ESSAYS ON CAPITAL AND INTEREST

THE COLLECTED WORKS OF ISRAEL M. KIRZNER

The Economic Point of View

Market Theory and the Price System

Essays on Capital and Interest

Competition and Entrepreneurship

Austrian Subjectivism and the Emergence of Entrepreneurship Theory

The Essence of Entrepreneurship and the Nature and Significance of Market Process

Competition, Economic Planning, and the Knowledge Problem

Discovery, Capitalism, and Distributive Justice

Reflections on Ethics, Freedom, Welfare Economics, Policy, and the Legacy of Austrian Economics

Ludwig von Mises: The Man and His Economics

ISRAEL M. KIRZNER

Essays on Capital and Interest

An Austrian Perspective

Edited and with an Introduction by

PETER J. BOETTKE and FRÉDÉRIC SAUTET

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INTRODUCTION TO THE LIBERTY FUND EDITION

Explaining the nature of capital and the phenomenon of interest has been one of Israel Kirzner's goals in his work on pure theory. These themes were already present in *Market Theory and the Price System,* but it was with the publication of *An Essay on Capital* (essay 2 in this volume) in 1966 that the author tackled the subject directly. Subsequently, Kirzner published two other essays continuing the exploration of the same theme. "Ludwig von Mises and the Theory of Capital and Interest," published in 1976 (essay 3 in this volume), reflects on Ludwig von Mises's theory of capital and interest. "The Pure Time-Preference Theory of Interest," published in 1993 (essay 4 in this volume), attempts to clarify the difficult issue of the pure time-preference theory of interest (e.g., explaining why the price of a tree does not equal the value of the total fruit output). We are using in this volume the 1996 edition of *Essays on Capital and Interest* published by Edward Elgar, which gathered those three essays and an introduction (essay 1 in this volume). We have included Kirzner's 1966 preface before the text of essay 2, as well as, at the end of this volume, an article entitled *The Theory of Capital,* which was published in 1976.

A constant theme in Kirzner's work is methodological subjectivism. As early as his doctoral work under the mentorship of Ludwig von Mises, Kirzner realized the importance of a subjective approach to understanding economic phenomena. Kirzner often cites Hayek's famous statement in *The Counter-revolution of Science:* "And it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism."[1] Kirzner's theoretical research on the nature of capital and interest is an early application of subjectivism in his work.

Austrian economists have always pursued a subjectivist approach to interest and its relationship to capital, going back to Carl Menger's emphasis that resources could not be intrinsically productive. Menger saw interest as the result of subjective valuations rather than an intrinsic property concerning the physical nature of capital. Kirzner put it in a thoroughly subjectivist manner: "In exactly the same way as Austrian value theory had no

1. See Friedrich A. Hayek (1979), *The Counter-revolution of Science: Studies on the Abuse of Reason,* 2d ed. (Indianapolis: Liberty Fund), p. 51.

place for 'cost of production' as an independent explanatory element . . . in the causation of economic value, a Mengerian capital and interest theory could have no place for the productivity of capital as an independent explanatory element in accounting for the structure of prices. . . . All prices, including interest, are brought about strictly by the actions expressing the valuations of purposeful human beings."[2] Austrian economists view the phenomenon of interest as the result of time preference and not as some intrinsic property of capital goods. The interest rate is merely a price, albeit one "particular kind of price—the intertemporal price—that is determined, along with all the other market phenomena, by the multiperiod plans that are being made by market participants."[3]

Mark Blaug concisely summarized the contribution of Kirzner's original *Essay on Capital* as follows: "Capital theory should never lose touch with its microeconomic foundations in acts of individual choice and must be viewed as consisting essentially of the economics of multi-period production planning."[4] If *Market Theory and the Price System* examines how relative prices adjust to changing circumstances to guide production and consumption decisions so that the coordination of economic activity results, then *An Essay on Capital* focuses on the concept of the "plan": the multiperiod production plans that actors initiate, revise in the wake of new knowledge, and sometimes leave unfinished. It is this notion of the "plan" that opens up the intellectual space for Kirzner's later work on entrepreneurship and his more mature understanding of the entrepreneurial market process.

