
Resource-Advantage Theory and the Wealth of Nations: Developing the Socio-Economic Research Tradition

SHELBY D. HUNT*
Texas Tech University

ABSTRACT: Why aren't all market-based economies wealthy? Many scholars believe that nonwealthy, market-based economies lack certain productivity-enhancing societal institutions, particularly those that promote trust. This article proposes that a new theory—the resource-advantage theory of competition—has the requisites of a socio-economic theory of competition and, consequently, can contribute to explaining why all market-based economies are not wealthy and why institutions that promote trust can be productivity-enhancing. Therefore, resource-advantage theory and its foundational propositions contribute to developing a socio-economic research tradition.

Keywords: productivity, economic growth, institutions, trust, ethics, resources, socio-economics.

If the central economic lesson of the 20th Century is that market-based economies are generally more productive than command economies, why aren't all market-based economies wealthy? One provocative view has it that the historical emphasis on the lack of capital and/or natural resources has been misguided. Rather, the most important deficit of nonwealthy, market-based economies is the lack of certain kinds of societal institutions that foster productivity and economic growth (North, 1990). Particularly important, according to some theorists, are institutions that promote trust (e.g., Fukuyama, 1995; Gambetta, 1988; Harrison, 1992; Phelps, 1975). As Arrow (1972, p. 357) hypothesized over two decades ago, because “[v]irtually every commercial transaction has within itself an element of

*Direct all correspondence to: Shelby D. Hunt, The J.B. Hoskins and P.W. Horn Professor of Marketing, Texas Tech University, Department of Marketing, P.O. Box 42101, Lubbock, TX 79409.

Journal of Socio-Economics, Volume 26, No. 4, pp. 335-357

Copyright © 1997 by JAI Press, Inc.

All rights of reproduction in any form reserved.

ISSN: 1053-5357

trust, ... [i]t can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence." As one of society's "invisible institutions," trust stems from "principles of ethics and morality" and serves as an "important lubricant of the social system" (Arrow, 1974, pp. 23, 26).

The importance of institutions and trust notwithstanding, because neoclassical theories of competition are frictionless and institutionless, they do not view economic relations as embedded within a broader complex of social relations (Granovetter, 1985). Thus, they have difficulty explaining how social trust can be productivity-enhancing or how distrust can thwart efforts to promote economic growth. Indeed, even Williamson's (1993, p. 99) "new institutional economics" contends that "the study of economic organization is better served by treating commercial transactions without reference to trust." Because "you cannot beat a theory with nothing," Etzioni (1988, p. 2) argues that explaining the empirical realities of modern, market-based economies requires a *socio-economic* theory of competition based on a socio-economic paradigm, research program, or research tradition.¹ This new research program "sees competition, the market, indeed the economy, as a subsystem nestled within a more encompassing societal complex" (p. 199).

Two theses underlie this article. First, a new theory—the resource-advantage theory of competition—being developed in institutional economics (Hunt, 1997), management (Hunt, 1995), evolutionary economics (Hunt, in press), and marketing (Hunt and Morgan 1995, 1996, 1997)—has the requisites of a *socio-economic* theory of competition. Second, this theory and its foundational propositions contribute to developing a *socio-economic* research tradition. A *prima facie* case can be made for these two theses on the grounds that the resource-advantage theory of competition adopts the very cornerstone of Etzioni's (1988) socio-economics—his moderate deontology. As Hunt and Morgan (1995, p. 6) state:

Third, in their roles as both consumers of products and managers of firms, humans are motivated by constrained self-interest seeking. This premise draws on Etzioni's (1988) argument that people have two irreducible sources of valuation: pleasure (or, in Etzioni's notation, "P-utility") and morality. Because people do pursue pleasure and avoid pain, P-utility explains much behavior. However, both consumers and managers are constrained in their self-interest seeking by considerations of what is right, proper, ethical, moral, or appropriate. In ethical theory terms, deontological considerations constrain teleological considerations.

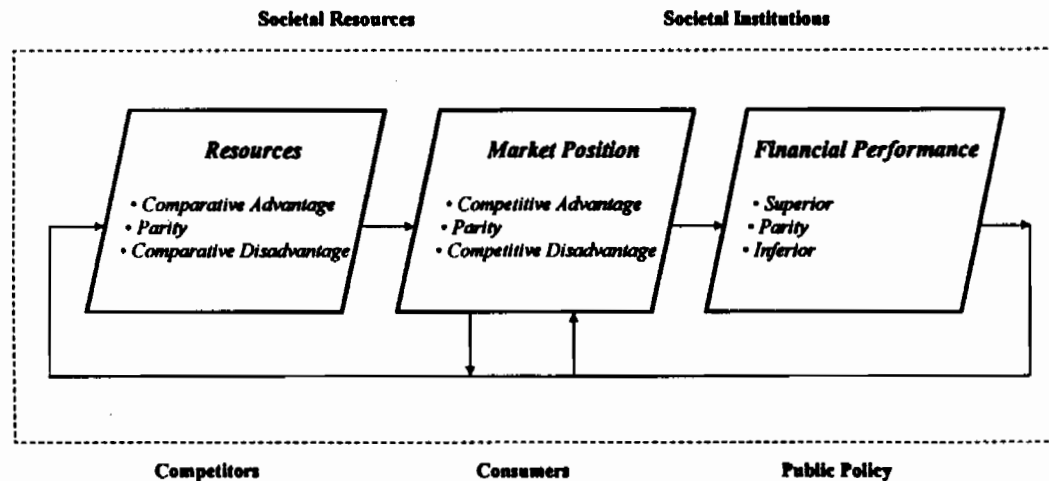
This article initiates an interdisciplinary discussion of the socio-economic aspects of the resource-advantage (hereafter, R-A) theory of competition. As a point of departure, I first overview briefly both the structure of and empirical evidence for the theory. Second, noting that Etzioni (1988, p. 254) argues that "the purpose of theory is to explain and predict," I show how R-A theory contributes to explaining productivity. Third, I argue that, because (a) it views the economy as a subsystem within a more encompassing societal complex and (b) it adopts moderate deontology, R-A theory can contribute to explaining how trust-producing

societal institutions can be productivity-enhancing and how the absence of such institutions can depress economic growth.

Before proceeding, a preliminary issue must be addressed. First, as to terminology, like Nelson and Winter (1982), I use “neoclassical” solely to identify the broad range of research that stems from viewing competition as equilibrium-seeking and perfect competition as the prototypical, ideal, competitive form. I do not use this label to signify all of mainstream economics, as do some works. Indeed, it is obvious that many mainstream works on competition depart significantly from one or more of the characteristics of the standard, textbook version of perfect competition. Therefore, this article compares R-A theory with the textbook version of perfect competition theory not because it is a convenient strawman, but because perfect competition’s foundational premises have been so meticulously articulated that they throw sharp relief on R-A theory’s nature.

