BOOK REVIEWS

G. Duménil and D. Lévy, *The Economics of the Profit Rate. Competition, Crises and Historical Tendencies in Capitalism,* Edward Elgar, Brookfield, 1993. Pp. xii + 390. £49.95

The opening sentences of this book sound like so many clarion calls. 'The profit rate is crucial to the functioning of advanced capitalist economies. ... Differentials between industrial profit rates drive the allocation of resources ... The profit rate is responsible in large part for the stability of the macroeconomy ... it is the ultimate criterion in the selection of new techniques ... it conditions the pace of accumulation and growth ... the trend of the profit rate also influences the potential progress of the purchasing power of workers ... it has a specific historical importance and can provide crucial insight concerning the periodization of capitalism into distinct stages.' These views will be shared by many economists, including the present reviewer, and by almost all businessmen. It is, however, contrary to the neo-classical paradigm which looks at business behaviour as being completely determined by utility functions, endowments and technology. Profits are absent in a neo-Walrasian world. In old-fashioned Keynesian models profits tend to disappear as well: they become a psychological variable, the marginal efficiency of capital, dominated by animal spirits. Textbooks enumerate the factors determining profits of individual firms: higher efficiency, better products, monopolistic market positions, windfalls. But research programmes directed at the quantification of these categories are virtually absent. Therefore Duménil and Lévy's book, called *The Economics of the Profit Rate*, opening with the foregoing quotations, deserves special attention and, if possible, a warm welcome. But the warm welcome is, as far as the present reviewer is concerned, not without qualifications.

The authors define profits as non-labour income: total revenue minus wages and minus depletion. Interest, paid or implicit, is not seen as a cost of production. On page 25 we read 'One may, or may not, subtract from profits the difference between interest paid to other agents and earned by firms.' They opt for not doing so, without argument. Rents of land are not mentioned. Profits, in this broad sense, are divided by the stock of capital; the quotient is the profit rate. The first part of the book is devoted to the problem of convergence: will capital mobility lead to equal profit rates in the various sectors? To solve this, Duménil and Lévy present a dynamic model which shows the stability conditions.

De Economist **142**: 507–531, 1994.

The chapter remains inconclusive in the sense that the data for the United States (the only country that is dealt with) do not confirm the convergence hypothesis. The reader who looks at the various graphs gets the impression that differences between profit rates are pretty persistent, but no formal tests are applied to confirm or reject the hypothesis.

The next part of the book is about disequilibrium. The authors describe a basic model that can compete with 'the towering edifice of general equilibrium which dominates neo-classical.' Markets do not clear and inventories of unsold commodities exist; these stocks are not transitory manifestations of shocks but the result of an uncoordinated system with limited information. In this Keynesian world there is a capacity utilization rate less than one, but also (very specific) a constant real wage rate and a capitalist who receives the total profit and devotes a given fraction of it to accumulation. There are banks that respond to the demand for loans. There are liquidities. Investment depends on profits and banks loans. Consumption depends on wages and on a given fraction of profits. Prices are sticky. There is no interest rate. Firms react to the observation of disequilibrium. The authors investigate whether this basic model leads to stable 'proportions' (the expression for relative prices and stocks of capital) and stable 'dimensions' (their expression for macro-variables like average utilization rate, price level, and total stock of capital). The analysis is formal and leads to conclusions regarding the stability conditions. Short-run stability in proportions is shown to be subject to rather weak conditions, defined in terms of reaction coefficients; but stability in dimensions is subject to much stronger conditions. The latter case, that of macro-economics proper, is dealt with in the rest of the book. The basic model is further developed and estimated. Three goods and three capitalists are introduced, technology is different in the production of each good, agents react in various ways, and a financial sector is introduced: money and liquidity ratios appear on the scene, and the idea is brought forward that profitability is the crucial determinant of the liquidity of firms. The short run is distinguished from the long run; it is shown that the model produces quite different results in both cases. One of the conclusions tells us (p. 228) that 'the primary impact of the profit rate on stability is clearly located in the decision to produce, mostly in its effects on the parameter which measures the sensitivity of firms to the level of their inventories – and not in the demand equation.'

The empirical part of the book is mainly concerned with the long run. The data are those of the US between 1869–1989. The authors observe a slowly declining profit rate between 1900 and 1940, a leap forward in World War II, and another decline afterwards. Yet they conclude (p. 348) that 'the historical trend of the profit rate is nearly horizontal,' which is explained by the 'capability to control the movement of the profit rate' being 'efficient'; however, they say 'this control is not sufficient to prevent the occurence of very long periods of declining profitability' which they call a 'trajectory *à la* Marx.' We are informed (p. 349) that this result was obtained 'at the cost of a major reformation of the economic system and alterations of relations of production.' And also: 'Assuming that the pattern observed in the US since the Civil War could be a repetition of the earlier experience in England,' it follows that 'a declining trend of the profit rate is an important characteristic of the standard historical dynamics of capitalism, but this is compensated by 'the progressive metamorfosis of the system.' In a final section of the book this conclusion is reformulated as follows: 'The growing instability of the macroeconomy ... results *ex post* in the transformation of the institutions in charge of the social management of stability, and the increasing role of the state.' This deep speculation is what Duménil and Lévy call 'ex-postisme.'

My summary of *The Economics of the Profit Rate* is sketchy, in particular with respect to the intricate models. The book offers the reader a curious combination of mathematics (the quest for stability conditions), stylized facts about the US economy, vivid confrontations between equilibrium and disequilibrium theory, *dogmengeschichtliche* interjections (showing a preference for the unorthodox) and speculations about the deeper nature of capitalism, inspired by Marx. Profits are part of the analysis, but they do not always assume the preponderant role that is suggested by the title.

In some respects the book is puzzling. One difficulty concerns the rate of interest, which is absent. The authors define profits in the broad Ricardian-Marxist sense. They seem to be completely unaware of the fact that interest payments are costs to the firm. Genuine profits may disappear and turn into losses when the rate of interest goes up. This makes the book pretty irrelevant to businessmen – they will not recognize their financial troubles in times of increasing costs of capital, like the seventies. The Ricardian concept also creates an enormous difference between the long-term analysis of a more or less constant profit rate and the facts of American life: constancy may well conceal a shift between interest and genuine profits. In a more theoretical sense monetarist and neo-classical economists may wonder how a model of the economy can be constructed which contains banks, liquidity and money but no interest rate.

A similar gap between model and reality is created by the absence of the public sector. Here the main missing link is taxation. Profits before tax and after tax tend to differ, but the difference is absent in the analysis. Moreover, the US public sector has the effect of driving up interest rates, so the two abstractions – no government, no explicit interest – strengthen each other in creating an atmosphere of high level abstraction. The value of the profit rate, which is about 0.3 (with sharp dips in depression years and some unexpected high values in a year like 1966) will be looked at with some suspicion, because it lies in the same order of magnitude as the share of capital in national income; this points to an unlikely capital-output ratio of one. The measurement of the stock of capital is a notoriously difficult enterprise. This makes the attempted periodization, and the conclusions drawn from it, dubious.

Concerning these conclusions, the intriguing notion of *ex postism* raises many questions. If it means that the market reacts in such a manner that profits are restored after a period of depression, it sounds like 'normal profits' in the sense of Marshall (who is not quoted and for that matter, not even mentioned). But if *ex postism* means that somewhere in the capitalist system there are forces at work that make the government intervene if profits become unsatisfactory the whole concept becomes mysterious. The authors refer to a 'transformation' of the system, and an optimistic Keynesian might recognize the idea of an alert, efficient government but the recent history of the US is one of general public helplessness. Budget deficits which cannot be controlled, slow productivity growth, unemployment that cannot be remedied – these are not signs of what the authors call 'a transformation of the institutions in charge of the social management of stability and in the increasing role of the state.' One would like to see a few examples.

It seems obvious that *The Economics of the Profit Rate* is hardly the kind of book the title suggests. It contains many interesting exercises in model building, in which profits play a role. But it is less a complete study than a series of beginnings. There are many loose ends and forgotten problems. Among the latter is the question: what determines profits at the individual level? What part of profits can be explained by technical progress, managerial competence and monopolistic dominance? What is the role of sheer luck? This type of analysis is at present an unattainable ideal, but Duménil and Lévy do not mention it. Future researchers should study the models discussed by the authors and the paragraphs about the pivotal role of profits, but they should try to leave this book behind them.

