

Boundary Decisions of the Firm: Make, Buy, Cooperate

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Abstract

Firms are not atomistic hierarchies only linked with one another at arm's-length distance in markets. Instead, a myriad of long-lived, highly cooperative relationships between suppliers and customers are pervasively found in the B2B world. And it is within those enmeshed relationships and networks that the co-evolution of capabilities and business specialisms is brought about and developed. If that is the actual 'topography' of the business landscape, then the coordination of economic activities in general, and the boundary decisions of each and every firm in particular, are unlikely to be reduced to a (dual) choice between 'making' or 'buying'. Inter-firm cooperation is in itself a third governance structure, in alternative to the hierarchical and the market modes of coordination. And, what is also equally important to note, it is through the make-or-buy-or-cooperate decisions that the (embedded) firm is able to change its nature and scope, redefine its (fuzzy) boundaries, and thus adapt to an ever-changing business setting.

KEY WORDS: Make-or-buy-or-cooperate decisions; vertical boundaries; nature; scope; theories of the firm

1. Introduction

No firm is a self-contained organisational entity, which is only occasionally connected with a few faceless counterparts via market transactions (Hakansson and Snehota 1989). The hierarchy-market dichotomy prominently featured in mainstream economics - that presumes that firms are "islands of conscious power in an ocean of unconscious cooperation like lumps of butter coagulating in a pail of buttermilk" (Robertson and Dennison 1923, p. 85) - has no touch with the real-life intricacies of the business setting in which firms do compete, transact, and cooperate with one another (Granovetter 1985). As long as the pervasiveness of B2B cooperative arrangements is acknowledged, firms can no longer be depicted as "islands of planned coordination in a sea of market relations" or likewise as "autonomous units buying and selling at arm's-length in markets" (Richardson 1972, p. 883).

The business world is populated by a multitude of firms, which develop and sustain among themselves both aggregates of discrete transactions and ensembles of inter-related cooperative relationships (i.e., markets and networks respectively). One may easily provide evidences on the ubiquity of those business relationships and networks and reaffirm, à la Richardson (1972), the Smithian view that specialisation and interdependence necessarily go hand in hand in the B2B terrain.

1.1 Hierarchies, Markets, and Networks

The coordination of economic activities is made either through (i) the 'visible hand' of hierarchies or (ii) the 'invisible hand' of markets or in alternative, via (iii) a relational governance structure. The decisions pertaining to the so-called division of labour depend largely on the (relative) costs and benefits of (a) using the authority within the firm, (b) 'playing the market', or

instead of (c) entering into and nurturing cooperative linkages with counterparts. That is to say, a given economic activity may be coordinated (and consequently its outputs may be brought about) (i) within the boundaries of a single firm, or instead those outputs may be (ii) traded in markets (through inter-firm transactions) or otherwise (iii) systematically exchanged through mutually rewarding buyer-seller interactions (and lasting cooperative arrangements). So, the firm either 'does things by itself' (i.e., it 'makes') or 'gets things done by others' in markets or in networks (i.e., it 'buys' from or 'cooperates' with counterparts, respectively).

While the similar activities (which require the same set of resources and capabilities for their undertaking) are often housed within a firm, the closely complementary (yet usually dissimilar) activities are likely to be found inside the boundaries of counterparts with which the firm cooperates (Richardson 1972). As a consequence, vertical cooperation is bound to be critical to the internal functioning and/or development of each and every firm (Axelsson and Easton 1992). Understandably, the 'strategic importance' of customer-supplier cooperation has been frequently stressed in the B2B literature (e.g., Sousa 2010).

1.2 Boundary decisions: make or buy or cooperate

The extensiveness of B2B interactions and relationships makes it unlikely that the core business of a firm is defined (and its boundaries are delimited) merely as the result of that firm choosing either (i) to perform internally a certain economic activity (and then sell that activity's outcome in a product market) or (ii) to acquire an external activity's output (in a factor market). Inter-firm cooperation is also a possibility, alongside the common options of (i) organic development and (ii) engagement in purely transactional relations with counterparts.

