

Forthcoming, *Strategic Organization*, 2003

# The Strategic Management and Transaction Cost Nexus: Past Debates, Central Questions, and Future Research Possibilities

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*Final version, 5 November 2002*

## **Acknowledgments**

The comments of Jean Boddewyn, Kirsten Foss, and Jakob Lage Hansen, three reviewers, the editor of this journal and seminar audiences at Université Paris (Sorbonne), Université Caén, Norges Handelshøyskole, and Southern Denmark University are gratefully acknowledged. Thanks also to Joe Mahoney for discussion of some of the key issues. Some parts of the present paper builds on joint work with Kirsten Foss (Foss and Foss 2002), and the paper may be read as a methodological companion to Foss and Foss (2002). The usual disclaimer applies.

**Keywords:** Transaction costs, strategic management, industrial organization.

# The Strategic Management and Transaction Cost Nexus: Past Debates, Central Questions, and Future Research Possibilities

## **Abstract**

The role of transaction cost economics (broadly conceived) in developing research in strategic management has been a hotly debated topic over the last decade. This methodological essay develops the argument that transaction cost insights are more than merely useful complements to existing approaches to strategic management. Rather, they are necessary for adequately understanding the nature of strategizing, because transaction costs are essential aspects of processes of creating, capturing and protecting value. If transaction costs are zero, these processes do not pose any strategic problems. However, when transaction costs are positive, opportunities for value creation through the reduction of inefficiencies caused by transaction costs exist, and protecting and appropriating value are costly activities that dissipate value. The use in strategic management of models in which the fullest possible account of transaction costs is taken is contrasted with more constraining models, in particular the patched-up competitive equilibrium models that are now used as the benchmark models in some important parts of strategic management research, most notably in the core models of the resource-based view.

## I. Introduction

In the strategic management field, work in economics on transaction costs and their role in structuring economic organization<sup>1</sup> attracted a great deal of sympathetic attention and influence at the beginning of the nineteen-eighties following the seminal work of Williamson (1975) (e.g., Dundas and Richardson, 1980; Rumelt, 1984). At least until the mid-1990s, it was rather generally accepted that “[w]ithin strategic management, transaction cost economics is the ground where economic thinking, strategy, and organizational theory meet” (Rumelt, Schendel and Teece, 1994: 28). However, during the 1990s, transaction cost economics (henceforth, “TCE”) became increasingly subject to critical discussion and even opposition.<sup>2</sup>

Existing debates have tended to concentrate on specific foundational assumptions, such as that of opportunism (Ghoshal and Moran, 1996), usually cast in the context of the theory of the firm (Connor, 1991; Foss, 1996a,b; Kogut and Zander, 1992, 1996; Connor and Prahalad, 1996). This is understandable, because the theory of the firm is central in strategic management research, and the assumption of opportunism (in various guises) is crucial in important theories of the firm. However, the present paper takes a different, and arguably more direct, approach. Rather than arguing — *indirectly* — that TCE insights are important for making sense out of firm organization (e.g., Foss, 1996a; Mahoney, 2001), and *therefore* for the understanding of central strategic management issues (Rumelt, 1984), the present paper makes the more *direct* point that transaction costs are the fundamental stuff that problems of strategic management are made of (Section II, “*The Strategic Management Debate on Transaction Cost Economics: Are the Right Questions Being Asked?*”).

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<sup>1</sup> In addition to Williamson’s work, this kind of work also includes other parts of new institutional economics, notably property rights economics (e.g., Barzel, 1997), as well as various contributions to contract theory (e.g., Holmström and Tirole, 1989; Hart, 1995). In the present paper I refer to all of this work as “transaction cost economics.” This may be somewhat imprecise, but may be defended by “new institutional economics” being a much less well-established term in strategic management than transaction cost economics. See Furubotn and Richter (1997) for a general presentation of the new institutional economics.

<sup>2</sup> Two particularly representative, and already classic, “counter-revolution” papers are Kogut and Zander (1992) and Ghoshal and Moran (1996).

Moreover, it is argued that taking much fuller account of transaction costs can expand the number of phenomena that can be addressed, conceptualized, and explained in strategic management research. This is partly argued by discussing the “pure” form (represented by Barney (1991) and Peteraf (1993)) of the dominant contemporary approach to strategic management (cf. Priem and Butler, 2001a), namely the resource-based view of strategic management (henceforth, the “RBV”). At least in this pure form, the RBV is underpinned by a patched-up version of a fundamental economic model, namely that of perfect competition (*aka* the competitive equilibrium model). The purpose of this comparative exercise is not to launch an attack on the RBV *per se* — in fact, I later argue that in some important respects TCE and the RBV are complementary —, but rather to point to the explanatory weaknesses of approaches that leave no, or very little, room for transaction costs. In particular, it will be argued that such approaches are limited with respect to comprehending processes of creating, capturing, appropriating, and protecting value, arguably the key issues in strategic management (Section III, “*Empirical Phenomena and Theoretical Models: The Case of the ‘Pure’ Resource-based View*”).<sup>3</sup>

It will be further argued that the understanding of these processes should not be grounded on any specific constraining economic model, such as competitive equilibrium, or on any specific view of the firm. Instead, such an understanding may begin from an examination of processes of the creation, appropriation, and protection of value in a setting in which there are no impediments to these processes. Such a benchmark is supplied by the so-called “Coase theorem” (Coase, 1960), an important mental tools in much of economics (particularly in Law and Economics). In this benchmark situation, strategic choice is trivialized, since there are no impediments to the creation, appropriation, and protection of value, and since capture cannot take place as protection is costless. This leads naturally to consider the nature of such impediments and what happens when they are introduced in a “Coasian” setting

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<sup>3</sup> A brief note on terminology: By “capture” I refer to the activities of taking (property rights to) value from other players without compensating them (e.g., by means of imitative competition); by “protection” I refer to resource-consuming activities of trying to hinder other agents’ capture; by “appropriation,” reference is made to the activity of securing a part of created value in bargaining games.

(Section IV, “*A Coasian Starting Point for Strategic Management*”). It will be argued that these impediments are *transaction costs*, and that their presence is a necessary condition for strategic choice to be real. Strategizing may be directed towards these impediments. In particular, value may be created, and competitive advantage may be had, from firm-level actions that aim at reducing transaction costs, and/or raising rivals’ transaction costs. Processes of value creation, appropriation, capture and protection are cast in a novel light by the systematic inclusion of transaction costs, which indicates the viability of a distinct transaction cost-based program in strategic management research (Section V, “*Towards a Transaction Cost Research Program in Strategic Management Research*”).

## II. The Strategic Management Debate on Transaction Cost Economics: Are the Right Questions Being Asked?

### **The Debate(s)**

The debate — or, set of connected debates — in the strategic management field on the role of TCE with respect to furthering insights in firm strategy have usually centered on Williamson’s version of TCE (Williamson, 1975, 1985, 1996). This is arguably not surprising, because the link between transaction costs economics and firm strategy was first made explicit in Williamson’s (1975) demonstration of the capacity of transaction cost reasoning to throw light on corporate strategy issues (i.e., the issue of efficient firm boundaries), as well as functional and organizational strategy issues (i.e., the issue of the efficient internal organization). Also, Williamson and his students and co-authors have continued to be influential voices in the strategic management field. The Chandler-Williamson M-form hypothesis quickly became a key insight in the strategic management field, particularly after being supported in a number of influential empirical studies (e.g., Armour and Teece 1978). The classic transaction cost papers on such issues as the multinational firm, vertical supply arrangements, joint ventures, franchising, sales force organization, etc. — most of which has been built on Williamsonian foundations — have become standard references in the strategic management field.

Given all this, it is not surprising that Rumelt, Schendel and Teece (1994: 27) could introduce the proceedings from the 1990 Napa conference on "Fundamental Issues in Strategy: A Research Agenda for the 1990s" with the observation that "... [o]f all the new subfields of economics, the transaction cost branch of organizational economics has the greatest affinity with strategic management," and then go on to observe that within strategic management, TCE "... is the ground where economic thinking, strategy and organizational theory meet " (Rumelt et al., 1994: 27). Their views echoed Rumelt's (1984) earlier argument that Williamsonian TCE should serve as the foundation for firm strategy research and, ultimately, managerial practice. Only TCE supplied an understanding of such foundational issues as the existence, boundaries, and, to a smaller extent, the internal organization of the firm, and a number of derived issues (e.g., the structuring of joint ventures, franchise contracting, diversification, etc.). However, the relevance of TCE seemed to be limited to corporate strategy issues; implicitly, it was acknowledged that TCE had very little to say about competitive strategy, that is, issues relating to positioning in an industry and defending such a position.

