

BOOK REVIEWS

P. Krugman and M. Miller (eds.), *Exchange Rate Targets and Currency Bands*, CEPR/NBER, Cambridge University Press, Cambridge, etc., 1992. Pp. xxii + 247. £13.95

This volume of essays contains, among other things, the papers which were presented at the Conference on Exchange Rate Targets and Currency Bands at the University of Warwick in July 1990. This body of literature is to a large extent inspired by a research memorandum of Krugman in 1988 (which was published in 1991, in the *Quarterly Journal of Economics*, Volume 56, pp. 669–682). This paper introduced the model which would become the standard target-zone model in much of the following literature and is outlined in chapter 2 of this volume. The bundle of papers collected in this volume can be seen as a critical evaluation of this new approach. The assumptions of the basic model are scrutinized and adjusted and the consequences carefully related to the basic model. The peculiarities and restrictions of the target-zone model become very clear. Although the mathematics of these models can become rather complicated the basic idea is simple.

Suppose that it is generally expected that the exchange rate moves between an upper and a lower exchange rate limit, because it is believed that the monetary authorities will defend these limits no matter what happens. Furthermore, the exchange rate depends on so-called fundamentals (subject to stochastic disturbances) and the expectations of future values of the exchange rate. These fundamentals can be the money stock, price differentials, interest rates, etc. When the exchange rate is getting close to, for example, the upper limit, the probability of an intervention to prevent the exchange rate from becoming too high increases. A further increase of the exchange rate is unlikely because speculators know that the monetary authorities have committed themselves to defend the exchange rate limit. The same holds *mutatis mutandis* for the lower limit. The resulting picture of the exchange rate is an S-shaped function of the fundamentals, with the S limited by the upper and lower exchange rate limits. Implicitly the fundamentals are also 'stabilized' in order to keep the exchange rate between these limits. The recent popularity of this model might be explained by the fact that it clearly shows why the traditional exchange rate models performed badly, since the exchange rate is a non-linear function of the fundamentals rather than a linear one. Paradoxically, this recent stimulus to exchange rate theory also revives the old monetary model, which is used as the building block in these new models.

The results depend mainly on two assumptions: the exchange rate target zones are perfectly credible and interventions only take place at the margins. Basically, these two assumptions are the focus of this book; they are critically discussed and extended. This

volume is concerned with mostly technical issues, and examines the consequences when the assumptions are changed. Flood and Garber (chapter 3) extend the model to incorporate large (discrete) interventions, which leads to a more general model. Delgado and Dumas (chapter 4) also extend the basic model to allow for changes in the distance between the exchange rate limits. They show that even for narrow target zones there is still room for the fundamentals to change: the bounds on the fundamentals are an order of two wider apart than the bounds on the exchange rate, thus leaving room for some policy freedom.

Although the target-zone model in its most simple form assumes fixed target zones, in real life we often witness regime changes. One possible regime switch is entering an exchange rate band. Froot and Obstfeld (chapter 5) discuss the technicalities of such a switch in a general way. If such a regime switch is fully credible (given the fundamentals) and the size of the intervention is announced, a stationary solution results. If the regime switch is, however, announced to take place at a specific time irrespective of the fundamentals the solution, as shown by Ichikawa, Miller and Sutherland (chapter 6), is non-stationary and depends not only on the fundamentals but also on time. These ideas are applied in Miller and Sutherland (chapter 7) to the case of Britain's return to gold in the 1920s and Britain joining the EMS. They introduce a Dornbusch-type model to cope with price inertia which they claim were essential at the time.

Another cause for changes in the targets are speculative attacks. Krugman and Rotemberg (chapter 8) show that speculative attacks are likely if reserves fall below a certain critical level. If reserves grow (again) they show that there is a transition to the standard target-zone model. If the monetary authorities, however, realign in order to avoid exhaustion of the reserves then in the long-run we no longer have an *S*-shaped exchange rate curve but a 45-degree line, with only short-run non-linearities as pointed out by Bertola and Caballero (chapter 10). Buiter and Grilli (chapter 9) solve a 'gold'-paradox, which arises when there is the possibility of speculative attacks in the face of uncertainty. This paradox states that when a country runs out of gold its currency appreciates. In such a situation there can be no equilibrium; the introduction of additional market agents solves this problem. Obstfeld, however, points out that more consistent and sensible policy rules also result in a unique, well-behaved equilibrium.

Empirical tests of the basic Krugman model were very unsatisfactory, according to Smith and Spencer (chapter 11). However, allowing for realignments and intra-marginal interventions to a large extent solved this problem (see *e.g.* Svensson, 1992).

For anyone who needs or wants to obtain a thorough insight into this relatively new field of exchange rate modeling this volume is an absolute must. As said at the beginning, the target-zone model is very well discussed and evaluated. As can be expected in such a new field time has not stood still since 1990 (the time of the conference). More attention has since been devoted to the relaxation of the basic assumptions, while only recently the welfare analysis of target zones is addressed (see Svensson, 1992): is a target zone better than fixed exchange rates, how often and when should there be a realignment and how narrow should the band be, *etc.* Moreover, more realistic models than the monetary model could be introduced. No doubt these problems will be analyzed in the near future, but for now this book provides a relatively up-to-date discussion of this new and stimulating approach to exchange rate modeling.

REFERENCE

- Svensson, L. E. O. (1992), 'An Interpretation of Recent Research on Exchange Rate Target Zones,' *Journal of Economic Perspectives*, 6, pp. 119–144.

G.C. Archibald, *Information, Incentives and the Economics of Control*, Cambridge University Press, Cambridge, etc., 1992. Pp. 173. \$39.95

The author takes you on a trip into the difficult economics of getting things done the way you want. He is in touch with real life and his concern is not difficult to detect. Parents, coaches and teachers often face problems not entirely remote from the ones the book is concerned with. So do shareholders, banks, auctioneers, policymakers, governments, and so does the central planning bureaucracy. But high theory is certainly not missing in this book, reducing its scope to the pros of the second category listed above and extending it to a category not mentioned before scientists, interested in developing economic control systems. Those who rely on piecemeal welfare economics in promoting free trade, *laissez faire* and systems to cope with externalities, may read the book as a cure.

Studying this book requires a real effort to keep in touch. This is not to be taken as a criticism. One follows a distinguished economist in his arduous attempt to apply welfare theory. The author is concerned with implementation of economic control, trying to design methods for achieving some sort of perceived optimality. The quest generally is for a behavioural rule for an agency to reach a target, hence (or) the establishment of an institution. At the outset the author discards central planning procedures as they imply that sufficient information be collected to calculate optimal quantities, or prices, *prior* to implementing the plan. Central plans, once effective, require obedience and no doubt a lot of policing. The author promotes a different procedure, guided by Adam Smith's insight that matters go more smoothly if institutions are such that private and social interests coincide. Control without planning is proposed by designing a sophisticated feedback control process. What the controllers chief wants to arrive at, is mapped into a Criterion Function, designed such that it signals when the target is sufficiently reached. Feedback controls were already introduced in economics by the engineer A. W. Phillips. However, two problems have for a long time been overlooked. An economic control (institution), once installed, alters the economy that it is supposed to control. Hence, economic agents may react upon their changed environment with the result that behavioural parameters change: preset and fixed control parameters are out of date. The presence of the control may also lead to strategic behaviour, implying a more drastic change. This way the economy changes more fundamentally, hence the control system controls something that it was not designed for (recall the Lucas critique on econometric model-based policy recommendation). The author therefore proposes that (iterative) control systems (institutions in a wider sense) be developed: (a) such that the controller 'learns' about his environment (parameters) whilst controlling and (b) which are strategy-proof as well as incentive-compatible. Showing how such sophisticated control systems can be designed makes sense for specified cases only. The author has chosen to discuss the implementation of his proposed control system using examples from the literature on

applied welfare economics and on managerial incentives. These cases deal with a variety of non-fancy economic problems. The difficulty in keeping on track lies in the author's ambitious task of detecting strategic behaviour, principal-agent problems, side-payments and collusions and the attempt to cope with them in this complex variety. There is another, deeper reason for this difficulty. The author is in constant struggle with the inappropriateness (of the two theorems) of general equilibrium welfare theory for policy recommendations, simply because he takes the latter seriously: he cannot rely on general equilibrium welfare theory whilst designing institutions and control systems. This is discussed in a 'philosophical way' (not related to control design) in Part I and in a 'practical way' (related to control design) in Parts II–III when particular cases are discussed (and criticized for their welfare foundations).

