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The strategic relevance of business relationships: a preliminary assessment

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**THE STRATEGIC RELEVANCE OF BUSINESS RELATIONSHIPS:
A PRELIMINARY ASSESSMENT***

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ABSTRACT

The ubiquitous contention within the Industrial Networks literature - that business relationships are one of the firm's most important resources - has not been, in our viewpoint, thoroughly explored. Hence we argue that the 'Resource-based View of the Firm' ('RBV') may complement the network-based reasoning on the strategic relevance of business relationships. A theoretical framework is proposed – a competence-based view of the firm – which solves RBV's terminological and inconsistency problems and, more importantly, assures compatibility with the network perspective's assumptions. The possibility of cross-fertilizing the Industrial Networks and RBV theories seems not only real, but also conceptually profitable for both theoretical fields.

Keywords: Business Relationships, Industrial Networks, Resource-based View of the Firm, Competence-based View of the Firm

JEL Classification: M10; M31

1. INTRODUCTION

It is generally considered, across the Industrial Networks literature, that business relationships¹, are among the firm's most important resources (Ford *et al.*, 1998). This is illustrated by the following citations chronologically found throughout that literature:

“Where the network view of the organizational context holds, some of the organization *relationships* with other organizations in the network *constitute in themselves one of the most – if not the most – valuable resources* that it possesses. Through these relationships with other parties, resources and activities are made available and can be mobilized and exploited by the organization in order to enhance its own performance. Access to the other party's resources – resources that complement those of the focal organization – constitutes an important asset” (Hakansson and Snehota, 1989: 154-5, emphasis added)

“Indeed one of the central issues in this [network] paradigm is the sharing of control over what is regarded as *a key resource: exchange relationships*. Control over this resource increases a firm's ability to access the resources of its partner” (Easton and Araujo, 1993: 14, emphasis added)

“As *a relationship* makes various resource elements accessible for the parties it also *constitutes [in itself] a resource that can be used and exploited (...)*. A relationship is one of the resources the company can exploit and use in combination with other resources (other relationships) available to the company” (Hakansson and Snehota, 1995: 26-7, emphasis added)

Apparently shared by most researchers of the Industrial Marketing and Purchasing (IMP) Group, the contention that business relationships are one of the firm's 'strategic' resources does not seem to have been, to our knowledge at least, sufficiently discussed and justified. The argument that business relationships are strategic in nature and relevance (that this contention implies) is, to a large extent, supported by what they accomplish for the focal firm: (a) the access to the other actors in the network, as well as to their (i.e., external) resources

¹ We did not find any non-ambiguous definition, within the Industrial Networks literature, for business relationships. This absence may be explained by business relationships being, by their own nature, *counterpart specific* (i.e., involving the joint creation and renewal of mutual obligations, expectations and possibilities), and hence somewhat *incompletely definable*. Drawing partially on Gulati's (1998) notion of '*strategic alliances*', we tentatively define business relationships as 'voluntary arrangements between firms that (a) are sometimes deliberately designed, whereas more often emerge from recurrent interactions (requiring, in any case, actors' investments for their development and maintenance), (b) hence involving, to varying extents, explicit and tacit elements (e.g., contracts or trust), (c) result from a wide range of motives (e.g., access to distribution channels, risk sharing), (d) take a variety of forms (e.g., joint ventures, consortia), and (e) occur across vertical and horizontal boundaries (i.e., connecting the focal actor to its suppliers, customers, partners, rivals, and so on)'.

and activities (Hakansson and Snehota, 1989, 1995; Gadde *et al.*, 2003), (b) the enhancement (i.e., strengthen or change) of an actor's network(s) position(s) (Mattsson and Johanson, 1992), and (c) the value creation potential of business relationships (Wilson and Jantrania, 1996; Sharma *et al.*, 2001). Such motives may be necessary, but do not seem to be sufficient conditions for advocating business relationships' strategic nature and relevance.

Accordingly we suggest that the '*Resource-based View of the Firm*' (henceforward 'RBV'), in particular its notion of '*strategic resources*' (Penrose, 1959; Barney, 1986, 1991), may shed more light on this regard. The firm is thus seen to comprise a '*bundle of resources*', which may include business relationships. This is not an absurd argument, at least within the RBV literature, as some of the most prominent resource-based theorists have included business relationships amongst the firm's resources (see, for example, Barney, 1991; Amit and Schoemaker, 1993; Teece *et al.*, 1997).

Enquiring the contended strategic nature and relevance of business relationships (certainly a major theoretical issue for the network-based perspective) may lead to some (possibly normative) implications regarding firms' relationship strategies, that is, the individual and collective management of firms' portfolio of business relationships (e.g., divest if a business relationship is perceived as 'non-strategic', or otherwise reinvest in it).

This paper is organized as follows. We start by offering a succinct overview of the network-based and resource-based perspectives. The strategic relevance of business relationships to the focal firm is then discussed (namely the industrial network's explanations for it). As the basic premises of network-based and (orthodox) resource-based views are quite different (in some cases, even antagonistic), their possible incompatibility is briefly discussed in the fourth section. In this respect, a competence-based view of the firm (i.e., a holistic framework derived from the heterogeneous RBV literature) which overcomes that incompatibility is advanced. Finally, we outline some issues needing further elaboration, in our attempts to extend the network-based rationale on the strategic relevance of business relationships.

2. THEORETICAL BACKGROUND

2.1 The network-based perspective

It was more than thirty years ago that the view of an atomistic, faceless, totally hostile and uncontrollable environment, wherein firms were self-sufficient “*islands of planned coordination in a sea of market transactions*”, was first rejected (Richardson, 1972: 883). Since then, markets are seen, at least by a stream of thought, to encompass ‘*dense networks of co-operation and affiliation*’ through which firms are *de facto* interrelated (op. cit.).

