

Ronald Coese's role on Transaction Cost Economics explanation for vertical restraints

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Abstract—Transaction Cost Economics revealed that vertical market restraints are contractual devices of partial integration that reduce the transaction cost of relying upon the market. This paper aims at analysing the influence of Ronald Coese's work on Transaction Cost Economics.

Keywords: Transaction Cost Economics, Ronald Coese, vertical restraints

I. INTRODUCTION

Transaction Cost Theory aims at analysing the essential features of transactions, in order to understand the reason why some transactions are performed in the market and others through alternative organizations structures, such us vertical restraints. Within TCE approach the principal unit of analysis is transaction [1].

This theory aimed at overcoming the price theory failures, which was considered the economic paradigm of industrial organization and competition policy.

The firm in price theory was the underpinning of the market, performing a technological function, carrying out a central role in resource allocation. In that process, the firm played a production function which transformed inputs into outputs, within the firm boundaries. The firm in price theory was the unit of analysis.

Within this approach, the firm was a legal entity, focused on the production, and management acted rationally, making decisions relating to the production process, based on perfect information [2].

The inner workings of the firm were ignored by economists¹.

¹ Ronald H. Coase, The Institutional Structure of Production, AM. ECON. REV., Vol 82, N° 4, 1992, p. 714, considers the neoclassical firm a *black box*, metaphor also used by Richard N Langlois, "Contract, Competition, and Efficiency", Brooklyn Law Review, Vol 55, 1989, p. 834, "The economist's firm-at least until recently-was a black box, a production function that took in inputs and transformed them into outputs".

Also mentioning the black box Michael C. Jensen, William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", JFE, Vol 3, N° 4, 1976, pp. 306-307 and Meese, "Monopolization, Exclusion, and the Theory of the Firm", Minn Law Rev, Vol 89, 2006, p. 775. Demsetz, "The Structure of Ownership and the Theory of the Firm", J.L. & Econ, Vol 26, 1983, p 377, states that "It is a mistake to confuse the firm of economic theory with its real-world namesake. The chief mission of

From this perspective, vertical integration was justified by technology, as it happened with the classic integrating iron-making and steel-making, which effectively reduced the cost of production, decreasing the price and increasing the output. In the absence of this technological justification, vertical integration was considered anti-competitive.

This technological justification also explained the horizontal integration, through the merger and internal expansion, with economies of scale and consequent reduction of production costs. Market power attained by the firm had to be justified by these benefits. Competition law should distinguish the efficient horizontal integration from the inefficient, according to the outcome from the balance of restriction benefits against its harms [3].

Accordingly, neoclassical price theory provided a technological explanation for the firm.

The transaction costs economics will demonstrate that different firms can produce products or complementary activities, preserving the autonomy and ownership, through, whenever it seems reasonable, nonstandard forms of contracting, given the existence of transaction costs².

In this sense, Coese work proved to be essential when he demonstrated that all activities normally assigned to firms, such as production, allocation and calculation, could be performed in the market, through a set of costless transactions between independent agents [4].

This lead transaction costs theory to search for an explanation for the management decision regarding to contract out or to produce internally, overcoming technological justification of price theory³.

neoclassical economics is to understand how the price system coordinates the use of resources, not the inner workings of real firms."

² The term 'non-standard contract' refers only to partial contractual integration such us tying, exclusive dealing, minimum resale price maintenance. Oliver E. Williamson, The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting, New York: The Free Press, 1985, pp. 13, 23-25, 371.

³ This paper as R. H. Coase, *The nature of the firm: influence*, J.L. ECON. & ORG, Vol. 4, N°. 1, 1988, p. 33, recognizes was ignored for thirty years. Nevertheless, we can not forget authors that preceded Coese, l such us, Maurice Clark, who in *Overhead Costs*, 15 years earlier, developed a theory about the influence of the coordination and contracting costs on the firm

II. COASIAN NATURE OF THE FIRM

Coase in his 1937 seminal essay *The nature of the firm* showed that individuals, only in the theoretical model of perfect competition, could totally rely upon the market to replicate the activities taking place within firms, by entering into perfect and complete contracts with partners to pursuit of economic activity, where the perfect knowledge, combined with the celebration of perfect contracts, prevented the existence of opportunistic behavior [5].

In this model, firms and individuals could, without costs, rely upon the market to conduct economic activity, given that, as rational beings, they had a perfect knowledge, communicating with each other in a process also costless⁴.

There were no transaction or enforcement costs, since these perfect contracts were able to govern all aspects of the relationship established between the parties and, therefore, could easily be enforced by the courts [6].

