Value-based Strategy Theories:
Clarification and Implications

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ABSTRACT

The concept of value is fundamental to research on and the practice of business strategy. Yet, in much of the work in business strategy, the concept of value is under-defined, weakening the logic of the strategy theories and limiting validity of empirical and normative work based on these theories. This analysis develops a clear definition of value, based on economics, and highlights the unavoidable need to define the firm’s competitive context when determining the amount of value a firm creates.
Recent work by MacDonald and Ryall (2002) on the economic foundations of successful business strategies has highlighted two fundamental conditions that an economic agent must meet in order to earn surpranormal profits, the generally accepted goal of business strategy among most management practitioners. First, a firm must *create* economic value, which entails forming a value chain that allows input suppliers, who value the inputs they supply at one level, with output buyers, who value the products made from these inputs at a higher level. Second and more critically, the firm must play a role in this value chain that cannot be played equally well individually or collectively by the suppliers, buyers and other competing firms so that it is in a position to *appropriate* an above-normal share of the economic value created by the value chain. They go on to develop a set of tools for determining precisely whether or not a firm plays such a role. Their approach, which builds on earlier work by Brandenburger and Stuart (1996) and is similar to recent work by Lippman and Rumlet (2003a; 2003b), possesses both an intuitive rationality and a robust economic logic, suggesting that it should form a solid foundation for empirical and normative research in strategy.

In this paper, I examine whether or not this confidence is warranted by looking more closely at the concept of competitive advantage using the implications of MacDonald and Ryall’s (2002) and an exploration of the nature of economic value. To begin, I make a clear distinction between two different definitions of competitive advantage that are often confused. Specifically, competitive advantage can mean a *state* in which a firm earns above normal returns as in “when [the minimum level of appropriation] exceeds the normal rate of return [we] say the individual has a competitive advantage” (p. 2 MacDonald and Ryall, 2002). Alternatively, it is often used to mean an
asset, resource, or capability possessed or controlled by the firm, which then allows it to earn above normal returns, as in “In the 1980s, companies discovered time as a new source of competitive advantage.” (p. 57 Stalk, Evans et al., 1992). In many regards, the search for competitive advantages in the latter sense represent the “holy grail” of much of the research in strategy in that positive theoretical research in the field often tries to answer such questions as “Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?” (Barney, 1986). Similarly, positive empirical research often uses cross sectional statistical methods to isolate features of firms that implicitly act as sources of competitive advantage as in “Diversification Strategy, and Profitability,” (Rumelt, 1982). Finally, by their vary nature, normative theories of strategy almost always explicitly point readers to hypothesized sources of advantage as is “The real sources of advantage are to be found in management’s ability to consolidate corporatewide technologies and production skills into competencies that empower individual businesses to adapt quickly to changing opportunities” (p. 81 Prahalad and Hamel, 1990).

The search for identifiable sources of competitive advantage turns out be theoretically problematic because there is no such thing as a source or even sources of competitive advantage that can be said to be possessed or controlled by an economic agent. The intuition behind this blunt statement is quite straightforward: economic value is created through exchange, which means that there must be at least two parties involved in all value creation, each of which, logically, plays a critical role in the value creation, even if only one appropriates all the value created. At issue here is something more than semantics. The critical theoretical implication is that the success of a “strategy” is always
context-specific, and hence, the answer to the question “Can X be a source of competitive advantage?” is always “no,” in the most rigorous technical sense since such a thing cannot exist by the logic above, or “yes, but only sometimes” in the looser, more intuitive sense in which the context is inferred. More practically, however, the real intuition for strategy research is that it is never theoretically tenable to discuss the performance consequences of a particular aspect of a firm, its resource or capabilities if you will, without explicit reference to the context in which that firm operates or can operate. For this reason, the only precise form of the term competitive advantage is that which describes a state of the economy or portion of the economy, which leads to a firm appropriating an above normal share of the value being created.