THE STRUCTURE OF R-A THEORY

R-A theory draws on numerous research traditions. Like Chamberlin (1933), it acknowledges the heterogeneity of intra-industry tastes and preferences. Like Clark (1961) and Porter (1985), competition is viewed as a process that focuses on marketplace positions of competitive advantage. Like Hayek (1935), firms learn as a result of competition. Like Kaldor (1985), competitive processes are disequilibrating. Like Kirzner (1979), entrepreneurial activity is important. Like Nelson



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 (1997).

Figure 1. A Schematic of the Resource-Advantage Theory of Competition

and Winter (1982), competition is evolutionary. Like North (1990), societal institutions are important. Like Penrose (1959), resources are heterogenous. Like Schumpeter (1950), innovation is endogenous to competition. And like Simon (1979), information is imperfect. Nonetheless, R-A theory is neither the same as the theories developed by these authors, nor is it simply a composite of their works. Indeed, R-A theory differs in important respects from all extant theories of competition—as a review of its structure will show.

Figures 1 and 2 schematically represent R-A theory and Table 1 shows its foundational premises.² My overview follows closely R-A theory's development in Hunt (1995) and Hunt (1997).

Using Hodgson's (1993) taxonomy, Hunt (1997) classifies R-A theory as an evolutionary, disequilibrium-provoking, process theory of competition, in which innovation and organizational learning are endogenous, firms and consumers have imperfect information, and in which institutions and public policy affect economic performance. Both firms and resources are proposed as the heritable,

Relative Resource-produced Value

		Lower	Parity	Superior
Relative Resource Costs	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

Read: 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: Hunt (1997).

Figure 2. Competitive Position Matrix^a

Table 1. Foundational Propositions of Perfect Competition and Resource-Advantage Theory

	<i>Perfect Competition</i>	<i>Resource-Advantage Theory</i>
P1. Demand is:	heterogeneous across industries, homogeneous within industries, and static.	heterogeneous across industries, heterogeneous within industries, and dynamic.
P2. Consumer information is:	perfect and costless.	imperfect and costly.
P3. Human motivation is:	self-interest maximization.	constrained self-interest seeking.
P4. The firm's objective is:	profit maximization.	superior financial performance.
P5. The firm's information is:	perfect and costless.	imperfect and costly.
P6. The firm's resources are:	capital, labor, and land.	financial, physical, legal, human, organizational, informational, and relational.
P7. Resource characteristics are:	homogeneous and perfectly mobile.	heterogeneous and imperfectly mobile.
P8. The role of management is:	to determine quantity and implement production function.	to recognize, understand, create, select, implement, and modify strategies.
P9. Competitive dynamics are:	equilibrium-seeking, with innovation exogenous.	desequilibrium-provoking, with innovation endogenous.

Source: Hunt (1997).

durable units of evolutionary selection, with competition for a comparative advantage in resources constituting the selection process. Because the selection process focuses on the locally fitter, not the maximally fittest, R-A theory accommodates path dependencies (Hunt and Morgan, 1996). Therefore, though R-A competition is moving, it is not moving toward some ideal point (such as a Pareto-optimal, general equilibrium).

At its core, R-A theory combines heterogeneous demand theory (Alderson, 1965; Chamberlin, 1933) with the resource-based theory of the firm. Discussed in this journal by Mehra (1994), the resource-based theory of the firm traces to Penrose (1959), Nelson and Winter (1982), and Wernerfelt (1984). Undergirding what Foss (1993) calls the "competence perspective" in evolutionary economics, the "distinctive capabilities" view of Kay (1995), and the "dynamic capabilities" approach of Teece and Pisano (1994), it has been extensively 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), Lippman and Rumelt (1982), Montgomery (1995), Peteraf (1993), Prahalad and Hamel (1990, 1994), Reed and De Fillipi (1990), Schendel (1994), and Schoemaker and Amit (1994).³

Contrasted with perfect competition, heterogeneous demand theory views intra-industry demand as significantly heterogeneous as to consumers' tastes and pref-

erences. Therefore, different market offerings are required for different market segments within the same industry. Contrasted with the view that the firm is a production function that combines homogeneous, perfectly mobile factors of production, the resource-based view holds that the firm combines heterogeneous, imperfectly mobile factors or *resources*. These heterogeneous, imperfectly mobile resources, when combined with heterogeneous demand, imply significant diversity in the sizes, scopes, and levels of profitability of firms within the same industry. As diagrammed in Figs. 1 and 2, R-A theory stresses the importance of (a) market segments, (b) heterogeneous firm resources, (c) a comparative advantage/disadvantage in resources, and (d) marketplace positions of competitive advantage/disadvantage.

In brief, market segments are defined as intra-industry groups of consumers whose tastes and preferences with regard to an industry's output are relatively homogeneous. Resources are defined 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). Just as international trade theory recognizes that nations have heterogeneous, immobile resources—and it focuses on the importance of a society's comparative advantage in resources to explain the benefits of trade among *nations*—R-A theory recognizes that many of the resources of firms within the same industry are significantly heterogeneous and relatively immobile, and it focuses on a comparative advantage in resources among *firms*. That is, analogous to nations, some firms will have resources resulting in a comparative advantage (and others a comparative disadvantage) in efficiently and/or effectively producing particular market offerings that have value for particular market segments.

Specifically, when firms have a comparative advantage (disadvantage) in resources, they will occupy marketplace positions of competitive advantage (disadvantage), as shown in Fig. 1 and explicated in Fig. 2. Marketplace positions of competitive advantage (disadvantage) then result in superior (inferior) financial performance. Competition, therefore, is viewed as the constant struggle among firms for a comparative advantage in resources that will yield marketplace positions of competitive advantage for some market segment(s) and, thereby, superior financial performance. As Fig. 1 shows, how well competitive processes work to foster productivity and economic growth is significantly influenced by five environmental factors: the societal resources on which firms draw, the societal institutions that form the "rules of the game" (North, 1990), the actions of competitors, the behaviors of consumers, and public policy decisions.

Consistent with its Schumpeterian heritage, R-A theory places great emphasis on innovation, both proactive and reactive. The former is innovation (major or incremental) by firms that is motivated by the expectation of superior financial performance, but is not prompted by *specific* competitive pressures. In contrast, the latter is major or incremental innovation that is not only motivated by the expectation of superior financial performance, but is also directly prompted by

firms learning through the process of competing for the patronage of specific market segments. Both proactive and reactive innovation contribute to the dynamism inherent in R-A competition.

