



**DEPARTMENT OF
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**The History of a Tradition:
Austrian Economics from 1871 to 2016**

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Abstract

This paper provides a comprehensive survey of the contributions of the Austrian school of economics, with specific emphasis on post-WWII developments. We provide a brief history and overview of the original theorists of the Austrian school in order to set the stage for the subsequent development of their ideas by Ludwig von Mises and F.A. Hayek. In discussing the main ideas of Mises and Hayek, we focus on how their work provided the foundations for the modern Austrian school, which included Ludwig Lachmann, Murray Rothbard and Israel Kirzner. These scholars contributed to the Austrian revival in the 1960s and 1970s, which, in turn, set the stage for the emergence of the contemporary Austrian school in the 1980s. We review the contemporary development of the Austrian school and, in doing so, discuss the tensions, alternative paths, and the promising future of Austrian economics.

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Introduction

This paper provides a survey and overview of the contributions of the Austrian school of Economics, with an emphasis on post-WWII developments. It is important for our narrative that readers keep some background information in mind. First, as the present symposium serves to substantiate, the Austrian school of Economics experienced a great migration during the 1930s and 1940s out of Austria and the German-language scientific community in the direction of the English-language scientific community in Great Britain and the United States. Second, during the 20th century, the discipline of economics became increasingly professionalized and, as a result, scientific and scholarly work was performed almost exclusively within the institutional structure of higher education. The result was that published work moved from treatises and monographs to focused research articles in specialized journals. The idea of the amateur enthusiast and generalist as a significant contributor to the discipline was crowded out by the rise of the technical expert. Third, the professional fate of the Austrian school of economics ebbed and flowed with some considerable volatility throughout the period we will be surveying. Although this volatility is not solely a function of either the migration or some perceived flaw in the core of Austrian theory, the influence of these factors at particular points in time cannot be dismissed out of hand.

The Journal of Economic Literature classification system (i.e., JEL codes) was established to aid in the cataloging of scholarly contributions to economics. The characterization of the Austrian school in the JEL codes mimics the rise, fall, and rise again of the professional reputation of the school. Prior to 1925, the contributions of the Austrian school were captured under the banner of neoclassical theory, whereas, in the post 1950 period, they have been categorized as heterodox theory. What happened in the intervening years that influenced this

perceived change in the mainstream status of the Austrian school? Today, Austrian economics is categorized alongside Marxism, Institutionalism, and Feminist Economics as part of the “Current Heterodoxy” (B53). At the same time, however, Austrian economics has recently been added to the category of macroeconomics and monetary economics as an alternative “General Aggregative Model” (E14). What has changed since 2000 that led to this development? Part of our purpose in this survey is to answer these questions.

Israel Kirzner, in discussing the strange professional fate of the Austrian school between 1925 and 1950, has added another twist to the mystery. Kirzner claims that precisely at the time the professional reputation of the Austrian school was at its nadir, members of the school were making their most original and profound contributions to the science. He highlights Mises’s *Human Action* (1949) and Hayek’s *Individualism and Economic Order* (1948) as the critical Austrian texts published in this period, and emphasizes the development of the central Austrian idea of the market as a process of the discovery and utilization of knowledge. 

There have been three significant episodes for Austrian economics in the years following the immediate postwar era surveyed in the present symposium. The first concerns the breakdown of the Keynesian consensus in the 1970s and Hayek’s receipt of the Nobel Prize in 1974. The second was the collapse of communism in the 1990s, and the belated recognition of the prescience of Mises and Hayek’s critiques of central planning in the 1920s and 1930s. The third and most recent episode was the re-evaluation of Austrian business cycle theory (ABCT) in the wake of the financial crisis of 2008 and ensuing “Great Recession.” Each of these episodes brought increased attention to the contributions of the Austrian school, as well as increased scientific scrutiny of the core arguments and intellectual practices of the school.

A survey of the Austrian school could focus on personalities. Paul Samuelson (1981), certainly no fan of Austrianism, nevertheless wrote an article detailing who he thought would have won the Nobel Prize in Economic Science had the award been established in 1901, at the same time as the other prizes. Among the names on his list were Carl Menger, Eugen Böhm-Bawerk, and Ludwig von Mises. So, a focus on personalities would certainly express much of interest to the history of economic thought and methodology.

Alternatively, a survey of the Austrian school could focus on the major methodological, theoretical, and political-economic debates in which members of the school figured prominently. The *Methodenstreit* of the late 19th century – prompted by the school’s founder, Carl Menger – led to disputes over positivism and formalism that engaged later Austrian economists in the 20th century. Similarly, at various times in the first several decades of the school’s history, Austrian economists played a critical role in debates with Walrasians, Marshallians, and Knightians over value theory, price theory, capital theory, and market theory. With the rise of the “New Economics” in the late-1930s and 1940s, Austrian economists discovered a new *bête noire*. And, of course, Austrian economists often sharpened their own analytical position in opposition to Marxists and market socialists. In the post-WWII period, these methodological, analytical, and political-economic debates would continue with novel twists and new central characters, but the essential Austrian perspective would remain a powerful antidote to whatever the prevailing professional consensus was at any given time.

Finally, one could survey the Austrian school by considering the various academic homes or the scholarly publications that have fallen under the editorial control of prominent members of the school. The school was of course born at the University of Vienna. For a time following Hayek’s emigration to Great Britain in 1931, the London School of Economics (LSE) was the

source of much of the most cutting-edge work in Austrian economics. In the postwar period, following the emigration of both Mises and Hayek to the United States, and, indeed, up to the present day, the academic contingent of the American revival of Austrian economics has resided primarily at New York University (NYU) and George Mason University (GMU). Moreover, Austrian economists have, at one time or another, exerted direct editorial responsibility over such prominent publications as *Archiv für Sozialwissenschaften*, *Economica*, *Il Politico*, and the *Review of Austrian Economics*.

Our approach is to blend these multiple approaches together to survey the history of the Austrian school and the prospects for its continued development. It is our contention that the best way to address Kirzner's conundrum is not merely to engage in improved scientific salesmanship of the existing body of Austrian thought, but to advance the ideas and use them to solve pressing methodological, theoretical, and practical problems. The professional reputation of the Austrian approach will rise through specific scholarly contributions. The gap that emerged in the 1930s and 1940s between the school and the mainstream was an aberration due to a variety of philosophical and historical contingencies of the time. Of course, the future is in part a function of the path-dependent past and the history of those fateful decades has yet to be completely overcome. Nonetheless, it is our position that the only way to place the discipline of economics back on a path more in harmony with Austrian masters is to actively use these tools to display the methodological, analytical, and practical power of the Austrian approach.¹

¹ In *Living Economics* (2012), Boettke argues that there is a "mainline" of economics and political economy that runs from Adam Smith and David Hume to Mises and Hayek, and from Mises and Hayek to Buchanan and Vernon Smith. This intellectual line is defined by substantive propositions about how the economic system works. There is also a "mainstream" of economics and political economy. However, Boettke argues that this is merely a "sociological" moniker that indicates nothing more than what is currently fashionable among elite economists. There have been several periods through the history of economics when the "mainline" and the "mainstream" were in close alignment, but there have been other moments of significant divergence. During these times of divergence, Boettke contends, various "schools of thought" emerge to act in an entrepreneurial fashion so as to bring them back into alignment. Recent examples of such entrepreneurial "schools" include "property rights economics", "public

The Theory of Practical Knowledge and the Practicality of Theoretical Knowledge

Since its founding, the Austrian school of economics has been both blessed and cursed by a mixed focus on purely scientific contributions to economic theory and practical engagement with public policy. As a student, Carl Menger (1840-1921) was a liberal activist. Menger was educated in Prague and Vienna, and eventually received his doctorate in jurisprudence from Krakow's Jagiellonian University. Prior to his scientific career, Menger had worked as a journalist reporting on daily market news, an experience that catalyzed his interest in economic theory. Menger found that the classical theory of price determination did not align with the way prices emerge in the real-world economy. He sought to align economic theory with the operations of markets he had observed as a journalist.

Menger was appointed to the faculty of law at the University of Vienna in 1871, and assumed the chair in economic theory in 1873. It was here that the Austrian school of economics was born. As can be seen in his *Lectures to the Crown Prince Rudolf of Austria* (1994), Menger's liberal activism never disappeared. However, Menger kept this activism separate from his scientific work. The next generation of Austrian school economists followed a similar approach.

Eugen von Böhm-Bawerk (1851-1914) rose to international prominence in the 1880s with his work *Capital & Interest* (1921), as well the controversy that followed his *Karl Marx and the Close of His System* (1949). From the beginning of his career, Böhm-Bawerk worked both in the Austrian ministry of finance and as a professor of economics. He was first appointed Finance

choice economics", "new institutional economics", and "market process economics". Of course, it should also be acknowledged that those who think the "mainline" is mistaken – Marxists, Historicists, Institutionalists, Keynesians, and Radicals – also engage in entrepreneurial acts to widen the divergence. See White's *The Clash of Economic Ideas* (2012) for a history of the main theoretical and policy-relevant debates of the 20th century.

Minister in 1895 and would serve in this capacity in several separate terms over the next decade. Throughout his time in office, Böhm-Bawerk argued for sound money and fiscal responsibility. Indeed, when he became concerned that mounting military demands were encouraging fiscal profligacy, he resigned from this position in 1904. Friedrich Wieser (1851-1926), the other leading light in the second generation of the Austrian school, also balanced his purely scientific contributions with a commitment to public policy analysis. However, Wieser was more sympathetic to a version of Fabian socialism than the classical liberalism of Menger and Böhm-Bawerk.

The next generation of Austrian school economists included Ludwig von Mises (1881-1973) and Joseph Schumpeter (1883-1950). Both also forged a balance between scientific interests and practical policy concerns. This blend of the theoretical and practical continued with the final generation of Austrian school economists to be trained at Vienna—F. A. Hayek, Fritz Machlup, Gottfried Haberler, and Oskar Morgenstern.