Note that this conclusion is imbedded within the approach taken by MacDonald and Ryall’s (2002). Their paper offers a method for determining which agents can and cannot appropriate a portion of the surplus they create through cooperative action for a given allocation of goods and preferences among the agents in the strategic setting. This allocation is an economic state, and it determines the set of value-creating exchanges. Which agents have and do not have a competitive advantage is then deterministic in the sense that it is the outcome of an equilibrium redistribution of the goods in the economy that exhausts all gains from trade. Hence, if you know that state, you know who has a competitive advantage. From a normative perspective, this approach offers an attractive, logical way for a strategist to evaluate alternatives as long as it is possible to characterize the alternative states that the firm and economic system in which it operates may move to.
MacDonald and Ryall’s (2002) are silent on how the system arrived at its current state or how that state is likely to evolve in the future. This silence, however, is not surprising since there are clear limits to the information one can obtain about the primitives that characterize the state of the economy—the allocation of goods and the preferences of individuals. Thus, the second theme of this analysis is a consideration of the nature of economic value and the implications this nature has for the formalization of strategy. In this analysis, I demonstrates that the economic value of a good—some combination of energy, matter, and information—is a psychological phenomenon, rooted in the idiosyncratic benefits that a good imparts to a particular individual, and hence is not an attribute of the good, but is instead, a property of an individual-good dyad. The implication for strategy research and practice that can be derived from this simple result is that economic value is inherently private in nature and is observable, imperfectly, only when one individual engages in voluntary exchange with another individual. As a consequence, opportunities for value creation are not precisely knowable \textit{ex ante}. Instead, they can only be inferred from the past experience, which gives the observer some information about the value placed on goods by a specific set of individuals. These inferences, in turn, rest on the theoretical models of consumer behavior that the strategist uses to generalize this information to new contexts, making it clear that a firm’s strategic choices depend fundamentally on its beliefs about the value of its existing and potential products.

This last result is consistent with Barney’s (1986) conclusion that superior firm performance that stems from purposive effort by the firm rather than luck is rooted in an information advantage possessed by the firm regarding the value creation and
appropriation potential of the factors it uses to serve its customers. However, the result also suggests that the advantage need not be limited to information about the internal capabilities of the firm, as asserted by Barney (1986). In particular, the role that experience plays in firm learning about the private value placed on inputs offered by suppliers and outputs used by buyers suggests that firms should also persistently differ in their knowledge of the environment in which they operate as long as some transactions between a firm and its buyers and suppliers remain private. More generally, the private nature of economic value implies that new, value-creating strategies have an irreducible creative component. That is, they cannot be completely delineated prescriptively without a complete description of the processes that produce consumer behavior. Given the state of knowledge in the fields of psychology, sociology, and neuroscience, which must ultimately underpin the firm’s model of consumer valuation, such a description is outside the current reach of both managers and researchers. Moreover, the axiomatic assumption of rational, self-interested behavior and revealed preferences used with considerable success by economists to characterize consumer demand is not a sufficient model of behavior for strategy research and practice. The fields of psychology and sociology, which inform the firm’s understanding of the value that an individual might derive from a good either offered as an input or consumed as an output, remain highly salient in the field of strategy research.

VALUE CREATION AS A STRATEGY CONCEPT

To understand the strategic implications of the psychological and sociological nature of value, it is useful to first review the basic structure of value-based theories of strategy. In Brandenburger and Stuart’s (1996) original value-based theory of strategy,
firm profits arise through a value creation process, defined as a cooperative game among a proper set of suppliers (who provide inputs), firms (who transform these inputs into products), and buyers (who derive some benefit from consuming the products offered by firms). In the setting defined by these participants, a firm creates value as long as some buyer is willing to pay a price for the firm’s product that is greater than the economic cost of the inputs used by the firm to produce that product, with the economic cost of the inputs defined as the amount the supplier could obtain by using them in their next best use.