As the feedback loops in Fig. 1 show, firms learn through competition 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, or 8 in Fig. 2), they attempt to neutralize and/or leapfrog the advantaged firm (or firms) by acquisition and/or innovation. That is, they attempt to acquire the same resource as the advantaged firm(s) and/or they attempt to innovate by imitating the resource, finding 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, or 6 in Fig. 2) can continue to do so if (a) they continue to reinvest in the resources that produced the competitive advantage (b) they proactively innovate, (c) consumers' tastes and preferences remain unchanged, and (d) rivals' acquisition and reactive innovation efforts fail. Rivals will fail (or take a long time to succeed) when an advantaged firm's resources are either protected by such societal institutions as patents or the advantage-producing resources are causally ambiguous, socially complex, tacit, or have time-compression diseconomies.

EMPIRICALLY TESTING R-A THEORY

Consider the issue of firm diversity raised by Nelson (1991). Both within and across industries, firms differ dramatically as to size, scope, and financial performance. Such diversity, though an anomaly for neoclassical economics, is expected under R-A theory (Hunt and Morgan, 1995). First, R-A theory acknowledges that every firm is a unique entity in time and space. As a result of its history in obtaining and deploying resources, therefore, firms will differ from their rivals. Second, different assortments of resources may be equally efficient or effective in serving some market segments. These different assortments, therefore, lead to firms of varying sizes and scopes.

Third, heterogenous demand implies that servicing different market segments in the same industry will lead to firms with different sizes and scopes, for example, "niche" marketers. Fourth, diverging from transaction cost economics (Williamson, 1993), firms tend to conduct activities in-house, rather than contract them out, when they constitute, or are part of an assortment of resources that constitutes, a competency. Therefore, because firms will be more hierarchical on those dimensions that constitute competencies, differences in competencies will

promote diversity. Fifth, when firms servicing some market segment have a comparative advantage in resources that competitors cannot imitate, find substitutes for, or leapfrog with an entirely new resource, there will be firm diversity in the very important area of financial performance.

Firm diversity in financial performance provides an area for directly testing the relative merits of R-A versus neoclassical theory. The standard defense of neoclassical theory is that its accuracy in predicting implies that its assumptions are either "close enough" to the real world or competitive processes work "as if" its assumptions were true (Friedman, 1953).

If firms are viewed as combiners of homogeneous, mobile resources by means of a standard production function and intra-industry demand is viewed as homogeneous, then the variance in financial performance across firms and their business-units must result from such industry factors as barriers to entry. This, of course, is the standard view of the structure-conduct-performance model in industrial organization economics (Bain 1956). Empirically, therefore, neoclassical theory predicts that "industry effects" should explain most of the variance in firms' performance and "firm effects" should explain very little. In contrast, if firms are viewed as combiners of heterogeneous, imperfectly mobile resource and intra-industry demand is viewed as heterogeneous, then "firm effects" should dominate "industry effects." Thus, on the issue of diversity of financial performance, R-A theory and neoclassical theory make empirically testable, opposite predictions.

Schmalensee (1985) investigated the issue of industry effects versus firm effects with Federal Trade Commission line-of-business data for 1975. His results showed industry effects accounting for 20% of the variance in business-unit return on assets and corporate effects to be not significant. Rumelt (1991), however, pointed out that Schmalensee's use of only one year's data not only confounded stable industry effects with transient annual fluctuations, but also make it impossible to separate the effects of the overall corporation from the individual business-unit. When Rumelt supplemented Schmalensee's 1975 data with FTC data for 1974, 1976, and 1977, he found that, whereas industry effects explained only 8% of the variance, corporate and business-unit effects explained 2% and 44%, respectively. Supporting Rumelt, a recent study by Roquebert, Phillips, and Westfall (1996) found industry, corporate, and business-unit effects to be 10%, 18%, and 37%, respectively (resulting in "total firm" effects of $18 + 37 = 55\%$). Notably, their sample was much larger (over 6800 corporations), had a broader base (over 940 SIC, 4-digit categories), and (unlike FTC data) included both small and large corporations.

The finding of large-scale studies that firm effects dominate industry effects strongly supports R-A theory's premises: firms are better viewed as combiners of heterogeneous, imperfectly mobile resources, and intra-industry demand is better viewed as significantly heterogeneous. Furthermore, because industry structure explains so little variance in financial performance, the structure-conduct-

performance view appears misguided. In short, industry is the "tail" of competition; the firm is "dog."

EXPLAINING PRODUCTIVITY

Although empirically testing theories is important, Etzioni (1988) argues that theories in socio-economics should not only predict, but explain as well. What, then, should a theory of competition be able to explain? Hunt (1995) and Hunt and Morgan (1995, 1997) argue that a theory of competition should contribute to explaining why market-based economies (defined as those economies premised on competition among self-directed, privately owned firms) have historically been more productive than planned or "command" economies (i.e., those premised on cooperation among state-owned firms under the direction of a central planning board).

One might expect that neoclassical theory could contribute to explaining the superior productivity of market-based economies by first pointing out the efficiencies of perfect competition and then arguing that market-based economies are "close enough" (Friedman, 1953) to perfect competition to benefit from such efficiencies. However, ever since the "socialist calculation debate" that pitted the "Austrians" against the socialists in the 1920s, 1930s, and 1940s, neoclassicists have argued that perfect competition theory, when combined with general equilibrium analysis, provides no *theoretical* ground for favoring market-based economies (Hodgson, 1992; Keizer, 1989; Lavoie, 1985).⁴

Lavoie (1985) documents meticulously the standard view among both neoclassical historians and those in comparative economics as to the relative *theoretical* merits of market-based versus command economies. This standard view, as succinctly stated by Goldman (1971, p. 10), is that socialist economists provided "an answer acceptable to economists" when "they decided to meet von Mises on his own terms." The socialists' "answer" to von Mises (and Hayek) was that, because neoclassical theory is a set of equations in which the institution of private property plays no essential role, a maximally efficient, Pareto-optimal, general equilibrium for a planned economy would involve solving the same Walrasian equations as for a market-based economy. Instead of the wasteful groping for Pareto-optimality under competition, the state planning board under socialism would solve the equations *directly*. This "answer," concludes Lekachman (1959, pp. 396-397), "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 more efficiently than the capitalist communities of experience." In fact, it was persuasive not only to economic historians and those in comparative economics, but even to Schumpeter (1942/1950, pp. 186, 188), for he believed the socialist calculation debate (and his own analysis) had shown that "the solution of the problems confronting the socialist management would be not only just as possible as is the practical solution of the problem of commercial managements: it

would be easier." Indeed, "there is a strong case for believing in its [socialism's] superior economic efficiency."⁵

R-A theory, it is argued, can contribute to explaining the superior productivity of market-based economies because it abandons four views that led so many neo-classicists to conclude, as did Knight (1936, p. 255), that "the problems of collectivism are not problems of economic theory ... and the economic theorist has little or nothing to say about them." These views are: (a) the belief that the process of competition can be approximated by a series of moving equilibria, (b) the belief that the efficiency/productivity problems of real economies can be usefully approximated by a series of equations, (c) the belief that the process of competition can be satisfactorily modeled with innovation and organizational learning being exogenous, and (d) the belief that societal institutions are superfluous to the efficiency-producing characteristics of competition.