TCE was first openly challenged by attempts to frame the then relatively recent RBV as a theory of the firm (in particular, Connor, 1991; Kogut and Zander, 1992). These attempts were launched on a general background of critique of TCE, particularly Williamson's version of TCE. Critics of Williamsonian TCE argued that it 1) put too much emphasis on opportunism and too little on trust (Ghoshal and Moran, 1996), 2) neglected "transaction benefits" and focused solely on transaction costs (Zajac and Olsen, 1993), 3) only considered "exchange" and excluded "production" (Winter, 1991), 4) could not explain firm heterogeneity (Connor, 1991), and 5) was static (Langlois, 1992). In contrast, it was argued that a new "strategic" theory of the firm could be built from insights in such neglected phenomena as transaction benefits, firm heterogeneity, etc., the obvious implication being that Williamsonian TCE was not necessary for developing a strategic theory of the firm, as Rumelt (1984) had argued earlier. This position was criticized by Foss (1996a,b), and in turn defended by Kogut and Zander (1996) and Connor and Prahalad (1996). The debate continues with recent contributions from Williamson (1999), Foss and Foss (2000), Dosi and Marengo (2000),

and Mahoney (2001). The debate has attracted numerous contributors and has sometimes provoked heated arguments and strong opinions. Important issues appear to be at stake.

In a review and assessment of the debate, Foss (1999) identified two distinct groupings in the debate, namely “isolationists” and “integrationists.” Whereas the “isolationists” grouping argues that either capabilities/resource-based/competence insights *or* organizational economics constitute a sufficient foundation for a strategic theory of the firm, integrationists argue that research in strategic management is best furthered by an integrative undertaking that draws on key ideas from both these two approaches (for concrete examples of integrationism, see Silverman, 1999 and Coff, 2001a&b). Although taking issue with his competence-based critics in a number of ways, Williamson (1999) nevertheless joined the integrationist camp, concluding that both TCE and the competence approach are “... needed in our efforts to understand complex economic phenomena as we build towards a science of organization” (1999: 1106). Taking a more purist “isolationist” position, Foss and Foss (2000) argued that many of the central ideas of the competence-based perspective could in actuality be reduced to basic ideas in TCE and other parts of organizational economics, which to them indicated the partial redundancy of the competence approach. From the opposite isolationist position, Dosi and Marengo (2000) responded by arguing that the emphasis on problem solving and on imperfect cognition that — they argued — characterizes the competence approach has no equivalent in organizational economics. However, while the debate may have clarified positions, both substantive and meta-theoretical, it is questionable that it has actually provided essential new insights. As I shall argue, this is because the participants in the debate may have failed to ask the right questions.

### **Are the Right Questions Being Asked?**

Most contributors to the debate have tended to focus on theory of the firm issues, and particularly on the role that opportunism plays in the theory of the firm. This is not surprising given that so much of the debate has revolved around Williamson’s version of TCE. However fundamental Williamson’s contributions are, they are not all of TCE, and there may be other ways of incorporating transaction cost notions in

strategic management research, ways that open up for other insights into how transaction costs impact on strategizing. Arguably as a result of the concentration in the debate on Williamson's work, not all of the right questions pertaining to the transaction cost/strategic management nexus have been asked.

To illustrate, in a recent paper Mahoney (2001; *emphasis in original*) provides a fundamental reason why the Williamsonian transaction cost approach to the firm is important to strategic management:

... asset specificity (sunk cost commitment) is a necessary condition for isolating mechanisms that sustain rents ... Often the firm achieves sustainable competitive advantage (i.e., sustains rents) because it reduces opportunistic behavior and allows for firm-specific investment. *In the absence of opportunism the rent-generating firm need not exist.* In the absence of opportunism, contracting would be sufficient to support investments that are strategic commitments.

However, note that the approach to the TCE-strategic management nexus contained in this quotation is *indirect*, in the sense that it takes a route over the theory of the firm, and argues that rent-generating firms would not exist in the absence of transaction cost-inducing opportunism. Such a view is potentially constraining, because it seems to imply that a TCE approach to strategic management must necessarily involve Williamsonian notions of asset specificity and opportunism. However, this route is not the only possible one. Thus, I shall argue that it is possible to take a more *direct* approach to the TCE-strategic management nexus: In order to demonstrate the usefulness of transaction cost insights to strategic management, one is not necessarily forced to start from asking what is the contribution of the Williamsonian theory of the firm to strategic management. It is possible to ask questions that are perhaps more fundamental and does not rely on a specific theory of the firm, such as, Is competitive advantage possible in a zero transaction cost world? How does the presence of transaction costs influence strategic opportunities and threats? How can firms reduce the transaction costs they themselves face and raise those faced by their competitors to their own advantage? Etc. Such questions may perhaps sound esoteric; however, they go right to the heart of the matter of the central issues of strategic management in their

concern with the creation, protection, appropriation, and capture of value, and the impediments to such processes. Rather than beginning from Rumelt's claim that "... it appears obvious that the study of business strategy must rest on the bedrock foundations of the economist's model of the firm" (1984: 557), inspiration is taken from Williamson's claim that "... economizing is more fundamental than strategizing" (1994: 362). However, in contrast to Williamson and Rumelt, an attempt is made to explain why economizing is (more) fundamental and why the study of strategy should rest on transaction cost insights.<sup>4</sup>

This is done in the following in a slightly roundabout manner, namely by discussing how the fundamental issues of strategic management are treated in the "pure" and most directly economics-based version of the resource-based view (Barney 1991; Peteraf 1993).<sup>5</sup> The purpose of this exercise is not to criticize the RBV *per se*, but rather to develop a general methodological point that underlies this paper, namely that the questions relating to strategic management that can meaningfully be raised, framed and answered are constrained by underlying theories and models. The focus on the pure (and perhaps core) RBV model is thus a means of exemplification. Specifically, it shall be argued that the pure version of the RBV 1) conceptualizes strategic management in a somewhat narrow manner, 2) has a limited reach, and that 3) this is ultimately caused by a starting from a constraining economic model, namely a patched-up version of competitive equilibrium.<sup>6</sup> Against this background, it is then argued that a transaction cost approach does not suffer from the weaknesses of the (pure version of the) RBV while providing, in important respects, deeper and also more encompassing explanations of the how value is created, captured, appropriated

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<sup>4</sup> Williamson's argument about the primacy of economizing seems to be predominantly empirical. In contrast, this paper argues for the primacy of economizing on theoretical grounds.

<sup>5</sup> I shall not discuss industrial organization economics approaches to strategy (Porter, 1980; Ghemawat, 1998), primarily because they are less vulnerable to the critique that is directed here at the RBV core models. Moreover, TCE has usually been attacked from a RBV point of view rather than from an industrial organization point of view

<sup>6</sup> For general arguments that the dominance of the perfect competition model in economics has strongly constrained the questions that economists can frame and answer, see Machovec (1995) and Makowski and Ostroy (2001). The perspective of the latter paper is closely related to the approach of the present paper.

and protected, what are the impediments to these processes, and how firms can influence these impediments. The following table presents the overall argument.

XXXXXXXXX *Insert table 1 Here* XXXXXXXXX

### III. Empirical Phenomena and Theoretical Models: the Case of the “Pure” Resource-based View

#### **Preliminary**

A simple and broad, yet intuitively appealing, understanding of strategic management is that it is concerned with the processes through which firms, if possible, on a sustained basis, create value, protect and appropriate the value they create, and try to capture value created by other firms. Although these issues certainly figure prominently in many treatments of firm strategy, in textbooks as well as in research papers, it is fair to say that they are given disproportionate amounts of attention, and that they are virtually never treated comprehensively within a single framework. In particular, the issue of value protection has been given very considerable coverage, particularly under the rubric of “non-imitability” (Barney, 1991), during the last decade or so, whereas value creation is often placed in a black box (cf. Bowman and Ambrosini, 2000; Priem and Butler, 2001a,b; Boddewyn, 2001; Foss and Foss, 2002; Foss and Knudsen, 2002). Value appropriation has been given only little attention (but see Coff 1999).