Within this framework, a firm can appropriate a portion of this created value if and only if it adds value, which means that it creates more value than any other firm in the setting. Note that because all inputs, including capital, are valued at their economic cost, appropriating value is equivalent to earning economic rents for suppliers of equity capital, the residual claimants on the value appropriated by the firm. More generally, any supplier, firm, or buyer that appropriates some of the created value is earning the equivalent of economic rents.

MacDonald and Ryall (2002) have shown that adding value is only a necessary condition for appropriating value. In order to be guaranteed a portion of the value created, the equivalent of a being at a competitive advantage, the firm must create so much value that it can always find a supplier-firm-buyer coalition that it can destabilize by offering at least one of the buyers or suppliers a better deal than they are getting in their current coalition (Proposition 4 MacDonald and Ryall, 2002). The essential feature of a firm that meets this sufficiency condition is that its capabilities in converting inputs into products are sufficiently well-matched to either the inputs of the suppliers or the
needs of the buyers so that it is always guaranteed participation in a coalition that allows it to appropriate some of the surplus.

Observe that in this model, the amount of value that can be created is determined in an exogenous fashion. In Brandenburger and Stuart (1996) the buyer’s willingness-to-pay and the supplier’s economic cost are both defined by recourse to alternatives outside the setting under consideration. In MacDonald and Ryall (2002) the “value creation opportunities are taken as the primitives of the game.” Taking the identities, endowments, and preferences of the agents in a setting as exogenous data is analytically equivalent to specifying the supplier-firm-buyer value chain in Porter’s (1980) five-forces position analysis. Its advantage over the positioning approach is that it provides a more concrete characterization of the bargaining power of each of the players in the setting. Its role in strategy formation is then as a tool for evaluating alternative positions that the firm is considering, an approach taken by Brandenburger and Stuart (1996).

These assumptions also make the approach structurally equivalent to Walras’ price determination problem, with the prices that emerge in the Walrasian equilibrium determining the allocation of the created value among the participants. In essence, both papers characterize the movement of an economic system from an out of equilibrium condition to an equilibrium condition at which all gains from trade are exhausted. In this regard, there is no strategy per se if strategy is meant to imply the seeking of rents. Rents are determined by the initial allocation of goods and preferences among the agents supplying, transforming and buying the goods in the economy. Even if the value appropriation approach is generalize to a setting that includes among suppliers those that provide the “strategic factors” (Barney, 1986) that the firms need to achieve a
competitive advantage. Again, the results are intuitive and logically robust in their economics—agents that are singularly well-matched to the suppliers of these strategic factors can appropriate a portion of the created value, and hence have a competitive advantage. Yet, the reason for the heterogeneity among agents in these strategic factor markets, which is the “ultimate” source of the competitive advantage, remains unexplained. What is need is a more comprehensive description of the sources and nature of this heterogeneity, which can only be developed through a micro-level analysis of the how exchange creates value.

THE CONTEXT SPECIFIC NATURE OF COMPETITIVE ADVANTAGE

A critical implication for strategy research that can be drawn from the concluding observation of the last section is that the added value of a given agent and hence, the size of its competitive advantage, is always a function of the initial endowments and preferences of at least one other agent in the setting under consideration. Stated another way, competitive advantage is an attribute of a firm-context dyad rather than an attribute of a firm per se. It follows immediately that the firm’s competitive advantage in one setting need not be portable to other settings.

A simple illustration will make this point most effectively. Consider a setting in which there are two sets of individuals, A and B, geographically isolated to the degree that exchange between the two groups never occurs. In essence, members of A and B each constitute a distinct market. In the vicinity of group A, there are two firms, 1 and 2, that are able to convert an unlimited amount of good l, one unit of which is possessed by all members of A and B, into one unit and goods g1 and g2, respectively. Members of A value g1 at 3l and g2, at 2l.
It is clear from the structure of this example that firm 1’s product, $g_1$, is superior to firm 2’s product, $g_2$, in the minds of members of $A$. It is also true that firm 1 will be able to appropriate a portion of the surplus it creates by converting $l$ into $g_1$ because it creates sufficiently more value than firm 2. That is, its minimum residual is positive (MacDonald and Ryall, 2002). The minimum residual of firm 2, by contrast, is zero so that it cannot appropriate any value. Most observers of this setting would generally claim that firm 1 has a differentiation advantage over firm 2 (Porter, 1980), and by implication possesses a competitive advantage. Absent any direct evidence of heterogeneity among the firms—the possession by 1 of a patented technology that imparts additional attractiveness to $g_1$, for example—they very likely will also infer that firm 1 possesses some valuable resource or capability that underpins its product superiority and point to that resource or capability as the source of its competitive advantage.

