THE REBIRTH OF AUSTRIAN ECONOMICS— IN LIGHT OF AUSTRIAN ECONOMICS

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Since human beings are not disembodied minds who instantly and costlessly absorb new knowledge, every scientific movement, if it is to flourish and advance, requires an institutional framework. By the institutional framework of a science, I mean a complementary set of means aimed at developing its ideas and theories, disseminating them among its active researchers and teachers, and inculcating them into its students and sympathetic public intellectuals. The institutions that constitute this framework include research institutes and libraries, graduate schools, regular conferences and colloquia, book series, and scholarly journals. Of course, the construction of such an institutional framework requires the power of disposal over real resources, that is property, and the will to employ such property exclusively and without deviation for the advancement of the science.¹ The travesties of National Socialist "biology," Soviet Socialist "physics" and the Keynesian "New Economics" should teach us that the property base that composes a science's institutional framework must be entirely private and independent of the State.

There is an exception to this key sociological principle of scientific progress. A creative genius such as Carl Menger, Ludwig von Mises, or Murray Rothbard working in isolation and outside a well-developed institutional framework may significantly

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¹The term "property" is here used in Menger's sense of a complex of complementary economic goods committed to a unitary scale of ends:

The entire sum of goods at an economizing individual's command for the satisfaction of his needs, we call his *property*. His property is not, however, an arbitrarily combined quantity of goods, but a direct reflection of his needs, an integrated whole, no essential part of which can be diminished or increased without affecting realization of the end it serves. (Menger 1981, p. 76)

advance the science supported mainly by his own resources. But in the absence of an institutional nexus of research institutes, academic programs and scholarly journals congenial to his work, the fruits of his genius will attract few active researchers and after his death they will quickly wither on the vine and the science will eventually retrogress. Now it may happen that a second creative genius appears on the scene as a student or protégé of the progenitor of new ideas and is able to develop the science further along the lines laid out by the master. Austrian economics has certainly benefited from such serendipitous intellectual relationships as those between Menger and Böhm-Bawerk, Böhm-Bawerk and Mises, and Mises and Rothbard. But serendipity cannot be depended upon to sustain the advancement of a science in the long run. Moreover, a science develops much more surely and rapidly when its problems are approached from different angles by a number of unique and individualized minds that are in active communication with one another. Finally, a progressing science cannot remain the domain of a solitary mind generation after generation because man, whether or not he is a mental giant among his species, is not infallible in his quest for truth. His ideas and theorems require the relentless and disinterested critical evaluation that can only be provided by other minds. As Mises (1998, p. 68) stated: "Man can never become omniscient. He can never be absolutely certain that his inquiries were not misled and that what he considers as certain truth is not error. All that man can do is submit all his theories again and again to the most critical examination."

Having argued that an institutional framework based on property is indispensable for sustained progress in the quest for scientific truth, I now address the contrary thesis maintained by the brilliant founder of Austrian economics, Carl Menger.

MENGER'S FATEFUL ERROR

Despite his pioneering brilliance in economic theory, Menger had a flawed conception of the sociology of the scientific enterprise. He denied in word and deed the proposition that rationally designed institutions constructed out of scarce, tangible means were required to aggressively combat erroneous ideas and promote scientific truth in economics. His most eminent immediate follower, Böhm-Bawerk, suffered from the same misconception. This misconception is summed up in the following statement discovered by Friedrich Hayek among Menger's unpublished papers after his death: "There is only one sure method for the final victory of a scientific idea, namely, by letting every contrary proposition run a free and full course" (quoted in Mises 1978, p. 38). This dictum was translated elsewhere in a slightly different form: "There is no better means to disclose the absurdity of a mode of reasoning than to let it pursue its full course to the end" (quoted in Mises 1984, p. 36).

Unfortunately and greatly to the detriment of Austrian economics, both Menger and Böhm-Bawerk rigidly adhered to this dictum in practice. Menger never attempted to engage himself in academic politics in order to obtain appointments for his followers. Neither did Böhm-Bawerk ever exert his potent influence as Minister of Finance and later as a prominent former statesman in an academic position to promote the academic appointment of economists sympathetic to his views. Menger occasionally, although unsuccessfully, tried to block the academic appointments of those egregiously unacquainted with economics, but Böhm-Bawerk refrained from even this course of action. In fact, the classical-liberal Böhm-Bawerk even promoted the candidacy of the rabid anti-Austrian and proto-National Socialist Othmar Spann for an academic position at a technical institute (Mises 1978, p. 37). Böhm-Bawerk also persistently trumpeted the brilliance of the young Joseph Schumpeter in his letters to other prominent economists and assisted him in obtaining a prestigious position as one of the youngest professors in the Austro-Hungarian empire, despite the fact that Böhm-Bawerk profoundly disagreed with Schumpeter's view that economics was about unmotivated quantities of things rather than motivated human actions and that mathematical equilibrium models formed the core of economic science (Salerno 1999, pp. 41-42). The result of Menger and Böhm-Bawerk's self-imposed dictate against intervening to construct an institutional environment more conducive to the dissemination and development of their economic doctrines was devastating for the cause of economic science. The economics professoriat at Austro-Hungarian universities became filled almost exclusively with the disciples of German historicism who were bitterly opposed to theoretical economics in general and to Austrian economics in particular and connived against granting positions to the followers of Menger (Mises 1978, p. 38).

Menger and Böhm-Bawerk, indeed, went to almost absurd lengths in applying their principle of allowing scientific truth to emerge spontaneously and refusing to purposively shape and deploy the institutional means at their disposal to advance their own views on economics. For example, Mises lamented that in Böhm-Bawerk's famous seminar, which he attended from 1904 to 1913, Böhm-Bawerk deliberately relinquished an important part of his responsibility as seminar leader by granting every participant an "extraordinary freedom to speak." Predictably, this freedom was occasionally abused by inconsiderate speakers and most egregiously by the abysmal thinker and fanatical Marxist, Otto Neurath (Mises 1978, pp. 40–41). Menger was not even concerned that his writings remain in print. Thus he refused to grant permission for a second edition of his path-breaking *Principles of Economics* to be published in spite of the facts that: the book was long out of print; the prices of second hand copies had risen steeply; and his publisher repeatedly pled for his consent (Mises 1984, p. 39).

Mises summed up the reasons for this anomalous bent toward scholarly self-abnegation on the part of Menger and Böhm-Bawerk. The early Austrian economists, he reported, believed:

that while it is the duty of a pioneering mind to do all that his faculties enable him to perform, it is not incumbent upon him to propagandize for his ideas, still less to use questionable methods in order to make his thoughts palatable to people. . . . The main and only concern of the Austrian economists was to contribute to the advancement of economics. They never tried to win the support of anybody by other means than by the convincing power developed in their books and articles. They looked with indifference upon the fact that the universities of the German-speaking countries, even many of the Austrian universities, were hostile to economics as such and still more so to the new economic doctrines of subjectivism. (1984, p. 39)

Unfortunately, Mises himself was ambivalent on the question of whether progress in the discovery of economic truth must proceed helter-skelter in the work of isolated creative thinkers or required a rationally constructed institutional framework. At times he seemed to incline to the Mengerian view, once writing that Menger and Böhm-Bawerk "knew that economists could not be reared. As pioneers and creative thinkers they were fully aware that scientific progress cannot be organized and innovation created, according to plan" (Mises 1978, p. 37). But Mises's attempted defense of his two beloved masters missed the point. Menger and Böhm-Bawerk in effect maintained, in contradiction to their own economic insights as well as to their own behavior as tireless researchers, that progress in uncovering economic truth could not be expedited by the purposeful allocation of scarce concrete means or "economic goods" to the scientific enterprise.

