MERGERS AND ACQUISITION

1. Two firms merge in order to gain from synergy. **The merger equations** are
   $MV_{AB} = MV_A + MV_B$ + Synergy Gain
   $PV_{AB} = PV_A + PV_B$ + Synergy Gain
2. Acquiring company is the company which is taking over and the target company is the one which is being taken over.
3. The Target's share of synergy gain will be normally ade over to them by acquiring company at the onset of the merger. Should the planned synergy gain fail, the acquirer loses
4. **How to compute swap ratio**
   a. Write the ratios
   b. Switch them around

5. **Steps in cash deal**

   Step 1: Compute Synergy Gain

   Step 2:
   (a) Compute value of consideration
   (b) Less: Market value of B
   (c) True Cost of Acquisition

   Step 3: Acquirer share of synergy gain

6. **Steps in Stock deal**

   Step 1: Compute Synergy Gain

   Step 2:
   (a) Compute theoretical post merger price
   (b) Compute value of consideration
   (c) Less: Market value of B
   (d) True Cost of Acquisition

   Step 3: Acquirer share of synergy gain

   $$\text{Theoretical post merger price} = \frac{MV_A + MV_B + SG}{\text{Shares of A + Shares issued to B}}$$

   $$\text{Theoretical post EPS} = \frac{E_A + E_B + SG}{\text{Shares of A + Shares issued to B}}$$

7. **The Exchange ratio is based on any one of the following ratios**
   (a) Earnings per share
   (b) Book Value per share
   (c) Market value per share
   (d) Fair value per share
   (e) Weighted average of all or any of these
8. **Synergy gain rules**
   (a) If there are no increase in earnings it can be assumed there is no synergy gain

(b) If there is no increase in earnings we can still contemplate a synergy gain if we assume the PEM of the acquiring company as the PEM of the merged entity and thus calculate MV of new entity

9. Gain or loss to entities

a. Market price based

Acquiring	New Market Price	Old Market Price	Difference
Target	Adjusted New Market Price	Old Market Price	Difference

Adjusted market price is new market price adjusted for exchange ration

b. Earnings based

Acquiring	New EPS	Old EPS	Difference
Target	Adjusted New EPS	Old EPS	Difference

Adjusted EPS is new EPS adjusted for exchange ration

10. BUSINESS VALUATION

(a) The discounted cash flow method is the most popular method of valuation

(b) The value of a business is the present value of incremental free future cash flows discounted at the weighted average cost of capital

(c) The value of a business is independent of the method of financing.

(d) The cash flows are computed in lines with the long term fund principle. They are hence after tax and before interest

(e) WACC can be either book value or market value weights

(f) Horizon value = (Year end value) / (WACC – G)

This is a substitute for terminal cash flows like sale of capex and recapture of working capital.