The dominance during the last decade of the RBV in strategy content research of the RBV may partly explain this allocation of attention to the different key strategy issues. Thus, the now conventional understanding of the basic issue in strategy (content) research as the understanding of the sources of sustained competitive advantage is one that has been most explicitly pressed by scholars working from the perspective of the RBV. Taking strategic management as being first and foremost about sustained competitive advantage means that the issue of value protection in the specific sense of safeguarding against imitation takes center stage; thus, “sustainability” becomes the central issue. However, it also means that issues of value

creation and how to capture value (through other means than imitating rivals) step into the background. While value appropriation is formally contained in the definition of sustained competitive advantage (Makadok and Coff 2002), it is not itself given much attention. It is arguable that this somewhat narrow approach to the key issues of strategic management is caused by grounding strategic management research on a particular model of economic activity, namely the competitive equilibrium model.

Since the RBV is not only the dominant contemporary strategic management perspective, and has helped to define the core issues in contemporary strategic management research, but has also formed the basis for some recent strong critiques of TCE (Connor, 1991; Zajac and Olsen, 1993; Connor and Prahalad, 1996; Madhok, 1996), it is useful to begin by discussing this view. This discussion serves to substantiate the point that recent important contributions to strategic management research start from a too narrow conceptualization of the basic issues of strategic management. Instead of focusing narrowly on sustained competitive advantage, researchers should focus more broadly on processes of creating, capturing, appropriating, and protecting value. And such a focus leads naturally to consideration of the impediments to these processes, impediments that I shall argue are in the nature of transaction costs.

### **Chicago Industrial Organization, the Resource-based View, and Competitive Equilibrium**

The dominant contemporary approach to the analysis of sustained competitive advantage is the RBV, initiated in the mid-1980s by Wernerfelt (1984), Rumelt (1984) and Barney (1986), and further developed by these and other writers. Economic equilibrium, particularly in the form of “competitive equilibrium” (i.e., equilibrium under perfectly competitive conditions), is central in this approach (Foss, 2000). Indeed, it is arguable that it is not until the advent of the RBV that the key issue of strategic management becomes defined as the problem of achieving sustained competitive advantage in the sense of earning (efficiency) rents in equilibrium. This is a special case of a broader view that “[t]he field of strategy is concerned with the conditions under which the microeconomic equilibrium of homogenous firms with zero profits can be overcome” (Knott, 1998: 3) — a further exemplification of the very

important role that the perfect competition model plays in much economics-based strategic management research.

Although the association between the work of Penrose (1959) and the RBV has often been made (e.g., Kim and Mahoney, 2001), at least in its purer and explicitly economics-oriented incarnations (such as Lippman and Rumelt, 1982; Peteraf, 1993), the RBV owes much more to the Chicago approach to industrial organization (Brozen, 1971; Demsetz, 1973, 1974, 1982 1989; Peltzman, 1977; see also Connor, 1991).<sup>7,8</sup> Briefly, a central aim of this approach is to explain long-lived performance differences in terms of efficiency rents existing under competitive conditions rather than in terms of monopolistic abuse of market power. The Chicago industrial organization approach was explicitly developed through the 1970s in open opposition to the Harvard industrial organization approach that was dominant in the 1960s and was the main source of inspiration for Porter's early work (Porter, 1980). To resource-based writers, and notably the highly influential Richard Rumelt and Jay Barney, the Chicago approach represented an appealing way to reconcile the emphasis on the idiosyncratic and firm specific that is characteristic of the strategic management field with economic equilibrium theory (Foss, 2000).

The Chicago legacy is directly present in the much quoted paper by Peteraf (1993) which explicitly casts the RBV in terms of rents in competitive equilibrium, using the basic demand and supply apparatus of economics textbooks to graphically illustrate this. It is perhaps less visible in the even more influential Barney (1991) paper, but it is still there. Consider Barney's (1991) statement of the RBV. He (1991: 102; *emphasis in original*) explains that

A firm is said to have a *competitive advantage* when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors. A firm is said to have a *sustained competitive advantage* when it is implementing a value creating strategy not simultaneously being

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<sup>7</sup> Aka the "Chicago-UCLA approach." Both Rumelt and Barney were part of the UCLA environment.

<sup>8</sup> However, this is not true of those parts of the RBV that are taken up with the analysis of diversification (e.g., Wernerfelt, 1984; Montgomery and Wernerfelt, 1988), where the Penrosian influence is more direct.

implemented by any current or potential competitors *and* when these other firms are unable to duplicate the benefits of this strategy.

Thus, sustained competitive advantage is defined in terms of situations in which all attempts by competitor firms at imitating or substituting a successful firm have ceased, that is, equilibrium obtains. Barney's analysis of the conditions under which such situations obtain is entirely Chicago in its emphasis on resources being costly to copy, etc. (compare Brozen, 1971; Demsetz, 1973, 1974, 1982, 1989; Peltzman, 1977).<sup>9</sup> His argument that all performance differences are explainable in terms of differential efficiencies of the resources underlying strategies, and that, therefore, superior returns are fully compatible with social welfare, is straight out of the Chicago book (e.g., Demsetz, 1974). Barney's (1986) earlier emphasis on factor market, rather than product market, imperfections as a condition of competitive advantage is also vintage Chicago (e.g., Demsetz, 1973).

Although borrowing from the Chicago approach in many ways thus furthered strategic management, it is arguable that the set of phenomena relevant to strategic management that can be framed by relying on this approach is rather limited. Fundamentally, this stems from the basic Chicago research methodology, namely to cast virtually any social phenomena in terms of competitive equilibrium — what Chicago School insider Melvin Reder (1982) characterized as the “tight prior equilibrium” assumption.<sup>10</sup> The competitive equilibrium may not entirely be of the perfect competition textbook variety, for example, some superior technology may be costly to imitate (Demsetz, 1973; Lippman and Rumelt, 1982) or there may be some asymmetric information in factor markets (Demsetz, 1973; Barney, 1986). Still, the basic model is one of instantaneous market clearing in markets populated by traders

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<sup>9</sup> More specifically, in order to hold a “potential” of sustained competitive advantage, a resource “... must have four attributes: (a) it must be valuable ... (b) it must be rare among a firm's current and potential competition, (c) it must be imperfectly imitable, and (d) there cannot be strategically equivalent substitutes for this resource that are valuable but neither rare or imperfectly imitable” (Barney, 1991: 105-6). Given these criteria, sustained competitive advantage obtains when a firm implements a unique strategy that is “backed up” by resources that conform to the four criteria above.

<sup>10</sup> The core of this approach is that “... in the absence of sufficient evidence to the contrary, one may treat observed prices and quantities as good approximations to their long-run competitive equilibrium values” (Reder, 1982: 12).

with no bargaining power. Here are some of the unfortunate consequences of grounding research in strategic management on such a model:

*Market power is excluded.* Since firms have no bargaining power in product markets — because of the assumption of price-taking —, competitive advantage is not a matter of “market power” in the sense of raising price above cost through restricting supply (as in, e.g., Porter, 1980).<sup>11</sup> Thus, there can be no profits from market power, only scarcity rents. However, the empirical evidence strongly suggests that firms’ returns are composed of both rents and profits (Montgomery and Wernerfelt, 1988; Demsetz, 1989). Moreover, bargaining in factor (input) markets is also abstracted from in some contributions (e.g., Barney, 1986), although not in all (it may be represented in Peteraf, 1993 by the assumption of “immobility”). Thus, the prices and present values of inputs do not diverge because demanders and suppliers on input markets have different bargaining powers; they diverge for purely informational reasons. Since bargaining is abstracted from, dissipation of value from bargaining activities (i.e., the “pie” is reduced as a result of haggling) cannot be treated. By the same token, creating value by means of reducing such activities (as in Williamson, 1996) cannot be treated either.

*Disequilibrium is not considered.* Since by the basic Chicago methodology, all phenomena that relate to strategic management must be expressed in terms of equilibrium, those aspects of strategic management that are best understood as disequilibrium phenomena appear out of sight. Notably, it is hard to make room for entrepreneurship in an “equilibrium-always” approach, because the essence of entrepreneurship is to either restore or upset equilibrium (Kirzner, 1973; Machovec, 1995; Lewin and Phelan, 2000). Of course, it is possible to use equilibrium models to examine the *effects* of entrepreneurship (e.g., in terms of earning rents in equilibrium), but the models themselves do not allow for the phenomenon itself, except in the very stylized form of draws from probability distributions over technologies with differing costs (as in Lippman and Rumelt, 1982). Related to this, dynamics becomes a matter of performing comparative-static exercises, that is, comparing equilibria where the

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<sup>11</sup> However, Peteraf (1993) hints at the possibility of incorporating market power concerns into the RBV, but the theory’s proponents have grappled with the implications of doing so.

variables differ because of changes in underlying data.<sup>12</sup> While disequilibrium characterizes the transition from one equilibrium to another, it is not treated in the model.