One of Menger's (1981, pp. 52-53) many brilliant insights involved identifying the prerequisites of an economic good, which included the power to dispose of the thing that satisfies a human need or end. A warm, sunny day at a particular time and place, as desirable as it may be to human beings, is not a good as long as we are unable to control the natural forces whose concatenation produces it. In contrast, the advancement of the understanding of economic laws certainly depends on the existing numbers of economic scientists, research institutes, graduate programs, journals, etc. These are all complementary concrete means for the advancement of economic science and they enhance the productivity of the creative genius as well as the rest of us workaday economists who contribute incrementally to the edifice of praxeological economics. Menger himself would have to admit that he could not have been as productive as he was without disposal over such property as books, journals, writing implements, and paper. But once this much is conceded, it becomes clear that new economic truth does not emanate spontaneously from the intellect of the occasional genius who happens into the field but is attained as the outcome of purposeful activity. New economic truth-like romantic love or aesthetic taste-is therefore an economic good, but not an exchangeable good. This means that it is a valuable end to those who pursue it and its discovery or "production" involves the use of scarce resources although the final product cannot be directly bought and sold on the market.² Moreover it implies that a reduction in the supply of property committed to its pursuit and propagation, all other things equal, may well lead to scientific stagnation or retrogression and the displacement of economic truth by economic fallacy in the realm of practical affairs. So even if we grant for the moment Menger's argument that the truth will spontaneously triumph in some unspecified long run after all economic errors have finally played themselves out, in the interim, periods of serious scientific retrogression may occur that destroy the economic basis of culture and civilization. We have witnessed such eras in the seven decades of existence of the Soviet Union and in National Socialist Germany of the 1930s. In both cases the property basis of science had been completely engrossed and revolutionized by the state.

This brings us to Böhm-Bawerk (1959, pp. 259–73), whose greatest contribution to economic science is his concept of time preference. According to this concept, human actors, *ceteris paribus*, systematically prefer goods available in the immediate future to the same goods available in the more remote future. This implies that every actor has a finite time horizon beyond which the provision of goods has no value.³ But since Menger's doctrine does not specify when economic truth will finally vanquish economic ignorance and error, it may well lie beyond everyone's praxeological time horizon. Moreover, even if it does not, its attainment may lie so far in the future, that the value differential between the earlier attainment of truth that results from its purposeful scientific pursuit and its anticipated later spontaneous emergence may be expected to more than repay the substantial expenditure of resources needed to construct an appropriate institutional framework to promote scientific progress.

Menger and Böhm-Bawerk's doctrine that the quest for scientific truth is purely an intellectual exercise that requires no property basis is clearly erroneous and blatantly contradicts their own pioneering contributions to economic theory. Indeed, the

²This is not to deny of course that knowledge of previously discovered economic laws as embodied, e.g., in books, journals, and lectures, can be exchanged on the market. But it does explain why the incomes of pure researchers in any science, but especially in the social sciences, would be so precarious in a free-market economy and consequently why social scientists are so readily enlisted as paid apologists for the continual expansion of the State and its range of activities. On the concept of "nonexchangeable goods," see Rothbard (1993, pp. 183-84) and Wicksteed (1967, 1, pp. 132-33).

³On this important implication of time preference, see Mises (1998, pp. 533-34).

insight of these early Austrians that the achievement of any goal whatever requires disposal over a structure of scarce, complementary goods provides us with a powerful theoretical tool with which to interpret the modern revival of Austrian economics. Thus Austrian economics is brought to bear in explaining its own rebirth.

THE MODERN REVIVAL OF AUSTRIAN ECONOMICS: THE ROLES OF PROPERTY AND GENIUS

The importance of the institutional framework for scientific progress can be illustrated by describing the interaction between property and creative genius in the modern revival of Austrian economics. There are three distinct phases in this revival that roughly coincide with radical differences in the institutional environment.

Phase I: Genius in Bloom-1962-1976

In the quarter of a century leading up to the 1960s Austrian economics as a scientific movement was moribund. The subjective value-based and proto-praxeological approach to economic theory initiated by Menger in 1871 had attracted an increasing number of followers and active researchers from the early 1880s to the outbreak of the First World War. In addition to Böhm-Bawerk, Friedrich von Wieser, Mises, and others in Austria, these included prominent members of the later Frédéric Bastiatinspired liberal school of economics in France and Italy such as Paul Leroy-Beaulieu, Maurice Block, and Augusto Graziani as well as leading Anglophone economic theorists like J.B. Clark, Frank A. Fetter, Herbert J. Davenport, and Philip Wicksteed. Poised on the cutting edge of neoclassical economic theory on the eve of the war, Austrian economics suffered an amazingly rapid decline, particularly in the U.S. and Great Britain, and was eclipsed by the Marshallian and Walrasian theoretical approaches during the 1920s and 1930s. By the mid-1930s there was no longer an Austrian School to speak of in the sense of a self-conscious, institutionally embedded community of scholars engaged in active research and dialogue within the Mengerian tradition.⁴ With the publication of *Nationalökonomie* in 1940, the German-language predecessor of Human Action, Ludwig von Mises single-handedly recovered and greatly advanced the distinctive Austrian tradition in pure economic theory.⁵ Among several other outstanding achievements, Mises explicitly linked up Mengerian value and price theory with an all-encompassing science of human action that he labeled "praxeology." Unfortunately Mises's great treatise and the praxeological paradigm formulated therein were completely neglected by postwar professional economists and failed to inspire the renewal of the Austrian scientific movement, although Human Action laid the foundations for its later rebirth.⁶

During the 1950s, Mises himself continued to work in and elaborate the paradigm, contributing an important methodological treatise, *Theory and History*. There were a few other books that were published by diffuse scholars during the decade that made notable contributions to Austrian theory and method. *Capital and Its Structure* by Ludwig M. Lachmann (1978) demonstrated that the capital structure of

⁴For an account of the rise and fall of the early Austrian School, see Salerno (1999, pp. 35-57). For the influence of Menger on the later French and Italian liberal schools, also see Salerno (2001, pp. 485-86).

⁵On the differences between *Nationalökonomie* and *Human Action*, see Herbener, Hoppe, and Salerno (1998, pp. xv-xvii).

