Test 3, Lecture 9 Review

PROPOSITIONS ON CAPITAL STRUCTURE

Modigliani and Miller: Proposition I

* Modigliani and Miller: Proposition I: the value of the firm is independent of its capital structure
	+ Assumptions:
		- No taxes
		- No default risk
		- Perfect information (no insider trading)
		- No transaction costs
		- Constant WACC
	+ Conclusion: the product is what matters
		- If a firm has a lousy product, it doesn’t matter how the firm finances it
		- The value of a business is independent of how you finance it
		- The value of a business is based on revenues and EBIT, not how you finance it
	+ \*\*\*In a world without taxes, capital structure doesn’t matter
* Modigliani and Miller: Proposition I (with corporate taxes): the value of the firm with corporate taxes increases with the use of debt
	+ Same assumptions as before, but know we do have taxes
	+ Use as much debt as possible
		- Debt creates value because of the interest tax shield

REAL OPTIONS

Real Options

* Real Option: the right to make a decision during a project that impacts value
	+ A real option gives the financial manager a chance to influence the riskiness and size of a projects cash flows by taking different actions during the life of the project
	+ Ex: investment timing decisions, growth/expansion decisions, and abandonment options
		- Optimal cycle length problems are an example of abandonment questions

There are 3 Types of Options:

1. Right to Abandon
	* Right to terminate
2. Right to Delay
	* Right to wait for more information to avoid making a bad decision
3. Option to Expand
	* Option to scale operations with a larger investment

 $NPV=NPV\_{project}+Option Value$

SPECIAL TOPIC: INTERNATIONAL FINANCE

The foreign exchange market describes the market where currencies are traded. Currencies are traded to pay for purchases in different countries. The foreign exchange market has no central marketplace; all business is conducted by computer or telephone. Turnover in the foreign exchange market is very large every day. For example, in London alone, about $640 billion in currency changes hands every day.

 \*\*\*There is a market for currency, just like stocks

There are 2 Ways to Express a Trade of Currency or Exchange Rate:

1. Indirect Quote: the number of units of foreign currency you can buy for $1
	* Ex: Euros/$
2. Direct Quote: the number of dollars that one unit of foreign currency purchases
	* Ex: $/Euro

Exchange rates change constantly, just like stocks, bonds, and other traded commodities

* When capital budgeting in a foreign country, we need to consider exchange rate risk
	+ We could potentially be exposed to risk with an exchange rate

Spot Rate of Exchange

* Spot Rate: the exchange rate in the moment
	+ Companies don’t use the spot rate because they are risk averse

Forward Exchange Rate

* Forward Exchange Rate: an agreement between a firm and an investor to lock in a future exchange rate
	+ When you buy a forward contract, you lock in a future exchange rate

Purchasing Power Parity

* Purchasing Power Parity: the idea that the real cost of a good is equal in all countries
	+ This works for big ticket items, like appliances and gold
		- PPP fails for other goods because of transportation costs and because goods aren’t the same

Interest Rate Parity

* Interest Rate Parity: the idea that investors can’t profit from a difference in price between spot and forward rates