Debt

1. Comparison with equity: **voting rights, claims, risks, terms, tax**.
2. Covenants: positive (things firms should do); negative (things firms are forbidden to do), any examples?
3. Two general types: direct or indirect.
   a. Direct: commercial papers, corporate bonds, and other instruments.
   b. Indirect: bank loans.
4. The **payoff** structure of equity and debt: (illustrated with the attributes of options, **drawing the graph**!)
   a. Buying **a share** of a company is like having a **long** position of a **call option** (earn only after passing certain threshold).
   b. **Lending** money to a company is like having a short position of a put option and a **long** position of **risk-free** instrument (agree to accept whatever is left there).
5. Leases: finance lease and operating lease.
   a. Lessor: the **provider** of the leased asset;
      Lessee: the **user** of the leased asset.
   b. Finance leases are essentially **borrowing to buy** and the lessee cannot break the deal without paying **large amount of penalty**;
      Operating leases are effectively **rental agreements** and the lessee **can call it off** at relatively low costs.
   c. The fundamental difference of finance & operating lease:
      **whether the risks and rewards associated with the ownership of the asset have all been transferred to the lessee.**
   d. Accounting differences*
      1) Pertaining to **operating leases**, **the lessor** reports the leased item as **an asset** and records the lease payment as **lease revenue**, whilst **the lessee** records the lease payment **as an expense**.
      2) With regard to **finance leases**, **the lessor** writes off the leased asset and records **a receivable** related to lease payments, whilst **the lessee** reports the leased item as **an asset** and records **a lease liability** simultaneously.
   e. Criteria for distinguishing finance & operating leases:
      1) Whether **the lessee obtains the leased item** at the end of the lease agreement;
      2) Whether the lease agreement has stipulated that the lessee has **the option to purchase** the leased asset from the lessor at the end of the lease agreement;
      3) Whether **the present value** of the lease payments has reached a certain amount;
      4) Whether **the term** of the lease agreement exceeds a certain percentage of the leased asset's useful life.
      **Say yes to any ONE of the above, and it's a finance lease!**
6. Leveraged lease: equity participants (tax benefits) and debt participants.
7. Lease or Purchase? (**calculation!**)
   a. Like with any other economic decisions, we have to consider **opportunity costs** (what **incremental value** would we get if we chose to lease rather than purchase?).
   b. Cash flows involved: asset price (+), lease payments (-), lease expense tax shield (+), depreciation expense tax shield (-), residual value (-), tax on gain/loss on residual value (+/-) (from whose perspective?).
   c. The discount rate we use is the equivalent bank loan **after-tax** interest rate.
   d. Using NPV analysis, we shall choose to lease if the NPV of the **incremental** cash flows resulting from leasing is positive (the **maximum** annual lease payment?).
   e. Note that we implicitly assume that the lessee **didn't choose to obtain** the leased assets after the lease term, and that the cash flows involved are **for tax purpose**, NOT for accounting purpose.
   f. What will be the **total** present value of the investment of the asset?
   g. The attributes of the leased asset:
      1) Easy to maintain and fix;