One can find parallels between Kirzner's work on entrepreneurship (after 1973) and his work on capital and the existence of interest. Kirzner's work on interest builds on Eugen von Böhm-Bawerk's and Mises's views in the same way that his work on entrepreneurship builds on Hayek's and Mises's research. Just as he sought to enrich Mises's view of the entrepreneur, he sought to clarify the work of Mises on interest. In doing so, Kirzner emphasized the following points: (a) future streams of output do not automatically flow from present resources (i.e., capital does not possess a productivity of its own), (b) capital goods at a given time are the results of past plans because all production is planned production (i.e., human purpose gives value to capital goods), and (c) production plans

2. See p. 4, below.

3. See p. 49, below.

4. See Mark Blaug (1969), "An Essay on Capital," *Econometrica* 37 (1), p. 158.

imply the sacrifice of present resources in order to obtain future ones (i.e., the value that this sacrifice represents to the individual gives rise to the phenomenon of interest).

The original 1966 *Essay* contains only one reference to entrepreneurship.[5] A literal reading of Kirzner's original work on capital and interest would conclude that it does not have much to do with his work on entrepreneurship. This is because his work on capital and interest was published before entrepreneurship became the focus in his career and he probably did not see any reason to develop an entrepreneurial theory of the phenomenon of interest and the capital structure. At another level, however, Kirzner's theory of capital and interest is about decision-making, plans, and projects of many individuals in a multiperiod context. In other words, it covers ground similar to that covered by market process theory. So while the two subjects of capital and entrepreneurship are analytically distinct, Kirzner's research on capital theory gave him the raw material for his future work on the issue of coordination and entrepreneurship in market process theory.

In 1966 Kirzner thought of the market as a system of interlocking individual plans using capital goods over multiple periods. Some of these plans "interlock" well with others and some do not. At any given time, some plans are finished, others are being revised, and new ones are emerging. A theory of capital based on purposeful human decisions is a key element in understanding the market process. In this sense, Kirzner realized that capital theory was much more than simply a "mere adjunct to the theory of interest." The idea of the market as a process, which became the focus of his work at the end of the 1960s, was already present in Kirzner's 1966 work on capital and interest.

In addition, Kirzner's theory of capital and interest further elaborates the bridge between the logic of choice in microeconomics and the emerging structure of the macroeconomy. In his review of the 1996 *Essays on Capital and Interest,* Roger Garrison went so far as to offer a warning to all economists of the Austrian persuasion:

> No Austrian economist who takes his subjectivism seriously should draw a Hayekian triangle until he has read Professor Kirzner's *Essays*! There is no inherent clash between the macroeconomic theorizing that the Hayekian triangles facilitate (including the Austrian theory of the business cycle) and the Kirznerian perspective that keeps the triangle

5. See pp. 41–42, below.

> adequately subjectivized. Quite to the contrary, it is precisely our understanding of the process that Professor Kirzner elucidates, the ongoing attempts on the part of many entrepreneurs to carry out their individual multiperiod plans (as guided by market rates of interest or as misguided by the central bank's rate of interest), that breathes subjectivist life into those otherwise meaningless triangles.[6]

Garrison went on to argue that Kirzner's work does more than just give meaning to the Hayekian analytics; it paves the way for the reconstruction of modern macroeconomics along capital-theoretic grounds. Kirzner builds the bridge between choice-theoretic market process theory and capital-theoretic macroeconomic analysis.