*Narrow understanding of competitive activities.* Because the understanding of how resources underlie competitive advantage is cast in a competitive equilibrium mould, the set of competitive activities that can be considered within the RBV is necessarily somewhat limited. While competition in terms of process innovations may be consistent with competitive equilibrium (Lippman and Rumelt, 1982), competition in terms of product differentiation, price discrimination, product innovation, etc. is not (Makowski and Ostroy, 2001). This is in contrast to other approaches, notably IO ones, that have made great strides forward in understanding a wide range of real-world strategic phenomena, such as the ones just mentioned as well as, for example, market foreclosure, advertising, entry-blockading pricing strategies and much else (Tirole 1988).

*Transaction costs are absent, or very selectively invoked.* The RBV is a “theory of the firm” only to the extent that it presumes significant transaction costs associated with exploiting a key resource through the market. And yet the theory ignores virtually all other transaction costs. The absence of transaction costs, save for a few selectively invoked ones, means that it is not possible to frame corporate strategy issues such as the choice of distribution channels, relations to suppliers, etc. in terms of comparative contracting (Chi, 1994). Moreover, the reduction of transaction costs — for example, through choosing governance structures that are more efficiently aligned to the relevant transactional dimensions than those that were previously in place (Williamson, 1996) — cannot be a source of value creation in such a world (Foss and Foss, 2002). In other words, the sources of competitive advantage cannot lie in economizing with transaction costs.

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<sup>12</sup> Foss (1996b) speculates that the suppression of dis-equilibrium issues is what explains the branching of the “resource-based view,” broadly conceived, into, first, the RBV proper, and, second, various “competence-based,” “capabilities,” “dynamic capabilities,” etc. approaches which all try to highlight dynamics in various ways (e.g., Hamel and Prahalad, 1994). Priem and Butler (2001a) recently also noted the lack of dynamics in the RBV.

*Processes of creating, capturing, and protecting value are conceptualized narrowly.* It emerges from the above points that with respect to the key strategic management issues of value creation, capture, appropriation, and protection, a competitive equilibrium starting point has quite a number of constraining consequences (cf. also Table 1). Thus, value creation by means of product innovation or differentiation (Machovec, 1995), advertising, improving contractual arrangements and internal organization (Akerlof, 1970; Williamson, 1994, 1996; Foss and Foss, 2002) and other ways of reducing inefficiencies cannot be represented.<sup>13</sup> This is caused by the suppression of entrepreneurship, disequilibrium, and transaction costs in the competitive equilibrium model. At least in the RBV core model, value creation is represented through the stochastic draw of a technology that is more cost efficient than those controlled by competitors (Lippman and Rumelt, 1982; Peteraf, 1993). Value appropriation represents no problem because factor owners receive their marginal product value. Value protection is then represented through those barriers at imitation that may protect the relevant rent stream in equilibrium, and capture is represented in terms of imitative competition. Protecting rents through deterring entry cannot be represented, because the price-taking assumption and the assumption means that market-power is absent. Finally, because transaction costs are assumed to be zero and bargaining is absent, the implication is that there is full appropriation, that is, firms appropriate all created value (Makowski and Ostroy, 2001), whereas in actuality sharing value is a very complicated bargaining game played out between the firm's stakeholders (Coff, 1997; Bowman and Ambrosini, 2000; Boddewyn, 2001).

## **Summing Up**

This section has exemplified the basic methodological point that the strategic management phenomena that can be conceptualized and explained are to a large extent constrained by the underlying theories and models. Thus, it has been argued that many strategic management phenomena cannot easily be represented by means of a patched-up competitive equilibrium model. In the following, I argue that it is

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<sup>13</sup> I am not arguing that the RBV is entirely silent about value creation; it clearly is not, since the very focus on sustained above normal profits in, for example, Peteraf (1993) implies a concern with value creation (in fact, a concern with appropriated created value, Makadok and Coff, 2002).

possible to take a broader view of how to address the key issues of strategic management, while still keeping the efficiency perspective characteristic of the RBV. Transaction cost notions (Coase, 1937, 1960; Williamson, 1975, 1985, 1996; Barzel, 1997) are useful for developing such a broader view.

## IV. A Coasian Starting Point for Strategic Management

### Starting From The Coase Theorem

The methodological point that the strategic management phenomena that can be addressed, conceptualized and explained are to a large extent constrained by the underlying theories and models may be taken to imply that we should let our choice of models (i.e., what we assume about interaction and behaviors) be guided by our research questions, not the other way around. Accordingly, the suggestion here is that the analysis of the fundamental issues of strategic management should begin by asking the fundamental questions and ask them, at least as a starting point, without reference to any specific structure of interaction or specific behaviors (e.g., price-taking). To repeat, in strategic management these questions are, *How is value created, captured, appropriated, and protected?* Answering these questions may at some stage involve reference to a competitive equilibrium model with price taking (they need not, however), but that particular model is no longer a constraining necessary starting point.

Rather, an approach to these issues may begin in a more general manner with the basic economic notion of exchange through bargaining. This is an appropriate starting point for the reason that exchange itself is value-creating (all parties to an exchange expect *ex ante* to increase their utility). Moreover, the notion of exchange leads to important bargaining issues, for example, that cooperating players' incentives to create value (e.g., undertake investments) are dependent on what they expect to get from the bargaining game (Grossman and Hart, 1986; Brandenburger and Nalebuff, 1996; Kim and Mahoney, 2001), and that the dissipation of value caused by resource-consuming bargaining (and associated phenomena, such as (excess) sorting, attempts to protect against the bargaining attempts of others, etc.) play a role in determining economic

organization (Barzel, 1997; Williamson, 1996). These issues are obviously relevant to strategic management; however, they are presently given rather scant attention (Williamson, 1994; Kim and Mahoney, 2001; Foss and Foss, 2002).

Starting with the notion of exchange through bargaining takes us into a vast territory.<sup>14</sup> In particular, there is a considerable body of work on the “*Coase theorem*” (Coase, 1960), much of which is a part of the TCE literature (Furubotn and Richter, 1997). Because of its centrality in the reasoning here, it is necessary to briefly state the theorem. In its conventional formulation, it says that absent transaction costs, initial assignments of property rights or legal entitlements to assets will make no difference to efficiency in the sense that the identical efficient (Pareto optimal) allocation will be realized regardless of who holds the relevant property rights or bear legal liability, since the parties will always be able to bargain their way to efficiency. Stated thus, the theorem may appear to be of interest only to economists interested in legal issues, particularly issues relating to liability. However, this is not the case: The theorem is much more general and has much richer implications, among which are implications for strategic management.

In essence, and to put it simpler, the theorem says that absent transaction costs,<sup>15</sup> efficient outcomes — that is, situations in which resources are used so that they yield maximum value — can always be realized.<sup>16</sup> It thus informs us that if transaction costs are zero, value creation can never be a *problem*. Collis and Montgomery (1997: 30-31) argue that “[v]alue is created in the intersection of ... three sets: when a resource is demanded by customers, when it cannot be replicated by competition, and when the profits it generates are captured by the firm.” However, if transaction costs are truly zero, there are no problems of resources being “replicated by competition” or any

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<sup>14</sup> Such as the game theoretical bargaining literature. Thus, there is a vast literature on bargaining processes and the role played by transaction costs, outside options, time preference, etc. for the outcomes from such bargaining processes (summed up in Muthoo, 1999). However, here the focus is on the tradition that began with Coase (1960). The insights and results may be rather overlapping, however.

<sup>15</sup> Transaction costs are here taken to be the costs of exchanging, capturing, and enforcing property rights (as in Barzel, 1997; Foss and Foss, 2002).

