

**RESOURCE-ADVANTAGE THEORY AND
AUSTRIAN ECONOMICS:
TOWARD AN AUSTRIAN THEORY OF COMPETITION?**

by

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**Austrian Scholars Conference 8
Ludwig von Mises Institute
March 15-16, 2002**

Forthcoming in *Entrepreneurship and the Firm:
Austrian Perspectives on Economic Organization*, eds. N.J. Foss and P.G. Klein. Cheltenham, UK:
Edward Elgar.

ABSTRACT

What is the lesson of the ‘socialist calculation’ debate? For Israel Kirzner, the major lesson of the debate is that the Austrian position represented a critique of socialism because it recognized that markets under capitalism constitute a dynamic process of entrepreneurial discovery. A new theory of competition, labeled ‘resource-advantage theory’ has been proposed in marketing, management, general business, and economics. This theory claims both to heed ‘Kirzner’s lesson’ of the socialist calculation debate and to contribute to explaining observed differences between market-based and

command economies. This article initiates an ‘Austrian’ evaluation of resource-advantage theory. First, it provides a brief overview of the theory and shows how the theory addresses the crucial issue of productivity. It then argues that the theory not only heeds ‘Kirzner’s lesson,’ but also is consistent with Austrian economics on the economic problem a society must solve and the nature of the constructs ‘value,’ ‘resources’ and ‘competences.’ Therefore, resource-advantage theory may provide the foundations for developing an Austrian theory of competition.

RESOURCE-ADVANTAGE THEORY AND AUSTRIAN ECONOMICS

If scientific theories should explain phenomena, what should a theory of *competition* explain? The single most important economic phenomenon of the twentieth century was, undoubtedly, the collapse of the command economies (which, it may be argued, were premised on a central planning board directing the efforts of state-owned firms) and the concomitant triumph of market-based economies (which, it may also be argued, are premised on competition among self-directed, privately owned firms). The minimum desideratum of a satisfactory *theory* of competition would seem to be, therefore, that it contribute to explaining why economies *premised* on competition have proved more abundant than their centrally planned counterparts.

Ensnared in its Walrasian ‘box’ (Rothbard 1987), in which innovation is exogenous and entrepreneurship is ignored, perfect competition theory can address differences in wealth creation only through explaining differences in resource allocation. However, as Lavoie (1985) documents, the neoclassical, ‘standard account’ of the socialist calculation debate concludes that socialists showed successfully that neoclassical theory (here meaning perfect competition *cum* general equilibrium) provides *no* grounds for predicting the superior efficiency (and, therefore, abundance) of

market-based economies in resource allocation. Indeed, to the satisfaction of ‘standard account’ advocates, socialist economists ‘proved that a Central Planning Board could impose rules upon socialist managers which allocated resources and set prices as efficiently as a capitalist society of the purest stripe, and much more efficiently than the capitalist communities of experience’ (Lekachman 1959, pp. 396-7). Thus, neoclassicists appear to have conceded that perfect competition theory does not, perhaps cannot, contribute to explaining observed differences in abundance between market-based and command economies.

Because new theories of competition should heed the socialist calculation debate, what are its lessons? In Kirzner's (1988, p. 2) view, 'neither Mises nor (in his earlier papers on the topic) Hayek was aware of how sharply their Austrian view of the market differed from that implicit in the views of other contemporary schools of thought.' Therefore, for Kirzner, rather than viewing the debate's unfolding as simply better communicating the Austrian view of markets, it should be interpreted as 'a process of improved self-understanding' (p. 3), at least for the Austrians. Indeed, he argues, it is only upon realizing that 'the illusion of transplanting competition to the environment of the socialized economy could have made its appearance only as a result of the mistaken belief that the role of competition in markets is best portrayed by the model of perfectly competitive equilibrium' (p. 8) did the Austrians develop their dynamic, process view of the market. Therefore, for Kirzner, the major lesson of the debate is: 'The [Austrian] position represented a critique of socialism only because and to the extent that markets under capitalism indeed constitute such a dynamic process of entrepreneurial discovery' (p. 3).

A new theory of competition, labeled 'resource-advantage theory' (hereafter, R-A theory), has been proposed in marketing (Falkenberg 2000; Foss 2000; Hodgson 2000; Hunt 1997a, 1999, 2000b, 2000c; Hunt, Lambe, and Wittmann 2001; Hunt and Morgan 1995, 1996, 1997; Savitt 2000), management (Hunt 1995, 2000a; Hunt and Lambe 2000), general business (Hunt 1998; Hunt and Duhan 2001) and economics (Hunt 1997b,c,d, 2000d). R-A theory claims both to heed Kirzner's lesson of the socialist calculation debate and to contribute to explaining observed differences between market-based and command economies.

The purpose of this article is to initiate an 'Austrian' evaluation of R-A theory. First, I provide a brief overview of the theory and show how it addresses the crucial issue of productivity. I then argue that R-A theory not only heeds Kirzner's lesson, but also is consistent with Austrian

economics on the economic problem a society must solve and the nature of the constructs ‘value,’ ‘resources’ and ‘competences. Although I argue that R-A theory may provide the foundations for Austrian theory of competition, only the critical evaluation and subsequent development that is (hopefully) stimulated by this introductory article can produce such a result. As Block (1988, p. 204) puts it: ‘The avowed purpose of Austrian economics, and of all other schools of thought, as well, is to discern the truth, let the chips fall where they may.’ Indeed.

An overview of R-A theory

Figures 1 and 2 provide a schematic depiction of R-A theory's key constructs; Table 1 shows its foundations. My overview will follow closely the theory's treatment in Hunt (2000b). I begin with its pedigree.

The pedigree of R-A theory

R-A theory has affinities with several research traditions. First, it traces to the resource-based theory of the firm and the historical tradition (Chandler 1990; Conner 1991; Penrose 1959; Wernerfelt 1984). Defining resources as the tangible and intangible entities available to the firm that enable it to produce efficiently and/or effectively a market offering that has value for some market segment(s), this theory views firms as combiners of heterogeneous, imperfectly mobile resources that are historically situated in space and time. The ‘resource-based view’ has been significantly developed by Barney (1986, 1991, 1992), Barney and Hansen (1994), Black and Boal (1994), Brumagim (1994), Collis (1991, 1994), Conner (1991), Dierickx and Cool (1989), Grant (1991), Lado and Wilson (1994), Madhok (1997), Peteraf (1993), Prahalad and Hamel (1990, 1994), Schendel (1994), and Schoemaker and Amit (1994). Consistent with the institutional economics' view that the most important firm resources are intangibles (De Gregori 1987; Ranson 1987), resource-based theory provides an undergirding for Teece and Pisano's (1994) ‘dynamic capabilities’ approach, Kay's

(1995) ‘distinctive capabilities’ view, and for what Foss (1993) calls the ‘competence perspective’ of the firm.¹

Second, R-A theory draws on marketing's heterogeneous demand theory (Alderson 1957, 1965; Chamberlin 1933).² This theory holds that, because intra-industry demand is significantly heterogeneous, different market offerings are required for different market segments in the same industry. Third, R-A theory draws on differential advantage theory (Alderson 1957, 1965; Clark 1961; Porter 1985). In this theory, marketplace positions of competitive advantage/disadvantage determine superior/inferior financial performance. Thus, firms can have an efficiency advantage, i.e., *more* efficiently producing value (see cell 2 in Figure 2). Or they can have an effectiveness advantage, i.e., efficiently producing *more* value (see cell 6 in Figure 2). Or they can have an efficiency/effectiveness advantage, i.e., *more* efficiently producing *more* value (see cell 3 in Figure 2).

Fourth, R-A theory draws on evolutionary economics (Hodgson 1993; Langlois 1986; Marshall 1898; Nelson and Winter 1982; Schumpeter 1950). Evolutionary economics views competition as a selection process, a *struggle*. It is this process of competition that produces innovation, ‘creative destruction,’ increases in productivity, and economic growth.

