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## Austrian and Neoclassical Economics: Any Gains From Trade?

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**Working Paper No. 133**

**AUSTRIAN AND NEOCLASSICAL ECONOMICS:  
ANY GAINS FROM TRADE?**

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Study of  
the Economy and the State  
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### Abstract

The systems aspects of Austrian economic thought pertaining to the process of competition deserve a prominent place in modern economic thinking. The paper illustrates the differences between the Austrian view of competition as an evolutionary process, and the neoclassical emphasis on determining market equilibrium under known or given conditions. These bear importantly on the fundamental way we think about decentralization of economic activities among highly specialized agents with incomplete knowledge and information. The role of competition as a selection device that often encourages survival of the fittest and solves some types of agency problems is still worth thinking about.

## Austrian and Neoclassical Economics: Any Gains From Trade?

Sherwin Rosen<sup>1</sup>

Austrian economics has been important to the development of modern economics, but its role in current practice is much diminished. The neoclassical approach dominates today's thinking. Many Austrians bemoan this state of affairs; most neoclassical economists just ignore it. But Austrian and neoclassical economics aren't mutually exclusive. Each represents a distinctive point of view, although with little meaningful intellectual exchange between them these days. This is unfortunate.

Many different things are associated with both Austrian and neoclassical economics. To concentrate on where the most fruitful exchange of ideas might occur, I am concerned about those aspects of Austrian economics primarily dealing with the process of competition, and that portion of neoclassical economics primarily dealing with the determination of economic equilibrium. This, in a nutshell, is the main intellectual difference between them. Some consequences of this difference are discussed in what follows.

I hope to show that mutually advantageous gains from trade exist. Austrian economics offers a valuable perspective of the economy as an evolutionary process, akin to biological evolution, with entrepreneurial activities representing the main instruments of change. It's primarily a macroeconomic theory of the economy as a whole, with keen insights on the

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<sup>1</sup>Thanks go to Kenneth Arrow, Gary Becker, Stanley Engerman, William Grampp and Robert Lucas for discussions and criticism of an early draft. Alan Kreuger and Timothy Taylor made helpful editorial suggestions. None of these people agree with all that remains.

nature of decentralization and the process of competition that deserve more attention. Neoclassical economics offers a microeconomic theory of economic behavior that is especially useful for analyzing specific economic problems and for orienting analysis around more sharply described empirical phenomena and data.

### Process and Equilibrium

On the terms I have chosen, the evolutionary theme at the heart of Austrian economics is most interesting when, in a very general sense, knowledge and information are highly decentralized, imperfect, and widely dispersed. Economic systems are seen to evolve as the amalgamation and interactions of trials and errors among economic agents. Entrepreneurial ventures and experiments, arbitrage activities, and survival of the fittest play crucial roles in this process. Not only do resources gradually move to their (perceived) highest valued uses, but values themselves are discovered and slowly revealed along the way.

In marked contrast, the methods of neoclassical economics mainly are concerned with the establishment of economic equilibrium under fully known or (in Marshallian terminology) given conditions of resource availability, technology and preferences. Perhaps it is revealing that the old-fashioned and somewhat more general terms "supply" and "demand" have gradually given way to the new and more specific terms "tastes" and "technology." Both must be fully specified before analysis begins. Whatever the language, the central approach is to analyze the costs and benefits of alternative courses of action of

consumers and producers, and find an overall solution where individual decisions are mutually compatible and can be implemented by everyone.

In neoclassical economics, individual behavior is described as the outcome of rational choices -- doing the best one can under the circumstances, and pursuing those specific actions from available alternatives that maximize the difference between personal benefits and costs. The choice set is fully specified, technology of sellers and tastes of buyers are given, as are the number and varieties of goods. There is a well-defined solution to the resource allocation problem. General conditions can be found for which a market equilibrium "exists" in the sense that all individual agents can independently fulfill the plans that best serve their self-interests, given the model assumptions.

Solving the existence problem is not a detail in the neoclassical scheme. It is a logical necessity. For if the individual plans chosen to fulfill self-interest turn out to be infeasible, the problem must have been incorrectly specified in the first instance. The pieces cannot fit together and it is not possible for individuals to behave in the postulated manner. The microeconomics won't aggregate to the economy at large, nor to the specific problem the analysis purports to solve. It is important that the conditions under which an equilibrium exists are fairly minimal. Otherwise neoclassical models of empirical phenomena could not be generally applied to a wide variety of circumstances.