Now imagine that the barrier that separated the firms from $B$ falls for some exogenous reason at the same time that a new barrier appears, cutting off the firms from market $A$ and forcing the firms to trade with members of $B$ only. The members of $B$ are similar to $A$ in that they also possess one unit of $l$ each, but differ from those of $A$ in that they value $g_2$ at $3l$ and $g_1$ at $2l$. Therefore, after the change in market structure firm 2’s minimum residual is positive while firm 1’s is zero, and hence, firm 2, not firm 1, has a competitive advantage, by the same logic we used above.

Observe that in this stylized example, nothing about the firms changed when the exogenously determined barrier arose between the firms and market $A$ and fell between the firms and market $B$. Yet, the identity of the firm possessing the competitive advantage changed. Clearly, the same result would have followed if we had given each
firm a market-specific cost advantage by assuming that it differed from its rival in its efficiency when converting units of $l_A$ and $l_B$, the inputs provided by members of A and B, respectively. It follows immediately that competitive advantage is not an attribute of a firm \textit{per se}, but is instead an attribute of the firm \textit{and} the context in which it operates.

The key insight in this example that is frequently overlooked when we talk about strategy is that value creation requires \textit{exchange}, and hence always involves at least two economic agents. Therefore, it is logically inconsistent to speak of one agent as the source of value creation or to attribute the created value to some resource, capability or competence possessed or controlled by only one of the trading partners. At a minimum, there must be a second agent which contributes its desire for the exchanged good, and hence attributing the value creation to a resource possess by the supplier of the good is no different, from a theoretical perspective, to attributing the value creation to a resource that underpins the buyer’s desire for the good. To my knowledge, no research using the latter perspective exists in the strategy canon, but its absence stems from making the selling firm the focus of strategy research, not because it is less tenable theoretically to attribute all of the value creation to the buyer rather than the seller.

The results of the example also hint at just how sensitive strategic analysis is to the definition of an industry that is used. Specifically, if the “industry” used to characterize the strategies of firms 1 and 2 includes customers in market A only, the results of an analysis of firm 1’s and firm 2’s competitive positions will be quite different than if the industry is defined as customers in market B. In the two parts of that example, the industry definition was given by reference to an exogenous barrier that existed between the firms and each of the markets. In a fundamental sense, this barrier should be
characterized as among the “sources” of the firm’s competitive advantage. That is, without the barrier between the firms and market B, for example, firm 1 has no competitive advantage.

This discussion begs the question of what if any theoretical basis is there for determining the boundary of the setting in which a firm competes. In general, industry boundaries are economic phenomena, determined by the state of technology and the allocation of goods and preferences among agents in the economy. At the most abstract level, the industry boundary divides those agents for whom value creation is possible through exchange from those for whom this is not the case. To make this statement more concrete suppose that instead of a physical barrier between markets A and B in the earlier example, we characterize the boundary between markets A and B as a transportation cost $c>3l$ such that the net gain that buyers in market $B$ obtain when buying firm 1 and 2’s products are $-2l$ and $-l$, respectively. In this example, the buyers in market $B$ can be safely excluded from a definition of the industry in which firms 1 and 2 compete. Again, it seems reasonable to include the transportation cost $c$ as part of the source of firm 1’s competitive advantage even though it is a feature of the environment rather than aspect of firm 1.