J. Pen

J. Hirschleifer and J.G.Riley, *The Analytics of Uncertainty and Information*, Cambridge University Press, Cambridge, *etc.*, 1992. Pp. xi + 465. £16.95

Recently newspapers carried the story of Ms. Mallon from Houston who put up her firm for auction. The firm called 'Wrap and Mail' is active in the parcel packing and delivery service. Ms Mallon has stipulated the following rather unusual auction rules. Each bidder is asked to write an essay on: 'How to manage your own firm.' The writer of the best essay will become the new owner of Mr. Mallon's firm, including ten thousand dollar of working capital. In addition, all bidders are required to pay a participation fee of one hundred dollars. The fee is pocketed by Ms. Mallon if at least one thousand essays are submitted, otherwise the bidders are reimbursed and the auction is cancelled. No more than fifteen hundred essays are considered, and all the fees and essays above this number are returned.

It is not so much the, quite standard, participation fee why this auction made it into the dailies. The uncommon aspect of this auction, besides the metric in which the bids have to be made, is the fact that all bidders forfeit their bids. Though most known auctions do not require the losers to pay their bids, the non-refundable nature of Ms. Mallon's auction is not so uncommon as it appears to be on first sight. Consider, *e.g.*, the way in which architects compete for contracts. Often several architects fabricate models and designs on the basis of which one project is commissioned to be built. The other competitors forego their efforts. Similarly, patent races and lobbying for political favors are activities in which all contenders sacrifice their 'bids,' and only the winner gets rewarded. Therefore, these situations are often termed all-pay auctions. The authors classify these situations as 'non-refundable discriminatory contests.'

Perhaps Ms. Mallon's auction is not so unworldly after all. But how should one bid in such an all-pay auction? What is the expected revenue to Ms. Mallon? Why might she be interested in excluding the best writers from participation? And, related to these questions, why do finalists in sport tournaments always seem to be such close competitors? These simple and less simple questions are all explicitly or implicitly dealt with in chapter 10 on the economics of contests, and fit into the broader framework of the economics of information acquisition and decision-making under uncertainty. The latter topic of choosing between terminal actions with uncertain outcome is treated in the first part of the book. It covers the more traditional parts of the curriculum on uncertainty such as risk-aversion, contingent-claims markets, mean-variance analysis, share cropping, and stock market equilibrium. But part I also addresses the more recent issues of incomplete markets and monopoly power in asset markets. It shows how such different areas as microeconomics, finance and general equilibrium theory have become strongly interrelated.

The revolution in game theory over the past decade has been the modelling of various kinds of informational asymmetries between agents. This is by and large the topic of part

II of the book on the economics of information. Economists now have a fair understanding of moral hazard and adverse selection problems. Explaining the 75% failure rate of new futures contracts, the usage of deductibles in insurance policies, the existence of asset market equilibrium when information acquisition is costly, the overproduction by scientists, the effects of screening and signalling, and the emergence of reputation no longer puzzles the informed economist.

The book by Hirshleifer and Riley does a nice job of presenting and integrating the two connected topics of uncertainty and information. It is suited for teaching an upper level undergraduate or first year graduate course through its eclectic use of instructive examples, analytic proofs and graphical derivations. The large number of exercises are fun to work, and add considerably to one's understanding. The book also serves as a useful reference guide for the partially informed researcher. The book, though, is not exhaustive in its treatment of the topics and the topics selected. For example, the issue of the existence of Nash equilibria is not treated, and the theme of the common knowledge assumption is only addressed in passing (but the concept of evolutionary equilibrium is discussed). But then again, these technical issues probably belong to the domain of game theory proper, for which there now are excellent textbooks available.

The authors have made quite an effort in presenting previously inaccessible technical material. For example, the discussion of the all-pay auction in the chapter on contests is presented for the two bidders case and becomes easy reading. This, though, comes at a cost: The second exercise on non-refundable discriminatory contests which discusses the multi-agent generalization of the all-pay auction is not accurate. In particular, with ties for the second valuation and a single highest valuation there is a continuum of equilibria, thus negating part C and the Remark which claims uniqueness. Another instance where the two-agent case can be misleading is in the discussion of the problem of the commons applied to the probability of being the first discoverer of a unique idea. The analysis of the commons problem is similar to the analysis of monopolistic competition. Either if products are imperfect substitutes but entry is free, or if there is only a limited number of producers (at least two) for a homogeneous good, the outcome is average cost pricing. In their analysis of the invention of a unique idea, the authors develop a two-agent case where each agent can increase the probability of being the first discoverer through expending more effort. As these probabilities are continuous in effort, the two invention activities are imperfect substitutes so that two agents are not enough to induce 'average cost pricing' (a discrete jump in the probabilities due to overinvestment, or free entry, might). Thus their first-order condition for the private optimum is not convincing; though it remains true that the marginality condition advocated here implies a Pareto inferior outcome when compared to the social optimum.

A final recommendation to those who are intrigued by the above questions and topics: The student and academic should run the risk and acquire the book. It is highly informative at a low cost.

Casper G. de Vries

I.M. Kirzner, *The Meaning of Market Process. Essays in the Development of Modern Austrian Economics*, Routledge, London/New York, 1992. Pp. 246. £40.–

What is economics made of? It is the *apologia* of a particular socio-political order, from a given perspective of what man should look like? Or a set of refutable propositions about man as an actor dealing with scarcity? As Kirzner is of the first inclination, and I of the second, a third party might well question the propriety of this review. But that, I presume, is the editor's responsibility.

In short, I believe that economics, as a science, has to combine deductive reasoning with a credible empirical effort, with quantitative data where appropriate, and with a careful exposure of the behavioural specifications of our models. In doing so, economic *theory* should work from what Sen has identified as 'non-utility information' on the institutional setting *as it is*, to begin with, and respect what *should* be as the realm of economic *policy*. Kirzner does not work that way. He plays with paradigms, deduces truisms from his normative concept of man and society, and makes sure not to get waylayed by empirical evidence.

If left to the Great, playing with paradigms makes for a more artistic approach to economics as a science, as evidenced by golden monuments as Hayek's *Constitution of Liberty*, or the sterling filigree of Robbins' *Essay*. Kirzner does not even come close. And so we are treated to a proven recipe from the fast food counter of philistine reasoning: depict the neo-classical tradition as a Walrasian obsession with equilibrium, misrepresent modern Keynesianism as the Errant Knight of disequilibrium, and – bingo! – there opens a middle ground of Austrian economics. Consolidate this intellectual war of conquest by re-inventing and appropriating the iterative process as a – typically Austrian (?!) – process of learning and discovery (p. 66), add a whiff of Schumpeter, construing an entrepreneur as the one who clinches the market by availing himself 'the circumstance that each gap in market coordination expresses itself as a pure profit opportunity' (p. 12), and you have a book. (How about missing markets? Shh... no evidence admitted!)

In terms of sheer logic, the book already collapses on p. 10, where the author fails to recognise that he gives himself away. Any reader who combines Kirzner's plausible and refutable statement that what happens in markets is 'the consequence of inescapable economic regularities, expressing themselves in obviously relevant tendencies' with his *petitio principii* on the very same page that 'those who object to market outcomes simply do not appreciate the faithfulness and consistency with which markets transmit valuations' recognises what he is in for by reading on. In the rest of part I, the author develops his predilections, maintaining the same degree of agnosticism about the world he supposedly describes. If economics could indeed abstract from such uncomfortable facts as externalities, the more ugly aspects of the distribution of power and income (producer sovereignty! Shhh..., no empirical results!), or the fallacy of aggregation, and if property rights could be legitimised by proclaiming marginal productivity as the one and only theory of desert (p. 74; further developed in a dynamic perspective in the final chapter), Kirzner could be our Guru, yes.

Part II is more fun. It starts out with some *petite histoire* on young Menger's diplomatic gift in dealing with the Historical School (dedicating his *Grundsätze* to Roscher!). Further on, it provides interesting insights in the development of Menger's vision. Erich Streissler, who presently holds Menger's chair in Vienna, is quoted to stress that he saw subjectivism as more important than marginalism. Although portraying Menger, dutifully, as a man who understood the limitations of his reasoning (pp. 92–95), the author oversells his own product by expressing 'bafflement at the absence, in Menger, on any *analysis* of a market process through which, possibly, errors on the part of market participants might be systematically eliminated.' After a rehash of the good old Mises-Lerner calculation debate, part II winds up with a chapter on the modern extension of subjectivism in a more dynamic sense, in which 'modern' is conveniently equated to 'Austrian,' in benign neglect of the contributions of others.