There are serious questions of whether "disequilibrium" analysis is possible in the neoclassical scheme. In my view it isn't: consider the crucial role of the "auctioneer" and tatonnement in the Walrasian system: the

postulated conditions on individual choice only hold when markets clear, at equilibrium prices. Years of analysis of "out of equilibrium" trades in that framework hardly have gotten anywhere. To be sure, many neoclassical models put restrictions on prices and on the existence of some markets. Sometimes these give rise to such phenomena as rationing and queues, but those too are part of the equilibrium process and must be specified in the underlying microeconomic decision structure.

The Austrian approach is entirely different. The economy is in a perpetual state of disequilibrium: things are always changing and in a state of flux. The economy is ever evolving, creating unforeseen profit opportunities that agents are constantly trying to find and to exploit. This is not to say that neoclassical analysis rules out mistakes and errors in economic decisions. Rational decision-making under uncertainty implies that people might well regret their previous decisions. Extensions of neoclassical theory since the 1950's address stochastic environments and work out the logic of how markets and other social arrangements deal with risk and risk-bearing. The market equilibrium concept is general enough to apply to the sharing and trading of certain kinds of risks in a relatively straightforward way, though problems of incomplete risk markets loom fairly large at the research frontier today.

#### Coordination and the Invisible Hand

The overall point I am attempting to make is well-expressed by the "invisible hand" welfare theorems of neoclassical economics. If there are enough markets to internalize all transactions (no external effects) and

decreasing returns (no nonconvexities), then the welfare theorems hold that a Pareto optimal allocation is achieved by a decentralized, competitive market price system. This is a consequence of the rationality of individual decisions and the fact that market prices, common to all participants, exhaust all gains from trade. It is routine in graduate economic courses today to identify these results with Smith's invisible hand and the virtues of markets.

Austrians have found this notion of the Invisible Hand misleading, if not entirely off the point. They occupy some high ground here. Much of modern neoclassical analysis goes back and forth freely between the Pareto optimum or "central planning" allocation problem and the decentralized market implementation of the optimum. In the Austrian approach all the intellectual traffic goes only in one direction, from individual behavior to social order. The central planning problem cannot even be defined!

This approach begins with the premise that there is an enormous amount of ignorance in the system. No one knows or can ever know what is being maximized overall. Decentralization is fundamental because specialization is extreme. Consider that out of the totality of what is known in the economy at large, any single person knows essentially nothing. Not only are people highly specialized in their work activities--each of us is an extremely small cog in an extremely large wheel--but none of us consumes or produces more than a trivial fraction of the truly huge set of goods that are actually traded.

If we can't even identify most of the goods and services that form the basis of economic affairs, how can we know our full opportunity sets? How can we define preferences over such goods or over those that might appear on the market at some future time but are unknown today? And if we do not know them



ourselves, how can anyone aggregate what is known by all? The central question is how all this knowledge and dispersed activity combines into a meaningful social allocation mechanism. The reverse question of decentralizing some notion of aggregate welfare or even the concept of pareto optimality never arises.

This is not an academic debating point of pure theory or doctrine. There are sound economic reasons for the compartmentalization and specialization of knowledge in society and for the incomplete dispersion of information. Economies of scale in learning and acquiring information make it socially advantageous for people to specialize their skills and information and trade with each other. This is what accounts for the elaborate division of labor and the lengthy round-about chains of production in modern economies. We do much better by learning a narrow range of specific skills very well, using them as intensively as possible, and trading with others in order to share the fruits of their specialized skills. Scale economies themselves create gains from trade and provide the social basis for extensive economic interactions among people (Rosen, 1983a). They give rise to the "propensity to truck, barter and trade" that are unique among the human species.

What must make it all possible is that knowledge itself is somehow divisible among people. For example, a person doesn't need to know much about science to construct a chair. An elementary and rather superficial knowledge of the rigidity of materials is sufficient. The rest can be bought or transmitted by materials manufacturers. The output of specific knowledge--the chair itself--is what has economic value, not the details of its construction. Buyers need know nothing of atoms, glue, nails and upholstery, nor the

accountancy, securities laws and other regulations that the manufacturer follows to sit in it and decide whether to purchase it. Someone has to know those things of course. But that knowledge largely is transmitted instrumentally, in the intermediate products that combine to produce the object itself. It is important to understand the mechanism by which all this divided knowledge aggregates for the social benefits of all.

