FIN THEORY II (Part 2)

Holger Mueller

FINANCIAL CONTRACTING

This course examines how moral hazard impairs firms' ability to finance investments, and how firms and investors can mitigate the resulting inefficiencies through monitoring, collateral, corporate diversification, and the design of corporate securities. The course consists of two parts:

PART I: MORAL HAZARD AND PLEDGEABLE INCOME

Applying and extending the famous model by Holmstrom and Tirole (1997), we will learn how entrepreneurial moral hazard reduces the income firms can pledge to raise outside funding, and how this in turn leads to credit rationing and underinvestment in equilibrium. We will also learn how firms and investors can boost pledgeable income by setting up monitoring technologies, posting collateral, and through corporate diversification. With regard to corporate securities, we will learn how debt overhang can cause underinvestment, how debt dominates equity in situations of moral hazard, and how equity dominates debt when agents can risk-shift.

Tirole, Jean (2006). The theory of corporate finance. Princeton: Princeton University Press (Ch. 3.2, 3.3, 4.2, 4.3 & 9.2.1).

Holmström, Bengt and Jean Tirole (1997), "Financial Intermediation, loanable funds, and the real sector," Quarterly Journal of Economics 112, 663-692.

Jensen, Michael and William Meckling (1976), "Theory of the firm: Managerial behavior, agency costs and ownership structure," Journal of Financial Economics 3, 305-360.

Myers, Stewart (1977), "Determinants of corporate borrowing," Journal of Financial Economics 5, 147-175.

Diamond, Douglas (1984), "Financial Intermediation and delegated monitoring," Review of Economic Studies 51, 393-414.

Stiglitz, Joseph and Andrew Weiss (1981), "Credit rationing in markets with imperfect information," American Economic Review 71, 393-410.

PART II: OPTIMAL FINANCIAL CONTRACTING UNDER MORAL HAZARD

While Part I considers the choice between debt and equity, Part II considers optimal security design in a more general setting. We will study three different settings, which differ in the degree to which cash flows are verifiable: in the Innes (1990) model, cash flows are fully verifiable; in the Townsend (1979) and Gale-Hellwig (1985) "costly-state verification" models, cash-flows are semi-verifiable; and in the Bolton-Scharfstein (1990) incomplete-contracting model, cash flows are non-verifiable.

Tirole, Jean (2006). The theory of corporate finance. Princeton: Princeton University Press (Ch. 3.6, 3.7, 3.8, 10.2, 10.4).

Innes, Robert D. (1990), “Limited liability and incentive contracting with ex-ante action choices,” Journal of Economic Theory 52, 45-67.

Townsend, Robert (1979), “Optimal contracts and competitive markets with costly state verification,” Journal of Economic Theory 21, 417-425.

Gale, Douglas, and Martin Hellwig (1985), “Incentive-compatible debt contracts: The one-period problem,” Review of Economic Studies 52, 647-663.

Gale, Douglas, and Martin Hellwig (1989), “Repudiation and renegotiation: The case of sovereign debt,” International Economic Review 30, 3-31.

Bolton, Patrick, and David S. Scharfstein (1990), “A theory of predation based on agency problems in financial contracting,” American Economic Review 80, 93-106.