BOOK REVIEWS

Peter A. Diamond, *On Time*, Lectures on Models of Equilibrium, Cambridge University Press, Cambridge, *etc.*, 1994. Pp. 120.

This book is an expanded version of the Churchill Lectures delivered at the University of Cambridge in 1993. It deals with the question of the modelling of time in economic theory. Diamond's point of departure is that it is necessary to model time explicitly in order to be able to judge the consistency of atemporal equilibrium models, as used for exposition and practical purposes. The book consists of two lectures each comprising two chapters. The first lecture investigates the role of time within the single industry context, in the first chapter with competitive pricing and in the second with non-competitive pricing. Marshall's period analysis, distinguishing temporary, short- and long-period equilibria, is the starting point. In the second lecture attention is focussed on the incorporation of time in economy-wide models. Hicks' IS/LM-model now serves as a frame of reference.

Two interpretations of Marshall's period analysis are possible. First, it is a means to disentangle complex adjustment processes by studying each process independently of the other processes: movements to a short-run equilibrium by adjustments in the variable inputs and movements to a long-run equilibrium by changing fixed inputs. Second, the short-run equilibrium is considered an equilibrium which is reached within a short period of time after a disturbance has occurred, while the long-run equilibrium is considered an equilibrium which is reached after a long period of time. In the latter interpretation the long run can be regarded as a sequence of short-run equilibria. Diamond rejects period analysis in both its interpretations: the former because not analyzing equilibrium means neglecting the feedback elements of the adjustment process, the latter because studying short- and long-run equilibria separately implies ignoring the interactions between short- and long-run adjustments.

The alternative Diamond offers does not only differ from Marshall's period analysis in that time is taken into consideration explicitly – by distinguishing between flows (entry of and exit from the market) and stocks of firms – but also in that Marshall's assumption of the representative firm is dropped. Entry is assumed to depend on sunk costs and the discounted value of future profits, while exit is modelled according to a Poisson process.

Diamond focusses on the IS/LM model instead of the Arrow-Debreu model as the point of departure of his macroeconomic analysis because in the latter theory the coordination of trade is timeless and perfect so that the problem of income determination – indicated by Diamond as the problem of the command over purchasing power – is non-existent. The focus of attention is instead on the formation of relative prices, whereas in the IS/LM analysis it is on trade and income determination. Diamond lists quite a number of problems inherent in the atemporal IS/LM model, such as the period over which income is calculated, the period over which income is calculated in relation to the transactions demand for money, possibly different periods with respect to the income and cash-in-ad-

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vance contraints, and consequently possible inconsistencies between the expenditure block and the money block of the IS/LM model.

Diamond's discussion of the theoretical and empirical work in the field of explicit-time modelling within both the single-market and the macroeconomic context is not – and in two lectures could impossibly be – exhaustive. Nevertheless, he has succeeded in gathering the most salient pieces of theoretical – of which many by his own hand – and empirical research, and in presenting to the reader a clear overview of the attempts made and the results obtained in the last two decades. Having finished reading the book, one is left with a feeling of embarrassment of riches on the one hand and of helplessness on the other. The former refers to results of empirical research:

(1) research by Davis and Haltiwanger makes clear that gross employment flows exceed net flows vastly. Moreover, job destruction not only results from contraction but also from exits of firms, and job creation is partly the result of expansion of existing firms and partly of entry of new firms. Further, the ratios of job destruction by exits and job creation by entries are not equal;
(2) retail prices of goods may change rather erratically within short periods of time under quite similar circumstances, whereas prices of goods with a highly predictable variation in demand show only small fluctuations. Research by Carlton reveals with respect to prices paid by firms that it is not unusual within certain industries that prices remain unchanged for several years, and that the correlation of price changes across buyers of homogeneous products is low;
(3) according to Miron the standard deviations of the seasonal components of industrial production exceed the standard deviations of the non-seasonal components to a considerable extent in all OECD countries;
(4) Blinder's interview study indicates that one can always find one or more firms that behave according to one of the various theories of price stickiness.

One is left with a feeling of helplessness when considering the state of the art of economic theory in confrontation with the requirements for the modelling of trade coordinations and with the broad range of factual behaviour. This feeling exists especially with regard to macroeconomic theorising, which may not be surprising as the problem of trade coordination is most prominent and also most complex within the study of the economy as a whole. The complexity of the macroeconomic coordination problem may also explain why macroeconomics is less coherent and shows more different strategies than partial equilibrium theory. Diamond seems well aware of the weakness of present-day macroeconomic theory where he argues that 'there is interesting research about pieces of explicit-time models that relate to the IS/LM perspective and there is research about models of the entire economy that are basically inconsistent with that perspective' (p. 103). The latter probably refers to the general equilibrium approach within macroeconomics. With Diamond's plea for a research strategy which aims 'to develop models where both price adjustment and determination of the command over purchasing power play out over real time' (p. 103) one can only agree. But this plea as such does not help us much further. Especially if we consider it from the perspective of the great variance of factual behaviour as appears from interview studies and other pieces of empirical research. In order to keep the macroeconomic analysis manageable we cannot do without invariances between broadly defined aggregates. Maybe the tracing and the founding of these invariances should not be so much a quest for a microfoundation of macroeconomics as a quest for a macrofoundation of microeconomics, in the sense of a search for institutions and conventions as determinants of predictable microeconomic behaviour.

S.K. Kuipers

Paul Davidson and J.A. Kregel (eds.), *Employment, Growth and Finance; Economic Reality and Economic Growth*, Edward Elgar, Aldershot, 1994. Pp. xiv + 241.

This book is made up of a selection from the papers presented at the Third University of Tennessee International Post Keynesian Workshop, held in July 1993. Such books tend to be motley collections of papers on different subjects. In the case of Post Keynesians this is hardly avoidable, as there is no such thing as *the* Post Keynesian approach which could hold the papers together. In the words of Hamouda and Harcourt, 'Post Keynesian economics is (...) a portmanteau term which contains the work of a heterogeneous group of economists who nevertheless are united not only by their dislike of mainstream neo-classical theory and the IS/LM general equilibrium versions of 'Keynesian' theory but also by their attempts to provide coherent alternative approaches to economic analysis.[1]' These alternative approaches lack a common analytical technique; what unites Post Keynesians is not a common theoretical framework but a view of the world which holds no place for neo-classical automatic stabilization. Rather than taking offense at Solow's view that Post Keynesians seem 'to be mostly a community which knows what it is against but doesn't offer anything very systematic that could be described as a positive theory,[2] they pride themselves on following a 'horses for courses' approach. This is reflected in the Introduction of *Employment, Growth and Finance*, where the editors repeatedly point to the discrepancy between 'traditional theory' and 'what every layman can observe in reality.' Obviously, any alternative to 'traditional theory' will do, provided that it corresponds to reality in some way or another, which we may take to mean that it does not start from the presumption of a stable equilibrium.

No wonder then that a common thread is difficult to discern in the book. To provide a semblance of structure, a division was made in three groups: Employment, Growth, and Finance, but within each group there is little coherence. The best a reviewer can do is to mention each individual contribution and make the odd comment.

The first chapter is on 'The intellectual and institutional requirements for full employment,' by M. Sawyer. He states that neo-classical theory faces a hard task explaining unemployment, especially in Britain where successive Conservative governments have gone out of their way since 1979 to reduce frictions in the labour market, only to see the level of unemployment nearly triple over a period of 14 years. High unemployment is explained, or rather an explanation is hinted at, by pointing to the balance of payments and the danger of inflation, which presumably militate against expansionary macroeconomic

1 O.F. Hamouda and G.C. Harcourt (1988), 'Post Keynesianism: From Criticism to Coherence?,' *Bulletin of Economic Research*, vol. 40, no. 1, p. 2.

2 R.M. Solow in A. Klamer (1984), *The New Classical Macroeconomics*, Brighton, Wheatsheaf, p. 137.

policies. Sawyer proposes to solve unemployment by stimulating demand through budget deficits, keeping interest payments on government debt within bounds by a low-interest policy. Furthermore he wants to reduce savings through an income redistribution from rich to poor, a tax on savings and discouragement of private pension plans. Finally, investment and exports should be stimulated. Inflationary pressures resulting from full employment should be counteracted by more centralized wage determination and by attempts to enhance productivity and worker commitment without the threat of unemployment, through such things as job enrichment, worker involvement in decision-making and profit-sharing. The financial sector should be made to better serve the need of the 'productive sector' and, you guessed it, an industrial strategy is required. One wonders in what world Mr Sawyer lives. To what reality does this correspond? One could perhaps cherish such dreams in the days of Hugh Dalton, but the world has moved on since then. Sawyer's contribution fulfills what Backhouse sees as the useful role of Post Keynesian economics, *i.e.* asking awkward questions,[3] but as a contribution to thinking on the subject at hand it can best be immediately forgotten (apart perhaps from his remarks on worker satisfaction, which, however, are very sketchy indeed). One shudders, for instance, at the thought of the degree of government control needed in financial markets to keep interest rates low in the face of high budget dificits on the one hand and discouraged savings on the other.