The simplicity of the solution to the industry boundary problem in the foregoing illustration belies three inherently problematic features of real world strategy problems. First, the net valuation imputed to a good by a group of consumers will never demonstrate the extreme homogeneity that the previous example relied on to draw a clear and precise boundary around the industry for the firms. It seems more reasonable to assume that consumers possess idiosyncratic net values, with a distribution derived from
heterogeneity in their preferences and endowments of goods. Second, this distribution is generally unknowable because economic value is inherently private and only partly observable to an observer, a topic I will turn to in the next section. Finally, the economic value of a good in a particular setting is a function of the value of goods outside that setting, making it theoretically impossible to isolate a setting completely and locate a firm’s competitive advantage within that setting. The implications of this last observation raise important issues for what a firm must understand and track in its environment if it is identify the opportunities and threats it faces, a topic I take up in the final section of the paper.

THE NATURE OF ECONOMIC VALUE

Under the more reasonable assumption of heterogeneous consumer valuations, a strategic assessment may safely exclude some buyers and draw a bright line industry boundary if and only if the distribution of values possesses a finite lower bound. In such a case, the industry boundary consists of the set of consumers whose valuations are such that exchange with the firm offering the best product leaves them with zero net surplus. The simplicity of this approach, however, again belies the difficulty of defining an industry boundary for a real strategic problem because economic value is a private, pysch-sociological phenomenon that is only imperfectly observable.

*The American Heritage Dictionary of the English Language* (Morris, 1971) offers the following definition of the term value:

value (väl’ yoo) n. 1. An amount considered to be a suitable equivalent for something else; fair price or return for goods or services. 2. Monetary or material worth. 3. Worth in usefulness or importance to the possessor; utility or merit. 4. A principle, standard or quality considered worthwhile or desirable. 5. Precise meaning or import, as of a carefully considered word. 6. *Mathematics.* An assigned or calculated numerical quantity. 7. *Music.* The relative duration of a
tone or rest. 8. a. The relative darkness or lightness of a color in a picture. 8. b. That aspect of color in the Munsell color system by which a sample appears to reflect more or less of the incident light. Value corresponds to lightness (see) of the perceived color. See color. 9. Phonetics. The sound quality of a letter or diphthong.

A close read of these ten definitions of value as a noun highlights a key aspect of the concept of value: it is a feature, either explicitly or implicitly, of the relationship between two things rather than of the things themselves. That is, declaring that something is valuable is a statement that it has more value relative to something else. In several of the definitions, one of the two objects in the comparison is an agreed upon standard reference point. For example, value can be measured using money (number 2.) or the standard colors in the Munsell color system (number 8.b.). In all the others except for number 3., there is an intrinsic reliance on some collectively agreed upon reference point, which serves as the basis with which a thing can be compared. For example, something is consider worthwhile (number 4.) because, implicitly, one or more individuals considers it worthwhile, and a word has a precise meaning (number 5.) because the 100 usage experts polled by William Morris, the editor of The American Heritage Dictionary (Morris, 1971) are in general agreement about the definition of that word. An implicit comparison point also exists in definition number 3., but that reference point is idiosyncratic rather collective.

It follows immediately, that to give economic value and value creation definitions in business strategy that are both concrete and universally accepted, we need a communally accepted comparison system. Ideally, this system would make use of a value reference point that is exogenous to the object whose value we are trying to assess, something akin to the cesium atom, whose vibrations are so regular and impervious to the
changes in the environment around them that they can be used to measure the passage of
time on earth to a precision of plus or minus one second every 20 million years.

Unfortunately, no such exogenous reference point can be devised for measuring
economic value because it is a psychological phenomenon at the individual level, which
is rooted in the idiosyncratic psychic processes of a human being. That is, it is not an
attribute of the object or action (in the case of a service), but is instead a state of the mind
of an individual. It follows immediately that the value of a good is always context-
specific—it depends fundamentally on the individual who desires it. Even when one firm
sells to another firm rather than an individual this conclusion holds because the buying
firm’s valuation of the good it is obtaining is ultimately underpinned by the demand of
some individual or individuals further downstream.