Scale economies are also present in acquiring economic information. It is not worthwhile to collect expensive information that will be seldom used. Why should a consumer be well informed about prices and availabilities of goods that probably will not be chosen? Why should producers learn about opportunities they probably will not take? Certain kinds of ignorance are rational. The costs of knowing often exceed the benefits.

### Evolutionary Processes

The idea of decentralizing maximum problems through markets is turned on its head in the Austrian scheme. The fundamental issue becomes one of assessing how all the individual pieces fit together and how to make sense of the whole. However, by not spelling out any potential empirical criteria for assessing the performance of the economy as a whole (no one can know this), it is not entirely clear what Austrian economics has to say about the workings of the economic system. This is why process is paramount in their scheme. External criteria imposed on the rules of the game--the rule of law, openness, freedom of action, and liberty--play important roles because incomplete

knowledge puts limits on how outcomes can be evaluated. No stone must be left unturned to allow individuals to investigate new possibilities and improve on the always imperfect existing ways of doing things.

The analytical precision of neoclassical economics as a logical system in principle is hermetically sealed from philosophical, ethical and moral issues, though of course in practice it is not. Neoclassical welfare economics is greatly constrained by the necessity of respecting known or given preferences and technologies. Austrians are not unwilling to confront questions of what kinds of social institutions and rules of the game make for a good society.

In many ways these aspects of Austrian economics parallel the theory of evolution and natural selection. An extraordinary image presented by Richard Dawkins (1986) in one of his books on evolution is remarkably similar to the Austrian economic idea of a *spontaneous order*, an elaboration of Adam Smith's invisible hand stated by Menger (1871) and eloquently explicated later by Friedrich von Hayek (1937, 1945, 1960).<sup>2</sup> Dawkins recasts Thomas Paley's criticism of Darwin by way of the example of the construction of the human eye. How could such a complex and wonderful object be constructed by other than a Supreme Designer? To bring the idea closer to home, imagine a complicated machine, say a Swiss watch or a modern automobile. Whatever example is chosen, the story serves as a metaphor for the complex and well-oiled machine that is the economy at large.

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<sup>2</sup>If Dawkins (1986) is more "Austrian" in its discussion, then Dawkins (1983) is more "neoclassical." See the brief discussion by Hayek (1960, ch. 4) on Darwin's knowledge of economics, especially of Smith and Malthus.

Buyers of the machine know little or nothing of its inner workings. They usually value the unit only for the work it can accomplish, not particularly for the circumstances of its manufacture. Extraordinary synchronization and coordination among thousands of intricate components are required for smooth performance of the machine as a whole. Consumers are ignorant of these details, and play no direct part in this coordination. How does it come about?

The Austrian view is built up from the spontaneous activities of myriad expert specialists single-mindedly pursuing and perfecting their own component businesses, including intermediaries who buy and sell from the most economical suppliers and assemble and market the final product. There is no overall plan. The watchmaker is blind, but the watch happens anyway. It evolves to an ever higher state as individual specialists and assemblers act in their own self-interests to improve their products to gain a competitive edge over rivals. Local conditions might encourage different sellers to use different production methods or to produce alternative varieties that serve different types of customers.

In fact, the economic history of the development of the watch clearly reveals its spontaneous and piecemeal evolution. Increasingly accurate measurement of time (measurement without theory!) was instrumental for new ways of thinking about science and lead to great advancements. And the increasing sophistication of the manufacture of precision time-pieces enabled widespread use of machine tools that spilled over to manufactures as a whole and made mass production possible (Landes, 1983; Boorstin, 1983).