After reading Kirzner's *Essay on Capital* and Donald Dewey's *Modern Capital Theory* in the 1960s, Ludwig Lachmann half-jokingly asked Kirzner whether the economists at New York University and those at Columbia University ever talked to one another. Admittedly there is something of the tone and method of an isolated scholar in *Essay on Capital*. One might think that Kirzner was simply trying to work through the material in capital theory and figure it out for himself without much interest in engaging his contemporary peers in economic debate. But Kirzner's focus on older "debates" in capital theory related to the works of Böhm-Bawerk, Irving Fisher, and Frank Knight, as well as his discussion of "waiting" and "capital measurement," provide the tools necessary to address more contemporary debates such as the "Cambridge Controversy" as well as increasing returns and path dependency. Ralph Pfouts's review of Kirzner's *Essay* for the *American Economic Review* points out a key Kirzner insight: one cannot ignore the subjective "element of decision making which can be encompassed only by the multi-period planning approach to capital theory."[7]

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We would first like to thank wholeheartedly Israel Kirzner for his unparalleled contribution to economic science. Kirzner's research program has deeply enriched the discipline and has shed light on some of eco-

6. See Roger Garrison (1997), "The Undiscountable Professor Kirzner," *The Freeman* 47 (8), pp. 511–13.

7. See Ralph W. Pfouts (1968), "Review of *An Essay on Capital* by Israel Kirzner," *American Economic Review* 58 (1), p. 196.

nomics' most difficult puzzles. Economists owe him an immense intellectual debt.

The publication of The Collected Works of Israel M. Kirzner would not be a reality without the participation of Liberty Fund, Inc. We are extremely grateful to Liberty Fund, and especially to Emilio Pacheco, for making this project possible. To republish Kirzner's unique œuvre has been on our minds since our time spent at New York University in the 1990s—where one of us was a professor (Peter) and the other was a postdoctoral student (Frédéric). We are thrilled to know that current and future generations of economists and other scholars will have easy access to Kirzner's works.

Finally, we wish to thank Rosemarie Fike for her invaluable help in the publication of this volume.

Peter J. Boettke and Frédéric Sautet

ESSAYS ON CAPITAL AND INTEREST

ESSAY 1 **INTRODUCTION**

The republication of the three essays which make up the body of this book offers an opportunity to place these papers in the context of more widely known twentieth-century developments in the area of capital and interest theory. As the sub-title of this book announces, each of these papers was written in the spirit of the Austrian tradition in economics, and specifically in order to clarify and develop what I have understood to be the Misesian position on these issues. The first of the three essays (Essay 2 in this book) was published in 1966, and dealt only with capital theory. Mises was still alive and active at that time, and he reviewed the essay before its publication. The second essay, published in 1976 (Essay 3 in this book), had been written in 1974 as a contribution to a symposium on the economics of Ludwig von Mises, who had died about a year earlier; the essay covered Mises's views on both capital and interest. The third essay (published in 1993) had been written in the late 1980s in an attempt to clarify (as much for myself as for others) what Mises (and of course Fetter) could possibly have meant by a theory of interest which recognized only time preference as the root cause of the phenomenon of interest, with what seems to be no recognition at all for any productivity-of-capital element in causing the interest phenomenon.

At the time the first of these three essays was written the Austrian tradition was widely perceived as having long died out. The subjectivist concerns which inspired that essay were almost invariably brushed aside in the profession generally as, at best, purist worries holding only trivial implications for economic theory, let alone policy. By the time the third essay was published, Austrian subjectivism had, in a resurgence quite remarkable in the history of economic thought, once again captured the attention of many (especially younger) economists. The insights of Ludwig von Mises are today no longer dismissed as old-fashioned economic philosophizing (or worse). It is now recognized that the methodological tenets which have shaped the course of mid-twentieth-century neoclassical economics have diverted the attention of economists from key insights which are essential for understanding the way in which economies in fact work. A number of these insights have, during the past two decades, been rediscovered in the work of Mises and the Austrian tradition (including, particularly, the contributions of Friedrich Hayek).

