Existence boundaries and organization of the firm

In this essay we present the main developments of the theories of the firm rooted in Ronald Coase's influential article " The Nature of the Firm", 1937. In this article he gave valid explanations based in economic theory for two major questions, that are why do firms exist, and why is each firm a certain size? We are going to explore these important topics- of the nature and boundaries of the firm, as well as the internal organization of the firm basing in his theory, which is a transaction- based theory.

Coase in his article, since 1937,[1]points out the need to incorporate transaction costs in the analysis of contractual decisions (Coase[1]later reaffirms this in his paper in what was called the " Coase Theorem" specifying that without transaction costs, institutional choices are not an issue). The first question a theory of the firm should be able to answer is what a firm is. According to Coase (1937), the existence of the firm is due to the existence of transaction costs, and the firm's boundaries are defined by a simple calculus. The firm stops growing when at the margin, the external transaction costs (the cost of the same transaction executed outside the firm in the market) equal the internal ones.

-The existence of the firm: Ronald Coase offers explanations for why in given markets there is a need for the institutional modality of the firm. His explanations that have been given have one feature: they explain the rationale for the existence of firms in terms of the need to economize on costs, such as transaction costs, agency costs, and supervision and monitoring costs. In this view these explanations assume that a given transaction can be carried out either in a market or in a firm, and that it is only the cost saving that determines where it will in effect be carried out.

The Coase answer to the question of why the firms exist is supported by the suggestion that transaction costs in practical firms are inferior than the costs of production carried out and coordinated through the market. The descriptive focus of this case is on the reduction of costs connected to the transactions involving individuals.

According to Coase (1937) if by contrast production was organized on the basis of market or other exchanges and through negotiated and renegotiated contracts between individual and self-employed producers, then equivalent facilities for cultural transmission and learning would not exist. Arguably, individual-to-individual relations tend to be more intensive and endure longer within the firm than in exchange or markets, despite the partial migration of labor in and out of firms. The relative cohesiveness and longevity of the firm as a durable organization facilitates the transmission of information and the generation of appropriate practical knowledge. Often this practical knowledge in the form of competences can exist in the body of an organized group of individuals only: it would not survive in a world of contracting and re-contracting individual agents. In such a contractual world without firms, productivity growth would be lower. And once the firm emerges its higher productivity could drive self-producers out of business. According to this more efficiently coordinate collective learning processes than market organization can be explained by the firm existence. The coordinating function of entrepreneur is realized through the coordinating instrument of price mechanism; it is the work of entrepreneurs to inquire through price mechanism and coordinating the actions. The approach of Coase, concerned with the existence and rationale of firms and organizations is explained

exclusively in terms of the idea that transaction costs are reduced relative to the alternative, exchange-based mode of co-ordination. The focus of this explanation is on the reduction of costs related to transactions executed by individuals.

What limits the extent of the firm? Coase argues that analysis of the firm may be illuminated by the " principle of marginalism" (p. 404) and relates this to the problems of the setting of the boundaries of the firm. Coase gives the transaction cost explanation that the firm would grow to the point where, at the margin, or the net benefits of firm organization were no

greater than of exchange-based coordination. This is summarized by Coase in a simple rule that a firm will be likely to enlarge until the costs of organizing an additional transaction inside the firm become the same with the costs of the same transaction outside the market or the costs of executing the transaction in another form of organization. (p. 395).

(Over fifty years later, Coase[2](1988) repeated this as stating that " the limit" to the size of the firm is set when the scope of its operations had expanded to the point at which the costs of organizing further transactions inside the firm exceeded the costs of running the same transactions through the market or in another firm.)

When Coase deals with the setting of the boundaries of the firm, he focuses on the cost side. Coase makes the question on why all production cannot be carried on by one firm. (1937, p. 394). He concludes that there would come out to be certain possible explanations. First, if the firm increases the activity, also the costs of organizing the additional transactions increase.

Because of this there may be that the returns of the firm decrease; but the firm stays to the point where the costs of organizing an additional transaction inside the firm are equal to the costs implicated in running the transaction outside in the market, or, to the cost of organizing by other form of organization.