Much of this admixture of the scientific and political can be explained by simple necessity. Scholarly life in Vienna existed largely outside of the university. The development and exchange of ideas was grounded in intellectual “circles” that met regularly, but whose members often held full-time jobs in business or government. As indicated by the example of Menger’s journalistic experience spurring his scientific work, it was also the case that the research interests of many prominent Austrian school economists were the direct consequence of engagement with specific practical problems.

The economists of the Austrian school thus had multiple audiences including: (1) their scientific peers, (2) their students (for those in academia), (3) policy makers (for those who worked, officially or otherwise, on problems of policy), and (4) the general public. The blending

of scientific and practical insights, as well as communication to multiple audiences, characterized many Austrian economists (then and now) and contributed to the revival of the tradition in America. We stress this point because it affects how we interpret the different paths that Austrian economics has taken over time.

These factors have been especially relevant in the new millennium. The Internet has broken down many of the old walls between academic research and popular writing. In the 1940s, when Hayek wrote “The Use of Knowledge in Society” (1945), he understood that he was addressing an audience of fellow professionals, just as Mises understood when he was writing for *The Freeman* in the 1950s that his audience was that of the interested layman. But the modern world of blogs and social media has complicated any such simple sorting. Not everyone is able to speak intelligently to multiple audiences, so intellectual markets historically sorted folks into teaching jobs, policy jobs, journalism jobs, and academic-research jobs. This has changed as today modern technology has blurred the lines that could traditionally be drawn between these categories.

Any survey of the Austrian school of economics, therefore, must acknowledge that this intermingling of the scientific and the practical has been both blessing and curse. The blessing is evident in two points. First, Austrian economists believe that policy relevance is a virtue not a vice and, thus, they tend to focus their attention on pressing issues of public policy. Second, Austrian economists believe that engagement with issues of public concern means that Austrian ideas can be supported outside of the traditional sources of financial provision and intellectual encouragement. There are many amateur enthusiasts of Austrian economics and this fact sustained the tradition during the years when the economics profession had moved decidedly against the general thrust of the Austrian school in methodological, analytical and ideological

terms. The Volker Foundation and the Foundation for Economic Education (FEE) played a critical role in the early period of the Austrian revival in post-WWII America. In the 1960s and 1970s, that same role came to be played by the Earhart Foundation, the Scaife Foundation, the Bradley Foundation, Liberty Fund, and the Institute for Humane Studies (IHS). Professional associations, such as the Mont Pelerin Society and the Philadelphia Society, played a more vital role in the communication of Austrian ideas among professional economists than did, say, the meetings of the American Economic Association. Without a dedicated audience of amateur enthusiasts, there is a strong possibility that the Austrian school of economics would have been simply relegated to a foregone chapter in the history of economic thought—albeit an illustrious chapter with many acknowledged contributions to the development of modern economic thought.

That said, there is also a sense in which this culture of amateur enthusiasts has cursed the subsequent development and absorption of Austrian ideas into the economics mainstream. In America, in particular, the Austrian school became closely identified with the libertarian political movement. Perhaps an analogy might help clarify the relevant point here. It is amateur enthusiasts who make the National Football League the major industry that it is, but were these enthusiasts to take the field on Sundays, American football would surely lose much of its popular appeal. Science is a similar endeavor of expert discourse, and in the postwar period the expert discourse in economics has taken place among university professors and in specialized journals to which many of the central figures of the Austrian revival refused to contribute.² Instead,

² On the other hand, part of the great attraction of the Austrian school of Economics to the amateur enthusiast is that one of the main lessons of its teachings is that the conceit of the expert must always be held in check in the realm of public policy. Mises, in fact, argues in *Human Action* that the role of the economist is to challenge the conceit of those in power. And, a close reading of Hayek's Nobel Prize lecture, "The Pretence of Knowledge" (1989), as well as his *The Fatal Conceit* (1991) will reveal a similar indictment of the arrogance of the "expert." So how do you temper the conceit of the expert, but recognize the earned authority of the scientific expert? See Levy and Peart (2012).

seeking to do an end-run around the academic establishment, they focused on publishing in general outlets and with non-academic publishers.

One relevant factor was that many figures of the Austrian revival held academic posts, but often not in PhD-granting institutions and, thus, they were not beholden to the publishing expectations and demands placed on research faculty. Of course, this also meant that many could not supervise graduate students and, were thereby severely limited in influencing the next generation of economic professionals. In America, during the 1950s and 1960s, the Austrian school could barely be maintained within the academic world. Things would change a bit in the late 1970s and early 1980s when an Austrian emphasis was established within the PhD programs at NYU, GMU and Auburn University.

Prior to the advent of the Internet, the intellectual marketplace sent strong sorting signals so that anyone could understand the different kinds of contributions being made. So, while the amateur enthusiast might have liked to get on the field, the barriers were such that no amateur could simply replace the quarterback. However, the Internet now gives many the impression that anyone can play regardless of background and skill, and this has had a very confusing impact, especially as many policy issues – e.g., former U.S. Congressman Ron Paul’s political opposition to both American foreign policy and domestic economic policy in the wake of the “Great Recession” – have moved the Austrian school to the forefront of public discourse. It is important to keep these issues in mind as we assess the various contributions of the contemporary Austrian school.

The Habsburg Years: The Original Theorists

The marginal revolution in value theory can be traced to 1871 when Carl Menger, William Stanley Jevons, and Leon Walras independently discovered the concept of marginal utility. However, 1871 also marks the birth of the Austrian school. In his *Principles of Economics*, published that year, Menger provided the edifice that would define the Austrians and distinguish their approach from that of other contemporary schools.


Some of the uniquely Austrian concepts that Menger developed include the means-end framework, the relationship between the specificity of goods and their value, and the temporal distinction between goods of higher and lower orders. Menger's emphasis on the temporal element inherent in economic production would be an important distinguishing characteristic of the Austrian school. In addition, Menger stressed the marginal aspect of the value of goods which, in turn, led to the famous Law of Marginal Utility.³ Finally, Menger described an innovative theory of exchange that stressed price formation in the real world as opposed to price determination in general equilibrium. This led Menger to criticize the pricing analysis of his contemporaries, as well as their use of the unrealistic assumption of continuous mathematical functions to describe exchange.

Menger's next book, *Investigations into the Method of the Social Sciences* (1883) considered the methodological aspects of economic theorizing and sparked the infamous *Methodenstreit*, (in English, "battle over methods"). In this book, Menger first described spontaneous orders a concept that would be used by many later Austrians.⁴

³ Menger did not actually use the term marginal utility. The first Austrian to do so was Friedrich von Wieser. In contrast to his contemporaries, for Menger, marginal utility was a ranking, or a choice among two goods, and not a psychological concept measuring satisfaction.

⁴ Menger ([1950] 1871, 1892) described the formation of money in this way. The hallmark of this style of reasoning is that the analyst derives the "invisible-hand" theorem from the "rational choice" postulate via institutional analysis. In other words, the analyst begin with purposive actors then specify the institutional filter

The Mengerian legacy would be carried on by Eugen von Böhm-Bawerk and Friedrich von Wieser, Menger's two most prominent colleagues at the University of Vienna. Menger's defense of the place of deductive theory in economics would be taken up by Böhm-Bawerk in both German- and (via translation) English-language scientific discussions. However, both Böhm-Bawerk and Wieser were primarily concerned with working out the implications of Menger's insights in analytical economics rather than in methodology.

Böhm-Bawerk expanded the architectonic structure of Austrian theory originally set out by Menger. In *The Positive Theory of Capital* (1889), Böhm-Bawerk built on Menger's price theory with his "marginal pairs" analysis, which describes the zone of an equilibrium price achievable in the real world without relying on continuous demand and supply schedules. Böhm-Bawerk also built off of Menger's distinction between goods of higher and lower orders in developing a capital theory that emphasized the temporality of production. Producing higher-order goods refers to engaging in roundabout (long-term) production processes, as their production is more temporally remote from final consumption than are lower-order goods (obtained through shorter production processes). Production in a society increases through the additional utilization of long-term production processes that are more productive than shorter ones. Böhm-Bawerk was instrumental in highlighting the fact that the economy is a structure of production consisting of heterogeneous (i.e., relatively specific) capital goods employed in production processes of varying degrees of roundaboutness. 

In addition, Böhm-Bawerk developed an influential theory of interest. In his *History and Critique of Interest Theories* (1884), Böhm-Bawerk dissected earlier explanations for

within which they pursue their purposes and interact with others pursuing their purposes, and then identify the equilibrating tendencies from the interplay of the logic of action with the logic of the situation. See Boettke, *Living Economics* (2012) for a discussion of this style of reasoning and its centrality to the "mainline" of economics and political economy.

interest. Böhm-Bawerk in turn emphasized time preference, i.e., that individuals prefer present consumption to future consumption, as one of the factors accounting for interest. He (1962 [1896]) used this to demolish the Marxian myth that interest was an exploitative phenomenon. Although there were disagreements between the two – for reasons that remain somewhat obscure, Menger famously described Böhm-Bawerk’s capital theory as “one of the greatest errors ever committed” (Schumpeter 1954, 847) – Böhm-Bawerk’s canon is firmly within the approach originally laid out by Carl Menger.⁵

Wieser was instrumental in developing the concept of opportunity cost, which in turn led to the Law of Cost.⁶ The value of factors of production used in a production process is in part determined by the various forgone alternatives of other consumer goods they could produce. The prices of consumer goods, which are based off of their utility, determine the cost of factors, and not the other way around.⁷ Wieser’s most famous works were *Natural Value* (1893) and *Social Economics* (1914). However, for various reasons, Wieser’s works are fundamentally different than those of Menger and Böhm-Bawerk, and future advancements in the Austrian school did not build off of them.⁸

Other important theorists that could be counted among the second generation of Austrian economics include Philip Wicksteed and Frank A. Fetter.⁹ Although he explicitly pledged allegiance to Jevons, a close reading of Wicksteed’s economics places him more in the Austrian

⁵ Böhm-Bawerk would revise both books throughout his career. They were combined, with additional essays, into the three-volume treatise *Capital and Interest* ([1959] 1921). Mises considered Böhm-Bawerk’s works “the most eminent contribution to modern economic theory” and strove to build off both his and Menger’s insights (Mises [1990] 1959, 155). In addition, Hayek’s work on capital and business-cycle theory in the 1930s, which will be discussed further below, was based off of Böhm-Bawerk’s theories.