No firm exists in complete isolation (Ford *et al.*, 1998). If we take a glance at the (incredibly changing) competitive landscape of nowadays, we can easily identify enmeshed webs of business relationships (e.g., joint ventures, consortia, alliances, trade associations, interlocking directorates) in which firms are deeply embedded and accruing interdependences which are difficult to unfold. Such interdependences (e.g., of a technical, knowledge, social, administrative, legal type) accruing to business relationships, while providing multiple opportunities to firms, also impose them severe constraints. Hence one may argue that business relationships are both demanding and rewarding (Hakansson and Snehota, 1995).

Firms seem to enter into business relationships for a variety of reasons (e.g., access to distribution channels or to foreign markets, cost reduction, risk sharing, increase speed to market) (Barringer and Harrison, 2000). Some of the primary motives for business relationships’ formation (and simultaneously, some of the major benefits obtained by firms that are involved in business relationships) are: (a) improvement of existing, or creation of new, internal resources and capabilities (Hakansson and Snehota, 1995); (b) access to, and exploitation of, external (complementary) resources and capabilities (Dyer and Singh, 1998); (c) joint development of new resources and capabilities (Hakansson and Snehota, 1989); (d) joint creation of new knowledge (i.e., innovation) (Hakansson, 1987); (e) cope better with (or reduce) firms’ environmental uncertainty (Hakansson and Snehota, 1995); (f) coordination of dissimilar (but complementary) activities (Richardson, 1972); (g) increase of firms’ efficiency (Hakansson, 1989); (g) exercise (or augment) of influence and power in the network (Hakansson and Johanson, 1992).

There can be, however, disadvantages associated with participating in business relationships, e.g., loss of proprietary information, growing dependency on partners and ensuing loss of decision autonomy, opportunistic behaviour of partners, lock-in effects (Barringer and Harrison, 2000).

Just like human relations, the majority of business relationships are strong, long-term and stable (although not a completely static) phenomena (Easton, 1992). They evolve continuously over time, traversing several stages wherein mutual '*adaptations*' are made, perceived commitment is increased, and consequently, '*distance*' between parties is reduced, that is, partners increasingly trust each other (Ford, 1980; Turnbull *et al.*, 1996). As each business relationship has a history of its own (e.g., differing in the parties involved, investments made, and degree of mutual trust and commitment built), the uniqueness of business relationships is contended (Hakansson and Snehota, 1995).

Because business relationships differ in their relative importance, and can only be developed through incremental investments of (limited) firm resources, they should be handled in quite different ways. In this sense, a '*relationship strategy*' is advised for the firm (Turnbull *et al.*, 1996).

2.2 The resource-based view

Firms' differences in performance (and the sources of their disparate competitive advantages) have been, since the 1970s, one of the major research thrusts in the Strategic Management field (Rumelt *et al.*, 1994). On this matter, two prominent perspectives emerged: the '*Industry and Competitive Analysis*' framework (Porter, 1980) and the RBV (Penrose, 1959).

With the formal emergence of the RBV by the mid-1980s (Rumelt, 1984; Wernerfelt, 1984)², the explanation of performance differentials – until then related to industry's structural conditions - changed towards firms' internal resources. Rather than embracing the industry analysis' view of firms (as '*portfolio of products*'), the RBV adopts the notion, that it traces to Penrose (1959), that the firm should be seen as encompassing a '*bundle of resources*'.

RBV's historical origin is arguably related to Penrose's theory of the growth of the firm, even though other contributions were paramount; Phillip Selznick (1957), Alfred Chandler (1962) and Kenneth Andrews (1971), in this chronological order, also anticipated much of resource-based thinking and may be considered as RBV precursors (Foss, 1997a).

Firm heterogeneity is considered the fundamental stepping stone for resource-based theorizing (i.e., firms should be seen as heterogeneous entities possessing distinct resource

² Despite being traced (mostly in hindsight) to Penrose's (1959) theory of the growth of the firm, Foss (1997a) argues that RBV's formal appearance has taken place during the 1980s with the publication of three works (Lippman and Rumelt, 1982; Rumelt, 1984; Wernerfelt, 1984).

endowments) (Penrose, 1959; Rumelt, 1984; Nelson, 1991; Amit and Schoemaker, 1993); as firms are dissimilarly endowed, they implement different strategies (by deploying their unique resources), and consequently, differ in the performance achieved. In addition to firm (and resource) heterogeneity, isolating mechanisms and *ex post* limits to competition³, and environmental uncertainty are also considered RBV cornerstones (Rumelt, 1984; Wernerfelt, 1984; Peteraf, 1993).

RBV's main objective can be briefly stated as "(...) *to account for the creation, maintenance and renewal of competitive advantage in terms of the resource-side of firms*" (Foss, 1997a: 4). It is particularly interested in examining the link between a firm's internal resources and its performance (Barney, 1991).

RBV's underlying logic is that firms, by (a) deploying idiosyncratic resources (Dierickx and Cool, 1989; Barney, 1991), (b) exploiting factor markets' imperfections (or enjoying pure luck) (Barney, 1986), and (c) deciding about resource development and deployment (Amit and Schoemaker, 1993), are able to obtain competitive advantages (i.e., economic rents⁴) (Conner, 1991; Amit and Schoemaker, 1993; Peteraf, 1993). Since rents are created, they must be sustained (i.e., kept within the firm) (Dierickx and Cool, 1989; Conner, 1991; Peteraf, 1993) and renewed (i.e., regenerated) by the firm (Penrose, 1959; Teece *et al.*, 1997).

³ Rumelt (1984) defines isolating mechanisms as phenomena that preclude the *ex post* equalization of firms' rents (e.g., legal regulation, switching costs, patents, brand, reputation). Peteraf (1993) coins the notion of *ex post* limits to competition (i.e., resource imperfect imitability and imperfect substitutability) to label the forces that prevent firm rents from being competed away.