The second chapter, by A.H. Goldsmith, J.R. Veum, and W. Darity, Jr., on 'The impact of unemployment on perceptions of personal efficacy: do gender and race differences exist?,' explores the question of market experiences, such as unemployment, and psychic well-being. The authors find that among American youths white males suffer significantly less from the psychic costs of unemployment than white females and non-whites. D. Bunting explores in chapter 3, titled 'Aggregate and household behaviour: poverty and savings,' the fall in the American savings ratio since the 1970s by looking at the development of the savings behaviour of the separate quintiles. The author finds that the decline in aggregate savings has been caused by a fall in the savings rates of the lowest income quintiles, but he is unable to find reasons for the change in savings behaviour. In chapter 4, 'The guaranteed minimum income as a proposal to remove poverty in Brazil,' E. Matarazzo Suplicy and S. Cury employ an input-output model of the Brazilian economy with 90 sectors of production and five income classes in order to simulate the results of a guaranteed minimum income programme for such variables as income distribution, savings and sectoral production. Mr Suplicy is a member of the Brazilian Senate and Mr Cury is his assistant. The paper derives from Mr Cury's Ph.D. dissertation on the subject and the project of a guaranteed minimum income was presented by Mr Suplicy to the Brazilian Senate. This empirical study is followed by a theoretical chapter on 'The influence of changes in income distribution on aggregate demand in a Kaleckian model: stagnation *vs.* exhilaration reconsidered,' by T. Mott and E. Slattery. The paper, which failed to exhilarate me, is in effect nothing but a commentary on a model by A. Bhaduri and S. Marglin, which they provide with a better investment function. In their asides on empirical matters they state that what they see as 'the stagnation of the past two decades' has been caused by a squeeze on mark-ups through international competition and by 'greater support for austerity to hold wage costs down and to prevent rentier interests from suffer-

3 R.E. Backhouse (1988), 'The Value of Post Keynesian Economics: A Neoclassical Response to Harcourt and Hamouda,' *Bulletin of Economic Research*, vol. 40, no. 1, p. 39.

ing due to inflation.' Their rentier presumably wears a top hat, smokes Havanas and does not yet realize that he has been driven from centre stage by institutional investors. The section on Employment ends with an essay by N. Shapiro on 'Ownership and management,' which starts from the proposition that the firm must elicit the co-operation and effort of those under its direction and subsequently shows that owner's control of the enterprise is not always benevolent. It is very well-reasoned, well-written and concise, to my mind one of the highlights of the book, even if it stands apart as the only contribution in the field of business management.

The section on Growth starts with a contribution by W. Darity, Jr., on 'What's so "new" about "new" theories of technical change?: Adam Smith, Robert Lucas Jr. and economic growth.' Darity compares the answers of Smith and Lucas to two questions: (i) how did the vast disparities in the world between per capita income originate, and (ii) why do they persist. Both Lucas and the new growth theory as developed by Paul Romer, 'who is merely parroting Adam Smith' are guilty of not paying tribute to Adam Smith and neither really tells us anything that Smith had not told us back in 1776. A much more useful piece of work is chapter 8 by M. Setterfield, 'Recent developments in growth theory: a post Keynesian view.' Setterfield, like Darity, notes the similarity between the new endogenous growth theory and the work of Adam Smith, and also the work of Kaldor and Myrdal. Neither the Post Keynesian tradition associated with Kaldor and Myrdal nor the new endogenous growth theory offers an endogenous explanation of changes in relative growth rates between regions over time. Setterfield proposes to remedy this defect by introducing endogenously induced supply-side changes. Lacking the wronged tone of Darity, he sets out to combine useful elements from different traditions and to build upon these to provide a better explanation of real-life phenomena. The last chapter in the Growth section is 'Structural change and productivity in the OECD,' by J. Cornwall and W. Cornwall. The authors, not happy with the usual model assumption of steady-state long-term growth, attempt to explain the post-1973 productivity slowdown in the OECD countries by constructing a hypothetical benchmark economy which is characterized by a certain growth rate for every different stage of development. The deviation of a country's actual growth rate from the benchmark growth rate associated with the country's stage of development then must be explained by differences in economic behaviour. Though interesting, the exercise suffers in my view from the fact that the variables taken to explain the deviation, *i.e.* export success, technology transfer (or catching-up), investment and economic slack, seem to have been chosen rather randomly and, in addition, cannot be seen as independent. Unfortunately, Cornwall and Cornwall are silent on having done any tests for multicollinearity.

Section three on Finance opens with a paper by H.P. Minsly, 'Full employment and economic growth as an objective of economic policy: some thoughts on the limits of capitalism.' It will come as no surprise to those familiar with his work that he discerns fragility in the financial system and sees a number of flaws in the capitalist system. His conclusion that 'the capitalist market technique of creating resources is flawed in that it is inherently myopic and needs to be permanently supplemented by the long view that government alone can have' is probably founded on a one-sided study of the behaviour of fund managers to the neglect of that of industrialists, and his optimism with regard to government, including the Clinton administration, will strike most readers as somewhat naive. Nonetheless, Minsky, painting with a broad brush, does have some pertinent things to say on maintaining full employment and deserves to be heard. Chapter 11, 'Global portfolio allocation, hedging, and September 1992 in the European Monetary System' by J.A. Kregel is a rather technical analysis, including a primer on financial liberalization and financial innovation. Concentrating on the Italian lira, Kregel shows that, when a currency comes under pressure, a rise in the short rate of interest may actually increase the pressure. Whereas chapter 10 by Minsky has a prophetic touch and chapter 11 by Kregel is painstaking economic analysis, chapter 12 by A. Cornford on 'The role of the Basle Committee on Banking Supervision in the regulation of international banking' is wholly descriptive. Chapter 13 on 'Is there an economic (non-neoclassical) explanation for the magic of the technical analysis of stock markets?,' by A. Terzi, is an intriguing attempt to throw light upon the baffling question of the attractiveness of chartism, as opposed to fundamentalism, in stock market analysis. As far as I can see, Terzi has really something new to say on the subject. Chartism can hold its own against fundamentalism, in Terzi's eyes, because prices are the outcome of a social process rather than the outcome of a function whose arguments are pieces of 'objective' information. Two different theoretical views of the market process can be deployed to support the chartist case: the Austrian theory of markets and Keynes's theory of speculative prices. Both can in principle explain the phenomenon of trends and patterns in price series. The final paper, by Zajicek on 'Can capitalism be built through shortcuts?: lessons from Poland's economic reform,' lists a number of problems associated with the reform process in Poland. Economic liberalization is not sufficient to guarantee efficiency and growth; an active role for government is essential, as is shown by the Pacific Rim countries. The paper ends with a number of recommendations which are rather *ad hoc*, as a sound theoretical basis underlying them appears to be wanting. It is all very well to disagree with Jeffrey Sachs, but if one shows no signs of having read such books as R.I. McKinnon's *The Order of Economic Liberalization* one can hardly be taken seriously as a writer on transition problems.

What does it all add up to? A collection of papers of very uneven quality on very disparate subjects. Most readers will probably find no more than a few chapters to their liking.

H. Visser

Mark A. Glick (ed.), *Competition, Technology and Money; Classical and Post-Keynesian Perspectives*, Edward Elgar, Aldershot, 1994. Pp. xxii + 250. £ 55.–

Classical and Post-Keynesian economics have often been compared with mainstream economics. This essay bundle, however, aims at comparing classical and Post-Keynesian economics with each other. The comparison is made for the five fields of competition, technological change, money and finance, macroeconomic modelling and international perspectives. The term classical economics refers to the work by well-known classical economists, as well as to that by Marx. Modern classical economists build on this heritage, instead of accepting the neo-classical approach that emerged after 1870. Post-Keynesians reject the neo-classical synthesis by continuing Keynes' lines of thought.

Malcolm Sawyer discusses Post-Keynesian and Marxian approaches to competition and the operation of markets. He thoroughly describes classical and Marxian theories on the one hand and Post-Keynesian theories on the other hand, the latter being divided into a monopoly capitalism approach and an investment-based pricing approach. Both Post-Keynesian approaches differ in what they regard as the objective of firms. Empirical research indicates a weak relationship between concentration and profitability within industries as well as a slow and incomplete tendency towards convergence of rates of profit. In an attempt to synthesize both strands of theory, the author argues that they do not differ in substance, as both consider long-term survival as the aim of organizations and profits as their owners' aim, but in the assumed degree of market power of large corporations. In the chapter written by Donald Campbell and the editor, the time horizon of classical theory as opposed to Post-Keynesian theory is shown to be crucial to the predictions of both theories with regard to profit rate equalization. According to classical economists, profit rates tend to equalize by way of capital movements and demand-induced price adjustments. The monopoly theory of capitalism, developed by radical Marxists, sees entry barriers as an obstacle to profit rate equalization. Post-Keynesians, like Robinson and Kaldor, give a macroeconomic interpretation to this line of thought. However, they neglect differences between short-term and long-term effects, thereby raising specification problems for empirical research. Recently, classical economists have returned to microeconomic analysis and thereby enabled econometric testing of competition theories, with results favouring the hypothesis of inter-industry profit rate equalization. The authors conclude by stating that Post-Keynesian theory tends to become outdated, whereas modern classical economics both matches with empirical facts and is compatible with new theories on industrial organization and oligopoly theory. Amativa Dutt presents a model that combines classical with Post-Keynesian elements. Both the classical view of intersectoral average profit rate equalization by moving investment capital and the Post-Keynesian idea of mark-up prices that reflect market power are integrated into a dynamic model. As a consequence of this synthesis, evidence on profit rate equalization does no longer discriminate between classical and Post-Keynesian theory. The classical element of profit rate equalization by changing prices on the goods markets, however, is not taken into account as this contrasts with the Post-Keynesian notion of mark-up pricing behaviour.