In part I the author, and rightly so I think, relaxes the axiom of pure selfishness on empirical grounds and on the logical difficulty of deriving rules from a system based on amoral agents to improve, so to speak, upon the outcomes of their 'immorality' on moral grounds. Under the weakest form of these 'extended preferences' the author shows that the First Theorem -any competitive equilibrium (CE) is Pareto-optimal- breaks down, since there may be CEs which the agents themselves regard as morally unacceptable. I suppose that the Criterion Function (CF) should therefore be designed such that it signals target fulfillment for morally acceptable CEs only. The author does not suggest this, probably because this deals with a minor problem relative to the ones which follow. The Second Theorem -any optimal allocation can be supported by a competitive price system (CPS) if the initial endowment is appropriate- implies that matters of efficiency and distribution can be 'divorced.' This rule for constructing targets is shown to survive extended preferences, provided these are non-paternalistic. But the restriction of non-paternalism does not help when there are public goods, whence there may be optimal allocations that cannot be supported by a CPS (efficiency). That general equilibrium runs into difficulties in case of increasing returns is well-known. For implementation this means that matters of distribution (equity) and efficiency cannot be divorced. The author shows how in this case efficiency depends on distribution. The author then gives ample reasons to believe that non-convexity is an ubiquitous phenomenon, hence planning involves a choice of what goods to produce and therefore the construction of a CF must involve value judgments. He also demonstrates that First Best solutions are generally unattainable and undesirable. In trying to implement a Second Best solution, by means of the proposed control process using a cost-benefit criterion, he reminds us that solutions to Second Best problems generally depend on some representative consumer, hence on intolerable aggregation assumptions. I can roughly summarize the author's position at the beginning of Part IV in concluding that, whilst his interest has primarily been in implementation of sophisticated feedback rules in standard cases where welfare economics has been applied, deeper digging in these cases was necessary, exposing the problem that welfare economics does not give clues as to what and how to implement them.

In part IV the author says there are still situations where Pareto-improvements are possible and he reminds us of a school of thought which states that these improvements are commonly blocked by ignorance and prejudice: unenlightened self-interest in fact. He fears not to believe this, making the point that when distribution is ignored, or left 'to the market,' potential losers are neither ignorant nor unenlightened if they resist change, although they are undoubtedly self-interested. (Recall the critique that Keynesian agents are ignorant, uninformed and non-rational.) The author then turns to cases where the

obstacles are caused by problems related to the Prisoner's Dilemma, in capitals, or to a Free-Rider nature, and he tries to design institutions which install self-interest to achieve improvement.

This is an important book, although it is a bit difficult to read. If the reader is in the appropriate category, I strongly recommend reading it.

J.A. Ribbers

F.A. Hayek, *The Fortunes of Liberalism. Essays on Austrian Economics and the Ideal of Freedom*, The Collected Works of F.A. Hayek, Vol. IV (P.G. Klein (ed.)), Routledge, London, 1992. Pp. xii + 279. £35.–

Hayek is recognized more and more as one of the leading social scientists and social philosophers of this century. His interests were very broad and even included tentative excursions into the field of psychology. As an economist he must be seen as a radical opponent of Keynes and Tinbergen, but certainly of similar importance and impact on the profession. The edition of the collected works of Hayek is therefore very welcome.

As a rule, collected works follow a certain plan or organizing principle – in many cases the chronological sequence of first publication (see the works of Marx and Engels, Keynes, Max Weber, and Samuelson). The organizing principle of the collected works of Hayek remains unclear. Perhaps they are the result of Hayek's most preferred principle, spontaneous evolution.

The present volume combines contributions to the history of economic thought in the first part under the subtitle 'The Austrian School of Economics' (others are to be found in Volume III), and reviews, addresses, personal recollections, and newspaper articles in the second part under the woolly subtitle 'The Fortunes of Liberalism.' What does not fit into this rather vague scheme and the resulting 14 chapters of the book is added as *Prologue*, *Addendum*, or *Coda*. Two obituaries of J.B. Clark and W.C. Mitchell clearly do not pertain to the Austrian school, so they are found in two addenda. But why the article on 'The Place of Menger's *Grundsätze* in the History of Economic Thought' suffers the same fate which implies smaller letters and more condensed printing than an ordinary chapter, the editor does not tell us. Nor does he tell us why certain other relevant pieces are not included into the volume. In his introduction, for instance, he repeatedly refers to a published lecture 'Coping with Ignorance' which is left out here without an indication that it will be found in any of the other volumes. The same happened to two further articles relating to Austrian themes, one of which must have been considered so important by its author that he published it several times and included it in his selection of essays *Studies in Philosophy, Politics and Economics*. The prologue of part I, 'The Economics of the 1920s as Seen from Vienna' is one of five lectures delivered at the University of Chicago and published in the present volume for the first time – where are the other four?

At the end of the book there is a chronological list of contents. It shows that the volume collects contributions between 1926 and 1983, and it makes clear that most of the contributions are obituaries, forewords, reviews, or occasional addresses. Such are not the places where critical assessment and elaborate scientific analysis are to be expected.

So, the book gives a lot of interesting information to the historian, but leaves the economist often somewhat disappointed. He neither can comprehend, for instance, what Menger's contribution was to monetary theory. For there are only allusions. Nor does he learn anything about its relation to Hayek's monetary theory.

Editing the collected works of Hayek must be a cumbersome affair. For Hayek has written many of his works in English and in German and has published them with certain alterations on several occasions. One of the best essays in the present volume, the chapter on Carl Menger, was first published in English in 1934 and after a series of ammended reprints, shorter versions and translations found its final version in German in 1968. The editor carefully renders all alterations and additions of later versions in is footnotes. These footnotes deserve the greatest praise anyhow. They try to correct certain errors made by Hayek, give short information on persons, events, books and ideas mentioned by him, and provide some references to important relevant literature.

Most of the ideas found in the book will be known to the informed reader. The present reviewer was surprised by chapters 10, *Is there a German Nation?*, a three and a half page book review of March 1945, and 11, *A Plan for the Future of Germany*, published in June 1945, with the addendum *The Future of Austria*, published in April 1945 (again the question, why two chapters?). The difference between a harsh treatment for Germany, understandable as it may have been in 1945, and a caring consideration for Austria's future is quite amusing: great philosophers too do not live without their emotions.

The present volume does not show Hayek from his best side. Nevertheless, it is indispensable for those interested in the history of economic thought. The plan of the editions of Hayek's collected works does not indicate a general index. Given the unsystematic presentation of his works, it would be one of the most important volumes.

H.-J. Wagener

Rudy van Zijp, *Austrian and New Classical Business Cycle Theories; A Comparative Study through the Method of Rational Reconstruction*, Edward Elgar, Aldershot, 1993. Pp. vii + 260. £39.95

The Austrian School and New Classical Economics (NCE) are research traditions in macroeconomics which bear a close resemblance to each other. Consequently, the question is often raised whether the similarities reflect a common ancestry, or whether it is merely accidental. This book addresses this question, not by comparing the fully-fledged forms of both traditions but by reconstructing their respective research agendas. The analysis is restricted to Austrian and new classical business cycle theories.

In part I (chapters 2–6) the developments in Austrian business cycle theory are discussed. The central problem in this theory is to explain why there exists a tendency towards coordination of the individual agents' plans and activities in such a way that general equilibrium can be attained. The latter can be characterized by optimality for all agents, in the sense that there are no endogenous reasons why individual plans will be frustrated. Given the subjective nature of the data in economics and the ensuing dis-

persion of knowledge, this coordination problem must be solved in some decentralized way. The crucial question of how a decentralized price system can bring about a tendency towards coordination is answered in reference to the process of competition between inherently heterogeneous economic agents. In this competitive process, entrepreneurial decision-making plays an important role. Such decision-making is creative, in the sense that it aims to discover and grasp existing but unexploited profit opportunities in the face of fundamental (Knightian) uncertainty about the future. The process of competition is presumed to eliminate such opportunities, so that the agents' plans and actions become coordinated. In this way, agents are able to learn their way into coordination. Austrians stress the complexity of social phenomena, and this has implications for the degree of explanation of their business cycle theory. These explanations are inherently incomplete and, according to the author, imprecise. As a result, they have little empirical content. Empirical testing can play a limited role only, given the complex and composite nature of economics.

Part II (chapters 7–10) discusses the developments in new classical business cycle theory. Its aim is to explain the correlation between money and output. This correlation is an unintended outcome of rational behaviour, and brought about by expectational errors caused by the agents' misperceptions about their decision situation. New classicals interpret business cycles as repeated instances of essentially similar events, thereby assuming that agents are confronted with Knightian risk and rejecting fundamental (Knightian) uncertainty. Moreover, by adhering to the homogeneity postulate and the representative-agent approach, NCE assumes that agents (and goods) do not differ in any systematic way. Given the objective of NCE to build mathematical models which can serve as laboratory economies, the domain is restricted to those problems which can be fully and determinately analysed in terms of mathematical models. Since these models are fully specified, new classical business cycle theories have a high degree of explanation and a relatively high empirical content. However, new classical tests have yielded ambiguous results.