⁴ Four types of rents may be distinguished (Mahoney and Pandian, 1992; Amit and Schoemaker, 1993): *Ricardian rents* (i.e., earnings from exploiting scarce resources), *Pareto rents or quasi-rents* (i.e., the added value between a resource best used and its second next best use), *Entrepreneurial or Schumpeterian rents* (i.e., earnings achieved by risk-taking and entrepreneurial insight in an uncertain and complex environment), and *Monopoly rents* (i.e., earnings derived from the exercise of market power, collusion or government protection). Ricardian and Pareto (and Schumpeterian?) rents are related to resource-based deployment of firm's resources, whereas Monopoly rents are mainly associated with an Industrial Organization way of competing.

3. THE STRATEGIC RELEVANCE OF BUSINESS RELATIONSHIPS TO THE FOCAL FIRM

We believe that business relationships' strategic relevance (and nature),⁵ as advocated throughout the Industrial Networks literature, needs further reflection and justification. In other words, the strategic relevance of business relationships seems not to have been as thoroughly discussed and established as it deserves. Our stance is that the contention - that business relationships are one of the firm's most important resources - is often asserted, but not sufficiently explained or explored in the literature. Three major reasons have been advanced to justify that contention:

i. Access to other actors in the network, and to their resources and activities. Arguably, Gadde et al. (2003: 358-9) make explicit what seems to be (implicitly) suggested by many other IMP researchers – that business relationships are strategic resources of the firm because (a) they provide access to external (complementary) resources and activities, (b) they account for the majority of the revenues and procurement expenditures (i.e., they connect the focal firm to its main customers and suppliers), and (c) they connect the focal actor to the rest of the network of business relationships in which it is embedded (e.g., financial institutions, partners, rivals, and so forth).

ii. Enhancement of an actor's network(s) position(s).⁶ Business relationships are seen as means to influence (i.e., reinforce or alter) a firm's position(s) in the network(s) in which it is deeply embedded (Mattsson and Johanson, 1992). Through business relationships, an actor can (a) influence other actors, business relationships and consequently network structures (e.g., by breaking business relationships, establishing new, or altering the character of existing, business relationships), and (b) restructure the web of interdependences at the production system level (e.g., reducing dependence of the firm on counterparts' resources and

⁵ We will henceforth use the term '*strategic relevance*' to refer to '*strategic relevance and nature*', as business relationships' relevance somehow 'comprises' their nature. business relationships' relevance (i.e., the consequences for firms entering them) encompasses the unknown, whereas nature (i.e., business relationships' own features) emphasizes a more '*here and now*' (verifiable) perspective. Moreover, if we take into account the path(history)-dependent development process of business relationships (Wilkinson, 2001), nature and relevance seem to be related (in a one-way dependence): business relationships' (future) consequences hinge upon their (mainly present, but also future) features, whereas business relationships' (present) consequences are a reflection of their (mainly past, but also present) features. The nature of business relationships is not significant *per se*; matters only insofar as it influences relevance. Accordingly, business relationships' relevance is thus less unknown (than one may initially thought), as it strongly depends on their nature. Relevance thus seems the primary dimension of business relationships.

⁶ A network position, changeable over time, consists of the firm's portfolio of relationships and the rights and duties associated with these relationships (Turnbull *et al.*, 1996). Developed through interaction with others (e.g., by influencing others' expectations), it is the basis of firm's reputation, influence and behaviour in the network and also a resource that can be used to establish new relationships (Ford *et al.*, 1998). Arguably, firms' positions in the network are interrelated (Easton, 1992).

activities, or increasing counterparts' dependence on the focal actor's resources and activities).

iii. Value creation potential of business relationships. Firms often engage in business relationships with the purpose of creating and appropriating value.⁷ Such value is ambiguous in nature, only subjectively measured (perceived), and thus difficult to assess objectively. Moreover, the perceived value of a business relationship, in a certain point in time, depends on each and every past relationship episode (Ravald and Gronroos, 1996). The vast majority of research conducted on business relationships' value creation has mainly privileged benefits and been mostly focused on the customer's perspective, hence neglecting the sacrifices accruing to maintaining and developing business relationships and the value created for the supplier (Walter *et al.*, 2001).

Nevertheless, to our viewpoint, these motives are altogether not sufficient to justify business relationships' strategic relevance, that is, they do not smoothly imply that '(all?) business relationships are strategic to the firm' assertion, which pervasively underlies the network theorizing. Many business relationships are terminated (deliberately or not), with minor implications (or even no consequences) for one, or both, firms involved. As an illustrative example, one may take the business relationship between X and Y (one of X's suppliers). We can imagine situations where X may prefer to maintain (or deepen) this business relationship even when: (a) the direct bond to Y, indirect connections (via Y) to other actors, and access to Y's (and to its counterparts') resources and activities are deemed dispensable; (b) that business relationship is not pivotal in preserving X's position(s) in the network; and/or (c) X-perceived value of such business relationship is low (i.e., sacrifices accruing to the business relationship far exceed explicit attained benefits).⁸ In all these situations, X's decision of not

⁷ The value concept has many different meanings across various fields (e.g., marketing, finance, accounting) (Wilson and Jantrania, 1996). Still, value may be defined as the actor-perceived (subjective) trade-off between benefits and sacrifices accruing to a business relationship (Ravald and Gronroos, 1996). Wilson and Jantrania (1996: 62-3) note three types of a business relationship's value to a firm: *economic value* (e.g., cost reductions in production, improvements in product quality), *behavioral value* (e.g., strengthened corporate culture, enhanced social bonding and teamwork abilities), and *strategic value* (e.g., reinforced core competences, increased fit to environment). Furthermore, they stress that economic value (possibly more prone to quantitative specification) is easier to estimate than (more intangible) behavioral and strategic values.