⁶On Mises's other significant advances in Austrian economic theory in *Human Action* and the reasons for the failure of his treatise to have an impact on the mainstream economics profession in the 1950s, see Salerno (1999, pp. 57-61).

an industrial economy was an intricate latticework of complementary resources that was constantly being reconfigured by entrepreneurs responding to anticipated changes in market prices. Henry Hazlitt's *The Failure of the "New Economics"* (1959) presented a thoroughgoing demolition of the tissue of fallacies that was Keynesian macroeconomics and, in the process, provided an original synthesis of Austrian thinking on a wide range of macroeconomic issues. Finally, Israel Kirzner, Mises's former doctoral student and graduate assistant at New York University, published his dissertation under the title *The Economic Point of View* (1976a), an examination and critique of various views on the definition and scope of economic science leading up to Mises's conception of economics as a branch of praxeology.⁷

Two essays published during the 1950s also merit notice for their substantive contributions to the edifice of Austrian economic theory. In "The Significance of Price Flexibility," originally published as a journal article in 1954, William Hutt explicated the concept of what he called "the dynamic coordinative consequences of price adjustment"—or "price coordination" for short—that was more or less implicit in the Austrian economic tradition from Menger to Mises. Hutt (1975, pp. 130-46) argued that, at any given moment, the structure of actual prices emerging on factor markets was shaped by the competitive bidding of entrepreneurs for inputs in light of their (fallible) individual appraisements of prices on future markets for consumer goods. This entrepreneurial pricing process engendered the actual and continual coordination of realized input prices with expected output prices, which in turn ensured both the full utilization of available resource stocks and their allocation to those uses of greatest *anticipated* monetary value to consumers, i.e., the maximization of the *expected* marginal revenue products of all resources.⁸

The second outstanding essay published during this decade was "Toward a Reconstruction of Utility and Welfare Economics" by Murray Rothbard (1956, pp. 224-62). In this essay, Rothbard finally brought to light and formalized the purely ordinalist, "demonstrated preference" approach to utility analysis inherent in Austrian economics since the early twentieth century. He then utilized the reconstructed Austrian approach to criticize contemporary, mainstream approaches to utility theory, which were nominally ordinalist but variously marred by errors of behaviorism, psychologism, cardinalism, and the assumed constancy of preferences. On the basis of his demonstrated preference approach Rothbard went on to establish that the several variants of modern neoclassical welfare economics were deeply flawed and unscientific because they relied on interpersonal comparisons of utility or harbored implicit value judgments. Rothbard concluded his essay by outlining an original approach to a scientific welfare economics purged of all value judgments and grounded on a rigorously ordinalist concept of utility.

This handful of scattered contributions to Austrian economics forthcoming in the 1950s, however, would have defined the death throes of the school rather than the prelude to its rebirth were it not for the creative genius of Murray Rothbard, which came to fruition in the early 1960s. The revival of Austrian economics as a living scientific movement can be dated from the publication of Rothbard's *Man, Economy, and State* in 1962, a contribution to Austrian economics and to pure economics in general that ranks as one of the most brilliant performances in the history of economic thought. The book was a two-volume treatise of nearly 1,000 pages written in

⁷Despite its many virtues, one drawback in Kirzner's treatment, which will be examined in more detail below, was his exaggeration of the difference between Robbins's–and Menger's– concept of "economizing man" and Mises's concept of "acting man."

⁸For an appreciation and elaboration of the implications of Hutt's concept of price coordination for contemporary Austrian economics, see Salerno (1991, pp. 325-43).

scintillating English that logically deduced the entire corpus of economic theory step by step from the undeniable fact of purposeful human action. It integrated the insights and theorems of dozens of previous Austrian economists from Menger to Mises into a systematic and comprehensive organon of economic theory. Perhaps the greatest of Rothbard's many contributions in his treatise was the elaboration of a unified theory of production, extending over five of the treatise's 12 chapters and encompassing the capital structure, interest rate determination, factor pricing, and the entrepreneurial role in production. While many elements of the theory had been developed previously by various Austrian economists, they had never been fully integrated and several elements were still missing. Rothbard's methodical treatment of production repaired one of the few serious gaps remaining in Austrian economics after Mises. Rothbard's book also contained critiques of contemporary neoclassical and Keynesian theories and a critical analysis of typical state interventions into the economy. Rothbard followed up this work in 1963 with America's Great Depression and What Has Government Done to Our Money? (1990). The former book applied the Austrian theory of the business cycle to an analysis of the causes of the Great Depression in the United States and the effects of the government policies implemented to cure it. The book represented an exemplar for future work in applied Austrian economics. The latter work was a slim booklet intended as a primer on Austrian monetary theory, but in it Rothbard originated a praxeologico-historical analysis of the transformation of gold money into fiat money that was an extension of Mises's famous regression theorem.

In 1970, Rothbard published *Power and Market* (1970), an exhaustive typology and analysis, based on value-free economic theory, of the myriad of government interventions into the economy. One of its many innovations was to identify and analyze taxation and government spending as types of intervention into the free market economy rather than, as in the long-entrenched conventional view of economists, the necessary means for creating and enforcing a legal framework for the market economy. The book also contained the first analysis of free market defense agencies from an Austrian perspective as well as a path-breaking *Wertfrei* praxeological critique of antimarket ethics. In 1973, Rothbard published *For a New Liberty* (1985a), a work in libertarian political economy that presented the first argument in defense of a purely anarcho-capitalist society grounded on a natural rights ethic. The book also contained a wealth of detailed argumentation and examples concerning how the free market would provide services hitherto provided by the State. A collection of previously published essays on political economy and social philosophy, *Egalitarianism as a Revolt against Nature* (2000), appeared the following year.

In these works Rothbard not only advanced but reshaped the praxeological paradigm to such an extent that his name became inextricably linked with the greatest thinkers in Austrian economics: mainline Austrian economics from then on was the economics of Menger, Böhm-Bawerk, Mises, and Rothbard. In creating this corpus of work, Rothbard–especially with regard to his work in pure economic theory–could certainly be regarded as a genius working in intellectual isolation. It was not until 1973 that Israel Kirzner published his influential *Competition and Entrepreneurship*, a contribution to pure economic theory that emphasized the entrepreneurial and equilibrating aspects of the market process in an attempted synthesis of Mises's and Hayek's sharply divergent views on the method and content of economic theory.⁹ The

⁹In addition to *The Economic Point of View*, Kirzner had published two other books prior to *Competition and Entrepreneurship*, one a textbook (Kirzner 1963) on price theory and the other a monograph (Kirzner 1966) described as a "prologue to capital theory." While containing original ideas that foreshadowed the new perspective on Austrian economic theory formulated in *Competition and Entrepreneurship*, these works had not inspired neophyte Austrian scholars to pursue a new research agenda as his latter work did.

only other notable book in the Austrian tradition published during this period was *The Myths of Antitrust*¹⁰ in 1972 by the young economist Dominick T. Armentano, which applied Austrian theory to a critique of American antitrust laws. Armentano's theoretical approach to competition and monopoly in the first edition, which was considerably revised in subsequent editions under the influence of Rothbard, was more Schumpeterian than Misesian. Finally, a series of essays and booklets that incisively criticized contemporary monetary theory and policy from the perspective of Austrian monetary economics was contributed by Hans F. Sennholz, an economist who had received his doctorate under Mises in the 1950s.¹¹ Thus paraphrasing Mises's (1984, p. 10) characterization of Menger, we may say: "Until the early 1970s, there was no modern Austrian School. There was only Murray Rothbard."