The book, which brings together earlier work published elsewhere, has more – but not much new – to say on prices, knowledge problems, welfare economics, self-interest and discovery in the remaining chapters. I could not review all this without repeating myself, as the author nowhere stops to consider the two most vulnerable spots in Austrian thinking: that prices will be brought endogenously to 'tell the truth,' as long as we allow the market process to get them right, and that prices will *always* drive quantities, rather than the other way around. In its ideological ardour, the book fails to see the greatness of the Austrian tradition, from Menger to Hayek, in observing the thin divide between advocacy and analysis. Unfortunately, only God chooses his own apostles.

Dirk J. Wolfson

P. de Grauwe, *The Economics of Monetary Integration*, Oxford University Press, Oxford, 1992. Pp. xii + 193. £9.95

It is a pleasure to read this book on monetary integration written by one of the leading experts in this field. In fact, the book does not deal with new areas. Nevertheless, it is an excellent book. It brings together all the relevant aspects. The strengths of this book are the inspiring and original descriptions and the lucid way of analysis. The author succeeds in presenting the material in such a way that it is quite useful for both theorists and policymakers. Only in a few cases is knowledge of economics really necessary to grasp the reasoning; for example when the author uses an IS/LM diagram or terms such as a consumer surplus. Usually, however, the theoretical framework is introduced in comprehensive descriptions -for example the aggregate supply and demand curves. The intensive use of well-chosen graphics and – the fashionable – boxes in the text contribute to the excellent accessibility of the material.

The book has been divided into two parts. The first one focuses on a full monetary union, where a common currency is in use. It contains a thorough analysis of the costs and benefits of this ideal state of affairs. The second part discusses what Corden coined a pseudo-monetary union. There the operational problems of more or less rigid exchange rate systems are treated, while the transition options towards a complete union are analysed with an application to the European Monetary System (EMS).

In part one, the first chapter surveys the theory of optimum currency areas, whereas chapter two has been meant as a critique of it. Executing these two goals the author appears to intermingle them to a certain extent. One illustration: in chapter one the suggested costs of a monetary union membership, consisting of the loss to choose the optimum trade-off between unemployment and inflation is already attacked. This results in the improved question whether it will be less costly for a country to reduce its inflation when it joins a monetary union than when it tries it to do it alone. Another example is that the openness criterion for joining a monetary union is only introduced in the second chapter. A slight omission is that the reader waits in vain for the criticism uttered against the Mundell criterion of factor mobility that it is essentially dependent on the kind of economic shocks that is assumed. For the rest, De Grauwe treats the subject exhaustively and compactly. The costs of a common currency are not only connected with labour mobility, preferences about inflation and unemployment, and economic openness, but also with wage flexibility and other labour market institutions, as well as with centralisation of the government budget, differences in growth rates, and the seigniorage problem. The need for policy credibility is also discussed by means of the Barro-Gordon model. Though quite insightfully presented, the first part of the book is not the appropriate place for a lengthy discussion of that. The outcome that only a sudden and complete transition to a common currency will bear sufficient credibility for a country like Italy to profit fully from the borrowing of credibility from inflation-shy Germany, is a relevant cost-benefit argument. But the emphasis here is on a gradual transition. This makes it mainly relevant for a pseudo-monetary union and, for that reason, it is much more connected with part two of the book.

Chapter three discusses the benefits of a common currency. Again the comprehensiveness of the treatment is remarkable. The potential benefits have two different sources: the elimination of both transaction costs in the foreign currency markets and exchange rate risk. In this chapter they are confronted with one possible cost that arises from exchange rate variability. While describing the transaction costs, the author again adds the situation of a pseudo-monetary union, in fact, as said, the subject of the next part of the book. De Grauwe is negative about the reduction of transaction costs through the EMS and supports this view by means of the observed differences in bid-ask spreads for the Belgian franc against Mark, French franc and guilder on the one hand and sterling and the US dollar on the other hand. These differences are somewhat smaller for the former group. It is always tricky to infer from a simple relation, certainly in this case where another important recognised determinant of the spread, *viz.* the market liquidity, is neglected. Its impacts will offset the EMS effect, because precisely the second group of currencies is characterised by deep markets. Exchange rate risk and uncertainty undermine the signalling function of the price mechanism and requires a higher risk premium for investors. De Grauwe connects the latter with the moral hazard and adverse selection problems and the concomitant choice for riskier investment projects. In an elegant way De Grauwe shows that higher exchange rate variability, on average, increases the producer and consumer surpluses. Consequently, due to the introduction of a common currency these surpluses diminish and thus have the character of costs. The only slight criticism here is that, in fact, the costs of a common currency are the subject of chapter one.

In a short chapter four the costs and benefits of a common currency are combined and related to a country's economic openness. Related to this openness the benefits curve is rising and the costs curve falling. The intersection point indicates the lowest level of openness for which monetary integration is worthwhile. It is remarkable that De Grauwe uses this graphical optimisation to support a two-speed monetary integration in Europe. Open economies at first and more closed economies possibly later. The missing link is the reason why the critical value of openness for integration will decline with certainty as time elapses. Such an argument can be constructed under some assumptions but is lacking here. This chapter is rounded of with an exploratory comparison of the adjustment costs in a country, Belgium, and a country state, Michigan. It illustrates that it is much more costly for a national economy, even an open one like Belgium, to function in an EMU than for a national state to operate in a country.

Part two, the analysis of problems of a pseudo-union, starts in chapter five with a deepening of the credibility problem of an adjustable peg exchange rate system and the issue how to set the union-wide monetary policy. After having discussed the credibility problems of such exchange rate systems in chapter 2, here the author only signals some mitigating system structures in the case of the EMS. The relatively large fluctuation margins are apt to eliminate undermining speculative capital movements, while the costs of a devaluation, as a measure to reduce inflation expectations, are higher than the costs of the simple announcement of a lower target rate of inflation. Moreover, since part of the inflation effects of a German monetary expansion are transmitted to other EMS countries, the incentives of the German monetary authorities to introduce surprise inflation increase, so that it will be easier for former high-inflation countries to join the exchange rate system successfully. The liquidity problem in a system of pegged exchange rates can be reduced to the well-known $(n - 1)$ problem: the sytem's money supply is free to be chosen. Its determination can be brought into the hands of the leader country (asymmetric solution) or it can be the result of a co-operative decision (symmetric solution). As the author argues, the EMS system, in contrast to the original intention has evolved into an asymmetric system with the concomitant advantage (discipline) and disadvantages (more intense business cycles and higher volatility of money supply).

Chapter six compares the possible ways towards a complete monetary union: the strategy of gradualism as agreed at the Maastricht Summit Meeting end 1991, a shock therapy or by means of the introduction of a parallel currency. A quite topical subject in view of the present troubles in the EMS. In fact, the author already predicted the present problematic situation using the Barro-Gordon model. Contrary to the gradual strategy, in the shock therapy the countries immediately form a full monetary union with a common currency and one central bank. Then the economic agents are instantaneously willing to reduce their inflation expectations in the high-inflation countries. This certainty is lacking in the event of graduality; a slow transition carries the risk of being self-defeating. In a clear, concise, and convincing analysis De Grauwe also rejects the third way be means of a parallel currency. It will be highly unstable as it generates the well-known problems of a bimetallic standard.

Chapter 7 discusses choices to be made before a European central bank can function. It is argued that the only viable form is where both a common currency replaces the national currencies and national central banks are abolished. Even irrevocably fixed national currencies will suffer from a credibility problem and therefore lack sustainability. De Grauwe recommends that the European central bank, even more so than the Bundesbank, gives priority to price stability. The Maastricht Treaty fulfills this condition. However, De Grauwe criticises the treaty as far as fiscal policy is concerned. In chapter 8 he stresses that no substantial centralised European budget will be created. Since the European labour markets are inflexible and the exchange rate will be lost as an adjustment instrument, while the national budget constraints in the future will be hard, the countries will not have any real adjustment policy at their disposal if asymmetrical shocks occur. Pressure on the European monetary authorities to inflate may therefore be substantial from time to time. The last two chapters are mainly directed to the final stage of a complete monetary union. Consequently, they could better have been added to the book's first part.

De Grauwe has succeeded in putting together all the relevant ideas on (European) monetary integration in a highly accessible book with a high information density. This by far overshadows the only essential critical remark that a better subdivision of the material into the two parts and chapters would have added to the reader's understanding of the cohesion of the subjects.