Fifth, R-A theory draws -- or, as will be argued in this paper, it warrantably *claims* to draw -- on Austrian economics (Hayek 1935, 1948; Kirzner 1979; Mises 1949). For the Austrians, competition is a process of competitive rivalry in which entrepreneurship and such institutions as money and private property are vitally important for creating wealth. Furthermore, because information is dispersed and tacit, competition is a knowledge-discovery process.

Sixth, R-A theory draws on socio-economics, economic sociology and institutional theory (De Gregori 1987; Etzioni 1988; North 1990; Ranson 1987). R-A theory recognizes that societal

institutions, such as laws, customs, taboos, traditions, and moral codes, produce order by structuring political, economic, and social interaction. The kind of order produced by societal institutions influences productivity and economic growth. For example, because societal institutions constrain individual and firm activities, both individual and societal moral codes, which are primarily deontological in character, constrain utility and profit maximization. Therefore, social trust is not only possible in R-A competition but it also plays a role in fostering productivity and economic growth.³

Although R-A theory draws on the previously cited streams of literatures, it is not precisely the same thing as any of the works in its pedigree. This can be most clearly seen by examining the structure of R-A theory (Figures 1 & 2) and its foundations (Table 1). Before examining the theory's structure and foundations, however, a common misconception concerning R-A theory should be addressed. Hunt (2000b) devotes three entire chapters (out of ten) to those research traditions and theories that either preceded R-A theory or share some affinities (as well as dis-affinities) with it. Therefore, some commentators (e.g., Foss 2000; Savitt 2000) apparently believe that the theory was developed by first reviewing all these traditions and theories, before picking and choosing portions of each tradition and theory to provide an integrated general theory of competition. These commentators are mistaken.

Insert Table 1 about here

All theories spring from their foundational premises. My co-author, Robert Morgan, and I developed the foundational premises and structure of R-A theory prior to our having detailed knowledge of most of the eleven traditions and theories to which it has affinities (and prior to our even being *aware* of some of them). It was only *after* our initial efforts at developing the foundations and structure of R-A theory that numerous scholars – including some strong critics – alerted us that

the foundations and structure of the theory had parallels in diverse research traditions. After reviewing them, we believed that academic honesty demanded that we acknowledge how the eleven theories and traditions are similar to, but not the same thing as, R-A theory. Again, R-A theory is the product of (1) a specific (and parsimonious) set of foundational premises and (2) a specific structure. It is true that most research takes place in closely guarded, isolated, academic ‘silos’; it is not true that the ‘silo’ system is desirable. Indeed, it inhibits the progress of science.

The structure of R-A theory

Because R-A theory draws heavily on Austrian economics and the Schumpeterian tradition in evolutionary economics, (a) innovation and organizational learning are endogenous to R-A competition, (b) firms and consumers have imperfect information, and (c) entrepreneurship and institutions affect economic performance. Because R-A theory incorporates marketing's heterogeneous demand theory, intra-industry demand is viewed as significantly heterogeneous as to consumers' tastes and preferences. Therefore, different market offerings are required for different market segments in the same industry. Because it adopts strategic management's resource-based view of the firm, firms are theorized to be combiners of heterogeneous, imperfectly mobile resources. Combining the resource-based view of the firm with heterogeneous demand and imperfect information results in diversity in the sizes, scopes, and levels of profitability of firms not only across industries, but also within the same industry. Finally, R-A theory stresses the importance of market segments, a comparative advantage/disadvantage in resources, and marketplace positions of competitive advantage/disadvantage.

Market segments are intra-industry groups of consumers whose tastes and preferences for an industry's output are relatively homogeneous. (The ultimate segment is, of course, a segment of one.) Resources are the tangible and intangible entities available to the firm that enable it to produce

efficiently and/or effectively a market offering that has value for some market segment(s). Just as international trade theory recognizes that nations have heterogeneous, immobile resources, and it focuses on the importance of a comparative advantage in resources to explain the benefits of trade, R-A theory recognizes that many of the resources of firms within the same industry are significantly heterogeneous and relatively immobile. Therefore, analogous to nations, some firms will have a comparative advantage and others a comparative disadvantage in efficiently/effectively producing market offerings that have value for particular market segments. Regarding the heterogeneity of labor as a resource, R-A theory agrees with Mises (1948, p. 134): ‘It is a fundamental mistake not to see that men and their abilities to work are different . . . It was one of the deficiencies of classical economics that it did not pay enough attention to this fact.’

Insert Figures 1 and 2 about here

When firms have a comparative advantage (disadvantage) in resources, they will occupy marketplace positions of competitive advantage (disadvantage), as shown in Figure 1 and further explicated in Figure 2. Marketplace positions of competitive advantage (disadvantage) then result in superior (inferior) financial performance. *Competition*, then, is the disequilibrating process that consists of the constant struggle among firms for comparative advantages in resources that will yield marketplace positions of competitive advantage for some market segment(s) and, thereby, superior financial performance. Competitive processes are significantly influenced by five environmental factors: the societal resources upon which firms draw, the societal institutions that form the ‘rules of the game’ (North 1990), the actions of competitors and suppliers, the behaviors of consumers, and public policy decisions.

R-A theory distinguishes between *proactive* and *reactive* innovation, both of which (as well as the constant changing of consumer tastes and preferences – see Table 1, Premise 1 – contribute to

the dynamism of R-A competition. Proactive innovation is innovation by firms that, though motivated by the expectation of superior financial performance, is not prompted by specific competitive pressures. As such, it is genuinely entrepreneurial in the Austrian sense, i.e., in the sense that an ‘entrepreneur perceives and exploits opportunities in the market that others have not noticed’ (Kirzner 1979, p. 214). In contrast, reactive innovation is directly prompted by the learning process of firms' competing for the patronage of a market segment(s).

As the feedback loops in Figure 1 show, firms learn through competing as a result of the feedback from relative financial performance signaling relative market position, which, in turn, signals relative resources. When firms competing for a market segment learn from their inferior financial performance that they occupy positions of competitive disadvantage (cells 4, 7, and 8 in Figure 2), the goal of superior performance motivates them to attempt to neutralize and/or leapfrog the advantaged firm (or firms) by acquiring the resource and/or reactive innovation. Reactive innovation includes imitating the resource, finding (creating) an equivalent resource, or finding (creating) a superior resource. Here, ‘superior’ implies that the innovating firm's new resource enables it to surpass the previously advantaged competitor in terms of either relative efficiency, or relative value, or both.

Firms occupying positions of competitive advantage (cells 2, 3, and 6 in Figure 2) can continue to do so if (a) they engage in entrepreneurial, proactive innovation, (b) they continue to reinvest in the resources that produce the competitive advantage, and (c) rivals' acquisition and reactive innovation efforts fail. Rivals will fail (or take a long time to succeed) when an advantage-producing resource is (1) protected by such societal institutions as patents, or (2) it is causally ambiguous, socially complex, highly interconnected, or tacit, or (3) it has time compression diseconomies or mass efficiencies.

Therefore, in Hodgson's (1993) term's, R-A theory is a phylogenetic, nonconsummatory, evolutionary theory of competition, in which firms and resources are the heritable, durable units of selection and competition among firms is the selection process that results in the survival of the locally *fitter*, not the universally *fittest*. In brief, because firms can acquire resources, using firms and resources as units of selection means that R-A theory is Lamarckian, not Darwinian. The selection process is 'locally fitter' because it results in the survival of resources and firms that are, relative to particular competitors, more efficient and/or effective at a point in time in producing market offerings for particular market segments.⁴ The renewable source of variety and change is the pursuit of superior financial performance through a comparative advantage in resources that leads to marketplace positions of competitive advantage. Because not all firms can have superior performance at the same time, the source of change is *renewable*, making competition an ongoing, never-ending, non-consummatory process.

