

Beyond the Steady State

Bruce MacFarlane*

The developments in non-neoclassical growth theory have been quite enormous in the 1980s. Not only that, but a number of different streams have emerged, from those remaining in the two-sector framework to the dynamic oscillators of Goodwin and to the work on vertical integration offered by Pasinetti. The time is ripe then for possible fruitful synthesis in this area; at the same time for a lucid introduction to the events and theoretical developments of the last decade.

The book under review succeeds in supplying these two objectives, and each chapter falls under one or other category: an explanation of trends in theory or an attempted synthesis. For example, the chapters by Vivian Walsh, Hagemann and Laibman are excellent introductions to difficult material suited to the needs of the beginner. Other pieces (including Walsh again) represent attempts at synthesising the new developments, in particular the writings of Kriesler, Halevi, Nell and Mukherjee.

A clear synthesis, however, requires some unifying tool of analysis or theoretical perspective. If this book does have a weakness it is perhaps that not all the contributors can be housed under the same umbrella of perspective. Nevertheless, perhaps two-thirds of the contributors can be so grouped and, to that extent, it is possible to say something about what that perspective might be. I would tentatively suggest agreement with the editors reference to their hope that the main thread holding this collection of theoretical articles together is the influence of Adolph Lowe on a number of the contributors. This is not the case, however, with R. Goodwin and Garegnani, who go on their own track. As the editors remark, (p. 8), Lowe is a great scholar of both classical and contemporary economics, whose work laid the basis for a more satisfying treatment of intersectoral relations in a growth setting and one which could be useful in planning the economies of both capitalism and socialism.

To begin with the roll-call. Ed. Nell has contributed two more than useful essays — one on demand-side equilibrium and one entitled "Transformational Growth, Mass Production and the Multiplier". These are highly innovative pieces which modify the role associated with growth models in new ways. Peter Flaschel and W. Semmler analyse technical change in a competitive model of the classical type. A unifying thread is "process" as well as product innovation and extinction. "Process"

A Review of J. Halevi, D. Laibman and E.J. Nell (eds.), Beyond The Steady State: A Revival of Growth Theory, MacMillan. N.Y., 1992. ISBN: 0333494768. Hb:45 Pounds.

here is defined as generation of excess profit resulting from an excess of market price over natural price. It leads to output changes, excess demand and further price changes. They suggest that Walras' "process of groping" in a competitive economy plays a similar role, "although stylised as a process of tatonnement". There is a lot of mathematics in this exercise, but, I suspect not a lot of solid economic content.

Joseph Halevi has contributed a most interesting joint piece with P. Kriesler on the "traverse", the path the economy traces from one point of time to the next in a dynamic context. This was also a favourite topic of Adolph Lowe as he demonstrated in the book *Path to Economic Growth*. Kriesler and Halevi in their article add considerably to our understanding of why it is essential that the student of economic dynamics take the trouble to appreciate the unifying role played by the traverse as an analytical framework. Halevi also has a follow-up article on "Structure and Accumulation" which indicates that to achieve a traverse with full employment would need strong sectoral planning and not merely management of aggregate demand as in the usual "Bastard Keynesian" approach. Halevi writes very clearly and is nowhere unmindful of the social context in which he puts his discussion.

Dynamic behaviour in the context of a two-sector classical model is the theme of another mathematician, Marc Jarsulic who underlines the great difficulty, mathematically, of even simple dynamic models. I do not feel competent to evaluate the very large number of simulations he has presented here.

R.M. Goodwin has given to this book a couple of his famous Cambridge lectures on dynamics. The discussion implies dissatisfaction with both "Say's Law" economics and Cambridge "Golden Age" economics. The main capitalist dynamic arise in the Goodwin constructs from a cyclical relationship between the wage bill and the employment ratio. However, there is little connection to Lowe or the Cambridge controversies here. The analysis is, rather, based on a highly original use of the prey-predator mathematics of Volterra, along with the familiar Goodwin use of oscillators picked up from his period dabbling in physics. It was a good idea that the editors of this volume made such an exciting contribution more widely available, especially now that Goodwin seems at last to have been taken up by disciples (albeit of very different hues). As the recent literature shows, M Desai has a new extension of Goodwin-style ideas based on a class struggle model, while Balducci and Ricci have used Goodwin with rational economic agents.