As a psychological phenomenon, economic value is also generally unobservable,
although an observer can learn some information about an agent’s valuation by observing
voluntary exchange—the transfer of the good between two actors in the economic
system—if we make the additional assumption that agents are rational in the sense of
only making exchanges that are in their individual self-interest, whatever those may be.

The psychological basis and inherently private nature of value is probably a key
source of the persistent heterogeneity among economic actors that ensures that there
always exist unexploited gains from trade in the economy. To see this, consider two
firms selling to three groups of consumers, one set that buy from neither and two other
sets that each alone sells to. Further, assume that a firm cannot observe the transactions
that its rival engages in. Finally, assume for simplicity, that each firm sells at a single
product at a uniform price to all buyers willing to pay at least that minimum price.
Under these assumptions, both firms will have information about the minimum valuations place on their goods by the customers for which they alone are suppliers. They know only the minimum valuation because they can only observe the buy/don’t buy decision that these consumers are making, which tells them that the valuation is greater than or equal to (buy) or less than (don’t buy) the uniform price. Similarly, they know the upper bound of the valuations that the consumers who don’t buy from either can have based on the fact that these consumers do not buy at the uniform prices. Finally, they know the lower bound on the value that their own customers place on any features they offer that their rivals do not, based on any price differential that exists between the two firms.

In this stripped down example, they have no information about how much consumers might pay for an additional feature until they actually offer that feature and learn by observing buy/don’t buy decisions after the introduction of the new feature. In a more realistic model, the firms might ask consumers whether or not they would value a new feature. Alternatively, they might theorize about what these consumers would value, using either a theory of the underlying value or possibility using experience in a setting they believe is analogous to one in which they are trying to improve their position.

In either case, it is not hard to see why firms will persistently differ over time. Each will observe different transactions and be closer to different sets of consumers. Each will also hold different theories about valuation, based on both the training and experience of the managers making decisions. The net result is a highly path dependent process that is rooted in the inherent opacity of economic value. This result also suggests that empirically, firm heterogeneity and market transparency should be inversely related.
Ceteris Paribus, the more transparent a market is, in the sense that it is possible for firms to see each other’s transactions, the less heterogeneity we should see among firms.

This analysis is also consistent with “Innovators Dilemma” (Christensen, 1997) in which historically successful incumbent firms are blind-sided by entrants because the incumbents are too focused on serving the needs of their existing customers. Essentially, the incumbents work to exploit their information advantage with the buyers they have but have no advantage when it comes to designing products for a new class of customers, whose needs are completely private until they are actually offered products. If it were only the case that the incumbents suffered from a lack of information then we would expect them to do about equally well as entrants at experimenting to discover the needs of the new class of buyers, all else being equal. That they actually suffer relative to the entrants suggests that they are at a disadvantage because their experience with existing buyers leads them to adopt the wrong theory in their searching for information about what the new class of consumers values.

The key normative implication to take away from this discussion is that it indeed pays to “get close to your customers.” Doing so allows the firm to make the most of the opacity inherent in economic value. But, it is equally important to systematically capture and analyze what the firm learns from its customers, with particular care taken regarding the theories the firm and its rivals use to generalize from its experience to new settings.

THE ENDOGENOUS NATURE OF ECONOMIC VALUE

The firm’s understanding the economic value of the goods it sells is further exacerbated by the endogenous nature of all economic value. The problems created by this endogeneity are somewhat hidden in Brandenburger and Stuart’s (1996) or
MacDonald and Ryalls (2002) analysis because an exogenous value reference point *per se* is not necessary for determining the allocation of economic value among the players in treatments of value-based strategies. As noted earlier, these treatments are structurally equivalent to general equilibrium models of prices that emerge in an economy, and economists have known since the late 19th century that the results obtained from these models do not require any assumptions about the *absolute* levels of value placed on an object by an individual. Only *relative* measures are necessary. Intuitively, both the value appropriation and general equilibrium analyses are circular in their value determination, with the value of one object dependent on the values of all other objects in the system. These values are stable only to the degree that a general equilibrium exists, a condition that is generally assured as long as consumer preferences are well-behaved in the sense of being reflexive, transitive, and complete.