On productivity

R-A theory claims to contribute to explaining the superior productivity and, hence, abundance of market-based economies because it heeds the lessons of the socialist calculation debate. For R-A theory, four neoclassical views contribute to perfect competition's failure to explain observed differences between market-based and command economies: (1) the belief that the process of competition can be approximated by a series of moving equilibria, (2) the belief that the efficiency/productivity problems of real economies can be approximated by a series of equations, (3) the belief that both knowledge discovery and productivity-enhancing innovations can be assumed to be exogenous to the process of competition, and (4) the belief that societal institutions are superfluous to the efficiency-producing characteristics of competition.

Following the argument in Hunt (2000b), R-A theory approaches productivity in a manner

similar to that of evolutionary economics (Nelson and Winter 1982) and the endogenous growth theorists (Grossman and Helpman 1994; Romer 1994; Stokey 1991).⁵ That is, because productivity is a ratio of outputs to inputs, R-A theory highlights the fact that increases in productivity can result from increases in either efficiency or effectiveness, that is, from (a) *more* efficiently creating value or (b) efficiently creating *more* value.

First, R-A theory contributes to explaining the superior productivity of market-based economies on the basis that superior rewards in such economies will flow to those firms (and then to their owners, managers, etc.) that engage in the innovative activities that lead to the discovery or creation of particular kinds of resource assortments. These specific assortments are those that enable firms to produce market offerings of value to particular market segments with such efficiency and/or effectiveness that the firms will occupy the marketplace positions identified as cells 2, 3, or 6 in Figure 2. The process of competing, then, motivates productivity-enhancing innovation. Command economies, to their detriment, lack this *process*. Neoclassical theory, to *its* detriment, attempted to approximate this process with a series of moving equilibria in which all productivity-enhancing innovation was exogenous. It failed.

Second, recall that firms seek to occupy marketplace positions identified as cells 2, 3, or 6 in Figure 2 because these positions of competitive advantage yield superior financial performance and, thereby, superior rewards. Note that firms in cell 2 have a comparative advantage in resources such that they can more efficiently produce a valued market offering. In contrast, firms in cell 6 are more effective because they can efficiently produce a market offering that is more valuable (e.g., having higher quality). Finally, those fortunate firms in cell 3 can produce *both* more efficiently and more effectively. Thus, it is by occupying competitive positions in the marketplace that firms know whether they are producing efficiently and/or effectively. This knowledge comes after competing,

not before. By competing, firms learn. As Hayek (1948) stressed, competition is a knowledge discovery process.

When firms occupy the positions of competitive disadvantage identified as cells 4, 7, and 8, they *learn* that they must use existing resources more efficiently or more effectively, or that they must seek other resources. Thus, they will be motivated to neutralize and/or leapfrog advantaged competitors by better managing existing resources and/or acquisition, imitation, substitution, or major innovation. Should these efforts at innovation succeed, then all firms serving a market segment become more efficient and/or effective. Should these efforts fail, firms seek market segments for which their resource assortments might provide a comparative advantage -- thus redeploying these resources will promote efficiency/effectiveness in other segments. Should these efforts also fail and financial performance fall below minimum acceptable standards, firms or parts of firms are dissolved or sold and their salvageable resources redeployed by other firms. This redeployment, again, promotes efficiency/effectiveness elsewhere.

Because perfect competition theory assumes perfect knowledge of all possible production functions and all possible resource assortments for producing all products, it deprives itself of a powerful means for differentiating market-based from command economies, that is, organizations learn from the process of competing. Therefore, it is not just productivity-enhancing innovation but also organizational learning that must be endogenous in a theory of competition that can distinguish between market-based and command economies on the issue of differential productivity and wealth creation. And for R-A theory, organizational learning is endogenous.

Third, note from Table 1 that R-A theory expands the concept of resources (from land, labor, and capital) to include such resources as organizational culture, knowledge, and competences. As DeGregori (1987, p. 243) puts it: 'Resources are not things or stuff or materials; they are a set of

capabilities. These capabilities use the stuff of the material and non-material universe in a life-sustaining manner.’ The intangible nature of many resources implies that, though they may be rare (Barney 1991), they are replicable and, hence, not *scarce*. For example, when a firm successfully imitates or replicates the competence of another, the imitated firm's (absolute) competence doesn't decrease (as would a scarce resource).

In R-A theory, a comparative advantage in intangible resources, for example, a new organizational form, process, ‘routine’ (Nelson and Winter 1982), or competence created by the firm, can yield a marketplace position of competitive advantage. Thus, rewards flow to firms that successfully create new resources, which provides them with a powerful motivation to innovate. In contrast, the central planners in command economies, by lacking the process of competition, lacked the means and motivation for discovering not only (a) the relative efficiency and effectiveness of extant resource assortments, (b) when and how to manage existing resources more efficiently and effectively, (c) when and where to seek alternative resource assortments, (d) when and where to redeploy existing resources, but *also* (e) when and how to create new resource assortments.⁶ Therefore, command economies have proved less productive than market-based economies.

R-A theory and Austrian economics

The preceding exposition of R-A theory, I argue, provides a *prima facie* case for warranting the claim that R-A theory shares affinities with Austrian economics and heeds Kirzner's lesson of the socialist calculation debate. That is, because R-A theory is a dynamic, process theory of competition in which monetary prices and private property are required, knowledge discovery is endogenous, and entrepreneurship is productivity-enhancing, its claim of an Austrian economics pedigree is warranted. I now argue that R-A theory is consistent with other tenets of Austrian economics and begin with the Austrian view of the ‘economic problem’ facing any society.

The economic problem

What is the major economic problem facing society? Kirzner (1988, p. 12) points out that Hayek, at least as late as 1933, was arguing the view that the economic problem facing society was the ‘distribution of available resources between different uses’ (Hayek 1948, p. 121). By 1945, however, Hayek was asserting that the economic problem was ‘the utilization of knowledge which is not given to anyone in its totality’ (Hayek 1948, p. 78). Therefore, argues Kirzner (1988, p. 13), ‘Hayek opened the door to an entirely new perspective on the ‘goodness’ of economic policies and institutional arrangements.’ In particular:

Instead of judging policies or institutional arrangements in terms of the resource-allocation pattern they are expected to produce (in comparison with the hypothetically optimal allocation pattern) we can now understand the possibility of judging them in terms of their ability to promote discovery. This innovative insight, whose importance seems difficult to exaggerate, was very clearly a direct by-product of the calculation debate (Kirzner 1988, p. 13).

If (1) the economic problem facing society is Hayek's utilization and discovery of knowledge and (2) the process of competition in market-based economies is thought to solve this problem well, then (3) the task or ‘problem’ facing the economic theorist is to develop a theory that veridically explicates this process. Such a theory requires foundational propositions that make the solving of individual and firm problems contribute to solving society's problem. I argue that premises 3, 4, and 5 (Table 1) of R-A theory accomplish this task.

As to human behavior, neoclassical theory assumes utility maximization, which, at least on the ‘substantive thesis’ interpretation (Etzioni 1988), equates with self-interest maximization. Therefore, among other things, everyone is assumed to engage in opportunism, i.e., self-interest seeking with guile (Williamson 1975). Although R-A theory does not deny the overwhelming importance of the pursuit of self-interest in human affairs, it proposes that human behavior is motivated by *constrained* (or restrained) self-interest seeking. Like North (1990, p. 3), it views

institutions as ‘the humanly devised constraints that shape human interactions.’ Like Etzioni (1988), R-A theory maintains that institutionally derived deontological considerations constrain teleological considerations. Humans, therefore, in their roles as consumers, firm-owners, and employees, are constrained in their self-interest seeking by, among other things, both formal institutions (such as laws) and informal institutions (such as moral codes).

As to the firm's objective, R-A theory proposes that the firm's primary objective is superior financial performance, which it pursues under conditions of imperfect (and often costly to obtain) information about extant and potential market segments, competitors, suppliers, and production technologies. Financial performance is indicated by such measures as profits, earnings per share, return on investment, and capital appreciation. Here, ‘superior’ equates with *more than* and *better than*. It implies that firms seek a level of financial performance exceeding that of some referent. For example, the referent can be the firm's own performance in a previous time-period, the performance of a rival firm, an industry average, or a stock-market average, among others. Both the specific measure and specific referent will vary from time to time, firm to firm, industry to industry, and culture to culture. For example, in Germany and Switzerland, where banks and others rarely trade their shares, firms pursue superior, long-term capital appreciation more frequently than in the United States (Porter 1990).

