Week 1. Theory of the Firm

1. **Objective of the Firm**

a. **Value (Shareholder Wealth) Maximization**

$$PV = \sum_{t=1}^{n} \frac{\pi_t}{(1+r)^t} = \sum_{t=1}^{n} \frac{TR_t - TC_t}{(1+r)^t} \leftarrow \text{Use } E[r_i] = r_f + \beta_{im}(r_m - r_f) \text{ or T-bill rate for } r.$$

b. **Revenue (Sales) Maximization** (William Baumol)

Managers seek to maximize sales after an adequate rate of profit has been earned, most likely because the executives' salaries and revenue are correlated.. Especially, venture capital firms pursue this type of strategy.

c. **Maximization of Managers' Utility (Principal-Agent Problem)** (O. Williamson)

As a result of separation of management from ownership, managers are more interested in maximizing their own utility measured in terms of compensation, extensive control over the corporation, & perks ... etc (*cf*. Moral Hazard). Principal-agent problem can be resolved by tying the managers' reward to the firm's performance in relation to other firms in the same industry.

d. **Satisficing Behavior** (H. Simon, R. Cyert & J. March)

Because of the complexity of running the large corporation, managers are not able to maximize profits but can only strive for some satisfactory goal in terms of sales, profits, growth, market share ... etc. (*cf*. Bounded Rationality)

Food for Thought: Value of the Firm = Equity + Debt, where

Shareholder Wealth = Equity = f(r), & $r_{t+1} = \frac{P_{t+1} + D_{t+1}}{P_t}$, where

D is Retained Earnings + Dividend pay-out = π before ex-dividend

& $g_{t+1} = \frac{P_{t+1}}{P_t}$, where $P = f$(Market Capitalization), which can be

driven solely by noise.