⁸ The decision to exit a business relationship will probably release resources, that may be used instead to reinvest in another, or establish a new, business relationship. Even in the case of that business relationship - perceived as strategically relevant (e.g., because it allows the exploitation of complementary, not internally possessed, competences) - being somehow terminated, the focal actor may find (or have) an alternative (e.g., the business relationship with another firm, or the recruitment of qualified personnel may serve as a substitute for the ended business relationship). Inasmuch as business relationships continually demand investments to their development and maintenance (Hakansson, 1982), they compete for the firm's limited resources. Therefore, the strategic relevance of business relationships must be continually assessed by the firm if it really wants to implement a

abandoning its business relationship with Y will probably unearth other motives (may be capability related).

Conformably, the three classes of arguments pointed out above seem necessary, but not sufficient conditions for business relationships' strategic relevance. Our suggestion is that to consider business relationships as part of firm resources (i.e., through '*RBV lens*') may be, on this regard, illuminating. This is by no means absurd - at least for the RBV research community - as some prominent theorists (e.g., Barney, 1991; Teece *et al.*, 1997) already include business relationships in the firm's bundle of resources. Distinguishing between physical, human and organizational firm resources, Barney (1991) includes business relationships in the latter resource category. Amit and Schoemaker (1993) argue that business relationships may be one of a firm's 'strategic assets' (i.e., resources and capabilities that are difficult to trade and imitate, and that confer it a competitive advantage), whereas Teece *et al.* (1997) suggest that business relationships are part of a firm's 'asset position' that shapes the managerial and organizational processes contributing to its competitive advantage.

We conjecture that RBV's notion of strategic resources may help to explain the strategic relevance of business relationships, hence complementing (maybe completing, but surely not replacing) the network-based explanations on this matter.⁹ For a start, we are interested in assessing whether, and to what extent, business relationships hold the potential (or only indirectly contribute?) to create, sustain and renew a firm's competitive advantage.

reasonable relationship strategy, and correspondingly manage (the allocation of resources within) its portfolio of business relationships.

⁹ The RBV notion of strategic resources was coined by Barney (1986: 1231) that presents these as "... resources necessary to implement a strategy"; later on, Barney (1991) discussed strategic resources as rent-sustaining ones. Our view of strategic resources extends Barney's (1991) to encompass also rent-generating and rent-renewing ones. That is, the firm's strategic resources permit it to create, sustain and renew rents. (Many resources' attributes (e.g., imperfect mobility, imperfect substitutability) have been mentioned, throughout the RBV literature, as primary determinants of their rent-sustaining capacity (e.g., Barney, 1991). In our viewpoint, such features also (decisively) influence resources' rent-generating and rent-renewing capacities. Nevertheless, to our knowledge no consensus has ever been reached about which of these attributes are mandatory for resources creating, sustaining and renewing rents. In sum, which resource nature is conducive to resource relevance is still a controversial issue within RBV theory.)

4. THE POTENTIAL INCOMPATIBILITY OF NETWORK- AND RESOURCE-BASED PERSPECTIVES

Ever since we started this research, our basic argument has been that the RBV can be appropriate and useful in assessing business relationships' strategic relevance. Of course, we unsurprisingly recognize that the RBV and the Industrial Networks Approach have divergent concerns. The former is focused on explaining performance differentials across firms (based on their resource endowments), whereas the latter is concerned with the character and evolution of industrial systems (i.e., the intricate networks of business relationships that complexly bond firms) albeit involving a focal firm. Hence these theoretical perspectives differ in their main units of analysis, which are firms' resources and networks of business relationships respectively.

Nonetheless, the network- and the (orthodox) resource-based¹⁰ perspectives strongly differ in terms of their premises regarding the *firm*, *environment*, *resource*, and *strategy* (see Table 1 below that draws on Hakansson and Snehota (1989), Axelsson and Easton (1992), Easton and Araujo (1993), and Dyer and Singh (1998)). Consider, for instance, the opposite contentions of a fully hostile, faceless and atomistic environment (under the resource-based perspective), and a co-opetitive, full face and networked environment (posited by the network-based view). The upshot of this is that the adequacy of drawing simultaneously from the RBV and the Industrial Networks theories needs to be assured.

¹⁰ It seems clear that the twenty-years old heterogeneous RBV literature is allegedly split into two branches: the '*traditional*', and the '*dynamic capabilities*' resource-based thinking, (as Teece *et al.*, 1997 implicitly contends). We prefer to call these RBV branches '*orthodox*' and '*heterodox*' respectively. Orthodoxy here means being strongly influenced by neoclassical economics' assumptions, and hence being somewhat unrealistic (e.g., the orthodox assumption of the firm as an isolated entity competing in a fully hostile, faceless and atomistic environment).

Issues	Network-based perspective	Orthodox resource-based perspective
<i>Unit of analysis</i>	• Networks	• Firm resources
<i>Firm</i>	<ul style="list-style-type: none"> • Networking actor • Transaction-oriented • Collection of resources • Activity structure • Blurring, undefined boundaries (changing with interactions among actors) 	<ul style="list-style-type: none"> • Isolated, independent entity • Production-oriented • Bundle of resources • Property owning entity • Clear-cut boundaries, defined by property rights
<i>Environment</i>	• Networked, full-face, co-opetitive, and partially influenced	• Atomistic, faceless, hostile, and uncontrollable
<i>Resource</i>	<ul style="list-style-type: none"> • Defined by ‘ownership and control’ and ‘access through business relationships’ criteria • Changeable (altering in ownership and in dimensions used) • Resource heterogeneity as the outcome of both internal operations and exchange processes • Strategic resources may extend beyond firm boundaries • Intrafirm and interfirm resource complementarity 	<ul style="list-style-type: none"> • Only defined by ‘ownership and control’ criterion • Largely immutable (only changing in ownership aspects) • Resource heterogeneity as given • Strategic resources (only housed within the firm) • Intrafirm resource complementarity • Competitive relation between internal and external resources
<i>Strategy</i>	<ul style="list-style-type: none"> • Exploiting internal and external (accessed via business relationships) rent-generating resources • Building and/or strengthening network positions • Relational strategy 	<ul style="list-style-type: none"> • Deploying internal valuable resources • Exploiting factor markets’ imperfections • Deciding about resource development and deployment • Competitive strategy