Following the argument in Hunt (1995) and Hunt and Morgan (1997), R-A theory approaches productivity in the manner of evolutionary economics (Nelson and Winter, 1982) and the endogenous growth theorists (Grossman and Helpman, 1994; Romer, 1986, 1994; Stokey, 1991).⁶ 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*. Specifically, 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 discover or create resource assortments that efficiently and/or effectively produce valued market offerings. Not only does the rational expectation of superior rewards, therefore, stimulate proactive innovation, both major and incremental (which, in turn, increases productivity), but so also does reactive innovation—as I now show.

Recall that firms seek to occupy marketplace positions identified as cells 2, 3, or 6 in Fig. 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. Thus, knowledge comes after competing, not before. By competing, firms learn. As Hayek (1935) 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 by 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 innovation but also organizational learning that must be endogenous in a satisfactory theory of competition, that is, one that can distinguish between market-based and command economies on the issue of differential productivity.

Note that R-A theory expands the concept of resources (from land, labor, and capital) to include such resources as organizational culture, knowledge, and competencies. As DeGregori (1987, p. 243) puts it: “Resources are not things or stuff or materials; they are a set a 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, not *scarce*. For example, when a firm successfully imitates or replicates the competency of another, the imitated firm’s 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 or competency created by the firm, can yield a marketplace position of competitive advantage. Thus, rewards flow to firms that successfully *create* new resources, providing them with a powerful motivation to innovate. In contrast, command economies, by lacking competition, suffer not only a lack of the means for knowledge discovery and a lack of the means and motivation for efficiently/effectively allocating existing (scarce) resources, but also for efficiently/effectively *creating* resources.

INSTITUTIONS, TRUST, AND ECONOMIC GROWTH

Why aren’t all market-based economies wealthy? North’s (1990) historical analysis concludes:

Third World countries are poor because the institutional constraints define a set of pay-offs to political/economic activity that do not encourage productive activity. Socialist

economies are just beginning to appreciate that the underlying institutional framework is the source of their current poor performance and are attempting to grapple with ways to restructure the institutional framework to redirect incentives that in turn will direct organizations along productivity-increasing paths (p. 110).

North's argument is richly detailed and difficult to reduce to a few paragraphs. Stated briefly, North (1990, p. 3) defines institutions as "the humanly devised constraints that shape human interaction" and he distinguishes formal institutions (constitutional law, statutory law, and common law) from informal institutions (cultural constraints, such as customs, traditions, conventions, and codes of conduct). He also distinguishes institutions (the rules of the game) from organizations (major players of the game). Organizations influence a society's institutional framework and, conversely, institutions influence organizational activities and performance. Importantly, a society's institutional framework determines its property rights, that is, "the rights individuals appropriate over their own labor and the goods and services they possess" (p. 33). Property rights, in turn, influence a society's productivity and economic growth.

By what processes, then, do institutions affect overall economic performance? North argues that institutions affect the costs of exchange and production. Specifically, efficient institutions—defined as those that "produce economic growth" (p. 92)—will lower transaction and transformational costs by inducing cooperation and reducing uncertainty. But, unlike Alchian's (1950) evolutionary hypothesis, which suggests that "ubiquitous competition would weed out inferior institutions" (p. 7), North argues that evolutionary change does not guarantee efficient institutions. Indeed, throughout history, "rulers devised property rights in their own interest and transaction costs resulted in typically inefficient property rights prevailing" (p. 7). North explains the persistence of inefficient institutions by adopting the evolutionary, path-dependency, "lock-in" view of David (1985).⁷ Indeed, "the resultant path of institutional change is shaped by (a) the lock-in that comes from the symbiotic relationship between institutions and the organizations that have evolved as a consequence of the incentive structure provided by those institutions and (b) the feedback process by which human beings perceive and react to changes in the opportunity set" (p. 7). This feedback can result in either efficient or "persistently inefficient paths" (p. 8).

For North, societies become wealthy over time "because the underlying institutional framework persistently reinforced incentives for organizations to engage in productive activity" (p. 9). In contrast, "in many Third World countries today as well as those that have characterized much of the world's economic history, [t]he opportunities for political and economic entrepreneurs are still a mixed bag, but they overwhelmingly favor activities that promote redistributive rather than productive activity, that create monopolies rather than competitive conditions, and that restrict opportunities rather than expand them" (p. 9).

If wealthy nations are wealthy because they have evolved sets of institutions that are efficient in creating economic growth, how do poor societies go about creating institutions that encourage productivity? North admits that he has no ready answer. Nonetheless, he identifies the goal that policy-makers should adopt: "One gets *efficient* institutions by a polity that has built-in incentives to create and enforce efficient property rights" (p. 140). He notes, however, that the serious study of institutions in economics has been long neglected. Furthermore, he laments, the dominant neoclassical paradigm represents a serious obstacle for anyone attempting to understand how societies can create efficient institutions: "But it is hard—maybe impossible—to model such a polity with wealth-maximizing actors unconstrained by other considerations" (p. 140). Socio-economics, most assuredly, agrees.

While North (1990) approaches productivity and economic development from the standpoint of an economic historian and he analyzes the impact of both formal and informal institutions, Harrison (1992) starts from the perspective of being in the "trenches" in the U.S. Agency for International Development. His work, furthermore, focuses on what North calls informal institutions.

Harrison (1992, p. 1) asks: "Why do some nations and ethnic groups do better than other?" And he answers: "The overriding significance of culture is the paramount lesson I have learned in my 30 years of work on political, economic, and social development." As a self-declared, "lifelong Democrat" (p. 221), Harrison knows the danger of contradicting the orthodoxy of cultural relativism, "which asserts that all cultures are essentially equal and eschews comparative value judgments" (p. 16). Nonetheless, he maintains that "cultural relativism flies in the face of reality" because "some cultures are progress-prone, while others are not" (p. 16). Thus, he seeks to explain not only why some nations are more prosperous than others, but also why some ethnic groups, (he identifies Jews, Chinese, Japanese, and Koreans as prototypical examples) seem to prosper even in societies that, overall, are relatively poor.

What, then, are the characteristics of a culture that will engender prosperity, one that is progress-prone? This is Harrison's (1992, p. 16) answer:

There are, in my view, four fundamental factors: (1) the degree of identification with others in a society—the radius of trust, or the sense of community; (2) the rigor of the ethical system; (3) the way authority is exercised within the society; and (4) attitudes about work, innovation, saving, and profit.