<sup>16</sup> Although this Coasian benchmark may seem to be exactly as extreme as the competitive equilibrium benchmark, in some dimensions it is not. For example, it is not dependent on any specific assumptions about market structure or by prices being given by some auctioneer.

problems associated with appropriating profits. These strategic problems only arise when transaction costs are positive.<sup>17</sup> Intuitively, therefore, a transaction cost focus provides the basis for a unified approach to the key issues of strategic management, that is, one that can analytically frame issues of value creation, capture, appropriation, and protection. To develop this, I begin from zero transaction cost exchange,<sup>18</sup> and examine what this tells us about the three central issues in strategic management.

### **Creating, Capturing, and Protecting Value in a Coasian Setting**

To illustrate, consider exchange in a vertical chain of agents, say, a supplier, a producer and a customer. How much value is created in this chain? "Value," as that term is conventionally used in strategic management discourse, typically refers to either the difference between revenue and the value of purchased inputs ("value added") or the amount by which the revenue exceeds the value of *all* the inputs (thus including the opportunity costs of the suppliers of labor and capital) the firm uses ("added value") (Davis and Kay, 1990). The latter measure is more satisfactory, for it captures the full economic loss that would result if the firm was broken up and "its" inputs used elsewhere in the economy. Given this notion of value, we can unambiguously define value creation in our vertical triad as the customer's reservation price (the maximum that he is willing to pay for the good) minus the supplier's opportunity cost. This generalizes to larger settings (i.e., more customers, producers, suppliers), so that value creation is the sum of the differences between the opportunity costs and reservation prices for all exchanges (see Brandenburger and Stuart, 1996).

In the Coasian setting, where all agents can bargain and exchange at zero cost, the agents (e.g., the parties to a contract) will in fact implement the mix of activities (i.e., the allocation of resources) that maximizes total value.<sup>19</sup> If indeed bargaining costs are zero, the issue of value creation can furthermore be separated from that of the

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<sup>17</sup> Note that this does *not* amount to claiming that all "problems of value creation" are transaction cost problems. To be sure, there are, for example, problems of innovation that have nothing to do with transaction costs (but see Kirsten Foss, 1996 for some cases where "problems of innovation" in fact *are* transaction cost problems).

<sup>18</sup> Analytically, this serves the same role as the assumption of "unrestricted bargaining" in Brandenburger and Stuart (1996).

appropriation of value. Thus, we may imagine that the parties to a contract follow a two-step procedure in which they first agree on the mix of activities that maximize their joint surplus, and then in the next step split this surplus through the prices and side-payments that emerge from bargaining. How will they split value, that is, how much value can each agent (say, in the above customer-firm-supplier triad) hope to appropriate? Game theoretic reasoning shows that there is an upper limit to what a player can appropriate, namely no more than his contribution to overall value creation (Hart, 1989). Making this more determinate requires that more assumptions be added, for example, that agents can join and leave “coalitions” (e.g., the above triad) as they please, that there are “many” agents, etc. Taking this to the extreme brings us to the competitive equilibrium model, where agents receive their marginal product value. In other settings, it is usually not possible to say exactly how cooperating agents will split the value they create in the absence of rather detailed knowledge about the size of the transfer payments that will normally be required to sustain an efficient outcome, bargaining powers, the structure of interaction, etc. (although economists have come up with a number of more or less plausible solution concepts to bargaining problems, see Muthoo 1999). It may be split in any possible way within the bounds given by opportunity costs and reservation prices. However, the Coase theorem implies that bargaining processes are instantaneous, consume no resources, and that there is no feedback effect from the splitting of value to the creation of value. Essentially, this implies that any organizational arrangement will be as efficient as any other (i.e., result in the same value creation).

Finally, just as the creation and splitting of value (i.e., the appropriation of value) presents no real problems, in the sense that these are costless processes in the Coasian setting, so the protection of value against other agents’ capture cannot be a problem either. This is because there will be no problem of protecting the value created in the coalition from, for example, would-be imitators, since in a zero transaction costs setting property rights can not only be costlessly exchanged but also costlessly

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<sup>19</sup> Milgrom and Roberts (1992: 35) denote this “the value maximization principle.” For the purposes of this paper, it is identical to the Coase theorem.

protected (Barzel, 1997). Thus, zero costs of protection implies infinite costs of capturing property rights from other agents.

### **Strategic Management in a Zero Transaction Cost World**

It is hard to make sense out of strategic management in a zero transaction cost world. To be sure, firms<sup>20</sup> may still come endowed with resources characterized by different efficiencies, these resources may be inimitable, and bargaining powers may still determine how firms share surplus value. Thus, resource-based strategies could still be carried out, because firms may implement strategies based on resources that are valuable, rare, and (infinite) costly to imitate and substitute, even if transaction costs were zero. However, maximum value would be created instantaneously in each time period, all rent streams would be perfectly protected, bargaining over the division of these streams would take place instantaneously and costlessly, there would be no problems of implementing a strategy (since organizational costs would be zero), etc. In sum, the creation, capture, appropriation, and protection of value would pose no problems whatsoever.

Arguably, a significant part of the content of strategic management seems to lie in all these processes *not* being instantaneous, costless and unproblematic. Extreme settings, such as the one underlying the Coase theorem, seems to leave very little room for genuine strategic choices. Still, a starting point in a situation with zero transaction costs is helpful for clarifying what it means to create, capture, appropriate, and protect value, and, in particular, *where* we should make adjustments to obtain a more realistic understanding of these issues. The relevant "adjustments" are a matter of introducing transaction costs. These are the monkey wrenches that we may throw into perfect machinery of the Coase theorem in order to better understand the connections between transaction costs and strategic management. Thus, transaction costs both directly and indirectly influence value creation. For example, measurement and bargaining costs directly influence (i.e., diminish) created value. So do costs expended on protecting value. When these costs are positive, some agents will expend resources

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<sup>20</sup> This is a bit of a misnomer since we cannot tell on economic grounds whether firms would exist in a zero transaction cost setting (one governance structure is as efficient as any other). "Producer" may be a better term for the productive unit under these conditions.

on capturing (property rights to) value created by other agents. These costs in turn induce “deadweight welfare losses,” that is, some transactions that would have been concluded under zero transaction costs are not carried out (Akerlof, 1970; Williamson, 1996; Hart, 1995).

All this is relevant to strategic management, because it implies, for example, that value may be created by reducing dissipation caused by transaction costs, organization has implications for returns, competitive activities aiming at protecting created value or capturing value created by other agents may be conceptualized as turning on transaction costs, etc. Thus, essentially the same strategy that Coase (1937, 1960) followed is followed here: Examine an extreme setting (i.e., the Coase theorem setting) to see what this tells us about the phenomenon that we are interested in understanding (i.e., the firm (Coase, 1937), the law (Coase, 1960) and strategic management (this paper)), and then demonstrate that this understanding is furthered by the introduction of transaction costs, in fact, that transaction costs are *necessary* to make sense out of the relevant phenomenon.

## V. Towards a Transaction Cost Research Program in Strategic Management Research

### **Transaction Costs and the Reality of Strategic Choice**

To see how extreme the setting assumed in the previous section is, and why it denies the reality of strategic choice, observe that the Coase theorem implies that all possible uses of assets are fully known, all returns from all uses of all assets are perfectly known, all legitimate and illegitimate uses of assets are perfectly specified, and all this is perfectly enforceable (Barzel, 1997). If all rights are completely defined in this way, there cannot, by definition, arise any conflicts over the use of scarce resources or the returns from assets because individuals do not have any discretion in the use of resources. Somewhat paradoxically, because there are no impediments to efficiency, there is also no genuine discretion, including no room for strategic choice.

In order to find a role for strategic choice, “imperfections” have to be thrown into this perfect world, as has been argued. This is recognized in strategic management,

although somewhat indirectly. Thus, scholars have introduced the economics notion of “market failures” (e.g., Dundas and Richardson, 1980), a concept that is closely connected to transaction costs (Cowen, 1988): Market failures arise as transaction costs are introduced into the perfect world of the Coase theorem. Relating market failures to fundamental strategic issues takes the form of arguments such as “asymmetric information is a necessary condition for internal capital markets to be superior to external capital markets,” “the public goods nature of knowledge may make it more efficient to exploit excess knowledge through diversification rather than contracting,” “because of asymmetric information, knowledge transfer may more efficiently take place inside firms than across firms,” etc. In fact, these are exactly the arguments underlying the Alchian-Williamson argument in favor of internal capital markets (Williamson, 1975), the dominant story of diversification (Teece, 1982), and the theory of the multinational enterprise, respectively, that is, theories that have been highly influential in the evolution of strategic management.