In the last part of the book (chapters 11 and 12) a comparison between both schools of thought is made. Both Austrian and new classical economists explain business cycles as unintended consequences of rational behaviour, where prices do not transmit all relevant information. But Austrian business cycle theory explains cyclical fluctuations in terms of coordination failures, while new classical economists eliminate these failures by assuming perfect price flexibility and price-taking agents. Van Zijp therefore concludes that Austrians and new classical economists study different problems. Both research traditions also differ in the empirical content of their explanations of business cycles. Austrians do not consider empirical testing meaningful. NCE do find empirical testing meaningful, but econometric tests led some of their proponents, such as Barro, to conclude that new classical monetary explanations of business cycles were empirically invalid.

Van Zijp's book is both stimulating and illuminating. It combines economic theory with the history of economic thought. Prerequisite for a comparison is the use of a common language to express the theories of both research traditions. Given the fact that Austrians and new classicals differ considerably as regards the appropriate language which economics should use, this is by no means an easy task. However, Van Zijp succeeds in making a useful comparison, thereby taking a neutral stand. By using mainly the verbal form of expression the book is relatively easily accessible. An extensive index, together

with concluding paragraphs at the end of most (though not all) chapters, further enhances the readability.

Jan Marc Berk

Jan Kees Martijn, *Exchange-Rate Variability and Trade*, Thesis Publishers, Amsterdam, 1992. Pp. 275. Dfl. 40,50

The problems within the GATT negotiations, the emerging trade blocks, the monetary problems within the European Monetary System and the growing tendency towards protectionism have turned the issue of the effect of exchange rate fluctuations on protectionism and trade flows into a main economic topic. The book 'Exchange-Rate Variability and Trade' by J.K. Martijn covers the existing theoretical literature on the impact of exchange rate uncertainty on trade flows from a national perspective (part 1) and from an export company perspective (part 2). It can also be regarded in some respects as an extension of the literature on this subject.

After a short introduction some words are given to the so called Dutch Disease, where a prolonged real appreciation leads to a higher level of protection to counteract the decrease of competitiveness. The author gives an overview of the most important economic factors such as economic growth and competitiveness of the domestic industry which explain the nature of Government action within the trade policy. The book consists of two parts; in part one a comprehensive survey of the theory concerning the transmission channels from exchange rate variability on international trade flows is given. First a real appreciation within the (neo)classical theory with factor price flexibility is adopted. Then the Keynesian income expenditure (with unemployment) approach is introduced. The distinction between the Classical and Keynesian approach is used throughout the book.

The effectiveness and efficiency of import restrictions, such as a uniform import tariff, to counteract the undesirable effects of a real appreciation are examined by analyses of several specific distortions of the adjustment process in response to a real appreciation. An example of such a distortion is the income distribution effect, treated in chapter 2. Under specific circumstances this can provide a rationale for temporary government intervention, although there are some costs involved. In the last section of part one, chapter 3, an analysis is made of the actual political decision-making process. Within the public choice framework the policy reaction to exchange rate fluctuations is analysed. This is mainly done in a mathematical way. The level of protection is determined by the behaviour of two opposing interest groups: the import-competing goods sector and the firms in the non-traded goods sector. By means of a mathematical model and the use of figures, the author makes the structure and the line of thought clear. Because of the technical approach throughout the book only specialists in the field can understand and interpret the conclusions which are reached.

Part two of the book discusses the impact of uncertainty about future exchange rates and prices on the optimum choice by firms of their production and foreign trade levels. With the help of a time profile of a foreign trade transaction between an importer and an exporter, presented in section 5.3, two types of exposures to exchange rate risks are

analysed: the transaction and the economic exposure. The main features of the 'basic' model are presented in chapter 5. Further on (chapter 6), seven models of the behaviour of competitive firms acting in one market (closely related, in some respects, to products/product categories) are developed. Each model is characterized by a specific type of exchange exposure. The starting point is a firm confronted only with a nominal exchange risk without hedging opportunities. By changing the underlying assumptions step-by step the analysis evolves towards that a firm with a real exchange risk. In chapter 7 the assumptions of a competitive environment and selling on just one market are dropped and the analysis ends within the framework of imperfect competition and selling the product both at home and abroad. This extension of the basic model completes the total overview of the literature in this field. In many respects the author has extended the state of the art with some innovative analyses.

H.A. Ebberts

Richard O'Brien (ed.) *Finance and the International Economy*, The AMEX Bank Review Prize Essays no 6, Oxford University Press, Oxford, 1992. Pp. viii + 160. £9.95

This book contains the eleven prize winning essays of the 1992 AMEX Bank Review Awards. According to the editor's introduction this competition was meant to stimulate new research or clearly expose complex issues in the area of finance and international economics. The essays should aim at a wide international readership. I enjoyed reading the book and I am convinced that it deserves widespread attention indeed.

Although the contributions cover a wide range of subjects, they have in common that they deal with highly topical issues. This review will focus on a few of these in particular. The first four essays concern aspects of the transition of Eastern Europe to market economies. In his original (and first prize winning) essay 'Eastern Europe's need for a civil economy' Richard Rose points to the necessity of introducing not only market institutions *per se*, but also a civil economy by which he means an economy based on respecting the rules of the law. It is stated that only in the legal (civil) part of the economy a process of sustained growth may be expected. The reason is that illegality will increase transaction risks and thus hamper investment. Data are presented that show the participation in various kinds of illegal economic activities for five East European countries. Of these activities, bribery seems quite common in some of these countries. In some instances, however, one may wonder about the classification used. For instance, it is curious to see private foreign exchange dealing denoted as an illegal activity, since in several of these countries it has been legalized for some time. This essay ends with some rules aimed at enhancing the civil economy, for instance: tax rates should not be too progressive and the tax structure should be pragmatic, taking into account ease of collectibility, etc.

Michael Dooley and Peter Isard in 'The roles of incentives and planning in market-oriented transformations' address the issue of to what extent incentives can be relied upon in the transition process. They argue that in some areas it will prove difficult to establish proper incentives, like for instance in the management of state enterprises and banks. In

an environment of market prices many of these companies may show a negative net worth. In this situation it may be rational for borrowers not to respect financial obligations, or in the case of banks, to continue lending to insolvent firms. A quick restructuring by the authorities of old debts is therefore necessary. Somewhat controversial may be their argument that continued government involvement is needed in the allocation of credit and restructuring of enterprises through a transitional planning agency.

Sweder van Wijnbergen ('Economic aspects of enterprise reform in Eastern Europe') discusses the problems of restructuring and privatizing the state enterprise sector. The author warns against the use of bankruptcy procedures as these would inevitably result in long delays. Also, it is recommended that special attention should be given to reconciling different creditors' interests. A proposed route towards privatization is sketched. It involves debt/equity conversion applied to the senior creditor, which is usually the State. Junior creditors, management and workers on the other hand would be compensated through call options on the enterprise's shares.

Holger Wolf, in his contribution 'Economic disintegration: are there cures?' compares the present disruption of trade between the former Soviet republics and also between the republics of former Yugoslavia to similar processes in the successor states after the dissolution of the Habsburg Empire. In order to overcome the disintegration process the establishment of a payments union is advocated. It should be enhanced with the obedience of rules of sound macroeconomics and trade policy. The author expects that the acceptance of such rules could be enforced by the IMF, by including them in its terms of conditionality.

Of the other contributions, which deal with a variety of subjects, mention should be made of Lorenzo Bini Smaghi and Silvia Vori's essay which discusses the question whether the EC is an optimal currency area compared to the US. The authors express their doubt about the negative answer found in recent studies. They state that the EC economies are more homogeneous – in terms of their regional production structure – than the US economy. Accordingly, the occurrence of asymmetric shocks seems less likely. Also, the efficiency of the exchange rate instrument in the EC appears to be low due to a relatively high real wage rigidity.

Charles Horner's essay 'Value-added does not pollute' dismisses the view that economic growth in itself will inevitably lead to environmental damage. Although the consumption of the raw material and energy component of goods may have negative effects on the environment, such is not valid for the value-added component. Policy should therefore aim at an increase in the value-added component of consumption. Several possible measures are suggested, like the introduction of an energy tax (combined with a reduction of income tax and VAT) and stimulating the use of recycling.

A.A. van der Werff

Paul Fisher, *Rational Expectations in Macroeconomic Models*, Advanced Studies in Theoretical and Applied Econometrics, Volume 26, Kluwer, Dordrecht, 1992. Pp. viii + 211. Dfl. 190,–

Large-scale macroeconometric models were at their height in the sixties and seventies. Well-known economists like Lawrence Klein and Jan Tinbergen were awarded the Nobel

prize amongst other awards for their efforts in the model-building industry. With the advent of New Classical economics and the devastating Lucas critique in 1976 large-scale model building was no longer an art with which one could show off at learned seminars. Today one can only show off one's capabilities in this field at very specialized conferences and in abstruse economic journals. In the seventies macroeconomic model builders thought one could counter the critique of the academic community by building larger models. Of course, this was an illusion since size has never been a character trait that convinces economists. One drawback of the continuously growing size of such models is that the transparency of economic mechanisms and principles is lost. Of course, the instant retort of macroeconomic model builders is that one gains a large amount of realism. One can easily forget however, that this gain in realism is merely *ex post* realism. The forecasting performance of models has not been significantly improved.

