

A Critical Essay on Modern Macroeconomic Theory.

by Mark Wright

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The application of competitive equilibrium theory to the study of business cycles has led to significant changes in the way modern macroeconomic research is undertaken. One of the attractions of the so-called real business cycle approach is its emphasis on microfoundations: these models take dynamics and expectations seriously and facilitate analysis of the welfare implications of macroeconomic policies. Opponents of the approach have typically objected to its 'new classical' results. In the early models, Pareto-optimal equilibria obviated the need for government intervention and the market-clearing assumption ruled out involuntary unemployment. Doubts have also been raised as to the models' ability to explain some business cycle facts. The result has been a move towards models that can produce suboptimal equilibria. If the recent expository volume edited by Cooley (1995) can be taken as representative, this is a dominant trend with around half of the chapters dealing with models that include multiple agents, imperfect competition and nominal and real rigidities.

The present volume, written by Frank Hahn and Robert Solow, is motivated by the same concerns. Indeed, its authors note at the outset their dissatisfaction with models which rule out the possibility of 'large scale economic pathologies'. This book is the result of that dissatisfaction and has two aims. The first aim is 'negative': Hahn and Solow aim to dispel what they believe is a myth put forth by new-classical theory. This is the view that rational decision making under conditions of perfect foresight and perfectly flexible wages and prices is sufficient to rule out such macroeconomic 'pathologies'. The second aim is 'positive': Hahn and Solow outline their vision for the future of macroeconomic research. This includes attention to microfoundations but not at the expense of flexibility and plausibility. In this more practical attitude to microfoundations, they differ from the trend in the real business cycle literature.

The negative result is established in Chapter 2 which outlines an overlapping generations model with two-period-lived agents and no bequests. Agents allocate their savings between money and firm-issued bonds, with positive money demand ensured by way of a cash-in-advance constraint. Otherwise, perfect competition with perfectly flexible prices and wages (and thus no unemployment) is maintained. This conventional model has unstable dynamics, which leads to the authors' first 'negative' result. In response to a large enough positive labour supply shock, wage and price deflation will occur.

With the nominal interest rate bounded by zero, the real interest rate will rise leading to falling investment and an unnecessary fall in output. The authors go on to show that a combined fiscal-monetary policy response (a monetary financed investment subsidy) can prevent this outcome. In this model, price and wage flexibility are the source of the instability, and in Chapter 3 the authors show that some real wage inflexibility, introduced via a real-wage Phillips curve, can improve the stability properties of the model.

The authors' positive contribution begins in Chapters 4 and 5 which present the building-blocks of the authors' prototype model. Chapter 4 modifies the overlapping generations model of Chapter 2 to allow for imperfectly competitive firms and increasing returns to scale. The result is the possibility of multiple equilibria and an emphasis on the importance of firms' expectations about the level of aggregate demand. Chapter 5 examines the labour market. Hahn and Solow argue that a 'realistic' model must allow for persistent involuntary unemployment and, as part of the negative aim of the book, they aim to show how involuntary unemployment can arise from the rational decisions of firms and workers. Whilst endorsing the approach taken by efficiency wage and insider-outsider theorists, Hahn and Solow also present two new models. One is a modified job search model whilst the other, which the authors make use of in Chapter 6, is a model of bargaining that they term a 'fairness' theory. The latter approach, which is reminiscent of Shaked and Sutton (1984), assumes the existence of insiders, who are already employed by the firm, and outsiders or unemployed. The authors show that if the outsiders adopt a strategy in which they refuse to compete with the employed for jobs unless one of their number defects, in which case they all compete, there may exist a subgame perfect equilibrium in which there is no wage undercutting. In this model, the fear of a 'wages free-for-all' prevents the unemployed from lowering the wage.

Chapter 6 presents a preliminary model of the type Hahn and Solow advocate. It is in the spirit of the previous chapters in that imperfect competition and increasing returns are combined with a labour market with features similar to that of the fairness model presented in Chapter 5. Importantly, the model is only in the spirit of the previous chapters: the underlying relations are suggested by, but do not arise exactly from, the models previously presented. The authors justify the departures from the exact models by the extra 'scope, realism, flexibility, and tractability' gained. The result is a model that achieves the authors' aim of depicting an economy that experiences fluctuations in employment and output, has a procyclical real wage, and in which there is a role for active government policy.

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Perhaps the most disappointing part of the book is the failure of the authors, having invested so much effort in developing the model, to put it 'through its paces'. Hahn and Solow content themselves with presenting only a small number of simulation results, and are at pains to point out that their aim was only to show the flavour of the results that can flow from a model of this type. However, this leaves the reader without any sense as to how general the simulation results are, and how sensitive they may be to the specific parameter values and functional forms assumed. In particular, one would expect the results to be particularly sensitive to the 'naive' expectations adjustment assumption. Nevertheless, there is much of value in this provocative, lucidly written volume. Readers will take away with them a greater skepticism for the view that price and wage flexibility are all that is required to ensure a stable economy. Others will be sympathetic to the pragmatic approach taken with respect to microfoundations. To the extent that this prompts researchers to develop models in a similar vein, Hahn and Solow will have achieved both of their aims.

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