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