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The Resurgence of the Austrian School

7.1. The Crisis of Equilibrium Analysis and Mathematical Formalism

The three decades between the end of World War II and 1975 saw the triumph of the “neoclassical-Keynesian synthesis” and of the mathematical formalism of equilibrium analysis in our discipline. Indeed, during this period, equilibrium analysis became master of economic science, though we should note that economists fell into two major camps concerning their use of the notion of equilibrium.

One camp followed Samuelson, who, after the publication of his *Foundations of Economic Analysis* (Samuelson 1947), joined Hicks in pioneering the neoclassical-Keynesian synthesis. Samuelson expressly embraced Lange and Lerner’s theory on the possibility of market socialism (Samuelson 1947, 217, 232), and thus he blindly adopted the stance of these neoclassical authors regarding the challenge posed by the theorem of the impossibility of socialism, which Mises had discovered. Moreover, Samuelson set himself the explicit goal of reconstructing economic science using mathematical language, and as a result, he made a number of simplifying assumptions which excluded from his models most of the richness and complexity of real market processes. In this way, bit by bit, the medium of analysis (mathematical formalism) was confused with the message, and syntactic clarity was achieved at the expense of the semantic content of the different economic analyses, even to the point that the scientific status of the most realistic theories and of literary economics was denied (Boettke 1997, 11-64).

The theorists of this group, which would also include Kenneth Arrow, Gerard Debreu, Frank Hahn, and more recently, Joseph Stiglitz, accept the competitive-equilibrium model in normative terms, as the ideal the economy should approach. Therefore, whenever they notice that actual conditions do not correspond with equilibrium in perfect competition, they imagine they have identified a “market failure” which would justify, *prima facie*, the intervention of the state to nudge these conditions toward the ideal represented by the general-equilibrium model.

In response to this first camp of economists, a second one formed within the mainstream and comprised those equilibrium theorists who were nevertheless in favor of a market economy. This group basically centered around the Chicago school, and its leading members included authors such as Milton Friedman, George Stigler, Robert Lucas, and Gary Becker, who all share an economic frame of reference composed exclusively of the equilibrium model, the principle of maximization, and the assumption of constancy.

The reaction of these economists, who, despite being equilibrium theorists, defend the market economy against the first camp’s theory of “market failures,” consists of arguing that the equilibrium model describes the real world fairly accurately, but that, in keeping with the tenets of the public-choice school, the failures of the public sector will always exceed those identified in the private sector.

The theorists of the Chicago school believe that the above approach inoculates them against attacks by market-failure theorists, and that the Chicago analysis shows state intervention in the economy to be unnecessary. As, from the viewpoint of this school, the real world closely resembles competitive equilibrium, its members hold that the real market is efficient in the Paretian sense and does not require intervention,

especially since the combined action of politicians, voters, and bureaucrats does not itself appear free from serious failures.

From the standpoint of the dynamic, Austrian conception of the market, the positions of both mainstream groups leave a great deal to be desired.

With respect to the Chicagoan models, Austrians note that they rely entirely on starting assumptions: equilibrium, maximization, and constancy. Austrians argue that before concluding that actual circumstances closely coincide with the equilibrium model, Chicago theorists should develop a theory on the real market process, a theory to explain how this process resembles equilibrium, if indeed it does. In other words, in believing that competitive equilibrium accurately describes the real world, Chicago theorists are too utopian, and they needlessly leave many flanks open to their ideological opponents of the first group, who in a sense are somewhat more realistic.

However, from the Austrian point of view, neoclassical market-failure theorists also commit important errors. In fact, this group overlooks the dynamic effects of coordination which entrepreneurship exerts and which appear in all real markets. These theorists maintain that it is somehow possible to approach the ideal of general equilibrium through state intervention, as if planners could actually obtain information that in reality will never be available to them. To Austrians, market-failure theorists do not appear utopian; on the contrary, they seem to consider the world much worse than it really is. By focusing on equilibrium in their analyses, even as a reference point, they miss the real process of coordination which takes place in the market, and they fail to see that the disequilibrium they so criticize is not an imperfection or a market failure, but is in fact the most natural characteristic of the real world, and that in any case, the real market process is superior to any other humanly possible alternative.

Therefore, public-choice analysis aside, the main theoretical problems Austrian economists have identified in the approach of the market-failure theorists are as follows: first, that they do not take into account that the interventionist measures they advocate to bring the real world closer to the equilibrium model can, and indeed do, exert very harmful affects on the entrepreneurial process of coordination which takes place in the real world; and second, that they assume the person in charge of public intervention can gain access to information which far exceeds what is theoretically conceivable.

Austrian theorists propose to go beyond the two equilibrium perspectives (that of the Chicago school and that of the market-failure theorists) by shifting the focus of economics research to the dynamic process of entrepreneurial coordination, which would eventually lead toward a state of equilibrium, though this state can never be reached in real life. Thus, as the current focal point of research, the equilibrium model would be replaced by a dynamic analysis which would consist of the study of market processes, and in this way the severe deficiencies of both neoclassical trends would be avoided.

Two examples, one from microeconomics and another from macroeconomics, can help to clarify this Austrian proposal.

The first example involves the modern development of information theory, which, in the Chicago-school version, began with Stigler's seminal paper on "The Economics of Information" (Stigler 1961). Stigler and his followers from the Chicago school view information objectively; that is, as a commodity which is bought and sold in the market in terms of costs and benefits. These theorists recognize that ignorance exists in the real world, but they assert that it always exists at an "optimal" level, since the search for new information, objectively speaking, ends only when the marginal cost exceeds the marginal revenue.