Henk Jager

Paul R. Masson and Mark P. Taylor (eds.), *Policy Issues in the Operation of Currency Unions*, Cambridge University Press, Cambridge, *etc.*, 1993. Pp. 310. $ 49.95

A currency union is a geographical area throughout which a single currency circulates as the medium of exchange. This volume provides an assessment and critique of the research on the issue of currency unification, dealing not only with the European Economic and Monetary Union (EMU), but with existing currency unions as well.

The book contains four parts. In the first part the editors provide an extensive review of the literature. They examine the traditional criteria for the successful operation of currency unions (factor mobility, openness and regional interdependence, industrial and portfolio diversification and wage/price flexibility). Since there is no single over-riding criterion that can be used to assess the desirability or viability of a currency union, attention has turned to analyses of shocks affecting economies, since shock absorption combines the net influence of several of the traditional criteria. The authors also examine the present evidence concerning the shock-absorbing properties of federal fiscal systems and the need for restrictions on the borrowing of member countries in a currency union. They conclude that financial markets do seem to play some role in disciplining government's deficit spending, but that problems of fiscal discipline probably do not disappear within currency unions in the absence of surveillance of policies or rules for limiting budget deficits. Transitional issues like the speed of transition are also discussed. The most important argument against a slow transition is that it is likely to be an unstable process since both currency substitution and speculative attacks may threaten the transitional phase. The major argument against a rapid transitional phase is that time is necessary to allow for 'sufficient' convergence. Unfortunately the authors are not very clear as to what they – or for that matter – the literature consider to be sufficient convergence.

The second part of the book contains three chapters dealing with existing currency unions. Daniel Gross examines the costs and benefits of the economic and monetary union in the former Soviet Union. He concludes that the more developed republics located west of the Urals would benefit from leaving the rouble area. The Baltic republics are expected to become highly open to the rest of the world; furthermore, they need to rely less on the inflation tax and would want to liberalize their economies faster than the rest of the former Soviet Union. Andrew Atkeson and Tamim Bayoumi examine the capital market in the US. They find that there have been large flows of capital between regions of the US, but that private capital markets provide only very limited insurance against regional fluctuations in income. However, there is evidence that in states with a large agricultural sector there is considerably more insurance. James M. Boughton analyses the economics of the CFA franc zone, which comprises seven countries that are members of the West African Monetary Union and that use a common central bank and six countries that use the Bank of Central African States as their central bank. The two banks use distinct but equivalent currencies, each of which is known as the CFA franc, which is firmly pegged to the French franc. The zone is far from qualifying as an optimum currency area, due to little intra-regional trade, sticky prices and wages and a wide diversity of incidence of shifts in the terms of trade. Boughton concludes that the countries in the CFA zone have benefited from the discipline and stability brought about by the association with the French franc.

The third and fourth part of the book deal with EMU. In the third part the issue is discussed whether Europe is an optimum currency area. This part also contains three chapters. Paul de Grauwe and Wim Vanhaverbeke examine real exchange rate variability within regions and countries of the EMS. The variability of the real exchange rates of nations is about twice as large as the one observed at the regional level. However, the regional variability of real exchange rates plays a significant role in regional adjustment. The authors also analyze labour mobility between regions and between countries measured by the flows or stocks of migrants. Surprisingly, Spain and Italy have a much lower degree of inter-regional mobility than Northern European countries. The degree of labour mobility between regions is much higher than the one observed between countries. Barry Eichengreen also analyses the labour market. Focusing on regional labour markets in the UK, Italy and the US he finds that the dispersion of shocks to regional labour markets is quite similar in the three countries. However, the responsiveness of migration to regional labour market disequilibria is greatest in the US. Still, it is not obvious that deviations from the long-term relationship among regional unemployment rates are more persistent in the UK and Italy than in the US. I found this last result not entirely convincing. I am not sure whether the hypothesis of co-integration of regional and national unemployment in the UK – implying that regions characterized by high unemployment in one year also tend to be characterized by unusually high unemployment in the next – still hold if more recent data would have been used. While traditionally the northern regions are hit relatively hard by a recession, the latest UK recession affected the southern regions quite seriously.

In the final chapter of part three, Patricia Fraser and Ronald MacDonald examine the degree of European capital market integration by looking at the predictability of excess stock market returns in terms of common European factors. The authors report strong integration of capital markets in France, Germany, Italy and the UK. However, the degree of integration of European capital markets with those in the US is as strong as the degree of integration with Germany, suggesting global rather than European capital market integration.

The fourth part of the book, also containing three chapters, is about the road from Maastricht and opens with a chapter by Charles Goodhart in which he analyses the provisions of the Maastricht Treaty as regards the European System of Central Banks (ESCB). First he compares the report of the Delors Commission with the Maastricht Treaty, pointing out five new elements, including convergence criteria and a timetable. Then he dwells upon the functions of EMI and the functioning of the European Central Bank, where much still has to be decided upon. He argues that the logic of the Maastricht Treaty is clear 'which is that public sector banking services should be privatized by whichever private commercial bank offers the best deal.' I disagree. The Treaty explicitly permits the central bank to perform as fiscal agent for governments. I agree with another conclusion of Goodhart, namely that the issue of prudential supervision will be a subject of continuing contention and dispute in the operations of the ESCB. Goodhart disagrees with the agreed upon allocation of seigniorage, arguing in favour of allocation to the central EC government. He notices that the objective of price stability is not defined in the Treaty or the Protocol. It is, however, widely understood that the aim of price stability implies an inflation rate between zero and two percent, so I doubt whether there is some room for flexibility as argued by Goodhart. Finally, the author questions the accountability of the ESCB.

An important issue with respect to the future monetary policy of the ESCB is the stability of the European money demand function. Michael Artis, Robin Bladen-Hovell and Wenda Zhang estimate demand functions and confirm results earlier obtained by Kremers and Lane: an aggregate money demand function can be estimated which appears structurally stable, whereas money demand functions for the individual countries appear less well behaved. Two interpretations are possible. First, aggregation works, because of currency substitution, and second, an aggregation bias may exist. The authors find that the stability of French monetary relationships is a powerful influence on the aggregate, while, unlike the case for the other countries, they could not find evidence for currency substitution in France.

In the final chapter Jürgen von Hagen examines the so-called parallel-unification proposition, *i.e.* the view that a successful economic and monetary union requires fiscal policy unification. Von Hagen argues that there are a number of fallacies lying behind this proposition. In his view, the importance of fiscal mechanisms to deal with asymmetric shocks has probably been exaggerated in much of the literature. The implementation of a tax-based redistribution mechanism among the member states would be more appropriate than both the creation of large spending power at the center of the union and a system based on unemployment insurance.

This book is very useful contribution in the burgeoning literature on monetary integration. Most chapters are not very technical, while the views put forward are easy to understand, and sometimes thought-provoking.

Jakob de Haan

Dennis Swann (ed.), *The Single European Market and Beyond. A Study of the Wider Implications of the Single European Act*, Routledge, London, 1992. Pp. 299. £14.99

In 1986 the member states of the EC signed the Single European Act (SEA), which basically brought three things: (1) new decision-making powers to the Council of Ministers and the European Parliament; (2) a Treaty for European Political Cooperation (EPC), which primarily served to codify the practices of EPC; and (3) speeding up of the process of completing the Single European Market (SEM) as originally envisaged in the EEC Treaty. The target data for completion of the SEM was set at 31 December 1992. Already in June 1985, the European Council had accepted the Cockfield Report, which detailed some 300 measures necessary to achieve this objective. The signing and ratification of the SEA was in due course followed by further significant decisions: the search for a European

Economic and Monetary Union (EMU) and European Political Union (EPU), as agreed upon in the Treaty on European Union, which was signed at the Maastricht Summit in December 1991.

This book contains twelve contributions from scientists from Loughborough University. In his preface the editor states that it aims to 'explore not only the single market concept but also [monetary, social, environmental, regional, technological, political and international] aspects.' The book is written from a British perspective and provides much background information, without the authors always taking an outright position.

In part I some background information on the process leading towards the SEA is provided. I found the chapter by David Allen illuminating, especially for people who are not very familiar with the political aspects of the Community. The introductory chapter by Dennis Swann covers much of the same ground, but in a less careful manner. On p. 15 he suggests, for instance, that the European Council agreed at its Milan July 1985 summit to convene an Inter-Governmental Conference (IGC), while in fact the British, the Greeks and the Danes voted against an IGC at the Milan European Council in June 1985, but subsequently accepted it at a meeting of EC foreign ministers held in July 1985.