For the most part, the rediscovery of Misesian subjectivism has tended to illuminate modern Austrian understanding of the market process, without regard to intertemporal considerations. Relatively little modern Austrian attention has been paid to further developing Misesian insights into the role of capital in the full market process, and into the theory of interest.[1] (A good deal of recent attention has of course been paid to refining and restating the Hayekian theory of the business cycle. And certainly this theory is deeply embedded in Böhm-Bawerkian capital-theoretic insights. However, a fairly strong case can be made that when Hayek developed that theory at the end of the 1920s from the sketched outline offered many years earlier by Mises, he was not yet as fully alive to the subjectivism of Mises's general approach as he was later to become. It is this which, for this writer, explains why the recent Austrian work on Hayekian cycle theory seems, on the whole, to fail to draw on the subjectivist, Misesian, tradition which the contemporary Austrian resurgence has done so much to revive.) So the Misesian approach to problems of capital and interest developed in the essays in this book may be able to make a contribution to that broader, subjectivist understanding of economic processes and relationships which is emerging from the contemporary revival of the Austrian tradition in economic thought.

During the second half of the twentieth century (that is, the period since the publication of Mises's *Human Action*) a number of developments in the treatment of capital and interest problems occurred, of course, outside Austrian economics. In particular a celebrated "grand debate" arose (mainly during the 1960s) between the defenders of neoclassical orthodoxy in the theory of capitalist distribution, and the radical critics of that theory (the latter often identified as the Italian-Cambridge School—the Cambridge being, of course, the UK Cambridge).[2] In this debate, with its unmistakably ideological overtones,[3] the neoclassical defenders were largely relying on Irving Fisher's theory of interest with its related framework of capital theory, a framework in which productivity elements were prominently present. The Austrian (that is, the Böhm-

1. For an example of recent attention to subjectivist theory in the area of capital and interest problems, see Garrison (1985).

2. The term "grand debate" was applied by Ludwig Lachmann (1973a). An account of the debate from a protagonist of the Cambridge (UK) side is given in Harcourt (1972). An assessment from the other side is provided by Blaug (1974).

3. For a comment on the ideological overtones of the debate, see Solow (1975).

Bawerkian) roots of this neoclassical framework were to some extent recognized in that debate. What was not recognized at all was that that neoclassical "Austrian" framework was by no means the only intellectual progeny of Böhm-Bawerk's seminal work on capital and interest. Alongside the better known Fisherine development of Böhm-Bawerkian doctrine there emerged an entirely separate filiation of Austrian ideas in regard, especially, to the theory of interest. This tradition emerged particularly in the pure time-preference theory of interest espoused by Fetter and later Mises. While this second Austrian tradition, too, derived in large part from Böhm-Bawerk, its more consistent subjectivism seems attributable also to more sensitive appreciation of the Mengerian legacy. We shall argue below that the failure of the two sides in the above "grand debate" to recognize the existence and relevance of a third option—the more subjective version of Austrian theory—rendered that debate both incomplete and inconclusive.

THE MENGERIAN LEGACY

For the Austrian tradition subjectivism was, of course, the key, revolutionary, insight. The classical economists had attributed the regularities governing economic phenomena to the objective physical and biological conditions under which societies exist. The Austrians, on the other hand, found these regularities to have their roots in the valuations and the decisions of acting human beings. For other marginalist schools of economic thought in the post-1870 era, economic regularities reflected the interplay of both the objective physical conditions governing production and supply and the subjective preferences underlying consumer demand. The Mengerian view, however, relegated the objective conditions governing production to the passive background upon which the actions of purposeful human beings impinged. What *actively* shaped subsequent economic phenomena was seen to be *only* the actions of such purposeful human beings. This way of seeing the economic process was expressed perhaps most clearly in Menger's well-known conception of "orders" of productive factors.

Goods which confer utility directly to the consumer are "goods of lowest order"; resources which produce consumer goods are "goods of higher order" (in an ascending ranking which treats the resources most remote from the finally consumed good as goods of highest order). For Menger the significance, the economic value, attached to productive factors was perceived as being derived not directly from the objective productive potential of those factors, but strictly from the resulting valuations which consumers (or their surrogates, the entrepreneurs) place upon them as being useful in promoting consumption utility.