“Market failure” theorists, led by Grossman and Stiglitz, in keeping with their characteristic approach, carry out a markedly different economic analysis of information. According to them, the real world is in a state of inefficient equilibrium, in which they detect the following “failure”: because economic agents believe prices transmit information efficiently, a “free rider” effect appears, by which economic agents do not bother to privately acquire the additional information they need, because it is costly. These theorists draw a conclusion which is obvious to them: the market tends to produce an inefficiently small volume of information, which would justify state intervention whenever the benefits of such intervention exceeded the monitoring costs, etc., it entails (Grossman and Stiglitz, 1980).

As we indicated at the beginning of this book, from the standpoint of the Austrian school, the principal problem with both approaches is that they treat information as an objective entity, i.e. as if information were “given” somewhere (though sometimes no one may know where). Unlike theorists of the two neoclassical trends, Austrians believe information or knowledge is always subjective and cannot be given, since entrepreneurs continually create or generate it when they recognize profit opportunities; that is, when, in the ever-changing constellation of market prices, they notice the existence of previously unnoticed maladjustments or discoordination. As a result, entrepreneurial information cannot be allocated in terms of costs and benefits, because until entrepreneurs discover the information, no one knows its value. Moreover, if it is impossible to make this maximizing allocation (in terms of costs and benefits), the Chicago school’s entire analysis of information falls like a house of cards.

In addition, as long as the free exercise of entrepreneurship is not prevented or hampered, the information which is created or generated in the market cannot be deemed “under-produced,” since there is no standard which enables us to determine

whether or not the volume of real information the market creates and uses is smaller than the supposedly “optimal” volume of information. The whole of the Austrian analysis regarding the theoretical impossibility of socialism is directly applicable here, in the sense that the supervisory agency will never be able to surpass the creative, entrepreneurial capacity of economic agents, who are the protagonists of market processes. As we know, Father Juan de Mariana declared back in the Spanish Golden Age that it is never feasible for the blind to lead the sighted (even if the sighted see “imperfectly” or have only one eye).

The second example we offer to clarify the Austrian proposal involves the different theoretical assumptions theorists make about the labor market. As is well-known, the Chicago-school theorists of new classical macroeconomics have directly attacked the irrationality implicit in the Keynesian assumption that nominal wages are sticky downward. As we have already seen, members of the Chicago school view the ignorance which exists in the market as “optimal” by definition. In other words, anyone who is unemployed is in that situation because he would rather continue searching for a better job than accept the one he is offered, and thus theorists conclude that no type of involuntary unemployment can exist in a real market. They also conclude that where there are economic cycles which affect employment, these must be due either to the succession of unanticipated changes in the money supply which prevent agents from clearly distinguishing between relative-price variations with a real, underlying cause and general-price-level variations caused by inflation (Lucas 1977); or simply to the sudden appearance of external supply, or real, shocks (Kydland and Prescott 1982).

For their part, the new Keynesians (Shapiro and Stiglitz 1984; Salop 1979) have developed different models of equilibrium unemployment based on the maximizing behavior of agents who act in an environment in which the “efficiency wage

hypothesis” is borne out. According to this hypothesis, productivity does not determine wages, but instead, wages determine productivity. In other words, to keep their employees motivated, entrepreneurs maintain equilibrium wages which are too high to clear the labor market. Again, both approaches are woefully deficient from the perspective of the dynamic Austrian conception of the market. In fact, to consider, as Chicago theorists do, that all unemployment is “voluntary” is wildly unrealistic, since doing so entails the assumption that at all times, the real process of coordination which constitutes the market has already taken place, and that therefore, the final state of rest described by the equilibrium model has already been reached. Nevertheless, the real market is in a constant state of disequilibrium, and even in the absence of institutional restrictions (minimum wage laws, union intervention, etc.), it is certainly quite possible that numerous workers who would be delighted to work with certain specific entrepreneurs (and vice versa) remain unemployed and never actually meet these entrepreneurs, or if the two do meet, that they fail to seize the mutually beneficial opportunity to enter into an employment contract, simply due to a lack of sufficient entrepreneurial alertness.

As for the theorists of the “efficiency wage hypothesis,” the belief that in the absence of legal or union restrictions, states of involuntary unemployment will be prolonged indefinitely, owing to the “efficiency wage,” runs directly contrary to the entrepreneurial desire of employers and employees to obtain profits and avoid losses. Indeed, if workers demand a wage that is too high and they do not find employment, they will tend to lower their expectations; likewise, as entrepreneurs, if certain economic agents overpay their workers to keep them satisfied, and later these agents realize they could hire similar or superior talents at lower wages, they are bound to decide in the end to change strategies, or they will be obliged to do so, in order to

survive in the market. Furthermore, we have not even mentioned that the new Keynesians overlook the severe effects exerted on employment by state intervention in the labor market, understood as a dynamic process.

From the standpoint of the Austrian school, economic cycles are neither a completely external phenomenon (i.e. caused by unanticipated changes, real shocks, etc.), as Chicago theorists would assert, nor a totally endogenous one (i.e. triggered by nominal or real rigidities, or by efficiency wages, etc.), as Keynesians believe. For Austrians, as we know, economic cycles result rather from certain monetary and credit institutions (fractional-reserve banking orchestrated by a central bank). Although today these institutions are considered typical of the market, they have not emerged from its natural evolution, but instead have been coercively imposed from the outside and generate grave maladjustments in the process of intertemporal market coordination (Huerta de Soto 2006).

Consequently, we can conclude that the dynamic, Austrian conception of the market irons out the imperfections and tempers the extreme conclusions to which the two equilibrium trends (that of the Chicago school and that of the new Keynesians) lead, and it gives a dose of realism to the analysis, realism which avoids the serious errors, in theory and economic policy, that arise from both neoclassical schools of thought.