As Langlois (1986, p. 252) argues, economic ‘agent[s] prefer more to less all things considered,’ but this differs from ‘maximizing rationality in any strong sense.’ Specifically, though firms seek superior financial performance, they do not maximize performance in any strong sense because: (1) managers lack the capability and information to maximize (Simon 1979), (2) managers' self-interest may diverge from those of owners, that is, the ‘agency problem,’ and (3) the pursuit of financial performance is constrained by owners' and managers' views of morality – their personal

moral codes.

Firms pursue superior financial performance because superior rewards -- both financial and nonfinancial -- will then flow to owners, managers, and employees. Importantly, superior financial performance does not equate with 'abnormal profits' or 'rents' (that is, profits differing from the average firm in a purely competitive industry in long-run equilibrium) because industry long-run equilibrium is such a rare phenomenon that 'normal' profits cannot be an empirical referent for comparison purposes. Equally importantly, the expectation of superior financial performance is rational because empirical works reveal large within-industry variance in financial performance. Indeed, studies show that 'firm effects' account for 46 to 55% of the variance in business-unit ROI and 'industry effects' account for only 8 to 10% (Rumelt 1991; Roquebert, Phillips, and Westfall 1996). For understanding competition, focusing on industries is to scrutinize the 'tail'; focusing on firms is to examine the 'dog.'

Therefore, the economic problem to be solved by firms is how to achieve, through time, superior financial performance (by whatever measure and compared with whatever referent). But superior performance can only be achieved, as Figures 1 and 2 show, by firms learning how they can occupy marketplace positions of competitive advantage (cells 2, 3, and 6 in Figure 2). That is, superior performance through time results only from firms' learning how to create (and then sustain) an efficiency advantage (cell 2), an effectiveness advantage (cell 6), or an efficiency-effectiveness advantage (cell 3).

The preceding explicates how the solving of individual and firm problems fuses, in the aggregate, with the solving of society's problem. That is, it is through the process of firms attempting to solve their individual knowledge problems (that is, learning how to achieve superior performance through being more efficient and/or effective) that firms will, in the aggregate, solve society's

knowledge problem (that is, learning how to use and create knowledge so as to be more efficient and more effective, and thereby more productive.)

As Figures 1 and 2 show, the learning process of R-A competition depends crucially on the concepts of relative superior value and a comparative advantage in resources, which themselves depend on the meanings of ‘value’ and ‘resources.’ R-A theory also highlights the importance of ‘competences.’ I now argue that how R-A theory conceptualizes these terms is consistent with Austrian economics. I begin with *value*.

On value

Figure 2 shows nine possible competitive positions for the various combinations of a firm's relative, resource-produced value for some segment(s) and relative resource costs for producing such value. As used in R-A theory, *value* refers to the sum total of all benefits that consumers perceive they will receive if they accept a particular market offering. *Relative superior value*, therefore, equates with *perceived to be worth more*. Perceived value may or may not be systematically related to any third party's assessments of ‘objective’ value. It is not that R-A theory denigrates third-party assessments. Rather, it is that *perceptions* of value drive consumer preferences and choices in the marketplace.

R-A theory's individualistic view of value dovetails with its view that both inter-industry and intra-industry demand are substantially heterogeneous and dynamic. Because consumers' tastes and preferences differ greatly within generic product categories and because their tastes and preferences change significantly through time, there are very few *industry* markets -- there are only partial homogeneties, fragments, or segments of demand *within* industries. Therefore, for most industries there exists no industry demand curve and, hence, no industry market.

For example, there is neither a market for shoes, nor more narrowly, a market for men's shoes, nor more narrowly yet, a market for men's athletic shoes. For most product categories, demand is at a

level of (dis)aggregation that would be too narrow to qualify as an ‘industry.’ For example, one would not speak of the men's basketball shoe, or the four-head, stereophonic, tape recorder, or the sport-utility vehicle *industries*. Nonetheless, because identifying those segments most suitable for developing market offerings is an entrepreneurial capability that affects firm performance, R-A theory views such market segments as these (or smaller yet) as essential for understanding the nature of competition.

As to the Austrian view of value, Yeager (1987) asks: ‘Why Subjectivism?’ Although he defends Austrian subjectivism on numerous grounds, he attacks the ‘pure subjectivism’ (p. 23) of the ‘ultrasubjectivists,’ which he associates with Rothbard (1962), Taylor (1980), Shand (1984), and Garrison (1979). A major example of ultrasubjectivism, for Yeager (1987) is:

The point repeatedly turns up in Austrian discussions that goods that people consider different from each other are indeed different goods, no matter how closely they resemble each other physically. This point is not downright fallacious, but the significance attributed to it is excessive, and its use in question-begging ways is likely to repel mainstream economists. An example is the contention that when a manufacturer sells essentially the same good under different labels at different prices, he is nevertheless not practicing price discrimination; for the goods bearing the different labels are considered by the consumers to be different goods, which *makes* them different goods in all economically relevant senses. The manufacturer is supposedly just charging different prices for different things (p. 23; italics in original).

As to R-A theory, it does not propose that perceived value is the *only* conceptualization of value that is in all cases ‘economically relevant.’ Nonetheless, it does hold that the value of a market offering as perceived by a market segment is central to understanding how the process of competition actually works. Indeed, if a market segment perceives more value in an offering of ‘essentially the same good’ that has one label (say, ‘Mazda’ or ‘Arrow’) than another (say, ‘Plymouth’ or ‘JCPenney’), it is these perceptions, not third party assessments, that drive marketplace behavior. Therefore, if perceived value is ultrasubjectivist, is ‘likely to repel mainstream economists,’ and is to be avoided by Austrian economists, then perhaps R-A theory should also be avoided.

On the other hand, Block (1988) disagrees with Yeager's categories and conclusions. Regarding subjectivism, he argues for four categories: (a) nonsubjectivists (e.g., neoclassicists), (b) moderate subjectivists (e.g., Yeager), (c) Austrian subjectivists (e.g., Rothbard, Kirzner, and Buchanan) and (d) ultrasubjectivists (e.g., Wiseman, Shackle, Lachmann, and the 'hermeneuticians' at George Mason University). Therefore, argues Block (1988), the ultrasubjectivist view, though sometimes associated with Austrian economics, is not (or should not be considered) genuinely *Austrian*. As Block (1988, p. 202), quoting portions of Yeager (1987), puts it:

[The] Austrian view does not mean that the 'realities of nature, science, and technology have *nothing* to do with determining prices and interest rates' (p. 22, emphasis in original). On the contrary, as Yeager himself later seems to grant to the Austrians, 'physical reality counts only *through* people's subjective perceptions of it' (p. 22, emphasis in original). In contrast, it is only the ultrasubjectivists, category D, not the Austrians, category C, who speak almost as if they wish to 'banish the influence of objective reality' (p. 22).

Block (1988) then defends Austrians for insisting that goods that people consider different from each other are indeed different goods by pointing out the import of the word 'essentially' in Yeager's (1987, p. 23) phrase 'essentially the same good.' Block (p. 204) asks: 'In whose mind is the determination of sameness to be made?' And he suggests: 'The Austrians' answer 'In the mind of the economic actor,' and this would appear to make good sense.'

Two conclusions on 'value' are warranted. First, the perceived value view of R-A theory accords well with category 'c' in Block's (1988) schema because it is perceptions of value that drive marketplace behavior. As Hayek (1948, p. 60) puts it, 'no superior knowledge the observer may possess about... [an] object, but which is not possessed by the acting person, can help us in understanding the motives of their actions.' And, as Rothbard (1962, p. 19) concludes:

Here again, it is very important to recognize that what is significant for human action is not the physical property of a good, but the evaluation of the good by the actor. Thus, physically there may be no discernible difference between one pound of butter and another, or one cow and another. But if the actor chooses to evaluate them differently, they are no longer part of the supply of the same good.

