THEORY OF THE FIRM AND OF THE MARKETS

WHY?

Firms are important parts of most economic systems

- Why do they exist?
- How do they operate?

"*But in view of the fact that it is usually argued that co-ordination will be done by the price mechanism, why is such organisation* [the firm] *necessary?*" (Ronald Coase, 1937, The Nature of the Firm, *Economica*, 386-405)

FIRST THEOREM OF WELFARE ECONOMICS:

Markets equilibria always yield a Pareto efficient allocation of social endowment

That is: prices operating always yields an allocation of endowment that cannot be improved

PRICES are the instruments through which informations about agents preferences are spread

BUT
Price mechanism does not operate inside a firm

The firm differentiates from markets since the process of resources allocation doesn’t take place through the price mechanism, but through an <u>authority mechanism</u>

May the authority mechanism be more efficient than the price system in the allocation of the resources?

The answer should be negative

BUT

We actually observe both the markets operating AND the existence of firms in an economy

some job exchanges may take places both in the markets and inside a firm

architect who sells her project of a new house to a home-building company → this exchange takes places inside the market

the architect may be an employee of the home-building company → the same exchange takes places inside the firm

THE NATURE OF THE FIRM??

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- What is the firm?
- Which is the role of the firm?
- Why do some exchanges take place in the markets and others inside the firm?

→ For which economic transactions the firm operates better than the market?

- Which is the best contractual relationship in the different situations. Which contractual relationship may lever the effort of an employee or of a manager
- Which organizational practice is the most suitable to the different circumstances (a more hierarchical structure works better than a more horizontal one? When does it happen?)
- Which is the most suitable financial structure of the firm? Debt? Emission of new shares?

Is profit maximization what a firm does or ought to do?

1. If the managers of a firm don't maximize profits, then the firm will be taken over by some other company (which can make money by maximizing profits) and the managers will be fired. Since the managers don't want to be fired, they maximize profits.

BUT

- There can be the unhappy possibility that in order to avoid being taken over , the incumbent managers of a firm may pursue any number of strategies to avoid a take over, even to the detriment of the profits
- Takeover targets will be those firms from which the rider can expect to extract profits for himself, which not necessarily coincide with firms whose current management is not pursuing maximal profits

Is profit maximization what a firm does or ought to do?

2. Profit maximization is in the best interests of shareholders of the firm. Shareholders can and do create incentive schemes for managers that force managers to do what is best for the shareholders.

   Hence managers maximize profits

Assume that a firm has market power both in output and in factor markets: the *xyz* corporation

Consider two shareholders of the *xyz* corporation

Shareholder 1 (Mr. 1): is a consumer of the output of *xyz*

If he consumes a lot of the output of ***xyz*** and owns a relative small quote of its shares, he can even be hurt by ***xyz***'s exercise of profit maximizing, more than he is helped by the distribution of those profits to shareholders

<u>Shareholder 2 (Mr2): sells inputs to *xyz*</u>

If Mr2 owns a relative small quote of its shares, he can even be hurt by *xyz*'s exercise of profit maximizing, more than he is helped by the distribution of those profits to shareholders when the firm is not competitive, the effect it has on prices can reverse the beneficial effects of greater wealth for the consumer-sellers/shareholder.

We know that the consumer *i*'s problem is to maximize his/her utility function subject to a budget constraint:

$$\sum_{c=1}^{C} p_c x_c \leq \sum_{j=1}^{J} s^{ij} p z^j$$

It is clear that consumer *i* is better off if his wealth is increased, that is if pz^j increases (as long as $s^{ij} > 0$) and *p* doesn't change.

In this case the budget constraint loosens.

But if *p* changes with z^j, then no clear statements can be made

Anyway, all depends on the *j*'s equity hold by consumer *i* with respect to the quantity of *j's* output consumed by him

$$\uparrow \sum_{c=1}^{C} p_c x_c \overset{\le}{>} \uparrow \sum_{j=1}^{J} s^{ij} pz^j$$

If increases in the expenditure of consumer *i* are larger, less or equal to the increases of the quote of wealth he receives by the maximizing behavior of the firm

All this is not to say that firms with market power don't maximize profits, only that "because it is in the interest of shareholders" is a poor excuse indeed

If a firm doesn’t maximize profits, what might it do?

If the managers of a firm do not choose a production plan to achieve maximal profits, how do they decide their actions?

MANAGERIAL THEORIES OF THE FIRM:

managers are moved by a very personal priority scale in their decisions about the production planes of the firm

Managers are often motivated by things other than their salary.

They are often motivated more by power and prestige than by wages.

And the prestige is linked to the size of her organization, measured either in terms of gross sales or in terms of capital

Obviously the pursuit of ever-increasing sales will shortly drive a firm into bankrupt

We can hence imagine a manager whose objective is to maximize sales or capital subject to a minimum profit constraint:

$$\underset{z}{Max} \quad \textit{sales}$$

$$\textit{s.t.}$$

$$\textit{minimum profit}$$

A manager liking her position of prestige and power may well become conservative in the action she takes so as not to lose her position in some risky venture that holds out excellent prospects of profits in expectation

THE FIRM AS A BEHAVIORAL ENTITY

Nelson R. and S. Winter (1982) “An evolutionary theory of economic change”, Harvard University Press

Firm’s production function:

$Y_j = Af_j(L,K)$

Nelson and Winter contend that it is unlikely that the firm would even be aware of the distribution of the technological coefficients that characterize its possible production function

What the firm knows is its production *ROUTINE*

Firms will change their production routines only infrequently

In fact, changing production routines implies costs:

- Of hiring and/ or dismissing;
- In terms of adaptation of the other members of the organization to the new routines.

The firm is imagined as a “TRUCE” among the various subjects who operate inside the firm. Among various employees (also managers), shareholders, suppliers, and so on, wherein the conflicting interests of these parties are reconciled

Since firm’s productivity routines are in any time the results of such truce and since as every truce, once made is difficult to rearrange, hence it is also hard to admit that productivity routines will systematically react to any small change of the market opportunities or of technology.

That is not to say that firms never change what they do, but they change relatively less frequently than the neoclassical model would predict

- firms change in response to a clear perception that making a change represents **substantial** gains
- they do not necessarily optimize in any exact term. But they search almost at random for ways in which to change, and <u>especially</u>, they tend to imitate the actions of those rivals that they think are doing better

Indeed the patterns of search and imitation that a firm chooses to employ is itself subject to organizational routine; if one method of search/imitation has proved to be good in the past, then it is the method to consider also at the present and in the future, until the firm feels the need to change its search/imitation routine.

- the short-run production routine
- the long-run process of search for better routine

→ The empirical analysis is mainly of case studies