Hence, it is not surprising that present-day economics, dominated by the mathematical formalism of equilibrium theorists of both perspectives, is deemed to be going through a major crisis. This crisis springs mainly from the following causes: first, theorists' central preoccupation with states of equilibrium, which have nothing to do with reality but are the only states which can be analyzed via mathematical methods; second, the total disregard for the role of dynamic market processes and real-world

competition, or the study of these from an unfortunate angle; third, the insufficient attention to the role played in the market by subjective information, knowledge, and learning processes; and fourth, the indiscriminate use of macroeconomic aggregates and the concomitant neglect of the study of coordination between the plans of the individual agents who participate in the market. All of these factors explain the lack of understanding in economic science today concerning the weightiest problems of real economic life in our time, and thus, they also account for the state of crisis and increasing loss of prestige in which, by and large, we now find our discipline. The above factors all share a common source: the lack of realism in assumptions, and the attempt to apply a methodology characteristic of the natural sciences to the sciences of human action, a field entirely foreign to it. It is precisely the discipline's current state of crisis which also explains the strong resurgence, beginning in 1974, of the Austrian school of economics, the members of which have been able to present an alternative paradigm which is far more realistic, coherent, and fruitful, with a view to rebuilding our science.

7.2. Rothbard, Kirzner, and the Resurgence of the Austrian School

The awarding of the Nobel Prize in Economics in 1974, the year following Mises's death, to his most brilliant disciple, F. A. Hayek, and the growing discredit of Keynesian macroeconomic theory and of interventionist prescriptions, a situation which first became evident during the stagflation period of the 1970s, provided fresh international impetus to the doctrinal development of the Austrian school (Kirzner 1987, 148-150).

Two of Mises's brightest students in the United States, Murray N. Rothbard and Israel M. Kirzner, have played a leading role in this resurgence of the Austrian school.

Rothbard was born in New York in 1926 into a family of Jewish immigrants who originally came from Poland. He earned a doctorate at New York's Columbia University, where he studied under the guidance of his neighbor, the famous economist Arthur Burns. By chance, Rothbard was exposed to the seminar Ludwig von Mises was giving at that time at New York University, and he immediately became one of Mises's youngest, and most gifted and promising disciples. With time, Rothbard became a professor of economics at the New York Polytechnic Institute, and later, a distinguished professor of economics at the University of Nevada, Las Vegas, a position he held until his unexpected passing on January 7, 1995. Rothbard has been one of the most coherent, multidisciplinary, and tenacious thinkers of the Austrian school and builders of a natural-law philosophical foundation for economic liberalism. His writings comprise over twenty books and hundreds of articles, including important works of economic history, such as *America's Great Depression* (Rothbard 1975), and of economic theory, such as his economic treatise *Man, Economy, and State* (Rothbard 1993) as well as *Power and Market* (Rothbard 1977). In addition, in England, Edward Elgar recently published *The Logic of Action*, an anthology of Rothbard's principal articles on economic theory in two volumes (Rothbard 1997). Also in England, Edward Elgar published both volumes of Rothbard's monumental posthumous work, *An Austrian Perspective on the History of Economic Thought* (Rothbard 1995a, 1995b), which has recently been translated into Spanish.

Israel M. Kirzner was born in England in 1930, and after several family vicissitudes, he wound up studying business administration at New York University. Also by chance (he needed a few more credits to complete his degree and decided to attend the seminar of the professor with the most publications, which was Mises), he came into contact with the great Austrian and became another assiduous participant in

Mises's seminar at New York University. Moreover, Kirzner realized that his vocation lay in education, and he became a professor of economics at that same institution, a post from which he recently retired. Kirzner has specialized in the development of the dynamic, entrepreneurial view and in the study of the coordinating consequences entrepreneurship has for the market. He has authored several important books on the topic, among which *Competition and Entrepreneurship* (Kirzner 1973), *Perception, Opportunity, and Profit* (Kirzner 1979), and *Discovery and the Capitalist Process* (Kirzner 1985) stand out. Furthermore, in a work entitled *Discovery, Capitalism, and Distributive Justice* (Kirzner 1989), Kirzner has explored the implications his dynamic conception of entrepreneurship suggests in the field of *social ethics*. Finally, Kirzner has written numerous articles on Austrian economic theory in general, and on entrepreneurship in particular, and in them he has been able to present a very clear, stimulating view of the market processes entrepreneurship drives, a view we have already largely put forward in chapter 2 of this book.

A large group of young theorists from various universities in the United States and Europe are responsible for this new resurgence of the Austrian school. Notable among the American universities are New York University (with Mario J. Rizzo and Israel M. Kirzner), George Mason University (with Peter J. Boettke, Donald Lavoie, and Karen Vaughn), and Auburn University (with Professors Roger Garrison, Joseph T. Salerno, and Hans Hermann Hoppe), and at other institutions we find Austrian economists as prominent as Jörg Guido Hülsmann, Gerald P. O'Driscoll, Lawrence White, and George Selgin, among others. In Europe, we could mention Professors Stephen Littlechild and Norman P. Barry, from the University of Buckingham; Professors William J. Keizer and Gerrit Meijer in Holland; Professor Raimundo Cubeddu in Italy; Professors Pascal Salin and Jacques Gareilo in France; Professor

José Manuel Moreira, from the University of Oporto in Portugal; and in Spain, a growing group of professors and researchers interested in the Austrian school, who, aware of the great academic and scientific responsibility entailed by the recognition of the school's Spanish origin (see chapter 3), are quickly joining together (and include Professors Rubio de Urquía, José Juan Franch, Ángel Rodríguez, Oscar Vara, Javier Aranzadi del Cerro, etc.).

In addition, the last twenty-five years have seen a dramatic increase in the publication of books and monographs by authors of the Austrian school of economics, and for years two scientific journals have published the research findings of these authors: *The Quarterly Journal of Austrian Economics*, which is printed every three months by Transaction Publishers in the United States; and *The Review of Austrian Economics*, which is printed biannually by Kluwer Academic Publishers in Holland.