⁶ Böhm-Bawerk also substantially developed and explicated this theory (Böhm-Bawerk 1962 [1894]).

⁷ This Austrian analysis of costs is fundamentally different from the Marshallian theory, which implied Neo-Ricardian real cost as the long-run determinant of the value of goods (Robbins 1933, xvii).

⁸ For example, his theory of cost and value imputation is based on a nonmonetary communist economy. Mises harshly criticized Wieser and acknowledged that some of his theories could justify considering him more of a Walrasian than Austrian (Mises 2009 [1978], 27-28).

⁹ For more on Menger and Böhm-Bawerk, see Salerno (1999a) and Garrison (1999) respectively. For more on the distinctiveness of the founding Austrians in comparison to the Marshallians and Walrasians, see Endres (1997).

tradition. Among other insights, his *The Common Sense of Political Economy* (1910) made notable contributions to the theory of price. First, Wicksteed developed total demand-stock analysis, which shows that the traditional forward sloping supply curve is nothing but a reservation demand by sellers for an existing stock of a produced good; in the absence of this, Wicksteed showed, demand price is exclusively determined by consumer demand.¹⁰ Second, Wicksteed analyzed the process by which disequilibrium prices (where shortages and surpluses exist) converge to equilibrium prices as market participants obtain greater knowledge and better appraise their situations, a particularly important point that foreshadows later Austrian analyses of uncertainty and the market process.¹¹ In various essays and in his *Economic Principles* (1915), Fetter contributed to the Austrian tradition via his work on the theory of rent and the pure time-preference theory of interest. In particular, Mises would build off of Fetter's work and argue that time preference is the sole determinant of interest, in contrast to Böhm-Bawerk, who defended a more eclectic approach.¹²

After World War I, the intellectual leadership of the Austrian school would shift to a new generation of scholars. By the 1930s, the unquestioned leaders of the school were Ludwig von Mises and F.A. Hayek.

¹⁰ This is in sharp contrast to the Marshallian forward-sloping supply curve that is supposed to interact with an instantaneous demand curve. This Marshallian supply curve is particularly influential in modern partial-equilibrium analysis.

¹¹ When discussing the Austrian qualities of Wicksteed, Kirzner (1999, 103), notes that both he and Rothbard relied upon Wicksteed's contributions in their respective price theories. Wicksteed's influence both at the LSE and, through Frank Knight, at Chicago is often overlooked in discussions of the subsequent development of economic theory. The "common-knowledge" of economists at different points in time and at different academic institutions is a topic that deserves much greater recognition and investigation. Irwin Collier's "Economics in the Rear-View Mirror" project is a potential corrective of this deficiency (see <http://www.irwincollier.com/>).

¹² Rothbard built off of Fetter's rent theory. For a collection of his works, see Fetter (1977).

The Interwar Years: From Mises to Hayek

The next phase in the history of Austrian economics would mark both the rise and fall of the school. The Austrian approach was considered cutting-edge throughout the 1920s and into the early 1930s, but was already passé by the end of World War II. This sets up the Kirznerian conundrum and the future shift in the JEL codes discussed in the introduction. Many mainstream economists would argue that by this time all of the important Austrian insights had been incorporated into the body of Neoclassical thought.¹³ However, as Kirzner (2014) has argued, this was in fact when the Austrians' most distinctive contributions were made. These contributions were in the fields of money and the trade cycle, economic calculation and the market process, and economic methodology. The main force driving all of these advancements was Ludwig von Mises.¹⁴

Böhm-Bawerk unexpectedly died in 1914, and Menger had stopped writing economics long before his death in 1921. This would open the door for the next generation to take over the scientific leadership of Austrian economics. Three names dominate this period in Austrian economics: Joseph Schumpeter, Hans Mayer, and Ludwig von Mises.¹⁵ Mises had established himself as one of the leading voices of his generation of economists in the German-language scientific community with the publication of *The Theory of Money and Credit* (1912). Although

¹³ In 1932, Mises argued that the Austrian, Marshallian, and Walrasian schools were different only in their methods of presentation. However, his remarks should be understood in context. What he meant was that Austrian and Neoclassical economists, as opposed to Historicists and Socialists, shared common ground with regard to the theoretical character of economics and their refutations of interventionist dogma. However, when focusing more on theoretical nuances, Mises acknowledged important differences between the schools (Salerno 2009, xxviii-xxix; Boettke [2012] 1997, 268-60).

¹⁴ This is the reason, we argue, for Hayek's statement in *The Counter-Revolution of Science* that Mises was ahead of his contemporaries (Hayek 1952, 52).

¹⁵ Schumpeter moved to a teaching post in Bonn, Germany in 1925 and then to Harvard in 1932, so his role in the Austrian community of scientific economists was minimal after that time. Mayer assumed Wieser's chair at the University of Vienna and later ascended to the presidency of the Austrian Economics Society, as well as the role of main editor of *Zeitschrift für Sozialpolitik und Verwaltung*. Mayer is discounted historically due to his shameful accommodation of the Nazi regime. His career was typically judged by those who were forced to migrate in the 1930s as a personal and professional failure. But, it must be acknowledged that, in the 1920s, he and Schumpeter were major influences in the community of Austrian economists.

Mises' work was more closely allied with the Menger-Böhm-Bawerk approach, Böhm-Bawerk placed greater hope on Joseph Schumpeter for the advancement of economic theory at this time.¹⁶ Böhm-Bawerk never developed a theory of money and appears to have not thought highly of Mises' work (see Garrison 1999, 119-20; Salerno 1999b, 41-42).

In his book, Mises advanced the Mengerian and Böhm-Bawerkian approach in many ways. These include the ordinal nature of marginal utility and its application to money, his regression theorem according to which money must originate as a commodity, and his monetary transmission mechanism, which showed that monetary injections were non-neutral. Mises' analysis stands in stark contrast to the contemporary works of Irving Fisher, who argued for an aggregative approach that relied on holistic concepts such as velocity and the price level, and who believed that money was neutral in the long run. Most importantly, Mises combined Böhm-Bawerk's capital theory with Knut Wicksell's natural rate of interest and developed his theory of the trade cycle, later known as Austrian Business Cycle Theory (ABCT). In this theory, Mises argued that the manipulation of money and credit by the central bank distorts interest rates and the structure of production, a process that inevitably leads to a bust.¹⁷

A critical part of Mises's work in *The Theory of Money and Credit* was a nascent theory of the role of monetary calculation in the coordination of economic affairs. Mises argued that the

¹⁶ Far from following in Böhm-Bawerk's footsteps, Schumpeter's work was closer in spirit to Wieser and Walras. Indeed, Böhm-Bawerk criticized Schumpeter's theories (Salerno 1999b, 39-41). Due to the educational-institutional structure of the Austro-Hungarian Empire, academic appointments to full-time chairs at the University of Vienna were both rare and political. Mises's failure to secure a chair must be interpreted in this context. In any case, it should be remembered that Mises was several times the second choice in such deliberations. Still, as has often been pointed out, a full-time chair for Mises was a hard sell because (a) he was Jewish, (b) he was a classical liberal, and (c) he didn't suffer fools. It has been pointed out that someone with Mises' considerable accomplishments could get a full-time appointment with any two of these traits, but not with all three. However, it is important to stress that Mises's position as *Privatdozent* at the University of Vienna did not limit his subsequent accomplishments. The international reputation of his research seminar was such that, through his connects with the Rockefeller Foundation, he was able to secure travel funding for several of his students and finance the operations of the Austrian Institute for Business Cycle Research.

¹⁷ Mises would continue to develop and refine his monetary theory throughout the 1920s and early 1930s. For collections of these essays, see Mises (1978; 1990).

very phenomena of money presupposes an economic order based on productive specialization and private property rights in producer as well as consumer goods. Money prices serve as guides to the human mind and as such are the essential tool in the economic calculation of alternative investment activities. After WWI, Mises further developed his ideas about the centrality of monetary calculation in coordinating advanced material production, first in his critique of “War Planning” in *Nation, State and Economy* (1919), then with the theory of economic calculation he developed in “Economic Calculation in the Socialist Commonwealth” (1920) and, finally, with his more elaborate treatment in *Socialism* (1922).¹⁸

In these works, Mises showed that the only way to rationally allocate society’s scarce means among competing ends – i.e., the only way to solve society’s economic problem – was for entrepreneurs in the private-property market economy to rely upon the knowledge provided by the profit-and-loss signals indicated by changes in money prices. According to Mises, private property offers not only incentives to husband resources efficiently, but also provides the basis for exchange. It is in the market for the means of production that exchange ratios are formed which constitute the money prices that, by forming the basis for profit-and-loss accounting, guide economic decisions. In socialist societies economic calculation is rendered impossible because the abolition of private property in the factors of production means that there is no market for these factors. Without a market, there will be no money prices that reflect the relative scarcities of the factors. As a result, there will be no way to distinguish the most economical projects from the array of those that are technologically feasible. Economic calculation will be absent and, as a result, socialism cannot sustain a modern industrial economy. Mises’s critique

¹⁸ The seeds of economic calculation were in Böhm-Bawerk’s description of the Law of Costs, and can also be seen in Wieser’s discussion of the problem of economic planning.

challenged how socialists understood the viability of their system and sparked the famous “socialist calculation debate.”