Coase, applying the analysis of transaction costs, revealed in *The nature of the firm* that the firm's structure is determined by the balancing of the costs and benefits of domestic production in comparison with the external market. This means that the firm analyses the costs, risks and production efficiencies associated with the performance of a particular function through the market and its internalization, opting for the solution which has less costs. The firm boundaries are drawn by the decision making procedures that favor the solution presenting greater marginal value, regardless the fact that these functions are performed within the firm or in the market [7].

In this sense, the firm boundaries are set when the cost of an additional transaction within the firm exceeds the cost of performing the same transaction using the market or another firm⁵.

Coase was able to offer a transaction cost explanation for firm's decision to perform internally the task instead of relying upon the market⁶.

decision making process, sustaining the relationship between negotiation and bargaining costs with the decision of contracting out, anticipating the theory of information "impactedness", later developed by Williamson. Hovenkamp, Coase, Coase, *Institutionalism, and the Origins of law and Economics*, Indiana Law Journal: Vol. 86: Issue 2, p. 536.

⁴ Frank H. Knight, *Risk, Uncertainty, and Profit*, Boston, Houghton Mifflin, 1921, pp 76–86. Stigler, *The Theory of Competitive Price*, New York: Macmillan 1942., pp.21–23, also accepted these assumptions. Nevertheless in *Economics of information*, his theory of information will reveal information costs.

⁵ R.H. Coase, *The Nature of the Firm*, cit., p. 394, *idem*, *The Nature of the Firm: Meaning*, J.L. ECON. & ORG, Vol. 4, N° 1, 1988, pp. 19-32. Herbert Hovenkamp, Coase, Institutionalism, and the Origins of Law and Economics, Indiana LJ, Vol. 86, 2011, pp. 539 refers "as long as the marginal costs of internal production are lower than the marginal costs of using the market, the firm will produce internally and vice-versa"

⁶ Ronald H. Coase, 'Nature of the Firm', 4 *Economica* (n.s.) (1937), p. 403, explains that "To determine the size of the firm, we have to consider the marketing costs (that is, the costs of using the price mechanism), and the costs of organizing of different entrepreneurs and then we can determine how many products will be produced by each firm and how much of each it will produce

However, Coase, in *The nature of the firm*, despite using transaction costs analysis to determine when the company uses internal processes or uses the market, does not surpassed the neoclassical notion that limits the firm to the decision to make or buy [8].

The impact of transaction costs in the decision to assume internally the production process or to use the market stems from the fact that by Coase understood that, given the absence of perfect information, the use of the price mechanism to organize production had costs. The most obvious cost was the discovery of the relevant price [9].

The cost of negotiating and contracting emerging from market contracting must also be added to the transaction cost. These costs will be as higher as more detailed are the contract terms. In this sense, Coase points out that there are cases, such as a regular supply, it is more appropriate to make long-term contracts, instead of several short-term contracts, in order to prevent the risk of behavior of the parties and to reduce some transaction costs. Nonetheless, long - term contracts have higher costs, because of uncertainty resultant from the incapability to foreseen all the problems that the future may bring to the contractual relationship and the need for the parties to conduct a detailed specification of the contractual conditions, which increases trading costs⁷.

It does not mean, however, that the firm will not have to enter into agreements with the inputs that become part of the overall organization, but will substantially reduces these agreements. Indeed, the firm does not have to make several contracts, as when relies upon the market, provided it contracts with the factors of production coordinated within the firm. On the other hand, these contracts grant the entrepreneur the power to direct resources, within certain limits [10].

The firm thus appears as a device to suppress the price mechanism and avoid the transaction costs, despite the internalization of economic activity also involves internal costs, in particular, coordination costs.

Indeed, by giving rise to the firm, the entrepreneur succeeds in building an organization.

The entrepreneur will be able to trade with other inputs and directing resources within the boundaries of the firm. The entrepreneur will get factors of production at a lower price than the offered by the market transaction, given the savings of some marketing costs, later referred to by Coase in *The problem of social cost*, as transaction costs [11]. However, if the cost is higher, it will always have the option of relying upon the market [12].

⁷ Ronald H. Coase, "Nature of the Firm *Economica*, New Series, Volume 4, Issue 16 (Nov., 1937),p. 391 coined the risk attitude to refer the risk of behavior of the parties. This *risk attitude* matches the opportunistic concept developed by Williamson, "Markets and Hierarchies: Some Elementary Considerations", AM. ECON. REV, Vol. 63, N° 2, 1973, p. 317. Ronald H. Coase, *The Problem of Social Cost*, J.L. & ECON, Vol. 3, 1960, p. 15, refers that "In order to carry out a market transaction it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up a contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on."