Without gainsaying his boundless energy and creative powers however, it must be pointed out that Rothbard was not without institutional means of support, limited though they may have been. From 1952, when he embarked on the writing of *Man*, *Economy and State*, until 1962, he received grants from and worked for the libertarian Volker Fund. He also received a grant from the Earhart Foundation to write *America's Great Depression* and had worked part-time for the Foundation for Economic Education since the late 1940s. After the dissolution of the Volker Fund in 1962 he obtained a "substantial" grant from the Lilly Endowment to write a general history of the United States.¹²

Rothbard's reconstructed praxeological paradigm took root during the late 1960s and early 1970s, shaping the intellects of dozens of American graduate students and young faculty members, who studied his works alone or in small groups. By the mid-1970s interest in Austrian economics, stimulated by Rothbard's works, had become so extensive that the Institute for Humane Studies (I.H.S.), which had succeeded the defunct Volker Fund as the main institutional promoter of hard-core Austrian economic theory and libertarian political economy, sponsored a conference on Austrian economics at South Royalton, Vermont, which brought together over 30 participants to hear lectures by Rothbard, Kirzner, and the German-born South African economist, Ludwig Lachmann, a former research assistant of Hayek's in the mid-1930s who had written his dissertation at the University of Berlin under the supervision of the German historicist Werner Sombart.¹³ A follow-up conference was held the next year in Hartford, Connecticut that featured papers by younger Austrian-oriented faculty members and graduate students with commentaries by senior Austrian economists and fellow travelers, including Rothbard, Kirzner, Henry Hazlitt, William H. Hutt, Hayek, Leland Yeager and Lachmann. The following year, 1976, a third and smaller conference was held at historic Windsor Castle in Scotland, which was to be the last high-level conference focused exclusively on advancing Austrian economics for some time to come.

¹⁰The revised and expanded version of Armentano's book was published in 1982 as *Antitrust and Monopoly: Anatomy of a Policy Failure.*

¹¹The most important of these essays were "Chicago Monetary Tradition in the Light of Austrian Theory" (1971, 2, pp. 347-66), *Inflation or Gold Standard*? (1973), "No Shortage of Gold" (1975, pp. 41-60). Sennholz later published a valuable book-length treatment of these themes as *Age of Inflation* (1979).

¹²On the sources of financial support for Rothbard's scholarly activities during this period, see Raimondo (2000, pp. 54, 151-53).

¹³For an overview of Sombart's career and the convoluted development of his thinking on economic and political issues, which included infatuations with both Marxian and, later, National Socialism, see Blaug (1986, pp. 236-38) and also Mai (1975, p. 211). Lachmann was not tainted with Sombart's political-economic views, although Sombart's methodological historicism left a lasting mark on Lachmann's thinking that came strongly to the fore in his later works.

Phase II: Austrian Economics without You Know Who-1977-86

The reason for the abrupt demise of the I.H.S. conference series was that the institutional framework of Austrian economics began to change radically in that year. Without going into detail, the new major funding source for I.H.S. and the Cato Institute, a newly-established libertarian "think tank," made a momentous decision in the late 1970s to deliberately downplay the role of Ludwig von Mises in Austrian economics because his radical intransigence in economic method, theory, and policy risked alienating moderate, neoclassical "free-market" economists, graduate students, and economic policymakers who the new financial-institutional axis was eager to draw into its ambit.

As time went on, Mises's name was mentioned less and less at conferences and symposia sponsored by these financially allied institutions and soon became almost anathema. As Mises was being phased out, there emerged an increasing emphasis on the contributions of Friedrich Hayek, who had won the Nobel Prize in 1974. Hayek, whose postwar views on methodological issues had increasingly paralleled those of the neo-positivist Karl Popper and who was a moderate social democrat willing to accept limited government interventions characteristic of the modern welfare state, was much more palatable to mainstream free-market economists.¹⁴ I.H.S also began to actively promote the work of Lachmann (1977) and co-sponsored, along with the Cato Institute, the publication of a substantial volume of his essays. Thus began the era of what may be called "Austrian Economics without You Know Who," which spanned the decade from 1977 to 1986. This sudden and revolutionary change in strategic vision by those who controlled the property basis of the emerging institutional infrastructure of modern Austrian economics happened to coincide with and intensify the growing rifts within the intellectual movement.

Incipient factionalism within Austrian economics was already apparent at the South Royalton conference in 1974. If one reads the papers presented at that conference and collected in the book, *The Foundations of Modern Austrian Economics*, it is clear that Rothbard, Kirzner, and Lachmann disagreed on a number of fundamental points of economic theory and method.¹⁵ Rothbard (1976a, pp. 19-39; 1976b, pp.

¹⁴For Hayek's description of how and when he came to accept the "Popperian philosophy," see Hayek (1994, pp. 49-51). Hayek's main essays elaborating his quasi-Popperian approach to the social sciences are found in Hayek (1969b, pp. 3-21; 1969c, pp. 22-42). This collection of essays was dedicated to Karl Popper. Hayek's concessions to social democracy and the welfare state appear in (Hayek 1960, part 3). In an otherwise favorable review of this book, Mises (1990a, p. 151) found "the third part of Professor Hayek's book . . . rather disappointing" for suggesting that the welfare state is compatible with liberty under certain conditions. Hoppe (1994a, pp. 67-93) argues that Hayek's view on the role of the market and the state is virtually indistinguishable from that of a modern social democrat.

¹⁵It should be noted that the date of the revival of Austrian economics depends on one's view of the degree of homogeneity of the earlier Austrian tradition that culminated in Mises and Hayek. This is a matter of intense controversy that has spawned a voluminous and growing literature. Those who identify themselves more closely with the views of Kirzner or Lachmann as described below in the text tend to deny the existence or importance of differences between Mises and Hayek and are inclined to mark the revival with the awarding of the Nobel Prize to Hayek in 1974. In contrast, those who perceive two divergent branches of Austrian economics that can be traced back through Mises and Hayek to their respective mentors, Böhm-Bawerk and Wieser, tend to agree with the present writer that the Austrian rebirth can be dated to the publication of Rothbard's *Man, Economy, and State* in 1962. In the latter view, deep-seated theoretical disagreements divide the contemporary Austrian movement into broadly Misesian and Hayekian factions, disagreements that began to surface more than a decade after the publication of *Man, Economy, and State*, when the Austrian revival was already in full swing. The controversy began in 1990 with the attempt by the present author to "dehomogenize" Mises's and

52-74; 1976c, pp. 89-111; 1976d, pp. 160-84) contributed four papers, on methodology, the role of value judgments in economic science, the Scholastic precursors of Austrian economics, and Austrian monetary theory. These were rooted squarely in the praxeological paradigm originated by Menger and Böhm-Bawerk and first comprehensively formulated by Mises.

Lachmann in his contributions presented a nihilist position, arguing that because knowledge is unpredictably and continually changing, the everyday prices that we observe and pay and that entrepreneurs anticipate to buy and sell at in the future are meaningless for economic calculation, and therefore economic science cannot say anything definite about the rationality or optimality of resource allocation in the free market. Moreover, Lachmann (1976, pp. 126-32) contended, because the market process is ruled by autonomous and mercurial expectations, which are detached from human purpose, judgment, and property, the free market is incapable of systematically weeding out inferior entrepreneurs over time. Both of these positions plainly contradicted Mises's conception of the function of prices, entrepreneurship and the market process. Lachmann (p. 145) also outrageously smeared Böhm-Bawerk, Mises's revered teacher and the most innovative capital theorist in the history of economic thought as someone "who never meant to be a capital theorist. He was essentially a Ricardian."¹⁶

In one of his contributions, Israel Kirzner (1976b, pp. 115-25) emphasized the distinction he had drawn in his earlier works between what he called the "Robbinsian" economizer or maximizer, who purposively allocates his scarce resources to those ends that he expects to yield him greatest satisfaction, and the Misesian actor who is ever alert to and seeking for new ends to pursue and means to achieve them.¹⁷ However, nowhere in Mises's Human Action or his other works is action defined in terms of perpetual seeking after the discovery of new opportunities. For Mises, who like Robbins based his concept of choice on Menger's "economizing man," action always involved a selection of the most valuable of the ends known to the actor at the moment of choice and attainable by the limited means known or expected to be at hand. Indeed, the subtitle of the German-language forerunner of Mises's treatise on Human Action translates into English as "The Theory of Action and Economizing," which plainly suggests the roots of Mises's concept of action in the Mengerian economizing man.¹⁸ Where Mises went beyond Menger and Robbins was to explicitly demonstrate that the very concepts of scarcity and choice constitute the universal condition of all rational beings who consciously and purposively strive to attain goals.