The nature and role of the long-lived and complex B2B re-

relationships seem to provide valid grounds for the primary analytical thrust of this paper: that the make-or-buy dichotomy (and its related theorizing, usually transaction cost-inspired) (e.g., Zenger, Felin et al. 2011) is less than satisfactory to explain how and why the firm makes boundary decisions (concerning which activities are to be kept inside its boundaries and which activities are to be left outside, and thus which resources and capabilities are to be internally developed, bought in factor markets, or instead accessed and explored via cooperation). It seems almost intuitive that the 'vertical disintegration' increasingly observed in the business world needs to be justified by considerations other than the ones supplied by Oliver Williamson's (1979) transaction cost minimising 'recipe' for an efficient match between exchange transactions (which differ in terms of the degree of frequency, uncertainty, and asset specificity) and coordination mechanisms (namely, hierarchical, market, and relational ones).

Plus, that dual firm-market reasoning leaves little room for explaining the emergence and development of the heterogeneous governance structures (e.g., of a different size, composition, and modus operandi) that are found to co-exist in the business world. For one does not only come across either large, vertically integrated hierarchies or spot B2B (factor and product) markets.

This paper also follows Holmstrom and Roberts (1998) in their attempt to downgrade the Organizational Economics' rationale that vertical integration is the primary (if not the 'only') solution (i) to avoid or solve hold-up problems (i.e., the expropriation by an opportunistic counterpart of the firm's quasi-rents, which are the returns on its relationship-specific investments made in excess of the respective opportunity costs) and/or (ii) to provide balanced incentives to (or promote the alignment or shift of incentives between) two cooperating parties.

Given the aforementioned conceptual state of affairs, this paper primarily aims to provide a few building blocks for a robust theoretical foundation to emerge in favour of the make-or-buy-or-cooperate decisions of the firm.

The paper is organised as follows. In the next section, one discusses briefly the division of labour in the business world and its causes and consequences. The third section of the paper addresses the (heterogeneous) nature and scope of the firm, in particular the different kinds of capabilities and the activities that the firm is likely to develop and perform internally. In the fourth section, one strives to add to the (incipient) analytical framework on the make-or-buy-or-cooperate decisions, therefore rejecting the quasi-axiom - à la transaction cost economics - that there is only a polar boundary choice on offer (namely, either the firm makes itself or buys from others). The final section includes the theoretical implications.

2. Specialisation and cooperation: the co-evolution of business specialisms

Adam Smith (1776) was the first to identify the substantial advantages that are likely to result from the division of labour, namely (i) the increasing dexterity and efficiency in the performance of each activity (and its sub-activities) and/or (ii) the development of 'local' innovations. The analysis of various 'businesses' operating in the 18th century (most notably, the pin-maker factory) led him to two major claims: (i) that, given each individual's 'power' (and 'disposition') to engage in exchanges of productive surpluses, self-interest may stand out as the primary cause of the division of labour; and (ii) that the conspicuous inequality of human expertise promotes and is reinforced by increases in the division of labour (Smith 1776, pp. 109, 119, 120).

But Adam Smith also made an important caveat. Though largely beneficial, specialisation cannot be pursued limitlessly. It is limited by 'the extent of the market', as George Stigler's (1951) dictum made clear later on. That is to say, any increase in the productivity of an activity (i.e., in the form of a higher efficiency and/or a greater throughput) has to be accompanied by the growth of the market demand for that activity's outcome.

The Smithian rationale was extended a century and a half later by Allyn Young (1928), who was focused on the 'increasing returns' that were often brought about by the deployment of a high-throughput machinery. Young argued that the division of labour sets in motion a series of changes both within firms and across industries (e.g., novel know-how, activities, and products, or new startups). All those changes (not only of a qualitative kind) are the result of a cascade of teaching and learning processes taking place inside as well as beyond each firm's boundaries.

Those (in- and out-) flows of knowledge may help explain why the internal economies of otherwise large, multi-product firms are likely to give way to the internal and the external (also know as Marshallian) economies of highly specialised firms (Young 1928, p. 538). Firms may thus take advantage of their own economies (of a limited scope) as well as of the economies explored by (highly specialised) counterparts. Young (1928, pp. 528, 538) further acknowledged the B2B embeddedness by claiming that (i) the external economies usually exceed the sum of all firms' internal economies and (ii) the growth of some industries is contingent on the growth of other, mostly vertically related (ancillary) industries.

