The New Institutional Theory of the Firm

The purpose of the lecture: Analysis of various theories of the firm

Neoclassical (traditional) theory of the firm

- The neoclassical theory described the firm in technological terms—as a production function—to which a profit maximization purpose was ascribed.
- In neoclassical theory, the firm is a *'black box'* there to explain how changes in inputs lead to changes in outputs.
- The firm in neoclassical theory is a specialized unit of production

Advantages of Neoclassical Theory of the Firm

- First, the theory lends itself to an elegant and general mathematical formalization.
- Second, it is very useful for analyzing how a firm's production choices respond to exogenous change in the environment, such as an increase in wages or a sales tax.
- Finally, the theory is also very useful for analyzing the consequences of strategic interaction between firms under conditions of imperfect competition.

Weaknesses of Neoclassical Theory of the Firm

- The Neoclassical theory completely ignores incentive problems within the firm.
- The theory has nothing to say about the internal organization of the firm. Nothing is said about the hierarchical structure, how decisions are made, who has authority within a firm.
- The theory tells us nothing about how to pin down the boundaries of the firm.
- The Neoclassical theory ignores conflicts of interest between owners and managers

F. Knight's Theory of the Firm

- Knight explained the firm on the basis of differential risk aversion between entrepreneur and worker. A firm is like an institution that provides risk sharing.

- Knight claims the entrepreneur as the owner of the firm and the bearer of risk/uncertainty. Profit is the reward of bearing non-insurable risks and uncertainties.

- Workers of the company are not risk averse; they prefer to receive stable wages. Because the owner of the company, as it were, insures his employees against risk, then he gets the right to control and manage them.

F. Knight's Theory of the Firm

The firm as "the system under which the confident and venturesome 'assume the risk' or 'insure' the doubtful and timid by guaranteeing the latter a specified income in return for an assignment of the actual results."

F. Knight. *Risk, Uncertainty and Profit (1921)*

R. Coase's Theory of the Firm

An article by Ronald Coase **"The Nature of the Firm"** (1937):

If markets are so good at directing resources, why do firms exist?

According to R. Coase, people begin to organize their production in firms when the transaction cost of coordinating production through the market exchange is greater than within the firm. For Coase the main reason to establish a firm is to avoid some of the transaction costs of using the price mechanism.

"Within a firm, … market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur … who directs production."

R. Coase's Theory of the Firm

- What determines the size of the firm? The size of the firm is dependent on the costs of using the price mechanism, and on the costs of organization of other entrepreneurs.
- When the external (market) transaction costs are higher than the internal (organizational) transaction costs, the company will grow. If the external transaction costs are lower than the internal transaction costs the company will be downsized.

Firm theories based on the "principal-agent" model

- Historically, principal-agent theories reach back to early debates on the shareholders-managers relation. Following the observation by Berle and Means (1932) that ownership of US firms had become separated from management and control.
- According to this theory a professional manager makes production choices, such as investment or effort allocations, that the firm's owners do not observe. Because the manager deals with the day-to-day operations of the firm, he also is presumed to have information about the firm's profitability that the owners lack. In addition, the manager has other goals in mind beyond the owners' welfare, such as on-the-job perks, an easy life, empire building, and so on.

Firm theories based on the "principal–agent" model

- Under these conditions, principal–agent theory argues that it will be impossible for the owners to implement their own profit–maximizing plan directly, through a contract with the manager in general, the owners will not even be able to tell ex post whether the manager has chosen the right plan. Instead, the owners will try to align the manager's objectives with their own by putting the manager on an incentive scheme. Even under an optimal incentive scheme, however, the manager will put some weight on her own objectives at the expense of those of the owners, and conflicting interests remain.

Firm theories based on the "principal-agent" model

Alchian-Demsetz: The Firm as a Solution to Moral Hazard in Teams

Alchian and Demsetz (1972) emphasize that the firm is the technology of team (joint) production, by which they mean production with inseparable individual production functions. According to them the firm emerges because extra output is provided by team production, but that the success of this depends on being able to manage the team. Transactions involving team production require careful monitoring so that each actor's contribution can be assessed. This may create a free-rider problem since team production can be a cover for shirking.

The solution to this problem is to appoint a monitor who is given the right to fire and hire members of the team, based on his observation of employees' activities.

Giving him rights to the residual income of the team furthermore means that he is given incentives to perform the efficient amount of monitoring.

Contracting Theories of the Firm

- From this point of view, the size of the firm (the boundaries of the firm) is determined by the number of employees of the firm. An employee is distinguished from an independent contractor by the nature of his contract: while the employee is subject to the authority of the manager of the firm, an independent contractor acts autonomously.

Contracting Theories of the Firm

Simon: The Firm as an Employment Relation

Simon defines the employment relationship more closely and compares its efficiency with the efficiency of a contract between two autonomous actors. The latter contract specifies the action to be performed in the future and its price while the *employment contract specifies a range of acceptable orders* and establishes the right of the employer and the duty of the employee to accept orders within this range. *The advantage of the employment relationship lies in its flexibility.* The benefit of flexibility is greater the greater the uncertainty.

Simon stresses that the employment relationship is to some extent reliant upon the employer's reputation for not abusing his authority. The need for trusting the employer is less if the employee is nearly indifferent between different tasks.

Contracting Theories of the Firm

Williamson: The Firm as a Governance Mechanism

- The starting points in Williamson's theorizing are, first, concept of bounded rationality, secondly, asset-specificity, and, third, opportunism

- According to Williamson, vertical integration does away with hold-up problems, because it removes the incentive to opportunism.

Additional Reading:

Coase R. The Nature of the Firm.