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An Alternative Analysis of Economic Theory and Policy

Professor Stephen F. Frowen
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Money and Banking

Issues for the Twenty-First Century

Essays in Honour of Stephen F. Frowen

Edited by

Philip Arestis

*Professor of Economics and
Head of the Department of Applied Economics
University of East London*

Foreword by

Helmut Schlesinger

President of the Deutsche Bundesbank

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Foreword

Helmut Schlesinger, President of the Deutsche Bundesbank

I feel greatly honoured by the invitation to open this volume. The Bundesbank has special ties with Professor Frowen; not only do we appreciate his excellent contributions to monetary policy issues over the decades, we also acknowledge the fine work he did as a professor at the Free University of Berlin, holding the chair of Monetary Economics endowed by the Bundesbank in 1987.

The title of this book *Money and Banking: Issues for the Twenty-First Century* tempted me to present an economic and political outlook that may turn out rather more speculative than such an article ought to be. From a central bank's point of view, the introduction of a single and common European currency will be the most significant change during the transition from twentieth to twenty-first century Europe; the creation of a new currency area in Europe is not a novel historical phenomenon. Such a development took place, for instance, not long ago in Germany. German monetary, economic and social union resulted from the 'peaceful revolution' in eastern Germany, and from the certainty that political union was subsequently to emerge.

The concept of European integration and especially of the Maastricht treaty works just the other way round. The European Monetary Union (EMU) is only poorly accompanied by broader responsibilities on the part of political Community authorities. The areas of responsibility shared by the Community and its member states remain in many respects quite unclear. The buzz-word 'subsidiarity' has become a symbol of the debate concerning the allocation of tasks between EC and national or regional decision-makers. But right up to today, EMU does not really emerge with the construction of a political union in western Europe.

In a more economic sense, it is even controversial whether a single currency for Europe is necessary for the common market. Those economists who notice that there is already a high degree of mobility of goods and the factors of production seem to think along those lines, while, on the other hand, those who stress the importance of exchange rate flexibility may think differently. However, economists

have to realise that the politicians have always regarded economic integration as a major step towards further political integration. So EMU, too, plays a significant part in the hopes of committed Europeans of overcoming nation states.

In contrast, in the second part of the nineteenth century, several monetary unions or, to be more precise coin unions, were established in order to achieve the nation state. Those monetary unions which finally came under the roof of a political union (Switzerland, Italy, Germany) have indeed survived. On the other hand, some monetary unions were set up at about the same time without any intention of political unification. Those systems, whose members remained separate (German-Austrian, Latin, Scandinavian Monetary Union) have collapsed sooner or later. Of course, it would be rash to reject the Maastricht project because of historical experience about one hundred years ago. Nevertheless, it is worthwhile noting that there may be a strong link between the success of EMU and the further political integration of the European Community. What may be the economic reasons why increasing integration is required?

For instance, two problems may arise in a currency union where the exchange rate mechanism is missing but where, on the other hand, a framework for solving different political and economic orientations of the participating countries exists only on a small scale:

- Co-ordination of fiscal policy. There is a further necessity for the co-ordination of fiscal policy in a twofold sense. On the one hand, in order to achieve a proper policy-mix with respect to single and common monetary policy and, on the other hand, to avoid or reduce regional imbalances resulting, for instance, from internal or external demand shocks.
- Willingness to redistribute income. Without a certain degree of exchange rate flexibility, disturbances on the markets for goods may generate larger income effects. Hence a currency union requires more income transfers in order to reduce the effects of exogenous shocks. The willingness of the citizens of high-income regions to compensate the residents of disadvantaged regions depends on their ability and will to share a common identity and a certain sense of solidarity in Europe.

On closer examination, there is no doubt that EMU's ability to last will hinge on political progress. What are the chances of European unification taking place?

On the 'market for ideas' there are several models which claim to predict future developments.

- The two-part world model. This pessimistic argument holds the view that tendencies towards integration in the western world were a response to east-west confrontation. The end of the east-west conflict reduces the external pressures and thus will lead to disintegration inside.
- The triangle world model. In some respects this view represents just the opposite. The world economy consists of three main players: North America, Japan and Europe. Their rivalry forces European countries to co-operate and disruptive political structures inside Europe will vanish at last.
- The cynical integration model. This stresses that pan-European integration has moved in circles during the last decades. Periods of progress have alternated with periods of retrogression. But EMU may create a 'point of no return', from which pulling back would impose prohibitive costs on the renegade. This does not prevent the Community from experiencing temporary halts and setbacks, but produces a kind of ratchet effect and a longer-term advance of the integration process.
- The political leader integration model. This emphasises the importance of individual political leaders. According to this view, progress in EC integration is always a result of coincidence of the views of main leaders. 'Progressive' periods are those in which the political leaders share the same beliefs at the same time. According to such coincidence arguments, Europe may rather be pursuing a historic 'random walk'. On the other hand, one cannot ignore the fact that integration has been increasing in Europe for a long time because there have been politicians who, from time to time, have fought for European integration, such as Gustav Stresemann and Aristide Briand after the First World War and Konrad Adenauer, Robert Schuman, Alcide de Gasperi and Paul-Henri Spaak after the Second World War.