The two chapters on technological change pay relatively much attention to theories by Marx. Gérard Duménil and Dominique Lévy discuss, as well as test, Marx' theory on the organic composition of capital. In a clear exposition of their method, the authors differentiate between 'profit efficient technical change,' which maximizes the increase of the profit rate given the prevailing wage rate, and 'biased technical change,' which can be either capital or labour-using. Over the period 1869–1989 they find supportive evidence for the thesis by Marx, which states that the profit rate decreases because technical chage is biased towards capital-using investments. For all three subperiods of forty years, a significant relationship between the degree of capital-biased technical change and the profit rate is found. These findings are compared with Post-Keynesian theories, such as the Kaldor-Verdoorn law, and are found to be compatible with them. Korkut Erturk centres his discussion on the issue of technological unemployment, *i.e.* unemployment resulting from technological change. In neo-classical economics, wage flexibility enables factor substitution until the labour market is in equilibrium. Classical economists, however, take production coefficients as given, so that technological change displaces labour and increases profit rates. From Ricardo's theory an *employment expansion condition* is derived, which states that technological change does not lead to a fall in demand for labour if and only if the rate of capital accumulation is greater than or equal to the sum of the percentage increase in the capital-output ratio and that of labour productivity. Marx follows Ricardo with regard to the trade-off between labour-diplacing technological change *versus* labour-absorbing capital accumulation, but stresses the cyclical character of growth. New technological innovations demand other types of accompanying labour force than the types displaced by now redundant technologies. Erturk concludes that although heterodox theories on technological change did not intend to focus on technological unemployment, they are nevertheless useful for explaining the phenomenon.

The influence of money and the financial sector on economic outcomes is the focus of Robert Pollin's chapter in which Marxian and Post-Keynesian theories are compared. These heterodox theories are said to provide an alternative to classical analysis, as they take into account the flexibility and uncertainty of the financial sector with regard to the amount of money and the investment spending as well as the systematic aggregate instability that may result. Duménil and Lévy also wrote a chapter on macroeconomic instability. Their innovation concerns a distinction between stable and unstable equilibria, in which variables gravitate towards their trend values or are swept into larger movements, respectively. However, the latter deviations tend to remain within boundaries. In an elegant model the authors demonstrate the different types of equilibria and their being a source of business cycles. Thus, they contribute to a classical economics type of business cycle theory with stabilization in the long run.

The first chapter on macroeconomic modelling is a long and detailed overview of David Gordon's results in comparing heterodox models. The author shows a structural model in which he inserts the characteristic features of Post-Keynesian, Marxian and Social Structuralist models by varying the values and signs of the coefficients of the variables. This approach is very illuminating, because it clearly indicates the differences and commonalities of the three types of models. The simulation with post-war US data reveals that heterodox macroeconomic models share more traits with each other than with mainstream models. The second chapter on this topic concentrates on Post-Keynesian macroeconomic models. Philip Arestis, Iris Biefang-Frisancho Mariscal, and Peter Howells demonstrate that Post-Keynesian quantitative economic analysis is consistent with methodological 'realism.' They show this by constructing a model of the UK financial sector in the 1980s which is based on Post-Keynesian assumptions. The 'realism' concerns the making of theoretical constructs from stylized facts, such as the interest sensitivity of bank credit and industry and consumer loans. The use of a context-specific econometric model enables the authors to explain the changes in the UK financial sector in the last decades.

The three chapters on international perspectives have in common that they synthesize the classical/Marxian view with Post-Keynesian theory. In the first chapter, Lynn Mainwaring presents an evolutionary vision on the international division of output and labour. The descriptive model is a combination of the classical surplus approach and the long-run Post-Keynesian accumulation and distribution theory. In the long run, either of two contraints can become binding: in the industrialized Northern countries, labour can limit the growth rate, and in the agricultural Southern countries, natural resources may do so. A sequence of binding contraints of both types form the basis of the authors's evolutionary theory of international investment and production division that is consistent with history. William Milberg argues that Ricardo's law of comparative advantage, though still often defended by theorists, is not only difficult to apply in multi-country multi-goods situations, but also theoretically problematic. The underlying assumptions of full employment and automatic price adjustment, which are assumed to guarantee balanced trade, were rejected by Keynes and Marx. Today's international trade theory allows for the existence of technology gaps and other structural differences between countries to determine trade patterns and justify government policy that stimulates innovations. Milberg's point of view corresponds to the vision of Nilüfer Çağatay, who discusses the many elements of classical economics that have entered new trade theory: imperfect competition, scale effects, specialization, innovation and technological change. New trade theorists try to combine these features with the assumptions of full employment and balanced trade that allow for the law of comparative advantage to hold. Post-Keynesian and Marxian elements are thus treated as an addition to the neo-classical approach, which diminishes the applicability of the new trade theory as compared to heterodox theories that take absolute advantage as their starting point.

This book deserves careful reading by scholars who work on heterodox theory. The survey chapters are nicely supplemented by more detailed chapters on model building, thereby making the ideas presented concrete and applicable. Both the authors and the editor have done a good job trying to synthesize theories whenever possible and clearly distinguishing them whenever needed. As this hinges on the subject studied, the division of the book in five parts is a very useful one. Besides, it makes the book easily accessible for readers who are only interested in some of the topics.

Fieke van der Lecq

H. Hageman and O.F. Hamouda (eds.), *The Legacy of Hicks; His Contributions to Economic Analysis*, Routledge, London, 1994. Pp. viii + 280. Dfl. 130,–

This is a collection of fifteen essays written in memory of Sir John Hicks. The work is organized in such a way as to stress the contribution of Hicks to economics in general and his impact on the foundations of economic theory. The authors of the articles (13 of which were written specifically for this volume) are not only familiar with Hicks' contributions in a particular field, but have themselves also made major contributions to that field. Thus one encounters well-known names as Hahn, Morishima, Kennedy, Bliss, Leijonhufvud, Laidler, and Hey, to name but a few. This approach has advantages as well as disadvantages. One major advantage is that the book couples broadness of topics – reflecting the fact that Hicks made a significant impact on almost every aspect of modern economic theory – with a remarkable depth within each topic. The major disadvantage in my view is that some parts of the book will be somewhat difficult to read for those readers not familiar with (some of) the literature on that particular subject.

The volume covers all the major fields that Hicks contributed to. Given the eminence of the contributing scholars, the essays are of interest in themselves. Thus one finds excellent and authoritative discussions of subjects as, among other things, the (abuse of the) IS-LM paradigm and its influence on the development of modern macroeconomic theory, Hicksian welfare economics, and Hicks' contributions in the field of general equilibrium, business cycle theory, labour economics, capital theory, uncertainty, monetary theory, and technical progress. In the last three chapters time-related phenomena as stocks and flows, the time structure of the production process and the fixprice and flexprice concepts are discussed. These are reflections of the issues that concerned Hicks in the later part of his life, where he used the Austrian insights of the importance of the temporal structures of productive processes to construct a theory of a growing economy which is not on a steady-state path but moving from one path to another.

In each essay's review, Hicks' work is related to that of authors who influenced him. The emphasis however lies on a prospective discussion of Hicks' work. The authors each try to assess which of the many contributions of Hicks will be remembered by future generations. In this respect a distinction can be made between 'finished' and 'unfinished' business. The former contributions can be characterized as final products, ready for end-use. As Matthews (p. 12) and Kennedy (p. 58) put it, these are products of Hicks the conceptualizer; he showed new methods of analysing economic problems. The theoretical tools for which he well, above all, be remembered were forged for the purpose of analysing the movement of an economy through time. The significance of this type of contributions is perhaps best illustrated by the remark of Hahn (p. 26): 'A time may come when his citation index becomes small, but only because so much of what he wrote will have become identified with the subject of economics itself.'

The latter kind of contributions, where Hicks left unfinished work for future economists to pursue, are perhaps more interesting from an academic perspective. Here the volume points to two important avenues of further research which were opened up by Hicks. Both are subjects which reflect the crucial role played by time. The first concerns the theoretical treatment of uncertainly in the analysis of general equilibrium and the second pertains to monetary theory. With respect to the treatment of uncertainty the contribution of Hey suggests that the combination of the Knightian distinction between risk and uncertainty, and Hicks' between risky and non-risky choices (a distinction based on the disaster-point concept developed by Hicks) may offer some promising insights. With respect to monetary theory, Scazzieri and Laidler conclude in their essays that Hicks' later monetary thought, where he stresses the medium-of-exchange role of money, has the potential of providing an important stimulus to the further development of monetary economics.

One of the main achievements of the book is, in my view, that it shows that the many issues that concerned Hicks are all interconnected, in that they all are manifestations of the central element in his thinking throughout his life, *i.e.* the treatment of time in economic theory. In reading these essays that mesh well in their complementarity, one can also find a different influence of time. It concerns the evolution in Hicks' methodology throughout his 60-years-long career. Whereas the younger Hicks adhered to the axiomatic approach to pure theory, the older Hicks withdrew from this approach and stressed the relationship between economic theory and economic history as of fundamental methodological significance. All the essays reflect, implicitly or explicitly and seen from different angles, this evolution in Hicks' methodology.