So, inasmuch as firms are often engaged in lasting vertical cooperative arrangements with each other, their nature and scope are likely to be inter-connected (Granovetter 1985). That is to say, the nature and the scope of a firm affect and are affected by, to varying extents and in diverse ways, the nature and scope of the counterparts with which that firm is directly and/or indirectly connected (e.g., a supplier and a customer's customer, respectively). Given the 'generalised connectedness' of firms (as well as of their cooperative relationships), 'co-evolution' is likely to be a notorious feature of the B2B world (Levinthal and Myatt 1994, p. 49).

2.1 Division of labour inside and among firms: differentiation and interdependence

Though one intuitively understands that the division of labour necessarily features the increasing (sub-)division of economic activities (i.e., 'differentiation'), one is not usually ready to grasp the attendant 'integration' of the resulting outcomes. But what is often the case, the specialisation of firms goes hand in hand with the development and reinforcement of B2B cooperation (Piore 1992).

Regardless of the respective field of expertise, being (or becoming) a specialist does not make one self-sufficient; the contrary is the norm. The division of labour impels the (specialist) firm to access and explore the dissimilar yet closely complementary resources and capabilities (that are likely to be found within the boundaries of counterparts), often through vertical cooperative arrangements.

This specialisation-cooperation duality inherent in the division of labour, firstly alluded to by Adam Smith (1776, pp. 116-7) who stated that final products were the joint outputs of a diversity of labour efforts, was explicitly recognised by Alfred Marshall (1890). By taking advantage of a biological, evolution-

any outlook on the survival and development of organisms in the natural world, Marshall (p. 241) foretold the concurrence of differentiation and integration in the business landscape: “(...) that the development of the organism, whether social or physical, involves an increasing subdivision of functions between its separate parts on the one hand, and on the other a more intimate connection between them. Each part gets to be less and less self-sufficient, to depend for its well-being more and more on other parts, so that any disorder in any part of a highly-developed organism will affect other parts also”. Allyn Young also seemed to share that view, by remarking that “(...) an increasingly intricate nexus of specialised undertakings has inserted itself between the producers of raw materials and the consumer of the final product” (1928, p. 538, emphasis added) and recommending that “industrial operations [should] be seen as an interrelated whole” (1928, p. 539). And Wroe Alderson’s (1965) functionalist theory of marketing also argued for the existence of a sequence of inter-related B2B exchanges (i.e., ‘transvections’) in each distribution and marketing channel.

So, it is no surprise to say the division of labour entails the emergence and the co-evolution (and increased interdependence) of business specialisms over time. One should bear in mind that the primary benefits of the division of labour, efficiency gains (e.g., reduced production costs) aside, include both the enhancement of the existing resources and capabilities of the firm and/or the development (or co-development) of new resources and capabilities. Marshall (1890, p. 241, emphasis added) also made this point: “This increased subdivision of functions, or ‘differentiation’, as it is called, manifests itself with regard to industry in such forms as the division of labour, and the development of specialised skill, knowledge and machinery (...)”.

3. The embedded firm

Given that the firm is endowed with only a limited set of resources and capabilities, it is always in need of external (closely complementary yet dissimilar) resources and capabilities for its survival and/or growth. That limitedness (and heterogeneity) is arguably the major reason for the notorious embeddedness of the firm; but one should also take into account that the heterogeneous nature of the firm is likely to be ‘fed’ by its embeddedness.

It thus makes little sense to depict each firm as a fully independent and clearly bounded hierarchy, which is surrounded by a wider environment over which it has but a smaller influence. The real brick-and-mortar firm has no rigid (vertical) boundaries and is semi-autonomous, being deeply entangled in a variegated texture of economic, social, and technological linkages with multiple counterparts (Hakansson and Snehota 1995).

3.1 Business setting: context and environment

The firm does not operate only in a hostile and uncontrollable environment that exists independently of that firm’s intents (and surely predated it and enduring after its demise), and with the impact of which the firm needs to cope.