To see this problem more clearly, consider the experience of the recorded music industry in the late 1990s. During that era, there were one-half a dozen dominant record companies that sold most popular recorded music, earning substantial profits from this music. To most observers, the key element that underpinned these profits was the major record company’s control of the copyrights to the music of the most popular musicians and their control over the future recordings of the stars they had under contract, which gave them a differential advantage promoting new talent and hence, signing that talent on favorable terms. Throughout the 1990s and up to the current era, their control over the music and talent they have under contract remains the same and the basic technology they have used to sell recorded music, the compact disk (CD), has not changed. Yet, their profits are in decline because of the advent of music piracy by consumers in which
consumers illegally download digital files of the music they want rather than buy it in CD form from the record company. To compete with the pirated music option, the record companies have had to discount their products and their profits have suffered accordingly. How can this change be explained through recourse to the value appropriation methodology?

Since we are seeing a different allocation of the surplus, it must be the case that the primitives, the allocation of goods and preferences in the setting, have changed. It’s arguable that consumer’s tastes have changed to the degree that their willingness to pay for music has changed. Similarly, there has been no change in the cost of the resources or the technologies available for producing CDs. That leaves a change in the agents included in the setting as the factor that has lead to a different allocation of the surplus. One can point to the entrance of Napster, Morpheus, Kazaa and other file sharing sites as the key change to the setting. I would argue that such a conclusion is only partly true because these players arise because of changes well outside the music industry. In particular, the declining cost of computing power and digital storage and the advent of low-cost broadband digital communication. More importantly, these factors evolved for reasons that were really quite peripheral to the music industry, the demand of business users for faster, networked computers with more storage capacity. In essence, the set of value creation opportunities inside the music industry is endogenous to industries outside of it.

Returning to my earlier example in which market A was separated from market B by an exogenous transportation cost c, this cost turns out to be endogenous to industries outside markets A and B. In the recorded music industry, c was the cost of reproducing
and distributing music on tape, or the expected penalty from stealing music from a music store. As long as these costs were high, and the music industry certainly took steps to raise the expected cost of stealing by modifying the in-store packaging used for CD’s, the record companies were able to enjoy a significant advantage. Once these costs disappeared, that advantage quickly began to erode.

At the heart of the problem is a critical feature of value-based theories of strategy: One needs to explicitly identify several features outside of the setting under consideration. For example, a buyer’s willingness to pay for a good in the setting is generally measured as the money he or she would be willing to give up in order to obtain the good. The value of the money given up, however, is a function of what it will actually buy outside the setting. Similarly, a supplier’s economic cost is the return, in money, that it could obtain by selling the good to its best buyer outside the setting. Therefore, to determine the value of the money spent by the buyer and the returns available to the supplier it is necessary to consider the other settings in which the buyers and sellers also act. Those settings in turn are similarly related to still other settings, with the process iterating until we are considering the entire economy. Thus, the only way to precisely determine the amount of value created in a particular setting is to use the prices that emerge from a general equilibrium of the whole economy. Clearly, such an exercise is beyond the cognitive limits any individual or group of individuals. As such, unexploited gains from trade will always exist for discovery by an entrepreneur.

CONCLUSIONS

What this discussion suggests to me is that “isolating mechanisms” (Rumelt, 1984) need to be looked at in a new light. In particular, firms are well advised to look
carefully at the technological and economic underpinnings of the transaction and transportation costs that keep their industries out of equilibrium. Note that the emphasis here is on factors that are outside the firm and generally outside any conventional definition of its industry. In this regard, I am calling for a shift away from the current emphasis on firm heterogeneity and its link to performance. As I hope is now clear, the consequences of firm heterogeneity can only be understood with proper attention paid to context in which the firm operates and the evolving nature of that context and those that underpin the value creation opportunities that the context contains.
References