In these theories, it matters in terms of efficiency which organizational arrangements are chosen, in contrast to the perfect world underlying the Coase theorem. Thus, strategic choices of organizational arrangements are real, because different arrangements have different consequences in terms of created value. For example, contractual arrangements with suppliers, internal organization, quality systems, sorting of customers, etc. may all be sources of value creation (Milgrom and Roberts, 1992; Williamson, 1996; Barzel, 1997). Williamson (1994) thinks that these choices are so fundamental that “economizing is the best strategy.” Presumably this is because governance and contractual choices are ubiquitous, must be made by all firms, and can have important impact on performance, whereas strategizing, which appeals to a market power perspective, is only open to major players (Teece, Pisano and Shuen, 1997: 513). No doubt, many strategic management scholars accept the importance of organizational arrangements for value creation and protection, as well as the pertinence of transaction cost insights into these arrangements. Thus, somewhat indirectly, the ultimate relevance of transaction cost reasoning is surely acknowledged. However, it is also fair to say that only some of the many ramifications of transaction

costs for understanding processes of creating, capturing and protecting value have been addressed.

Before some of these are discussed, it should be noted that critics of the use of transaction cost notions in strategic management may object that not much is added with respect to understanding the nature of strategic management by patching up an atemporal economic equilibrium model with transaction costs: In a transaction cost constrained equilibrium, strategic choice is no more real than in the competitive equilibrium of economics textbooks. Relatedly, such critics may counter that the very same explanatory weaknesses — that is, narrow conceptualization of competitive activities, no attention to disequilibrium and entrepreneurship, neglect of market power, etc. — that were discussed earlier in connection with the pure version of the RBV will also beset applications of TCE in strategic management, since the TCE is not only an equilibrium theory, but also one that abstract from power considerations. However, although rather little work exists on this, TCE is in fact able to frame, for example, disequilibrium and power issues, so that in principle market phenomena that reflect disequilibrium and power are within the explanatory orbit of TCE.

Thus, beginning from the property rights branch of TCE, Foss and Foss (2002) point out that underlying transaction costs is costly information. They further argue that if information were not costly, agents could perfectly anticipate each others actions, including how many resources they would spend on creating, protecting and capturing value, which would lead to an equilibrium in which only those assets (property rights) worth protecting (e.g. from imitation) would in fact be protected. However, most information is costly. Information costs include the costs of forming estimates of the resources that other agents put into creating, protecting, capturing, and appropriating value. Given costly information, such estimates may be incorrect, biased, etc., which will lead to dis-equilibrium actions with respect to creating value, attempting to capture the value created by others, protecting one's own value, etc.<sup>21</sup> In

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<sup>21</sup> Of course, these actions are only disequilibrium relative to the very demanding benchmark of full expectational equilibrium just mentioned. They may well be equilibrium actions relative to less constraining equilibria, such as game theoretical ones (Tirole, 1988).

other words, costly information, a key assumption in TCE, leads to dis-equilibrium,<sup>22</sup> and therefore to errors, but also to attempts to outguess the market, inventing new value propositions, etc. In short, dis-equilibrium provides room for entrepreneurial activity (Kirzner, 1973; Rumelt, 1987; Mosakowski, 1998; Furubotn, 2002).

### **Transaction Costs, Market Power, and Competitive Strategy**

The nexus between costly information, transaction costs and strategic actions aiming at creating, protecting and capturing value also opens for an understanding of market power. In turn, this provides a link to competitive strategy, an important part of strategy that TCE theorists hitherto have had little to say about.<sup>23</sup> Most (economics-based) work on competitive strategy has been conducted from a perspective that stresses the pursuit and maintenance of market power (Porter, 1980; Tirole, 1988; Shapiro, 1989). The emphasis on market power is usually taken to be in contrast to the efficiency orientation of TCE and the RBV, such as in Williamson's (1994) distinction between "economizing" and "strategizing" perspectives.

As has often been noted, in a market power perspective, the pursuit of competitive strategy implies welfare losses caused by firms exercising their market power; a successful competitive strategy must unavoidably impose some deadweight losses on society. In the world of the Coase theorem, there can be no such inefficiencies, since all property rights are perfectly specified and enforced and agents can make costless bargains. In this situation, all inefficiencies will be eliminated through exchange. For example, a monopolist will be "bribed" by buyers to supply the competitive (efficient) output. While the monopolist may still be able to appropriate a

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<sup>22</sup> As Barzel (1997: 12, 11) argues in a slightly different context: "When equilibrium is disturbed in a positive transaction cost world, price adjustment is not expected to be instantaneous," which is in contrast to a zero transaction cost world, where "... when equilibrium is disturbed a new equilibrium is instantaneously attained because, given zero transaction costs, the cost of adjustment is zero."

<sup>23</sup> Of the few TCE contributions that deal with competitive strategy, none do so in the way sketched here. Williamson (1999: 1103) argues that TCE may add to positioning issues by providing insights into the *organization* of those strengths that allow firms to position themselves. However, he does not provide details on this. Nickerson (2000) argues that the choice of efficient organization should be seen as complementary to the choice of positioning. Nickerson, Hama and Wada (2001) provides an empirical illustration of this basic idea. Nickerson and van den Bergh (1999) integrate TCE ideas in the context of Cournot competition. And Hansen (2002) argues, drawing on Foss and Foss (2002), that governance structures may be usefully analyzed in a TCE manner with respect to their abilities to create, capture and protect value.

significant part of the created value (i.e., the sum of producers and consumers surpluses), this will not be associated with any deadweight welfare loss. The logic of the Coase theorem suggests that in order to make provision for market power-based competitive strategy, *some* transaction costs have to be present, in other words, some property rights have to be costly to exchange and/or less than perfectly specified and/or protected. This implies that underneath the market power arguments of, for example, Porter (1980) and Tirole (1988) is a deep structure of transaction costs that, however, is not spelled out in these works, and, furthermore, that it is ultimately economizing with these costs that yield the outcomes described in theories based on market power. This is a possible interpretation of Williamson's claim that "... economizing is more fundamental than strategizing" (Williamson, 1994: 362). The following elaborates.

A convenient way to illustrate the link between transaction costs and market power arguments is to consider the economic analysis of monopoly. In economics, monopolies are traditionally considered harmful because they introduce deadweight welfare losses, that is, the value of the lost supply that the monopolist's exercise of his market power deprives society of. However, the welfare losses introduced by monopoly may well be larger than this value. A large literature — called the "rent-seeking literature" — is concerned with the losses associated with the *creation* of monopoly positions, for example, through price wars, advertising, R&D, etc. Often this is cast in the language of property rights economics (Barzel, 1997), so that would-be monopolizers compete for the right to the monopoly profit (Posner, 1975). From an economic (if not legal) perspective, property rights may be defined as "... an individual's net valuation, in expected terms, of the ability to consume the services of [an] asset, or to consume it indirectly through exchange" (Barzel, 1994: 394; see also Barzel, 1997; Foss and Foss, 2002). Given this, transaction costs may then be defined as the costs of capturing and protecting such rights (Barzel, 1997). The would-be monopolist who is successful in his capture attempts becomes the economic owner of the right to the monopoly profit. Waste (i.e., transaction costs that dissipate value) arises in the competitive scramble for this property right, because only one will firm

capture the property right to the monopoly profit, but all competing firms expend resources in an attempt to capture it.

However, as Barzel (1994) points out, there are further ramifications of a would-be monopolist's attempts to capture rights to the profits from a monopoly position that are seldom considered in conventional analysis of monopoly. The other side of the coin of a successful would-be monopolist capturing monopoly rights is, of course, that consumers/users will have to surrender their rights to (parts of) the economic surplus that is now captured by the monopolist. Indeed, in the usual industrial organization analysis of such issues as monopolization, price discrimination, and the creation of entry barriers (e.g., Tirole, 1988; Scherer and Ross, 1990), much of which is echoed in crucial contributions to competitive strategy (Porter, 1980), consumers/users are assumed to passively surrender their property rights to the monopolist. If, in fact, consumers/users are *not* willing to surrender these rights but instead invest resources in protecting them, the would-be monopolizer's capture attempt may be frustrated. The fundamental point is that "... in anticipation of the potential of becoming the victims of monopolization, people can take protective action to avoid the associated loss" (Barzel, 1994: 407).<sup>24</sup> In turn, the would-be monopolizer will form estimates of this "protective action," that is, of the (transaction) costs incurred on protection. These estimates form the basis of his decision of whether to try to capture or not. By the same token, potential "victims" will form estimates of the costs that a would-be monopolizer may invest in capture. These estimates form the basis of their decision about whether to try to protect or not. In equilibrium, these estimates coincide and property rights will be perfectly delineated in favor of either the consumers/users or the monopolist (Barzel, 1994; Foss and Foss, 2002). For example, economizing with the costs of protection may lead to monopolization, when consumers/users realize that the costs of resisting monopolization overwhelm the benefits. If the relevant (transaction) costs do not change, the monopolist's position (i.e., "competitive advantage") will be sustainable.