Markets, Socialism and Central Planning

It is not uncommon for neoclassical economists to push the welfare theorems to the limit and often cast markets and price mechanisms in a seemingly secondary role for decentralizing and implementing well-defined mathematical optimization problems. After all, the "central planning problem" is equivalent to a market solution, given the specification of technology and tastes, if the conditions of the welfare theorem hold, the answer can be applied directly to the data without studying individual maximizing decisions at all. That's why markets "must do it."<sup>3</sup> This method has its virtues. It allows the analyst to abstract from many complicated details and investigate the key features of the economic environment -- specific aspects of preferences or technologies -- needed to capture the main empirical features of a problem. It also has its deficits. Sometime components of individual behavior from which the phenomena are built up are ignored and some of the data to which individuals are supposed to react are not examined. This method is unthinkable in the Austrian approach. The debate over central planning earlier in this century best illustrate the essential logic of the Austrian approach and one of its most outstanding successes.

Before World War II it became popular to point out that a central economic planner, using information on available technology, could redistribute and set prices in a way that would produce the socially desired outcome (Lange, 1939). This "market socialism," it was further argued, would be superior to an uncontrolled market because the central planner could make adjustments to compensate for monopoly power, costs of dislocation and unemployment, and so

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<sup>3</sup>Kydland and Prescott (1982) is an outstanding and influential example.

on. In what was perhaps their finest hour, the Austrians, led by Mises and Hayek, argued that this vision of market socialism was impossible, and that it was based on a fundamentally misguided vision of markets and prices.<sup>4</sup>

That the central planner could successfully mimic the competitive market solution by choosing the "correct" prices is true only if information and knowledge available to the center is complete and, even if that is granted, when their legal power to manipulate economic life is not tainted by self-serving actions. Though some market socialists recognized that the center would have to experiment and ask lots of questions to discover the necessary information, the Austrians insisted that the problem was not only that the information existed and had to be collected at enormous expense, but also that information about technology, tastes, and products literally existed only when the market called it into being. Even then it existed only in an extremely decentralized form, continuously changing and evolving within the specific circumstances of time and place. Economists have also come to a better understanding that individuals at the center also act selfishly, and not necessarily in the public interest.

Surely these are the reasons why the highly regulated, centrally controlled economies have fared so poorly. The failure of planning and central control and market reforms occurring all over the world today is one of the most important economic events of our age. Isn't it odd that so few neoclassical economists could use their theory to take much of a stand on such matters? But the logical basis of neoclassical theory is not well-equipped

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<sup>4</sup>Persky (1991) gives a succinct summary of many aspects of the role of von Mises and Lange in the debate.

for that task. The collapse of central planning in the past decade has come as a surprise to most of us. Economists who early on questioned the reports of the economic successes of socialist and communist economies were ignored, if not ridiculed by many in the economics establishment.

### Mechanism Design

The challenge laid down by Hayek and the market socialist debates in part stimulated economic theorists to develop the theory of mechanism design, the systematic study of social devices and institutions that might efficiently communicate private information known by one agent to others. The main difficulty is clear enough. People with private knowledge and information have incentives to communicate only what is in their self interest. Their willingness to reveal what they know depends on how it will be used and how it will affect them. Voting on a public good is the prototypical example. Voters have strong incentives to exaggerate their preferences because the expression of value to them is isolated from their direct willingness to pay for it.

Truthful elicitation of information requires incentive-compatible mechanisms. These are feedback rules from the reported information to the payoffs received by the reporter that always make it in the reporter's self interest to tell the truth. A noteworthy recent result is the "revelation principle" (Myerson, 1979; Townsend, 1979), which establishes that truthful mechanisms usually must use elicited information in socially inefficient ways. Otherwise there are incentives for the reporter to manipulate the situation by lying. Of course, lying and attempted manipulation also is inefficient.

Inefficiency can be minimized. It can't be avoided.

While this development is interesting and firmly in the neoclassical tradition, Austrians may not be too impressed with it. Achieving incentive compatibility often requires that the mechanism designer know an enormous amount about the conditions of the problem -- almost as much as a central planner would have to know. This includes expert and detailed knowledge of the preferences, budgets, and technology available to economic actors, information that is properly considered as private knowledge in many (most?) division-of-labor contexts. Thus, economic forces put sharp limits on how knowledge and information can be elicited for economic planning and social welfare purposes.

There is no getting around the fact that decentralized markets generally utilize divided, specialized knowledge rather efficiently. Furthermore, many social and legal arrangements, including competition itself, greatly constrain specialists from using their private knowledge to cheat others, though of course they do not entirely eliminate cheating and deceit. In fact, it seems as if an open competitive process itself deters opportunism and cheating by increasing the range of choices available to economic agents. Much of the recent work on agency problems concentrates only on contractual micro-economic solutions and ignores the important influence of markets in disciplining economic activities. That is an important legacy of Austrian economics.