Despite this type of critique, economists of a practical persuasion are still attracted by the model-building industry. For instance, in the U.K., the U.S., Germany, France, The Netherlands and at OECD headquarters (the project LINK) large-scale models of the economy are still used in practice to evaluate economic policies and to generate forecasts for the short-run; the very bold use them for long-run forecasts. The professional requirements of a model builder have, however, changed over time. One cannot simply construct a model consisting of a set of simultaneous equations and add a time path for some exogenous variables to generate forecasts. On the contrary, the lingo has changed with the Lucas critique and one has to incorporate forward-looking behaviour (somehow) and examine the uniqueness, stability and time-consistency properties of the model under review. In that respect the model builders are in no way different from their high-brow general equilibrium colleagues. But the task they set themselves is riddled by many difficulties; difficulties that are perhaps easily resolved in three-equation models of a small open economy. However, in a large-scale non-linear model of, say, 1000 equations problems of this nature become increasingly complex and one has to resort to other practical methods of evaluating the model properties. Analytical proof has become impossible. Paul Fisher, while working at the ESCR Macroeconomic Modelling Bureau and the University of Warwick, wrote a book on how to evaluate large-scale, non-linear macroeconomic models that contain rational expectations of future-dated variables. In order of appearance he examines topics like solution algorithms for the two-point boundary value problem; terminal conditions; uniqueness and stability; experimental design and stochastic simulation; the role of the exchange rate; and control methods including optimal control. In evaluating the model properties of large-scale models he resorts to three publicly available models of the U.K. economy, *viz.* the Liverpool model, the London Business School (LBS) model, and the National Institute of Economic and Social Research (NIESR) model. The main thread that can be distilled from his book is that *solution methods matter*. For example, the often favoured shooting techniques in solving rational expectations models are an inappropriate formulation for solving the basic consistent expectations problem and are unlikely to be feasible on many nonlinear models. Or to give another example: each finite-horizon, consistent expectation solution requires a set of terminal values. As long as the model possesses the required stability properties, Fisher proposes the use of endogenously generated values which assume constant or zero growth rates. The book is full of this kind of answers to practical solution-method problems.

Summing up all his findings encountered in the practice of large-scale model building

is a tedious task. I will leave it to the interested reader to distill the most interesting parts from his evaluation. The main merit of Fisher's book is that one is warned against the dangers of using large-scale models with rational expectations in a naive way. Fisher does not offer the reader a pleasant journey (and to a certain extent this is inherent in the objective of his book) but he does make model building with the use of rational expectations accessible and I believe that his 'cookery book' will surely be consulted by the applied economist who wants to put together a state-of-the-art non-linear macroeconomic model with rational expectations.

Hendrik P. van Dalen

J.J. Laffont (ed.), *Advances in Economic Theory*, Sixth World Congress, Vol. II, Cambridge University Press, Cambridge, etc., 1992. Pp. 450. £35.-

This book comprises 7 invited papers presented at the Sixth World Congress of the Econometric Society in Barcelona in August 1990. Each of the papers presents a survey of the most recent advances in some area of economic theory.

The first chapter by L. Epstein surveys developments in the theory of decision-making under uncertainty. The common goal of these theories is to generalize the classical expected utility model of choice in the view of some laboratory evidence. The paper explains these approaches both in static and intertemporal choice settings and discusses the implications for asset pricing models and the theory of games.

M. Harris and A. Raviv synthesize the recent literature on the theory of financial contracts in chapter 2. This literature addresses the problem of explaining the capital structure of firms and the design of financial securities using insights from the economics of information, industrial organization, and the theory of incomplete contracts. The paper not only summarizes these contributions but also relates them to the empirical evidence and points out problems for future research.

In chapter 3 J. Tirole presents the basic elements of a theory of collusion in organizations. The general framework involves an extended principal-agent problem, where the principal hires a supervisor to monitor the agent. In this situation the principal has to take into account that the agent and the supervisor may collude against him. The chapter concludes with a list of some open problems.

The following two chapters by D. Duffie and D. Cass, respectively, focus on the general equilibrium analysis of incomplete markets. Duffie's paper concentrates on existence of equilibrium, innovation in security markets, applications to asset pricing, and production decisions in an incomplete markets setting. Cass discusses the indeterminacy of the equilibrium allocation in such markets. This 'real' indeterminacy arises because the price level of future goods is not uniquely determined. The paper investigates the seriousness of this problem and the consequences of integrating outside money into the model.

R. Guesnerie and M. Woodford review the theory of endogenous fluctuations in models where market dynamics generate cyclical variations even in the absence of exogenous shocks. These models apply new results in the mathematical theory of dynamical systems

to the analysis of rational expectations equilibria in an infinite horizon economy. The paper explains the mathematical tools and studies cycles and 'sunspot' equilibria. In addition, issues such as learning dynamics and the scope for stabilization policies are addressed.

The final chapter by L. Jones is devoted to the equilibrium analysis in infinite dimensional commodity spaces. Such commodity spaces may be motivated by an infinite time horizon, infinitely many states of uncertainty, or a continuum of locations in a geographical market. The paper presents several examples and outlines the techniques that are available to prove the existence of a competitive equilibrium.

The contributions of the volume focus almost entirely on microeconomics; perhaps the chapter on endogenous fluctuations might also interest the macrotheorist. Within microeconomics a large part of the book is dedicated to general competitive equilibrium analysis. The more applied theorist will probably enjoy chapters 2 and 3. Given the heterogeneity of the contributions, the reader will perhaps feel that some areas are more exciting and promising for future research than others. Even though the mathematical background varies substantially across the surveys, all of them are skillfully written and understandable for the non-specialist. Anyone who wants to catch up quickly with the current state of the art in one of the areas will highly value this collections of surveys.

Helmut Bester

Louis Phlips and Lester D. Taylor, *Aggregation, Consumption and Trade: Essays in Honor of H.S. Houthakker*, Kluwer Academic Publishers, Dordrecht, etc., 1992. Pp. 261. Dfl. 145,-

Several pre-eminent economists have appropriately contributed to this book, published in honor of Henk Houthakker, which also collects four previously unpublished articles by Houthakker himself, namely his presidential address to the Econometric Society, a paper on the dynamics of consumption and saving and two notes relating to the origins of his *Consumer Demand in the United States* (with Lester Taylor). The ten contributions are either inspired by Houthakker's work, or variations on themes frequently investigated by Houthakker.

Paul Samuelson investigates the 'fundamental' law of genetics in a canonical classical growth model and shows that the system converges to a unique equilibrium that maximizes the system's Virtual Rent.

Anton Barten establishes the links between Allais coefficients and the parameters of the demand functions and shows that qualifications like 'luxury' or 'necessity' might be misleading.

Birgit Grodal and Werner Hildenbrand show the roles that the shape of the Engel curves and the expenditure distribution play in determining the Law of Demand for a large consumption sector.

John Muellbauer and Panos Pashardes show that the frequent rejection of the homogeneity postulate in the analysis of static demand systems usually reflects an inadequate dynamic specification of the demand functions.

Robert Pollak and Terence Wales investigate two different dynamic structures in the estimation of a system of dynamic demand functions.

Robert Russell discusses how non-parametric methods can be used to test the axiomatic foundations of consumer theory, but stresses the limited power of these tests.

Lester Taylor explores consumption dynamics inspired by the tri-level hierarchical brain structure and finds that essentially all of the standard dynamic models can emanate from the second-level brain.

Lester Telser chats about corners in a futures market.

Peter Møllgaard and Louis Philips analyze a three-stage game description of the North Sea crude oil market.

Stephen Magee shows that protection can go either up or down in a lobbying model in response to an income-induced increase in imports depending upon the cause of the growth in income.

Two final remarks. First, it remains unexplained why the volume is dedicated to Houthakker on his 68th (?) birthday. Second, I can forgive quite a few misprints in the book, but the mistake on page 18 referring not to Hendrik but to *Hendrol* Houthakker is unacceptable, especially to people with command of the Dutch language.