Hayek's views on the socialist calculation debate and has progressively broadened to include such issues as: the role of calculation versus the role of knowledge in Austrian price theory; the timing and causes of the decline of the early Austrian School; and, most recently, whether there existed a general equilibrium tradition in Austrian economics that included Wieser, Schumpeter, Hayek, and most of the Austrian economists of Hayek's generation. For contributions on both sides of these issues, see: Kirzner (1988, pp. 1-18; 1996, pp. 143-54; 1997, pp. 79-80); Salerno (1990a, pp. 26-54; 1990b, pp. 51-71; 1993, pp. 113-46; 1994, pp. 111-25; 1999; 2002); Rothbard (1991, pp. 51-76); Yeager (1994, pp. 93-109); Hoppe (1996b, pp. 143-49); Herbener (1996, pp. 151-62); Hülsmann (1997, pp. 23-48); Reynolds (1998, pp. 29-43); Boettke (1998, pp. 131-58); Horwitz (1998, pp. 427-50); and Caldwell (2002, pp. 47-66).

¹⁶Lachmann's statement sharply conflicts with the respect he expressed in an earlier work for "the intuitive genius of Boehm-Bawerk" as a capital theorist and as one who "saw more clearly" than any other economist "the essential heterogeneity of all capital" (Lachmann, 1978, p. 73).

¹⁷Kirzner had introduced this distinction in *The Economic Point of View* (1976a, pp. 108-85), and deployed it as the basis for his distinctive view of the market as an entrepreneurial discovery process in *Competition and Entrepreneurship* (1973).

¹⁸I am indebted to Guido Hülsmann for translating the subtitle and for alerting me to its relevance for my point.

In the same essay, Kirzner dismissed the explanation of price determination in terms of Marshallian supply and demand curves as presupposing perfect information and therefore inadequate for explaining the formation of actual market prices. However, Kirzner failed to note that supply-and-demand analysis as developed by Böhm-Bawerk, Wicksteed, Mises, and Rothbard did not rely on the assumption of perfect knowledge and foresight and was perfectly adequate for explaining the dynamic pricing process on real markets.¹⁹ Mises provided a concise statement that perfectly expresses the essence of the realist, Mengerian approach to supply and demand that incorporates speculative actions and errors:

Prices come into existence by the eagerness of people to exchange one commodity or service against another commodity or service. They are the outcome of various individuals' readiness to buy or to sell. Every price is the outgrowth of a definite constellation of demand and supply. No price could ever be different from what it really was, because people failed to appear on the market at that time who were ready to bid a higher price, or who were ready to ask a lower price. The structure of prices reflects the state of the material conditions determining people's existence and the success of the endeavors made to satisfy the most urgent needs, as far as these material conditions make it feasible. (Mises 1990b, p. 140)

The volume of collected papers from the 1976 Windsor Castle conference revealed a further sharpening and hardening of the fundamental approaches and concerns dividing the Lachmannians, Kirznerians, and Rothbardians. The latter focused on advancing specific aspects of mainline Austrian economic theory, with especial emphasis on macroeconomic issues.²⁰ The contributions of the Kirznerians and Lachmannians, for the most part, were absorbed in broader methodological issues and critiques of the neoclassical mainstream and of each other with a conspicuous avoidance of the macroeconomic topics of money and business cycles.

With the subtle shift of institutional support toward the Kirznerian and Lachmannian variants of Austrian economics just getting under way in 1977, Rothbard perceptively noted the effect on younger Austrians almost immediately and began to sound a clarion call to all and sundry for a return to the mainline Misesian tradition. In a letter to me in 1977 properly rejecting a paper I had submitted to the *Journal of Libertarian Studies* for being pervaded with "Lachmannia," he concluded:

I sound off at you on Lachmann because I've been appalled, since reading some of the papers written by the [summer] fellows out here [at the Institute for Humane Studies in Menlo Park, California] at the extent to which Lachmannia has permeated their thinking. I am convinced that Mises would have considered Lachmann (an institutionalist, nihilist, and Keynesian) an "anti-economist," and he would have been right. Lachmann is not an Austrian at all. Back to Mises! (Rothbard 1977)

By 1978, the headlong retreat from Mises and the praxeological paradigm had begun in earnest and the split in Austrian economics was discussed openly by all sides. For example, the late Don Lavoie wrote a review of the monthly Austrian

¹⁹See, for example, Wicksteed (1967, 1, pp. 212-36; 2, pp. 493-517) and Rothbard (1998, pp. 91-140).

²⁰See especially: Armentano (1978, pp. 94-110); Rothbard (1978, pp. 143-56); and Garrison (1978, pp. 167-204). All three of these essays have gone on to become classics of the Austrian revival. Another noteworthy chapter in the book that reflects a strong Rothbardian influence is Rizzo (1978, pp. 40-56).

Economics Seminar held at New York University for *The Austrian Economics Newsletter* published in Fall 1978. This issue of the newsletter also happened to feature an interview with Lachmann. In his review, Lavoie forthrightly identified "two contrasting intellectual tendencies among Austrians: 'nihilism' and 'Ricardianism'." He went on to declare, "the modern Austrian school can be usefully analyzed with the theoretical tool of this 'nihilist-Ricardian' spectrum" (Lavoie 1978, p. 5).²¹ The "nihilists" comprised Lachmann and the British economist George Shackle who was Lachmann's fellow Hayek research assistant at the London School of Economics in the mid-1930s.²² "Ricardian" was the derisive term picked up from Lachmann's characterization of Böhm-Bawerk by his younger followers and referred to Rothbard and his followers, as well as to Kirzner, because of his emphasis on the equilibrating tendency imparted to the market process by entrepreneurial activities.

Shackle himself, who became an early guru to the nihilist wing, admitted in an interview with *The Austrian Economics Newsletter* that his approach to economics involved "a very nihilistic position and I realize that." He also declared in the same interview: "I've been saying for almost forty years that economics isn't a science, and we ought not to call it a science." When asked by the interviewer what sort of advice he believed that an economist could prudently give to policymakers to improve economic welfare for society, he responded: "My idea of welfare economics is that you choose an administrator, a man with a conscience himself, and broad sympathy, with a generous mind and then you say, 'Leave it to him!' I don't believe you can do any better" (Shackle 1983, p. 7). In other words the intuition of a benevolent dictator or economic czar is more apt to identify the processes needed to secure economic efficiency and prosperity than the systematic reasoning of economic science.