Second, R-A theory is, most assuredly and emphatically, not ultrasubjectivist in the sense of seeking to ‘banish the influence of objective reality’ (Yeager 1987, p. 22). The epistemology of R-A theory is ‘scientific realism’ (Hunt and Morgan 1995), which is decidedly anti-relativist. Scientific realism's core tenets are (1) the world exists independently of its being perceived, (2) the job of science is to develop genuine knowledge about that world, even though such knowledge will never be known with certainty, (3) all knowledge claims must be critically evaluated and tested to determine the extent to which they do, or do not, represent or correspond to that world, and (4) the long-term success of a theory gives reason to believe that something like the entities and structure postulated by the theory actually exists (Hunt 1990, 1994).

Although the logical positivists denied the fourth tenet of scientific realism (Manicas 1987; McMullin 1984; Suppe 1977), the ultrasubjectivists' total banishment of objective reality would deny all four tenets. Furthermore, as Hoppe (1989 p. 179) discusses, advocates of hermeneutics and ‘economics as rhetoric,’ also deny all four tenets, for they embrace ‘the ancient tune of skepticism and nihilism, of epistemological and ethical relativism.’ Thus, R-A theory's adoption of scientific realism implies the rejection of not only ultrasubjectivism, but also hermeneutics, skepticism, nihilism, relativism, and ‘economics as rhetoric.’

On resources

Rather than restricting resources to a firm's tangible factors of production or even to its tangible assets plus human capital, R-A theory defines resources as the tangible and intangible entities available to the firm that enable it to produce efficiently and/or effectively a market offering that has value for some market segment(s). Thus, resources can be categorized as financial (e.g., cash reserves and access to financial markets), physical (e.g., plant, raw materials, and equipment), legal (e.g., trademarks and licenses), human (e.g., the skills and knowledge of *individual* employees,

including, importantly, their entrepreneurial skills), organizational (e.g., controls, routines, cultures, and competences -- including, importantly, a competence for entrepreneurship), informational (e.g., knowledge about market segments, competitors, and technology), and relational (e.g., relationships with competitors, suppliers, and customers).

Hayek (1948, p. 80) points out that ‘practically every individual has some advantage over all others because he possesses unique information of which beneficial use can be made only if the decisions depending on it are left to him or are made with his active co-operation.’ Likewise, for R-A theory, resources are both significantly heterogeneous across firms and imperfectly mobile. Recalling that firms are historically situated in space and time, resource heterogeneity implies that every firm has an assortment of resources that is (at least in some ways) unique. *Imperfectly mobile* implies that many firm resources, to varying degrees, are not commonly, easily, or readily bought and sold in the marketplace. Because of resource immobility, resource heterogeneity can persist through time despite attempts by firms to acquire the same resources of particularly successful competitors.

Note that even intangible entities can be resources, as long as they have an *enabling* capacity. Note also that a resource need not be owned by a firm, but only available to it. For example, a strategic alliance between firms A and B may contribute to their efficiency and/or effectiveness and, thus, constitute a resource for both. Yet neither A nor B *own* the resource, for neither can sell it.

R-A theory's view of resources not only differs from that of neoclassical economics, it also diverges from the long-standing position in business strategy. For example, Day and Wensley (1988, pp. 2-3) distinguish between ‘skills’ and ‘resources’ on the basis that the former are ‘the distinctive capabilities of personnel’ and the latter are the ‘more tangible requirements for advantage.’ In contrast, R-A theory maintains that intangibles can be resources and views the skills of individuals (and, as discussed in the next section, the competences of organizations) as *kinds* of resources.

Austrian economics, I argue, supports this view.

In evaluating the methodology of Simon's (1981) *The Ultimate Resource*, Sinnett (1987) explores the nature of resources by turning to Hayek's (1948) discussion of the nature of 'facts' in the social sciences. Hayek (1948) investigates how it is that social science classifies the objects ('facts') to be explained and asks: '[Are] the human actions which we observe, and the objects of these actions, things of the same kind because they appear as physically the same or different to us, the observers -- or for some other reason?' (p. 59). Using such concepts as 'tools,' 'medicine,' 'weapons,' and 'acts of production' as examples, Hayek rejects the view that social science classifies things into or out of these conceptual categories based on 'some objective properties possessed by the things ... [for] there is no single physical property which any one member of a class must possess' (p. 54). Indeed, social science 'concepts are also not merely abstractions of the kind we use in all physical sciences; they abstract from *all* the physical properties of the things themselves' (p. 59, italics in original). Therefore, for Hayek, social science concepts used to categorize the 'facts' are 'teleological concepts' and 'can be defined only by indicating relations between three terms: a purpose, somebody who holds that purpose, and an object which that person thinks to be a suitable means for that purpose' (pp. 59-60). In the social sciences: 'Money is money, a word is a word, a cosmetic is a cosmetic because somebody thinks they are' (p. 60).

For Sinnett (1987), Hayek's analysis of teleological concepts is dispositive for conceptualizing 'resources' because '[one cannot] classify a substance as a resource without reference to those human purposes for the achievement of which somebody regards the material as a suitable means' (p. 214). For Austrian economics, therefore, entities become firm resources only when they are perceived to contribute to the human purpose of the *firm*. If the purpose of firms involves producing market offerings that have value for market segments, then *any* entity, tangible or intangible, that contributes

to a firm's ability to efficiently and/or effectively produce a market offering that has value for some market segment(s) is a *resource* for that firm. Therefore, R-A theory's view of resources accords well with the 'human purpose' view of Austrian economics.

On competences

What is an organizational *competence*? R-A theory views a competence as a higher-order resource that consists of a distinct package of basic resources. Specifically, competences are socially complex, interconnected, combinations of tangible, (e.g., specific machinery) and intangible (e.g., specific organizational policies and procedures and the skills and knowledge of specific employees) basic resources that fit coherently together in a synergistic manner. Competences, then, play a major role in enabling firms to produce efficiently and/or effectively valued market offerings and, by being highly heterogeneous and significantly immobile, contribute greatly to understanding how marketplace positions of competitive advantage/disadvantage (and, thereby, superior/inferior financial performance) can persist through time.

Foss (1994) discusses two versions, both tracing to Coase (1937), of the 'modern' theory of the firm: the nexus of contracts approach (Alchian and Demsetz 1972) and the asset specificity approach (Williamson 1985). Even though many of the insights in the 'modern' theory (e.g., the importance of knowledge, incentives, and property rights) are consistent with -- indeed, were argued for in the 1930s and 1940s by -- Austrian economics, Foss (1994) argues that this theory is still sorely deficient because it still tends to: '(1) neglect the distinction between spontaneous and planned order; . . . (2) neglect the market process; . . . (3) neglect the activities of the entrepreneur; . . . and (4) objectify costs' (p. 50).

In contrast, Foss (1994) argues that Austrian economics complements and contributes to the development of the contemporary theory of the firm, which he labels the 'evolutionary' or

‘capabilities’ view (p. 57). First, for Foss, this view is consistent with the ‘Austrian insight that the most economically relevant knowledge is local and tacit’ (p. 56). Second, it is ‘Hayekian’ in ‘the sense that firms are placed in an evolutionary setting, incorporating both selection [of ‘routines’] through the market and conscious adaptation (though not maximization)’ (p. 56). Third, it maintains that ‘not all routines or capabilities are equally efficient’ (p. 56). Therefore, it provides ‘room for a view of the market as a continuous disequilibrium process, in which, for example, certain routines are selected against’ (p. 56). This, he argues, is consistent with Kirzner's (1979, p. 134) point that ‘under conditions of disequilibrium, when scope exists for entrepreneurial activity, there is no reason genuine disparities may not exist among different producers.’ Finally, Foss argues that, even though the capabilities theory of the firm views the firm as a learning system, it is a planned, not spontaneous order. This is because the firm is a local learning system, not a global one: ‘the firm, like the entrepreneur, learns about *local* facts’ (p. 57, italics in original). Foss (1994), therefore, claims that the capabilities or competence view of the firm is leading ‘towards an Austrian theory of the firm’ (p. 55).