In his *Epistemological Problems of Economics* (1933), Mises also made major contributions to the field of economic methodology. Mises argued that sociology, or the general theory of human action, and its most developed branch – economics – was a deductive system grounded on the axiom of human action – which he argued was *a priori* – plus various subsidiary empirical propositions. As, in his assessment, the field of sociology had been diverted by the influence of Durkheim away from the more appropriate foundations laid by Max Weber, Mises adopted the term *praxeology* to describe this science of human action. Mises’s philosophical position stood in stark contrast to the growing trend of his day toward, in one direction, formalism, and, in another direction, positivism.

Mises’s neighbors, the logical positivists of the Vienna Circle, argued for the unity of science (rather than the methodological dualism advocated by Mises), while the burgeoning formalist movement, perhaps best embodied at the time by Karl Menger’s (son of the Austrian school’s founder) Mathematical Kolloquium at the University of Vienna, insisted that economists should build formal models that would yield tentative hypotheses that could be tested empirically and quantitatively (rather than the more nuanced negation that might arise in the interpretation of history via theory that Mises envisioned).

During the second half of the 1930s, Mises published little technical economics as he was working on a planned treatise titled *Nationalökonomie*. It is also important to recall a critical point raised in the introduction, namely, the great migration from Vienna of Austrian economists throughout the 1930s. Moreover, Mises’s works were not widely available in English, so the communication of his essential contributions to economics would be left to others in his

Viennese research circle who moved to the UK and the US in the 1930s. This opened the door for younger colleagues such as Fritz Machlup, Oskar Morgenstern, Gottfried Haberler, as well as contemporaries like Joseph Schumpeter, to convey the Austrian school's contributions to English-language scientific communities. The most prominent of the younger scholars, and the one most closely associated with Mises, was F.A Hayek. Following his move to the London School of Economics in 1931, Hayek – along with the Englishmen Lionel Robbins, who headed the LSE economics department – would represent the ideas of the Austrian school in debate with both the market socialists and the Cambridge (U.K.) school best represented by John Maynard Keynes.

Although he was not among Mises' students, Hayek considered Mises his mentor and developed Mises' analyses in many ways, especially in the fields of trade-cycle theory and economic calculation. It was, in fact, Mises who provided Hayek with his first job as an economist at the Vienna Chamber of Commerce and the two worked in close collaboration for about a decade. Hayek would soon publish a number of essays and books on trade-cycle theory, particularly *Prices & Production* (1931/1935), and *Monetary Theory and the Trade Cycle* (1933).¹⁹

In these works, Hayek expanded upon Böhm-Bawerk and Wicksell's theories, and refined the structure-of-production concept.²⁰ Hayek argued that the interest rate is really the price spread between various stages of production that capitalists would earn in long-run

¹⁹ Later essays can be found in Hayek (1939). See also his book on monetary theory (1937).

²⁰ Contrast the Austrian capital and interest theory with those of contemporary Marshallians and the Chicago school economist Frank Knight. Although Knight would influence later Austrians on the problems of entrepreneurship, profit and loss, and probability theory, his work on capital and interest is considered anathema. In particular, Knight argued that capital was a self-perpetuating homogenous fund and that time was not an important factor in production. He also banished time-preference as a determinant of interest, something that Hayek initially accepted before returning to an eclectic Böhm-Bawerkian approach completely at odds with the Fetter-Mises pure time-preference theory of interest.

equilibrium. The interest rate would fall or rise depending on how the proportion of consumption to investment changed. He used this to show that the lengthening of the structure of production was either sustainable or not depending on whether it was caused by an increase in voluntary savings or by credit expansion. Mises and Hayek used ABCT to explain the onset of the Great Depression and the inability of governments to use deliberate policy to correct the misaligned structure. The Mises-Hayek explanation of the Great Depression was advanced in two works, *The Great Depression* (1934) by Lionel Robbins and the unfortunately neglected *Banking and the Business Cycle* (1937) by the American economists Chester A. Phillips, T.F. McManus, and R.W. Nelson.²¹ Further works in the ABCT tradition include Fritz Machlup *The Stock Market, Credit, and Capital Formation* (1940), Richard von Strigl *Capital and Production* (1934) and Gottfried von Haberler “Money and the Business Cycle” (1932).

In the 1930s, an English-language socialist calculation debate arose in response to Mises’s original contribution. According to the market socialists, Mises’ economic calculation problem could be overcome by solving, either via mathematics or trial-and-error, a Walrasian system of equations describing a general equilibrium condition. Hayek responded in *Collectivist Economic Planning* (1935), a collection of essays on the controversy that he edited and to which he contributed two essays. Hayek soon wrote a third essay, included in his *Individualism and Economic Order* (1948), on the calculation debate. Hayek argued that solving such a system mathematically would be insuperably complex.²² The socialists Oskar Lange and Abba Lerner responded that the managers of nationalized firms could “play market” and solve the economic

²¹ Robbins would be a particularly important colleague of Hayek at the London school of Economics. During the early 1930s in addition to the above book he wrote several Austrian essays on cost (1930, 1934) and introductions to works of Mises, Hayek, and Wicksteed (1931, 1933, 1934). He also wrote *An Essay on the Nature and Significance of Economic Science* (1932), which was a methodological book grounded in the Misesian tradition.

²² Robbins (1934) also argued along similar lines. This method of argumentation was seen by many contemporaries as changing the Austrian position to one of the impracticability rather than, as argued by Mises, the impossibility of effective socialism.

problem via trial-and error. However, Hayek argued that this “solution” still missed the fundamental properties of markets – i.e., private property and market-determined prices – that allow for effective economic calculation. Hayek’s point was that these attempted “solutions” to Mises’ original socialist calculation critique presupposed the availability to the socialist policymaker or manager knowledge that could be *discovered* only in the marketplace. Hayek’s “The Meaning of Competition” (1946) would later deploy this same criticism against the sterile perfect competition model.

Unfortunately, by the beginning of World War II, the Lange-Lerner “solution” was widely accepted in the economics community, and Hayek’s prescient warnings went unheeded. In addition, the perceived usefulness of ABCT went into decline throughout the decade, especially with the publication of John Maynard Keynes’ *General Theory of Employment, Interest and Money* (1936), which forever altered the landscape of the economics discipline. Keynesian economics explained economic fluctuations using holistic macroeconomic aggregates that ignored the structure of production and the coordinating role of relative prices, as understood through the Hicksian IS-LM diagram. Keynes and Hayek had dueled earlier, beginning with Hayek’s trenchant reviews of Keynes’s previous *Treatise on Money* (1930) (Keynes 1931, Hayek 1931b, 1931c, 1932). By the end of the 1930s it was generally accepted within the economics community that Keynes and his followers had won the debate. As a result, the Keynesian approach would dominate economic theory in the 1940s and beyond.²³ Other than Mises and Hayek, nearly all of the adherents of ABCT repudiated the theory and became Keynesians. The Austrians were consigned to the dustbin of history. Both Mises’s *Nationalökonomie* (1940) and Hayek’s *The Pure Theory of Capital* (1941) fell more or less stillborn from the press.

²³ For a comparison of Keynes’ and Hayek’s views, see White (2012).

Mises would emigrate from Geneva (his home since leaving Vienna in 1934) to the United States in 1940. Though he struggled to find his way in an unfamiliar nation at the relatively advanced age of 60, Mises accepted an offer to work with the National Bureau of Economic Research, and soon published two books, *Bureaucracy* (1944) and *Omnipotent Government* (1944). Still in London, and convinced that the intellectual world had gone haywire due both to an epistemological attitude that refused to acknowledge human cognitive limitations with respect to social phenomena and an analytical error that ignored the role of institutions in social analysis, Hayek would soon embark on his, ultimately uncompleted, “Abuse of Reason” project. The sort of *epistemic institutionalism* that he had hinted at in his “Economics and Knowledge” (1937) simply eluded his contemporaries. When he first embarked on this project with *Freedom and the Economic System* (1939) and *The Road to Serfdom* (1944), Hayek was seen by his contemporaries as moving away from economics toward political theory and philosophy. There is a strong sense of intellectual isolation that both Mises and Hayek experienced in the immediate postwar era. It certainly seemed that the Austrians were down, but, as it happened, they would not be counted out.²⁴

Before the Revival: Lachmann, Rothbard, and Kirzner

The decade of the 1940s is a critical time in our narrative because economics had abandoned the last vestiges of Austrian advancements in the past two decades and, by the early 1950s, had coalesced into the neoclassical synthesis. War-torn Europe would see a further migration of

²⁴ It is important to remember that, at this time, Schumpeter, Morgenstern, Machlup, Haberler, etc. were all making their own way in their new academic homes. Machlup, in particular, is a case study of academic assimilation. To the discerning reader, Machlup’s Misesianism is evident throughout his economics, but to those who think of Mises only in terms of a dogmatic insistence on *laissez faire*, Machlup might seem to have been cured of Misesianism. However, critics misunderstood the Misesian position on methodology and were completely unsympathetic to his politics, and so, neglected the profound affinities between Machlup and Mises.

academic economists to the United States which, due to both the GI Bill and the Cold War, would experience a great expansion of higher education during the next three decades. The center of gravity within the science of economics moved decidedly to the United States after WWII, and to professional economists in the United States, the Austrian economists were simply outdated relics. It is not accurate to say that Mises and Hayek were unknown, but it is true that, by the 1950s, they were viewed as largely irrelevant to the further technical development of economics, an irrelevance fully captured in the JEL codes.²⁵

The neoclassical synthesis was the post-WWII fusion of Walrasian and Marshallian microeconomics with Keynesian macroeconomics undergirded by increasingly mathematical methods in theory, and positivism in empirical research. The works that most contributed to this synthesis were Hicks' *Value and Capital* (1946), Stigler's *The Theory of Price* (1946), and Samuelson's *Foundations of Economic Analysis* (1947), the latter of which combined a coordinating Walrasian microeconomics with a discoordinating Keynesian macroeconomics (Boettke 2012 [1997] 272-73; Salerno 2009, xl-xlii, xxi-xxii).