Finally, various international conferences and meetings take place regularly and provide an arena for the enthusiastic discussion of the most controversial and novel present contributions of the modern Austrian school of economics. Professors and researchers from all over the world who specialize in the Austrian school attend.

7.3. The Current Research Program of the Austrian School and its Foreseeable Contributions to the Future Evolution of Economics

The fall of the Berlin wall, and with it that of real socialism, is exerting a profound impact on the neoclassical paradigm thus far predominant, and in general on the way economic science is practiced. For it seems obvious that a critical failure has occurred in economics as a science, since, with the rare exception of the Austrian school, economists were unable to predict such a momentous event and analyze it adequately. Fortunately, due to the heavy blow received, we are now in the position to correctly assess the nature and degree of the distortion in the neoclassical “theoretical

spectacles,” which until now has largely prevented economists from perceiving and interpreting the most significant events of the social world with sufficient clarity. Furthermore, we need not undertake the essential reconstruction of economic science from scratch, as many of the analytical tools which will now be necessary have already been developed and perfected by Austrian theorists, in their effort to explain, defend, and refine their positions throughout the successive debates they have had with their scientific counterparts since the foundation of the Austrian school.

Though we cannot possibly list here all areas of our discipline which are affected by the current situation, much less develop in detail the new content which could result from Austrian contributions, we can offer a few inexhaustive examples.

First, we must mention the *theory of institutional coercion*, which emerges as an extension of the Austrian analysis of socialism. Indeed, we have already explained that each entrepreneurial act involves the discovery of new information, the transmission of this information throughout the market, and the coordination of maladjustments in the behavior of human beings, all in a spontaneous, evolutionary process which makes life in society possible. Therefore, it is clear that the systematic, institutional exercise of coercion which socialism and interventionism involve precludes, to a greater or lesser extent, not only the creation and transmission of information, but also something even more serious: the spontaneous process by which maladjustments in the behavior of human beings are coordinated, and hence, the survival of the coordinated social process. Thus, a whole new field of research opens up for the analysis of the maladjustments which follow from economic interventionism in each and every sphere in which it is present. This is a promising field for the future research efforts of scholars in our discipline.

Second, we need to abandon the widespread functional theory of price determination and replace it with a *price theory* which explains how a sequential, evolutionary process results in the dynamic formation of prices. This process is driven by the force of entrepreneurship, i.e. by the human actions of the actors involved, and not by the intersection of more or less mysterious curves or functions which in any case lack real significance, since the information which is hypothetically necessary to know and draw them does not even exist in the minds of the actors involved.

Third, we should comment on the development of the Austrian theory of *competition and monopoly*, which calls for the abandonment and reconstruction of the clumsy static theory of markets that is advanced in textbooks, and its replacement with a theory of competition, understood as a dynamic, purely entrepreneurial process of rivalry. Such a theory renders irrelevant or inexistent the problems of monopoly, understood in the traditional sense, and focuses on institutional restrictions on the free exercise of entrepreneurship in any sphere of the market. Furthermore, an important economic-policy corollary of the Austrian analysis of competition and monopoly is the reconsideration of all antitrust policy and legislation, which from the Austrian perspective becomes largely detrimental and superfluous (Kirzner 1998-1999, 67-77; Armentano 1972).

Fourth, as we have already seen, the *theory of capital and interest* is heavily influenced by the subjectivist viewpoint of the Austrian school. It is necessary to reincorporate capital theory into the study programs at university schools of economics in order to overcome the current inadequacies in the macroeconomic view, which overlooks the microeconomic processes of coordination that take place in the productive structure in the real world.

Fifth, the *theory of money, credit, and financial markets* may present the greatest theoretical challenge to our science in the near future, from the standpoint of the Austrian school. Now that the theoretical gap represented by the analysis of socialism has been filled, the least known and most vitally important field is the monetary field, where methodological errors, theoretical confusion, and the systematic coercion of central banks continue to prevail throughout. The social relationships that involve money are decidedly the most abstract and difficult to understand, and hence the knowledge they generate is the most vast, complex, and intangible, which in turn makes intervention in this area by far the most harmful and, ultimately, the direct cause of the regular emergence of successive economic recessions (Huerta de Soto 2006).

Sixth, the *theory of economic growth and underdevelopment*, which rests on equilibrium and macroeconomic aggregates, has been formulated without taking account of the only true protagonists of the process: human beings and their alertness and creative entrepreneurial capacity. Therefore, we must reconstruct the entire theory of growth and underdevelopment and eliminate the elements which justify institutional coercion and which until now have rendered the theory harmful and futile. We should center the theory on the theoretical study of the processes by which to discover the development opportunities that remain unexploited due to a lack of the essential entrepreneurial element, which is undoubtedly the key to leaving underdevelopment behind.

Seventh, a similar observation is in order about so-called *welfare economics*, which is based on the phantasmagoric Paretian concept of efficiency and thus becomes irrelevant and useless, since to be workable it requires a static environment of full information which never exists in real life. Consequently, rather than on Pareto criteria, efficiency hinges on, and must be defined in terms of, the capacity of entrepreneurship

to spontaneously coordinate the maladjustments which emerge in situations of disequilibrium (Cordato 1992).

Eighth, the *theory of “public” goods* has always been constructed in the strictly static terms of the equilibrium paradigm, for it is assumed that the circumstances which determine “joint supply” and “non-rivalry in consumption” are given and will not change. Nevertheless, from the standpoint of the dynamic theory of entrepreneurship, any apparent instance of a public good creates a clear opportunity for someone to discover and eliminate it via entrepreneurial creativity in the legal and/or technological spheres. Therefore, from the Austrian perspective, the set of public goods tends to become empty, and thus one of the stalest alibis used to justify state intervention in the economy in many social areas disappears.