Charles van Marrewijk

Heinrich Otruba, Peter Pelizon, Gerhard Manner, Peter Bleier and Martina Hochreiner, *Kosten-Nutzen-Rechnung von Universitäten: Eine Fallstudie am Beispiel der Wirtschaftsuniversität Wien* (Cost Benefit Analysis of Universities; A Case Study of the University of Vienna), Studies in Contemporary Economics, Springer-Verlag, Berlin, 1991. Pp. 209. DM 57,-

Consider the following situation. A monopolist supplies a product for which, at the going price, demand heavily exceeds capacity. A third party offers the firm an amount of money that could be spent any way the firm wishes. The board of the firm consults its employees what to do with the money. Two solutions are proposed and discussed. Firstly, the firm might split according to the two lines of production that are already in operation. This solution seems to make sense, since economies of scope do not play a role. Secondly, the grant might be used as a subsidy to persuade a new firm to enter the market (an incentive instead of a barrier to entry), and compete with the established firm. No doubt any theoretical model that operates on the basis of conventional/sensible economic assumptions, would predict that the first option is preferred by the employees of the existing firm. Remaining a monopolistic firm and spending a large grant surely gives more space for X-inefficiency than supporting a future competitor.

Of course I would not have introduced this example had the book that is under review not contained a monopolist who chose the second option. The monopolist under consideration is the University of Vienna. This university is the largest university in Austria and only offers courses in social sciences, economics and business. In 1987 the number of enrollers was about 16,000. At the end of the 1980s the University of Vienna faced some

serious problems: (i) Due to a sharp increase of the number of students throughout the eighties, the student-staff ratio exceeded more than twice the maximum level allowed in Germany; (ii) research activities and output were too small; (iii) the drop-out rate amounted to 63 percent.

At the same time the city council of Vienna offered the university board a piece of ground for expansion. The large problems and the city council's gift were reason for the university board to consider in some depth which strategy the university should adopt for the future.

Instead of installing a committee of wise old men or asking a consultant for advice, it was decided to initiate a serious scientific investigation into the problems which the university faced. The researchers who performed this investigation think that their results are not only of importance for policymakers at the University of Vienna, but might also be useful for a broader audience. The present book (written in German) contains these results.

The following research steps were performed. Firstly, the authors analyze the future influx of students. Secondly, they address the question which student profiles fit best into the demand of potential employers. Thirdly, it is investigated how the staff of the university thinks about alternative future strategies. The most promising strategies are then selected and made as concrete as possible. Finally, cost benefit analyses of these most promising strategies are presented.

The analysis of future influx concludes that although the total number of youngsters between 18 and 20 will decrease until 1997, the growth of the participation rate is large enough to result in a further increase in the number of students. The analysis in this chapter is based on extrapolation of the trend and on transition probabilities. Basically, the same method is applied by the Dutch department of education. If the accuracy of the predictions is comparable, this would imply that the analysis is likely to underestimate future enrolment.

To answer the question which skills are necessary for future graduates to match the requirements of the labour market, the researchers drew up a questionnaire which was sent to 600 Austrian firms. The questionnaire listed a large number of skills and the firms were asked to judge the importance of each of these skills. After applying factor analysis the researchers (quite to their surprise) concluded that general skills that relate to the personal development of candidates are more important than skills that are related to professional knowledge. From this result the researchers conclude that the student/staff ratio should be reduced.

With respect to their preferences for different strategies, the members of the university staff are divided into two groups. The majority are in favour of the establishment of a new university, able to compete with the existing university in all areas. A minority of the staff prefers to split up the existing university into two parts: one part that will be dedicated to educate students in the first phase of their study, and a second part that will deal with education in the second phase and research.¹

It is not difficult to understand the preferences of the staff members. My speculation is that only a minority of the staff is certain that in case of a split they are qualified enough to get an appointment at the (assumably) more prestigious research branch. All others

1 Note that the second alternative closely resembles the recent proposal of the Rector of the University of Groningen (and editor of this journal).

who have given up their dreams of becoming a full professor, see new unexpected opportunities when a new university is established. If my speculation is correct it also explains the seemingly perverse preferences of the employees of the monopolistic firm mentioned earlier.

The cost-benefit analyses that are performed to compare both alternatives promises to be the most interesting part of the book. The reader might be really very curious how the researchers are able to weigh the costs and benefits of such different solutions. As often with such analyses the cost-benefit analysis in this book is disappointing. Especially the alternative of splitting the existing university into two branches contains so many costs and benefits – nearly impossible to quantify – that the subjective judgement of the researchers is decisive. The conclusion that establishing a new university is a better alternative than splitting the existing university is therefore not convincing.

The work reported in this book constitutes a chain of different pieces of research. As such the work is as good as the weakest element of the chain. And since the book is rather unbalanced, there are several weak elements. I will give two illustrations. On the one hand the predictions of future inflow of students is performed very carefully, and different sensitivity analyses are performed. On the other hand, however, the cost-benefit analyses just assume that both alternative solutions will reduce the average study duration by one year. Similarly 'the data from the firms' questionnaire are analyzed very extensively, whereas the fact that only 77 out of 600 firms filled in the questionnaire is only briefly mentioned in a two line paragraph (p. 50). The consequences of that very low response for the analysis and the results is not even speculated upon.

Hessel Oosterbeek

William E. Becker and Darrell R. Lewis (eds.), *The Economics of American Higher Education*, Kluwer Academic Publishers, Boston, Dordrecht, London, 1992. Pp. 349. Dfl. 235,-

As many other sectors that rely to a large extent on public funding, post-secondary educational institutions are faced with tighter budgets. According to the editors of this book, the first thing that advocates of higher education need to do, is to spell out all individual, regional and social gains from higher education. This book contains the microeconomic half of the resulting story, the macroeconomic half will be covered in another book edited by the same persons. This book applies to the system of higher education in the United States. This also makes the book interesting for readers outside the States as the systems in many other countries tend in some respects towards the American system (more choice and product differentiation).

The book contains 12 chapters divided into 4 parts. Part I deals with the missions of American higher education, parts II to IV deal with the personal, regional and social returns to higher education, respectively. The remainder of this review is mainly addressed to the four chapters that deal with the personal returns to higher education.

The chapter by Chicago economists Murphy and Welch deals with a time-series analysis of the rate of return to education. In the late 1970s and early 1980s a large amount

of literature has documented that the rate of return to higher education in the US was declining. This literature therefore gave rise to the notion that the American population became overschooled. In the 1980s, however, the earnings differential between college and high school graduates rose sharply, and in 1986 the differential was larger than ever. Murphy and Welch employ the basic human capital framework in their attempt to explain these developments. The story is quite convincing. After the supply shift caused by the post-World War II baby boom the proportion of college graduates rose in the 1970s. Because the growth in supply exceeded the growth in demand the wage premium of college graduates was depressed. With a time lag of about three years the lower premium caused a slowdown in growth of the college population whereas the demand for college graduates grew above average. As a result the rate of return was able to reach its historic maximum in 1986.

Another interesting paper is contributed by Berger. He analyses the private returns to specific types of education. Berger develops a microeconomic model in which the choice between different types is governed by expectations about future earnings. This enables him to estimate type-specific wage equations which are purified for the fact that students select themselves into their most preferred type of education. The types of education distinguished by Berger are business, liberal arts, engineering, science and education. The most notable difference between the students that enrol in different types of study is that the average IQ level of education students is nearly 10 points below that of science students. With respect to the results from the wage equations the most important conclusion is that the starting salary for different types of study differ considerably, but the wage profiles converge with labour market experience.

Although interesting, the contributions by Murphy and Welch and Berger are not new to readers who are familiar with the economics of education literature. Murphy and Welch's chapter is a non-technical version of a paper that recently appeared in the *Quarterly Journal of Economics*, whereas Berger's chapter is a slightly revised version of a paper that appeared in 1988 in the *Industrial and Labor Relations Review*.

The other two 'economics' chapters are review articles dealing with the literature about the private monetary and private nonmonetary returns to investment in education. The chapter about the monetary returns is written by the first editor of the book, Becker. The other chapter is written by the authors of one of the standard textbooks in the economics of education, Cohn and Geske. Both chapters are quite disappointing as they do not contain any new insights; they are really very predictable. Both chapters also clearly show the bias that American researchers have towards research output from their own continent. As far as I can judge, one of the most innovative contributions with respect to the demand for higher education in the last 10 years is the splendid PhD thesis of David Kodde.¹ While his work is relevant for the material in both chapters there is no citation to his work. The fact that the empirical parts of his thesis deal with The Netherlands, whereas these chapters consider the situation in the US is not a good justification, since Kodde's work also offers important theoretical insights.

The fact that this review is mainly concerned with the part about the individual returns does not imply that the other chapters are not worth reading. My impression from these chapters is that, here too, the quality is quite diverse. Some of the contributions are rather

1 The thesis appeared in 1985 and is unpublished, but nearly all chapters were published in leading international journals.

boring, while others give some interesting insights. An example of the latter category is the chapter by James Hearn in the part about the missions of American higher education. Hearn analyses the paradox in American higher education that, according to popular image, universities are primarily engaged in teaching while in reality most of the efforts are attached to research and graduate teaching. Essentially, Hearn's explanation comes down to the existence of an imperfection in the market of college enrollers; Hearn refers to evidence which suggests that enrolment in universities is determined by such factors as locations, programmes, local employment conditions and reputation, and not by the quality of the educational product.