All in all, this is a useful and stimulating book, despite the fact that some contributions are difficult to follow for the non-specialist reader. It will help historians of thought and those interested in the development of economic ideas to grasp the significance of Hicks' own contributions and those of Hicksian economics.

Jan Marc Berk

John B. Davis, *Keynes's Philosophical Development,* Cambridge University Press, Cambridge, *etc.,* 1994. Pp. xiii + 196.

'I am a good friend of the Universe and I will do my best for it: but am I willing to go to the devil for it?' Thus Keynes (cited in Davis, p. 85) wondered in an unpublished paper on egoism, written for the 'Apostles.' From his early years in Cambridge on, Keynes contemplated philosophical problems. One of them was how to reconcile 'being good' (having a good state of mind) and 'doing good' (acting to realize good states of mind). For a long time this remained his favourite dilemma. The meaning of 'good' itself was part of the problem. Keynes' early hero, the Cambridge philosopher G.E. Moore, inspired his early beliefs on these matters. Moore argued that 'good' is a simple, non-natural property, to be grasped with infallible intuition. Keynes and his young friends stretched this view to the extreme, convinced as they were of their own individual judgement. But Keynes realized that the relationship between being good and doing good was far from self-evident.

One of the problems involved related to the ability of having a correct intuition about 'good' and other moral categories. A second problem dealt with inference: how to judge whether a certain act which seemed 'good' would indeed, by its sequence of consequences, ultimately result in a good state of affairs? The young Aspostles evaded these dilemma's by behaving on the verge of solipsism: for them, only their small Apostolian society existed, and good were their love affairs. However, Keynes gradually took distance from this small world. A major theme of Davis' book is that, when Keynes became an economist (as a theorist, but also an active stock-market speculator), his philosophy changed. This happened, say, somewhere during the 1920s, when Keynes became intrigued by the importance of the social dimension of judgement.

But already earlier, despite the Apostles' veneration for Moore, Keynes questioned Moore's views on ethics in relation to conduct, disputed his frequentist interpretation of probability, and wondered about 'the curious connexion between probable and ought' (cited in Skidelski 1983, p. 148). A major problem with Moore's philosophy of ethics is his neglect of judgement errors. What if intuition happens to be wrong? The first chapter of Davis' book deals with this issue. Alternatives to Moore, in paricular the emotivist theories of ethics (advocated, among others, by Lionel Robbins), hold 'good' is *not* a simple, non-natural objective property. Value judgements are entireley subjective, without an underlying truth to be grasped by intuition. Wittgenstein (who talked frequently with Keynes on these matters) criticized not only Moore, but also the alternatives, because of the impossibility of a private (intuitive or subjective) language. This is the topic of chapter 2. The first two chapters of Davis' book are hard to read. A cryptic style of writing, with unduly long sentences, contributes to this problem. But economists may also get lost in the discussion of Wittgenstein's language games and wonder why it is needed for an understanding of Keynes. However, Davis seems to have a point although it is hidden in abstract wording.

Readability improves with chapter 3, which deals with Keynes' self-critique. Here, Moore's neglect of judgement errors is discussed. The importance of rules and conventions is introduced. The problem of 'interdependent belief expectations' is essential for this later philosophy and features in chapter 4. Chapter 5 discusses Keynes' philosophical development in the light of his *General Theory*. In this chapter, Keynes' view on habits, animal spirits, error correction and rational behaviour are discussed. While the young Keynes rejected Moore's conventionalism, the mature Keynes regards conventions as the cement of society. Unlike Moore, the mature Keynes does not base conventionalism on a frequentist theory of probability. In this respect, the argument presented in the *Treatise on Probability* remains intact. Note that the *Treatise* is a book in the tradition of Hume (in a sense, an effort to circumvent Humean scepticism). Hume's conventionalism is an implicit ingredient (being attacked) of the *Treatise*. Davis' book would have gained interest if he had clarified this issue. And, apart from the influence of Moore on Keynes, it might have been interesting to trace the impact of another famous Cambridge philosopher, W.E. Johnson, as well. Johnson inspired both Harold Jeffreys and Maynard Keynes, two of the most important contributors to inductive probability theory this century.

Chapter 6 finally relates Keynes' ethics to his views on economic policy. In particular, the bearing of speculative motives on investment is discussed, and Keynes' plea for a socialization of investment. This policy, it is argued, creates the necessary rules and conventions needed for regaining economic stability and may reconcile being good and doing good. However, what exactly is 'good' in Keynes' matured Victorian set of values is not made quite clear.

Davis' argument is largely based on (unpublished) Apostles papers by Keynes, which figure as the benchmark for his philosophical development. Keynes' most important philosophical publication, the *Treatise on Probability*, receives surprisingly little attention and where is does, it is not quite satisfactory. Although I trust Davis has read the *Treatise on Probability*, at times I wonder whether he has read the same book as I have. Some of the explicit references (*e.g.* on p. 37) seem rather absurd, but more interesting is what is not referred to. A salient feature of the *Treatise* is the discussion of non-numerical probability. In 1921, Keynes uses an example to illustrate the problem which has become famous after its reappearance in the *General Theory*. It is the Beauty Contest. In the *General Theory*, it figures to illustrate the problem of interdependent belief expectations (using Davis' words). How can one claim that the crucial feature of Keynes' philosophical development is the introduction of social beliefs, if the very exemple which is used to exemplify the problem was used to illustrate a related (and most controversial) element of his early philosophy? To substantiate his claim Davis should have discussed Keynes' views presented in 1921, among other things the Principle of Limited Independent Variety, and how (if at all) it relates to the development of Keynes' philosophy. Did Keynes change his mind about non-numerical probality, first being subjective, later social?

Keynes shifted from an individual, arguably subjective, to a social theory of judgement. Concerning the theory of ethics, this seems to be a correct interpretation. In his early beliefs, value judgement is a private matter, based on intuition. Later, such judgements have a much stronger conventional character, and those conventions are the cement of society; they obtain a positive intrinsic value. Here, Davis has a valuable point. But is he right in attributing this development to Keynes' change in interests, his transition from philosopher to economist? In fact, Keynes' first publications, from 1908 onwards, were on economics – much earlier than the suggested turning point around 1925. Another query which remains after reading the book is how Keynes defined the social (or public) good. It is clear that he rejected Benthamite utilitarian calculus. His ethical alternative remains obscure, and it is not clear whether something philosophically interesting developed. Perhaps Davis can clarify these issues in future publications.

Hugo A. Keuzenkamp

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Skidelski, Robert (1983), *John Maynard Keynes, Hopes Betrayed 1883-1920*, New York, Viking.

Th. Mayer and S.M. Sheffrin (eds.), *Fiscal and Monetary Policy*, volumes I and II, Edward Elgar, Aldershot, 1995. Pp. 363 and 322.

Fiscal and monetary arrangements belong to the basic institutional set-up of modern market economies and so do fiscal and monetary policies. The two share important goals as high employment and price stability. However, other policy objectives are exclusive to either fiscal or monetary policy. Predominant examples to illustrate this exclusiveness are income redistribution and exchange rate policies. The common and distinctive properties of the above two types of economic policy form in some way or the other the contents of the two volumes edited by Mayer and Sheffrin, which are divided into three parts. The first part deals with some general problems of stabilization policy which are common to both fiscal and monetary policies. The second part deals with fiscal policy and the third part with monetary policy.

As a matter of fact the two volumes reprint 28 articles published in the easily accessible leading economic journals, including *American Economic Review, Economic Journal, Econometrica, Journal of Political Economy* and *Journal of Monetary Economics*. However, also a few articles published in the less accessible reviews of a number of the Federal Reserve banks are included. According to the editors – and I share this view – many of the essays reprinted here were pathbreaking articles, which at the time encouraged new research and became seminal references in the literature. Examples of monetary economics – all included in volume II – are Milton Friedman's 1968 essay on 'The role of monetary policy,' Karl Brunner's 'The pragmatic and intellectual tradition of monetary policy making and the international order' of 1973 and W. Poole's seminal 1970 article 'Optimal choice of monetary policy instruments in a simple stochastic macro model.' The 28 articles date from 1953 to 1993 with almost two thirds of them from the last decade and only two from the period 1953-1963. These two are: Friedman's 'The effects of a full-employment policy on economic stability' and Modigliani's 'Long-run implications of alternative fiscal policies and the burden of the national debt.' The articles from the latest decade are on issues like time inconsistency, the motivation of monetary and fiscal authorities, central bank behaviour, the Lucas critique, and feedback policy rules.

In summary, I believe this is a valuable book of readings on fiscal and monetary matters. It brings together in a handy format 26 important papers published in scientific journals which a monetary or fiscal economist may wish to consult regularly. This makes this publication useful for both the new and old generations of economists. Of course, these readings also have their own idiosyncracies by totally neglecting empirical papers. This is true in spite of the fact that many of these papers have been instrumental in the advancement of monetary theory over the last two decades. Nevertheless the two volumes are worthwhile.