R-A theory, however, is not only consistent with the capabilities view, but provides an explication and theoretical foundation for it.⁷ That is, because resources are tangible or intangible entities that enable firms to produce efficiently and/or effectively market offerings of value to some market segment(s), firm competences are viewed by R-A theory as distinct packages of socially complex, interconnected, tangible (e.g., specific machinery) and intangible (e.g., the skills and knowledge of individual employees) basic resources that fit coherently together in a synergistic manner. Therefore, I argue, R-A theory's view of competences adopts the emerging Austrian view of the firm.⁸

Conclusion

The minimum desideratum of a satisfactory theory of competition is that it should contribute to explaining why economies premised on competition have proved more abundant than their centrally planned counterparts. In doing so, such a theory should heed the lessons of the socialist calculation debate. This paper discusses the resource-advantage theory of competition, which claims both to heed the major lesson of the socialist calculation debate and to contribute to explaining observed differences between market-based and command economies. Furthermore, R-A theory is claimed to be consistent with Austrian economics on the economic problem a society must solve and the nature of 'value,' 'resources,' and 'competences.' Indeed, R-A theory may provide the foundations for an Austrian theory of competition. Therefore, I submit it for the purposes of critical evaluation and further development.

Notes

1. See Montgomery (1995) for a review of resource-based theory.
2. Reekie and Savitt (1982) argue that Alderson's work dovetails well with Austrian economics.
3. Being frictionless and institutionless, trust is absent from neoclassical theory. However, for Mises (1949), trust is ubiquitous: 'The buyer must always rely on the seller . . . If possible a man prefers a store or brand with which he himself or trustworthy friends have had good experience in the past . . . The regular customer does not always select the article or the service, but the purveyor whom he trusts' (p. 377-8). Hunt (1997d) develops this argument.
4. Mises (1949), I argue, supports the 'locally fitter' view of competition: 'We do not assert that the capitalist mode of economic calculation guarantees the absolutely best solution of the allocation of factors of production. Such absolutely perfect solutions of any problem are out of reach by mortal men. What the operation of a market not sabotaged by the interference of compulsion and coercion can bring about is merely the best solution accessible to the human mind under a given state of technological knowledge and the intellectual abilities of the age's shrewdest men' (p. 701).
5. Note that a key assumption of endogenous growth models is that technology is a nonrival, partially excludable resource in the production process. See Hunt (1997b) for the argument that R-A theory can ground endogenous growth models.
6. Hunt (1995) argues that the empirical evidence regarding the collapse of the Soviet Union's economy supports the view that the absence of a process for efficient/effective resource creation was a critical factor.
7. See Hunt (2000a,b,d) for detailed arguments that resource-based theory, at least the version of resource-based theory adopted by R-A theory, provides a theoretical foundation for the competence or capabilities view of the firm.
8. See, also, Klein (1996) and Minkler (1993) for arguments that the capabilities or competence view of the firm is consistent with Austrian economics.

**Table 1 Foundational Premises of Resource-Advantage Theory:
Toward an Austrian Theory of Competition?**

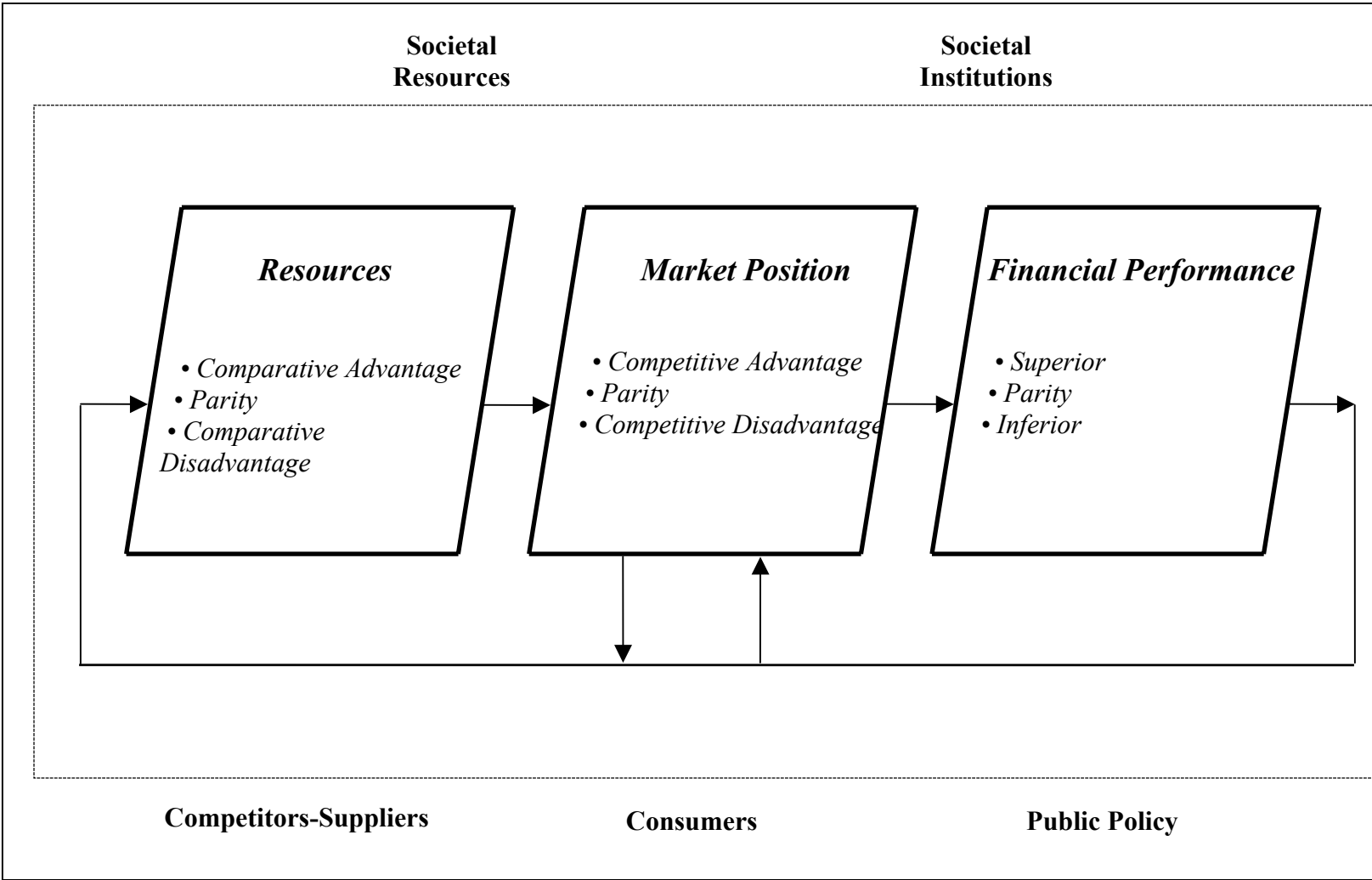
	Resource-Advantage Theory	Austrian Theory of Competition
P1. Demand is:	heterogeneous across industries, heterogeneous within industries, and dynamic.	?
P2. Consumer information is:	imperfect and costly.	?
P3. Human motivation is:	constrained self-interest seeking.	?
P4. The firm's objective is:	superior financial performance.	?
P5. The firm's information is:	imperfect and costly.	?
P6. The firm's resources are:	financial, physical, legal, human, organizational, informational, and relational.	?
P7. Resource characteristics are:	heterogeneous and imperfectly mobile.	?
P8. The role of management is:	to recognize, understand, create, select, implement, and modify strategies.	?
P9. Competitive dynamics are:	disequilibrium-provoking, with innovation endogenous.	?