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<sup>24</sup> Note that this also applies to the TCE explanation of governance structures: These are chosen so as to minimize the losses caused by hold-ups and morally hazardous activities (Williamson, 1996).

As an example, consider monopolization attempts through the competitive strategy known as “predatory pricing” (i.e., temporarily setting price below marginal cost in order to drive competitors out of the market). The relevant preys are here the predating firm’s competitors *and* its consumers who have to pay a monopoly price when the predator has driven rivals out of the market. However, preys are not completely defenceless against a would-be monopolizing predator. For example, the preyed-upon firm(s) and consumers can enter into long-term supply contracts that will protect them against the predator. A contract that stipulates the prevailing competitive price as the one under which future transacting will take place may be sufficient to stall all attempts at predation.

The reasoning suggests the following empirically refutable and closely related propositions:

**Proposition 1:** In industries where the probability that firms will exploit their market power (e.g., through predatory pricing) is high, buyers and sellers are more likely to enter into long-term supply agreements than in industries where the probability is smaller.

**Proposition 2:** In industries where the costs of contracting are high, firms will exploit their market power (e.g., through predatory pricing) to a larger extent than in industries where contracting costs are low.

A managerial implication is that strategizing firms are well advised to carefully consider the contractual structure that characterizes the industry in which they wish to position and compete (see also Aghion and Bolton 1987). Another one is that it may pay for would-be monopolizers to make it costly for preys to enter into contracts with each other. A way to do this is to engage in product differentiation and price discrimination, because these strategies essentially function as *divide et impera* strategies relative to attempts to build counter-wailing consumer/user power. They do so because they make it more costly for users to organize and protect against the would-be monopolizer’s capture.

Another way that a would-be monopolizer may make it costly for preys to enter into contracts that may stall attempts at monopolization is to engage in frequent

product upgrading. This can work as a means of raising the costs of contracting between preys, because consumers entering into these contracts with rival suppliers in the hope of avoiding being the victims of monopolization may have to pay for this in terms of not having access to upgraded products. The latter costs may overwhelm the former cost. In this case, a technologically dominant firm may indeed exploit its market power. Also, the assembling and announcement of allies, as when Sun gathered allies in support of Java and took out full-page advertisements listing the companies behind the Java coalition (Shapiro and Varian, 1999), may serve the purpose of deterring the attempts of preys to protect against capture. In other words, successful strategizing may proceed by means of raising the perceived impediments to exchange. The tactics of raising other players (consumers/users, rivals) perceived impediments to exchange by means of product upgrading, product differentiation, price discrimination, and various kinds of signaling would only seem to be necessary in industries where indeed other players can easily contract around attempts to exploit market power; if they cannot, why engage in resource consuming deterrence tactics? This reasoning suggests the following proposition:

**Proposition 3:** In industries in which consumers/users and firms can orchestrate their protection efforts at low cost (e.g., because they are few in number, are particularly well organized, have clearly defined shared interests, etc.), there will be more product upgrading, product differentiation, price discrimination, and signaling on the part of would-be monopolizers than in industries where it is more costly to orchestrate protection.

The kind of reasoning exemplified here has broader applicability (for an attempt to generalize, see Foss and Foss, 2002): All instances of market power-based competitive advantages may ultimately be explained in terms of efficiency-enhancing contracting (“Coasian contracts,” if you like) being too costly to carry out, so that the firm that exploits its market power can have its way. In this sense, indeed economizing is more fundamental than strategizing, because it is ultimately barriers introduced by transaction costs that explain why market power may be exploited at all.

## **The Empirical Dimension of the Transaction Cost Research Program in Strategic Management**

Examples have been provided of how TCE may help furthering the understanding of strategic management issues. On the most fundamental level, TCE helps to explain the nature of impediments to the creation, protection, appropriation, and capture of value, identifying transaction costs as important, but neglected, impediments. First, TCE supplies a *benchmark* characterized by such impediments being non-existent and the scope for strategizing therefore being very limited, namely the setting underlying the Coase theorem. Second, it tells us where to look for an understanding of these impediments, namely to transaction costs. Third, TCE makes specific contributions to the understanding of strategic management. A number of such contributions have already been put forward in the existing literature (e.g., Williamson, 1975, 1985, 1994 1996, 1999; Chi, 1994; Argyres and Liebeskind, 1999; Nickerson and van den Bergh, 1999; Nickerson, 2000; Nickerson, Hamilton and Wada, 2001; Foss and Foss, 2001, 2002; Hansen, 2002). Explicitly or implicitly these contributions make the point that value may be created through the reduction of dissipation introduced by transaction costs. Per implication the reduction of transaction costs may also be a factor behind competitive advantage. In addition, it has been argued in this paper that underneath market power-based explanations of competitive advantage is a deep structure of transaction costs. This approach highlights expectations and contracting as variables that strongly influence the capture and protection activities that go on in an industry. A pertinent question is how these ideas may be operationalized, opening up for empirical work.

Empirical application presents immediate problems because some of the core concepts, notably transaction costs and expectations, are hard to proxy. There is, of course, a very substantial body of empirical research in Williamsonian transaction cost economics (Klein and Shelanski, 1995). However, most of this work does not treat transaction cost issues in a strategic setting. Moreover, it is also centered on asset specificity, which is just one source of transaction costs (Barzel, 1997). It would therefore seem that in some important respects, empirical work on the TCE and strategic management nexus must start from scratch. The following remarks therefore

only serve to suggest the viability of empirical TCE research in strategic management that goes beyond the traditional asset specificity focus.

A first approach is to isolate practices in firms that arguably exist because they represent efficient means of handling transaction cost problems. Contracting are obvious examples of such practices. Little empirical work exist on contracting as a source of value creation, whether different kinds of contracting (e.g., more or less complete contracts) may contribute to explaining the distribution of competitive advantages in an industry, and the extent to which contracting practices are easy to replicate. Most empirical work in has been tests of the extent to which explanatory variables highlighted in TCE research, notably asset specificity, explains the choice of organizational form, the hypotheses that the value-maximizing organizational form is chosen being assumed rather than demonstrated. The performance implications of contracting practices represent a large, relatively unexploited opportunity in strategic management.

There are other practices with possible performance implications than contracting that may related to transaction considerations. Sorting practices are examples. Thus, in industries where quality variation is an issue — such as in food-related industries — sorting commodities into quality classes is, on theoretical grounds, expected to be a source of value creation. This is because there are gains to trade if customers' sorting, and therefore their measurement costs, can be reduced. Customers adversely sort among products in the hope of finding products the prices of which are below their value. Such sorting dissipates value, both because of the customers' cost of sorting and because sorting reduces the firm's expected appropriable value, leading it to reduce supply (Barzel 1982). If instead the firm sorts, dissipation may be reduced, because the producer arguably has a comparative advantage in sorting. The additional created value may be shared between the firm and its customers, according to bargaining strength. The reason that firms do not *always* sort is that their cost of sorting may overwhelm (his share of) the gains from trade if he sorts. However, as Kirsten Foss (1996) explains on the basis of qualitative studies, a number of innovations in sorting technology, packaging, and much else may be understood as lowering producers' costs of sorting, thus allowing for gains for both

customers and firms. Competitive advantages may be founded on such innovations in sorting technology.