The radius of trust is the extent to which individuals identify with, or have a sense of community with, others in the society. The smallest radius of trust is a society in which individuals trust only themselves. Next would be those in which the radius extends only to members of the immediate family and other kin. Because of the narrow radius of trust in such "familistic" societies: "Commercial and industrial enterprises ... are usually weighted down by centralization, includ-

ing a variety of checking mechanisms and procedures designed, ostensibly, to assure conformity and to control dishonesty" (p. 11). In contrast, market-based systems in such high trust countries as Japan have proved to be relatively productive because "successful enterprise usually depends on effective organization and cooperation, which, in turn depend on trust" (p. 11).

Whereas Harrison focuses on trust as being one of four cultural factors that promote prosperity, Fukuyama (1995), motivated by what he sees as the "crisis of trust" (p. 267) in American society, maintains that trust is the *sine qua non* of societal productivity and economic growth. Defining trust as "the expectation ... of regular, honest, and cooperative behavior, based on commonly shared norms" (p. 26), he maintains that a community's set of shared ethical values contributes to its capacity for spontaneous sociability, which "refers to the wide range of intermediate communities, distinct from the family or those deliberately established by governments" (p. 27). Indeed, where sociability and trust are low, governments often have to step in to promote community.

Fukuyama argues that spontaneous sociability contributes to the "social capital" (Coleman, 1988) of high-trust societies and to their ability to innovate organizationally: "Hence highly sociable Americans pioneered the development of the modern corporation in the nineteenth and twentieth centuries, just as the Japanese have explored the possibilities of network organizations in the twentieth" (p. 27). In contrast, in low-trust societies, where the radius of trust extends only to kin, the cooperation necessary for large corporations can be obtained only "under a system of formal rules and regulations, which have to be negotiated, agreed to, litigated, and enforced, sometimes by coercive means" (p. 27). This legal and regulatory apparatus, which is unnecessary in a high-trust society, serves as a substitute for trust and imposes a high burden of transaction costs on low-trust societies: "Widespread distrust in a society, in other words, imposes a kind of tax on all forms of economic activity, a tax that high-trust societies do not have to pay" (pp. 27-28).

In summary, a provocative, heterodoxical view is emerging among economic historians and others as to why only some market-based economies have evolved into wealthy societies. This view is that it is differences in formal and informal institutions that distinguish wealthy from nonwealthy societies. Some institutions are productivity-enhancing; others are not. Some foster economic growth; others do not. Because they reduce transaction and transformational costs, institutionalized moral codes that promote trust are thought to be particularly important. But not all moral codes will be equally trust-inducing. The next section, following Etzioni (1988), argues that it is moral codes based on deontological ethics that promote trust, productivity, and economic growth.

DEONTOLOGICAL ETHICS AND TRUST

In general, the moral codes that guide individual behavior draw on two traditions in moral philosophy: deontology and teleology (Beauchamp and Bowie, 1988).

Because deontological codes focus on specific actions or behaviors and teleological codes focus on consequences, the former stress the *inherent* rightness-wrongness of a behavior, and the latter emphasize the amount of good or bad embodied in a behavior's *consequences*. Deontologists believe that "certain features of the act itself other than the value it brings into existence" make an action or rule right or wrong (Frankena, 1963, p. 14). Moral codes based on deontology will emphasize the extent to which a behavior is consistent or inconsistent with such deontological norms as those *proscribing*, lying, cheating, deceiving, or stealing and those *prescribing* honesty, fairness, justice, or fidelity. Accordingly, they emphasize duties, obligations, and responsibilities to others. Teleologists, on the other hand, "believe that there is one and only one basic or ultimate right-making characteristic, namely, the comparative value (nonmoral) of what is, probably will be, or is intended to be brought into being" (Frankena, 1963, p. 14).

Whereas deontological codes must address the difficult issue of conflicting norms, those emphasizing teleological factors must grapple with which stakeholders are to be valued. Those moral codes adopting *utilitarianism* hold that an act is right only if it produces for all people a greater balance of good over bad consequences than other alternatives (i.e., "the greatest good for the greatest number"). Even though it focuses on consequences, because utilitarianism demands that decision-makers consider an act's consequences on all stakeholders, it shares at least some common ground with deontology's emphasis on duties and responsibilities to *others*. In stark contrast, codes adopting ethical egoism hold that an act is right only if the consequences of the act are most favorable for the individual decision-maker—a view directly opposed by deontological ethics.

For example, whereas an employee guided by deontological ethics believes padding expense reports is wrong because it violates norms proscribing cheating and stealing, an egoist believes padding is right or wrong depending on the relationship between the benefits of padding versus the likelihood of getting caught and the resulting punishment. Therefore, though both deontologists and egoists may abstain from padding expense reports, they do so for different reasons. These different reasons, I argue, have efficiency and effectiveness consequences for firms.

Etzioni (1988) emphasizes the moral dimension in decision-making and argues for deontological ethics. He maintains that a core assumption of neoclassical economics is that people are ethical egoists who seek to maximize one, and only one, utility, which has historically been viewed as synonymous with pleasure. Thus, he labels it "P-utility." In contrast, Etzioni promotes the "I & We paradigm," in which one of the core assumptions is that people pursue at least two irreducible "utilities" and have two sources of valuation, pleasure and morality.

Etzioni points out three conceptualizations of "utility" and "utility maximization" in contemporary economics. The first is the self-interest maximization of ethical egoism, which directs all actions toward the pursuit of pleasure or the avoidance of pain:

P-utility has longstanding philosophical and psychological foundations, it provides a major explanatory concept and generates testable hypotheses ... To the extent that it is hypothesized that the pursuit of P-utility is a major explanatory factor, the hypothesis is clearly valid ... To argue that people are pleasure-driven ... surely explains a good part of human behavior (pp. 28, 34).

However, it is clear, as Etzioni documents, that people don't *maximize* P-utility. Indeed, many people do act unselfishly on many occasions, as shown by scores of empirical studies on genuine acts of altruism, on economic decisions related to such behaviors as saving, on activities related to public goods, on free riders, on the cooperative behaviors in prisoner's dilemma experiments, and on the voting behaviors of citizens. Because people are not guided solely by ethical egoism, if "utility" is meant as P-utility, then the utility maximization thesis in the neoclassical model is clearly false.

