Federal Reserve Bank of Minneapolis

Quarterly Review

Modern Business Cycle Analysis: A Guide to the Prescott-Summers Debate (p. 3)
Rodolfo E. Manuelli

Theory Ahead of Business Cycle Measurement (p. 9)
Edward C. Prescott

Some Skeptical Observations on Real Business Cycle Theory (p. 23)
Lawrence H. Summers

Response to a Skeptic (p. 28)
Edward C. Prescott
This issue of the *Quarterly Review* is devoted to research on real business cycles, work pioneered by Finn E. Kydland and Edward C. Prescott. The theory of real business cycles seeks to explain recurrent fluctuations in economic activity as the outcomes of well-specified market games in which individuals follow maximizing strategies. Real business cycle models usually are fitted to the data by *calibration*, a process in which key parameters are assigned values based on observations not directly related to business cycles, such as individual behavioral responses taken from panel studies or production input shares taken from average growth relationships.

Kydland and Prescott had planned to analyze business cycles in two steps: first build a model which included only real quantities, such as output and relative prices, and then extend the model to also include nominal quantities, such as money and absolute prices. After completing the first step of this plan, however, Kydland and Prescott concluded that the second may be unnecessary; business cycles can be explained almost entirely by just real quantities.

In the first article in this issue, “Modern Business Cycle Analysis: A Guide to the Prescott-Summers Debate” (p. 3), Rodolfo E. Manuelli describes the general approach to economic analysis that real business cycle researchers (among others) have adopted. He also describes, from that broader perspective, some of the questions about real business cycle research that are debated in the articles that follow. Manuelli points out that the theory of real business cycles and the method of confronting real business cycle models with the data are quite separate; one can be bought without the other.

The next article, “Theory Ahead of Business Cycle Measurement” (p. 9), by Prescott, serves several functions in this issue: it illustrates how real business cycle models are constructed and calibrated, it describes the current state of knowledge in real business cycle research, and it is the focus of the next two articles. This article will also be published in a Carnegie-Rochester conference proceedings volume, and kind permission to publish it here was given by Allan Meltzer.
Prescott’s article is followed by “Some Skeptical Observations on Real Business Cycle Theory” (p. 23) by Lawrence H. Summers. He argues that Prescott’s type of real business cycle model is not relevant to the business cycles actually observed. Summers questions the values Prescott and others have assigned to some key parameters of their models, and he questions the ability of any models that exclude nominal variables to explain observed business cycle phenomena.

Summers’ questions are answered in the final article, Prescott’s “Response to a Skeptic” (p. 28). Prescott defends the modeling methodology of real business cycle researchers and their estimates of some key parameters. He argues that real business cycle models are consistent with the data.

The Minneapolis Federal Reserve Bank does not take a side in the debate published here. But it does consider the debated issues important, and deserving of further discussion and analysis, for they could lead to a better understanding of the limits of countercyclical policymaking.