Besides those faceless and all-powerful environmental forces (e.g., political, economical, technological, and social ones), the firm is to be found within a context (Hakansson and Snehota 1989). That context includes all the distinct, full-faced counterparts that the firm knows relatively well and with which it interacts directly and/or indirectly over time, mostly via cooperative relationships (namely, suppliers, customers, suppliers’ suppliers,

customers’ customers, and even competitors and complements). Any context is therefore (co-)created and shaped, to varying extents, by each of the participating firms.

Each firm should no longer be taken to be a mere (unilateral) decision-maker and resource controller (Ford, Hakansson et al. 1986). The firm is mostly interaction-oriented, thus being much more than a production function.

3.2 Nature and scope: resources, capabilities, and activities

When looked in detail, the firm is nothing more than a heterogeneous bundle of resources and capabilities (Penrose 1959).

Many resources are available for purchase in factor markets; yet, the most ‘valuable’ resources usually can only be developed inside the firm and at a substantial cost. Imperfectly imitable resources, such as reputation or brands, are examples of the latter (Barney 1986). In addition to resources, one is also likely to find within the firm’s boundaries a certain mix of capabilities.

Corporate capabilities (either individual or collective) are the distinctive know-how internally developed over time as a result of the repeated and varying skilled performance of a given set of activities (so-called ‘routines’), which often involves the combined deployment of several resources (e.g., blue collar workers, machinery, electrical power, and organisational culture to mention a few) (Dosi, Nelson et al. 2000). In short, capabilities may be seen as a knowledge-based, idiosyncratic by-product of the firm’s routinised praxis over time, in both doing things and getting things done (Loasby 1998).

Any capability development process is likely to be time-consuming and costly, for both trial-and-error learning and huge investments are needed in order to create, refine, and revise the firm-specific and ‘sticky’ tacit knowledge of ‘how to do competently (some but not all) things’ (Nonaka and Takeuchi 1995).

Each firm can be seen as a highly specialised organisational entity that knows how to do a few things by itself and consequently, that needs to (and does) know how to get other things done by others (Nelson and Winter 1982). That is to say, the firm has direct and indirect capabilities, both of which contribute decisively to its survival and growth (Loasby 1998).

4. Either make or buy... Why not cooperate?

Each firm is an interdependent hierarchy with fuzzy (vertical) boundaries within which resources and capabilities are somewhat developed, deployed, combined, and modified as well as activities are performed with varying degrees of efficiency, efficacy and/or proficiency. Those boundaries are not fixed once and for all; regardless of how vertical boundaries are ‘drawn’ at a given point in time, they can be changed yet often at a cost (e.g., if the firm needs to cope with rapidly changing product market conditions).

4.1 Boundary decisions, neither twofold nor discrete

For the firm, keeping or changing boundaries is basically about choosing (i) which resources, capabilities, and activities reside (or should be brought) internally and consequently, (ii) which resources, capabilities, and activities are to remain ‘outside’ (and thus be left promptly accessible and explorable through cooperative relationships with counterparts or to be intermittently purchased in markets). This is the basic thrust of each of the mul-

multiple make-or-buy-or-cooperate decisions that the firm makes over time, for which there is no definitive recommendation.

Different theories and conceptual frameworks are bound to issue contrasting normative guidelines on boundary decisions, that is to say, 'where' the firm should define its (vertical) boundaries and therefore 'what' is likely to be the (limited) scope of the firm. At the forefront of those theories is likely to be the transaction cost economics, which argues that the firm should opt for the organic development (instead of the internalisation of inputs or even the vertical integration of the respective suppliers) whenever the overall costs of the 'making' option are exceeded by the costs potentially incurred in the 'buying' (e.g., see Williamson 2005). The firm should thus opt for the efficiency-maximising governance structure that brings about the lowest (relative) costs of coordinating the relevant economic activities.

One of the most important shortcomings of the transaction-cost minimising rationale is that it neglects for the most part the substantial impact that B2B cooperative relationships usually have over where the firm's vertical boundaries are to be 'drawn'. That impact, which has been lent both analytical and empirical support, mostly under the research umbrella of the markets-as-networks theory (e.g., Araujo, Dubois et al. 2003) but also elsewhere (e.g., Barney 1999), can be grasped as follows: the firm may keep its vertical boundaries unchanged while, at the same time, extending (or reducing) its scope by engaging in (or terminating) cooperation with competent counterparts. The firm may thus alter its scope without having to redefine its boundaries, that is, without needing to opt for making or buying things.

