ECON 4245 Corporate Governance – Fall 2014

Seminar II

Problem 1.

Discuss reasons why a collateralized asset may be of higher value to the entrepreneur than to an outside investor.

Problem 2. (Exam, spring 2009)

Jenny has a business idea she wants to develop. Her project is risky: with probability p, it is successful while with probability $(1 - p)$ it fails. Success means that investing an amount I returns RI, where $R > 1$ is the return per unit of investment. Failure means a zero return on the project: $R^F I = 0$. The probability p of success depends on Jenny's own efforts: if she works hard, then $p = p_H$, while if she does not work hard, then $p = p_L$, where

$$0 < p_L < \frac{1}{R} < p_H < 1.$$

By not working hard, she will gain a benefit BI, where B is the benefit per unit of investment, satisfying

$$(p_H - p_L)(R - \frac{1}{p_H}) < B < 1 - p_L R.$$

Jenny has available own funds of size $A \geq 0$. If she wants to invest more than A, she will need funding from outside investors. Assume that the capital market is competitive, that Jenny is risk neutral, that limited liability prevails, and that efforts are not observable.

a) How much will Jenny invest in the project?

b) Find an expression for her borrowing capacity (or debt capacity), and discuss how this borrowing capacity is affected by the extent of the moral-hazard problem.

c) Suppose now that even failure of the project has a positive return, but lower than the return following success: $0 < R^F < R$. Explain the difference between debt and equity as ways of funding a firm. Explain in particular why, in this situation, it is not optimal for Jenny to fund her investment by issuing equity only.

Problem 3.

Exercise 4.10 in Tirole, pp. 191-192.

Problem 4.

Discuss how and why renegotiation may occur in a loan agreement and the role played by the lenders' (borrowers') bargaining power in the renegotiation stage.