#### Dynamic Analysis, Expectations, and the Austrian Perspective

Some old-timers used to say that Austrian economics pursued a "dynamic" approach while the neoclassical approach was "static." If this claim was ever



true in the past, it is false today. Much neoclassical analysis in the past three decades has been devoted to explicitly dynamic, intertemporal resource allocation problems, while following an equilibrium approach. An essential aspect of these problems is that current decisions depend on the plans agents expect to follow in the future. The way expectations are formed becomes an essential part of the economic structure, one of the given conditions of analysis.

The concept of rational expectations imposes a kind of intertemporal consistency requirement on average values of future equilibria. It postulates that agents are sufficiently well-informed that their expectations turn out to be true on average. It follows that, on average, previous anticipated plans can be carried out. The thinking behind such models runs along Austrian lines, that inconsistent expectations imply unexploited profit opportunities, and create scope for entrepreneurial activities to eliminate them.

However, since actual realizations never turn out as anticipated even in rational expectations models (only the averages do) it stretches terminology to think that nonrational expectations represent "disequilibrium" models in any more fundamental sense. In this way, neither approach really addresses Austrian concerns. Indeed, Austrians are as hostile toward rational dynamic models as are many other camps.

#### Empirical Content and Justifying Methodology

Neoclassical economics gains much of its power and utility from the "as if" principle: We construct economic models as if rational economic actors

optimize some objective subject to constraints. Most neoclassical economists, at least those of my generation and older, judge the value of this enterprise by whether the relatively simple rules of behavior implied by this form of rationality have useful descriptive content and empirical predictive power. If rational optimizing models work well in this sense, then theory implies that it is often possible, in principle, to infer the underlying structure (supply and demand, for instance) from actual behavior. Here the back-and-forth logic between equilibrium choices and given conditions are crucial. The theory of revealed preference is the canonical example. Knowing a person's tastes and income, we can predict how market prices affect choices; but having observed choices in different price and income configurations, we can invert the process and infer what those underlying preferences must have been, so long as preferences are reasonably stable and the source of variation is sufficient to achieve identification.

Many Austrians hold to the view that quantitative empirical work in economics is infeasible or uninteresting because the world is changing so much that "behavioral relationships" inherently are unstable and it is fruitless to estimate them. An unwillingness to pursue the consequences of "given conditions" greatly limits the empirical scope and consequences of Austrian economic theory. The paucity of quantitative empirical work in the Austrian tradition accounts for why so few Austrians are found in the professional economics community today. Their approach basically excludes most of the things that most economists do. Austrians tend to disavow what they consider to be "routine" mathematical optimization problems that underlie much of empirical economics.

Yet some problems are more routine than others. Consider how difficult it has been for centrally directed economies to manage their industries efficiently and to make the best use of their resources under known technological conditions. Empirical work is difficult under almost all circumstances: the neoclassical inference problem of going from observed behavior to underlying structure has proven especially hard to solve in practice.

Less precise quantitative evidence in economics often is much more secure than precise structural estimates: for example, most of us are much more confident that demand curves slope downward than about the precise values of demand and supply elasticities for specific goods. Large scale, gross evidence on economic effects, like the general effects of OPEC on the use of oil or the way in which the voluntary army affected the supply of recruits, may be difficult to quantify with journal-quality econometric precision, but count very strongly to inform professional judgements about economic behavior. Perhaps the frustration of estimating structural parameters has turned many non-Austrian economists away from the neoclassical modeling approach at the moment. Many are attracted by a looser and more institutional style. Others seek out "natural" and laboratory experiments to minimize the need to model all the intervening "nuisance" influences that always affect a problem. Still others are attracted by the complexities of game theory and the elaboration of strategic behavior it affords, because the market equilibrium paradigm is too benign for their world view.