Etzioni discusses two means by which neoclassicists attempt to save utility maximization in the face of its falsity. First, many turn utility into a tautology. Thus, acts of altruism are "explained" by suggesting that the pleasure of the person who benefits from such acts has become a source of the doer's pleasure, part of his or her utility. However, "saving" the utility maximization thesis by making it a tautology destroys its scientific status, for there are no conceivable behaviors that could possibly even *count against* the thesis. Second, some treat utility maximization as an *ex post* rank ordering of preferences that makes the mathematical equations work out. However, Etzioni argues that science, unlike mathematics, requires substantive concepts. Moreover, even though neoclassicists "save" utility maximization by turning the concept into either a tautology or an empty mathematical abstraction, when they turn to giving advice to policy-makers, they tend to revert to treating P-utility maximization as a substantive, verified thesis (as in the "public choice" school). This, he contends, is not only intellectually indefensible, but morally reprehensible.

Etzioni argues that socio-economics should draw on deontological ethics and, rather than urging the abandonment of P-utility, he theorizes that moral commitment is a separate source of valuation. Thus, he hypothesizes that behavior is *co-determined* by P-utility and a moral commitment based on deontological ethics. By moderating the P-utility thesis with deontological ethics, argues Etzioni (1988, pp. 7, 8), socio-economics can account for trust, which "is pivotal to the economy ... as, without it, currency will not be used, saving makes no sense, and transaction costs rise precipitously."

INSTITUTIONS, DEONTOLOGICAL ETHICS AND R-A THEORY

As shown in Fig. 1, R-A theory adopts North's (1990) view that the process of competition is significantly influenced by societal institutions. First, with its strong emphasis on the role of innovation, R-A competition requires institutions that pro-

protect the property rights of innovators (e.g., patents, copyright laws, and laws protecting trade secrets.) As Poirot (1993, p. 892) puts it: "In order for an existing institutional structure to direct economic activity along a path that is conducive to economic growth, individuals must be able to reap the gains from innovation." Because R-A theory views firms as combiners of heterogeneous, imperfectly mobile resources, reaping the gains from innovation becomes theoretically *possible*. Because R-A theory recognizes the importance of institutions protecting property rights, reaping the gains of innovation becomes empirically *likely*.

Second, by postulating that humans are motivated by constrained—or restrained—self-interest seeking, R-A theory explicates the processes by which such institutions as moral codes can be productivity-enhancing. Understanding how R-A theory accomplishes this requires that we begin with how R-A theory views the firm's primary objective.

R-A theory proposes that the firm's primary objective is superior financial performance. Because it *enables* firms to pursue other objectives, such as contributing to or otherwise furthering social causes, superior financial performance is viewed as *primary*. Firms pursue superior financial performance because superior rewards—both financial and nonfinancial—will then flow to owners, managers, and employees. Superior financial performance does not equate with abnormal profits or rents (i.e., profits differing from the average firm in a purely competitive industry in long-run equilibrium) because R-A theory views industry long-run equilibrium as such a rare phenomenon that normal profits cannot be an empirical referent for comparison purposes. Furthermore, the actions of firms that collectively constitute competition do not inevitably force groups of rivals to tend toward equilibrium. Instead, the actions of firms that constitute competition are primarily disequilibrating, not equilibrating.

Superior financial performance is indicated by such measures as profits, earnings per share, return on investment, and capital appreciation. Here, "superior" equates with both "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 its own performance in a previous time-period or that of a rival firm, an industry average, or a stock-market average, among others. Both the specific measure and specific referent will vary somewhat from time to time, firm to firm, industry to industry, and culture to culture. For example, in Germany and Switzerland, where banks and many other shareholders rarely trade their stocks, the objective of superior long-term capital appreciation is pursued more frequently than it is in the United States (Porter, 1990).

If at the micro-level the primary objective of firms is superior financial performance, but at the macro-level a key factor distinguishing wealthy from nonwealthy societies is trust-promoting institutions, the challenge is to explicate the process by which such macro-level, trust-promoting institutions as moral

codes can contribute to (or from) firm-level, superior financial performance. A detailed example shows how R-A theory explicates this process.

Recalling the role of relative resource costs and relative resource-produced value in R-A theory (Fig. 2), consider two organizations, A and B, that are competing for the same market segment. Assume that A is located in an area populated primarily by ethical egoists and B in an area of deontologists (or, alternatively, B's hiring procedures screen out egoists). Because most of A's employees will be guided by egoism (self-interest or P-utility maximization) and B's by a code stressing deontological ethics, A will have transformational costs (e.g., costs associated with shirking, cheating, stealing, monitoring, and free riding) that B avoids. In R-A theory's terms, the fact that B's employees, guided by deontological ethics, are trustworthy results in an intangible, comparative advantage-producing *resource* for B, when competing with A. *Ceteris paribus*, B will then occupy a marketplace position of competitive advantage (Fig. 2) *vis-a-vis* A and enjoy superior financial performance—its primary objective.

Now recall that heterogenous organizational competencies are foundational in R-A theory and assume that both A and B seek a strategic alliance with C, who has a particular competency that both A and B lack. For example, perhaps C can produce a key component of A's and B's products that is of particularly high quality—a quality that neither A nor B can match. Further assume that, because of their employees' different moral codes, B has a reputation for integrity and A for opportunism. Because C would fear A's opportunism, C would decline the alliance or would insist that A absorb the high monitoring and other costs resulting from A's moral code. In contrast, B is an attractive partner for C because C recognizes that B's moral code lessens the likelihood of B engaging in opportunistic behavior. Thus, B will be able to align itself with C, and A will have to do without C's competency. B's strategic alliance with C will then become what Hunt and Morgan (1995) call a "relational resource" that makes B more *effective* in competing with A. That is, B is now more likely to achieve marketplace positions identified as cells 2 and 3 in Fig. 2 and, thus, enjoy superior financial performance.

Now assume that A and B are nation-states, instead of organizations, where A's dominant culture has a moral code tending toward ethical egoism and B's toward deontological ethics. *Ceteris paribus*, A will be less productive than B for three reasons. First, A must absorb transaction and transformational costs that B avoids. Therefore, B is more *efficient* than A in producing valued market offerings. Second, recalling again that organizational competencies are heterogenous, firms in A will be less successful in forming cooperative alliances or networks. Therefore, B is more *effective* than A in producing valued market offerings for both domestic and global markets. B's greater efficiency and effectiveness, therefore, increases its productivity relative to A. Third, assume that firms in A are competing with those in B for the business of firms in nation C. *Ceteris paribus*, B's firms will be in an advantageous position over those in A because B's firms will be both more

efficient and more effective in producing valued market offerings. Therefore, nation B is better able than A to reap the gains from trade with C, resulting in further increases in B's productivity and growth, relative to A.