It is not difficult to see how this Mengerian refusal to accord *intrinsic* importance to the productivity of resources carries implications (not only for the theory of value, in which these implications have been recognized from the beginning, but also) for the theory of capital. In exactly the same way as Austrian value theory had no place for “cost of production” as an independent explanatory element (coordinate with “consumer utility”) in the causation of economic value, a Mengerian capital and interest theory could have no place for the productivity of capital as an independent explanatory element in accounting for the structure of prices (including, especially, the phenomenon of interest). All prices, including interest, are brought about strictly by the actions expressing the valuations of purposeful human beings.

This implication of the Mengerian legacy was in large part lost sight of in Böhm-Bawerk’s theory. In his monumental exploration into the role of time in production, and in the resulting development of his theory of capital and interest, Böhm-Bawerk seemed unable to avoid permitting the physical productivity of roundaboutness (or of time, or of waiting) to play an independently explanatory role in accounting for the phenomenon of market interest. So that subsequent interest theorists (particularly Irving Fisher) came to develop “Austrian” theories of interest which could hardly be considered Mengerian. Fisher’s theory (and thus the mainstream of subsequent theorizing on capital and interest) has been considered Austrian in that it followed Böhm-Bawerk in emphasizing the role of time (both in enhancing the productivity of other resources and—through time-preference considerations—in shaping consumer decisions). But that theory must be considered as inconsistent with the fundamental Mengerian insight in that it treats the productivity of waiting as an independent explanatory element in accounting for the phenomenon of market interest.

It was thus Mises, in his 1940 *Nationalökonomie* rediscovery and further development of Fetter’s pure time-preference theory of interest, who was to refine Böhm-Bawerkian theory and redirect it along Mengerian lines. In his slashing review article on Mises’s book, Knight (1941) perceptively recognized this—and saw it as grounds for dismissing Mises’s entire approach to the theory of capital and interest. In other words, Knight was attacking Mises not only because he was, like Böhm-Bawerk and Fisher, emphasizing the role of time in production (whereas for Knight the foundation of wisdom in this area consists in recognizing that "in a stationary economy, all production and consumption are strictly simultaneous; the waiting period is zero; there is none"; ibid., p. 420). Rather, he was attacking Mises for his "original and naive or absolute 'Austrianism'" (ibid., p. 422)—by which he apparently meant Mises's Mengerianism. (This reading of Knight's attack is reinforced by his own explicit rejection of Mises's frequent and favorable references to Menger's conception of the "order" of goods. On Knight's sweepingly dismissive attitude to this conception of Menger's, see also his highly critical introduction to the 1950 English edition of Menger's 1871 *Grundsätze,* p. 25.) For Knight, Mises's cardinal sin was not so much his emphasis on the role of time *per se,* as his denial of primary explanatory significance to the objective *productivity* of time.

MENGERIAN AUSTRIANISM AND THE CAMBRIDGE CONTROVERSY

As indicated earlier, we wish in this Introduction to draw attention to a certain incompleteness surrounding the Cambridge controversy. In that controversy mainstream neoclassical theory was under relentless attack by economists seeking to reverse the marginalist revolution and to return to the classical perspective. The critics, especially insofar as they were following Sraffa (1960), argued for an economics in which the objective conditions of production determine economic events, with virtually no role assigned to consumer demand. We wish to emphasize that what was overlooked in that debate was the existence of a third theoretical approach (a "Mengerian" approach) to capital and interest issues, in which the *entire* explanatory burden is assigned to consumer valuations. Our task in developing this critical observation regarding the Cambridge controversy is complicated by the fact that the *ideological* component of that controversy seems at first glance to place the mainstream neoclassical position squarely in Mengerian territory. In order to avoid confusion, therefore, it is necessary briefly to review this ideological element in the controversy.

From the Cambridge (UK) perspective, the error of mainstream neoclassical capital and interest theory consists in its explanation of distribution as being determined by the conditions of supply and demand. Given consumer preferences, resource availabilities and technological possibilities, the share of output going to capitalists as interest income is determined through the interplay of consequent supply and demand conditions. A different level of interest income would generate a suboptimal level of capital use: either consumers would be denied current consumption enjoyments without the justification of sufficiently worthwhile later increase in output, or else they would be enjoying current consumption at the cost of available, and preferred, later production (which might have been achieved through the maintenance of a higher level of capital use). The ideological element in the mainstream approach here being attacked is thus the "consumer sovereignty" claim held to be implicit in that approach. The Cambridge (UK) critics, denying the supply-and-demand determination of income distribution under capitalism, were denying that capitalist income shares benignly express (and cater to the satisfaction of) the preferences of the consuming public.