M.M.G. Fase

A. Alesina and H. Rosenthal, *Partisan Politics, Divided Government and the Economy*, Cambridge University Press, Cambridge, *etc.*, 1995. Pp. 280. $ 17.95

The market economy provides a simple mechanism of coordinating actions. This mechanism is driven by prices; prices convey information about consumers' preferences and the costs of producing goods. In the public sector a mechanism does not exist. In democratic countries, decisions are made in the political market, where political parties supply policies and individuals express their demand for policies by voting. To evaluate and understand the role of the government it is important to understand how policies come about in the political market and this is what the book by Alesina and Rosenthal is about.

The purpose of the book has not been to build a large political model that describes the behaviour of all agents (politicians, bureaucrats, interest groups, voters, *etc.*) who may affect policy outcomes. Instead, models have been constructed that are small and based on a minimum of assumptions, but nevertheless capture some basic features of the U.S. political economic system and provide explanations for some strong regularities.Two of these regularities receive special attention. The first is that U.S. policies depend on the political colour of the executive and the composition of legislation. The second regularity is that in congressional elections, which are held in the middle of the administration's term, the party that holds the White House loses votes relative to the previous congressional elections.

The second chapter focuses on explaining the first regularity and deals with a key assumption underlying all models in the book that in the United States the political system is polarised. The basic idea behind this assumption is that the democratic and republican parties represent the interests of different constituencies. In such a political setting, political parties do not choose policies in order to win elections, but want to win elections to choose policies.

It is evident that the assumption of partisan preferences may help to explain that policies depend on the policital colour of the government. It should be emphasized, however, that partisan motives do not automatically lead to policy divergence. Calvert (1985) points out that if political parties are able to make a credible commitment to a party platform and have complete information about voters' preferences, party platforms completely converge even if political parties have different preferences. Alesina and Rosenthal deviate from Calvert's approach in assuming that political parties cannot enter into policy commitments. They argue that under this assumption polarised preferences usually lead to diverging policies. The logic of their argument is simple. Once elections are held the party that has won the election is free to carry out its most preferred programme. Only if the policymaker cares deeply about the distant future might he be interested in building a reputation. However, according to the authors, political actors are likely to be myopic. Personally, I do not find the authors' argument convincing. Before presidential elections are held, candidates have to be nominated by their parties. At this stage political parties may have the opportunity to make a commitment to a policy programme. By nominating a moderate candidate the party increases its chances of winning the elections and after the presidential elections are held the winning (moderate) president can carry out its middle-of-the-road policy programme. Thus the U.S. institutional system does offer parties the possibility to make a credible commitment to a policy programme.

In spite of the theoretical problems of the partisan theory, it is difficult not to be convinced by the empirical evidence cited by the authors that the U.S. political system is polarised and that U.S. Presidents are often far from moderate. Still a convincing theory of why partisan policies are important and whose interests parties represent is lacking.

Chapters 3-6 discuss models describing the interaction between the executive and legislature. The main message of this model is that the institutional environment in the U.S. provides voters with the possibility to moderate policies pursued by the executive. The models are based on the assumption that policy depends on the political colour of the executive and the composition of the legislature. In this setting, voters can generate middle-of-the-road policies by splitting their votes. For example, if the Democratic party holds the White House, voters can balance the power of the Democratic party by voting for Republicans in congressional elections. In chapter 4, Alesina and Rosenthal show that if in this model voters are uncertain about the preferences of other voters the predictions of this model are consistent with the mid-term voting cycle. The key idea behind these predictions is that in the middle of the administration's term, voters know with certainly which party holds the White House (in contrast to elections that are held simultaneously with presidential elections) and choose the opposition to balance policies.

As said before the models which are discussed in the book are elegant and simple but do provide an explanation for some regularities. Nevertheless, I believe that the theories developed by Alesina and Rosenthal should be regarded as a first step into the right direction, rather than the ultimate theory. One aspect I find disappointing in the models is that the relationship between the legislature and the executive is hardly motivated in the model. Implicitly, the executive and the legislature bargain over policy and ultimate policy lies somewhere in the middle of the wishes of the executive and the legislature. I have two objections to this approach. First, the bargaining process does not seem to reflect the institutional process in the U.S. In principle, the legislature can reject the proposals of the executive (which for example happened with Clinton's health reform plans). Second, it is unclear how in this model the position of the legislature is accomplished. For example, why is it that the composition of the legislature counts and not simple majority?

Chapters 7-9 deal with stabilisation policy. To some extent this part of the book can be seen as an application of the theories developed in the previous chapters. In chapter 7 the rational partisan model is discussed. Two political parties with different preferences over real output and inflation run for office. The economy is described by a simple Phillips curve according to which inflation surprises have real output effects. The outcomes of this model are well-known. Under Democratic administrations inflation is higher than under

Republican administrations and real output is higher (lower) at the beginning of the terms of Democratic (Republican) administrations. The temporary output effects are caused by uncertainty about election outcomes. This uncertainty causes unions to underpredict inflation when a Democratic candidate wins the elections and overpredict inflation when a Republican candidate wins the elections. The authors claim that the data are consistent with their model and are in conflict with the predictions of alternative political economic models. Some puzzles remain, however. The finding that the effect of the political colour of the administration affects inflation later than real output does not seem consistent with their economic model that describes that output growth increases with unexpected inflation. Furthermore, in one of their regressions the authors find that in the second year of the administrations' terms output is about seven percentage points higher under Democratic administrations than under Republican administrations. This would require either an implausible output inflation trade-off or an enormous amount of uncertainty about election outcomes. Unfortunately, the authors hardly address these problems. Chapters 8 and 9 examine how voters behave in a rational partisan model. Consistent with the theoretical models of the first part of the book, voters are found to use mid-term elections to moderate policies pursued by the executive.

In summary, this is a high-quality book that should be read by any economist who is interested in political economy. The models explored by the authors promise to be a fruitful starting point for further research, because empirical evidence strongly supports their predictions, while a number of puzzles remain.

Otto Swank

Michael Landesmann, István P. Székely (eds.), *Industrial Restructuring and Trade Reorientation in Eastern Europe*, Cambridge University Press, Cambridge, *etc.*, 1995. Pp. xxi + 369. $ 59.95

This book edited by Landesmann and Székely addresses the long-term aspects of the economic transformation currently taking place in Central and Eastern Europe. Whereas, according to the authors, the bulk of current literature in the field of emerging market economies in the region focuses on macroeconomic stabilization as a prerequisite for successful transformation (p. xxi), they believe it their primary task to depict and analyse the region's restructuring in industry and foreign trade. The authors refute the rather naive idea of creating a market economy by dismantling the system of central planning, and, instead, stress the importance of integration into the world economy as a precondition for transformation. This view necessarily implies that the entire transformation will take decades rather than years. For economists, the tremendous task of industrial restructuring and foreign trade reorientation almost provides the laboratory experiment which they were always looking for in their analyses, but were never able to find. Landesmann and Székely observe, analyse, and report this unique experiment.

Besides a separate introductory chapter, the volume consists of three parts. The first presents a general view on currently changing industrial and foreign trade structures (Landesmann and Székely) and addresses expected shifting trade patterns from East to West in the coming decades (Landesmann). The second part elaborates developments in different countries or regions, *viz.* Eastern Germany (Schmidt and Naujoks), Hungary (Blahó and Halpern), Czechoslavakia (Nešporová), Bulgaria (Dobrinsky, Markov, Nikolov, and Yalnazov), and Poland (Tomaszewicz and Orlowski), whereas the analysis in the third part is more on the enterprise level. It subsequently investigates the performance of Hungarian exporters (Halpern), the hardening of budget constraints in Poland (Belka and Krajewski), the issue of industrial policy (Landesmann and Ábel), and the role of financial intermediation in industrial restructuring (Ábel and Székely).

Despite the fact that it may be somewhat premature to assess structural changes in industry and foreign trade so shortly after the demise of mandatory planning, and despite an overkill of tables and graphs which tends to divert the reader from the main line of reasoning, the different authors manage to present a broad view on the legacies of the past, the current problems involved, and likely patterns for the future. Without claiming completeness, the overall conclusions are that (i) the legacies from the communist era greatly differed among the countries in transition, (ii) while there are major regional shifts of trade from East to West, commodity structures of Central and Eastern European countries' foreign trade are currently more thoroughly changing on the import than on the export side, and (iii) strong government intervention remains needed to successfully complete industrial restructuring. The first conclusion is not as revealing as Landesmann and Székely pretend (p. 49), since it is well-known from earlier literature that reforms in Hungary shifted trade from East to West quite some time before the collapse of the system, whereas former investments in Czechoslovakia were the result of negotiations within the *Council for Mutual Economic Assistance* (CMEA) and, therefore, primarily had to meet Soviet import demands (*e.g.* Senior Nello, 1991). But the second and third conclusion certainly do have interesting implications for generally accepted views on industrial restructuring and foreign trade reorientation in Eastern Europe.