Recalling that a resource is any entity, tangible or intangible, that is available to (not necessarily *owned by*) the firm that enables it to produce valued market offerings, just as employees having a moral code stressing deontological ethics constitutes a *firm* resource, a society having a dominant culture with a moral code stressing deontological ethics has a *societal* resource. That is, deontological ethics can contribute to a society's social capital (Coleman, 1988). Thus, by explaining how a heterodoxical kind of societal resource can contribute to the wealth-creating potential of competition, R-A theory provides theoretical grounds for Etzioni's (1988, p. 257) ultimate conclusion: "The more people accept the [P-utility maximization part of the] neoclassical paradigm as a guide for their behavior, the more their ability to sustain a market economy is undermined."

CONCLUSION

Etzioni (1988) argues that the socio-economic research program must contain new theories of competition, ones that (a) are capable of explaining and predicting, (b) view economic relations as embedded within societal complexes, and (c) abandon the view that human behavior is best assumed to result from self-interest maximization. Toward the end of initiating an interdisciplinary discussion, further empirical testing, critical evaluation, and development, R-A theory is advanced here as a socioeconomic theory of competition and the foundational propositions of R-A theory are proposed as contributing to the development of a socioeconomic research tradition.

Not only does R-A theory adopt the embeddedness and constrained, self-interest seeking views of socio-economics, it also: (a) makes the correct prediction (contrasted with neoclassical theory) on the issue of firm diversity, (b) contributes to explaining observed differences in productivity between market-based and command economies (on the basis of motivational, informational, and competitive process factors), (c) contributes to explaining why all market-based economies are not wealthy (on the basis that competitive processes are embedded within differing institutional frameworks), and (d) contributes to explaining why institutions that promote trust can be productivity-enhancing (on the basis that societies having moral codes based on deontological ethics have reduced transaction and transformational costs, making their competitive processes more efficient and effective.)

It is important to emphasize the "contributes to" in the preceding paragraph. R-A theory is not claimed to be a complete or definitive explanation for any phenomenon. Nor are R-A theory's foundational propositions claimed to be inviolate. R-A theory and its foundations, as a work in progress, only *contribute*

to explaining phenomena and developing a socioeconomic research tradition. Obviously, before stronger claims can be made, R-A theory requires more testing, more development, and critical evaluation. In the spirit of interdisciplinary collaboration, socio-economics would seem to be well positioned, perhaps uniquely positioned, to undertake such collaborative efforts.

Acknowledgments: I thank Robert M. Morgan, Nicolai J. Foss, Richard R. Nelson, and P. Rojan Varadarajan for their help in developing resource-advantage theory.

NOTES

1. This writer prefers "research program" or "research tradition" over "paradigm" because the latter denotes (or connotes) for many that all research in science takes place within rigid, encapsulated, self-justifying, incommensurable, paradigmatic cocoons. "Research program" and "research tradition" do not have this denotation or connotation. Indeed, the developing research program of socio-economics, unlike neoclassical economics, takes justifiable pride in its openness to contributions from other research traditions.
2. Note that the foundational propositions are to be evaluated according to scientific realism (Hunt and Morgan, 1995). Space constraints dictate that not all of R-A theory's foundational premises be reviewed here. See Hunt (1995) and Hunt and Morgan (1995) for detailed arguments for each premise.
3. For a recent review of the resource-based theory of the firm and its compatibility with evolutionary economics, see Montgomery (1995).
4. The most comprehensive review of the socialist calculation debate is found in Lavoie (1985). Brief reviews may be found in Hodgson (1992), Hunt (1995), and Keizer (1989).
5. See Lavoie (1985) for detailed documentation that this has been the standard view among neoclassical historians and those neoclassicists specializing in comparative economic systems.
6. Note that a key assumption of endogenous growth models is that technology is a nonrival, partially excludable resource in the production process (Romer, 1994). See Hunt (1996) for detailed arguments that a theoretical foundation for endogenous growth models requires a theory with several of the key characteristics of R-A theory.
7. See Liebowitz and Margolis (1990, 1994, 1995) for an evaluation of the "lock-in" thesis.

REFERENCES

- Alchian, A.A. (1950). Uncertainty, evolution and economic theory. *Journal of Political Economy*, 58, 211-221.
- Alderson, W. (1965). *Dynamic marketing behavior*. Homewood, IL: Irwin.
- Arrow, K.J. (1972). Gifts and exchanges. *Philosophy and Public Affairs*, 343-361.
- Arrow, K.J. (1974). *The limits of organization*. New York: W-W. Norton.
- Bain, J.S. (1956). *Barriers to new competition*. Cambridge, MA: Harvard University Press.
- Barney, J.B. (1986). Strategic factor markets, expectations, luck and business strategy. *Management Science*, 32, 1231-1241.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.

- Barney, J.B. (1992). Integrating organizational behavior and strategy formulation research: A resource-based analysis. In P. Shrivastava, A.S. Huff, & J.E. Dutton (Eds.), *Advances in strategic management* (pp. 39- 61). Greenwich, CT: JAI Press.
- Barney, J.B., & Hansen, M.H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, 15, 175-190.
- Beauchamp, T.L., & Bowie, N.E. (1988). *Ethical theory and business*, 3rd ed. Englewood Cliffs, NJ: Prentice Hall.
- Black, J.A., & Boal, K.B. (1994). Strategic resources, traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, 15, 131-148.
- Brumagim, A.L. (1994). A hierarchy of corporate resources. In P. Shrivastava, A.S. Huff, & J.E. Dutton (Eds.), *Advances in strategic management* (pp. 81-112). Greenwich, CT: JAI Press.
- Chamberlin, E. (1933). *The theory of monopolistic competition*. Cambridge, MA: Harvard University Press.
- Clark, J.M. (1961). *Competition as a dynamic process*. Washington, DC: Brookings Institution.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(Supplement), S595-S5120.
- Collis, D.J. (1991). A resource-based analysis of global competition. *Strategic Management Journal*, 12(1), 49-68.
- Collis, D.J. (1994). How valuable are organizational capabilities? *Strategic Management Journal*, 15, 143-152.
- Conner, K. (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.
- David, P.A. (1985). Clio and the economics QWERTY. *American Economic Review*, 75, 332-337.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35, 1504-1511.
- DeGregori, T.R. (1987). Resources are not; they become: an institutional theory. *Journal of Economic Issues*, 21(3), 1241-1263.
- Etzioni, A. (1988). *The moral dimension: toward a new economics*. New York: Free Press.
- Foss, N.J. (1993). Theories of the firm: contractual and competence perspectives. *Journal of Evolutionary Economics*, 3, 127-144.
- Frankena, W. (1963). *Ethics*. Englewood Cliffs, NJ: Prentice Hall.
- Friedman, M. (1953). *Essays in positive economics*. Chicago: University of Chicago Press.
- Fukuyama, F. (1995). *Trust: the social virtues and the creation of prosperity*. New York: Free Press.
- Gambetta, D. (1988). *Trust: making and breaking cooperative relationships*. New York: Basil Blackwell.
- Goldman, M.I. (1971). *Comparative economic systems: a reader*. New York: Random House.
- Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Grant, R.M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33, 114-133.
- Grossman, G.M., & Helpman, E. (1994). Endogenous innovation in the theory of growth. *Journal of Economic Perspectives*, 8, 23-33.
- Harrison, L.E. (1992). *Who prospers?: how cultural values shape economic and political success*. New York: Basic Books.
- Hayek, F.A. (Ed.) (1935). *Collectivist economic planning, critical studies on the possibilities of socialism*. London: Routledge.
- Hodgson, G.M. (1992). The reconstruction of economics: is there still a place for neoclassical theory? *Journal of Economic Issues*, 26(3), 749-767.
- Hodgson, G.M. (1993). *Economics and evolution*. Ann Arbor: University of Michigan Press.

