2 years to maturity) when the market rate is 5%. Market rate at time of issuance is 6%.

What is the market price of the bonds at that time?

$$PV_0 = FV_n / (1+r)^n$$

$$PV_0 = 11,910 / (1.05)^2 = 10,803$$

What is the effect on the BSE and financial statements?

Cash (A)	=	Bond Principal	-	Discount	+ RE
BB		11,910	-	1,310	
(10,803)		(11,910)		(1,310)	(203)

The gain or loss on early retirement of debt is reported as an **extraordinary item** on the income statement.

What is the journal entry?

11

On Bond Accounting



- If you have the terms of the bond, you should be able to calculate book value of the bond at the end of any period, interest rate at time of issuance, etc.

12

Lease accounting



- Differences between operating lease and capital lease
- What conditions are used to classify a lease as a capital lease?
- Lease footnotes – what they do and don't tell you
- Lease liability at the end of any year = Present value of future lease payments at the lease capitalization rate (or effective interest rate)
- Is it possible to work out lease liability if operating leases were instead classified as capital leases?

13

Summary



- Read Question Carefully – answer all parts
- You will probably see questions on Journal Entries or T-accounts involving any of the topics for this midterm
- Do Not Panic – If it's on the exam, you have seen it before
- Good Luck

14
