

# Introduction

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## 1 THE THEORY OF THE FIRM

In his seminal paper, 'The nature of the firm', Nobel Prize winning economist Ronald Coase (1937) introduces transaction cost theory, and defines the firm in relation to the market. Coase suggests that, given the presence of imperfect information, production will be centralized in the firm when the costs of doing so are cheaper than the costs of coordinating production through the market price exchange mechanism. The firm therefore is defined as a 'system of relationships' (ibid.), or as a 'nexus for a set of contracting relationships among individuals' (Jensen and Meckling, 1976, p. 8), which only 'comes into existence at the direction of the entrepreneur' (Coase, 1937, p. 393).

Figure 0.1 summarizes the Coasian argument. Here the vertical axis measures cost differences between internal organization and market transactions, and the horizontal axis measures asset specificity, denoted by  $k$ . The  $\Delta Y$  curve measures the differences in production costs when an item is produced in a vertically integrated firm, and when it is exchanged through a market transaction. It is positive at every level because outside suppliers can always aggregate buyer demands, and take advantage of economies of scale and scope to lower production costs below the production costs of the firm. The  $\Delta Y$  cost difference curve is downward sloping because higher levels of asset specificity ( $k$ ) implies more specialized uses for the input, and fewer outlets for the outside supplier, and so increased asset specificity reduces the possibility of scale- and scope-based advantages.

Next, the  $\Delta X$  curve measures differences in exchange costs when an item is produced internally, and when it is purchased from an outside supplier. It is positive for low levels of asset specificity, because then transaction costs are low, but quickly becomes negative as the levels of asset specificity increase. Higher levels of asset specificity suggest higher levels of transaction costs, and beyond point  $k^*$  these costs are so large that vertical integration is more efficient than market exchange. Finally, the  $\Delta Z$  curve is the

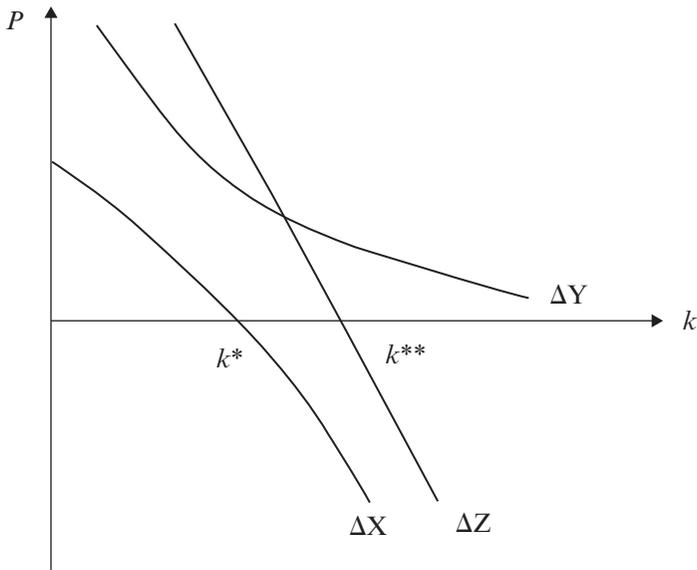


Figure 0.1 The boundaries of the firm

vertical summation of the  $\Delta X$  and  $\Delta Y$  curves; it represents production and exchange costs under vertical integration, minus production and exchange costs under market transactions. When positive, the market exchange is preferred, and when negative the exchange costs of using the market more than offset the production cost savings, and vertical integration is preferred. Point  $kk^*$  then becomes the black and white Coasian boundary.

## 2 THE BLURRING OF BOUNDARIES

According to Klein (1983, p. 373), however, in reality ‘such a sharp distinction does not exist’. In its simplest form, Coase’s model offers clear and distinct boundaries between firms and markets – and hence between firms themselves which, it is suggested, are connected through markets – but does not allow for boundaries or subdivisions within firms. It is well known, however, that multiple markets exist within the firm, and that boundaries are blurring not only between firms, but even between the firm and the state.

In the aftermath of the financial crisis, for example, the boundaries between public and private have become increasingly unclear. As state actors in the US and Europe have slowly acquired ever more significant

shares of private firms, while public and non-profit organizations adopt business practices, the question of where exactly the state stops and private industry begins is becoming an increasingly difficult question to answer.

