Economics of the firm: Overview

- Modigliani-Miller theorem: when debt or equity does not matter.
- Simple model of credit rationing: fixed investment model.
  - Incentive compatibility constraint
  - Expected pledgeable income
  - Lenders’ breakeven (participation) constraint
  - The extent of moral hazard
- Borrowing capacity: variable-investment model.
  - The equity multiplier
  - The shadow value of equity
- Salvage value of assets: the maximal incentives principle
- Extensions
  - continuum of effort levels
  - risk aversion
  - semi-verifiable or non-verifiable outcome
- Diversification
  - Cross-pledging
- Sequential projects
  - Increased incentives on early project
- Collateral
  - Redeployability
  - Contingent pledging
  - Weak firms pledge more collateral than strong firms
  - Pledging existing assets
- The liquidity-accountability tradeoff
  - later: also an issue for the monitor
  - a possible investment opportunity at an intermediate date
  - Non-verifiable liquidity shock: strategic exit
- Inalienability of human capital
- Liquidity management
  - short-term income in addition to the standard, long-term one

    - a stochastic reinvestment need at the intermediate date
    - contract includes cutoff value for reinvestment need
    - cash-rich firms: stronger firms have less short-term debt
    - cash-poor firms: hoarding of reserves
- The liquidity-scale tradeoff
    - variable-investment model
    - tradeoff large investment vs available liquidity
    - continuum of possible liquidity shocks
- Endogenous liquidity shocks
    - cutoff increasing in short-term income in order to provide entrepreneur with incentives to lessen the liquidity problem
    - soft budget constraint
- Asymmetric information
    - Adverse selection: entrepreneurs trying to sell overvalued assets to investors
    - Private information about prospects
    - A measure of adverse selection
    - Private information about assets in place
    - The pecking-order hypothesis: debt preferable to equity
    - Dissipative signals
        - Certification
        - Collateral
        - Good firms pledge more collateral than bad firms
- Product markets
    - Profit destruction: strategic uncertainty about how many other firms succeed
    - Benchmarking
    - Competition: allocating control rights to investors makes the firm look tough
    - Predation: Financially weak firms may be subject to predatory actions by strong firms
        - A long-term financial contract for the weak firm may reduce strong firm’s incentives to prey

- Earnings manipulations
    - Managerial myopia: boosting short-term profit at the cost of long-term loss
    - Uninformed manipulation vs informed manipulation
- Career concerns: too little risk taking?
- Herding
- Effort and risk taking: a two-dimensional incentive problem
- Investor monitoring
    - Active vs passive monitoring
    - Prospective vs retrospective information
    - Passive monitoring: monitoring early performance
        - Enlisted monitor vs market monitoring
- Investor activism: active montoring
    - Incentives for the monitor
    - Scope for overmonitoring
    - Scarce monitoring capital
    - Collusion between entrepreneur and monitor
    - Monitor as advisor
    - Dynamics of active monitoring: learning by lending
    - Monitors with liquidity needs
- Control rights
    - Allocation of control rights may affect pledgeable income
    - Multiple control rights
    - Contingent control
    - Noncontractible investments: managerial initiative
    - Real vs formal control
- Takeovers: tradeoff efficiency vs rent extraction
    - Incentive effects of takeovers
    - Modelling takeovers in practice