With that relational impact in due consideration, two arguments are likely to be brought to the foreground of analysis: (i) that the boundary decisions of the firm need to be examined in a greater detail; and (ii) that the definition of vertical boundaries is unlikely to be the outcome of a series of discrete boundary decisions taken by the firm over time.

The boundary decisions of the firm are seldom discrete and dichotomous (cf. Williamson 1975). Firstly, those decisions are likely to be closely connected to each other over time, as well as somewhat linked with the boundary decisions of the significant counterparts with which the firm maintains strongly cooperative arrangements. Holmstrom and Roberts (1998, p. 92) seem to take a similar viewpoint: "It is (...) questionable whether it makes sense to consider one transaction at a time when one tries to understand how the new boundaries are drawn. In market networks, interdependencies are more than bilateral, and how one organises one set of transactions depends on how the other transactions are set up."

Secondly, and more importantly, the boundary decisions of the firm are threefold given the availability of a third option, namely that of cooperating with others in alternative to the conventional make or buy choices (Gibbons 2001). The firm is not necessarily obliged to either develop organically or internalise all the resources and capabilities that it needs in order to do the things that it does (or aims to do), since there may be the possibility of accessing and exploring (at a cost) those externally available resources and capabilities, primarily through vertical cooperation.

4.2 The (few) things that the firm does, hence the (other) things that it gets done

There seems to be a relevant argument that is largely overlooked in any of the mainstream theories of the firm: that the things that the firm does by itself and the things that it gets done by others, which are both 'consequences' of the multiple make-or-buy-

or-cooperate decisions the firm took over time, are likely to be inter-related to some extent (Araujo, Dubois et al. 1999).

First, one knows that the firm does the things that it is capable of doing with the inputs at hand. That is to say, the firm performs the activities for which it has the required (internal) resources and capabilities as well as by taking advantage of some externally available resources and capabilities. But there may also be the case that the firm does some things by itself only because it is unable to get those things done timely, efficiently, and/or proficiently. For (i) there may be no (highly) competent counterpart(s) with respect to the demanded activities and (ii) the firm is unable to persuade others to do the things that it would aim to get done, most likely because very high dynamic transaction costs were to be incurred.

The 'relatedness' of the things that the firm does and the things that it gets done is a corollary to the fact that there are always some things that the (highly specialised firm) is in need of and can only find outside its boundaries: and in those cases, the firm may choose to get those things done either through arm's-length relations or by engaging in cooperative relationships with counterparts.

To grasp that relatedness, one may think of, for instance: (i) a particular firm that requires a specific set of resources and capabilities (which are closely complementary yet dissimilar compared to those that it owns and controls internally) in order to perform a given set of activities and to obtain the respective outputs; and (ii) that such set of resources and capabilities is externally available (e.g., can be found within the boundaries of a clearly identified supplier). What is the firm to do then? Should the firm internally develop that set, even if the stand-alone option incurs a great amount of organic development costs and entails a lot of time and a higher risk of failure (e.g., given the absence of previous experience in such resource and capability development processes)? Or in alternative, is the firm advised to readily acquire that set of resources and capabilities in an open market? Or instead of internalising the aforementioned set, should the firm access and explore it through a long-standing cooperative arrangement?

Regardless of the firm's basis for making each of its boundary decisions (and the outcomes that it expects to obtain from that decision), one may always wonder why that was the case. As Richardson (1972) presciently argued, there is likely to be no comparative advantage whatsoever for a particular set of closely complementary yet dissimilar resources and capabilities being brought within the boundaries of the firm, through internal development, internalisation, or vertical integration. That potential 'disadvantage' may help explain the firm's choice for exploring important resources and capabilities through cooperation, given that a relational governance structure is likely to be more advantageous (e.g., allowing the firm to take advantage of a greater productive efficiency or a higher level of proficiency in a particular activity or even in a given field of expertise).