Hessel Oosterbeek

C. Freeman, *The Economics of Hope*, Pinter Publishers, London, 1992.
Pp. 249. £37.50

This book is composed of essays written by C. Freeman on the economics of technical change during the last twenty-five years. Freeman belongs to the group of neo-Schumpeterian scientists, who defend the evolutionary approach to the role of technology in society and who have done a lot to stimulate empirical research. Freeman himself has been very productive and can really be considered as the innovator of the Science Policy Research Unit (SPRU) at the University of Sussex.

The book is divided in three parts. Part 1 deals with policies for allocation of resources to scientific and technical activities. Part 2 discusses the theory of innovation and evolutionary economics and part 3 is concerned with economic growth and the environment. Of the three chapters in part 1, I recommend reading the essay on design and British economic performance, which is a good example of Freeman's wisdom and knowledge. Part 2 presents three recently written papers on the nature of innovation and the evolution of the productive system, a very fine piece on networks of innovators and on innovation, changes of techno-economic paradigm and biological analogies in economics. In part 3, there are chapters on the human use of human beings and technical change, a green techno-economic paradigm for the world economy and one on technology, progress and the quality of life.

The overall impression of this book is very positive. It represents a well-balanced synthesis of historical and empirical knowledge and rigour of a descriptive nature. Again and again the relationship between institutional changes and technical development is put into the foreground of the analysis. This feature of Freeman's approach is also the main building block for his plea of an active technology policy, founded on society at large and with an emphasis on the diffusion of knowledge and application. Still, Freeman is of the opinion that there is much more to be achieved if the full potential of science policy research is to be realised.

The title of the book is a reference to Freeman's idea that on the basis of technical change mankind can use its resources in order to improve the quality of life. In this sense Freeman takes a positive view on the role of technology in society. Although several of the theoretical issues on the economics of technical change have been dealt with at a more

sophisticated level by others – and in particular, neo-classical writers – there can be no doubt that Freeman has been very instrumental in bringing these issues to the fore. This book is a fine illustration of his essential role in this respect.

A. Heertje

István P. Székely and David M.G. Newbery (eds.), *Hungary: An Economy in Transition*, Centre for Economic Policy Research, Cambridge University Press, Cambridge, etc., 1993. Pp. xxvii + 360. £40.–

This volume edited by István Székely and David Newbery contains the proceedings of the conference '*Hungary: An Economy in Transition*' organized by the Centre for Economic Policy Research. Most of the contributions are written by Hungarian scientists and policymakers. The conference itself took place in February 1992, while the book appeared within a year afterwards, which is very quick. The book focusses on Hungary's unique '*gradualist*' economic transition. It tries to find out why Hungary opted for a different transition strategy than its surrounding former socialist countries. Before discussing further details, I have to state in advance that the editors have succeeded in giving an extremely good exposé on the current transition debate in Hungary.

Besides an introduction in which the editors give a broad picture of the Hungarian transition process, the book consists of seven parts, diverging from external economic relations to privatisation and competition policy, the emergence of financial markets, tax regulations and labour market policy. Each part is followed by a discussion. Though the sequential order of the miscellaneous parts is not always clear, most of the individual chapters are very illuminating themselves. Due to space limitations it is impossible to treat all of them. Therefore, this review will try to disentangle the main thread of arguments connecting all the chapters.

Throughout the book one can sense a positive attitude towards a gradual transition strategy. The common idea seems to be that the post-communist authorities in Hungary were confronted with a different legacy than existed in other Central and Eastern European countries. The initial conditions made radical changes politically less attractive and economically less necessary. One of the positive legacies was to be found in Hungary's external relations, as László Csaba makes clear in his contribution on the economic consequences of Soviet disintegration for Hungary (chapter 2). A reorientation of Hungary's foreign trade took place some four years before the abolition of the CMEA in 1991. Therefore, it was in a better position to survive the collapse of intra-CMEA trade. Furthermore, as from January 1989 the communists had introduced an extensive import liberalization programme, which also gave Hungary a headstart in shifting external relations from East to West. The same holds true with respect to investment possibilities. These are, among other things, quite extensively described in the contributions of Zsigmond Járai and Péter Mihályi on Hungary's privatization policy (chapters 5 and 6). Thusfar, privatisation mainly proceeds through foreign direct investments from the West, while the legal and the institutional framework had been more or less introduced before

the Antall-government took over administration, the implementation of the *State Property Agency*, responsible for guiding the process of privatisation, included.

A relatively favourable legacy is also to be found in the fact that at the start of the transition process Hungary did not represent the classical case of the shortage economy in which real and monetary flows are systematically separated. In the eighties the former communists had taken initiatives to modernize the banking sector. A *two-tier* banking system was introduced in 1987. As can be learned from Eva Várhegyi's contribution, this reform entailed that the *National Bank of Hungary* had to transfer its direct enterprise relations to the commercial banks (chapter 9). It meant the end of a monolithic banking system in which the national bank fulfilled the functions of both a central and a commercial bank. The reform steps, however, were insufficient. Political constraints blocked real independence of the banking sector from the dominance of the government's economic policy. Once these constraints had been lifted by the political turmoil, further reform measures became possible. But as Péter Mihályi puts it 'the magnitude and persistence of these (former reform) steps were large enough to narrow the spectrum of choice in the present' (p.88).

Different initial conditions within the former socialist countries in Eastern Europe gave rise to diverging transition strategies. A good example is presented by the various stabilization policies. Stabilizing the economy is believed to be a *sine qua non* condition for restructuring. In the last contribution István Abel and John Bonin discuss the motives of the Hungarian authorities not to follow a 'shock therapy' according to the Polish example, but to opt for a 'slow but steady' approach instead (chapter 17). According to the authors Hungary has succeeded to moderate inflationary pressures by avoiding large volatile swings in the real effective exchange rate. Of course it is a matter of dispute whether this was a deliberate policy, as Abel and Bonin suggest, or just hesitation or lack of ideas from the side of the Antall government not to stick to stabilization based on a nominal exchange rate anchor.

Nonetheless, the central message is that whatever policy is opted for, the state has an important role to play in managing the transition, be it in the field of privatisation, legislation, or stabilization. It is not enough to simply change the rules of the game and wait for a market economy to come about spontaneously. In this review special attention is given to chapters dealing with foreign trade relations, privatisation, the financial system and state desertion. This choice, however, does not imply that the other chapters are less interesting. On the contrary, all of them contribute to my opinion that *Hungary: An Economy in Transition* is a highly recommendable book.

Herman W. Hoen

Die deutsch-deutsche Integration. Ergebnisse, Aussichten und wirtschafts-politische Herausforderungen (The German Unification. Results, Prospects and Social-Political Challenges), Beihefte der Konjunkturpolitik, Zeitschrift für angewandte Wirtschaftsforschung, Heft 39, Duncker & Humblot, Berlin, 1992. Pp. 201. DM 112,-

This book(-let) contains contributions of a conference held in Bonn, May 1991. The conference was organized by the *Arbeitsgemeinschaft deutscher wirtschaftswissenschaftlicher*

Forschungsinstitute and focussed on various aspects of the (re-)unification of East and West Germany. Within this context a variety of themes was discussed. The angle of incidence, however, was mainly sectoral. The majority of articles in this volume are, for instance, concentrated on industry perspectives, developments in services, agriculture, labour market policies, infrastructure and so forth. But it also contains chapters on monetary and fiscal matters in the process of transition, as well as chapters on privatization. Each of the chapters is followed by a summary of the discussions. The book is not subdivided into clearly distinctive parts, and it is therefore, somewhat hard to disentangle a kind of leading thread. It is actually about everything that concerns the restructuring of the former GDR. This point of criticism, however, is not meant to dispute the value of this volume. On the contrary, many of the separate chapters are very worthwhile reading and informative.

The first two contributions dwell on financial aspects of the unification. In his paper Horst Schöberle elaborates the conflicts between monetary and fiscal targets, while Georg Milbradt stresses the importance of Western financial flows. According to Milbradt Western reluctance to invest hampers a take-off. These two chapters remind us of the severe tasks and problems of the transformation, but do not really yield new perspectives.