Table 1 – Comparing network- and orthodox resource-based perspectives

4.1 The (real) possibility for cross-fertilizing the network- and the resource-based perspectives

Within RBV reasoning, the notion of strategic resources is strongly related to the concept of competitive advantage (i.e., the ability to create, sustain and renew Ricardian, Pareto and Schumpeterian rents). The notion of competitive advantage (apparently not much found in IMP research as it seems to implicitly call forth the premise of *anonymous and atomistic markets*) may be compatible with the network-based perspective - ultimately, a firm’s network position and its relationship strategy may be seen as boiling down to (creating, sustaining and renewing) current and anticipated rents. The notions of competitive advantage and network position may possibly co-exist as one may find (at least some) real world firms

operating simultaneously in (global) faceless, atomistic markets, and in (local) enmeshed networks of business relationships.

We contend that a theoretical cross-fertilization between network- and resource-based perspectives may be not only apposite, but also conceptually profitable for both fields of study. In this respect, the RBV may overcome some major shortcomings, namely its unrealistic view of isolated firms (consequently ignoring external resources' contribution to the firm's competitive advantage), and ensuing limitations in addressing the performance of the networked firm (Lavie, forthcoming); as Gulati et al. (2000: 203, emphasis added) put it: "(...) the conduct and performance of firms can be more fully understood by examining the network of relationships in which they are embedded. *By adopting a relational, rather than an atomistic, approach, we can deepen our understanding of the sources of differences in firm conduct and profitability*". The Industrial Networks view, on the other hand, may advance its understanding of business relationships' strategic nature and relevance. RBV can shed some light on both business relationships' strategic nature (e.g., which features distinguish strategic business relationships from non-strategic ones), and strategic relevance (e.g., what consequences, in capabilities terms, accrue to firms involved in strategic and non-strategic business relationships).¹¹

The intellectual bridge between these two perspectives has been attempted (if not *de facto* made) by Loasby (1998). Bridging the insights of Penrose (1959) and Richardson (1972), thus harmonizing resource- and network-based rationales, Loasby (1998) postulates the firm as a set of (direct and indirect) capabilities, embedded in a wider network of direct and indirect capabilities; inasmuch as firms have "... necessarily *limited direct capabilities* and the consequent *need to know how to get certain things done* by other people ..." (op. cit.: 156, emphasis added), establishing and maintaining business relationships to access, and exploit, needed capabilities may be fundamental.

¹¹ Even if the competitive advantage and strategic resource constructs are considered inadequate or useless in a network setting, RBV's conceptual 'baggage', particularly that related to the firm's resource base (e.g., the notions of routines, dynamic capabilities, competences), may be enlightening for the network-based perspective.

5. PROPOSING A COMPETENCE-BASED VIEW OF THE FIRM

We propose a holistic framework that not only (a) assures compatibility with the primary assumptions of the network-based perspective (in terms of the firm, environment, resource, and strategy), but also (b) overcomes main pitfalls pointed out to RBV¹² (see Figure 1). Moreover, this competence-based framework unravels the conceptual tangle within RBV, both clarifying alleged ‘statics/dynamics’ inconsistencies and solving its terminological ambiguity (Foss, 1997b).

The firm is thus seen both (a) to comprise a bundle of *assets*, *dynamic capabilities* and *internal competences*, and (b) deeply embedded in its environment (hence relying, via business relationships, on partners’ *external competences* and *resources*).

Assets. Resources that were acquired, or internally developed, by the firm. That is, assets may be (a) (previously undervalued) resources available on factor markets (Barney, 1986), or (b) idiosyncratic (created, accumulated) resources (Barney, 1991; Amit and Schoemaker, 1993). Such assets may also be (apparently non-strategic, overvalued) resources that were bought and afterwards altered within the firm, thus becoming firm-specific – maybe resembling Teece’s (1980; Teece, 1986) notions of specialized and cospecialized resources. Finally, assets may be used in the development and adjustment of internal competences (Teece *et al.*, 1997).

Dynamic capabilities. Low-level (partly tacit) capabilities that cannot be purchased on factor markets (Teece *et al.*, 1997). Instead, they are internally developed (Dierickx and Cool, 1989), through learning mechanisms (i.e., knowledge accumulation, articulation and codification) on which the firm must deliberately invest (Zollo and Winter, 2002). Such capabilities are responsible for building, integrating, reconfiguring, honing, and altering internal competences and assets (Teece *et al.*, 1997; Eisenhardt and Martin, 2000), hence permitting the firm’s adaptation to its changeable environment.

¹² These pitfalls (largely attributable to the orthodox RBV and reflecting its neoclassical economics’ influence) are mainly the view of (a) firms as isolated entities (hence neglecting business relationships and considering atomistic and fully hostile markets), (b) strategic resources only residing within the firm (ignoring external resources’ contribution to competitive advantage, and overlooking both intrafirm and interfirm resource complementarities), and (c) strategy as totally competitive (zero-sum) (Foss, 1998; Lavie, forthcoming). Other (less important) RBV shortcomings may be stressed: difficulties in ‘operationalizing’ the criteria that resources have to meet in order to yield competitive advantage (e.g., rarity, imperfect imitability, imperfect substitutability) (Foss, 1997b), and the undervaluation on the development costs of resources, and overlook of ‘*the dark side*’ of committing to certain resources (Lavie, forthcoming).