By the late 1970s, with Rothbard increasingly deprived of an institutional base, the Rothbardian revival of Austrian economics that was just beginning to ripen in the early 1970s was in serious jeopardy of withering away. Meanwhile the resources needed to construct an institutional framework for the two alternative branches of contemporary Austrian economics were gushing forth. A well-funded Austrian Ph.D. program was in place at New York University where Kirzner occupied a tenured faculty position, Lachmann held an annual one semester appointment as a Visiting Professor, and two additional, young Austrians were hired on as full-time faculty members in 1978. The prospects for the Rothbardian revival darkened considerably when in 1980, a lavishly financed Ph.D. program in anti-Misesian, pro-Lachmannian "Market Process" economics was instituted at George Mason University in northern Virginia.²⁴

²⁴This program has since been transformed into a *bona fide* Austrian economics program congenial to Misesian economics, largely through the efforts of Peter Boettke.

²¹Lavoie later emerged as the leader of the nihilist faction when it attempted to engraft the hermeneutical method onto Austrian economics in the mid-1980s.

²²Shackle's work that exercised the greatest influence on the Austrian nihilists was *Epistemics and Economics: A Critique of Economic Doctrines* (1972).

²³The two young NYU Austrian faculty members were Mario J. Rizzo, a productive Hayekian scholar who specialized in the discipline of law and economics, and Gerald P. O'Driscoll, Jr. (1977) a rising star in Austrian macroeconomics who had just published a book on Hayek's contributions to monetary and business cycle theory. The two later collaborated on a book entitled *The Economics of Time and Ignorance*, which, as the title suggests, dealt extensively with Lachmannian and Hayekian themes and significantly influenced the generation of young Austrian scholars who had entered the NYU and GMU graduate economics programs in the early 1980s (O'Driscoll and Rizzo 1985). For a critical review of the book from a Misesian perspective, see Baird (1987, pp. 189-206).

Rothbard's break with Cato Institute in early 1981, left him once more intellectually isolated and institutionally homeless, but neither his spirits nor his scholarly productivity ever waned. In fact, every setback only steeled his determination to complete the revival of Misesian economics and reconstruct the institutional framework necessary for its permanent flourishing. Throughout the early 1980s, Rothbard continued to advance the Austrian paradigm in the areas of monetary analysis, applied economics, and political economy, publishing several classic essays, including: "The Myth of Neutral Taxation" (1981); "Law, Property Rights, and Air Pollution (1982a); "The Federal Reserve as a Cartelization Device" (1984, pp. 89-136); and "The Case for a Genuine Gold Dollar" (1985b). During this period he also published two books, *The* Ethics of Liberty (1982b) and The Mystery of Banking (1983). The former volume was a landmark in the history of social philosophy as the first work to provide the anarcho-capitalist variant of libertarian political economy with an ethical foundation in natural rights theory. In the process Rothbard demonstrated that the right to property-in one's person and appropriable goods-is the fundamental unifying concept of both normative political philosophy and value-free economic science.

The Mystery of Banking was a theory and history of money and banking written from an Austrian perspective and, as its title suggests, accessible to the non-specialist in economics. Nonetheless it contained an important extension of Austrian monetary theory. Specifically, Rothbard integrated a detailed exposition of the multiple bank credit expansion process into Austrian monetary theory. This task had never been undertaken before by Mises or by Rothbard in his treatment of money in earlier works and constituted a lacuna in the Austrian explication of the money supply process. The arcane process by which a fractional reserve banking system operates to multiply demand deposits was first systematically expounded by the Austrian-oriented American economist, C.A. Phillips in 1920.²⁴ In addition to this expository contribution, Rothbard corrected an erroneous deviation from Phillips's path-breaking analysis that began to crop up after World War II and especially after the publication of Milton Friedman's and Anna Schwartz's influential Monetary History of the United *States* in 1963. Whereas Phillips had derived a simple but versatile "reserve" multiplier capable of distinguishing between the influences of central bank policy, commercial bank operations, and the actions of the non-bank public on the money stock, modern money and banking textbooks following Friedman and Schwartz (1963, pp. 50-51) operated with a seemingly more sophisticated formula, the "high powered money" or "monetary base" multiplier, which conflates these separate influences. In rectifying this technical error and rescuing Phillips's original analysis from oblivion, Rothbard restored the proper analytical framework for interpreting historical boom-bust episodes such as the Great Depression.²⁵

In 1977, Rothbard also became the founding editor of *The Journal of Libertarian* Studies, an interdisciplinary journal that served as an outlet for occasional articles on applied economics and economic policy from an Austrian perspective, and he continued to edit it throughout this period.

²⁴Phillips went on to co-author a monograph in 1937 on the Great Depression in the U.S. that employed his analysis of the deposit multiplier process combined with the Austrian theory of the business cycle as an interpretive framework and concluded that the primary cause of the depression was the bank credit expansion orchestrated by the Fed in the 1920s (Phillips, McManus, and Nelson, 1972). Also of doctrinal interest is the fact that Herbert Davenport (1968, pp. 260-63, 286-87), another American economist strongly influenced by the early Austrians, had briefly outlined the deposit multiplier process in 1913.

²⁵In his review, Lawrence White surprisingly failed to mention Rothbard's expository and technical achievements in the book.

Despite Rothbard's continued productivity during his time in institutional exile, the thoroughgoing revolution in the property infrastructure of Austrian economics now forestalled the products of his creative genius from reaching and molding the young minds of a new generation of graduate students. Shackle-Lachmann nihilism or Kirzner's "discovery" approach to the market process were the new paradigms that young Austrian scholars were now immersed in.

Phase III: The Quarterly Journal of Austrian Economics *and the Return of Ludwig von Mises–1987-Present*

Rothbard clearly recognized that the rapid spread of the Lachmannian strand of nihilism and the calculated apotheosizing of the methodologically tolerant Hayek and shunting aside of the allegedly "dogmatic" Mises, which was fostered by the new institutional arrangements, was leading to decay and retrogression in modern Austrian economic thought. Fortunately, contrary to the position maintained by Menger and Böhm-Bawerk, Rothbard believed that intellectual error must not be permitted to run its course without challenge. He further understood that combating these particular errors and restoring the Misesian praxeological paradigm as the core of Austrian economics required a structure of complementary institutional means. Thus was born the idea of a journal devoted exclusively to advancing Austrian economics. But the idea was not originally Rothbard's, it was Llewellyn H. Rockwell's.

When Rockwell founded the Ludwig von Mises Institute in 1982, he had singlehandedly laid the institutional foundations for the restoration of sound Austrian economics-Austrian economics unabashedly inspired by the scientific vision of Ludwig von Mises. The Mises Institute was indispensable for rescuing the modern Austrian movement that had been initiated by Rothbard in 1962 and by the early 1980s was manifestly foundering. When Rockwell suggested the idea of an Austrian journal as an integral component of this institutional rescue effort, Rothbard immediately saw merit in the idea and seized upon the journal as the main instrument for reclaiming Austrian economics from those who had stripped it of its essential Misesian content in search of acceptance by mainstream economists. Hence Rothbard pushed for a distinctive and bold name for the journal that would proudly and explicitly proclaim Austrian economics as an alternative to the prevailing neoclassical-Keynesian synthesis. He was opposed in this by a number of younger Austrians who argued for a less provocative and more nondescript name like the Journal of Market Process. But Rothbard perceptively recognized this concession on the journal title as a cover for and first step toward watering down the praxeological core of Austrian economics. Rothbard responded to his critics:

But it seems to me that one of the glories of such a journal is precisely to be out-front, to raise high the banner of Austrianism and to mark it as a distinct school, which of course it is. Otherwise, though in the short-run it might be more comfortable for some of our associates or contributors to be associated with a neutral-type name, in the long-run (or even not so long) the whole enterprise loses its point. . . . The quarrel over the journal name is only a symptom. . . . The problem is this: a lot of younger Austrians . . . have given up basic Misesian praxeology, that is: that Austrian theory is deduced from a few general axioms implicit in the existence of human action, and that therefore the economic method is fundamentally different from the methods of the physical sciences Many Austrians . . . are anti-praxeological, and hence anti-Misesian, and they are trying to preserve fashionable methodological unity of the sciences by being mainstreamers who simply talk about "disequilibrium," time, and "market process." . . . The key is praxeology and these people have given it up. . . . So I think that lurking behind the alleged tactical differences on

the title of a journal rests a much deeper problem: the abandonment of Austrianism itself. (Rothbard 1982c,d)

Thus the name of the journal became *The Review of Austrian Economics* and it was initially boycotted by a number of prominent younger Austrians who refused to serve on its editorial board or to contribute articles to it. Nonetheless, it thrived and has gone from an annual to a quarterly publication under the new title of *The Quarterly Journal of Austrian Economics.*²⁶

In 1982, Rothbard closed his remarks on the controversy over the journal's name with the following statement: "At any rate, we have a tough row to hoe in Austrianism in general to rescue it from: Lachmann-Shackle nihilism; Stanford probababble; . . . modern philosophy; and fuzzy Hayekianism. All this makes a hard-core institute all the more necessary" (Rothbard 1982d). Lew Rockwell gave us the hard-core institute; Murray Rothbard gave us the hard-core journal. With these institutional means at our disposal we have achieved our goal of putting the modern Austrian revival back on track and restoring the names of Mises and Rothbard as the modern masters in the scientific pursuit of economic truth.

References

- Armentano, D.T. 1982. Antitrust and Monopoly: Anatomy of a Policy Failure. New York: John Wiley and Sons.
- ——. 1978. "A Critique of Neoclassical and Austrian Monopoly Theory." In Spadaro, ed. 1978.
- Baird, Charles W. 1987. "The Economics of Time and Ignorance: A Review." Review of Austrian Economics 1.
- Blaug, Mark. 1986. "Sombart, Werner (1863-1941)." In *Great Economists before Keynes: An Introduction to the Lives and Works of One Hundred Great Economists of the Past.* New York: Cambridge University Press, 1986.
- Boettke, Peter J. 1999. "Is There an Intellectual Market Niche for Austrian Economics." *Review of Austrian Economics* 11 (1/2).
 - —. 1998. "Economic Calculation: The Austrian Contribution to Political Economy." *Advances in Austrian Economics* 5.

 $^{^{26}}$ The Review of Austrian Economics is now the name of another, newer journal that began publication in 1999 under the editorship of Peter J. Boettke. According to the introductory editorial of the new RAE, the Austrian contribution to intellectual history "was to combine the interest-driven logic of economic analysis with a classical sociological emphasis on social institutions.... This is still the Austrian program." The mission of this journal is, therefore, to fill the "intellectual market niche" in contemporary economics that is "defined by the unsolved problems and the unanswered questions inside the 'black boxes' of human desires and beliefs, of expectations and imperfect foresight, of novelty and change, and of history and institutions' (Boettke 1999, pp. 3-4). The mission of the new RAE is thus more diffuse than that of the Rothbard-inspired QIAE, which is to advance and disseminate the praxeological paradigm to the point where it is widely perceived as a viable replacement for the rapidly degenerating and increasingly vapid positivist paradigm in economics. The identification of the difference in their respective missions is not to suggest that the two journals are not complementary elements in the broader Austrian movement. In fact, an increasing number of Austrian scholars regularly publish in both journals, as well as in the Journal des Economistes et Etudes Humaines (which accepts English-language articles) and the more policy-oriented Independent Journal of Political Economy.

- Böhm-Bawerk, Eugen von. *Capital and Interest*. Vol. 2. *Positive Theory of Capital*. George D. Huncke, trans. South Holland, Ill.: Libertarian Press.
- Caldwell, Bruce J. 2002. "Wieser, Hayek and Equilibrium Theory." *Journal des Economistes et Etudes Humaines* 12 (March).
- Davenport, Herbert J. [1913] 1968. Economics of Enterprise. New York: Augustus M. Kelley.
- Dolan, Edwin, ed. 1976. The Foundations of Modern Austrian Economics. Kansas City, Mo.: Sheed and Ward.
- Friedman, Milton, and Anna Jacobson Schwartz. 1963. A Monetary History of the United States, 1867-1960. Princeton, N.J.: Princeton University Press.
- Garrison, Roger W. 1978. "Austrian Macroeconomics: A Diagrammatical Exposition." In Spadaro, ed. 1978.
- Greaves, Bettina Bien, ed. 1990. Economic Freedom and Interventionism: An Anthology of Articles and Essays. Irvington-on-Hudson, N.Y.: Foundation for Economic Education.
- Hayek, F.A. 1994. *Hayek on Hayek: An Autobiographical Dialogue*. Stephen Kresge and Leif Wenar, eds. Chicago: University of Chicago Press.
- ----- 1969a. Studies in Philosophy, Politics, and Economics. New York: Simon and Schuster.
- ----- 1969b. "Degrees of Explanation." In Hayek 1969a.
- ------ 1969c. "The Theory of Complex Phenomena." In Hayek 1969a.
- ------ 1960. The Constitution of Liberty. Chicago: Henry Regnery.
- Hazlitt, Henry. 1959. The Failure of the "New Economics": An Analysis of Keynesian Fallacies. Princeton, N.J.: D. Van Nostrand.
- Herbener, Jeffrey M., Hans-Hermann Hoppe, and Joseph T. Salerno. 1998. "Introduction" to Mises 1998.
- Hoppe, Hans-Hermann. 1996a. "Socialism: A Property or Knowledge Problem?" *Review of Austrian Economics* 9(1).
- . 1996b. "Calculation and the Question of Arithmetic." Review of Austrian Economics 9(1).
- ——. 1994. "F.A. Hayek on Government and Social Evolution: A Critique." *Review of Austrian Economics* 7 (1).
- Horwitz, Steven. 1998. "Monetary Calculation and Mises's Critique of Planning." *History of Political Economy* 30 (Fall).
- Hutt, William H. 1975. "The Significance of Price Flexibility." In *Individual Freedom: Selected Works* of William H. Hutt. Svetozar Pejovich and David Klingaman, eds. Westport, Conn.: Greenwood Press.
- Hülsmann, Jörg Guido. 1997. "Knowledge, Judgment, and the Use of Property." *Review of Austrian Economics* 10(1).
- Kirzner, Israel M. 1997. "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach." *Journal of Economic Literature* 35 (March).
- . 1996. "Reflections on the Misesian Legacy in Economics." Review of Austrian Economics 9(2).
- ------ 1976a. The Economic Point of View: An Essay in the History of Economic Thought. Kansas City, Mo.: Sheed and Ward.
- ------ 1976b. "Equilibrium Versus Market Process." In Dolan, ed. 1976.
- ------ 1973. Competition and Entrepreneurship. Chicago: University of Chicago Press.
- ------ 1966. An Essay on Capital. New York: Augustus M. Kelley.
- ------ 1963. Market Theory and the Price System. Princeton, N.J.: D. Van Nostrand.
- Lachmann, Ludwig M. 1978. Capital and Its Structure. Kansas City, Mo.: Sheed Andrews and McMeel.
- 1977. Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy. Walter E. Grinder, ed. Kansas City, Mo.: Sheed Andrews and McMeel.
- ------ 1976. "On the Central Concept of Austrian Economics: Market Process." In Dolan, ed. 1976.