One should always bear in mind that the costliness of developing or internalising resources and capabilities (especially the dissimilar ones) warrants a careful assessment by the firm (Barney 1999). For in many observed instances, the hierarchical as well as the market governance costs to be potentially incurred by the firm are likely to outweigh the costs resulting from engaging in the alternative of B2B cooperation. Plus, the benefits of adopting a relational governance structure may largely exceed the potential benefits of opting for the internal development or the internalisation of those needed resources and capabilities or even for the vertical integration of a highly resourceful, compe-

tent counterpart.

Interestingly, Williamson's (1979) analysis suggests that the relational benefits and costs may be more 'attractive' than the benefits and costs being brought about in either the hierarchical or the market governance structures whenever the asset specificity under consideration is symmetrical (and not too high). This may be the case regardless of the degree of contractual incompleteness and the frequency of the inter-firm exchange episodes under consideration, and assuming that there is a moderate uncertainty concerning the future 'states of the world' (namely, forthcoming contingencies and the respective 'appropriate' actions to be taken by the firm).

In the event of any or both of the two above-mentioned conditions being observed (i.e., the relational benefits outweigh the hierarchical and/or the market governance benefits and the relational costs are less than the hierarchical and/or the market governance costs), inter-firm cooperation is very likely to emerge and thrive. And it is the conjunction of those two conditions that may well put flesh on the bones of Richardson (1972), who first advanced the *raison d'être* of the mutually rewarding cooperative arrangements developed amongst buying and selling firms over long periods of time. Needless to say, the B2B cooperation goes alongside the heterogeneity of firms, with the latter demanding and reinforcing the former.

5. Implications

This paper builds upon three major analytical stepping stones: (i) Richardson's (1972) view on the three governance structures co-existing in the business world (namely, hierarchies, markets, and inter-firm cooperation); (ii) Nelson and Winter's (1982) and Loasby's (1998) arguments on the business relevance of both the direct and the indirect capabilities of the firm (i.e., the firm's know-how to do things by itself and its know-how to get things done by others, respectively); and (iii) Holmstrom and Roberts' (1998) analysis on the determinants of boundary choices.

It primarily endorses a knowledge-based view of the firm, thus taking that highly specialised hierarchical entity as competing in markets as well as being deeply embedded in wider B2B cooperative arrangements and networks. Each business specialism evolves gradually on account of the firm's routinised performance of (and the associated development of the idiosyncratic, tacit knowledge of how to do distinctively well) only a limited number of activities within a given field of expertise, through the combined deployment of a restricted bundle of internal and external resources and capabilities.

The (potentially expandable) scope of the firm, which is grounded in the limitedness of the internal resources, capabilities, and activities, is likely to lead to the appropriation of substantial specialisation gains (e.g., a higher throughput or a greater productive efficiency). The magnitude of those gains is likely to justify at large the extent of vertical disintegration (and B2B cooperation) found throughout the business world.

In short, the firm often chooses to be a specialist, thus striving to become increasingly competent at performing only a few (core and ancillary) activities. And as Young (1928) stressed, that decision implies that the firm deliberately relies on some ('significant') external business specialisms, with which it is often connected through cooperative arrangements. So, the firm's rule of thumb is to be both highly specialised and strongly linked with (vertically related) specialists, both upstream and downstream.

This (knowledge- and network-based) view of the firm im-

plies that a different conception of the boundary decisions and of the strategy development process needs to be brought to the foreground.

5.1 Make or buy? There is no such thing as a twofold boundary decision!

No firm is a business island, which is only occasionally linked to other firms through purely economic transactions. As the Richardsonian (1972) analysis made clear, three governance structures co-exist in the business world: hierarchies, markets, and inter-firm cooperative arrangements. So, to think of the boundary decisions of the firm as a twofold and discrete decision-making process is a delusive way to conceptualise the way the firm proceeds to change its nature and scope, mostly in order to adapt to evolving contextual and environmental conditions.

The (trichotomous) boundary decisions of the firm are hence about choosing what things it makes by itself and what things it gets done by others (either buying from or cooperating with them). That is to say, the firm chooses one of three alternative options: (i) to internally develop the resources and/or capabilities it needs and to perform the required activities in-house; or (ii) to internalise the valuable resources and capabilities it is in need of, by engaging in transactions with counterparts (or even by vertically integrating those counterparts as a whole); or (iii) to access and explore those (external) resources and/or capabilities by developing and sustaining cooperative arrangements with competent counterparts.