For some Austrians, lurking in the background is the view that quantification and intellectual conceit might lead to inappropriate central

control. It is mildly interesting here that the root word for "statistics" is "state." The historical development of social and economic statistics in this century largely parallels growth of the state in economic life. But the causal connections aren't very clear. Perhaps the development of national income statistics affected some aspects of macroeconomic policy over the past 75 years, but social events created the need to pursue those matters in the first instance. The more distressing fact is that the enormous growth and influence of the state in the 20th century, surely the most important little-understood economic fact of our era, cannot be explained by either Austrian or neoclassical economics. The economics of the state, Austrian or otherwise, fills the pages of a very small (though growing) book.

Although the methodology of positive economics and the task of making falsifiable predictions about data from well-specified theoretical models has certain limitations, it can also be realistic and useful, as indicated by many successful examples over the years. Taxes, regulations, and shifts in supply always occur and we might as well try to understand them. Surely it is not without interest to know how a tax will affect the price and quantity of a commodity; how a specific policy, such as licensing or price controls, will quantitatively affect a market; or how a rise in the price of some resource will affect its use. By downplaying the possibilities for empirical inference, Austrians mainly confine their empirical investigations to historical case studies. However, the uniqueness of each study and the difficulties of drawing out common elements capable of wider generalization have limited their usefulness in economics. A more quantitative approach has dominated empirical research and will continue to do so. That kind of research is impossible

without relatively sharp definitions and quantifiable concepts.

### The Role of the Entrepreneur

There is a joke circulating today among economists in Poland. Question: "How many people does it take to change a light bulb?" Answer: "None, the market will do it." The joke tweaks the noses of neoclassical economists, but doesn't faze members of the Austrian school. In Austrian economics the world isn't exclusively populated by optimizing automatons, passively consuming or producing their market-equilibrating quotas of goods and services at market equilibrium prices. The real movers and shakers in the economy are entrepreneurs. These are the people who take actions, compete with each other, and perfect markets. They are the instruments of economic energy and change. They make the competitive, evolutionary process what it is.

Entrepreneurs are not to be found in neoclassical economics. The term does not appear in the indexes of the main graduate texts on economic theory, nor is the concept mentioned in any context or under a different name. The fact is that there is no role for entrepreneurs when economic conditions are "given," when the list of goods to be traded is cut and dried, when consumers and producers are clearly identified, and when resource availabilities are known. Entrepreneurial activities are only possible when the nature of the world is not fully known, when knowledge and information are incomplete and dispersed, precisely the conditions postulated by the Austrian approach. Entrepreneurship is a disequilibrium phenomena. The entrepreneur is a person who exploits

heretofore unrecognized opportunities.<sup>5</sup> In equilibrium neoclassical economics, "given conditions" means that there is nothing for the entrepreneur to do.

Rather too much, in my judgement, is made in Austrian theory about defining and interpreting entrepreneurial activities (von Mises, 1949; Schumpeter, 1934, 1962). No matter how fine the distinctions or the degree of hair-splitting, it remains an elusive concept that lacks an operational definition and cannot be quantitatively measured. Though all economists recognize its significance, there exist no quantitative measures of the scale or scope of entrepreneurial activities in the economy.

Entrepreneurship is the kind of thing that can be recognized after one sees it, but is hard to describe in the abstract. Interesting and useful case studies of important entrepreneurs abound. However, case studies of entrepreneurial failures are infrequent, even though it seems likely that many, perhaps even most entrepreneurial ventures are unsuccessful. If we cannot measure the total volume of entrepreneurial activity, there is no way to assess its economic importance and rate of return, nor to evaluate the social and legal environments that nurture it or suppress it. What is the current supply price and elasticity of supply of entrepreneurs? There's no way of knowing.

Nonetheless, totally ignoring the concept of entrepreneurship has a very constraining effect on the neoclassical view of competition. It is precisely here where potential gains from intellectual trade are largest in my

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<sup>5</sup>See especially the comprehensive account of Kirzner (1973); my own views appear in Rosen (1983b).

judgement. The Austrian view of competition as evolutionary struggle is a very compelling idea that plays no role in neoclassical economics, which is constrained to look at the final outcomes of the competitive process after all competitive opportunities in the Austrian sense have been exploited.