- Hunt, S.D. (1995). The resource-advantage theory of competition: toward explaining productivity and economic growth. *Journal of Management Inquiry*, 4, 317-332.
- Hunt, S.D. (1996). Evolutionary economics, resource-advantage theory, and endogenous growth models. Unpublished working paper, College of Business Administration, Texas Tech University.
- Hunt, S.D. (1997). Resource-advantage theory: An evolutionary theory of competitive behavior? *Journal of Economic Issues*, 31(1), 59-77.
- Hunt, S.D. (in press). Towards synthesizing resource-based and evolutionary thought: the contribution of resource-advantage theory. In N.J. Foss and P. Robertson (Eds.), *Resources, technology and strategy*. Copenhagen: Copenhagen Business School.
- Hunt, S.D., & Morgan, R.M. (1995). The comparative advantage theory of competition. *Journal of Marketing*, 59(2), 1-15.
- Hunt, S.D., & Morgan, R.M. (1996). The resource-advantage theory of competition: dynamics, path dependencies, and evolutionary dimensions. *Journal of Marketing*, 60(October), 107-114.
- Hunt, S.D., & Morgan, R.M. (1997). Resource-advantage theory: a snake swallowing its tail or a general theory of competition? *Journal of Marketing*, 62(October).
- Kaldor, N. (1985). *Economics without equilibrium*. Armonk, NY: M.E. Sharpe.
- Kay, J. (1995). *Why firms succeed*. Oxford: Oxford University Press.
- Keizer, W. (1989). Recent reinterpretations of the socialist calculation debate. *Journal of Economic Studies*, 16(2), 63-83.
- Kirzner, I.M. (1979). *Perception, opportunity and profit: studies in the theory of entrepreneurship*. Chicago, IL: The University of Chicago Press.
- Knight, F.H. (1936). The place of marginal economics in a collectivist system. *American Economic Review Papers and Proceedings*, 26, 255-266.
- Lado, A.A., & Wilson, M.C. (1994). Human resource systems and sustained competitive advantage: a competency-based perspective. *Academy of Management Review*, 19(4), 699-727.
- Lavoie, D. (1985). *Rivalry and central planning: the socialist calculation debate reconsidered*. Cambridge: Cambridge University Press.
- Lekachman, R. (1959). *A history of economic ideas*. New York: Harper.
- Liebowitz, S.J., & Margolis, S.E. (1990). The fable of the keys. *Journal of Law and Economics*, 33(April), 1-25.
- Liebowitz, S.J., & Margolis, S.E. (1994). Network externality: an uncommon tragedy. *Journal of Economic Perspectives*, 8(12), 133-150.
- Liebowitz, S.J., & Margolis, S.E. (1995). Path dependence, lock-in, and history. *Journal of Law, Organization and History*, 7(4), 205-226.
- Lippman, S.A., & Rumelt, R.P. (1982). Uncertain imitability. *Bell Journal of Economics*, 13, 418-438.
- Mehra, A. (1994). Strategic groups: a resource-based approach. *The Journal of Socio-Economics*, 23(4), 425-439.
- Montgomery, C.A. (Ed.) (1995). *Resource-based and evolutionary theories of the firm: towards a synthesis*. Norwell, MA: Kluwer Academic Publishers.
- Nelson, R.R. (1991). Why do firms differ, and how does it matter? *Strategic Management Journal*, 12, 61-74.
- Nelson, R.R., & Winter, S.G. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press.
- North, D.C. (1990). *Institutions, institutional change, and economic performance*. Cambridge: University of Cambridge.
- Penrose, E.T. (1959). *The theory of the growth of the firm*. Great Britain: Basil Blackwell & Mott.
- Peteraf, M.A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal*, 14(3), 179-191.

- Phelps, E.S. (1975). *Altruism, morality, and economic theory*. New York: Russell Sage Foundation.
- Poirot, C.S., Jr. (1993). Institutions and economic evolution. *Journal of Economic Issues*, XXVII(3), 887-907.
- Porter, M.E. (1985). *Competitive strategy*. New York: The Free Press.
- Porter, M.E. (1990). *The competitive advantage of nations*. New York: The Free Press.
- Porter, M.E. (1994). Strategy as a field of study: why search for a new paradigm? *Strategic Management Journal*, 15, 17-34.
- Prahalad, C.K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, May-June, 79-91.
- Reed, R., & DeFillippi, R. J. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15, 88-117.
- Romer, P.M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94, 1002-1037.
- Romer, P.M. (1994). The origins of endogenous growth. *Journal of Economic Perspective*, 8, 3-22.
- Roquebert, J.A., Phillips, R. L., & Westfall, P.A. (1996). Markets versus management: what drives profitability? *Strategic Management Journal*, 17(8), 653-664.
- Rumelt, R.P. (1991) How much does industry matter? *Strategic Management Journal*, 12, 167-185.
- Schendel, D. (1994). Introduction to "Competitive organizational behavior: toward an organizationally-based theory of competitive advantage." *Strategic Management Journal*, 15, 14.
- Schoemaker, P.J.H., & Amit, R. (1994). Investment in strategic assets: industry and firm-level perspectives. In P. Shrivastava, A.S. Huff, & J.E. Dutton (Eds.), *Advances in strategic management* (vol. 10A, pp. 3-33). Greenwich, CT: JAI Press.
- Schmalensee, R. (1985). Do markets differ much? *American Economic Review*, 75, 341-350.
- Schumpeter, J.A. (1950)[1942]. *Capitalism, socialism and democracy*. New York: Harper & Row.
- Simon, H.A. (1979). Rational decision making in business organizations. *American Economic Review*, 69, 493-512.
- Stokey, N. (1991). Human capital, product quality, and growth. *Quarterly Journal of Economics*, 106, 587-616.
- Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms. *Industrial and Corporate Change*, 3, 537-556.
- Wenerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- Williamson, O.E. (1993). Opportunism and its critics. *Managerial and Decision Economics*, 14, 94-107.