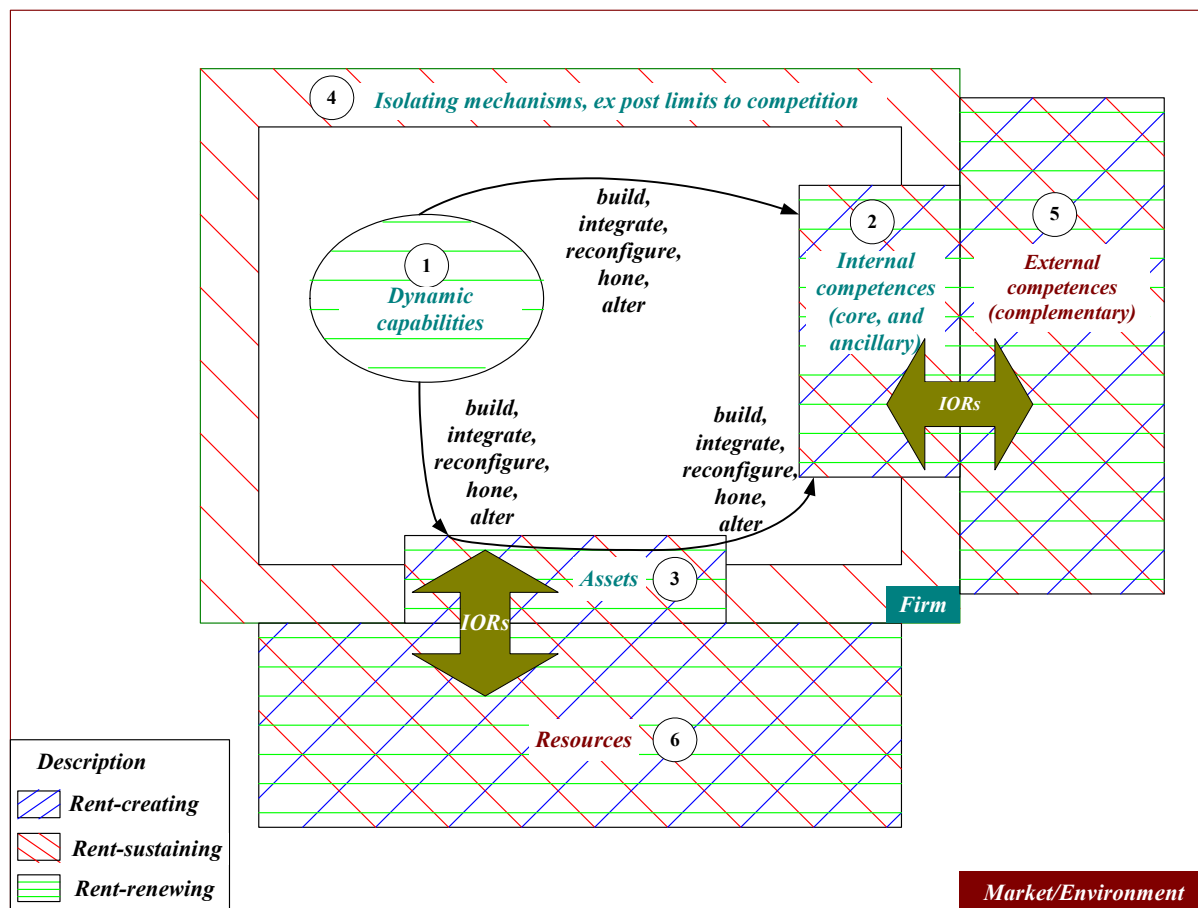


Figure 1 – The firm as a bundle of assets, dynamic capabilities and internal competences

Internal and external competences. One may say that our framework’s underpinning is a typology of competences.¹³ Some competences are *internal* (existing within the firm), and other are *external* (complementary, residing outside the firm) (Richardson, 1972). Internal competences may be of two types: *core* (*direct*), i.e., the ‘*know-how to do*’ (Nelson and Winter, 1982; Langlois, 1995; Loasby, 1998), or *ancillary* (*indirect, relational, network*), i.e., the ‘*know-how to get things done (by others)*’ (Nelson and Winter, 1982; Langlois and Robertson, 1995; Dyer and Singh, 1998; Loasby, 1998; Lorenzoni and Lipparini, 1999; Ritter, 1999). Both internal and external competences may be envisaged as knowledge assets (Richardson, 1972; Winter, 1987), primarily intangible (tacit, difficult to codify), rooted in the firm’s ‘*way of doing things*’ (i.e., organizational routines composed of complexly interconnected individual skills) (Nelson and Winter, 1982). Such distinctive, idiosyncratic

¹³ As the term ‘*capability*’ is already employed in our framework (to label the firm’s low-level dynamic capabilities of the firm), we thought it would be more appropriate to use another term to label the other (high-order) capabilities of the firm, hence clearly distinguishing them. That is why we resort to Selznick’s (1957) ‘*competence*’ construct.

(e.g., imperfectly imitable, imperfect mobile, etc.) competences (Barney, 1991; Amit and Schoemaker, 1993), cannot be purchased on factor markets but rather ought to be internally developed (Penrose, 1959; Dierickx and Cool, 1989; Teece *et al.*, 1997; Loasby, 1998).

Resources. Eminently physical (tangible), resources are available across factor markets for purchase/ownership (Barney, 1986), or access via business relationships (Dyer and Singh, 1998).

This framework integrates contributions from many resource-based theorists (e.g., Penrose, Barney, Teece). It somewhat differs from Foss and Knudsen's (1996) 'competence perspective'. We consider it to be holistic because both strategy content and process are addressed.