Regarding asymmetric adjustments in commodity structures of the Central and Eastern European countries' imports and exports, the implications are that, by and large, lost markets in the CMEA have been compensated for by an increase in exports of the same sort of commodities to Western markets. Given the fact that the segmentation of foreign trade markets in terms of different factor intensities and quality standards has always been taken for granted, it is quite astonishing that *e.g.* Hungary, Poland, and former Czechoslovakia manage to increase market shares in the *European Union* (EU) dramatically without major shifts towards exports of less capital-intensive manufactures. In this regard, Landesmann and Székely are quite persuative in their analysis of remaining quality deficiencies of Central and Eastern European exports to the EU, but Halpern's microeconomic analysis of Hungary's foreign trade reorientation is highly informative too. It would have been interesting, though, if the reader was further informed about the impact on patterns of production in the EU. On the basis of this and other analyses (*e.g.* Drábek and Smith, 1995), it might be assumed that too much fear for massive structural adjustment within the EU is not justifiable, and, hence, there may be fewer arguments left for EU protectionism.

The necessity of government-led industrial restructuring also provokes established views on the emergence of market economies in Central and Eastern Europe. At the enterprise level, most of the literature directly links privatization to the problem of restructuring. There have been extensive debates whether privatization should precede restructuring or not (*cf.* Estrin, 1994; Jackson and Bilsen, 1994). The general idea of a quick and free distribution of state property over the population at large, is to leave restructuring to the market. Curiously enough, privatization is not addressed in this book and for the innocent reader it may seem irrelevant to the problem of restructuring. The irrelevance is not subscribed to in this book, but the authors do make a different stand by emphasizing that industrial restructuring under conditions of as yet not fully-developed markets will not be successful without active government policy. That leads to questions as to whether state-owned as well as private enterprises already behave according to the rules of the market, or whether it is still possible to escape market discipline. The study on hardening of budget constraints in Poland is most illuminating in this respect. The analysis of Belka and Krajewski leads to the conclusion that, on average, Polish manufacturing enterprises are confronted with harder budget restrictions, that the magnitude of inter-enterprise debt is largely overstated, but that tax arrears are the main leak in the budget constraint (pp. 310–311). Similar analyses for other Central and Eastern European countries would be more than welcome.

One can conclude that *Industrial Restructuring and Trade Reorientation in Eastern Europe* is to be wholeheartedly recommended to the reader of general interest in problems of changing patterns in the international division of labour. It distinguishes from and substantively contributes to the already vast amount of literature on the newly emerging market economies.

Herman Hoen

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Yu-Shan Wu, *Comparative Economic Transformations. Mainland China, Hungary, the Soviet Union, and Taiwan*, Stanford University Press, Stanford, 1994. Pp. 282. £ 30.–

This book is a study of Chinese economic reforms in the 1980s. Wu applies a property rights approach in that his analytical framework focuses on the distinction between *usus* on the ore hand and *fructus-abusus* on the other. *Usus* is the right to use a thing, and the transfer of *usus* from the state to private individuals is called marketisation; *fructus* and *abusus* are the rights to the proceeds of a thing and the right to sell a thing, respectively, and transferring these rights from the state to private individuals is called privatisation.

Furthermore, Wu argues that marketisation increases allocative efficiency, and that privatisation increases what he calls 'motivational efficiency.' Starting from a command economy, defined as an economy where the state holds the *uses* as well as the *fructus-abusus*, reformers can choose to marketise if they believe that defunct allocation is the main cause of poor economic performance, or privatise if they think that motivation is the culprit. Interestingly, we learn from Wu that Chinese economic reformers can indeed be classified in a 'price school' (which favours marketisation) and an 'ownership school' (which favours privatisation) (p. 44). In the 1980s, the 'price school' was on the whole more successful in turning its ideas into government policy than the 'ownership school,' although the latter was not entirely unsuccessful either. Wu makes clear that the Chinese reforms in 1984-85 basically amounted to marketisation, in 1986-87 to privatisation, and in 1988 again to marketisation.

Wu explains the prevelance of marketisation over privatisation by viewing economic reform as a process that is constrained internally by ideology and externally by security. Privatisation is constrained by ideology, marketisation by security. Wu excludes the possiblity that the communist leaders of China will ever privatise large scale industry, because this would be incompatible with their ideology (p. 213). Conversely, since there is no direct security threat to China, there is room for more marketisation in the 1990s.

However, Wu also thinks that 'the possibility of a return to the old command system in the 1990s cannot lightly be dismissed' (p. 81). This conclusion is derived from his comparison of present-day China with the situation in the USSR in the 1920s in chapter 4. 'Where can we find a similar situation, in which agriculture and small industry and trade are private and the state holds the 'Commanding heights,' that is, large industry and other strategic areas of the economy? The NEP period of the Soviet Union from 1921 to 1929 comes immediately to mind' (p. 80). As in the Soviet Union then, Wu expects a 'grain crisis' to trigger a return to the old ways. We can read with some concern that 'grain production in post-Mao China is an issue as prominent as it was in the Soviet Union during the NEP period' (p. 125) and also that 'China's grain shortage could erupt into a crisis at any time' (p. 130).

There is, however, one major difference between the USSR in the 1920s and China in the 1990s. Whereas the NEP functioned only fairly well, China has recently experienced 'the greatest increase in economic well-being within a 15-year period in all of [world] history, perhaps excluding the period after the invention of fire,' as Stanley Fischer has put it. Hopefully, but also probably, this success will keep Chinese leadership from a return to the command economy. I will lightly dismiss the possibility of such a return.

Bert van Selm

Jean-Jacques Laffont, *Advances in Economic Theory: Sixth World Congress,* Volume I, Cambridge University Press, Cambridge, *etc.*, 1995. Pp. 327. $ 19.95

Every five years the Econometric Society organises a world congress. The last one was held in Barcelona in 1990. The next, at least at the moment I am writing this, will be held this year (1995) in Tokyo. At these congresses specialists in the leading subjects of economics are asked to survey their research topic. Every five years these surveys are published in two books: *Advances in Econometrics* and *Advances in Economic Theory*. This is a review of one of the two volumes of the *Advances in Economic Theory*, edited by J-J. Laffont. The fact that for the first time there are two volumes *Advances in Economic Theory*, indicates the growing importance of economic *theory versus econometrics*, which your reviewer considers either as *empirical* economics, or as advanced *statistics*.

The reviewed volume contains three parts, each with two papers and comments on these papers by a third author. The first part contains the papers 'Foundation of game theory' by Kenneth G. Binmore, 'Refinements of Nash equilibria' by Eric van Damme and comments by Eddie Dekel. These papers are no exception to the high quality throughout the volume. The paper by Binmore deals with 'common knowledge' and '(bounded) rationality.' In this paper you will meet two automata, playing a game after exchanging their 'Gödel number.' Do not feel disappointed after this remark. I find the papers of Binmore always very intriguing, but I never fully understand them. As often in this kind of volume, whether one likes one paper or the other, is a matter of taste. I very much liked the paper by Van Damme. It is a beautiful survey on all 'ins' and 'outs' of Nash refinements. Especially the section on 'stability' gives the reader the flavour of this, in my view, difficult subject without the, in this part of game theory popular, results from algebraic topology.

The second part contains the papers 'explaining cooperation and commitment in repeated games' by Drew Fudenberg, 'Repeated games: cooperation and rationality' by David G. Pearce and (very interesting) comments by Ariel Rubinstein. You will meet them all: patient and impatient players, long and short-run players, reputation building players, and so on. Some of the topics of part one are, in a context of repeating games, also treated here. In Pearce's paper there is a little more attention to 'incomplete information,' 'monitoring' and 'folk theorems' than in Fudenberg's contribution.

Before continuing with the last part, I want to make a general remark. So far all papers deal with *game theory*, and that is probably the reason why the editor of this journal asked me to review them, but not with *economic theory*. The reader will, in the parts described so far, on only a very few occasions in the examples and not in the main text, encounter words like: prices, quantities or investments. True, nowadays game theory is an important tool in economics, but so is differential calculus. Even more than fifty years ago, a paper on differentiable functions, applied to costs, profit and/or production functions, would not have been accepted in a volume like the one reviewed here. Also true, economists have made important contributions to (mainly noncooperative) game theory, especially on the subjects of imperfect and incomplete information, a subject lacking in many mathematical studies in the field. This, however, neither implies that game theory is a part of economics, although some people believe it is, nor does it justify such a complete lack of economic content. In order not to be misunderstood, I very much like game theory and, by the way, the same holds for differential calculus. But, in economics books or journals, I expect applications of such theories, not the theories themselves. I am prepared to look up the mathematical theory in mathematical books and journals. For me, being trained as a mathematician, and most other members of the Econometric Society this is no problem. But most 'pure' economists, like the readers of this journal, are more interested in, and will better understand, the economic applications than the mathematical theory. This type of reader will find very little of interest in this book.

The third and last part contains the papers 'Implementation, contracts and renegotiation in environments with complete information' by John Moore, 'Implementation in Bayesian equilibrium: the multiple equilibrium problem in mechanism design' by Thomas R. Palfrey and comments by Mathias Dewatripont. Here we encounter much more economic content than in the first two parts. Moore, with a lot of humour, first gives an example: the Judgement of King Solomon, and continues with an excellent survey of known results in implementation theory. Where Moore deals with complete information, Palfrey covers the incomplete information case.

In contrast to volume I, volume II contains more on economic subjects and I hope someone else will review that volume in this journal. In spite of some negative comments above, I consider this kind of survey indispensable for those who want to keep in touch with the continuation of economic theory. It is a pity that between the presentation of the papers in Barcelona and the publication of this review, there is such a long time lag, so that those who decide to buy the book today are slightly running behind the facts.