In the third paper Hilmar Schmidt examines the role of the *Treuhandanstalt* (State Property Agency) in the process of restructuring the economy. Hilmar Schmidt, being directly involved with the *Treuhand*, gives an illuminating overview of this unique structure of privatization. None of the other Eastern European countries followed this example. It is true, Hungary installed a State Property Agency as well, but property rights were not transferred to this agency. It only serves as a mediator, whereas the *Treuhand* also became the new owner. The merits and drawbacks of this centralized privatization model are vividly discussed. In order to restructure and to allow the former GDR to catch up, one thought it to be a necessary privatization scheme. But the *Treuhand*, being an entrepreneur as well as an intermediary, has to fulfill too many purposes. Besides, it was a misunderstanding to believe that it would be able to flatten East Germany's economic downswing.

The fourth till the eighth contribution contains sectoral analysis. Karl Brenke, Klaus-Dieter Schmidt, and Wilhelm Henrichsmeyer treat industry, the service sector and agriculture, respectively, while Juergen B. Donges and Heinz Schrumph scrutinize labour market policies and bottlenecks in infrastructure. The authors draw a very gloomy picture of these sectors. Even the service sector, notoriously neglected under the communist regime, will, according to Klaus-Dieter Schmidt, not have the capacity to absorb labour in the short and medium term. On the contrary, expectations that this sector will be the fastest growing are not justified. A reshuffling has to take place, and this appears to be an asymmetrical process. New jobs in services will emerge in a slow pace, while inefficient services will have to be cut immediately. As far as labour market policy is concerned, Juergen B. Donges makes a strong plea to diversify wages as much as possible. Besides, he proposes to introduce vouchers for the unemployed (*Qualifizierungsgutschein*) which enable them to follow a sort of 'training on the job,' while being unemployed. Unfortunately, Juergen B. Donges does not elaborate on who exactly will be earmarked to receive these vouchers as a sort of reward for flexibility and which firms will be allowed to offer training programmes and receive some kind of wage subsidy in return.

While the aforementioned contributions more or less stick to a domestic approach, the last two chapters explicitly include external relations as well. Hans-Hagen Härtel's article most explicitly tackles the problems that come to mind when reading the book's title *Die deutsch-deutsche Integration*. The question is how long will it take the former GDR to catch

up with West Germany. Hans-Hagen Härtel presupposes that a proper competition policy will lead to converging trends, although these developments may take quite a long time. Here one can pose some question marks. Endogenous growth theories, for instance, may be taken as a theoretical framework in which such a catch-up is by no means self-evident. In the case of Germany's unification these theories do have certain validity, for West Germany could very well supply East Germany's demands. As a consequence, divergence in economic growth might be the result. The last paper, written by Klaus Werner, elaborates on trade relations with the former CMEA countries. As from January 1991 these were accounted in convertible currencies. The paper does not present new insights, or it has to be the fact that already in the beginning of 1991 someone stressed the importance of trade relations with the former socialist region, while others only looked the other way around.

Two general points of criticism are finally to be made. Firstly, as all former socialist countries in Eastern Europe appear to be in a period of dramatic change, especially the new *Bundesländer* which presently experience the most extreme shock therapy, all that has been stated in this book becomes outdated very rapidly. The case of the former GDR represents a good frame of reference as far as the costs of transformation are concerned. But as the book appeared in 1992, one has to be keen on what has already changed in the meantime. Secondly, the written text too closely resembles the oral presentations at the conference, although likely and informative in themselves. In reading the discussions on the various contributions and the report of the plenary meeting, one gets the feeling even to have to disentangle stopgaps of the several participants. In a sense this point coincides with the before-mentioned lack of structure. To be short, this book needed an editor.

Herman W. Hoern

Gerlinde Sinn and Hans Werner Sinn, *Kaltstart-Volkswirtschaftliche Aspekte der deutschen Vereinigung* (Cold Start-Social Aspects of the German Unification), J.C.B. Mohr, Tübingen, 1991. Pp. xiii + 229. DM 78,-

Not only the title, but also the contents show a sensitivity for language and style that is all too often absent from books on economic policy. One single example: 'the political transformation of East Germany has been completed successfully... the economic transformation is much harder to accomplish. To believe that East Germany can achieve economic parity with the West within three, four or five years requires a feat of the imagination that can only be performed by those who are obliged to believe it because of their official function.' Five well-written and very accessible chapters cover the political context, the monetary reform, the *Treuhand* and its privatization strategy, and the East German labour market. The chapter on the monetary reform and the introduction of the DMark in East Germany at a 1-1 exchange rate correctly emphasizes that this was a generous exchange rate at the margin for the East German citizens, even though the average purchasing power of an East Mark did not differ that much from the average

purchasing power of a DMark.¹ Chapter 4 on privatization points out how much delay was caused by the political decision to restore property rights to previous owners of property in the East German provinces. Privatization would have been much easier if property rights could be transferred freely to new owners with the issue of reparation payments to previous owners being decided separately. Unfortunately, this chapter goes astray with a long, misguided argument that the rate at which the *Treuhand* could dispose of its properties was and is constrained by balance of payments considerations. The authors worry about the international mobility of capital and the balance of payments identities and claim that the German current account has to show a deficit equal to the annual payments to the *Treuhand* by new owners of East German assets: 'the only way in which the sale of *Treuhand* assets can generate a sufficiently large deficit on current account and thus cause the necessary capital imports, would be to spend all the proceeds from asset sales by *Treuhand* on foreign imports... we cannot, however, assume a 100 percent marginal propensity to import on the part of the *Treuhand*.' All of this is greatly confusing. The slow speed of privatization in East Germany is caused by uncertain property rights and political refusal to sell assets without employment guarantees from the new owners, and is not at all connected to macroeconomic equilibrium or the German balance of payments.

The final chapter contains a much more normative analysis of labour market policies. I found pages 160–164 on the effects of wage subsidies on the German government budget hard to follow, especially the claim that the cost of wage subsidies for East German industry are not a burden for German society because they amount to an income redistribution.² The book ends with a plea for a multi-year freeze of real wages in East Germany, with possible dispensation being provided only to private sector employers.

I found the first three chapters interesting and highly readable, but was disappointed by the irrelevant macroeconomic complications in chapter 4. Chapter 5 with its advocacy of fixing East German real wages at the mid-point of Greek and Irish levels has some interesting comments on labour mobility and the qualifications of the labour supply in West and East Germany, but seems to dismiss too readily the well-known arguments for substantial wage subsidies in East-Germany.

E.J. Bomhoff

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- D. Begg and R. Portes, 'Eastern Germany since Unification: Wage Subsidies Remain a Better Way,' *Discussion Paper Series*, no. 730, Centre for Economic Policy Research, London, 1992.

1 See Neumann (1992) for an opposing view with more emphasis on the differences in quality between East and West German goods, and on the importance of waiting lists for expensive consumer goods.

2 See Begg and Portes, 1992, for the arguments in favour of wage subsidies.

Ibrahim F.I. Shihata, *The World Bank in a Changing World. Selected Essays*, Compiled and edited by Franziska Tschofen and Antonio R. Parra, Martinus Nijhoff Publishers, Dordrecht, 1991. Pp. xxiii + 490. Dfl. 250,- (A low price paperback version is available from the World Bank Publications Department.)

Although the book provides no information about the author, it is relevant to note that Mr Shihata is a remarkable man with a most interesting international career. As an Egyptian administrator and law professor, he entered the international scene in the mid-1960s and served as the Legal Adviser to the Kuwait Fund for Arab Economic Development and consultant to various Arab governments and international organizations. Subsequently, he was the Director-General of the OPEC Fund for International Development and in 1983 he joined the World Bank Group as its General Counsel and Vice President. In each phase of his career Mr Shihata has published widely. For instance, in 1975 the Institute of Palestinian Studies published his *The Arab Oil Embargo* in which he defended the use of this 'oil weapon' from an international law point of view. Two other books on OPEC followed. In recent years the author has published books on new international institutions such as the Multilateral Investment Guarantee Agency (1988) and the European Bank for Reconstruction and Development (1990), in the establishment of which he played a crucial role.

The book under review is a collection of ten essays on the work of the World Bank in a changing world. Some chapters have been published previously in professional journals and books, others are unpublished papers and lectures by the author. Apart from a rather general opening chapter on 'The World Bank facing the 21st century' which basically deals with developments in the 1980s and prospects for the 1990s, the book consists of two main parts. Part one looks at social and political issues in World Bank operations, while part two focuses on the World Bank and the promotion of private and foreign investment.

Both parts provide the reader with a wealth of information, yet part one is by far the more interesting and innovative. It addresses such topical issues as 'good governance,' human rights performance, environmental management and 'involuntary resettlement' in borrowing member countries and in World Bank financed projects. Nearly all of these sensitive issues are dealt with from a legal perspective. They provide a clear and authoritative insider's view of the evolution of what one might call the changing 'development ideology' of the World Bank Group by one of its principal architects. It is small wonder that the book is a straightforward defence of the Bank's policy and operations. It is, however, somewhat disappointing that the author does not report any substantive differences of opinion amongst the Bank's Governors and Directors. Despite the disclaimer in the foreword, one gets the idea throughout the book that the author's views are the Bank's views and *vice versa*.

