

CAPITAL AND TIME IN ECOLOGICAL ECONOMICS: NEO-AUSTRIAN MODELLING. BY MALTE FABER, JOHN PROOPS, AND STEFAN SPECK WITH FRANK JÖST. CHELTENHAM, U.K.: EDWARD ELGAR, 1999.

Lecturing annually at the Foundation for Economic Education, Israel Kirzner reels off a list of possible intended meanings of “Austrian economics.” The economics advertised by this label can be characterized by its national origin, methodological underpinnings, market-friendly policy implications, and/or attention to the time element in the economy’s production process. His list is a prelude to the identification of a tradition in economics begun by Carl Menger and continued by Eugen von Böhm-Bawerk, Friedrich von Wieser, Ludwig von Mises, and Friedrich A. Hayek. Despite Menger’s harsh criticism of Böhm-Bawerk’s theorizing and despite the actual and perceived differences between Mises and Hayek, it is the methodological underpinnings that count in this tradition. Economic theorizing must be rooted in the subjective evaluations of market participants, each employing means in pursuit of his or her own separate ends.

“Neo-Austrian Modelling” is twice removed from “Austrian economics” as understood by Kirzner. First, the prefix removes the economics from Austria and anchors it in a wholly different tradition. The kinship of the volume under review to John R. Hicks’s *Capital and Time: A Neo-Austrian Theory* (1973) is too obvious to miss. Kirzner points to Hicks’s neo-Austrianism as a strand of theorizing that draws nothing from the Austrian tradition except for its attention to the time element in production process. Second, the use of the term “modelling” serves as an effective warning that the primary language of neo-Austrianism is mathematics. This sort of modelling is a characteristic of “formalism,” a term that Ludwig Lachmann always employed as subjectivism’s antonym. The Austrians’ means–end framework is overshadowed by the neo-Austrians’ mathematical structure.

The authors are aware of the nature of their Austrian roots. In an early chapter on historical background, they identify two different schools of Austrian thought: “The first can be described as Austrian subjectivists, who are mainly interested in the ideas of Menger. The other approach, called neo-Austrian capital theory, goes back to Böhm-Bawerk’s capital theory, and its main interest lies in the vertical time structure of the production process” (p. 30).

Readers duly attuned to the significance of “Neo” and “modelling” will not be surprised to find no reference whatever to Mises in this volume and only one passing reference to Hayek. Featured instead are the works of such modelers as Peter Bernholz, Carl von Weizsäcker, and Heinrich von Stackelberg.

Some books are intended to be read; others are intended to be worked through. This book is almost wholly in the latter category. The first of its five parts, “Introduction and History,” is readable and, to the authors’ credit, reveals a methodological awareness uncharacteristic of economists who devote themselves to mathematical modelling. The second part sets out neo-Austrian capital theory, employing a three-sector, two-period model and then, in a separate chapter, extending the time horizon to include “T” periods. Further extensions, involving the innovation of techniques, are presented in the third part of the book before environmental considerations are introduced in the fourth part. The fifth and last part deals with the issues of pollution and recycling and ends with an application of neo-Austrian capital theory to the iron and steel industry.

In some chapters where the mathematical formulations and extensions give way to prose, the reader will find hints of a market process at work. Rather than assume static expectations or so-called rational expectations, the authors postulate what they call “rolling myopic plans” (p. 96). Entrepreneurs make plans that span several periods, and they modify these plans as time goes by. Myopia, however, is a relative term and should not be taken to imply a failing of the entrepreneurs. Although the authors (p. 103, n. 4) do seem to reject interpreting the term to mean “short-sightedness,” their alternative meaning, “maximizing short-term payoff,” is no less objectionable. Relative to what other decisionmakers are the entrepreneurs supposedly myopic? We are reminded of Keynes’s ill-founded claim that the state is in a position to take the long view, with general social advantage in mind. The Austrian subjectivists, who find merit in comparative-institutions analysis, would find myopia in the decisionmaking associated with the political process. And in view of the four-year election cycle, they might contrast the continually-adapting entrepreneurial plans that drive the market process with the periodic myopic schemes of public-office seekers.

How can we get long-sighted results from what the authors see as an inherently short-sighted process? Implicitly, this question underlies a key chapter on “National Accounting, Time and the Environment.” Many pollutants are harmlessly absorbed into the natural environment. The authors refer to this service provided by nature as “natural pollution degradation” (p. 164). They advocate valuing a marginal unit of this nonmarketed service in accordance

with the marginal value of publicly-provided pollution abatement programs—even though they acknowledge that such government programs cannot themselves be designed to meet optimality criteria. With similar reasoning, the authors would put a higher price on the present use of nonrenewable resources than the market, left to its own devices, would allow for.

Factoring into our national accounting scheme the true value of nonrenewable resources and the imputed value of natural-resource degradation is seen as an essential corrective for the myopia that would otherwise distort the market process. The authors (p. 172) state their conclusions clearly:

[In the absence of these accounting adjustments,] current national income is grossly underestimated. This in turn leads to an inappropriate time profile of investment, thereby further distorting economic development from the path that would be intertemporally optimal if there were a long planning horizon and an appropriate evaluation of environmental services. In particular, there will be a tendency to over-exploit nonrenewable resources and to overload ecosystems with pollution, thereby eating up the “environmental wealth” available for present and future generations.

The key to resolving the problem is “new institutions and conventions” (ibid.). Elaboration of this solution involves references to licenses and the like and thereby confirms what the reader suspected from the beginning: Far-sighted governmental interventions are needed to override the short-sighted market process. This conclusion of neo-Austrian modeling, of course, could never have been reached by Austrian subjectivists working in the tradition of Menger, Böhm-Bawerk, Mises, and Hayek.

Twenty years before the appearance of the present volume, Malte Faber provided us with an *Introduction to Modern Austrian Capital Theory* (1979). Several years later, he was the editor of *Studies in Austrian Capital Theory, Investment and Time* (1986), a volume which contained articles by himself, John Proops, and others. Some understanding of Austrian subjectivism crept into these *Studies* through the contributions of Ingo Pellengahr, who had been a visiting scholar at New York University. More recently, Faber turned his attention to matters of ecology, conspiring with Reiner Manstetten and John Proops to produce *Ecological Economics: Concepts and Methods* (1996). *Capital and Time in Ecological Economics* fits the mold of these earlier offerings and is best viewed as the latest installment in Faber’s ongoing research agenda.

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