ACCT 30001 Financial Accounting Theory
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Week 7

Agency relationship: a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.

Agency theory: a branch of game theory that studies the design of contracts to motivate a rational agent to act on behalf of a principal when the agent's interests would otherwise conflict with those of the principal.

Lenders vs shareholders:

- Lenders are concerned that management may choose accounting policies to hide performance that threatens their interests. Thus they demand protection against this possibility.
- Lenders are crucially concerned about protecting themselves on the downside. Thus they demand financial accounting policies that help prevent financial distress and provide an "early warning system" if distress threatens.

Shareholders vs managers:

- Managers may shirk on effort and cover up overstatements and lower profits through opportunistic behaviour such as overvaluation of assets and managing earnings upward. This creates a demand for financial accounting policies that encourage responsible manager efforts and limit opportunistic manager actions.

Example from textbook:

Consider a simple firm consisting of a single owner (the principal) and a single manager (the agent). The contract is for a single period. Specifically, the owner hires the manager for one year. The firm faces risk: The payoff resulting from the manager's activities for the year will be x_1=\$100 or x_2=\$55.

The rational owner wishes to maximize the expected payoff, net of manager compensation.

	Manager's Effort			
	A_1(work hard)		A_2(shirk)	
	Payoff	Probability	Payoff	Probability
x_1(high payoff)	\$100	0.6	\$100	0.4
x_2(low payoff)	\$55	0.4	%55	0.6

Assume that the owner is risk neutral and that the owner's utility from a given payoff is equal to the dollar amount of that payoff. Assume also that the manager receives a fixed salary of \$25 for the period. Then the owner's expected utility conditional on each act is:

$$EU_o(a_1) = 0.6(100 - 25) + 0.4(55 - 25) = 57$$
$$EU_o(a_2) = 0.4(100 - 25) + 0.6(55 - 25) = 48$$

Consequently, the owner wants the manager to choose a_1 because its expected utility to the owner is greater.

Assume that the manager is effort averse--- the manager dislikes effort and that the greater the level of effort the greater the dislike. The disutility of effort is subtracted from the utility of remuneration.

Consequently, we will assume

Disutility of effort level a_1=2.00

Disutility of effort level a_2=1.71

We assume that the manager has a square root utility function.

$$EU_m(a_1) = \sqrt{25} = 2.00 = 3$$
$$EU_m(a_2) = \sqrt{25} = 1.71 = 3.29$$

Therefore manager has a tendency to shirk.

How to control moral hazard?

It is not possible to know for sure the magnitude of the agent's efforts because the incentives of managers and owners can never be aligned. (the additional expected utility of the two are different and the extra utility can never exceed the extra effort the manager pays)

- Direct monitoring
  - First-best: gives the owner the maximum attainable utility (57) and gives the agent his/her reservation utility (3).
  - Risk-sharing: the manager bears none of the firm's risk, because a fixed salary is received regardless of the payoff. Since the manager is risk averse, this is desirable. The owner bears all the risk of the random payoff. Since the owner is risk neutral, he or she does not mind bearing risk.
  - Frequently unattainable. The nature of managerial effort is so complex that it would be effectively impossible for a remote owner to establish whether the manager was in fact "working hard".
- Indirect monitoring
  - Moving support: the set of possible payoffs is different depending on which act is taken. (payoff x_2, a_2 is now \$40). The penalty is sufficient cause for the agent to choose a_1.
  - We cannot reply on indirect monitoring to ensure that the first-best contract will be attained. Many contracting situations may be characterized by fixed support. Even if moving support holds, legal and institutional factors may prevent the owner from penalizing the manager sufficiently to force a_1.