The sources of competitive advantage are the firm's assets (tangible, idiosyncratic, internal), dynamic capabilities (firm-specific, internal), competences (intangible, distinctive, internal and external), and resources (external); these are the rent-generating and rent-renewing components explaining the strategy process issues (i.e., dynamics). Besides exploiting firm's bundle of resources, assets, internal and external competences, rents can also be created (and continually regenerated) by exploiting factor markets' imperfections or enjoying luck (Barney, 1986), and/or by deciding sub-optimally (because of bounded rationality and uncertainty) about resource development and deployment (Amit and Schoemaker, 1993).

Strategy content (i.e., the sustainment of rents, statics) is explained by the existence of isolating mechanisms (e.g., patents, regulation) (Rumelt, 1984), and *ex post* limits to competition (i.e., the idiosyncrasy of firm's assets and competences) (Peteraf, 1993).

6. ISSUES ON NEED OF DEEPER ARTICULATION

It is now time to set forth our ongoing (unsolved?) problems. First, the problematic consideration of business relationships as resources of the firm, according to RBV's 'ownership and control' criterion, seems that can be easily overcome. Inasmuch as business relationships are not totally owned, but are instead partially controlled by both parties (each actor usually has the power to modify, or even terminate, the business relationships in which it is involved), the consideration of business relationships as resources of the firm is only possible if such criterion is relaxed, as Easton and Araujo (1993) wisely suggest.

Secondly, within our competence-based view of the firm (still needing refinement), two problems (that seemed, at first, insurmountable) completely vanish: (1) RBV's static/dynamic inconsistencies and terminological confusion, and the incompatibility of network- and resource-based perspectives does not seem to exist; (2) the resource-based analysis of business relationships' strategic relevance becomes a more easy (perhaps less ambiguous) task to undertake. In this respect, two (sound?) questions may be formulated: '*Is business relationships' strategic relevance related to the creation, access and exploitation¹⁴ of (rent-generating, rent-sustaining, rent-renewing) external competences and resources?*'; or '*Is business relationships' strategic relevance related to the (joint) development of the firm's internal competences and assets?*'.

If the answer to these questions is a 'yes', then business relationships' strategic relevance may be strongly associated with what the firm does (competently) and what it subcontracts, via business relationships, to others. business relationships' strategic relevance may thus be explained by the (indirect?) influence business relationships have on delimitating firm boundaries (Araujo *et al.*, 2003; Mota and Castro, 2004).

¹⁴ This 'strategic' exploitation of a partner's external competences and resources through business relationships, may signify one of two (or even both) things: (a) the creation, sustainment and renewal of rents for the firm, by directly employing such accessed external competences and resources; (b) the development and/or adjustment of the firm's internal competences and assets, using those external competences and resources.

REFERENCES

- Amit, R. and Schoemaker, P. (1993), "Strategic assets and organizational rent", *Strategic Management Journal*, 14: 33-46.
- Andrews, K. R. (1971), *The concept of corporate strategy*, Homewood: Irwin.
- Araujo, L., Dubois, A. and Gadde, L.-E. (2003), "The multiple boundaries of the firm", *Journal of Management Studies*, 40 (5): 1255-77.
- Axelsson, B. (1992), "Corporate strategy models and networks - diverging perspectives", In *Industrial Networks: a new view of reality*, ed. Axelsson, B. and Easton, G., London: Routledge.
- Barney, J. (1986), "Strategic factor markets: expectations, luck, and business strategy", *Management Science*, 32 (10): 1231-41.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, 17 (1): 99-120.
- Barringer, B. and Harrison, J. (2000), "Walking a tightrope: creating value through interorganizational relationships", *Journal of Management*, 26 (3): 367-403.
- Chandler, A. D. (1962), *Strategy and structure: chapters in the history of the industrial enterprise*, Cambridge: MIT Press.
- Conner, K. (1991), "A historical comparison of resource-based theory and five schools of thought within Industrial Organization Economics: do we have a new theory of the firm?" *Journal of Management*, 17: 121-54.
- Dierickx, I. and Cool, K. (1989), "Asset stock accumulation and sustainability of competitive advantage", *Management Science*, 35 (12): 1504-11.
- Dyer, J. and Singh, H. (1998), "The relational view: cooperative strategy and sources of inter-organizational competitive advantage", *Academy of Management Review*, 23 (4): 660-79.
- Easton, G. (1992), "Industrial networks: a review", In *Industrial Networks: a new view of reality*, ed. Axelsson, B. and Easton, G., London: Routledge.
- Easton, G. and Araujo, L. (1993), "A resource based view of Industrial Networks", Paper presented in 9th International IMP Seminar, Bath, UK.

- Eisenhardt, K. M. and Martin, J. (2000), "Dynamic capabilities: what are they?" *Strategic Management Journal*, 21: 1105-21.
- Ford, D. (1980), "The development of buyer-seller relationships in industrial markets", *European Journal of Marketing*, 14 (5): 339-54.
- Ford, D., Gadde, L.-E., Hakansson, H., Lundgren, A., Snehota, I., Turnbull, P. and Wilson, D. (Eds.) (1998), *Managing business relationships*, Chichester: John Wiley & Sons.
- Foss, N. (1997a), "Resources and strategy: a brief overview of themes and contributions", In *Resources, firms, and strategies: a reader in the resource-based perspective*, ed. Foss, N., Oxford: Oxford University Press.
- Foss, N. (1997b), "Resources and strategy: problems, open issues, and ways ahead", In *Resources, firms, and strategies: a reader in the resource-based perspective*, ed. Foss, N., Oxford: Oxford University Press.
- Foss, N. (1998), "The resource-based perspective: an assessment and diagnosis of problems", *Scandinavian Journal of Management*, 14: 143-64.
- Foss, N. and Knudsen, C. (Eds.) (1996), *Towards a competence theory of the firm*, London: Routledge.
- Gadde, L.-E., Huemer, L. and Hakansson, H. (2003), "Strategizing in Industrial Networks", *Industrial Marketing Management*, 32 (5): 357-64.
- Gulati, R. (1998), "Alliances and networks", *Strategic Management Journal*, 19: 293-17.
- Gulati, R., Nohria, N. and Zaheer, A. (2000), "Strategic networks", *Strategic Management Journal*, 21: 203-15.
- Hakansson, H. (1982), "An Interaction Approach", In *International marketing and purchasing of industrial goods*, ed. Hakansson, H., Chichester: Wiley.
- Hakansson, H. (Ed.) (1987), *Industrial technological development: a network approach*, London: Routledge.
- Hakansson, H. (1989), *Corporate technological behaviour: co-operation and networks*, London: Routledge.
- Hakansson, H. and Johanson, J. (1992), "A model of industrial networks", In *Industrial Networks: a new view of reality*, ed. Axelsson, B. and Easton, G., London: Routledge.