Ninth, we could also remark on the research program Austrian theorists are developing in the realm of the *public-choice* school and the *economic analysis of law and institutions*. Researchers in these fields currently struggle to get rid of the unhealthy influence of the static model based on full information, a model which, in the neoclassical field, has given rise to a pseudoscientific analysis of many laws, an analysis which rests on methodological assumptions identical to those put forward in the past with the aim of justifying socialism (full information). Such assumptions exclude the dynamic, evolutionary analysis of the spontaneous social processes entrepreneurship sparks and drives. Austrian theorists see an obvious contradiction in the attempt to analyze legal norms and rules based on a paradigm which, like the neoclassical, presupposes an environment of constancy and the existence of full information (either in certain or probabilistic terms) concerning the costs and benefits which derive from these norms and rules. Indeed, if such information existed, the rules and norms would be unnecessary, and it would be more effective to replace them with simple commands.

In fact, if anything substantiates and explains the evolutionary emergence of law, it is precisely the ineradicable ignorance in which human beings are constantly immersed.

Tenth, the contributions of Austrian theorists in general, and of Hayek in particular, have given a revolutionary boost to *population theory*. Austrians do not consider human beings a homogeneous factor of production, but instead they believe humans are endowed with an innate and entrepreneurial creative capacity. Hence, Austrians view population growth not as a hindrance to economic development, but as both the driving force behind it and the necessary condition for it to occur. Moreover, theorists have shown that the advancement of civilization involves a perpetually increasing horizontal and vertical division of practical knowledge, which is only possible when there is a parallel rise in the number of people, a rise sufficient to sustain the growing volume of practical information used on a social level (Huerta de Soto 1992, 80-82). These ideas, in turn, have been developed by other scholars who have been influenced by the Austrian school, such as Julian L. Simon, who have applied them to the theory of population growth in Third World countries and to the analysis of the positive economic effects of immigration (Simon 1989, 1994).

Eleventh and finally, Austrian contributions are exerting a powerful impact in the field of the *theoretical analysis of justice and social ethics*. Notable examples include not only the critical analysis Hayek makes of the concept of social justice in volume 2 of *Law, Legislation, and Liberty*, but also the aforementioned work by Kirzner, *Discovery, Capitalism, and Distributive Justice*, in which he demonstrates that every human being has the right to reap the fruits of his own entrepreneurial creativity. In this analysis, Kirzner perfects and completes Robert Nozick's earlier examination of the same issue (Nozick 1988). Lastly, one of Rothbard's most brilliant disciples, Hans Hermann Hoppe, has successfully provided an a priori justification for property rights

and the free market, based on the Habermasian principle that argumentation presupposes the existence of, and prior respect for, each person's ownership of his own body and personal attributes. From this principle, Hoppe logically deduces an entire theory on the free market and capitalism (Hoppe 1989) which complements the natural-law justification for liberty Rothbard presents in his now classic treatise, *The Ethics of Liberty* (Rothbard 1998).

We could mention many other fields of research to which the program of the new Austrian school of economics is sure to spread with fruitful results. However, we feel that with the brief references to the above areas, we have given sufficient indication of the direction economic science may take in the future, once freed from the theoretical and methodological defects which until now have largely encumbered it. In this new century, the widespread acceptance of the Austrian perspective is sure to give rise to a much broader, richer and more realistic and elucidative social science in the service of humanity.

7.4. Replies to Some Comments and Criticisms

We will now respond to some critical comments which are often expressed regarding the Austrian paradigm and which, for reasons we will offer, we deem unfounded. The most common criticisms leveled at the Austrians are as follows:

A) *“The two approaches (the Austrian and the neoclassical) are not mutually exclusive, but complementary”*

This is the thesis of those neoclassical authors who wish to maintain an eclectic position not openly opposed to the Austrian school. Nonetheless, Austrians consider this view as generally nothing more than an unfortunate consequence of the nihilism typical of methodological pluralism, according to which all methods are acceptable and

the only problem of economic science is to choose the method most suitable for each specific problem. Austrian authors identify this position as a mere attempt to safeguard the neoclassical paradigm from the powerful critical arguments raised against it by Austrian methodology. The thesis of compatibility would be justified if the neoclassical method (based on equilibrium, constancy, and the narrow concepts of optimization and rationality) corresponded to the real manner in which human beings act, and did not, on the whole, tend to corrupt theoretical analysis, as Austrians believe it does. Thus the great importance of reformulating neoclassical theoretical conclusions from the standpoint of dynamic, subjectivist Austrian methodology, in order to show which neoclassical conclusions must be abandoned, due to analytical defects. For it is inconceivable that the neoclassical paradigm could incorporate human realities which, like creative entrepreneurship, far exceed its conceptual framework of categories. The attempt to force the subjective human realities Austrians study into the neoclassical corset leads inevitably to either the blatant mockery of these realities or the healthy failure of the neoclassical approach, which would be overcome by the richer and more realistic, complex, and illuminating conceptual framework characteristic of the Austrian school.

B) "Austrians should not criticize neoclassicals for employing simplified assumptions which make reality easier to understand"

In reply to this argument, which is so often used, Austrian economists state that it is one thing for an assumption to be simplified and quite another for it to be totally unreal. The bone Austrians have to pick with neoclassicals is not that their assumptions are simplified, but precisely that they contradict the empirical reality of how human beings act and express themselves (dynamically and creatively). Therefore, it is the fundamental unreality (and not the simplification) of neoclassical assumptions which,

from the Austrian viewpoint, tends to jeopardize the validity of the theoretical conclusions neoclassicals reach in their analyses of the different problems of applied economics they set out to study.