Between organizations too, boundaries are becoming increasingly blurred. The rising popularity with which 'joint service centres' are being created, for example, raises some interesting questions. From a policy perspective, for instance, is it optimal to allow competitors to enjoy scale economies in the provision of 'non-core' products and services? And, from the firm's perspective, is it really beneficial to create joint ventures in, for example, research and development (R&D), when the resultant subsidiaries do not demonstrate strong ties to their parents? The existence of such 'intermediate forms' of activity, operating between firms and markets, however, draws into question the applicability of Coase's theory (Richardson, 1972).

Klein (1983, p. 373) suggests that Coase must also be updated to consider 'transactions occurring within the firm as representing market relationships', because as the state plays more of a role in internal governance, the functional areas of the firm have to adapt. Different product lines and/or projects, for example, are increasingly encouraged to adopt a market mechanism, and to compete for resource allocations. Between firms, competitors can be welcomed into the fold (creating a patent pool) as alliance partners competing with another set of firms cooperating as an alliance to create a dominant design (standard). Traditional boundaries between 'them' and 'us' are continuously challenged on multiple levels relevant from an economic or business perspective.

### 3 CHANGES IN THE THEORY OF THE FIRM

A number of theories have been put forward to explain the blurring of Coasian boundaries: the managerial, the behavioural, and the Schumpeterian approaches.

Of these, the managerial theories – as developed by Baumol (1959 and 1962), Marris (1964) and Williamson (1996) – probably takes the dimmest view of the blurring boundaries. Managerial scholars suggest that managers seek to maximize their own utility, and that it is an asymmetry in the interests of the manager and the owner that explains the deviation from the behaviour suggested by transaction cost theory. More recently this has developed into 'principal-agent' analysis (Spence and Zeckhauser, 1971), which suggests that managerial behaviour arises either because the agent has greater expertise or knowledge than the principal – that is, the owner or shareholder – or because the principal cannot directly observe the

agent's actions. The principal-agent problem is a leading explanation for the observed destruction of value, for example, in the case of mergers and acquisitions (Martynova and Renneboog, 2008).

The behavioural approach – as developed in particular by Cyert and March (1963), and which builds on Herbert Simon's work in the 1950s – is somewhat more forgiving, and suggests that 'limited cognitive ability' causes 'bounded rationality' but also 'framing', and that it is this which results in non-Coasian outcomes. Behavioural scholars suggest therefore that the blurring of boundaries is not evidence of self-interested managerial behaviour, but of the fact that a human manager cannot possibly weigh up all the costs and benefits of an action, and cannot therefore always adhere to the one best solution suggested by Coasian theory. Rather, managers tend to 'do the best they can', and it is this that sometimes leads to the selection of a suboptimal alternative. Furthermore, Cyert and March argued that the firm cannot be regarded as a monolith, which scrutinizes every decision against a single utility-maximizing condition. Firms and organizations, they suggest, are composed of different individuals and groups, each of which has its own aspirations, and often conflicting interests, and therefore organizational behaviour is the weighted outcome of these conflicts, rather than the actions of a single individual.

## 4 THE RISE OF THE KNOWLEDGE ECONOMY

In the Schumpeterian literature, and in a knowledge economy, the firm is seen in a different light. Rather than a simple 'nexus of contracts', the firm is seen to be a creator of knowledge through localized search efforts in and around production (Nelson and Winter, 1982; Rosenberg, 1982; Nelson, 1991). Such efforts, however, often require knowledge exchanges between individuals, between firms, and between firm and non-firm actors. And if the flows of knowledge, and the extent to which firms draw upon external capabilities rise sufficiently, then the boundaries of the firm blur.

Developments in information and communication technologies, and a more liberal anti-trust environment for interfirm cooperative arrangements, have facilitated this expansionary process, and encouraged the proliferation of cooperative ventures, by removing some of the constraints which had the capabilities for industrial growth centralized within large firms (Langlois, 2002). The result is a shift towards a more open structure of interfirm network relationships, and a decline in the relative significance of the traditional pyramid-like structure of organizational hierarchy. The result is that firms became specialist 'integrators' of different systems of knowledge, each of which was derived from internal and external sources

(Ernst and Kim, 2002), and embedded in a series of internal and external business networks (Forsgren et al., 2005).