This kind of reasoning may be generalized; it is also in principle testable. In principle, it applies to all sorts of “transaction technology,” including, for example, monitoring technologies (see Hubbard, 2000 for an empirical application). Propositions that are in principle testable and that emerge from this kind of reasoning are of the following rather generic kind: “Firms’ competitive advantages are positively and significantly influenced by the size of the investments (weighted by firm size) they put into sorting technology [substitute monitoring technology, credit controls, etc].”<sup>25</sup>

A second empirical approach that is suggested by the preceding discussion of the link between transaction costs and market power puts more of an emphasis on firms’ external environments and the interplay between capture and protection, placing contracting and expectations center stage. A basic problem here is that expectations and the costs of contracting are not directly observable. Thus, it is hard to directly test overall propositions of the form, “In industries where the threat of predatory pricing [substitute other kinds of monopolization attempts] is high, buyers and sellers will hold expectations that lead them to adopt long-term contracting with other firms than the would-be predator, unless the costs of doing so are prohibitive.” Also, the “threat of predatory pricing” and even the extent of “long-term contracting” may be hard to measure. Thus, testing the above hypothesis must be indirect. For example, there are various measures of, for example, the transaction costs of engaging in preemptive contracting that blockades monopolizing attempts. A relevant measure would be the percentage fraction of organized consumers/customers of the whole consumer/customer base. Another relevant measure of the above transaction costs would be industry concentration (e.g., measured as the Herfindahl/Hirschman index). Time series of these could relatively easily be constructed and regressed against some measure of monopolization attempts, for example, the number (and perhaps types) of

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<sup>25</sup> Of course, this kind of generic proposition presupposes that factor markets are imperfect; otherwise, benefits would be completely offset by investment costs. Also, there are issues of endogeneity here: If lagging firms are observed to not make investments in, for example, sorting technology, should we assume that if they did undertake such investments they would do better, or should we assume that there are some unobserved characteristics that explain performance and why they do not undertake investments? (Thanks to an anonymous reviewer for pointing the endogeneity problem out).

antitrust cases in the relevant industry. Testing this proposition will require controlling for such factors as asset specificity and price-stability, both of which tend to promote long-term contracting (Williamson, 1996).

### **Closing Comments on the RBV and the TCE**

In the preceding pages, the pure, economics-based version of the RBV was used as an example of how a narrow analytical core may strongly constrain the reach of an approach. However, there are at least two areas where a TCE approach may usefully complement existing work in the RBV.

The first one concerns the issue of *sustainability* of competitive advantage. The TCE contains implications for sustainability. For example, it has been suggested that whether firms can sustain a favorable position that builds on market power depends on the protection costs of other agents (see also Foss and Foss 2002). However, to the extent that imitability and substitutability of critical resources are key concerns in the analysis of this issue (Barney 1991), the TCE has relatively little to offer of its own. While sustainability may formally be placed under the rubric of (sustained) “protection of value” and would-be imitators’ costs of imitation may be conceptualized as measurement costs (Barzel, 1997), the TCE approach that has been sketched here has little to say *per se* about the characteristics that resources must possess for sustainability to obtain. For example, rather little effort has been devoted within the TCE to develop distinct insights into issues such as tacitness of knowledge, social complexity, path-dependence, time-compression diseconomies, asset stock interconnected, etc., all of which are arguably critical factors in the sustainability of competitive advantage (Barney, 1991; Peteraf, 1993).

The question is how exactly this complements the TCE. This leads into the second issue where a TCE approach may usefully draw on RBV insights, namely with respect to differential capabilities, that is, firms’ differential abilities to organize, manage, coordinate or govern sets of activities. Foss and Foss (2000) argued that because capabilities are essentially about organizational processes, they should be susceptible to analysis in terms of the TCE. However, TCE cannot adequately account for why capabilities are different across the population of firms (Williamson 1999; Dosi

and Marengo, 2000). To be sure, the RBV does not present much of an analysis of exactly *why* firms differ either, but at least it takes it axiomatic that for understanding performance differences, it is necessary to posit that firms' resource endowments are different. This perspective complements the TCE because it suggests that for the TCE to successfully explain performance differences, it is necessary to think of firms as controlling differential capabilities with respect to capture, appropriation, and protection. Some work has been done already on how path-dependence may be aligned with the TCE (Argyres and Liebeskind, 1999), and this goes some way towards understanding why capabilities are asymmetrically distributed across firms. Ultimately, TCE (*and* the RBV) needs to be integrated with theories of learning in order to realize its full potential, including the dynamics of the formation and change of capabilities, and therefore the dynamics of competitive advantage.

There are reasons to think that TCE has at least the potential to become an integrating perspective in strategic management research, one that can encompass key insights of industrial organization approaches (because of the emphasis on contracting, expectations and interactive processes of capture and protection of value in the TCE) and the RBV (because the TCE explains exactly why organization-based resources may be sources of value creation). However, although the TCE may be *integrating*, it is not argued here that the TCE is *overarching* in the sense that it can express other approaches as special cases *and* add something of its own. For example, because the RBV contains ideas that are not present in the TCE (i.e., the characteristics of resources that cause sustainability), it cannot be expressed as a special case of the TCE. Also, the TCE directs primary attention to reducing inefficiencies associated with exchange as an important source of value creation. Evidently, there are numerous sources of value creation that do not fall within this perspective. For example, in many cases, creating value through product and process innovations does not. Thus, the TCE is not an all-encompassing strategic perspective. No perspective is. However, it directs attention to phenomena that, although important, have hitherto been comparatively neglected in strategic management research.

## VI. Conclusions

This primarily methodological paper has been taken up with foundational issues in contemporary strategic management research, particularly the role of transaction costs. Its starting point is the uncontroversial one that the issues that can meaningfully and informatively be conceptualized are limited by the available conceptual lens. This was exemplified by focusing on the pure RBV model, which is arguably a patched-up competitive equilibrium model, and which strongly constrains what can be said about strategic management. For example, because transaction costs are largely absent from this model, transaction cost-based sources of value creation are not treated.

This led into the broader and more constructive argument that the understanding of the key strategic management issues of the creation, capture, appropriation, and protection of value will be substantially informed by considering transaction costs. First, to the extent that these processes pose strategic problems, it is (largely) because transaction costs are involved. Examination of the zero transaction cost benchmark revealed that in this situation no real strategic problems exist. Second, and in a more specific vein, introducing transaction costs means introducing sources of creating value that so far has not been systematically treated in strategic management. Thus, creating value may mean reducing transaction costs, and the deadweight losses implied by their presence.

As noted, others have made related, if perhaps less expansive, claims on behalf of TCE, notably Rumelt (1984), Williamson (1994, 1999), Rumelt, Schendel and Teece (1994), and Nickerson (2000). I concur with these, but submit that proponents of TCE in the strategic management field have not demonstrated the necessity of using transaction cost arguments for making sense out of many interesting issues of strategic management. Moreover, although the relevance of TCE arguments have traditionally been acknowledged in connection with corporate strategy issues, the relevance of these arguments to *competitive* strategy has, with a few exceptions (Williamson, 1999; Nickerson, 2000; Foss and Foss, 2002; Hansen, 2002) not been noted or developed. In contrast, this paper has tried to demonstrate the generality of TCE arguments and ultimately the necessity of invoking these arguments. The possibility of applying TCE

arguments to competitive strategy issues has been noted and some ways to unfold this possibility have tentatively been sketched. Thus, there is basis for feeling confident that future TCE-based work in strategy will prove fruitful.

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TABLE 1:  
*Key Strategic Issues in TCE and RBV*

	<b>Value Creation</b>	<b>Value Capture</b>	<b>Value Appropriation</b>	<b>Value Protection</b>
<b>RBV</b>	Usually black-boxed (e.g., Barney 1991). However, Barney (1986) addresses value creation as arising from superior information or luck.	Enters formally through imitative competition. However, the details of imitation games are never explored in great detail.	Usually not explicitly treated, except under Peteraf's (1993) notion of "resource mobility". See also Coff (1999).	Enters mainly through "barriers to <i>ex post</i> competition" (Peteraf 1993).
<b>TCE</b>	Value is created through reducing 1) transaction costs and 2) the deadweight welfare losses caused by transaction costs. Thus, the TCE adopts an exchange perspective on value creation.	May take numerous forms, e.g., excess sorting, moral hazard, opportunism, as well as most competitive forms.  Opportunities for capture depends crucially on expectations with respect to the resources other firms put into protection and on the prior contracting in an industry.	Depends on bargaining strength which is partly a matter of the allocation of property rights (Hart, 1995), and on how agents can influence the return stream (Barzel, 1997).	May take numerous forms. Depends crucially on contracting and expectations.  Firms may protect value-creation by means of farsighted contracting that blockades other firms' capture. Or, they may raise would-be capturers' cost of capture.

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