Part II contains four chapters on completing the 1992 single market. Dennis Swann shows that various non-tariff barriers (standards, government procurement, mergers, and state aid) still exist. Tony Westaway deals with the fiscal dimension of 1992. The SEA allows the Council, for the purposes of achieving the single market by the end of 1992, to act by qualified majority. Upon insistence of the UK it also provides, however, that unanimity is required for fiscal provisions, the free movements of persons, and the rights and interests of employees. This prerequisite hampers a swift agreement being reached on further tax harmonization. Nevertheless, regarding VAT the Cockfield report proposes to apply the destiny principle in combination with a 'clearing house' system to ensure that VAT collected by the exporting member state and deducted by the importing member state is reimbursed to the latter. The Commission strives for acceptance of this system after 1996. Until then the existing VAT system remains in operation, except that VAT on exports is added by the purchaser instead of at the frontier from 1993 onwards. Westaway also discusses excise duties and corporate taxes. It is a pity that at the time of publication the book is already somewhat outdated, which is amplified by the fact that the Ruding report is not discussed.

The next chapters by David Llewellyn and Kenneth Button deal with banking and financial services and the liberalization of transport services, respectively. The final chapter in part I, written by Christopher Milner and David Allen, is about the external implications of 1992. Broadly speaking two extreme scenarios can be discerned: a more protectionist fortress Europe or a more liberal Europe, emphasizing global trade instead of bloc politics. Although the authors note that potential instruments may exist after 1992 to effect a fortress Europe (community-wide restraints, which replace national restraints; discriminatory use of certification and testing procedures; more emphasis on rules of origin; and more aggressive use of reciprocity provisions), they leave unanswered the question of which of these scenarios is most likely. It is also not yet clear how responses of those presently outside the EC will shape the evolution of the single market.

In part III the emphasis shifts to deepening and widening the Community. The history of the Community in the monetary sphere and the problems raised by EMU are discussed by Brian Tew. In the light of the history of the SEA, an interesting issue here is whether the Maastricht Treaty has any chance of success. The SEA proved acceptable even for the UK and Denmark, since it linked something Britain and Denmark wanted – the completion of the single market – with a reform of EC institutions. The UK and Denmark do not show much enthusiasm for either EMU or EPU. Although informative – but not complete; there is, for instance, no mention of the Basle-Nyborg agreement – this chapter unfortunately hardly deals with the burgeoning literature on the pros and cons of European monetary integration and the linkage – if any – between economic and monetary integration.

In chapter 9 Dennis Swann discusses four topics: the regional issue, the social issue, the environment, and research and technological development. The final chapter in part III is about the European Community and the new Europe and is written by David Allen. He argues that the initial impetus for EMU derived from the success of the 1992 Programme and the SEA, but that events in Eastern Europe, especially German unification, served to speed up this process. Allen also discusses European political unification.

Part IV of the book presents a chapter in which three of the authors add some final thoughts. They conclude that the benefits of the SEM reported in the Cecchini report are overestimated, but that the SEA has, no doubt, revitalized the Community. With respect to EMU the authors doubt whether the EC is an optimum currency area, but since nominal exchange rate changes may not have permanent effects on real exchange rates, for most countries there is little surrendered by eschewing exchange rate adjustments. The authors expect a two-speed approach for EMU to be most likely, but note that this could undermine much of the current structure of the EC. Part IV closes with a chapter outlining the Maastricht Treaty.

This book provides much useful background information on the various aspects of economic, monetary and political integration in Europe. For those who are not familiar with one or more of the various aspects of European integration this book, although not entirely up to date, provides a welcome introduction. Specialists would probably have liked the book to contain more thorough analyses.

Jakob de Haan

J. de Melo and A. Panagariya (eds.), *New Dimensions in Regional Integration*, Cambridge University Press, Cambridge, *etc.*, 1993. Pp. xxviii + 473. £35.–

This book is a collection of the papers presented at a World Bank-CEPR conference held at the World Bank, Washington DC, on 2–3 April 1992. Part one deals with economic integration theory and GATT negotiations; Part two contains separate chapters on integration efforts in Europe, America, Asia and Africa, with Stanley Fischer's paper on Middle East economic integration prospects as the most exotic contribution. From the fact that the fifth continent is uncovered, it should not be concluded that there is no integration effort in this corner of the globe: the Australian-New Zealand Free Trade Agreement dates back to 1965, and was renewed in 1983.

Economists have mixed feelings about regional economic integration. In this volume, many of the pros and cons are touched upon. Bhagwati's overall assessment is negative, because he fears that the formation of trade blocks hampers worldwide trade liberalisation. This fear is mainly based on past experience: postwar multilateralism created a relatively liberal worldwide trade regime, whereas interbellum bilateralism ended in beggar-thy-neighbour policies. However, Irwin digs deeper in the history of tariff negotiations and finds that bilateralism is not necessarily a bad thing. The tariff reductions that followed the 1860 Anglo-French Commercial Treaty were achieved bilaterally. Olson (in a comment to Irwin) suggests that the real issue is not multilateralism *versus* bilateralism, but rather hegemony *versus* dispersion of power. A world dominated by a single hegemon (the UK before the First World War, and the US after the Second) is likely to be relatively liberal, both because the hegemon gains by free trade and because it has the power to enforce it. The problem today, as in the interbellum, is that there is no hegemon.

Krugman formulates his objections to regionalism in a 'trade block' model. The number of trade blocks determines world welfare. If there is only one block, barriers of trade are nonexistent and world welfare is maximized. If there are many small blocks, a situation close to the optimum is reached, because small blocks have little market power and hence little incentive to raise tariffs. The number of trading blocks that minimizes world welfare lies somewhere inbetween. Krugman shows that under a number of reasonable assumptions, world welfare is minimized if the number of trade blocks is exactly three! He subsequently qualifies his own result by stating that if transportations and communication costs lead to a strong tendency for countries to trade with their neighbours, regional concentration in a few blocks is less welfare-reducing. As this is true for at least two of the three envisaged blocks (EC and NAFTA), the real problem, according to Krugman, is not global efficiency, but rather small economies that might be left in the cold (p. 64).

What should the small economies in Africa and Latin America do if the process of block formation continues? Past experience suggests that forming a block of their own is not the right answer. The chapters on Africa and Latin America make clear that integration efforts failed mainly because the participants are no natural trade partners, so that the potential benefits of integration ('trade creation,' buying something in the partner country that was produced domestically before) are small and the potential losses ('trade diversion,' buying something from the partner country that used to be bought in a third country) significant. Alternatively, southern countries could pursue membership of a northern block. The example here has been set by Mexico. The general feeling expressed in the book is that Mexico has struck a good deal. The United States and Canada are important and growing trade partners, and via the treaty Mexico can 'lock in' prior domestic policy reforms (p. 357). In a theoretical chapter by de Melo, Panageriya and Rodrik, this same point is driven home. If 'third country tariffs' exist, the formation of a customs union might be a better policy than unilateral trade liberalisation (p. 168). North-south integration is certainly more promising than south-south integration.

Yet, this point should not be overemphasized. The world is far from being rigidly divided in three blocks. The chapter on East Asia makes clear that there is no regional bias in trade among the Eastern Asian economies, and that institution building in the region is unimpressive. The success of these economies was based on a worldwide trade strategy, not on a regional one. This wise lesson for developing countries is repeated by many authors in this book. In all, this work is a fine contribution in a topical and dynamic field of research.

Bert van Selm

Paul B. Thompson, *The Ethics of Aid and Trade: U.S. Food Policy, Foreign Competition and the Social Contract*, Cambridge University Press, Cambridge, *etc.*, 1992. Pp. x + 233. £35.–

In this seventh book in the 'Cambridge studies in philosophy and public policy series' Professor Thompson takes a fresh philosophical look at an old economic problem: the question of whether government intervention in international economic relations is justified when (part of) the population is economically hurt while foreigners at the same time benefit from the specific measures. The book contains earlier contributions to *Public Affairs Quarterly* and to the *Social Science Agricultural Agenda Project*, but the larger part of *The Ethics of Aid and Trade* is new.