Note: The foundational premises of R-A theory are to be interpreted as descriptively realistic of the general case. Specifically, P1, P2, P5 and P7 for R-A theory are *not* viewed as idealized states that anchor end-points of continua. For example, P1 posits that intra-industry demand in most industries (i.e., the general case) is *substantially* heterogeneous, not perfectly heterogeneous. In contrast, P1

for perfect competition assumes the idealized state of perfect homogeneity.
Source: Hunt and Morgan (1997).

FIGURE 1

A Schematic of the Resource-Advantage Theory of Competition



Read: Competition is the disequilibrating, ongoing process that consists of the constant struggle among firms for a comparative advantage in resources that will yield a marketplace position of competitive advantage and, thereby, superior financial performance. Firms learn through competition as a result of feedback from relative financial performance “signaling” relative market position, which, in turn signals relative resources.

Source: Hunt and Morgan (1997)

Figure 2
Competitive Position Matrix^a

	Lower	Parity	Superior
Lower	1 Indeterminate Position	2 Competitive Advantage	3 Competitive Advantage
Parity	4 Competitive Disadvantage	5 Parity Position	6 Competitive Advantage
Higher	7 Competitive Disadvantage	8 Competitive Disadvantage	9 Indeterminate Position

^aRead: The marketplace position of competitive advantage identified as Cell 3 results from the firm, relative to its competitors, having a resource assortment that enables it to produce an offering for some market segment(s) that (a) is perceived to be of superior value and (b) is produced at lower costs.

Source: Adapted from Hunt and Morgan (1995).

REFERENCES

- Alchian, Armen A. and Harold Demsetz (1972), 'Production, information costs and economic organization', American Economic Review, 62, 777-795.
- Alderson, Wroe (1957), Marketing Behavior and Executive Action, Homewood IL: Richard D. Irwin.
- _____ (1965), Dynamic Marketing Behavior, Homewood, IL: Richard D. Irwin.
- Barney, Jay B. (1986), 'Strategic factor markets, expectations, luck and business strategy', Management Science, 32, 1231-1241.
- _____ (1991), 'Firm resources and sustained competitive advantage', Journal of Management, 17 (1), 99-120.
- _____ (1992), 'Integrating organizational behavior and strategy formulation research: a resource-based analysis', in P. Shrivastava, A.S. Huff, and J.E. Dutton (eds), Advances in Strategic Management, Greenwich, CT: JAI, pp. 39-61.
- Barney, Jay B. and M.J. Hansen (1994), 'Trustworthiness as a source of competitive advantage', Strategic Management Journal, 15, 175-190.
- Black, Janice A. and Kim B. Boal (1994), 'Strategic resources, traits, configurations and paths to sustainable competitive advantage', Strategic Management Journal, 15, 131-148.
- Block, Walter (1988), 'On Yeager's 'Why Subjectivism?'' The Review of Austrian Economics, 1, 199-208.
- Brumagim, Alan L. (1994), 'A hierarchy of corporate resources', in P. Shrivastava, A.S. Huff, and J.E. Dutton (eds), Advances in Strategic Management, Greenwich, CT: JAI, pp. 81-112.
- Chamberlin, Edward (1933), The Theory of Monopolistic Competition, Cambridge, MA: Harvard University Press.
- Chandler, Alfred D. (1990), Scale and Scope: The Dynamics of Industrial Capitalism, Cambridge, MA: Harvard University Press.
- Clark, John M. (1961), Competition as a Dynamic Process, Washington, DC: Brookings Institution.
- Coase, Ronald H. (1937), 'The nature of the firm,' Economica, 4, 386-405.
- Collis, David J. (1991), 'A resource board analysis of global competition', Strategic Management Journal, 12 (1), 49-68.
- _____ (1994), 'How valuable are organizational capabilities?', Strategic Management Journal, 15, 143-152.
- Conner, Kathleen (1991), 'A historical comparison of resource-based theory and five schools of thought within industrial-organization economies: do we have a new theory of the firm?', Journal of Management, 17, 121-154.

- Day, George S. and Robin Wensley (1988), 'Assessing advantage: a framework for diagnosing competitive superiority', Journal of Marketing, 58 (April), 31-44.
- DeGregori, Thomas R. (1987), 'Resources are not; they become: an institutional theory', Journal of Economic Issues, 21 (Sept), 35, 1241-1263.
- Dierickx, Ingebar and Karel Cool (1989), 'Asset stock accumulation and sustainability of competitive advantage', Management Science, 35 (Dec), 1504-1511.
- Etzioni, Amitai (1988), The Moral Dimension: Toward a New Economics, New York: Free Press.
- Falkenberg, A.W. (2000), 'Competition and markets', Journal of Macromarketing, 20 (June), 7.
- Foss, Nicolai J. (1993), 'Theories of the firm: contractual and competence perspectives', Journal of Evolutionary Economics, 3, 127-144.
- _____ (1994), 'The theory of the firm: the Austrians as precursors and critics of contemporary theory', The Review of Austrian Economics, 7 (1), 31-65.
- _____ (2000), 'The dangers and attractions of theoretical eclecticism', Journal of Macromarketing, 20 (June), 65-67.
- Garrison, Roger (1979), 'Waiting in Vienna', Time, Uncertainty, and Disequilibrium, Lexington, MA: Lexington Books, 215-226.
- Grant, Robert M. (1991), 'The resource-based theory of competitive advantage: implications for strategy formulation', California Management Review, 33, 114-133.
- Grossman, Gene M. and Elhanan Helpman (1994), 'Endogenous innovation in the theory of growth', Journal of Economic Perspectives, 8 (Winter), 23-33.
- Hayek, Friedrich A. (ed) (1935), Collectivist Economic Planning, Critical Studies on the Possibilities of Socialism, London: Routledge.
- _____ (1948), Individualism and Economic Order, Chicago: University of Chicago Press.
- Hodgson, Geoffrey M. (1993), Economics and Evolution, Ann Arbor: University of Michigan Press.
- _____ (2000), 'The marketing of wisdom: resource-advantage theory', Journal of Macromarketing, 20 (June), 68-72.
- Hoppe, Hans-Herman (1989), 'In defense of extreme rationalism: thoughts on Donald McCloskey's the rhetoric of economics', The Review of The Austrian Economics, 3, 179-214.
- Hunt, Shelby D. (1990), 'Truth in marketing theory and research', Journal of Marketing, 54 (July), 1-15.
- _____ (1994), 'A realist theory of empirical testing: toward resolving the theory ladenness/objectivity debate', Philosophy of the Social Sciences, 24 (2), 133-158.
- _____ (1995), 'The resource-advantage theory of competition: toward explaining productivity and economic growth', Journal of Management Inquiry, 4 (Dec), 317-332.
- _____ (1997a), 'Competing through relationships: grounding relationship marketing in resource advantage theory', Journal of Marketing Management, 13, 431-445.