- Hakansson, H. and Snehota, I. (1989), "No business is an island: the network concept of business strategy", *Scandinavian Journal of Management*, 5 (3): 187-200.
- Hakansson, H. and Snehota, I. (Eds.) (1995), *Developing business relationships*, London: Routledge.
- Langlois, R. (1995), "Capabilities and coherence in firms and markets", In *Resource-based and evolutionary theories of the firm: towards a synthesis*, ed. Montgomery, C. A., Dordrecht: Kluwer Academic Publishers.
- Langlois, R. and Robertson, P. (1995), *Firms, markets and economic change*, London: Routledge.
- Lavie, D. (forthcoming), "The competitive advantage of interconnected firms: an extension of the resource-based view", *Academy of Management Review*, (Special Topic Forum on 'Building effective networks').
- Lippman, S. A. and Rumelt, R. P. (1982), "Uncertain imitability: an analysis of interfirm differences in efficiency under competition", *Bell Journal of Economics*, 13: 418-38.
- Loasby, B. (1998), "The organization of capabilities", *Journal of Economic Behavior and Organization*, 35 (2): 139-60.
- Lorenzoni, G. and Lipparini, A. (1999), "The leveraging of interfirm relationships as a distinctive organizational capability: a longitudinal study", *Strategic Management Journal*, 20 (4): 317-38.
- Mahoney, J. and Pandian, J. (1992), "The resource-based view within the conversation of strategic management", *Strategic Management Journal*, 13 (June): 363-80.
- Mattsson, L.-G. and Johanson, J. (1992), "Network positions and strategic action - an analytical framework", In *Industrial Networks: a new view of reality*, ed. Axelsson, B. and Easton, G., London: Routledge.
- Mota, J. and Castro, M. (2004), "A capabilities perspective on the evolution of firm boundaries: a comparative case example from the portuguese moulds industry", *Journal of Management Studies*, 41 (2): 295-316.
- Nelson, R. (1991), "Why do firms differ, and how does it matter?" *Strategic Management Journal*, Winter Special Issue (12): 61-74.

- Nelson, R. and Winter, S. (1982), *An evolutionary theory of economic change*, Cambridge: Harvard University Press.
- Penrose, E. (1959), *The theory of the growth of the firm*, New York: John Wiley.
- Peteraf, M. (1993), "The cornerstones of competitive advantage: a resource-based view", *Strategic Management Journal*, 14: 179-91.
- Porter, M. (1980), *Competitive strategy: techniques for analysing industries and competitors*, New York: The Free Press.
- Ravald, A. and Gronroos, C. (1996), "The value concept and relationship marketing", *European Journal of Marketing*, 30 (2): 19-30.
- Richardson, G. B. (1972), "The organisation of industry", *The Economic Journal*, 82 (327): 883-96.
- Ritter, T. (1999), "The networking company: antecedents for coping with relationships and networks", *Industrial Marketing Management*, 28 (5): 497-506.
- Rumelt, R. P. (1984), "Towards a strategic theory of the firm", In *Competitive strategic management*, ed. Lamb, R., Englewood Cliffs: Prentice-Hall.
- Rumelt, R. P., Schendel, D. E. and Teece, D. J. (1994), "Fundamental issues in strategy", In *Fundamental issues in strategy: a research agenda*, ed. Teece, D. J., Boston: Harvard Business School Press.
- Selznick, P. (1957), *Leadership in administration: a sociological interpretation*, New York: Harper & Row.
- Sharma, A., Krishnan, R. and Grewal, D. (2001), "Value creation in markets: a critical area of focus for business-to-business markets", *Industrial Marketing Management*, 30: 391-402.
- Teece, D., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, 18 (7): 509-33.
- Teece, D. J. (1980), "Economies of scope and the scope of the enterprise", *Journal of Economic Behavior and Organization*, 1 (3): 223-47.
- Teece, D. J. (1986), "Firm boundaries, technological innovation and strategic management", In *The economics of strategic planning*, ed. Thomas, L., Lexington: Heath.

- Turnbull, P., Ford, D. and Cunningham, M. (1996), "Interaction, relationships and networks in business markets: an evolving perspective", *Journal of Business and Industrial Marketing*, 11 (3/4): 44-62.
- Walter, A., Ritter, T. and Gemunden, H. (2001), "Value creation in buyer-seller relationships: theoretical considerations and empirical results from a supplier's perspective", *Industrial Marketing Management*, 30: 365-77.
- Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, 5 (2): 171-80.
- Wilkinson, I. (2001), "A history of network and channels thinking in marketing in the 20th century", *Australasian Marketing Journal*, 9 (2): 23-52.
- Wilson, D. and Jantrania, S. (1996), "Understanding the value of a relationship", *Asia-Australia Marketing Journal*, 2 (1): 55-66.
- Winter, S. (1987), "Knowledge and competence as strategic assets", In *The competitive challenge*, ed. Teece, D. J., Cambridge: Ballinger.
- Zollo, M. and Winter, S. (2002), "Deliberate learning and the evolution of dynamic capabilities", *Organization Science*, 13 (3): 339-51.

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