Professor Thompson's investigation deals with international exchange in the agricultural sector, both commercial trade, development aid and emergency assistance (mainly food aid). Agriculture provides well-known examples of protectionism and has been the target of free trade movements ever since David Ricardo's discovery of the law of comparative advantage and his fight against the Grain Laws both in the English parliament and in his *Principles of Political Economy.* Despite a good two centuries of economists arguing for free trade, the edifices of protectionism and managed trade are still very visible in this sector worldwide. Probably the best known example is Europe's Common Agricultural Policy that stands out as one of the EC's most protectionist features. In the United States, however, agricultural interests also play an important role in trade policy. The so-called Bumper Amendment even went so far as to prohibit the U.S. Agency for International Development to spend money and expertise on poor farmers in Third World countries if this support would enable those farmers to increase their commercial production of amongst other things meat, maize, wheat and palm oil. This amendment to the U.S. Supplementary Emergency Appropriations Bill inspired Professor Thompson to investigate the values and concepts that underlie the arguments *pro* and *contra* aid and trade in international agricultural economics.

From a philosophical point of view, Thompson argues, social contract theory is the right tool to analyze the problems at hand. However, ever since Hobbes has laid the foundations for this approach in his *Leviathan* the duties of government have generally been considered to the own nation, leaving the status of outsiders unspecified and uncertain. Conflict is then evident when governments follow a course of action which hurts some of the members of society, especially when international economic relations are being considered as a zero sum game. By defining national interest in a very broad and long-run sense, Professor Thompson seeks both to salvage and to reconcile the theory of social contract and the economic lessons that stress the mutual benefits that can be derived from international economic exchange.

All in all *The Ethics of Aid and Trade* tells an old lesson that is worth repeating from a new perspective. For political scientists Professor Thompson offers a new interpretation of social contract theory that can help to determine goals for international economic policymakers. For trade theorists the book offers philosophical support for their economic arguments against protectionist challenges.

Peter A.G. van Bergeijk

James H. Gapinski (ed.), *The Economics of Saving*, Kluwer Academic Publishers, Boston/Dordrecht/London, 1993. Pp. 338. £9.95

This book contains seven papers, dealing with different aspects of saving. Every paper is followed by two commentaries.

The first paper, 'Questions on the Economics of Saving,' by James H. Gapinski, both provides an overview of the book and presents some estimates of the Ricardian equivalence hypothesis. Not surprisingly, these tests reject equivalence almost without exception.

David J. Smyth provides an overview of the theories of saving. He is not overly optimistic about what has been achieved: 'Considerable talent has been lavished on the saving function over more than half a century. The results are disappointing. Not only do we not have agreement on *the* saving functions, but our models have failed to provide us with adequate explanations of saving behaviour.'

If private saving remains constant, then a cut of the government deficit will promote national saving. Robert Eisner and Paul J. Pieper challenge the presumption that private saving will remain constant if the deficit changes. They argue that a rise of the real deficit raises output and hence investment. The rise will also contribute to greater imports and a trade deficit and hence less net foreign investment. Since the negative impact on net foreign investment is smaller than the positive impact on domestic investment, national saving will rise if the government deficit expands.

By far the most interesting contribution is that of E. Ray Canterbery, entitled 'Reagonomics, Saving and the Casino Effect.' Canterbery is rather cynical about supply-side thinking. He shows that the tax cuts secured by the Reagan Administration led to a redistribution of income in favour of the rich. This redistribution indeed led to an increase of the saving rate. Saving as measured in the National Accounts (which does not include revaluation of existing wealth) did not rise, but since increases of housing prices and share prices were phenomenal, saving measured as an increase in household net worth did. However, gross investment (as measured in the National Accounts) did not increase and net investment actually fell. With the slowdown in real net business investment, high levels of personal savings were diverted to what Canterbery terms the 'Casino Economy,' creating the speculative bubbles that have become so characteristic of the second half of the eighties.

Gian S. Sahota presents short surveys of literature on four topics: theories of the functional distribution of income, theories of saving, and a discussion of possible impacts of policies and institutions on saving and distribution. Sahota makes some interesting remarks about both the rational expectations hypothesis and the Ricardian equivalence hypothesis: 'Both notions destabilized mainstream macro-economic thought for quite some time and portended the prospects of revolutionary changes in macroeconomics. Both were elegant. Both seemed to sound an apparent death knell to discretionary public policies. Both created bandwagons of research and generated stimulating controversies. Yet the emerging opinion among economists seems to be that both are petering out, yielding place to mainstream economics, though not without leaving a lasting impact on economics, specifically an awareness of how expectations are formed and ought to be modeled.'

When a nation raises its saving rate permanently, the economy will adjust from an old equilibrium to a new one in the neo-classical growth framework. Although in the new equilibrium output will be higher, in the transition path there are initially some sacrifices to be made. Laurence S. Seidman and Kenneth A. Lewis summarize the main results of their recent work on the analysis of the transition path. They show that the 'sacrifice time' – which is the time that elapses before the new consumption overtakes the control path – is only 6.5 years. Their contribution is too short; instead of presenting all the arguments in their paper, they refer to articles published elsewhere. Fortunately, commentaries by Winston W. Chang and John Conlisk clarify many of the arguments ommitted in the paper by Seidman and Lewis.

T.N. Srinivasan discusses the impact of saving on the development process in the less developed countries. He shows that although saving and investment rates have increased significantly in the last four decades, the belief that such an increase in investment rates would result in higher sustained growth rates has proved to be overly optimistic.

The book is certainly very interesting. However, the papers are not very homogeneous; some are literature surveys; others are new work and in one paper the authors discuss recent work published elsewhere. Nevertheless, the book is very suitable as a reference tool for researchers.

Bas Bakker

Central Planning Bureau, *FKSEC: A Macroeconometric Model for The Netherlands*, Stenfert Kroese, Leiden/Antwerpen, 1992. Pp. 184. Dfl. 39,–

This book presents FKSEC, the main model of the Dutch Central Planing Bureau since the spring of 1991. The model is a medium-size, quarterly, macroeconomic model with a disaggregated supply side, and is used for both short- and medium-term forecasting and policy analysis. To give an idea of its size, FKSEC contains 30 behavioural equations, 150 semi-behavioural equations or rules of thumb, 1250 definitional equations and has over 1400 endogenous variables, over 100 exogenous variables and some 200 autonomous terms. FKSEC can be labelled a partly disaggregated version of its predecessor FREIA-KOMPAS.

The book consist of one hundred pages verbal description and about eighty pages of appendices including a complete listing of the model. The first chapter provides a summary of the model and describes its new features. The most prominent new feature is the sectoral disaggregation of the supply side. Chapter two describes how sectoral supply is linked to aggregate demand. Chapter three presents the main equations of FKSEC and discusses the differences with its predecessor. Chapters four and five illustrate the working of the model as a whole by means of historical tracking and by examining how the model responds to changes in exogenous variables.

FKSEC differs fundamentally from the 1985 version of FREIA-KOMPAS in two respects. In the first place, the model explicitly takes account of differences in production processes between sectors, because the supply side of the model has been disaggregated. The major distinction is between exposed and sheltered sectors. The capital-intensive exposed sector is modelled according to a clay-clay vintage production function. No actual production function has been modelled for the sheltered and construction sectors. Sectoral supply is connected to aggregate demand by means of a *Cumulative Production Structure* (CPS) matrix that describes the cumulative input shares of the different primary inputs for each category of final demand. The entries of this reduced-form input-output matrix are endogenized to capture substitution effects.

Disaggregating the supply side has important consequences for other parts of the model, *e.g.* demand for labour and investment are determined per sector taking explicitly into account the fact that the sectors have different production functions. However, the idea that sectors differ with respect to production structure is not maintained throughout the model. For practical reasons it is assumed – in order to link disaggregated supply to aggregate demand – that *the input structure of investment in equipment used by different sectors is sufficiently similar* (see footnote 1 on page 9).

The second change is the exogenization of the interest rate and the removal of the financial sector. The observation that *because of the virtually fixed exchange rate regime within most of the Common market, Dutch interest rates very closely follow foreign interest rates, especially the German one* led to this modification. Dutch monetary policy aims at maintaining a fixed exchange rate *vis-à-vis* the Dmark, and it cannot be denied that an interest equation based on this description of monetary policy is simple. Perhaps too simple if one looks at recent developments in interest rates. The CPB emphasizes that the elimination of the financial subsector does not imply that the influence of monetary factors within the model has been reduced. Inclusion of the interest rate on employment in the sheltered sector and introduction of financial variables in investment equations have, according to the CPB, most likely increased the importance and scope of monetary factors. Nevertheless, we regret the loss of FK's elegant monetary block. We believe that the increasing importance of financial variables on other variables justifies careful modelling of a financial sector.