- _____ (1997b), 'Evolutionary Economics, Endogenous Growth Models, and Resource-Advantage Theory,' Eastern Economic Journal, 23 (4), 427-441.
- _____ (1997c), 'Resource-advantage theory: an evolutionary theory of competitive firm behavior?', Journal of Economic Issues, 31 (1), 59-77.
- _____ (1997d), 'Resource advantage theory and the wealth of nations', Journal of Socio-Economics, 26 (4), 335-357.
- _____ (1998), 'Productivity, economic growth, and competition: resource allocation or resource creation?', Business and the Contemporary World, 10 (3), 367-394.
- _____ (1999), 'The strategic imperative and sustainable competitive advantage: public policy and resource advantage theory', Journal of Academy of Marketing Science, 27 (2), 144-159.
- _____ (2000a), 'The competence-based, resource-advantage, and neoclassical theories of competition: toward a synthesis', in R. Sanchez and A. Heene (eds), Competence-Based Strategic Management: Theory and Research, Greenwich, CT: JAI Press, pp. 177-208.
- _____ (2000b), A General Theory of Competition: Resources, Competences, Productivity, Economic Growth, Thousand Oaks, CA: Sage Publications Inc.
- _____ (2000c), 'A general theory of competition: too eclectic or not eclectic enough? Too incremental or not incremental enough? Too neoclassical or not neoclassical enough?', Journal of Macromarketing, 20 (1), 77-81.
- _____ (2000d), 'Synthesizing resource-based, evolutionary and neoclassical thought: resource-advantage theory as a general theory of competition', in N.J. Foss and P. Robertson (eds), Resources, Technology, and Strategy, London: Routledge, pp. 53-79.
- Hunt, Shelby D. and Dale F. Duhan (2001), 'Competition in the third millenium: efficiency or effectiveness?', Journal of Business Research, forthcoming.
- Hunt, Shelby D. and C. Jay Lambe (2000), 'Marketing's contribution to business strategy: market orientation, relationship marketing, and resource-advantage theory', International Journal of Management Reviews, 2 (1), 17-44.
- Hunt, Shelby D., C. Jay Lambe, and C.M. Wittman (2001), 'A theory and model of business alliance success', Journal of Relationship Marketing, forthcoming.
- Hunt, Shelby D. and Robert M. Morgan (1995), 'The comparative advantage theory of competition', Journal of Marketing, 59 (2), 1-15.
- _____ (1996), 'The resource-advantage theory of competition: dynamics, path dependencies, and evolutionary dimensions', Journal of Marketing, 60 (3), 107-114.
- _____ (1997) 'Resource advantage theory: a general theory of competition?', Journal of Marketing, 61 (3), 74-82.
- Kay, John (1995), Why Firms Succeed, Oxford: Oxford University Press.
- Kirzner, Israel M. (1979), Perception, Opportunity and Profit: Studies in the Theory of Entrepreneurship, Chicago, IL: The University of Chicago Press.

- _____ (1988), 'The economic calculation debate: lessons of Austrians', Review of Austrian Economics, 2, 1-18.
- Klein, Peter (1996), 'Economic calculation and the limits of organization', The Review of Austrian Economics, 9 (2), 3-28.
- Lado, A.A. and M.C. Wilson (1994), 'Human resource systems and sustained competitive advantage: a competency-based perspective', Academy of Management Review 19 (4), 699-727.
- Langlois, Richard N. (ed) (1986), Economics as a Process: Essays in the New Institutional Economics, Cambridge: Cambridge University Press.
- Lavoie, Don (1985), Rivalry and Central Planning. The Socialist Calculation Debate Reconsidered, Cambridge: Cambridge University Press.
- Lekachman, Robert (1959), A History of Economic Ideas, New York: Harper.
- Lippman, S.A. and Richard Rumelt (1982), 'Uncertain imitability', Bell Journal of Economics, 13, 418-438.
- Madhok, Anoop (1997), 'Cost, value, and foreign entry mode: the transaction and the firm', Strategic Management Journal, 18 (1), 39-62.
- Manicas, Peter T. (1987), A History of Philosophy of the Social Sciences, New York: Basil Blackwell.
- Marshall, Alfred (1898), 'Distribution and exchange', Economic Journal, 8 (1), 37-59.
- McMullin, Erman (1984), 'A case for scientific realism', in Scientific Realism, Berkeley: University of California Press, pp. 8-40.
- Minkler, Alanson P. (1993), 'The problem with dispersed knowledge: firms in theory and practice', Kyklos, 46 (4), 569-87.
- Mises, Ludwig von (1949), Human Action: A Treatise on Economics, New Haven, CT: Yale University Press.
- Montgomery, C.A. (ed) (1995), Resource-Based and Evolutionary Theories of the Firm: Towards a Synthesis, Norwell, Mass: Kluwer Academic Publishers.
- Nelson, Richard R. (1991), 'Why do firms differ, and how does it matter?', Strategic Management Journal, 12, 61-74.
- Nelson, Richard R. and Sydney G. Winter (1982), An Evolutionary Theory of Economic Change, Cambridge, MA: Belknap Press.
- North, Douglass C. (1990), Institutions, Institutional Change, and Economic Performance, Cambridge: University of Cambridge.
- Penrose, Edith T. (1959), The Theory of the Growth of the Firm, Great Britain: Basil Blackwell & Mott Ltd.
- Peteraf, Margaret A. (1993), 'The cornerstones of competitive advantage: a resource-based view', Strategic Management Journal, 14 (3), 179-191.

- Poirot, C.S., Jr. (1993), 'Institutions and economic evolution', Journal of Economic Issues, 27 (3), 887-907.
- Porter, Michael E. (1985), Competitive Strategy, New York: The Free Press.
- _____ (1990), The Competitive Advantage of Nations, New York: The Free Press.
- Prahalad, C.K. and Gary Hamel (1990), 'The core competence of the corporation', Harvard Business Review, May-June, 79-91.
- _____ (1994), 'Strategy as a field of study: why search for a new paradigm?', Strategic Management Journal, 15, 17-34.
- Ranson, B. (1987), 'The institutionalist theory of capital formation', Journal of Economic Issue, 21 (Sept), 1265-1278.
- Reed, Richard and Robert J. DeFillippi (1990), 'Causal ambiguity, barriers to imitation, and sustainable competitive advantage', Academy of Management Review, 15, 88-117.
- Reekie, Donald and Ronald Savitt (1982), 'Marketing behavior and entrepreneurship: a synthesis of Alderson and Austrian economics', European Journal of Marketing, 16 (7), 55-66.
- Romer, Paul M. (1994), 'The origins of endogenous growth', Journal of Economic Perspectives 8 (Winter), 3-22.
- Roquebert, James A., Robert L. Phillips and Peter A. Westfall (1996), 'Markets versus management: what 'drives' profitability?', Strategic Management Journal, 17 (8), 653-664.
- Rothbard, Murray (1962), Man, Economy, and State, Princeton: Van Nostrand.
- _____ (1987), 'Breaking out of the Walrasian box: the cases of Schumpeter and Hansen', The Review of Austrian Economics, 1, 97-108.
- Rumelt, Richard P. (1991), 'How much does industry matter?', Strategic Management Journal, 12, 167-185.
- Savitt, Ronald (2000), 'A philosophical essay about a general theory of competition', Journal of Macromarketing, 20 (June), 73-76.
- Schendel, Don (1994), 'Introduction to competitive organizational behavior: toward an organizationally-based theory of competitive advantage', Strategic Management Journal, 15, 14.
- Schoemaker, P.J.H. and R. Amit (1994), 'Investment in strategic assets: industry and firm-level perspectives', in P. Shrivastava, A.S. Huff, J.E. Dutton (eds), Advances in Strategic Management, Greenwich, CT: JAI, pp. 3-33.
- Schumpeter, Joseph A. (1950), Capitalism, Socialism and Democracy, New York: Harper & Row, (Original work published 1942).
- Shand, Alexander (1984), The Capitalist Alternative: An Introduction to Neo-Austrian Economics, New York University Press.
- Simon, Herbert A. (1979), 'Rational decision making in business organizations', American Economic Review, 69, 493-512.

- Simon, Julian (1981), The Ultimate Resource, Princeton, NJ: Princeton University Press.
- Sinnett, M.W. (1987), 'Method versus methodology: the ultimate resource', The Review of Austrian Economics, 1, 207-223.
- Stokey, Nancy (1991), 'Human capital, product quality, and growth', The Quarterly Journal of Economics, 106, 587-616.
- Suppe, Frederick (1977), The Structure of Scientific Theories, (2nd ed.), Chicago: University of Chicago Press.
- Taylor, Thomas C. (1980), The Fundamentals of Austrian Economics, San Francisco: Cato Institute.
- Teece, David and G. Pisano (1994), 'The dynamic capabilities of firms: an introduction', Industrial and Corporate Change, 3 (E), 537-556.
- Wernerfelt, Birger (1984), 'A resource-based view of the firm', Strategic Management Journal, 5, 171-180.
- Williamson, Oliver E. (1975), Markets and Hierarchies: Analysis and Anti-Trust Implications, New York: Free Press.
- _____ (1985), The Economic Institutions of Capitalism, New York: Free Press.
- Yeager, Leland (1987), 'Why subjectivism?', The Review of Austrian Economics, 1, 5-31.