Part two deals with the various mechanisms by which the World Bank aims to promote investment in developing countries. It starts with an interesting chapter on the World Bank's stand towards private sector development, which fits in the current trend of disenchantment with public ownership and public sector enterprises and renewed interest in private and foreign investment. The chapter provides the reader with a balanced plea for privatization and a review of the supplementary role the Bank can play through its various lending and promotional instruments. The next chapters include a general account

of the functions and actual roles of the three foreign investment-related agencies of the World Bank, *i.e.* the International Finance Corporation (established as early as 1956), the International Centre for the Settlement of Investment Disputes (ICSID, set up in 1966) and the Multilateral Investment Guarantee Agency (MIGA, created in 1988). The author gives a rather descriptive and favourable review of the respective roles of these institutions in the promotion, protection and insurance of foreign investment. Since each chapter of part two describes the basic facts, there is a certain amount of overlap between them. This part also contains recent data on actual investment flows and useful information on appropriate investment policies as well as a description of foreign investment promotion and regulation activities in the context of the United Nations, the OECD, the GATT Uruguay Round and the EC-ACP co-operation (Lomé IV). Although part two may contain little that is new for insiders, it does provide students of international economic relations with a well-organized and up to date introduction to the World Bank's increasingly important role in foreign investment promotion and regulation. After completion of the book, a task force of the Bank headed by Mr Shihata succeeded in drafting 'Guidelines on the Treatment of Foreign Direct Investment' by host states. In September 1992 the Development Committee of the World Bank and the IMF welcomed these guidelines as 'useful parameters in the admission and treatment of private investment in their territories, without prejudice to the binding rules of international law at this stage of its development.' The formulation of such a general framework is a remarkable achievement, which contrasts sharply with the state of affairs surrounding its complementary document, the UN Code of Conduct on Transnational Corporations, on which painstaking negotiations have been taking place within the United Nations since 1977.

Finally, a word of tribute should be paid to Ms Tschofen and Mr Parra of the World Bank's staff who have done a careful and excellent job in editing these essays.

Nico Schrijver

J.B. Opschoor (ed.), *Environment, Economy and Sustainable Development*, Wolters-Noordhoff Publishers, Groningen, 1992. Pp. 149. Dfl. 49,-

The book contains the rewritten papers that were discussed at the 12th Annual Conference of the Association of Post Keynesian Studies. This conference, that was devoted to 'Environment, Growth and Sustainable Development,' was held on November 13, 1991, roughly a half year prior to the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. The papers were meant to give an impulse to the global discussions about how to make a shift from a period in which economic growth had been the main objective to one in which sustainable and equitable development is to be achieved. Special attention is thereby given to the role of economists in designing strategies, institutions and instruments for tackling unsustainability.

Most of the book is readily accessible to readers with a moderate knowledge of environmental economics. The book is divided into three sections: one on theoretical aspects, one on the global dimensions of the unsustainability problem and one on North-South issues. Each of those sections contains a central paper which is discussed in two

shorter papers. The division into sections is somewhat artificial. The authors of the three central papers (Opschoor, Diefenbacher, and Kadekodi) all chose a rather broad perspective. Because of that some important questions are addressed several times. In particular the inequalities in global welfare distribution are a central issue in most of the papers.

One of the subjects that is discussed in the first part of the book is the usefulness of neo-classical economics in providing insights into the mechanisms leading to environmental degradation. Opschoor argues that neo-classical economists, when looking at environmental problems, too easily regard them as externalities. As a consequence more institutional mechanisms and solutions tend to be overlooked. In Opschoor's view market-based approaches are necessary but insufficient. In addition to such measures fundamental reversals in the legal status of polluters *vis-a-vis* pollutees are needed, which can only be brought about when countervailing powers, in the form of ngo's and interest groups, are formed on the national and the international level. In reaction to Opschoor, Wolfson argues that neo-classical economics offers more possibilities than is generally recognised. He denies in particular that there is an inherent bias in neo-classical theory towards market solutions. Their difference of opinion however partly seems to exist for the sake of the debate; the conclusions they draw with respect to policy-making are more or less similar.

In a not very convincing paper in the second part of the book Diefenbacher looks at environmental problems as part of a much broader unsustainability of the economic system. Other manifestations of this unsustainability are the increasing and interrelated problems of unemployment, poverty and indebtedness in developed as well as developing countries. According to Diefenbacher a discussion on global environmental problems is meaningless without analysing the other problems at the same time. In his view a fundamental restructuring of our 'growth economy' is needed on the national and the global level. To trigger this process five economic policy measures are suggested which, for not very clear reasons, are called pragmatic. One of those measures is the reduction of working hours and the introduction of upper limits to real wages. With Proost I fail to see why such a measure necessarily is a good policy to attain a more sustainable economy.

The two central issues in the third part of the book are the usefulness of the user cost approach as proposed by Keynes in the discussions on sustainability on the one hand and the need for a separate theory of sustainable development for developing countries on the other. With regard to the second question Kadekodi points to the different characteristics of unsustainable development in developing and developed countries and concludes on that basis that there are no universal models with universal solutions when it comes to ecology. Although this conclusion seems fully justified, it can hardly be called surprising after the publication of the Brundtland Report. More important is that Kadekodi fails to integrate in his contemplation the linkages between the two different types of unsustainable development which are so important in the real world, as Terhal and Hadj-Sadok rightly remark. Leaving out these relations makes the formulation of an adequate policy illusory.

In my view the book provides a good overview of the most important issues concerning the relation between environment, economy and development. As Opschoor states in his introduction, the book does not contain a plan for action but rather a research agenda. Many fundamental questions that are raised form an invitation to further discussions and study. The rather disappointing results of the UNCED conference, however, show that

besides discussions and study a strong political will is needed to tackle the threats that confront our planet.

Edwin Oskam

Wim Moesen and Vic van Rompuy, *Handboek Openbare Financiën*, (Handbook of Public Finance), Acco, Leuven, Amersfoort, 1991. Pp. xvi + 323. Dfl. 55,75

This volume is a revised edition of an introductory textbook on public finance with special attention to the situation and institutional detail in Belgium. Like most such textbooks, its introduction discusses the economic rationale for government intervention and the relation between policy targets and instruments. Additionally, attention is paid to political decision-making. Chapter II concentrates on institutional aspects of budget documents and the budget cycle in Belgium. Chapter III on government expenditure compares the evolution of public sector outlays in Belgium with public spending in other countries and presents the standard theories which try to explain its evolution over time. This chapter contains a section devoted to techniques of budgetary analysis like cost-benefit analysis and zero-base budgeting. Chapter IV is not on revenue as one would expect, but has the title 'Principles of Taxation' and it has indeed one section devoted to that subject. Remaining sections concentrate on the concept of taxes and its different shapes, the tax level and structure in Belgium in contrast to those in other countries and a section on the economic effects of and reactions to taxation (tax shifting, *etc.*). Chapter V titled 'Tax Systems' first sets out the main taxes in Belgium with regard to tax base and tax rates and their economic effects. Then a section is devoted to optimal taxation followed by a section on tax reform and tax harmonisation. Chapter VI on public debt discusses the economic consequences of public debt and its limits, debt management and public debt in Belgium. Chapter VII, 'Macroeconomic Aspects of Public Finance,' deals with fiscal policy, budgetary norms and related subjects. The book finishes with two short chapters: chapter VIII is on social security aspects and chapter IX on fiscal federalism.

Because the book covers a broad terrain and has a very spacious layout, there is less subject matter between its covers than one would guess from the number of pages. At the same time this layout makes the book easily accessible.

The composition of the book in chapters and sections is not always straight and chapter titles do not always cover contents (chapter IV and section I.3 are examples). An introductory section to elucidate the organisation of the book is missing. The language of the book contains many typically Belgian words and expressions ('*baremieke aanslagvoet; drukkingsgroepen; vragen primeren; gebeurlijke compensatie; bruto-elasticiteit (ook soms beweeglijkheidsfactor genoemd)*') which might disturb the Dutch readers. It is to be regretted that the reader will hardly find any references in the text to literature on which it is based, or in which the relevant subjects are further explored.

The book contains some errors of fact: merit goods are presented as positive external effects (p. 29); urbanisation is seen as an unexpected side-effect of economic activity (p. 92); the distinction between indirect and direct taxes (p. 110); interest payments as an

example of an irrelevant expenditure item in Dutch structural budget policy (p. 254). In the section on budgetary norms (in chapter VII), no clear distinction is made between their use as a measure of the demand effects of the budget and their use as a guideline for fiscal policy. An expositions of the rules-*versus*-discretion discussion is missing.

In summary, I do not see much value added in this book, when compared with other available introductory textbooks.

C.G.M. Sterks