The firm is a special form contract which, as a deviation from the standard contracts, will be qualified as nonstandard contract, whereby the factors absorbed by the firms' organization accept voluntarily, within certain limits, the entrepreneur's management powers⁸.

This assertion grounds the contractual nature of the firm, which is not only limited to concept of the firm as a nexus of contracts, but it will also be present in the theories of the firm, offered by the incomplete contracts theories⁹.

The use of the price mechanism by the firm, abandoning the neoclassical perfect information assumption, presents costs with the discovery of the relevant price, the negotiation and conclusion of the contract, that the firm, as a nexus of contracts over which the entrepreneur exerts control, have the ability to decrease. The firm is thus a type of contract under which the inputs are linked to the entrepreneur's management powers, choosing to perform economic activity within the firm than in the market [15].

At the heart of Coase's perspective is the importance of the relationship of authority present in the employment contract that allows the entrepreneur to coordinate factors of production, reducing transaction costs. The firm, in this approach, is a center of authority by which the entrepreneur coordinates resources, saving transaction costs arising from legal relationships characterized by autonomy¹⁰.

III. CONCLUSIONS

The role assigned, brilliantly, by Coase in 1937, to transaction costs in the emergence of the firm and its size will allow Williamson, in the 70s, to overcome, definitively, the technological concept of the firm, where the firm is only a centralized unit of productive resources, replacing it by a concept of the firm, where it assumes a substantive aspect,

⁸ Ronald H. Coase, "Nature of the Firm *Economica*, New Series, Volume 4, Issue 16 (Nov., 1937), p. 391. Later, R.H. Coase, *Nature of the Firm: Meaning*, J.L. *ECON. & ORG.* Vol 4, 1988, p. 28, considers the firm a "special kind of contract". Steven N. S. Cheung, *The Contractual Nature of the Firm*, cit., p. 3, explains that the firm "is simply a shorthand description of a way to organize activities under contractual arrangements that differ from those of ordinary product markets. The author also states that 'The Contractual Nature of the Firm', JLE, 26, 1983, p. 5 that the firm involves "a form of contract that binds the input owner to follow directions instead of determining his own course by continual reference to market prices of a variety of activities he may perform"

Cfr. R.H. Coase, *Nature of the Firm: Influence*, J.L. *ECON. & ORG.* Vol 4, 1988, cit., p. 41. This contractual approach sustained by Coase is very different from Knight concept of firm, where *design and direction* took a central role and the *contractual form* was despised. Cfr. Langlois, "The entrepreneurial theory of the firm and the theory of the entrepreneurial firm", *Journal of Management Studies*, Vol 44, N° 7, 2007, 1114.

⁹ For instance, Property rights' theory of the firm, transactions costs economics and relational contracting theories.

¹⁰ This point of view will be later developed by Simon, Herbert A. (1951), 'A Formal Theory of the Employment Relationship', 19 *Econometrica*, 293-305

Langlois, Richard N. and Foss, Nicolai J., *Capabilities and Governance the Rebirth of Production in the Theory of Economic Organization* (1996). *Economics Working Papers*. Paper 199602, p. 6. Online. Available at :Paper 199602 http://digitalcommons.uconn.edu/econ_wpapers/199602, considerer that at the center of Coase's explanation for the emergence of the firm are the coordination costs.

being composed by a number of people interacting voluntarily with each other and with other agents in the market, making decisions that affect the form of organization adopted and the size of the firm, giving relevance to the market analysis [16].

We can not ignore, though, that transaction cost analysis was also present in Chicago School Economics¹¹.

Grounded on Coasian foundations, the economic analysis performed by Transaction Costs Economics, will explain the firm as a governance mechanism and vertical market restraints will be therefore mechanisms of partial contractual integration, designed to reduce "the cost of transactions, that is, the cost of relying upon an unbridled market to conduct economic activity"[17].

This analysis will have to be, however, left for another paper.

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¹¹ Cfr. Wright, *The Roberts Court and the Chicago School of Antitrust: The 2006 Term and Beyond*, *Competition Pol'y Int'l*, 2007, Vol. 3, N° 2, p. 34. Hovenkamp, "Harvard, Chicago and TCE", *Antitrust Bull*, 55, 2010 pp. 622- 623, also supports the proximity between TCE and Chicago School. The author sustains though that TCE has helped antitrust develop a new center somewhat closer to the Chicago School than to the hostility position reflected by structuralism and the traditional leverage theory.