Dave Furth

R. Blundell, I. Preston, and I. Walker (eds.), *The Measurement of Household Welfare*, Cambridge University Press, Cambridge, *etc.*, 1994. Pp. 283. $ 54.95

Welfare may be considered to be the ultimate output of economic activity. Therefore, the availability of tools to measure it is most desirable, if not indispensable, for the design and evaluation of economic policies. The present book summarizes and exemplifies the progress that has been made in welfare measurement in the last two decades. It starts off with a concise yet remarkably complete introductory chapter, which structures the contents of the book around five main themes: duality and the measurement of welfare loss, equivalence scales and the cost of living, within-household welfare distribution, labor supply decisions and welfare, and social welfare, inequality and poverty.

The book reveals that there have often been contributions to the literature which initially seemed to be destructive in nature, but eventually led to richer theories and improved methods of empirical analysis. A simple example is the measurement of welfare loss due to taxation. When a price change occurs as a result of taxation, the concepts of equivalent variation and compensation variation can be used to obtain money metric measures of the associated welfare loss. It has been thought that these concepts were of little practical use because it relies on compensated demand curves, which are unobserved. However, by exploiting duality properties, Hausman and others have shown that equivalent variation and compensation variation can also be recovered from ordinary, uncompensated demand curves.

Another example is provided by the measurement of equivalence scales, the percentage change in income a household needs to remain on its initial utility level when its demographic composition changes. As pointed out by Pollak and Wales in the late seventies, there is a fundamental identification problem. Given the information available in budget surveys, the determination of equivalence scales will always have to be based on untestable additional assumptions, for example the assumption that the scale is independent of the reference utility level. Since different authors have used different identifying assumptions, the equivalence scales literature has produced a bewildering range of scale estimates. As pointed out (but not fully implemented) in the book, a possible way out of these identification problems is to invoke additional subjective information such as individuals' opinions about scales.

A final example, reflecting what is sometimes referred to as 'the empirical cycle,' concerns the distribution of welfare *within* households. A tension that has characterized traditional demand analysis is that theory is formulated in terms of individual behavior, whereas the available data usually apply to multi-person households. One implication of the traditional model is that household expenditures depend on total household income but not on the relative shares earned by various household members. The implication has been rejected empirically several times, indicating that the traditional model is misspecified. This has led to the development of more general models – game-theoretic in nature – which allow for unequal preferences and unequal access to resources within households. Given the emphasis on identification issues in the discussion of equivalence scales, it is somewhat surprising that identification receives no explicit attention in the discussion on intra-household welfare. The game-theoretic models of household behavior suffer from an inherent identification problem which is very similar to the one in the equivalence scales literature. Unless one is willing to make partly untestable assumptions (such as weak separability between consumption assignable to household members), individual welfare levels and access to resources can be identified only in the presence of data richer than usually available in household budget surveys.

It is not surprising that the book's eleven chapters, written by nineteen different authors, show quite some variation in relative emphasis on theory *versus* empirics, depth and novelty; one chapter is an almost exact copy of an earlier journal article. However, this does not detract from the merits of the book. It will allow graduate students and researchers to get acquainted quickly with the most important issues in this area and to easily find their way into the relevant literature. The fifty page introductory chapter is a valuable rush course in applied welfare analysis and strongly reinforces the coherence of the book. This is the way one would like to see a volume consisting of a collection of papers by different authors to be edited.

Peter Kooreman

A. Banerjee, J. Dolado, J.W. Galbraith, and D.F. Hendry, *Co-integration, Error Correction, and the Econometric Analysis of Non-stationary Data*, Oxford University Press, Oxford, *etc.*, 1993. Pp. xiii + 329. £ 40.–

This book is about the single most important subject in econometrics over the last few years. The explosion of literature about this complicated subject is thoroughly discussed. The contents of the book are as follows. After an introduction with an overview of the subject in chapter 1, chapter 2 presents *Linear transformations, error correction, and the long run in dynamic regression.* (The invariance of co-integrating vectors is discussed in the concluding chapter 9.) Chapter 3 presents the asymptotic theory of integrated processes, introducing the Wiener process. In chapter 4 the testing for a unit root is discussed. Tables are given with critical values for the tests discussed. The concept of a similar test is introduced and it is stated which tests are similar to each other. Chapter 5 is about the nature of co-integration, including the Granger Representation Theorem. Chapter 6 is about regression with integrated variables. It is discussed when a t-ratio still has a t-distribution, and a table is given with the distribution of the t-ratio for some model. Here is some overlap with chapter 4. Chapters 7 and 8 are about the estimation of co-integrated equations – individually and as a system, respectively. Some empirical illustrations are given. In chapter 8 the Johansen maximum likelihood tests are presented. In chapter 9 a mixture is presented of concluding remarks and several details not yet discussed.

This book is not a gentle introduction to the subject, to be read during a few spare hours. Most of it is very technical in nature – only after a hundred pages the first practical results are beginning to emerge (in chapter 4). Hence, those who are only superficially interested in the subject might try something less technical. For a text about what tests are performed when, *etc.*, consult for example the software-related book by Hendry and Doornik (1994). For criticism of the practical value of the material discussed, consult for example the appendices to Campbell and Perron (1991).

However, this landmark in the history of econometrics is recommended to those who are more than superficially interested in the subject, including all those teaching the subject; possibly as a source of reference rather than of reading from cover to cover. In fact, there is no competitor for this book; reviews of the subject in journals are too short – either they start at an advanced level, or they do not end at an advanced level. In their own words, the authors have tried to make the book as self-contained as possible, starting from the knowledge obtained in final year undergraduate or first year graduate courses in econometrics.

At the Netherlands Central Planning Bureau, several researchers have studieed this book together. Although for us is was not an introduction to the subject, much in it was indeed new for most of us. Afterwards, we asked ourselves: what skills have we learned from this book? The book is of such a technical nature that some of us found it very hard to give an answer to this question. We think that for teaching, the book might benefit from a set of questions and exercises.

The book is not a collection of articles which have previously been published elsewhere. In this book the authors decided to stick to the notation of the papers discussed; not to design a uniform notation. This makes it easier to refer back to the original papers, but otherwise this is somewhat of a nuisance. For instance, on page 183 the vector $\mathbf{S}_t$ is called a matrix; no doubt because bold-face upper case symbols usually stand for matrices. The problem is that here several vectors are in bold-face upper case, while bold-face lower case $\boldsymbol{\eta}$ also indicates a matrix – all very confusing. The choice between upper and lower case is from the original paper, which however has no bold-face for these symbols. Also, in defining a univariate autogressive data generating process, sometimes x_t is used (pages 122, 164, and 170), but mostly y_t; the error is sometimes ε_t (pages 82, 106, 122, and 164), but mostly u_t.

Sticking to the original articles also reduces the didactic value of the book when a more intuitive or simple approach is available. We find assumption A3 of the Granger Representation Theorem on page 147 clumsily formulated. A linear system of dynamic equations is written as $\boldsymbol{\pi}(\mathbf{L})\mathbf{x}_t$=noise, with $\boldsymbol{\pi}(\mathbf{L})$ a matrix polynomial in the lag operator. The assumption states that a matrix product of three auxiliary matrices, which are derived from $\pi(.)$, is of full rank $n-r$. Better is something like: '$\pi(\mathbf{z})$ has (exactly) $n-r$ unit roots.' (See Boswijk, 1992; the first three chapters of this work are a useful introduction to the literature.) Assumption A1 refers to these roots, and the entire unit root literature is about these roots. Also note that in sections 8.2 and 8.3 the hypothesis of $n-r$ unit roots is discussed without reference to the roots of $\pi(\mathbf{z})$.

A book with four authors requires a lot coordination. It seems that the latter has not been perfect. For instance, the discussion around equations (4) and (5) on page 23 is given afresh on page 89 around equations (18) and (19), respectively, with different references. Also, the concept of balance is introduced three times, in somewhat different ways (pages 164, 166 note 3, and 167).

In the discussion of similar tests on page 105, a hint as to why these tests are similar might have been given, with an example. The point here is that in a linear regression the OLS estimate of the coefficient of a regressor does not change if one or more of the other regressors are added to any variable, including the left-hand-side variable. Even if it is obvious for anyone considering it for just a second, we think it is useful to notice such a thing – also in an advanced text.

At several places in the book, results are used of Monte Carlo regression simulations, both from the literature and performed by the authors. At the bottom of page 73 the hypothesis of a zero slope coefficient in a univariate regression model where the two series involved are both integrated is rejected. However, it follows from the nature of the data generating process here that the distribution of this coefficient is symmetrical around zero and hence its mean value is zero. Also, in Figure 3.4 the values of $\bar{\beta}+SSD$ and $\bar{\beta}-SSD$ are obviously constant; their ripples are just Monte Carlo fluctuations and here too analysis should replace computer results.

We have found several errors in the book. The following one may be quite confusing, as it occurs in the complicated and long proof of the Granger Representation Theorem. In the discussion of the theorem on page 146 and further, this system is rewritten in first differences and a lagged level x_{t-k}; see equations (26) and (27). However, the differences are related to the unlagged level x_t in the proof which follows. (Compare equations (27) and (28a): the matrix function $\Psi(\mathbf{L})$ cannot be the same in these two equations.)