However, even in this environment, Mises continued to work to advance Austrian economics. By far his most important work of the 1940s, and widely acknowledged to be the most important Austrian work of the 20th century, was his epochal *Human Action* (1949). An English-language revision of his earlier *Nationalökonomie* (1940), this sweeping treatise elaborated and refined his earlier advancements in money, calculation, and method, as well as in

²⁵ This is something of an overstatement with respect to Hayek's "The Use of Knowledge in Society" (1945), which would in fact stimulate several generations of economic theorists, e.g., the mechanism design work of Hurwicz, the information economics of Stigler, subsequent developments in information-theoretic economics by Stiglitz, and modern work on imperfect-knowledge economics by Frydman. This being said, Hayek's own unique understanding of the knowledge-generating role of the competitive market process would not be picked up in these rather "mainstream" efforts (Boettke and O'Donnell 2013).

other fields (such as interventionism).²⁶ The bedrock of his system was his elucidation of the market process, where appraising entrepreneurs seek to make profits and avoid losses in accordance with the dictates of consumer sovereignty. In doing so he showed that the free market is the most effective institutional framework for the promotion of general welfare.

Although he mostly neglected his earlier work on capital theory, Hayek also continued to write in the 1940s and produced a collection of several of his most important early essays on knowledge, calculation, and the market process, titled *Individualism and Economic Order* (1948). In the 1950s, Mises and Hayek would continue to write about economics, especially its epistemology and methodology.²⁷ However, Hayek's focus was primarily on philosophy and legal theory, while the aging Mises concentrated on popular articles meant to articulate economic principles to the layman. It was ultimately in this decade that the responsibility for advancing technical Austrian economics would be passed to a new generation, best represented by Ludwig Lachmann, Murray Rothbard, and Israel Kirzner.

Lachmann had been a student of Hayek's at the LSE and his career in economics focused on capital and the theory of expectations, two fields also developed in Hayek's early work. Lachmann's most important work was *Capital and Its Structure* (1956), a book grounded in the structure-of-production tradition. He argued that the economy contained a vast network of heterogeneous capital goods constructed according to the various plans and forecasts of economic actors. Lachmann's work on expectations and their role with regard to convergence to general equilibrium would continue to evolve over the course of his career. He came increasingly

²⁶ Mises wrote that only in *Nationalökonomie* did he fully explicate the theory of economic calculation and presented a unified price theory grounded in praxeology (2009 [1978], 95). This led to him describe the pricing process in terms of ordinal rankings of money and goods as opposed to the indifference curve barter framework which assumed a numeraire. Another important advancement was his elaboration of Fetter's pure time preference theory of interest to combat the eclectic Böhm-Bawerkian approach most recently developed by Fisher.

²⁷ See Hayek's *The Counter-Revolution of Science* (1952), and Mises's *Theory and History* (1957) and *The Ultimate Foundation of Economic Science* (1962).

under the influence of G.L.S Shackle, and would eventually argue that divergent expectations prevent a convergence to equilibrium, a controversial position that became a particular bone of contention among later Austrians.²⁸ However, after *Capital and Its Structure*, Lachmann was drawn into university administration and only returned to research in the late 1960s. At the start of the next decade, Lachmann published *The Legacy of Max Weber* (1971).

In contrast to Lachmann, Rothbard and Kirzner, who were both a generation younger than Lachmann, were working on their PhD's in the 1950s and were taught (officially or otherwise) by Mises. Although not a formal student, Rothbard attended Mises' seminars throughout the 1950s, while Kirzner received his PhD directly under Mises. Both sought to position themselves firmly within the Misesian tradition.²⁹

In the 1950s, Rothbard's most important essays in the Austrian tradition were "Towards a Reconstruction of Utility and Welfare Economics" (1956) and "In Defense of 'Extreme Apriorism'" (1957). The first, published in a *festschrift* honoring Mises, defended Austrian views on utility and offered a new welfare theory. The second was a response to a debate between Machlup and Hutchison on the relationship between positivism and Mises' apriorism. Machlup tried to provide a defense of his former mentor from within a framework compatible with positivism. Rothbard argued against Machlup's interpretation and defended Mises' praxeological framework as one where economic laws are deduced from realistic self-evident axioms.³⁰

Rothbard was commissioned by the Volker Fund, an institute that promoted the ideas of Austrians and likeminded scholars, to write a textbook version of *Human Action*. The underlying

²⁸ For a collection of Lachmann's various essays during this period, see (1977).

²⁹ Hans Sennholz was another of Mises's students during this time and for many years represented the Misesian position from his faculty position at Grove City College, as well as in popular essays and books. However, all of his work was directed at students and interested laymen rather than scientific peers. His influence on the subsequent development of Austrian economics in the second half of the 20th century was channeled mainly through the legions of students he taught at Grove City, many of whom would go on to academia, public foundations, and think tanks.

³⁰ For a recent view that defends Machlup's interpretation see Zanotti and Cachanosky (2015).

ideas was that Mises's treatise assumed an audience familiar with technical economics, so a more popular treatment was needed in order to communicate Mises's ideas to the laymen.³¹ Rothbard worked on this project for several years and eventually decided to develop a full-blown treatise in the style of Mises' work. The result was *Man, Economy, and State* (1962), a landmark book in Austrian economics and one of the core texts in the subsequent revival of interest in Austrian economics among younger research scholars in the 1970s.

Rothbard's work was both an alternative to Samuelson's *Economics* (1948) and an attempt to return to the older style 19th-century treatise in economics that proceeded in steps from the basics of economic reasoning to more advanced, and at points very controversial, positions in theory and public policy. Among Rothbard's many theoretical innovations was a production theory that synthesized earlier strands of thought in the Austrian tradition. Rothbard combined the structure-of-production theory of capital with the pure time-preference theory of interest to provide a unified position on the interest rate (Salerno 2009, xxvii). Rothbard's production theory represented the Austrian middle ground between isolated Marshallian firms and holistic Keynesian aggregates. The theory was further distinguished from Walrasian general equilibrium in that it concentrated on real-world dynamic adjustment processes. Rothbard also resurrected Fetter's rent theory to help explain factor pricing and incomes.³²

Rothbard wrote a second important book, *America's Great Depression* (1963), which provided an up-to-date Mises-Hayek explanation of the Great Depression. *America's Great Depression* was meant to challenge the prevailing wisdom according to which the Great

³¹ Note how this stated purpose reflects back on our discussion in section II.

³² Mises praised the book, writing that "as the result of many years of sagacious and discerning meditation, [Rothbard] joins the ranks of eminent economists by publishing a voluminous work, a systematic treatise on economics...adopting the best of the teachings of his predecessors, and adding to them highly important observations" (Mises 1962). However, he criticized Rothbard's forays into philosophy and legal theory, disciplines that would consume much of Rothbard's later career.

Depression demonstrated the inherent instability of free-market capitalism and the necessity of government management of the economy in order to avoid the social ills of economic volatility and mass unemployment. Rothbard argued that the Federal Reserve's inflationary credit expansion in the 1920s caused an unsustainable bubble that led to the 1929 stock market crash. Rothbard further catalogued the litany of government interventions that exacerbated the subsequent depression. Needless to say, Rothbard's Austrian account stood in stark contrast to the prevailing Keynesian and Monetarist explanations of the Great Depression.³³


Though four years younger than Rothbard, Israel Kirzner started publishing around the same time.³⁴ In his first book, *The Economic Point of View* (1960), a published version of the dissertation he had completed under Mises,³⁵ Kirzner provided an intellectual history of the evolution of the economics discipline, chronicling its transformation from the science of wealth to the science of welfare. At the pinnacle of this science was Mises' praxeological system. In this book, Kirzner briefly touched upon a point that he would later develop more fully, namely, the relationship between Robbinsian economizing and Misesian human action.

Kirzner's second book, *Market Theory and the Price System* (1963), was a textbook intended for the contemporary neoclassical audience of the 1960s that attempted to fuse older neoclassical price theory with Austrian insights. It marked the beginning of Kirzner's later efforts to use Austrian insights within a neoclassical system. Perhaps the most important insight was Kirzner's analysis, using the Böhm-Bawerkian marginal pairs and Wicksteedian total

³³ Mises thought it was important enough to cite in a revised edition of *Human Action* (1966), and Hayek spoke highly of it in private conversations (Gordon 2009). Rothbard published two additional essays on money during this time, the first a defense of gold against the Chicago monetarists, and the second an introductory monograph on money and inflation (Rothbard 1962b, 1963b).

³⁴ After delays due to conflicts with his first thesis advisor, Arthur Burns, forced Rothbard to switch to a second advisor, Joseph Dorfman, Rothbard finally earned his PhD from Columbia in 1956. Kirzner completed his PhD in 1957. Rothbard had published in the *American Economic Review*, *Southern Economic Journal*, and *Quarterly Journal of Economics* between 1950 and 1960 prior to publishing *Man, Economy, and State*.

³⁵ Mises wrote a forward to the book, and had earlier recommended Kirzner for a position at NYU.

demand-stock framework, of convergence to equilibrium. In fine Wicksteedian fashion, Kirzner showed that, in any given market, incorrect speculative forecasts lead to disequilibrium prices. Transactions at these disequilibrium prices lead to a revision of plans and encourage learning among market participants that direct prices towards equilibrium. This analysis concentrated on the equilibrating *process*, rather than the equilibrium *end-state*, an important point considering the Austrian emphasis on real-world disequilibrium pricing, and would lead directly to Kirzner's later work on the equilibrating entrepreneur. 