The model contains one further major innovation. The wage equation, traditionally prominent in Dutch models, has received a lot of interest from CPB researchers. A direct result has been the inclusion of the replacement rate and the change of the unemployment rate as explanatory variables.

CPB's approach to model building is 'rather eclectic': in their view no single theory provides a complete description of reality. This basic notion is stated at the end of footnote 16 on page 30 rather than in the introductory chapter, suggesting that this view is common among modellers. This might be the case for Dutch model builders but it is not undisputed internationally (see Challen and Hagger (1983)).

Eclecticism finds expression in different theories that have been brought in, and in the fundamental choice between theoretical rigour and practical tractability. FKSEC shows a tendency towards a more pragmatic way of modelling. Compared to its predecessor, FKSEC is theoretically less sophisticated; the number of behavioural equations is reduced; and the number of technical relationships is increased. We wonder how long the vintage approach – a feature of CPB models for almost twenty years – will survive, if this theory-to-practice trend continues. The implementation of the clay-clay vintage approach in FKSEC without embodied technical progress, and hardly any economic scrap, might be replaced by an aggregated production function. The last difficult device will then be sacrificed to ease the burden of regularly preparing forecasts. Moreover, a putty-clay vintage model is more appropriate from a theoretical and empirical point of view.

Concluding, the CPB has succeeded in writing a fine, but very concise, description of its main model FKSEC. The model differs from previous CPB models, but not all changes are improvements. The major changes are technical in nature (CPS matrix), or just practical (deleting the financial model). In some respects FKSEC is rather old-fashioned:

traditional expectations formation and obsolete clay-clay. With regard to wage formation, investment and disaggregated supply the model is more up to date. Finally, for anyone who is merely interested in understanding how the model works without going through the trouble of learning the model from the equations, we refer to CPB's *FKSEC: variantenboek* (in Dutch), which it makes possible to design one's own policy with the floppy disk included.

Jan Jacobs
Gerard Kuper

REFERENCES

Central Planning Bureau (1992), *FKSEC: variantenboek*, Stenfert Kroese, Leiden/Antwerpen (in Dutch, including diskette).
Challen, D.W. and A.J. Hagger (1983), *Macroeconometric Systems: Construction, Validation and Application*, St. Martin, London.

Lourens Broersma, *The Relation between Unemployment and Interest Rate: Empirical Evidence and Theoretical Justification*, Thesis Publishers, Amsterdam, 1992. Pp. xii + 214. Dfl. 37,50

This book, which appeared as a thesis at the Free University of Amsterdam, contains an econometric analysis of the causal relationship between unemployment (u) and the rate of interest (r). The interest rate is selected – maybe surprisingly – from a number of possible candidates as the outstanding macroeconomic variable that displays a causal relationship in the sense of Granger with unemployment for the G7 countries minus Italy and including The Netherlands for the 1960–1987 period, on the basis of an ARMAX model applied to monthly data (and an ARX model for quarterly data). The results are to be considered as remarkable because, with a few exceptions, the rate of interest appears as the *only* Granger-causing variable for unemployment. Strong candidates like inflation, wages and output are rejected. These results are interesting, but they are also bound to raise questions.

A merit of the book is the clear exposition and consequent application of the econometric method involved. A detailed account is given of the process of model specification, estimation and testing, which leads to final model reduction and the establishment of causal relationships. Broersma is an advocate of the time-series approach as a decisive instrument to establish which model may represent the data generating process behind the observed data. The preference of the author is in testing which variables do survive, rather than specifying a theoretical model *a priori*. Nevertheless, an unavoidable first selection of variables involved in the explanation of unemployment is made (chapter 2) by scanning different theories; this leads to a choice in favour of wages, prices, output and the interest rate. Strikingly, the author picks typically endogenous variables only, while excluding exogenous variables (such as demographic factors).

Chapter 3 explains the econometric methodology. It develops the econometric model to be used and gives an instructive discussion of testing procedures necessary to check the applicability of the model to the data. The ARMAX model includes an autoregressive (AR) scheme for the dependent variable, takes account of intertemporal correlation in the residuals (MA), captures seasonal movements, and is supplemented with the chosen set of explanatory variables. The lag structure of the process is imposed arbitrarily, as the author admits.

Chapter 4 contains preliminary tests on the stationarity of the variables involved. This leads to the use of levels of unemployment and (nominal) interest, and to the use of growth rates for prices, wages and output.

Chapters 5 and 6 give the empirical results for the single equation approach and the simultaneous equations (or vector autoregressive) approach, respectively. Chapter 5 reveals that in most cases (including the US, Germany and Japan) only the interest rate and the growth of industrial output survive as significant to unemployment levels. Only for The Netherlands does wage inflation appear as relevant, possibly because of the degree of openness of the economy.

When the interactions are taken into account in chapter 6, it appears that the output variable is Granger-caused by the interest rate, which eliminates output and confirms an indirect effect of r on u. thus we are urged to acknowledge the pre-eminence of the (nominal) rate of interest in the causation of unemployment, whereas the real wage is (generally) rejected. The role of output is only intermediary.

The book ends (chapter 7) with an attempt to justify the findings in a theoretical sense by searching for a theory that might be consistent with the data. According to the author a revenue-maximizing theory of the firm (by Baumol, and extended by Bierens) might provide a clue, since it stresses fixed costs rather than variable costs as important to employment decisions. The absence of a role for real wages could be an indication of their counterbalancing effects on consumption and on labour demand.

This analysis, though solidly applied, does ask for some notes concerning its plausibility, precisely because of the striking character of the results.

1. We might question the method on two points. Firstly, what role is to be assigned to economic theory? At the outset, explanatory variables are selected without specification of structural relationships. But in the end an attempt is made to reconcile a rather specific economic model with the general results. So the author switches in fact to a different methodology here; the theoretical 'justification' of the results is not in line with this method of searching for a data generating process. Secondly, could we not argue that the conclusions might be sensitive to the *a priori* choice of the lag structure, or to missing variables such as labour supply data? Generally speaking, it seems difficult to insert explanatory variables in an ARMA-type model without using structural relations based on theory from the outset.
2. We might also question the data. Firstly, the direct effects of the explanatory variables pertain to employment rather than to unemployment. Moreover, the data concerning unemployment are rather sensitive to measurement errors and changes in registration methods. So what is gained by having long series of data (monthly unemployment figures) which might be lost by lack of precision or theoretical justification? Is it not necessary to test whether the conclusions remain valid when using employment data? Secondly, the interest rate is captured by taking official discount rates, which seems questionable as a representation of interest effects on the economy. Broersma himself (p. 112) seems to have doubts on this point too.

3. We might question the theoretical intuition involved. Theories which mention the importance of interest rates for unemployment emphasize real rates rather than nominal rates (see Phelps, 'Review of Unemployment,' *Journal of Economic Literature*, XXX/3, 1992). When embracing the interest rate explanation, one owes an explanation. The fact that only official discount rates survive the test seems like proving too much, and tends to thwart the plausibility of the story.

Yet the book contains a careful econometric study and gives a valuable insight in the testing procedures involved in the model under consideration.

Boe Thio

David E. Schrader, *The Corporation as Anomaly*, Cambridge University Press, Cambridge, *etc.*, 1993. Pp. xi + 202. $44.95

Schrader's scepticism about the appropriateness of making the same claims about individual entrepreneurial behaviour as about corporate behaviour has led him to study theories of the firm as an issue of theory justification in economics. The author's primary subject of investigation is behaviour in large corporations. Large business corporations have become important institutions in society, both regionally and internationally. Economic growth has become more dependent on the foreign investment of multinationals than on international trade.

Schrader believes that although corporations are here to stay, their appearance as an institution is undergoing profound change. To understand this phenomenon and its change, it is necessary to question the state of the art of the corporate theory. What has led Schrader to investigate the development of the theory of the firm is not so much the lack of a theoretical framework within which the corporation can be placed, but rather the conflicting and contradictory theories within which scholars have attempted to place the business corporation.