C) “Austrians fail to formalize their theoretical proposals”

This is the only argument Stiglitz raises against the Austrian school in his recent critical treatise on general-equilibrium models (Stiglitz 1994, 24-26). We have already explained why, from the beginning, most Austrian economists have been very wary of the use of mathematical language in our science. Austrians regard the use of mathematical formalism as a vice more than a virtue, since it consists of symbolic language that has been developed to meet the requirements of the world of natural sciences, engineering, and logic. In all of these areas, subjective time and entrepreneurial creativity are conspicuously absent, and hence mathematical formalism tends to overlook the most essential characteristics of the nature of human beings, who are the protagonists of the social processes economists should study.

Moreover, mathematicians have yet to (and may never) take up the challenge of conceiving and developing a whole new “mathematics” which permits the analysis of human creative capacity with all of its implications. To do so, mathematicians could not rely on the postulates of constancy from the world of physics, which underlie the development of all known mathematical languages. Nevertheless, we believe the ideal scientific language in which to communicate this creative capacity is precisely the one which human beings themselves have spontaneously and gradually created in their daily entrepreneurial activities and which takes the form of the different verbal languages now used in the world.

D) “Austrians produce very few empirical studies”

This is the criticism empiricists most frequently direct at the Austrian school. Though Austrians attach enormous importance to the role of history, they recognize that their scientific activity takes place in a very different area, that of theory, and theory must be known before it can be applied to reality or illustrated with historical events. In fact, Austrians see an overproduction of empirical analyses and a relative shortage of theoretical studies which facilitate the understanding and interpretation of real life. Moreover, though the methodological assumptions of the neoclassical school (equilibrium, maximization, and constancy of preferences) appear to aid empirical studies and comparisons between certain theories, they often conceal the true theoretical relationships, and thus they can lead to serious errors in theory and in the interpretation of what is really occurring at any specific moment or in any particular set of historical circumstances.

E) “Austrians jettison economic forecasting”

We have already seen that Austrian theorists are quite humble and prudent as to the possibility of scientifically predicting future events in the economic and social sphere. They prefer to focus on building a framework or store of concepts and theoretical laws which permit the interpretation of reality and help acting human beings (entrepreneurs) to make decisions with a greater likelihood of being successful. Austrians may make only qualitative “predictions” and couch them in strictly theoretical terms; however, paradoxically, in practice, the far more realistic nature of Austrian assumptions (dynamic processes of entrepreneurial creativity) considerably improves the chances that their conclusions and theories, in comparison with those of the neoclassical school, will help Austrians make accurate “predictions” in the realm of

human action. As examples, we could mention the prediction of the fall of real socialism, a forecast implicit in the Misesian analysis of the impossibility of socialism, and the prediction Austrians made of the Great Depression of 1929. Curiously, neoclassical economists foresaw neither of these momentous historical events.

F) “Austrians lack empirical criteria by which to validate their theories”

According to this criticism, which is often voiced by empiricists who suffer from a Doubting Thomas complex (“I’ll believe it when I see it”), empirical reality alone will reliably expose unsound economic theories as such. As we already know, this approach ignores the fact that in economics the empirical “evidence” is never incontrovertible, since it concerns complex historical phenomena which do not permit laboratory experiments, in which the relevant phenomena are isolated and all other factors which may be involved remain constant. In other words, economic laws are always *ceteris paribus* laws, when in real life this assumption of constancy is always false. Austrians assert that it is perfectly possible to validate theories by a continual elimination of flaws in the corresponding chain of logical-deductive arguments, by the analysis and examination of the different steps in the formulation of theories, and by using the utmost care when, in applying theories to real life situations, it becomes necessary to determine whether or not the *assumptions* behind them are correct in the specific historical context in question. Given the uniform logical structure of the human mind, this continuous validation process Austrians propose is more than sufficient for scientists to reach intersubjective agreement, which in spite of deceptive appearances, in practice is much more difficult to achieve in the case of empirical phenomena, because their extremely complex nature means they invariably lend themselves to the most diverse and contradictory interpretations.

G) *“Austrians are dogmatic”*

Fortunately, due to the remarkable resurgence of the Austrian school in recent years and to the keener grasp economists in general have of its tenets, this accusation is made less and less. However, in the past, many neoclassical economists have yielded to the strong temptation to dismiss the entire Austrian paradigm and label it as “dogmatic” without examining its different facets nor attempting to answer the criticisms Austrians have expressed.

Among others, Bruce Caldwell has been sharply critical of this attitude neoclassicals have adopted when they have discounted the positions of Austrian methodologists without even considering them. Caldwell declares that this attitude itself is dogmatic and anti-scientific, and he concludes that it is totally unjustified from a scientific standpoint. Caldwell criticizes Samuelson’s stance on the Austrian school and asks: “What are the reasons behind this almost anti-scientific response to praxeology? There is, of course, a practical concern: the human capital of most economists would be drastically reduced (or made obsolete) were praxeology operationalized throughout the discipline. But the principal reason for rejecting Misesian methodology is not so self-serving. Simply put, the preoccupation of praxeologists with the ‘ultimate foundations’ of economics must seem mindless, if not perverse, to economists who dutifully learned their methodology from Friedman and who therefore are confident that assumptions do not matter and that prediction is the key... Regardless of its origins, such a reaction is itself dogmatic and, at its core, anti-scientific” (Caldwell 1994, 118-119).

Paradoxically, the real arrogance and dogmatism lie in neoclassical economists’ habitual presentation of the approach they deem most typical of economics: one based exclusively on the principles of equilibrium, maximization, and constancy of preferences. In this way, neoclassicals seek a monopoly over the scope of what is

considered “economics,” and they try to impose a gag rule on theorists who, like the Austrians, represent alternative viewpoints, adhere to richer and more realistic paradigms, and compete with neoclassicals in the field of scientific research. We hope, for the good of the future development of our discipline, that this camouflaged dogmatism (for example, Becker 1995) disappears permanently.