A lucid survey of where Goodwin fits in with other trends in growth theory is presented by B. Mukherjee in a chapter entitled "Bifurcation in the Theory of Growth". The existence of "bifurcation" is illustrated by the careers of two books published in the 1980s whose paths have not crossed — Marglin's *Growth, Distribution and Prices* and Goodwin's *Non-Linear Models of Fluctuating Growth*. Does this matter? Mukherjee says "yes", because he wants to retain a general equilibrium framework that "must underlie a growth process". However, given that the need to specify labour markets and to give a leading role to unemployment levels is apparently inescapable in a model of capitalist dynamics, he has to concede that "an orthodox Marxist would be delighted that a non-Walrasian growth theory is essential even when starting from Walrasian assumptions". (p. 352). Interestingly, Goodwin needs the use of a Phillips curve for the wage/unemployment relation and Mukherjee thinks that if this curve is vertical Goodwin will not get his cycles.

I now come to three separate items which clarified many of the mysteries of

dynamic theory for the beginner. First there is the chapter by Hagemann who starts with Hicks and the Austrians on the introduction of new producer-goods. He adds that Lowe's analysis of "pure" labour-displacing innovations in the consumer-goods sector produces a kind of traverse: here the structural adjustment process required for the compensation of the initial temporary unemployment and convergence to the new equilibrium path can be studied without the additional complications arising from secondary effects of labour saving innovations which are inputs into the production of consumer-goods. Hence Hagemann in part answers the question posed by the editors — where do we go in growth theory after the Cambridge controversies?

A similar thing is achieved in David Laibman's survey of the issues. He reviews the Marxian family of models of cycles and growth, not excluding Goodwin that "lifelong but wayward marxist" (as the Cambridge academic recently described himself). The ground covered includes intersectoral analysis, crises of effective demand ("realization crises"), and cycle models based on Marx's industrial reserve army. These are counterposed to the orthodox smooth adjustment mechanisms of the price-mechanism model. Inter-sectoral disproportions are clearly an important part of today's capitalist reality and Laibman is right to insist on this point, which has a long history since the original debates over Tugan-Baranovsky who wrote on disproportions and whether they could seriously disrupt a growth process.

The third helpful piece for the beginner in modern growth theory is V. Walsh who continues the good work of his celebrated textbook and raises the implications of Pasinetti's work on vertical integration for all sectoral analysis. Clearly here is something that the orthodox Marxian models based on the consumer-goods/capital goods sector will have to grapple with as well. Walsh is not only producing a very competent introduction to dynamic growth theory, he is explaining the frontiers of the subject.

There are two "neo-Ricardian" pieces in this volume, by Garegnani and H. Kurz. They differ from Goodwin and the Marxists (who emphasise disequilibrium) in their approach to the adjustment mechanism within the economy for handling disturbances. Neo-Ricardians seem interested in underlying the "elasticity" in adjusting to effective demand, and the level of output determined by it, of what they variously call "the industrial system", capitalism and the "market system". These two writers seem to be at pains to stress the limitations of erratic movements and deep crises and of the amplitude of fluctuations in rates of capital accumulation. However, apparently remembering at one point Marx's strictures on Dr. Price to the effect that money only increases like compound interest in an unreal world, Garegnani does refer to bankruptcies, duplication of capacity and the destruction of capital stock. One is tempted to ask though, why a piece written ten years ago for another purpose and showing no signs at all of updating should have been included in a volume where the other contributors are giving us a picture of the very recent developments in theory?

At the basic level, this is a book that can be recommended to those who want to get acquainted with the growth theories of the 1980s. Due especially to the efforts of Halevi, Laibman and Nell we can now see ways out of the strait-jacket of LM/IS framework (Nell), of steady-state frameworks (Kurz) or orthodox Marxian two-sector models (Halevi).

Finally, there are the implications of all these analytical exercises for the theory and practice of economic planning. Given Goodwin's oscillators, or even the complicated relationships over time between effective demand, technical progress, labour force and investment structures, the idea of a one big Central Plan may well appear to be a pipedream. The events in Eastern Europe, especially growing recognition of the limitations of static versions of neo-classical trade and development theory have put this firmly back on the agenda. Despite Jeffrey Sach's best efforts, results from the laissez-faire approach have been meagre. Some role for planning is inescapable in the context of what are obviously problems of deep structural imbalances and inadequate understanding of erratic movements of the economic system. The editors missed an opportunity to intervene in the planning debate seen in the new context of planning for erratic and big movements of an unstable kind. The volume would have gained by a final chapter bringing together the various strands of thought about the implications of each model (or even of the more significant simulations of the Jarsulic portfolio) for the modern economic planner seeking a traverse or growth path that is not too jerky and which can produce a result which avoids mass unemployment.

* Department of Economics, University of Newcastle.