Arie ten Cate*

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Boswijk, H.P. (1992), *Cointegration, Identification and Exogeneity*, Amsterdam, Thesis Publishers.

* This review is the spin-off of the study of this book by a group of people at the Netherlands Central Planning Bureau. This group included F.J.H. Don, D.A.G. Draper, A. Houweling, F.H. Huizinga, P. Kooiman, A. Nieuwenhuis, R.M.G. van Stratum, and the author of this review. Without this group, this review could not have been written.

Campbell, J.Y. and P. Perron (1991), 'Pitfalls and Opportunities: What Macroeconomists should know about Unit Roots,' in: O.J. Blanchard and S. Fischer (eds.), NBER *Macroeconomics Annual*, Cambridge MA, MIT Press, pp. 141–219.
Hendry, D.F. and J.A. Doornik (1994), *PcFiml 8.0 Interactive Econometric Modelling of Dynamic Systems*, London, Thomson Publishing.

International Labour Office Geneva, *World Employment 1995. An ILO Report*, ILO Publications, Geneva, 1995. Pp. x + 200. SF 25,–

'Restoring full employment is feasible with sufficient political will and the right combination of international and national policies. There will be vast benefits from a renewed commitment by all nations to the objective of full employment.' Under this adagium the ILO recently published its *World Employment 1995* report. The report intends to be the first in a new series of ILO reports that review employment issues from an international perspective.

Opposite to recent studies as the *European Commision White Paper* and the *OECD Jobs Studies* the ILO report attempts to discuss the persistent unemployment in the developed countries in combination with the employment crises in the transition economies of Central and Eastern Europe and the developing world. The major advantage of this approach is that it can be easily shown that the unemployment problems in these three global regions are interlinked through trade, foreign direct investment, financial flows, and migration flows. From this global view the report is a plea against the 'defaitist attitude' that full employment is unattainable and the 'isolationist solutions' to the employment problem that impede the integration of the global economy.

The three main parts of the report deal with the (debates on the) causes of the unemployment problems and the various policy options in the developing countries, the transition and the industrialized countries, successively. These three parts are preceded by a chapter that surveys the key aspects of the current globalization of the world economy and are followed by a final chapter that discusses the potential contribution of international policies to the reduction of global unemployment.

The key features of the system that ensured full employment in the industrialized countries and increasing prosperity for many developing countries in the 1950s and 1960s are more or less the backgrounds of the policy lines the ILO advocates. However, this does not mean that the report is directed towards the 'tripartite paradise lost' of that period. It is argued that for developing countries, transition economies as well as for industrialized countries a successful response to the globalization process is of strategic importance. This primarily means that each country should specialize in activities where it has a comparative advantage. However, this policy causes severe problems of adjustment with high social costs. Moreover, transitional unemployment can become persistent through hysteresis effects, whereas the social problems might feed protectionist sentiments.

Therefore 'positive adjustment policies' should be adopted in order to smooth the transfer of resources from declining to new activities in line with a country's competitive advantage. In particular labour retraining schemes are important in this respect. The industrialized countries should focus on the training of low-skilled workers as part of overall efforts to shift employment towards higher-productivity activities. For the transition economies of Central and Eastern Europe the ILO points at the critical importance of the emergence of employment services and the reactivation of enterprise-based training by a government-supported institutional framework for providing such training needs. In the developing countries more general investments in human capital which are often complementary to investments in physical capital could provide an additional stimulus to growth.

A major point made in the ILO report is that the enhancement of cooperative international action is an important part of the solution 'to current employment problems throughout the world.' This *Tinbergen mission* should create the basis for cooperative positive-sum policies. A number of policy lines are discussed. As policies inducing wage decreases will not bring the gains in international competitiveness if they are implemented in all countries these typically 'single country instruments' should be abandoned. As the level of capacity utilization is generally low in most countries there should be a basis for coordinated expansionary policies. Moreover, a reform of the international monetary system should reduce the destabilizing effects of speculative financial flows on exchange and interest rates. Instruments as a taxation tax on financial flows should therefore be seriously considered. Since protectionist sentiments are often fed by perceptions that some countries obtain 'unfair competition' by violating basic labour standards, international action is required to safeguard against a competitive debasement of labour standards in order to improve shares in world trade. Finally, the report suggests two specific steps to bring 'current social problems and anxieties to the fore of the global agenda': (1) to include the ministers responsible for employment and social affairs in international deliberations on economic policy and (2) a closer cooperation between the ILO and the international agencies responsible for economic and financial policies.

My general impression is that the ILO report offers a valuable contribution to the public debate on economic and emplyment policies. Several discussions in economic literature on employment and labour market policy issues are suggested in a rather balanced way with a main orientation on the (international) market processes without falling back on a *laissez-faire* attitude. Interesting is in particular the discussion on the costs and the benefits of labour market regulation in which the often neglected benefits are highlighted. Obviously the argument for cooperative international action is a correct one which indeed is the major challange for economic, financial and employment policymakers at the moment.

Andries de Grip

Cees G.M. Sterks and Maarten A. Allers, *Gemeenten in drievoud. Financiële positie van gemeenten in drie scenario's tot 2015* (Municipalities in Triplicate, The Financial Position of Municipalities in Three Scenarios till 2015), Vereniging Nederlandse Gemeenten – Uitgeverij, Den Haag, 1995. Pp. 119. Dfl. 34,50

In 1992 the Centraal Planbureau (CPB) (Central Planning Bureau) published a long-term study *Scanning the Future*, which had a time horizon of twenty-five years. In that study, the following questions are dealt with: 'What are the driving forces behind the process of economic development,' 'How do we assess the current position of the various regions in the light of these driving forces?' and 'Which long-term trends stand out as the ones which can strongly influence the development of the world economy during the next quarter century?' Four scenarios (*Global Shift, European Renaissance, Global Crisis,* and *Balanced Growth*) are presented with the purpose of helping people envisage the various futures which may evolve, meanwhile enabling them to better prepare themselves for bottlenecks and opportunities which could emerge. This study distinguishes three perspectives, which provide us with a relatively complete picture of the driving forces behind economic development: the *Equilibrium Perspective*, the *Coordination Perspective* and the *Free Market Perspective.*

This study is followed by a CPB scenario study *Nederland in Drievoud*, in which these three perspectives are projected on the Dutch economy. It did not consider the scenario to the 'globas crisis.' Sterks and Allers have rounded off this series with their book '*Gemeente in Drievoud. Financiële positie van gemeenten in drie scenario's tot 2015.* In their study they present 'three internally consistent and plausible models of the role and the financial position of municipalities in the next 20 years.'

Working with scenarios and models of the future provides the opportunity to consider fully and systematically alternative courses for solutions. It is therefore a nice idea of the authors not only to offer these models of the future world and national economies, but also to present a contribution to the developments closer to home: local administration. Dutch municipalities are highly dependent on the policy pursued by the central government and consequently also on the scenarios opted for at that level. There certainly is a need for such an approach. Looking back upon the development of municipal administration during the last 30 years one reaches the conclusion that the local administration's decisiveness could be improved. National policy severely restricts the municipalities and they have only little freedom to take advantage of external developments. Since the end of the 1970s the national government has enforced big spending cuts on the municipalities. What does the future have in store for them?

Sterks and Allers' study is subdivided as follows. First the three scenarios and the three prospects for The Netherlands are discussed in triplicate (chapters 2 and 3). Chapter 4 shows how varied the consequences are for the scale and composition of public expenditure. This has far-reaching consequences for the municipalities. The description of the starting position in 1990 begins with a discussion of municipal revenue and expenditure, and continues with the present developments in domestic administration. The last part presents a differentiation of each of the three CPB scenarios by municipality. What effect does this have on municipal expenditure and revenue, respectively? All this is reviewed in the typically Dutch context of the financial balance between central and local administrations. The whole is summed up in a comparative survey in chapter 12. Several conclusions follow.

The three different scenarios have consequences for the organization of the national administration; its taxes and levies; the general payment by the Gemeentefonds (Municipal Fund); and the specific allowances. The three scenarios result in decreases in expenditure in some policy sectors and increases in expenditure in others. Thus the 'global shift' scenario, which implies stagnation of European development, leads to gloomy prospects for the municipalities. Fewer funds for education, infrastructure and social security and more for subsidies, care and public administration. The 'balanced growth' scenario leads to a reassessment of the welfare state to a guarantee state, resulting in an increase of local and provincial taxes. Citizens will no longer be able to appeal to the municipalities for social care. In the 'European Renaissance' scenario the central control of the national and European authorities will remain strong. The present municipalities will merge into larger entities.

The development of expenditure in the various scenarios, divided into traditional government tasks (education, public administration, and infrastructure); domestic transfers (care, social security, and subsidies) and interest can be translated into expenditure by citizen and by living accommodation. The authors show that the various scenarios will lead to different results as well. Yet we must stick to our sense of reality. What was originally intended by the CPB, namely to portray the driving forces behind the future world economy, boils down to rather detailed computations. The authors seem to expect that – the closer to home we are operating – these driving forces will really materialize into actual expenditure towards 2005 and 2015, respectively. However, they run the risk that the introduction of all sorts of presuppositions on institutional changes in public administration will not yet have taken effect by then.

L. van Leeuwen