|  |  |  |  |
| --- | --- | --- | --- |
| **Exam 4 breakdown** | |  |  |
|  |  |  |  |
|  | Qual | Quant |  |
| Chap 12 | 2 | 7 |  |
|  |  |  |  |
| Chap 13 | 4 | 7 |  |
| Chap 15 | 10 |  | Total |
|  |  |  |  |
|  | 16 | 14 | 30 |

**Exam 4 Midterm Review**

**Chapter 12 Cap Budgeting Cash Flow**

Cash Flows

Incremental – cash flows that change because of the project

Incidental – type of incremental – Example, Ford Focus and CAFE (Corporate Average Fuel Economy)

Cars 27.5 mpg Lt Trucks 20.7 mpg Trucks < 8500 22.5 mpg 2008, 23.1 2009, 23.5 2010

Sunk Costs – Example of Finance students switching to Econ

Depreciation

Why do we depreciate – we’d rather expense. (New tax code?)

Various methods, we cover two.

Straight line: Annual deprec = (cost-salvage)/life

MACRs: Annual deprec = cost X percentage where the percentage dictated by gov’t mandate and life. Base cost stays the same.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | 3-year | 5-year | 7-year | 10-year |
| 1 | 0.333 | 0.200 | 0.143 | 0.100 |
| 2 | 0.445 | 0.320 | 0.245 | 0.180 |
| 3 | 0.148 | 0.192 | 0.175 | 0.144 |
| 4 | 0.074 | 0.115 | 0.125 | 0.115 |
| 5 |  | 0.115 | 0.089 | 0.092 |
| 6 |  | 0.058 | 0.089 | 0.074 |
| 7 |  |  | 0.089 | 0.066 |
| 8 |  |  | 0.045 | 0.066 |
| 9 |  |  |  | 0.065 |
| 10 |  |  |  | 0.065 |
| 11 |  |  |  | 0.033 |

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Changes in Working Capital

What is it?

Goes back to incremental on whether to count or not.

Recapture – e.g., %

Tax impacts on Cap Bud cash flows

1. Normal income taxes on EBT for the project
2. Taxes on asset sales. Compare sales price to book value – tax the gains or take the tax shield loss.

Timeline

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Putting it together

Cap budgeting in 3 steps

Evaluate Cash Flows (this chapter 12)

Assess Project Risk (Chapter 9)

Accept or Reject Project (Chapter 11)

Practice problems.

**Lesson 13 Firm Valuation**

Lesson 13 Firm (Enterprise) Valuation

When might we need to value a firm?

Three methods

1. Replacement Cost (or just Cost) method

Tangible assets pretty easy to value

Intangible assets hard to value

Debt pretty easy to value

Can then back out equity value

What types of firms good for?

2. DCF methods

FCFF - WACC

FCFE – Ke

Difference? FCFF method – market debt = FCFE method

What types of firms good for?

3. Comparable multiples (comps) method

PE

P/S

M/B

P/EBITDA – entrepreneurial finance

What types of firms good for?

Caveats (CFA, some debate)

Salary

Liquidity (40-50%)

Control (30-35%)

Event Study

House appraisal example

**Chapter 15**

Know the four areas in the text for Chapter 15

Car and House buying strategies (read through and be familiar)

Personal Investing (understand risky and non-risky part of portfolio

Be familiar with the email exchange pertaining to negotiating an offer

Understand cash and term life insurance and which the best option is normally

Buying a House

Steps to buy a house

Go through closing docs and explain

Know appropriate vs. inappropriate debt.

Home mortgage [“Get a modest home and pay off the mortgage quickly”]

Education [“…pay it back. And do so promptly, even at the sacrifice…”]

Transportation [“needed first car”]

Business [“But be wise, and do not go beyond your ability to pay.”]

Know the Survival Advice – Human Capital

Market yourself as aggressively as possible

Lower your expectation for material things

Refuse to be part of the entitlement generation

Practice the FILO work principle

Understand short term vs. long term investing

Know the examples of short term investments

Checking, savings, money market, CDs

Know the non-risky and risk parts of long-term investing

Tax-sheltered *investment vehicle*: Traditional IRA, Roth IRA, 401K, SEP IRA, 529 Plans, etc.

Think of these as your grocery cart that give tax advantages

Biggest consideration on IRAs:

Roth – use after-tax dollars. Never pay tax again.

Traditional – use before-tax dollars. Pay tax when withdraw.

Biggest consideration on 401K/403B:

Get the match!!

Your first employer will most likely have a match. Be ready!!

Defined contribution vs. Defined benefit

Defined contribution = 401K-like self-directed

Defined benefit = old-fashion pension, not many left

Money is locked-up and will have penalties if withdrawn early.

*Investment assets* (inside the vehicle)

Like groceries inside the shopping cart

Can be virtually any asset you choose (stocks, bonds, ETFs, mutual funds, bank accounts, whatever your risk likes).

Index mutual fund

Very low administration costs/fees

A computer simply tracks an index like the S&P 500, Russell 3000, Wilshire 5000

Actively managed mutual fund

More expensive than index funds

Loads (front end and back end)

12b-1 and other management fees

Try to beat benchmark (e.g., growth, value, small-cap, emerging markets, industry (like technology), bonds)

Understand why broad equity index funds are a good option for long-term investing.

Stocks have historically outperformed other assets.

With time diversification, the probability of loss in the stock market over 10-30 years is very small.

Active managers fail to outperform simple index mutual funds more often than not.

The fees from active managed funds destroy a lot of wealth for the investor.