While both Rothbard and Kirzner were able to penetrate the mainstream by publishing in academic journals such as the *American Economic Review*, *Journal of Political Economy*, and *Quarterly Journal of Economics*, this was *not* where they concentrated their efforts to communicate to fellow scholars. They aimed instead at producing scholarly monographs and textbooks; and they both wrote to a broader audience about the importance of economic thought for understanding the world and public policy. Compare these aims with the activities of contemporaries such as Gary Becker and James Buchanan – both methodological individualists and (more or less) free market advocates – and the point we raised in the introduction concerning the pre-Internet mechanism of sorting the scientific and the practical should become clear. Becker and Buchanan certainly produced scholarly monographs, but these were typically followed by detailed scientific studies published in professional journals; neither wrote textbooks or treatises, let alone popular essays, in the early years of their careers. Becker and Buchanan built their respective scientific careers during the 1950s and 1960s, and they faced the same hostility in terms of advancing their unique research agendas in the economics profession. Yet, unlike Rothbard and Kirzner, both would go on to win widespread professional acclaim, including Nobel Prizes.

Why did Rothbard and Kirzner pursue their careers in this unorthodox fashion? There's no need for psychological speculation here. It suffices to point out that the journals of the era were allergic (and increasingly so) to certain styles of economic argument. In such an environment, the decision to write books and popular essays was an obvious one.³⁶ For very personal reasons, both remained somewhat more distant from the economics profession than would be considered normal for a young research scholar. This is all the more puzzling considering that both had easy access to the mainstream in the form of Fritz Machlup, a very social person who was seriously engaged with the elite of the economics profession, and who certainly could have encouraged these young professors in their interactions with non-Austrian economists. Alas, such social aspects of science were not inculcated in the American Austrians. So it was multiple factors, both within the profession and through decisions taken by practicing Austrian economists during the third quarter of the 20th century, which tended to reinforce the *sub rosa* existence of the Austrian School.

Other important books in the Austrian tradition published during this period include Henry Hazlitt's *The Failure of the "New Economics"* (1959) and *The Critics of Keynesian Economics* (1960)³⁷ and W.H. Hutt's *Keynesianism-Retrospect and Prospect* (1963). Both Hazlitt and Hutt were consumed with bringing to light the defects of the Keynesian system. One could be forgiven for thinking that the torrent of books published by notable authors during these years might have sparked an Austrian revival in the 1960s, but this was not the case. These

³⁶ A bibliography of Rothbard's writings is available here: <https://mises.org/library/rothbard-bibliography>. An incomplete bibliography of Kirzner's writings that captures the critical first decade of his career can be found here: <http://www.econ.nyu.edu/user/kirzner/>. What these bibliographies reveal is that, while both Rothbard and Kirzner had some success in the professional journals, they devoted at least as much time writing for outlets such as *The Freeman* and *National Review*. Rothbard was always very comfortable in his role as radical heretic to the scientific orthodoxy. Kirzner was more focused on pure scholarship, but even his career reflected the common Austrian engagement with matters of public interest that we discussed in section II.

³⁷ That Hazlitt, a well-known journalist and editorialist, made important, if non-academic, contributions to the Austrian tradition reinforces the mixed blessings of the Austrian tendency to intermingle the scientific with the popular.

books were widely ignored by the profession. Moreover, little work was done in Austrian economics proper during the rest of the decade.³⁸

However, those books – particularly Rothbard’s *Man, Economy, and State* (1962) – did inspire a renewal of interest in Austrian economics among libertarian scholars and younger students.³⁹ The mainline of Austrian economics had always been oriented toward the free market. Mises’s work further encouraged the public perception of this orientation to such a degree that, during these years, he was commonly dismissed as an anachronistic free-market ideologue. Of course, Rothbard’s writings, academic and popular, as well as his political activism, led him to an even more extreme *laissez-faire* stance. For better or worse, the future of Austrian economics was monogamously wedded to political libertarianism.⁴⁰ And by the early 1970s, a full-blown Austrian revival was on the horizon.

Austrian Economics Through the End of the 20th Century: New Paths and Tensions

Ludwig von Mises was named as a Distinguished Fellow of the American Economic Association in 1969. This was a considerable scientific honor, but the impression was that the award was for lifetime achievement and not an indication that future researchers should follow

³⁸ Exceptions are Kirzner’s monograph on capital theory (1966), which was strongly influenced by Lachmann (1956), and an essay on markets (1967), and some essays found in Lachmann (1977)

³⁹ The collapse in the scientific development of Austrian economics within the profession during the 1960s was in part due to the collapse of the Volker Fund in the early part of the decade. Its termination weakened the strategic organization of scholars and financial resources dedicated to the revival, and the growth of other similarly-minded institutes was stunted until the early 1970s (Doherty 2007, 292-97). The unrest of the 1960s, the anti-war movement, and the subsequent economic stagnation of the early 1970s proved to be fertile ground for young minds inclined to distrust so-called experts and to look outside the establishment for fertile insights, and it is here that the controversial idea of “Austro-Libertarianism” emerged with all its strengths and weaknesses.

⁴⁰ At the University of Virginia’s Thomas Jefferson Center for Political Economy the work of Mises and Hayek was taught as simply part of the common knowledge in political economy from a methodological individualist perspective, and several scholars would emerge from that who would develop these ideas in their own way. To name two, Paul Craig Roberts’s work on market socialism and the Soviet system would challenge the conventional wisdom that the market socialist model answers the objections raised by Mises and Hayek as well as the way we understand Soviet economic planning. Craig Roberts worked closely with both Buchanan and G. Warren Nutter at University of Virginia. Richard Wagner also would emerge from the Jefferson Center working on themes influenced by Mises and Hayek at a methodological, analytical and practical policy level.

Mises on the Austrian path. Austrian economics had its time in the scientific limelight, and now that Mises was nearing his 90s, his peers could, without harm to their professional reputations, recognize his long illustrious career. Mises was always viewed as someone who belonged to the 19th century and the European culture of a bygone era, rather than the modern age of science. By this time, Hayek was retired not only from Chicago, but also from Freiburg, and had moved to a post in Salzburg that didn't have graduate students or even a functioning library. So, in effect, the two leading representatives of the Austrian school were retired, and younger scholars such as Rothbard and Kirzner were making little professional impact. From a scientific perspective, the Austrian school was at its nadir around the year 1970. However, things soon started to change in drastic ways.

The beginning of the 1970s marked a new, dramatically different, phase in Austrian economics. At this stage, the critical institutional actor was the Institute for Humane Studies and the critical individual influence was Murray Rothbard. Rothbard's blending, and at times blurring, of the lines between Austrian economics, revisionist history, and a radical and consistent libertarianism was always appealing to F.A. "Baldy" Harper, founder of IHS. Harper was a professor at Cornell University in the 1940s, when he was chastised for using Hayek's *The Road To Serfdom* in one of his classes. He was frustrated with what he saw as the closing of minds on campus – a manifestation of an earlier age's political correctness – and was lured away from academia to work for the Foundation for Economic Education (FEE) in New York, under the expectation that they would develop advanced educational and research programs. However, despite efforts by various staff members and longtime associates of FEE to establish a new "American Graduate school," the project never materialized.

So, by the end of the 1950s, Harper was looking to establish a new institute consistent with his own vision. In a lovely alcove, adjacent to the equally lovely Stanford University campus, he established the Institute for Humane Studies—the name was meant to reflect the 19th-century French liberal tradition of the *sciences humaines*. Harper’s idea was to cultivate a new generation of scholars who would research topics of consequence, and once again colonize academic positions in philosophy, politics, economics, history, and law. The Institute continued many of the programs that the Volker Fund had sponsored in the 1950s to cultivate scholars working in political economy. The Volker Fund always had a strong commitment to Austrian economics and, in fact, was the main source of financial support for both Mises and Hayek following their arrival in America.

Starting in the 1970s, various conferences were organized devoted exclusively to Austrian economics, and with the success of these programs, plans were made to establish new institutes, as well as new graduate programs within which the Austrian tradition could play a significant role. Since Rothbard was not a faculty member at a PhD-granting institution, but was well positioned within the Cato Institute⁴¹ and the Libertarian Party, he tended to focus on ideological activities, while the effort to develop new graduate programs in Austrian economics were centered around Kirzner at NYU. It was the beginning of a new period when Austrians would attempt to seriously re-engage in academic discourse. This would soon lead to internecine debates that, at times, would appear to fracture the school.⁴²

By the 1970s, the American revival of the Austrian school was firmly coupled with the libertarian movement intellectually, institutionally, and financially. A case in point was

⁴¹ Rothbard helped establish the Cato Institute, a libertarian think tank that also promoted Austrian ideas, in 1974.

⁴² It is important to emphasize that Austrians have always had internal disagreements. In the post-WWII period, these controversies were mostly hidden from the public eye as the school itself existed only on an underground level.

Rothbard's *Power and Market* (1970).⁴³ In this book, Rothbard provided Austrian critiques of *all* forms of government intervention. He included a brief analysis of stateless societies and the private provision of law, a system known as anarcho-capitalism, which would galvanize both Austrians and, more generally, libertarians, and serve as an important research topic for future generations of scholars.

Rothbard was having considerable success advancing Austrian ideas through the popular libertarian movement. Two publications founded by Rothbard, *Libertarian Forum* and *The Journal of Libertarian Studies*, frequently featured, in addition to Rothbard's own writings, essays by younger Austrian scholars. A mainstream publisher agreed to publish Rothbard's book *For a New Liberty* (1973), and he was profiled in several mainstream periodicals. Robert Nozick's *Anarchy, State and Utopia* (1974), heavily influenced by Rothbard, won the National Book Award, and Nozick was catapulted to superstar status within the discipline of philosophy.