This process of business network formation simultaneously, however, not only blurs the boundaries between firms, but also erects new boundaries within the firm. In an environment of open structures, subsidiaries, for example, or other subunits, may independently choose to initiate and/or participate in different networks, and do so at such a frequency that the company's headquarters is unable to fully understand the diversity of its networks, as they develop. In addition, a given business network may connect a selection of internal and external actors, so that parts of the network belong to some common corporate group, but there are other subunits of the same group that may have no association with this network. So, if an entrepreneurial initiative begins in conjunction with network partners, the relevant focus of analysis may become the localized network, rather than the firm as such. As a result, the barriers to knowledge exchange between different units of the business in large firms can, it is suggested, become as much of an issue as the boundaries between firms, with the result that tension may develop between the local interorganizational networking relationships of an intrafirm unit and its wider international networking relationships with other parts of its corporate group.

## 5 ON THE NATURE OF BOUNDARIES

The boundaries of the firm are therefore active and dynamic places. Boundaries are typically contested, and have been compared to rivers, which 'tend to stick in their places, doing damage when they wander'.<sup>1</sup> Borders should not, however, be treated as a negative of behaviours elsewhere. In some academic domains, this is well understood.

Law, for instance, draws boundaries between what is allowed and what is not allowed.<sup>2</sup> At the same time, however, the law relies on boundaries for it to be effective. Without impregnable geographical boundaries, at least to some extent, the law is toothless. And enforcement of the law boils down to keeping the boundaries in place.

In sociology and anthropology, inclusion and exclusion, and the active contestation of their implied boundaries, is a long-standing research theme. What is included and what is excluded defines communities as well as organizations and firms: 'They' do not belong to 'us' (Elias and Scotson, 1965; Barth, 1970; Dolfsma et al., 2009). By establishing a border, a relatively stable sphere is created, which is safe and predictable in relation to an outside that is not. The inside/outside distinction that boundaries create 'lies at the collective' (Falk, 1994, p. 121). Boundaries

will thus function not only as thresholds, controlling inflow and outflow, but also as binding structures, producing and reproducing internal unity (Llewellyn, 1994, p. 14). The boundaries created to impose homogeneity and certainty create a common institutional 'furniture' that allows for interpretation and coordination without direct involvement of a specific individual in a specific role.

Boundaries can be persistent, but also remarkably fluid under pressure. Boundaries are not simply residuals, to be changed at will. Transaction cost economics, as we have seen, takes the romantic view that boundaries are perfectly flexible, to the point where they are inconsequential. Much has been written about where the boundaries of the firm for instance are, but little about what actually occurs at the boundaries (Casson and Wadeson, 1998). The economy, for example, is an open system (Grunberg, 1978), which makes interactions with an environment inevitable. Hence, there is a need for active boundary maintenance, controlling which information is exchanged with the environment (Weber, 1968; DiMaggio and Powell, 1983; Llewellyn, 1994). Some measure of inertia is implied, and this explains, for example, why the supposed globalization of management practices does not materialize (Pot, 2000). But a change in the permeability of a boundary, may mean that (communication) costs increase, or decrease (Casson and Wadeson, 1998).

## 6 THE NATURE OF THE NEW FIRM

In this volume, we enquire into the 'nature of the new firm'; that is, the firm that has emerged from the blurring of traditional Coasian transaction cost boundaries.

In Part I we look at the blurring of boundaries within firms, and begin with an overview by Beuglesdijk which unites the three chapters, and marks their contributions. In Chapter 1, Ashton-James et al. study the nature of managerial power within the firm, and show, with reference to the merger process, how the manager's 'experience' of power can destroy value within the firm. In Chapter 2, Zaal studies unethical behaviour, and discusses how the organizational architecture of the firm can be used to reinforce ethical behaviour. Building on the findings of Ashton-James et al., particular attention is paid here to the assignment of decision rights, the structure of performance evaluation and the reward systems. And finally, in Chapter 3, Alexiev et al. look at the role of 'advice seeking' on the whole process. The authors consider how top management teams connect to their internal and external environments and, using data from a cross-industry study of Dutch firms, investigate the relationship between

'advice seeking', and the degree of comprehensiveness, or level of rationality, in the strategic decision-making process. In line with the story of Part I, they find that external advice seeking is an important factor in the decision-making process.