Schrader deals with this problem in eight chapters. In chapter 1 the author outlines the approach to corporations in previous and current economic theory (from Adam Smith to Olivier E. Williamson), and the hidden change that has taken place in economic theory. Chapter 2 presents four views of scientific change (K.R. Popper, Th. Kuhn, I. Lakatos and L. Laudan). Chapter 3 provides an overview of the history of economic theory (classical political economy, the marginalist approach, J.M. Keynes and the Chicago School). Chapter 4 deals with the agreement and disagreement within the traditional theory. Central issues are methodological individualism, self-interested human activity and the invisible hand or unintentional coordination of economic activity. Three major theories of the corporation are then presented (chapter 5) and it is shown how behavioural and managerial theories differ from the dominant marginalist theory of economic tradition. In chapter 6 the author discusses the dominant marginalist view. Chapter 7 describes the characteristics of the large managerial corporation, its profits, constituents and its institutional structure. In chapter 8 Schrader concludes that a fundamental change in general economic theory is required if the theory of the firm is to be improved.

Schrader carefully sifts through both the traditional and more recent approaches to the economic theory of the firm. In earlier approaches, the firm does not receive quite as much explicit attention as it does in more recent theories. However, more isolated approaches are apparently hampered by too many inhibitions and unrealistic assumptions related to the traditional economic framework. Schrader considers the main weakness of managerial approaches to the theories of the firm to be the narrow explanatory scope. Moreover, such approaches fail to account for the collective characteristics of modern business corporations. The continuing dominance of the marginalist theory of the firm is not so much due to its prominence in explaining corporate behaviour, but rather to the lack of an alternative general framework in traditional general economic theory. Carl G. Hempel has called this 'support from above.' The modern business corporation is an anomaly for traditional economic theory because it is a genuine collective entity featuring a very conscious 'visible hand' type of coordination of economic activity (p. 7). New theory must include an account of collective as well as individual action; conscious coordination of economic activity as well as unconscious coordination. The modern corporation is a social institution with 'semi-public power,' as has been stated by John Bates Clark. In this locus of collective action, varied interests are transformed into a more or less coherent pattern of group behaviour in pursuit of purposes at least partly convergent (p. 8).

Schrader observes that the behavioural and the managerial approaches have certain characteristics in common. In dealing with the latter he notes the significant role of discretionary managerial behaviour, as put forward by R.M. Cyert and J.G. March, and by O.E. Williamson. He concludes that 'behavioural approaches' to the firm could be called 'organizational analysis' (p. 101). Digging a little deeper, one encounters the concept of 'strategic choice' in organizational decision-making. This concept has much in common with discretionary behaviour. This is because the differentiation between neo-classical theory and managerial/behavioural approaches is primarily based upon the difference between the significance of situational determinism and managerial discretionary behaviour.

Schrader's stimulating book, written in clear language, does convince the reader – if (s)he has not already been convinced – that the downfall of the marginalist aspects of traditional economic theory will take place sooner rather than later. This aspect of economic theory, which poorly integrates behavioural and managerial approaches, is badly in need of change if what is required is a fully-fledged theoretical explanation of corporate behaviour. Many of the non-intentional approaches, prominent in neo-classical economic theory – and often claimed to belong to the 'mains stream' – have come under fire, not in the least as a result of new paradigms in behavioural approaches.

Schrader emphasizes the contribution of the transaction costs approach. This should be acknowledged: neither the assessment of the environment by various actors, nor the governing of contractual relationships under conditions of bounded rationality and incomplete contracting, are costless. However, should not the transactions cost approach be conceived of as just another, indeed valuable, extension of the marginalist approach of managerial behaviour, since its reasoning is based on performances and costs? Much variance in managerial decision behaviour cannot be explained within a marginalist framework based on differences in costs/benefits as it is still far from clear what precisely management is maximizing.

Here, a possible flaw in the author's analysis, or in the limits he has imposed upon himself, can be observed. While Schrader convincingly demonstrates that many problems pertaining to corporate behaviour should be analyzed as phenomena of collective action, he fails to explicitly acknowledge the implication, namely that not only economic theory is relevant, but sociological theory (of organisations) as well. One example in recent sociology, in which methodological individualism is not cast aside, is the 'rational choice' paradigm.

Furthermore, it is almost embarrassing to miss a discussion of R.H. Coase's work on the nature of firms in which the corporate firm is a central object of analysis. Probably more than the A.A. Berle, Jr. and G.C. Means contribution, Coase's (revolutionary) article can be seen as a watershed in economic theorizing about corporations. Its message is critically pertinent to the discussion here, because it provides the basis for the concept of the firm (hierarchy) as an alternative to the market, a conscious mode of coordination as opposed to an unconscious mode of coordination of economic activity. These alternatives correspond with the distinction between the neoclassical perspective of free market mechanism and the behavioural/managerial perspective of the business corporation.

The reader could agree with the author's conclusion that decision-making in managerial corporations is more frequently better understood as 'bureaucratic' (as opposed to 'entrepreneurial'). However, Schrader should have noted that many corporations have introduced changes in the 'Post Fordistic' period by bringing back entrepreneurship in the, decentralized or federated, corporation. The edge of hierarchy and market, pushed outside of the corporation by bureaucratization, has been brought back in again in order to accelerate the necessary changes. Market or marginalist perspectives (price changes) and behavioural or managerial perspectives are badly needed simultaneously.

The author concludes that the analysis of corporate structure in mainstream (marginalist) economics is still based on individual action rather than on collective action, on unconscious coordination rather than conscious coordination of economic activity. It is the weakness of marginalist economic theory not to deal profoundly with both collective action and conscious coordination of economic activity.

It is not the marginalist theory of the corporation *per se*, or the general marginalist perspectives in economic theory that are the cause of the current problem. What is lacking is a fundamental change in general economic theory to enable the development of a new coherent explanatory framework of the corporation. This challenge, as the author rightly claims, will not receive a fruitful response without contributions from both managerial and behavioural perspectives.

The book is worth reading as it sharply marks the divide between old economic approaches and the need for change in traditional economic theory. Whether the development of an adequate theory is a challenge to the general theory of economics alone, to sociology, or to both, still remains to be seen.

A. Buitendam

Michael Ellman, Egor T. Gaidar and Grzegorz W. Kolodko, *Economic Transition in Eastern Europe*, Blackwell, Oxford (UK)/Cambridge (USA), 1993. Pp. 99. £19.99

This book is a collection of three essays from a seminar held at Erasmus University in the fall of 1991 on the transition from centrally planned economies to market economies in Eastern Europe.

Ellman, in his opening essay, has wide ground to cover in discussing the general aspects of transition. He discusses the reasons for the collapse of the old system, the approaches to the transition and the issues in the transition. He distinguishes stabilization, institutional change and structural change as the three main economic issues in the transition and discusses some of the interdependencies between these issues. In a lecture, this wide variety of subjects and the concise treatment is functional and it presents the audience with a general idea of the enormous task that the economies of Eastern Europe face in their attempt to return to Europe. However, as a reader, I am missing structure and argumentation.

Kolodko first outlines and comments the usual course of reasoning in evaluating the development of socialist economies in the past and the prospects for future growth, but subsequently argues that the main problem is not this or that forecast, but the mechanism of the turning point of the reproduction process, the mechanism which will put the post-communist economies in transition onto the growth path. The centrally planned economies are going through a process in which the trade-off between inflation and shortages is replaced by a trade-off between inflation and unemployment. Kolodko presents the Polish case to argue that in the centrally planned economies, different enough from a typical market economy, a situation can happen in which simultaneously economic growth and growth of unemployment occur.

Gaidar describes the interdependencies between the political events in the former Soviet Union and the inflationary problems. The argument Gaidar brings forward is that the democratic reform and the dissolution of the Soviet Union prevented a powerful anti-inflationary policy. Republics slashed their contributions to the federal budget and to win popular support, authorities let the taxation system tumble down. The central government had no option but to accept increasing inflation, which decreased its credibility to implement a stabilization policy.

With respect to the contributions of Kolodko and Gaidar the same can be said for Ellman's; they are interesting lectures, but due to their inherent compactness it is difficult for a reader to follow the line of argument. In Kolodko's essay there is a clear break between the first and the second part, while Gaidar is lost a little in following the events in the former Soviet Union. With respect to the book as a whole I find the title somewhat misleading. It suggests a broader approach and more coherence among the essays than is realized. Only Ellman's contribution presents general argumentation; the two others concentrate on a single country. The focus is very much on the topic of stabilization, which indeed in 1991 was a very important topic in the discussion on the transition of economic systems. All in all I find that the book strongly reflects the text of lectures. From the viewpoint of the wider context of reading scholars, I think the organizers of the seminar could better have left it at organizing an interesting series of lectures.

Joop de Kort