At the same time, Kirzner continued to communicate the nuances of the Austrian approach to the market process in various essays and monographs. In 1973, the University of Chicago Press published Kirzner's highly influential *Competition and Entrepreneurship*, which described Kirzner's theory of the entrepreneur – a human actor alert to previously unrecognized opportunities for mutual gains from exchange – in its full efflorescence. In his earlier writings Kirzner had touched upon the idea that purposive human actors will be alert to that to which is in their interest to be alert to. He more fully developed these ideas in *Competition and Entrepreneurship*. The concept of the entrepreneur would be the central focus of Kirzner's scholarly activities for the rest of his career.



⁴³ Originally the third part of *Man, Economy, and State* (1962), *Power and Market* (1970) was removed from the first edition because it was deemed too controversial and replaced with a short chapter on interventionism.

Kirzner emphasized that neoclassical price theory focuses on the end-state of general equilibrium rather than the process of equilibration. Kenneth Arrow (1959) had earlier identified a central problem with the price-taking assumption at the heart of the Walrasian depiction of the market: systematic market adjustment guided through relative price adjustments simply could not be modeled in the Walrasian fashion. Kirzner thought the Mises-Hayek theory of the entrepreneurial market process explained the equilibration process. Working within the neoclassical framework, Kirzner used his theory of entrepreneurship to fill in this lacuna in the theory of price adjustment. Kirzner's central insight, which he attributed to Mises, is that entrepreneurship is alertness to previously unknown profit opportunities. Entrepreneurs recognize profit opportunities and correct disequilibrium prices through arbitrage, thereby facilitating convergence to general equilibrium. Kirzner's book was initially highly praised within the Austrian movement, but would later stir some considerable controversy concerning the nature of both equilibration and the entrepreneur.

The year 1974 would prove to be a crucial year for the Austrian school. A cadre of young research scholars was posed to pursue advanced study in economics. The Austrian program at New York University was developing quickly, with a regular seminar, PhD fellowships, visiting professors, and post-doctoral fellowships. The time seemed right to bring students and faculty together to start a more organized scholarly movement. In June 1974, the IHS organized a conference in South Royalton, Vermont devoted exclusively to Austrian economics. Sadly, Mises had died the previous year and, for various reasons, Hayek could not attend the conference. Nonetheless, the South Royalton gathering was a rousing success. Papers by the next generation of Austrians, namely, Lachmann, Rothbard, and Kirzner were presented on diverse topics like method, capital, money, and equilibration. The conference produced a volume edited

by Edwin G. Dolan titled *The Foundations of Austrian Economics* (1976). Shortly after South Royalton, Lawrence Moss organized a conference at the Southern Economics Association dedicated to the economics of Ludwig von Mises, and these papers were published in a volume edited by Moss titled *The Economics of Ludwig von Mises* (1975).

However, by far the most momentous event of 1974 – or, for that matter, most any other year – occurred in October when Hayek was awarded the Nobel Prize for his “pioneering work in the theory of money and economic fluctuations and...penetrating analysis of the interdependence of economic, social and institutional phenomena” (Nobel 1974). Hayek shared the Prize with Post-Keynesian Gunnar Myrdal, who was quite bothered to have to split the Prize with a déclassé Austrian economist—but Hayek didn’t mind and the community of Austrians was elated. The world’s attention was once again focused on the economic ideas of the Austrian school.

And so the burgeoning revival of the Austrian school received a further, and much-welcomed, burst of attention and expansion. The Institute for Humane Studies organized two further conferences on Austrian economics, the first, in 1975, in Hartford, Connecticut, and the second the following year at Windsor Castle in Scotland. The papers of the Hartford conference were gathered into a volume, edited by Louis Spadaro, titled *New Directions in Austrian Economics* (1978). This volume featured essays by the older generation of Austrian scholars as well as papers by younger scholars like Mario Rizzo, Dominick Armentano, Gerald P. O’Driscoll, and Roger Garrison. Further conferences in later years generated volumes edited by Rizzo (1979) and Kirzner (1982). Meanwhile, Hayek (1976) wrote a book outlining a new plan for monetary reform; O’Driscoll (1977) wrote on Hayek’s conception of economics as a

“coordination problem”; Kirzner (1979) compiled his 1970s essays on entrepreneurship; and Armentano (1982) developed a Rothbardian analysis of antitrust law.

Lachmann joined Kirzner at NYU as a visiting professor in 1975. Graduate programs soon started at Auburn University and George Mason University, the latter of which also created the Center for the Study of Market Processes. Finally, in 1982 Llewellyn Rockwell, with the assistance of Rothbard, founded the Ludwig von Mises Institute, which soon established *The Review of Austrian Economics* (RAE), a new academic journal devoted to Austrian economics.⁴⁴

With this great proliferation of new forums for Austrian economics came various doctrinal disputes. The three main factions, headed, respectively, by Rothbard, Kirzner, and Lachmann, would debate three key issues for years to come.⁴⁵

The first issue related to Kirzner’s theory of the entrepreneur. A rift could already be noticed at South Royalton, when Kirzner and Lachmann presented papers that contained divergent positions on the nature of equilibration. Kirzner (1976) staked a position similar to his earlier work and argued that entrepreneurial alertness is the key to equilibration. From this perspective, in their search for profit opportunities, entrepreneurs correct market disparities and facilitate convergence of expectations to bring the economy closer to equilibrium. Lachmann (1976a), however, argued that entrepreneurial expectations could not only converge to bring the

⁴⁴ The *Austrian Economics Newsletter* and *Market Process* had both been publishing since the 1970s and 1980s, but were more newsletters than full-fledged academic journals. IHS published *Literature of Liberty*, which contained bibliographic essays focused on topics that appealed to both classical liberals and Austrian economists.

Rothbard served as editor of the RAE until his death in 1995 when editorial duties transitioned to Walter Block, Hans-Hermann Hoppe and Joseph Salerno. In 1997, Kluwer Academic Publishing made the decision to assign editorship to Peter Boettke. Block, Hoppe and Salerno would eventually start a new journal, *Quarterly Journal of Austrian Economics* (first issue published in 1998). Boettke continues as editor-in-chief of the RAE, a duty now shared with Christopher Coyne. Along with Israel Kirzner and Mario Rizzo, Boettke also established the book series *Advances in Austrian Economics* in 1994. *Advances* continues to publish with Christopher Coyne and Virgil Storr as co-editors.

⁴⁵ Although Hayek was still writing in the 1970s and 1980s, he did not directly involve himself in these internal discussions. However Hayek’s positions are closer to Kirzner than either Rothbard or Lachmann, and as a result the three groups can be characterized as Rothbardian, Hayekian-Kirznerian, and Lachmannian.

economy to equilibrium, but also diverge and lead the economy away from equilibrium. In the latter case, entrepreneurial activity would not correct previous errors but, instead, compound them and divert the market process from equilibrium. Lachmann's position led to a form of nihilism: the future was unknowable and so economists could predict little about it. The possibility of divergent entrepreneurial expectations was seen to run riot over previously-held economic laws. O'Driscoll (1977) suggested that the resolution of the debate lay in the theory of spontaneous order.

Subsequent articles extended the discussion to the related Lachmannian themes of a "kaleidic" society (a term borrowed from Shackle) and radical subjectivism, a term used to describe the full implications of a main Austrian tenet.⁴⁶ Mario Rizzo and Gerald O'Driscoll published *The Economics of Time and Ignorance* (1985), a book strongly influenced by Lachmann. The book pursued subjectivism to its logical conclusion and restated Austrian principles using this new system. The reactions from both Rothbard and Kirzner were unenthusiastic, to say the least (Baird 1987, Kirzner 1985a). Lachmann (1985), however, praised the book, which would subsequently exert considerable influence on younger Austrians.⁴⁷

A related point of disagreement related to aspects of Kirzner's entrepreneur. Kirzner (1973) argued that the entrepreneurial function could be analytically separated from the capitalist function (in the sense that entrepreneurs can be propertyless) and is characterized by being alert to profit opportunities and acting on that through arbitrage. Among others, Rothbard (1974, 1985) objected to the ownerless property and argued that entrepreneurship is better characterized

⁴⁶ Among others, see White (1982); Lachmann (1976b, 1979, 1982) Littlechild (1979, 1982); Rizzo (1979); Shackle (1979); Boehm (1982); Selgin (1988 [1982]); and Boettke, Horwitz and Prychitko (1986).

⁴⁷ A related episode involving Lachmann concerns Don Lavoie's efforts to reconstruct Mises' apriorism and praxeological method from within the philosophical framework of the hermeneuticist Hans-Georg Gadamer (see Lavoie 1985a, 1986; Ebeling 1986). Rothbardians reacted against this development (see Gordon 1986; Rothbard 1989, Hoppe 1989). See Storr (2011) and the related symposium for a more appreciative view of Lavoie's efforts.

by uncertainty bearing and appraisal rather than alertness. Kirzner (1982) defended his entrepreneur from his critics and continued to elaborate on his theory in future works (1985, 1989, 1992).

The second debate concerned money. At South Royalton, Rothbard presented a paper on what he considered to be the major tenets of Austrian monetary theory. He posed three questions for future research: (1) What is the best route to free-market money?, (2) What is the relationship between a system of full reserves and one of free banking?, and (3) What is the Austrian definition of the money supply? The second question, in particular, led to considerable controversy. Rothbard favored a system of 100% reserves and argued for the illegitimacy of fractional-reserve banking. A free-banking system, though it would effectively limit credit expansion and tend to full reserves, was nevertheless second-best.