- Lavoie, Don. 1978. "Austrian Economics Seminar: Part II: 1976-77." *Austrian Economics Newsletter* 1 (Fall).
- Mai, Ludwig H. 1975. Men and Ideas in Economics: A Dictionary of World Economists Past and Present. Totowa, N.J.: Littlefield, Adams.
- Menger, Carl. 1981. *Principles of Economics*. James Dingwall and Bert F. Hoselitz, trans. 2nd ed. New York: New York University Press.
- Mises, Ludwig von. 1998. *Human Action: A Treatise on Economics*. Scholar's Edition. Auburn, Ala.: Ludwig von Mises Institute.
- ------ 1990a. "Liberty and Its Antithesis." In Greaves, ed. 1990.
- ------ 1990b. "Professor Hutt on Keynesianism." In Greaves, ed. 1990
- ——. 1984. The Historical Setting of the Austrian School of Economics. Auburn, Ala.: Ludwig von Mises Institute.
- ------ 1978. Notes and Recollections. Hans F. Sennholz, trans. South Holland, Ill.: Libertarian Press.
- O'Driscoll, Jr., Gerald P. 1977. Economics as a Coordination Problem: The Contributions of Friedrich A. Hayek. Kansas City, Mo.: Sheed Andrews and McMeel.
- O'Driscoll, Jr., Gerald P., and Mario J. Rizzo. 1985. *The Economics of Time and Ignorance*. New York: Basil Blackwell.
- Phillips, C.A. 1920. Bank Credit: A Study of the Principles and Factors Underlying Advances Made by Banks to Borrowers. New York: Macmillan.
- Phillips, C.A., T.F. McManus, and R.W. Nelson. 1972. *Banking and the Business Cycle: A Study of the Great Depression in the United States.* New York: Arno Press and the New York Times.
- Raimondo, Justin. 2000. An Enemy of the State: The Life of Murray N. Rothbard. Amherst, N.Y.: Prometheus Books.
- Reynolds, Morgan O. 1998. "The Impossibility of Socialist Economy, Or a Cat Cannot Swim the Atlantic Ocean." *Quarterly Journal of Austrian Economics* 1 (2).
- Rizzo, Mario J. 1978. "Praxeology and Econometrics: A Critique of Positivist Economics." In Spadaro, ed. 1978.
- Rothbard, Murray N. 2000. *Egalitarianism as a Revolt against Nature and Other Essays.* 2nd. ed. Auburn, Ala.: Ludwig von Mises Institute.
- . 1997a. The Logic of Action 1: Method, Money, and the Austrian School. Cheltenham, U.K.: Edward Elgar.
- _____. 1997b. The Logic of Action 2: Applications and Criticism from the Austrian School. Cheltenham, U.K.: Edward Elgar.
- . 1993. *Man, Economy, and State: A Treatise on Economic Principles.* 2nd ed. Auburn, Ala.: Ludwig von Mises Institute.
- . 1991. "The End of Socialism and the Calculation Debate Revisited." *Review of Austrian Economics* 5 (2).

- ----- 1985b. "The Case for a Genuine Gold Dollar." Reprinted in Rothbard 1997a.
- ——. 1984. "The Federal Reserve as a Cartelization Device: The Early Years, 1913–1930." In *Money in Crisis*, Barry Siegel, ed. San Francisco: Pacific Institute for Public Policy Research and Cambridge, Mass.: Ballenger Publishing.
- ------ 1983. The Mystery of Banking. New York: Richardson and Snyder.
- ------ 1982a. "Law, Property Rights, and Air Pollution." Reprinted in Rothbard 1997b.
- ------ 1982b. The Ethics of Liberty. 2nd ed. New York: New York University Press.
- ----- 1982c. Memo to Llewellyn H. Rockwell, Jr. May 30.
- -----. 1982d. Memo to Llewellyn H. Rockwell, Jr. July 18.

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- ------ 1981. "The Myth of Neutral Taxation." Reprinted in Rothbard 1997b.
- ------ 1978. "Austrian Definitions of the Money Supply." In Spadaro, ed. 1978.
- ——. 1977. Personal Correspondence, September 3.
- ------ 1976a. "Praxeology: The Methodology of Austrian Economics." In Dolan, ed. 1976.
- ------ 1976b. "New Light on the Prehistory of the Austrian School." In Dolan, ed. 1976.
- ------ 1976c. "Praxeology, Value Judgments, and Public Policy." In Dolan, ed. 1976.
- ------ 1976d. "The Austrian Theory of Money." In Dolan, ed. 1976.
- —. 1956. "Toward a Reconstruction of Utility and Welfare Economics." In On Freedom and Free Enterprise: Essays in Honor of Ludwig von Mises. Mary Sennholz, ed. Princeton, N.J.: D. Van Nostrand. Reprinted in Rothbard 1997a.
- Salerno, Joseph T. 2002. "Friedrich von Wieser and Friedrich A. Hayek: The General Equilibrium Tradition in Austrian Economics." *Journal des Economistes et Etudes Humaines* 12 (June/September). Forthcoming.

- -----. 1994. "Reply to Leland Yeager." Review of Austrian Economics 7 (2).
- ----- 1993. "Mises and Hayek Dehomogenized." Review of Austrian Economics 6 (2).
- ——. 1991. "The Concept of Coordination in Austrian Macroeconomics." In *Austrian Economics: Perspectives on the Past and Prospects for the Future.* Richard M. Ebeling, ed. Hillsdale, Minn.: Hillsdale College Press.
- ------ 1990a. "Ludwig von Mises as Social Rationalist." *Review of Austrian Economics* 4.
- 1990b. "Postscript: Why a Socialist Economy Is 'Impossible'." In Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth.* Auburn, Ala.: Ludwig von Mises Institute.
- Shackle, G.L.S. 1983. "An Interview with G.L.S. Shackle." Austrian Economics Newsletter 4 (Spring).
- ——. 1972. *Epistemics and Economics: A Critique of Economic Doctrines*. New York: Cambridge University Press.
- Sennholz, Hans F. 1979. Age of Inflation. Belmont, Mass.: Western Islands.
- —, ed. 1975. "No Shortage of Gold." In Sennholz, Gold Is Money. Westport, Conn.: Greenwood Press.
- ------ 1973. Inflation or Gold Standard? Lansing, Mich.: Bramble Minibooks.
- ——. 1971. "Chicago Monetary Tradition in the Light of Austrian Theory." In *Towards Liberty: Essays in Honor of Ludwig von Mises on the Occasion of his 90th Birthday*. F.A. von Hayek et al., eds., 2 vols. Menlo Park, Calif.: Institute for Humane Studies.
- Spadaro, Louis M., ed. 1978. New Directions in Austrian Economics. Kansas City, Mo.: Sheed Andrews and McMeel.
- White, Lawrence H. 1984. "Money Made Simple." Inquiry (March/April).
- Wicksteed, Philip. 1967. The Common Sense of Political Economy and Selected Papers and Reviews on Economic Theory. Lionel Robbins, ed. 2 vols. New York: Augustus M. Kelley.
- Yeager, Leland B. 1994. "Mises and Hayek on Economic Calculation." *Review of Austrian Economics* 7 (2).