5.2 The (quasi-extended) nature and scope of the firm

By taking boundary decisions, top managers often intend *inter alia* to change the nature and scope of the firm (e.g., by choosing to 'make X' or 'buy the input Y from supplier A' or 'cooperate with supplier B in order to explore the input Z').

The make-or-buy-or-cooperate decisions are likely to lead to (mostly incremental) modifications in both the things that are to be found within the boundaries of the firm (i.e., its internal resources and capabilities) and the things that it is capable of doing and of getting done (i.e., internal and external activities). But while the making and the buying options imply the expansion of the firm's vertical boundaries (given that new resources and/or capabilities are organically developed or are internalised, respectively), the (bilateral) decision to cooperate with a counterpart does not necessarily bring about any boundary change. So, it is worth stressing that the alternative of engaging in cooperative arrangements allow to extend the nature (and more importantly, the scope) of the firm while leaving unaltered its increasingly fuzzy vertical boundaries.

The nature and scope of the firm are greatly delimited by its (vertical) boundaries; but the fuzziness of those boundaries, in face of the widespread B2B cooperation, makes unlikely that the nature and scope of the firm are defined once and for all by boundaries alone. Cooperation provides for the possibility that the nature and scope of the firm can be both enlarged (or reduced) even if the firm's vertical boundaries stay unchanged: for instance, consider the case of a large multinational firm that chooses to expand its scope of activities on the basis of newly explored, external resources and capabilities, which are accessed through a recently developed cooperative relationship with a foreign and highly proficient supplier.

As Patel and Pavitt (2000, p. 329) correctly stress, the (inter-

nal) resources, capabilities, and activities make up the *nature* or 'core' of the firm, rather than trace unequivocally its (vertical) *boundaries*. Moreover, that *threefold* nature sets at large the scope of the firm, that is to say, the things that the firm both does and is capable of doing with varying degrees of efficiency, efficacy, and/or proficiency. But one must also bear in mind that the scope of the firm is *not unrelated* to the scope of (significant) counterparts: for the firm's scope is likely to be affected by (and to affect), to varying extents, the scope of the (most important) suppliers and customers with which the firm develops and maintains strong and long-lived cooperative arrangements over time.

5.3 A new view... of corporate strategy?

The mainstream strategic management literature often depicts corporate strategy largely as a tool at the firm's disposal, which is aimed at the creation and renewal of competitive advantages in a cut-throat business setting (e.g., by means of putting to work a low cost leadership) (Porter 1980). But, as Axelsson (1992) and Gadde et al. (2003) point out, the embeddedness of the firm and the co-evolution of capabilities (and of business specialisms) are likely to demand a very different outlook on corporate strategy.

Strategising in the highly networked B2B world is more likely to boil down to (re)defining the nature and scope of the firm over time, that is to say, making decisions and taking actions concerning (i) what the firm owns and controls within its (fuzzy) boundaries and (ii) the things the firm both does and gets done by others, at present and in the future. Strategy-making, in essence, may be all about deciding: (i) which resources and capabilities are to be owned and controlled by the firm (and thus being kept within boundaries) and which activities the firm is to perform (and is capable of performing); as well as (ii) which external resources and capabilities (and activities) are to be accessed and explored by the firm via (mostly vertical) cooperative arrangements.

If this is so, a 'good' strategy-making process is likely to add to the likelihood of business survival, by promoting the dynamic alignment of the firm with (i) a changeable context (e.g. rapidly shifting customer preferences or modifications in a major supplier's productive process and output) and/or (ii) an unpredictable environment (e.g., new regulation, economic stagnation, or a technological breakthrough) (Hakansson and Snehota 1989).

This said, it seems that a quite different analytical view on the intricacies of the (embedded) strategy development processes taking place in the B2B world is to be advanced (e.g., see Sousa 2010). One hopes that such a theoretical account, among other possible lines of research on the firm, may built upon the arguments put forth in this research paper.

Acknowledgements

The author greatly appreciates the in-depth criticisms and constructive remarks of one anonymous reviewer to earlier drafts of the paper, yet taking full responsibility for all remaining errors and omissions.

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