The Methodology of Empirical Macroeconomics

The Methodology of Empirical Macroeconomics stakes out a pragmatic middle ground between traditional, prescriptive economic methodology and recent descriptive (sociological or rhetorical) methodology. The former is sometimes seen as arrogantly telling economists how to do their work and the latter as irrelevant to their practice. The lectures are built around a case study of a concrete example of macroeconomic analysis. They demonstrate that economic methodology and the philosophy of science offer insights that help to resolve the genuine concerns of macroeconomists. Questions addressed include: What is the relationship between theoretical model and empirical observations? What is the relevance of macroeconomics to policy? Should macroeconomics be viewed as a special case of microeconomics? What is the place in macroeconomics of long-standing philosophical issues such as the scope and nature of economic laws, the role of idealizations, methodological individualism, and the problem of causality? Finally, what is an adequate methodology for macroeconomics?

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> We cannot make a science more certain by our wishes or opinions; but we may obviously make it much more uncertain in its application by believing it to be what it is not.

> > T. Robert Malthus

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Preface

These five lectures were originally delivered in a short course for the Netwerk Algemene en Kwantitatieve Economie (known by the acronym NAKE and rendered into English as the Netherlands Network of Economics). Twice each year the Network, which is a consortium of economics departments of Dutch universities, invites three or four foreign economists to teach students from the various member universities in five-day courses on subjects close to their own research and to consult with graduate students on the students' research. I was privileged to be invited to deliver lectures on methodology at the University of Nijmegen on 8–12 December 1997. This volume is a lightly edited version of those lectures.

These lectures do not aim to be a systematic treatise on methodology. Seven hours of lectures could hardly be that. Instead, they aim to introduce the economically sophisticated student (and I hope the professional economist), who may never have consciously reflected on the methods of the discipline he or she practices, to a few of the most pressing issues of methodology in a single area of economics – empirical macroeconomics. Although these lectures are explicitly concerned with empirical macroeconomics,

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I hope that they nevertheless prove of interest to economists working in other areas as well.

Most economic methodologists divide into two camps. On the one hand, they regard traditional methodology as prescriptive, directing the practice of economists on the basis of philosophical first principles. On the other hand, the recent tendency among methodologists reflects a reaction to the pretensions (arrogance, perhaps) of the methodologist telling the subject-matter specialist how to proceed. The recent approach is more descriptive. It accepts the autonomy of the economic practitioner and tries to understand the internal principles on which he proceeds or, without giving advice, to reconstruct the social or rhetorical strategies that inform his practice. This tendency is often agreeable to economists who wish to dismiss methodology as irrelevant and a waste of time.

In these lectures, however, I explore an alternative, pragmatic approach. The leading notion of this approach is that a relevant methodology must start with the genuine concerns of a particular discipline. Yet careful analysis of those concerns often reveals problems of varying degrees of generality that transcend the concerns and the methods of a single discipline. On this view, methodology and the philosophy of science are not disjoint disciplines from economics, but continuous with it, though operating at a higher level of abstraction. Methodology may sometimes help to solve genuine problems in a particular specialty and is, in that sense, prescriptive.

To remain grounded and relevant, these lectures begin with the consideration of concrete issues in macroeconomics. How should macroeconomic models be formulated? What is the relationship between theoretical models and empirical tests of those models and other empirical observations? What is the relevance of macroeconomic models to policy? Should macroeconomics be viewed as

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a special case of microeconomics? Questions like these raise issues with a long history in the philosophy of science: the scope and nature of economic laws, the role of idealizations, methodological individualism, and the problem of causality. The first lecture, by way of introduction, considers in detail a particular macroeconomic model and its empirical implementation, highlighting the methodological questions it raises. The second, third, and fourth lectures take a deeper look at some of those problems. The final lecture considers some general methodological questions in light of the previous four lectures.

I am grateful to the Netherlands Network of Economics and especially to its director at the time of my lectures - Professor Ben J. Heijdra, then of the University of Amsterdam (now of the University of Groningen). Professor Heijdra was a warm and generous host, without whom my knowledge of Dutch pub life would have been sadly deficient. The host students of the University of Nijmegen generously devoted their time to providing a pleasant working environment. I am especially grateful to Cornellie van Moorsel and Iman van Leydel, who not only gave up office space for my comfort but also provided me with courteous practical advice on negotiating Nijmegen. I also thank Professors Peter Phillips of Yale University and Ariel Rubinstein of Tel Aviv University, with whom I shared the stage. They were fascinating dinner companions and temporary colleagues. I am grateful to Roger Backhouse and to five anonymous reviewers who read and commented on an earlier draft of these lectures. The lectures have benefited from their many comments. I took the advice with which I agreed – that is, most of it – so long as it was compatible with preserving the shape of the lectures as recognizably those that I had delivered in Nijmegen. Finally, my thanks are due the students in the NAKE course, without whom these lectures would not have been desired or possible. I hope that they got some small

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proportion of the benefit from hearing the lectures that I derived from writing and delivering them.

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