Against this position, Lawrence H. White articulated a theory of fractional reserve free banking, later to be elaborated by his student and future colleague George Selgin in *The Theory of Free Banking* (1988). White argued that credit expansion would be held in check in a system of free banking and that banks would tend to lower reserve ratios as the public grew more comfortable holding bank money. White cited the example of Scotland in the late 18th and early 19th centuries as an approximation of this system. White (1985, 1986) further criticized Rothbard's position on the supposed illegitimacy of fractional reserves and his overly broad definition of the money supply (1978).⁴⁸ Rothbard (1988) and Sechrest (1988), a free banker otherwise sympathetic to White's monetary work, criticized the latter's position on the history of free banking in Scotland. Walter Block (1988) and Joseph Salerno (1987) defended Rothbard, respectively, on the illegitimacy of fractional-reserve banking, and the broad definition of the

⁴⁸ Further references to the Austrian theory of free banking include White (1989) and White and Selgin (1994). Horwitz (1992) and Sechrest (1993) were strongly influenced by the White-Selgin theory.


money supply. Monetary debates continued well into the late 1990s and remain unresolved today.⁴⁹

The last debate concerned the nature of calculation, coordination, and the respective views of Mises and Hayek on these matters, views that resurfaced to the forefront with the end of the communist countries around this time. One popular interpretation was that Hayek and Robbins retreated from Mises's arguments for the "impossibility" of socialism and the Lange-Lerner solution showed that socialism was possible. However, in his influential *Rivalry and Central Planning* (1985), Don Lavoie maintained that Austrians had never retreated from the Misesian position and that the crucial concept, the entrepreneurial aspect of the competitive-discovery process, was always inherent in their works.

While applauding Lavoie's work, Kirzner (1988), stressed that Mises and Hayek's views did evolve over time – and for the better – from a static critique to a dynamic one, which later became the competitive-discovery process argument made explicit in Kirzner's works on entrepreneurship. This position was challenged by Salerno (1990a, 1990b, 1993) and Rothbard (1991). Salerno noted apparent differences between Mises and Hayek on knowledge and coordination. He argued that Mises's original static view, rather than the later uncertainty argument, was always, according to Mises, the key to the calculation problem.⁵⁰ Moreover,

⁴⁹ Among others, see White (1992), Salerno (1991, 1993, 1994), Hoppe (1994), De Soto (1995), Hulsmann (1996), White and Selgin (1996), and Hoppe, Block, and Hulsmann (1998). Horwitz (2000) deals indirectly with many of the relevant issues, as does much of the Austrian literature on capital and the business cycle. The main force behind much of the latter literature has been Roger Garrison, whose work is widely appreciated by both sides of the Austrian banking debate; see Garrison (1978, 1982, 1984, 1986, 1989, 1991, and esp. 2000). Other prominent books on capital and structure-of production-theory include Skousen (1992), De Soto (2006 [1998]), and Lewin (1999).

⁵⁰ See Mises (1951 [1922], 120-21) where he argues that under stationary conditions "there no longer exists a problem for economic calculation to solve." The problem of economic calculation, Mises argued, "is of economic dynamics: it is not a problem of economic statics." Also see Mises (1935 [1920], 109). Furthermore, see Mises's (2005 [1927], 50) "the decisive objection that economics raises against the possibility of a socialist society [is that] it must forgo the intellectual division of labor that consists in the cooperation of all entrepreneurs, landowners, and workers as producers and consumers in the formation of market prices. But without it, rationality, i.e., the possibility of economic calculation, is unthinkable." As Hayek would later argue, not only does the price system coordinate the division of labor it does so through the utilization of the corresponding division of knowledge in society.

according to Salerno, Hayek and Robbins made a fateful error in retreating from the hardcore Misesian position to a defense based on the complexity of the relevant phenomena; properly understood, Hayek's knowledge problem described in "The Use of Knowledge in Society" (1945) was fundamentally different from the Misesian problem of economic calculation. Salerno's argument led to a lengthy debate (e.g. see Kirzner 1996; Salerno 1994, 1996, 1999b, 2002, Yeager 1994, 1997; Hoppe 1996; Herbener 1996; Hulsmann 1997; Boettke 1998, 2000, 2001, Caldwell 2002, Horwitz 2004).⁵¹ 

By the 1990s a changing of the guard in the Austrian school was evident as many of the old guard passed away or retired and the generation of revival-era scholars assumed positions of intellectual leadership, often at research universities where, unlike in previous decades, they could train graduate students and chair doctoral dissertations. The Austrians who reached intellectual maturity in the last quarter of the 20th century had, by the end of this period, become elder statesmen of the tradition. Moreover, not only were they training graduate students, but they had succeeded in publishing their work in top journals and with respected academic presses. By the new millennium, there were more economists pursuing the Austrian approach than at any time since the interwar years, and this number has only increased in the last 15 years.⁵²

⁵¹ See also Thomsen (1992) and Rothbard (1992) for summaries of the respective lessons learned from the debates between, and among, Austrian economists and mainstream neoclassical economists since the 1970s.

⁵² The Society for the Development of Austrian Economics (SDAE) was founded in 1995 under the initiative of Karen Vaughn with an original membership of 25. There were more than 100 scholars in attendance at the most recent SDAE conference, which meets each November in conjunction with the annual meetings of the Southern Economic Association. Each year, the SDAE awards a Best Book and Best Article prize. Among the books that have won this award in recent years include treatises published by academic presses such as Cambridge, Princeton, Oxford, and Stanford—a far cry from publishing with Van Nostrand in the 1960s as both Kirzner and Rothbard did. We have, perhaps unfairly, excluded from our narrative the emergence of organized efforts to advance Austrian economics throughout Europe, Latin America, and Asia. A comprehensive accounting would include research and educational programs in Britain, Czech Republic, France, Germany, Guatemala, and Spain.

Austrian Economics in the New Millennium and Beyond: The Bright Present and the Promising Future

There is no need for the new generation of Austrian economists to continue the internecine doctrinal disputes that have often hindered scientific progress. These young scholars should feel unencumbered by previous personality conflicts and focus instead on presenting the best arguments possible. But, of course, scars never fully heal and those who lived through them easily recognize traces of these debates in contemporary Austrian writings. Many of these issues have their roots in the intermingling of a scientific tradition with an ideological agenda, and the contentious idea that there is a coherent and intellectually respectable position called “Austro-Libertarianism.”

With the advent of the Internet and social media, there has been an undeniable acceleration of the “democratization” of economic discourse in the new millennium. This democratization, we have emphasized, bears benefits as well as costs. From the perspective of the *academic project* of advancing Austrian economics, one potential cost is that of reinforcing the “outsider” status of the school. Of course it isn’t an either-or decision and academics can take advantage of new technologies to engage a variety of audiences including: scientific peers, students, decision-makers in both the private and public sectors, and the general public. This approach requires an appreciation for engaging the academic community through academic outlets.

On the other hand, the combination of the Internet and the serious economic policy issues of the 2000s have brought many Austrian insights to public attention. The resurgence of ABCT as a viable theory towards understanding the 2008 financial crisis as opposed to alternative mainstream macroeconomic theories has led to renewed interest in Austrian economics in

general and explains the recent reentry into part of the JEL codes.⁵³ The influence of U.S. Congressman Ron Paul and other libertarian organizations during the 2008 and 2012 Presidential elections also increased interest in the Austrian school. Many young scholars in the 21st century first encountered the Austrian school of economics not in a classroom lecture or an assigned reading by an economics professor, but through Google. Without a doubt, thanks to advances modern technology, more students have watched interviews of Hayek on YouTube than have ever enrolled in his classes or attended his public lectures.

James Buchanan (1979) taught that the most important function of an economist is didactic—to inculcate an appreciation of the spontaneous order of the market economy so that students become informed participants in the democratic process. If we take Buchanan at his word, then the democratizing aspects of new media must be judged a positive development. That said, we would be wise to keep in mind the warning from proto-Austrian Frédéric Bastiat: “The worst thing that can happen to a good cause is, not to be skillfully attacked, but to be ineptly defended” (Boettke 2013, 45). While the Internet provides virtually unlimited access to information that would otherwise remain obscure, it requires disciplined judgment to truly learn from that information. A background in technical economics is an essential instrument of such discipline, but acquiring that background requires sustained study at a high intellectual level.

Important developments in the modern and contemporary Austrian school are adeptly summarized in *The Elgar Companion to Austrian Economics* (1994), *Handbook of Contemporary Austrian Economics* (2010), and *The Oxford Handbook of Austrian Economics* (2015).⁵⁴ However, these developments can also be seen in a survey of recent publications that have addressed, e.g., problems of economic development, (such as Coyne 2007, 2013 and Powell

⁵³ See Cachanosky and Salter (forthcoming) for a survey of some of the recent scholarly resurgence in ABCT.

⁵⁴ Space constraints prevent a full list of the recent Austrian literature. See Evans and Tarko (2014) for a sample of recent work in Austrian economics in the 21st century.

2014); or works that consider the Global Financial Crisis such as Koppl (2014), and the various commentaries on the crisis and monetary economics in general (e.g., see Selgin, Lastrapes, and White 2012, White 2011, Selgin 2010, Horwitz 2012, and Salerno 2010, 2012). There are many scholars who have also made recent contributions to the fields of entrepreneurship and organization theory (e.g., see Klein 2010, Foss and Klein 2010, 2012, Sautet 2000, Holcombe 2007, Lewin and Phelan 2000, Lewin and Baetjer 2011, and Langlois 2013) . Contemporary Austrian economists have made fundamental contributions to challenging new research programs concerning endogenous rule formation and self-governing social orders such as Leeson (2009; 2014), Skarbek (2014), and Stringham (2015). Finally, Austrians have made significant contributions to a growing “cultural economy” research program that considers (*inter alia*) the responsiveness of communities to devastating crises (Chamlee-Wright 2010 and Storr 2013).

The contemporary Austrian school represents a thriving community. These scholars are constantly teaching, publishing, and promoting their work. Though points of emphasis and applications have shifted throughout the years, when the Austrian school celebrates its sesquicentennial in 2021, the core characteristics of the School will essentially be those that guided Carl Menger.

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