

that there is significant public-regarding sentiment among the populace?<sup>4</sup> The point is that the issue of safety as a public good is at heart an empirical one, and it deserves careful analysis.

The underlying, although implicit, theme in this book is that OSHA and the political process which created and administers it are here to stay. Economic analysis is, to say the least, not valued by policymakers—and there is a hint that if economists are to have any hope of being even marginally important they must shift their focus from “what should be” to “what is possible.” What is apparently politically possible bears little resemblance to the normative prescriptions of economics—a situation which creates a dilemma for economists which Mendeloff implicitly raises but neither appreciates nor solves. If the full implications of resource scarcity, individual choice, and Pareto optimality are pointed out, economists are judged to be lacking in “feelings” and thus unfit for the job of social engineer. Yet if economists silence their normative analyses in order to gain enough favor to be accorded peripheral influence in the regulatory process, they will be abandoning modes of thought and concepts of social welfare about which society very much needs to be educated.

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## References

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*Macroeconomic Analysis and Stabilization Policies*. By STEPHEN J. TURNOVSKY. Cambridge: Cambridge University Press, 1977. Pp. 390. \$37.50 (cloth); \$13.95 (paper).

This book is designed primarily as a graduate text in macroeconomic theory. It is based on graduate lectures given at the Australian National University, as well as a number of journal articles published by Stephen Turnovsky during the past several years. The text develops and gives a clear exposition of a sequence of macroeconomic models of increasing complexity. In order that more space may be devoted to the technical analysis of the properties of these models, the book does not provide an explicit microfoundation for the aggregate relationships or an empirical rationale for the choice of models and the aggregation and functional-form assumptions.

<sup>4</sup> A recent paper by Danziger and Haveman (1979) suggests that X's concern for Y is motivated by self-interest, not benevolence. However, for the current topic the distinction is not important.

The central aim of the text—as outlined by Turnovsky in the preface—is to provide a detailed exposition of four areas of macroeconomics not normally featured in graduate textbooks. These include optimal stabilization policy, open-economy macroeconomics, inflation theory, and the macroeconomic implications of balance-sheet constraints. In reviewing the text it will be convenient to consider each of these items in turn.

Optimal stabilization policy is the subject of the last two chapters of the book. The exposition proceeds systematically from the static Tinbergen analysis, to the dynamic policies studied by A. W. Phillips (proportional, derivative, and integral), and, finally, to the fully optimal policies derived using dynamic stochastic control theory. These chapters are, in many respects, one of the most attractive features of the text. The exposition is clear and concise, with enough examples to give the student an intuitive feel for the mathematical techniques. As yet, alternative treatments of the subject at this level can only be found in specialized optimal control texts or in journal articles, and these do not generally focus on the macroeconomic applications. An important omission, however, is a discussion of the Lucas (1976) critique of stabilization techniques as conventionally applied in macroeconomics. Given the extensive literature which has developed over the past several years in this area, a balanced treatment would require some discussion of these ideas. To be sure, much of this literature was evolving as this text was being prepared, so that an expository review may have been premature or inappropriate. In any case, selected reading assignments for students to supplement the more traditional exposition in the text could easily remedy this omission.

Open-economy macroeconomics is the subject of almost one-third of the text. Given the increasing importance of international issues in macroeconomics, this relatively heavy emphasis on the open economy compared with existing graduate macro texts seems entirely appropriate and should increase the appeal of the text. The “small-country” framework is used throughout the discussion with world output, interest rates, and inflation taken as exogenous. Most emphasis is given to the development of rather eclectic models which incorporate sticky wages and/or prices using Phillips curve equations and general portfolio balance relationships. Simplifications which arise from purchasing-power parity or from perfect capital mobility are treated as special cases of this more general framework rather than as alternative theories of the exchange rate or the balance of payments. The pure monetary theory of the balance of payments, for example, is not singled out as a particularly useful or interesting theory, although it is shown that the general model is consistent with the monetary approach in the long run. This methodological approach of developing an all-purpose model may have some advantages in underlining the inherent complexity of open-economy macroeconomics, but it may also have a pedagogical disadvantage in not providing the student with a full appreciation of some of the theoretical developments in international finance theory where the choice of what complexity to abstract from, and what to emphasize, has been crucial for the development of the theory. One important problem which has generated much research recently—the dynamics due to expectations of exchange-rate changes (see Dornbusch 1976)—is not discussed, though as with Lucas (1976) the relatively recent development of the results would have made inclusion difficult.

The inflation theory developed in chapter 5 of the text is based primarily on the Friedman-Phelps “expectations-augmented” Phillips curve, in which there is no long-run trade-off between inflation and unemployment. A

short-run trade-off is maintained, however, through the use of *adaptive* expectations, since with the models considered, *rational* expectations would imply a vertical short-run Phillips curve as well. In general, rational expectations theory is given very brief treatment in this analysis. The main reason given by Turnovsky for focusing on adaptive rather than rational expectations is that, with learning behavior, rational expectations have many adaptive features. However, with learning behavior, these adaptive coefficients would be time varying and not fixed as in the analysis in this book. The implication of the research on learning with rational expectations is not that adaptive expectations should be used but, rather, that care be taken in describing the learning process. Another reason for a nonvertical short-run Phillips curve, even with rational expectations, is the existence of multiperiod contracts. This subject is taken up on page 91 of the text, and although the author feels this "crucial institutional factor" is very important, it is not dealt with explicitly because it is "even more cumbersome to incorporate into a formal model." Although certain simplifications might be necessary, such incorporation would be useful for students in order to gain an appreciation of what is crucial about these contracts.

Of the four topics featured in the book, the development of consistent balance-sheet constraints is emphasized most strongly. Chapter 3 is devoted to linking the *flow* equations from the traditional income expenditure model with the *stocks* of balance-sheet items in the major sectors—households, firms, and government. Considerable care is taken in developing these linkages so that the relationship between savings and the accumulation of the various assets in the economy becomes transparent. These relationships have generally been implicit in graduate texts, but it is important to make them explicit as Turnovsky has done in order to understand the full workings of the macroeconomy without getting bogged down by vaguely defined stock-flow problems.

There is too much emphasis, however, on the "intrinsic" dynamics associated with balance-sheet constraints. With few exceptions these dynamics are the only reason for the persistence of economic fluctuations studied in the book. The government budget constraint is emphasized most heavily, following Christ (1968) and Blinder and Solow (1973). These dynamics arise in this case because the change in government bonds or the money supply must equal the budget deficit. This first difference in the stock adds a derivative or lagged dependent variable to the model, thereby generating the dynamics typically described by differential or difference equations. Very little empirical work is available on how important these dynamics might be in explaining aggregate fluctuations. My view is that, except perhaps in less developed countries where tax collection or open-market operations are difficult, these dynamics are not significant when compared with the many other sources of dynamics which have been emphasized over the years by business-cycle theorists. Changes in tax rates or in the proportion of the deficit financed by money creation are generally too frequent to permit the fixed-coefficient difference equations on which these dynamics are based. Moreover, well-chosen financing rules may eliminate the dynamics completely if that is desired. But this is an open question. Perhaps the carefully expounded models developed in this book and the emphasis placed on these dynamics will stimulate the necessary empirical work to resolve the question.

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**References**

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