Now, the doctrine of consumer sovereignty appears closely tied to the Mengerian insights mentioned above. It was Menger who emphasized that the entire structure of prices (and thus factor incomes) is to be attributed to consumer preferences and valuations. Certainly, the Austrian development of the theory of the market saw market prices of both consumer goods and factor services as the expression of the relative valuations held by consumers. Yet, as indicated above, we shall maintain that the mainstream neoclassical theory under Cambridge attack can in no way be identified as Mengerian.

For the Cambridge critics the objectionable character of neoclassical theory arises out of its identifying interest as the additional value generated by productive capital. It is this feature of the theory which provides justification for the incomes enjoyed by capitalists: they are merely enjoying the value of what their capital has created for consumers. But what we have called the Mengerian (that is, the Menger-inspired) theory of capital and interest expounded by Mises in his 1940 book, emphatically rejects the interpretation of interest as a value of marginal product. For Mises's pure time-preference theory (as for Fetter's theory), capital productivity is neither a necessary nor a sufficient cause for interest. Interest is seen not as the value of any additional product but as expressing the difference between the valuations of a given prospective receipt by a consumer, made at different earlier dates. So Mises's theory of interest cannot possibly incur Cantabrigian wrath on account of its identifying interest with additionally produced product. In regard to this specific issue the "extreme" Austrianism of the pure time-preference theory seems in fact to coincide substantially with the view of the Cambridge critics. Yet, in regard to the *general* "ideological" bone of contention between the neoclassical and the

Italian-Cambridge school, the Misesian theory must certainly be seen by the latter school as an enemy. Indeed, this Misesian theory depends, far more radically than does the mainstream neoclassical view, upon the key Mengerian insight (that incomes reflect consumer evaluation of the productive contributions of resources).

That this is the case is seen immediately from the basis upon which the pure time-preference theory *rejects* all productivity theories of interest. That basis is in fact precisely the Austrian insight into the relationship between factor-service values and the value of output. All final output, Fetter (following Böhm-Bawerk) had argued, must be swept back by the market process to the original factors of production from which that output proceeded. (That is, the market values of the original factors can be relied upon to tend to reflect the full value to consumers of final output.) If one refuses (as indeed Böhm-Bawerk had himself refused)[4] to recognize time as a productive resource, this reasoning must inevitably lead to denial of independent productivity to any but the original factors of production.

So while the Misesian theory coincides with the Cambridge view at least in denying that interest is a productivity return, it offers to that view an "ideological" profile which must be fully as unattractive to it as that of the mainstream neoclassical view. For the pure time-preference perspective, interest emerges in intertemporal exchanges in which freely interacting market participants express their prospective relative valuations of receipts/sacrifices of different dates. Interest income so received is an entirely defensible reflection of consumer sovereignty (in regard to the intertemporal allocation of utilities).[5]

It is this third alternative (to both the Cambridge-classical approach and the mainstream neoclassical approach) which was, unfortunately, entirely overlooked throughout the course of the Cambridge debate. Confusion in this regard seems to have been compounded due to the circumstance that the mainstream neoclassical view itself was partly derived, as we have seen, from Austrian intellectual roots (in the Böhm-Bawerkian theory).[6] Let us turn to examine some of the radically subjectivist (and thus certainly Austrian) aspects of the Misesian approach, and to observe how this subjectivism renders this approach invulnerable to the powerful

4. On this point, see Böhm-Bawerk (1959b, pp. 97f.; 1959c, p. 196).

5. On this point, see the discussion toward the conclusion of Essay 4 below.

6. For a treatment of the mainstream neoclassical theory of capital and interest which emphasizes its Austrian roots, see Hausman (1981, pp. 37ff.).