In Part II we move to look at the blurring of boundaries between firms, and again begin with an overview, by Dolfsma and Duysters, which first introduces, and then unites the four chapters in Part II. In Chapter 4, Hitt and Ratinho begin with a discussion of institutions. They suggest that specific regulatory, political and economic institutions, as well as the emergence of a global economy, has affected the strategic behaviour of firms, both domestic and foreign. The strategic challenge that this poses to firms is lucidly illustrated in their contribution, and the authors make clear that firms need to develop strategic positions in their value chain if they hope to maintain a competitive advantage, and appropriate rents from their investments and innovative activities. In Chapter 5, Rietveld shows how choosing a position in a chain is not self-evident, even for established players. Rather than developing these key capabilities oneself, Rietveld shows that a firm may be forced to seek cooperation with another firm, thereby relinquishing a large part of the proceeds to this other firm.

In Chapter 6, Amiryany et al. suggest that serial acquirers can build the capabilities to share knowledge across boundaries, and investigate the micro-foundations of the so-called 'knowledge-sharing capability'. They suggest that knowledge transfer between cooperative units, and across the boundaries of the firm, is dependent upon the levels of integration. In Chapter 7, ter Wiel and Vlaar point out that the accumulation of experience in collaborating with other firms does not always contribute to a firm's competitive position. The authors argue that experience with one type of collaborative relationships is different from experience with another, and thus that lessons learned from repeated interactions with one party might not be transferable to another. Worse, they suggest that experience with certain types of collaborative relationships may even be detrimental to the performance of other types of relationships.

Finally Part III concludes with a discussion of the blurring of boundaries between public and private, profit and non-profit sectors, and deals with the issues of trust, and of boundaries between workers and management, between the clients of the organization, and the building of relations in the market. Groenewegen introduces this discussion, with an overview that unites the last three chapters. In Chapter 8, Sapulete et al. begin with a discussion on the connections between workers and management function, and argue that trust in the relationship between the two is crucial to understanding the effect of works councils on productivity during reorganizations. When trust is present, they suggest, works councils and

management can be considered as part of a closely-knit network, which enhances the functioning of organizations, while a disjointed network leads to conflict, distrust and lower productivity. Organizations struggle, however, with the control issues related to networked organizing when hierarchical lines are blurred. This has frequently been shown to be the case when a network-like perspective is applied to the core of organizing, and is the subject of Chapter 9. Here, Fiolet discusses the changing patterns of activity in organizations, and suggests that this reflects this need for exploration into new forms of organizing. Fiolet suggests that due to external changes in mission, there is an increased need to change from internal logics to demand-driven care. This new logic crosses the boundary between two forms of control, one derived from care demands, the other from cost control. The process requires the development of trust relations, it is suggested, between different departments and disciplines in health-care organizations. Fiolet's research indicates that new organizational forms increasingly emerge as a consequence of a patchwork of solutions to the problems of organizations. And, echoing prior contributions to this volume, she suggests that managerial responsibility requires some degree of control, but that the new services also require management control. Finally, in Chapter 10, Weinberg and Lee explore the blurring of boundaries between the internal and the external, public and private. In both the research and management domains, networks are a key concept, enabling proper external positioning of the organization. Therefore external relations and positioning also become increasingly important to all organizations, and marketing tools are of increasing importance in finding audiences for both social and non-profit organizations, as argued by Weinberg and Lee. Marketing, they suggest, can be described as establishing relations with new publics, and in order to succeed in marketing, trust is subsequently seen to be an essential ingredient. Thus for marketing to work effectively, the authors suggest that the organization needs to pay attention to building relationships with the public, and make clear that networks are of broader importance. The growth in the number of non-profit providers catering for the same social needs, they suggest, shows that networking with 'competitors' is essential for success.

## NOTES

1. *The Economist*, December 19, 1998 'Good Fences', pp. 19–22.
2. We would loosely define a boundary as an institution or set of institutions that separates two or more relatively homogeneous entities.

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