Secondly, it may be, that because of an increase in the number of the transactions organized inside the firm, the firm fails to position the factors of production to their highest efficiency uses, that means is unsuccessful to make the best utilize of the production factors. Again, the firm reaches and stays to a point where the loss from the misuse of resources is the same to marketing costs of transaction outside in the market or to the loss whether the transaction is executed by another form of organization. Finally, between a large firm and a small firm are present comparative advantages, reflecting the higher levels in the supply price of larger firm's factors of production. Of course, the firm stops the expansion till a point determined by an arrangement of the factors mentioned above. Coase then argues the other conditions will be equal, that a firm will tend to expand the activity if, 1) the costs of organizing are low, and the increase in the transactions organized will bring a lower amount increase these costs, 2) the entrepreneur is going to make less mistakes, or the lower increase in mistakes will happen with the increase of the transactions organized, 3) the less the rise of the supply price of bigger size firms of factors of production. (1937, pp 394-97)

But what happens to the transaction costs as the level of that activity rises. The answer to this question is related with marginal analysis applied to the question of the boundaries of the firm as Coase argues. And to explore this

question we have to establish what are the types of Coase's " marketing" costs, or costs of market exchange.

Coase argued that a series of market contracts may be substituted by one contract between the entrepreneur and the owner of a relevant factor of production, in turn reducing all the costs of making that transaction. And what were these costs of using the market mechanism? The most evident the cost of " organizing" production throughout the price instrument is that to discover what the appropriate prices are. This cost might be reduced but it would not be removed by the coming out of experts who will vend this information. The costs of discussing and finishing a contract for each exchange transaction that occurs in a market has also to be taken into account" (1937, pp. 390-91).

So the extent of the firm is limited by the increasing marginal costs of organizing more transactions within the firm and decreasing returns of managerial ability.

Coase also noted that other costs of using the market derived from risk and uncertainty and the difficulties of forecasting impeding the formation of long term contracts.

(At this point, a " modern" approach to the question of what constitutes the costs of market exchange would introduce notions of opportunism and asset specificity (Williamson, 1985, 1998). However, we are still endeavoring to pursue the analysis on the terms set by Coase in his original framework, and are setting aside these issues by Coase's own point of view, not considering opportunism as significant sources of transaction costs.)

Bordered rationality of entrepreneurs is discussed and mobilized in order to explain the limits of the firm. As noted by Coase, it is because the entrepreneur fails to proper use the factors of production to their greatest value. This inefficiency of production factors comes when the number of transactions organized inside the firm increases. In other words, a firm will be predisposed to be bigger if less “ the entrepreneur is to make mistakes” (p. 394-6).

Also, Coase pointed out that the “ dissimilarity of the transactions” (p. 397) will increase the costs of organizing a transaction within a firm.

Furthermore, the role of uncertainty is claimed, explaining why depending on sectored consideration, firms may be more or less present. For example, considering the use of long term contracts, Coase affirmed that due to the complexity of forecasting, the longer the phase of the contract will be for the supply of the good or service, the less probable, and the less attractive it is for the individual purchasing to indicate what the other contracting party is projected to do. (p. 391) According to Coase the fundamental nature of the firm, and its basis of advantage over the product of markets, lies in its certain kind of flexibility to respond to different circumstances of change and to possible uncertainty.

Lastly, Coase considered how a change in the institutional environment may affect the decision to create firms:

” If we consider the operation of sales tax, it is clear that it is a tax on market transactions and not on the same transactions organized within the firm. Now since these are alternative methods of “ organization” – by the price

mechanism or by the entrepreneur – such a regulation would bring into existence firms which otherwise would have no reason to enter” (p. 393).

To sum up, Ronald Coase in 1937 launched modern economic theory by arguing that firms would exist only in environments, in which firms perform better than markets would. He suggested that some environments might have high transaction costs, which cause markets to perform inefficiently. Coase then went on to explain that firms exist, because of inefficiencies in the marketplace. Any firm would tend to expand according to this logic, up to the point where the costs of organizing an additional transaction inside the firm becomes the same to the costs of executing the same transaction by ways of an exchange in the open market. The number and type of organizations, which would make up an economic system, would also be shaped by the costs involved in co-ordination and transactions. Where the costs of transaction and co-ordination between value adding entities is high, large hierarchies in the form of autonomous firms would predominate as they could achieve economies of scale in production and distribution. However, where transaction and co-ordination costs approach zero, markets would become the dominant form of economic organization, efficiently arbitrating how value is created and exchanged. According to transaction cost economics, the difference between external (market) or internal (hierarchy) activities are due to transaction costs, where transaction costs are defined as costs incurred for setting up and enforcing contracts.