The outwardly simple notion of competition as a comparison among alternatives is in reality an immensely sophisticated statistical selection scheme for aggregating incomplete and specialized knowledge, for achieving consensus among disparate views, and for disciplining market participants to align their self-interests with social interests. Entrepreneurial ventures are statistical experiments among alternative ways of doing things. Those that are better tend to prosper and survive. They pass the market test. Those that are worse tend to recede and vanish. The role of legal institutions, government, and property rights establish the rules of the game and affect "fitness" of the system overall. That is why they are so important in the Austrian scheme. Neoclassical literature on this kind of competition has appeared in recent years, but little of it has been inspired by Austrian economics.<sup>6</sup>

Neoclassical economics undoubtedly would be enriched by a more fully articulated view of competition as a selection device, as an economical processor of information and generator of economic change. Yet it is hard to

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<sup>6</sup>The classic statement of evolution as justification for neoclassical analysis is Alchian (1986). Nelson and Winter (1982) pursue this analysis and often reach different conclusions. There has been substantial interest in patent and other "racing" problems for intellectual property rights. See for instance Kamien and Schwartz (1983). A related literature on competitive tournaments mainly examines incentive issues (Lazear and Rosen, 1982). Some of the information revealing aspects of contests are discussed in Rosen (1986), but little systematic work has been done on the problem.

assess exactly what is lost without it. The neoclassical approach does not ignore change. Rather, it analyzes change in a more empirically manageable way. The whole point of describing how an economic equilibrium depends on given conditions is to infer how changing conditions affect the data. This forces the analyst to pursue a research strategy of looking for the fundamental sources of change. Neoclassical dynamics is basically represented as a moving equilibrium process rather than as an Austrian-style perpetually disturbed disequilibrium. The theory of economic growth is a leading example.

In many ways, controversies over which phenomena are in equilibrium and which are not can't go anywhere. The data don't care one way or the other. The relevant question is which way of thinking works best in practice, and neoclassical economics has had its share of successes. The Austrian approach has had its share too, but the spheres in which these successes have occurred are substantially different.

#### The Market Test?

Debates about methodology have opportunity costs. Most of us prefer to assess serious attempts to do economics, rather than spend time arguing over which methods should be used in those attempts. Instead of seeking a sure-fire method for ascertaining economic truth, which experience shows is an impossible task, the more practical stance is to use whatever methods work best in practice. Different methods coexist because their usefulness differs from problem to problem. The theory of natural selection applies to methods as well as to other things.



Karl Popper (1968) pointed out years ago that there is an enormous amount of evolutionary Austrian competition in the marketplace for ideas. Only a few economists have tackled this fascinating idea (Director, 1964; Coase, 1974), but the argument goes something like this: Virtually all the a priori conditions for competition in the industrial organization sense apply to the market for ideas. There are large numbers of independent purveyors; the personal gains in money and status are big enough to make competition interesting and attract entrants; and entry is about as free as it gets in any business. From the Austrian point of view, there is no dearth of intellectual entrepreneurs looking for heretofore unrecognized opportunities to peddle their wares. Considering the common property aspects of intellectual life, maybe there are too many! What is the fact that neoclassical economics has scored higher than Austrian economics on the evolutionary/survival test telling us?

Many economists and other intellectuals get nervous about the thought of applying the market test to ideas. No doubt it has to be carefully applied (especially to one's own work). For instance, the equivalent of monopolistic elements, in the form of fashion and peer pressure, appear in the intellectual marketplace from time to time. Frictions and adjustment costs in changing professional consensus naturally arise from specialization within the profession. It isn't possible to be on the frontier in all subjects of a discipline. It is rational to remain ignorant of some topics and rely on the opinions of the "establishment." Some fashions persist longer than others, but as some Austrians have put it, why aren't monopolies in ideas just as temporary as monopolies in goods? Eventually superior new entrants will break

through. The strong grip that Keynesians held on macroeconomics and the Marxists on history, or, since we are speaking of the Viennese, the straightjacket in which atonality bounded modern musical composers for so many years, serve as examples of why we must look to the long run in assessing the market test. It often takes a little time for new ideas to gain a foothold against prevailing views.

The great Austrian economists were recognized as such in their day. The Austrian approach dominated American economics at the turn of the century. They are not forgotten and many of their ideas have been incorporated into the canon. Others have been forgotten. It would be a pity if economists lost the enduring legacy of the economic systems aspects of their views, of how the process of open competition and survival of the fittest work to aggregate highly decentralized knowledge and information into an amazingly well constructed, mostly smoothly operating, but rudderless social organization.

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