7.5. Conclusion: A Comparative Assessment of the Austrian Paradigm

The comparative assessment neoclassical economists usually give of the successes of the different paradigms is in keeping with their fundamental methodological stance: they frame their assessment in strictly empirical and quantitative terms. For instance, they usually regard the *number* of scientists who defend a particular methodological position as the main criterion of its “success.” They also frequently refer to the *number* of specific problems which the approach in question has apparently “solved” in operational terms. Nevertheless, the “democratic” argument concerning the number of scientists who follow a certain paradigm is hardly convincing (Yeager 1997, 153, 165). It is not only that in the history of human thought, even in the natural sciences, the majority of scientists have often been mistaken; it is also that an additional problem arises in the area of economics: the empirical evidence is never indisputable, and hence erroneous doctrines are not immediately identified and abandoned.

Furthermore, when theoretical analyses based on equilibrium seem to receive empirical confirmation, even if the underlying economic theory is unsound, they can appear valid for very long periods of time. And even if the theoretical error or defect they contain is eventually exposed, the fact that these analyses were carried out in connection with the operational solution of concrete historical problems means that

once the problems are no longer current, the theoretical errors committed in the analyses go unnoticed or remain largely concealed from the majority.

Also, up until now, there has been (and presumably will continue to be in the future) a naïve but strong effective demand on the part of many social agents (mainly public authorities, social leaders, and citizens in general) for concrete predictions and empirical, “operational” analyses regarding different economic-and-social-policy measures that could be adopted. Thus, it is not surprising that this demand (just like that for horoscopes and astrological predictions) tends to be satisfied in the market by a supply of “analysts” and “social engineers” who give their customers what they desire, with a veneer of scientific respectability and legitimacy.

However, Mises rightly states: “The development of a profession of economists is an offshoot of interventionism. The professional economist is the specialist who is instrumental in designing various measures of government interference with business. He is an expert in the field of economic legislation, which today invariably aims at hindering the operation of the market economy” (Mises 1996, 869). If consensus among professional specialists in intervention is to determine the ultimate value of a paradigm which, like the Austrian, discredits the methodology embodied in the interventionary measures these very specialists advocate, then the “democratic” argument is senseless. Moreover, if we admit that in the realm of economics, unlike in that of engineering or the natural sciences, rather than perpetual advances, there are sometimes serious backward steps and errors that take a long time to identify and correct, then we cannot accept the mere number of apparently successful operational solutions as the definitive criterion of success, since tomorrow it may be revealed that what today appears “correct” from an operational standpoint rests on faulty theories.

In contrast with empirical criteria for success, we propose a *qualitative criterion*. According to this standard, a school's degree of success would hinge on its bringing about solid theoretical developments of momentous import to the evolution of humanity. That school of thought with the most achievements of this sort would be the most successful. From this perspective, it is obvious that the Austrian approach surpasses the neoclassical. Austrians have formulated a theory on the impossibility of socialism, a theory which would have spared the human race enormous suffering had it been heeded in time. Furthermore, the historic fall of real socialism has vividly illustrated the soundness and the immense significance of the Austrian analysis. Austrians showed similar insight, as we have already indicated, in the case of the Great Depression of 1929, and in many other areas in which they have carried out their dynamic analysis of the discoordinating effects of state intervention. Examples include the monetary and credit sphere, the theory of economic cycles, the formulation of a dynamic theory of competition and monopoly which supersedes the static one, the theory of interventionism, the establishment of new criteria for dynamic efficiency to replace the traditional Pareto criteria, the critical analysis of the concept of "social justice," and in short, the improved understanding of the market as a process of social interaction driven by the force of entrepreneurship. These are all examples of the considerable qualitative successes the Austrian school has achieved, and they contrast with the severe deficiencies of the neoclassical school, including, notably, the confessed inability of its members to recognize the theoretical impossibility of the socialist economic system and to foresee its damaging consequences in time. Sherwin Rosen, a neoclassical of the Chicago school, ultimately admitted: "The collapse of central planning in the past decade has come as a surprise to most of us" (Rosen 1997, 139-152). Another surprised economist was Ronald H. Coase himself, who stated:

“Nothing I’d read or known suggested that the collapse was going to occur” (Coase 1997, 45).

Some neoclassical economists, like Mark Blaug, have shown great courage and have ultimately declared their apostasy from the general-equilibrium model and the static, neoclassical-Walrasian paradigm. Blaug concludes: “I have come slowly and extremely reluctantly to the view that they [the Austrian school] are right and that we have all been wrong [on Walrasian general equilibrium]” (Blaug and de Marchi 1991, 508). More recently, in reference to the application of the neoclassical paradigm to justify the socialist system, Blaug himself called this paradigm “so administratively naïve as to be positively laughable. Only those drunk on perfectly competitive static equilibrium theory could have swallowed such nonsense. I was one of those who swallowed it as a student in the 1950s and I can only marvel now at my own dim-wittedness” (Blaug 1993, 1571).

Clearly, if we wish to overcome the inertia implied by the constant social demand for concrete predictions, formulas for intervention, and empirical studies, all of which are willingly accepted, though from a theoretical standpoint they incorporate serious defects that are concealed in an empirical context in which it is very difficult to obtain incontrovertible evidence for the conclusions drawn, we must continue to develop and spread the subjectivist Austrian approach in our science. Therefore, the *Methodenstreit* of the Austrian school will go on as long as human beings continue to prefer doctrines that satisfy them in each concrete situation to those that are theoretically valid, and as long as the traditional arrogance or fatal rationalist conceit of human beings prevails. This is the conceit which leads people to assume that in each specific set of historical circumstances, they possess far more detailed and accurate information than they can ever actually obtain (Hayek 1990b). Against these dangerous

trends in human thought, trends likely to emerge again and again, our only weapon is the much more realistic, fruitful, and humanistic methodology which until now the theorists of the Austrian school have developed, and which can be expected to acquire ever-increasing importance in the future of economic science.

discover the best way to satisfy the wishes of consumers. Due to the essentially creative nature of the process, its results cannot be judged, since we lack a standard to indicate in each specific case whether those results are in any way “optimal.” Therefore, we must content ourselves with the continual action, in a favorable institutional environment, of the process entrepreneurship drives.

[Insert passage from *Law, Legislation, and Liberty*.]

The Nature of Surprise and Discovery

In 1997, to mark the occasion of his retirement as professor of economics at New York University, the editors of the *Journal of Economic Literature* asked Israel M. Kirzner to contribute a piece in which he would briefly describe the current state of the modern Austrian school. The result of this invitation was the article, “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach,” which appeared in the above-mentioned journal in March of that same year (volume 35). Below, we reproduce an important section in which Kirzner explains the fundamental role of surprise and discovery as features of creative entrepreneurship. He also notes that the concept of discovery or creativity occupies a healthy middle ground between the neoclassicals’ deliberate search for information and the anarchic and kaleidoscopic concept of the market we find in authors such as Shackle. Here are Kirzner’s own words:

[Insert passage from “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach.”]

also as a scientifically misleading one, inasmuch as it rests on false assumptions (the existence of unchanging relationships between economic variables, the availability of all necessary information, etc.) and leads to mistaken conclusions (which are only applicable to states of equilibrium never to be encountered in real life). Therefore, we can conclude that mathematics distracts brilliant minds from the true economic problems, and worse still, it constantly leads them into error.

The negative consequences of the use of mathematics in economics can be seen in practically all areas of our science. For instance, the theory of “perfect competition” has given rise to a totally unrealistic model that utterly fails to explain real market processes, the ones which should interest economists. Also, “welfare economics,” paradoxically, is an attempt to judge economic realities in light of a model which is not derived from real life and is foreign to it: the general-equilibrium model. Last but not least, there is the problem of socialist economic calculation, which a legion of mathematical economists deemed possible precisely because they had already based their models on the assumption that all the information necessary to formulate the corresponding system of Walrasian equations was available. These examples, and many others we could give, reveal the extent of the need in economics for a paradigm shift which takes research in new, more fruitful directions, away from the quagmire of scientism.

Competition as a Process of Discovery

Below, we quote an excerpt from the third volume of F. A. Hayek’s work, *Law, Legislation, and Liberty*. In this passage, Hayek briefly outlines the dynamic, Austrian view of competition. As we explained in chapters 1 and 2 of this book, competition is understood as a dynamic process of rivalry which enables entrepreneurs to create and

Nonetheless, if the use of mathematics were objectionable only on the basis of an economy of effort, its advocates might at least defend it in terms of aesthetics or academic prestige. However, it must be noted that Mises rejects the mathematical method in economics not only because it is ineffective, but also because it seriously hinders progress in our science. For as we indicated in chapter 1, Austrians view economics as a science which deals with real-life facts, with categories of human action which are present in the minds of all men, and which have nothing to do with the formulas and elements of mathematical language. Therefore, the main problem with mathematics is that it is only suited to reflect the repetitive, equilibrium states characteristic of the realm of mechanics. Thus, mathematical economists have inevitably tended to stray from reality and to restrict their studies to equilibrium or stationary economic models, because those are the ones which most lend themselves to mathematical treatment. Austrian economists believe this trend has been very harmful, since the mathematical method tends to obscure the real object of economic science. The object of economic science is the study of human action, i.e. the study of the human activities which make up market processes. It is due to these processes that all market economies forever tend toward equilibrium; such a state is never reached, however, given the constantly-changing nature of data from the outside world, and especially the leading role man's innate capacity for creativity and entrepreneurship plays in market processes. From the Austrian perspective, the mission of the economist is to study those processes which would eventually lead toward equilibrium; but not to study equilibrium itself, which is only an auxiliary logical construct created by economists. The sole purpose of this construct is to facilitate comprehension of dynamic market processes through comparison and contrast. It is therefore understandable that, in Mises's view, the mathematical method must be cast aside not only as a useless tool, but

Commentary

Many times the use of mathematics arises as an inevitable result of positivist and empiricist research in the field of economics. In this sense, the use of statistical procedures must be regarded as a method for historical research, but not as an instrument of progress in economic theory. Human creative capacity causes any empirically-acquired knowledge to be, in any case, historically contingent, so there is no guarantee that it will remain constant in the future. Hence, to Austrian economists and Mises in particular, although history, understood as empirical knowledge of reality, is very important as a reliable guide to past events, it has only the virtue of *illustrating* the theoretical laws of economics with real-world examples from the past. Moreover, Mises's criticism of the use of mathematics does not stop there. Mises points out that even mathematical economists invariably use logic to advance in their research, and that only afterwards do they translate their ideas into mathematical language and present them in that format. It is argued that mathematical notation offers a more precise and ordered language than that of mere logical reasoning. Nevertheless, this assertion is highly doubtful. Verbal-logic expressions may well be more general and flexible (something which certainly constitutes an advantage), but they are in no way bound to be less precise than mathematical expressions. Also, verbal language is more general, because, for example, it is not subject to the restrictions and the automatism present in mathematical operations. Thus, it is easy to see that if mathematical economists must first logically construct their theories and later translate their results into mathematical formalism, while making use of the rules of logic to verify in every case the conclusions that emerge from their models, they are violating the great scientific principle which dictates that entities are not to be multiplied beyond necessity.