In the eyes of the citizens of the participating countries, a European currency will certainly be the most perceptible change caused by EC integration. This makes price stability essential, not only in an economic but also in a political sense. It is unlikely that European citizens will be made aware of their common ground by a currency unit that steadily decreases in value relative to other currencies. If a common

currency is to support a tendency towards broader political unification, it can only be a stable one. Price stability will facilitate the acceptance of the future common currency. From my point of view, acceptance and the credibility of the future EC currency are the most important arguments for asserting that the future European central bank must preserve the goal of price stability, and also that it must be independent of political instruction in its decisions, whether coming from national governments or from EC institutions.

Notes on the Contributors

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No. 37, 1990; 'Are Exchange-rate Fixity and Financial Liberalization in Europe the Source of Monetary Instability and Fiscal Laxism?', *Cahiers Economiques et monétaires de la Banque de France*, 1992; 'New Strategies for Developing Countries Debt Relief' (with J. C. Berthelemy), *Revue d'Economie Politique*, July 1991; and Joint Papers with V. Marimoutou.

Charles Goodhart was appointed to the newly established Norman Sosnow Chair of Banking and Finance at the London School of Economics (LSE) in September 1985. He was elected a Fellow of the British Academy in 1990. During 1986, he helped to found, with Professor Mervyn King, the Financial Markets Group at LSE, which began operation at the start of 1987. For the previous 17 years he served as a monetary economist at the Bank of England, becoming a Chief Adviser in 1980. He is a graduate of Cambridge (BA 1960) and Harvard (PhD, 1963). After returning from Harvard to teach at Cambridge, where he was a Fellow of Trinity College, (1963–5), he became an adviser in the Department of Economic Affairs (DEA) for a brief period (1965–6), before returning to academic life as a Lecturer in Economics at the LSE (1966–8), from whence he joined the Bank of England. Goodhart's initial research was in monetary history, writing two books, the first – a distillation of his thesis – on *The New York Money Market, 1990–1913* and a second companion on UK banking in the same period, *The Business of Banking, 1891–1914* (an LSE monograph). His interests, teaching and research, soon shifted to a study of contemporary monetary issues. During his period at LSE, and subsequently at the Bank, he published a number of journal papers on monetary issues, both analytical and empirical. In 1973 he wrote a textbook on contemporary monetary economics *Money, Information and Uncertainty*, which has now been revised; the new edition published by Macmillan (1989). In 1984 he put together a collection of his papers and published these under the title, *Monetary Theory and Practice*. Subsequently, he has completed a monograph on *The Evolution of Central Banks* (1985), published by LSE; this has now also been revised, and re-issued in a new format by MIT Press (1988). Besides his research work for the FMG, his two main recent articles have been his Inaugural Lecture, 'The Foreign Exchange Market: A Random Walk with a Dragging Anchor', *Economica*, November 1988, and a survey paper on 'The Conduct of Monetary Policy', *Economic Journal*, June 1989. Since then his research interests have concentrated on the foreign exchange market

where he has been analysing a massive data set of continuous quotes of spot exchange rates taken from Reuters screens. His policy interests have focused on the progress towards European Monetary Union. He is, perhaps, more widely known for two less serious pieces. First, he was one of the first to have undertaken a serious empirical study of the relationship between macroeconomic developments and political popularity, in his article 'Political Economy', *Political Studies*, vol. 18, 1970. Second, he is the author of Goodhart's Law (see *Monetary Theory and Practice*, p. 96), 'that any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes'.

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G. L. S. Shackle was Brunner Professor of Economic Science at the University of Liverpool from 1951 to 1969 and Emeritus until his death in 1992. In 1957 he gave the Professor F. de Vries Lectures in Amsterdam, and was visiting Professor of Economics at Colombia University, New York. In 1966 he was President of Section F of the British Association for the Advancement of Science. In 1967 he was Visiting Professor of Economics, University of Pittsburg. In 1967 he was elected Fellow of the British Academy and in 1976 gave the Keynes Lecture at the British Academy. From 1955 to 1969 he was a member of the Council of the Royal Economic Society. In 1974 he was awarded the Honorary Degree of DSc by the New University of Ulster, in 1978 the Honorary Degree of D.Soc.Sc. by the University of Birmingham, and in 1988 the Honorary Degree of Doctor of letters by the University of Strathclyde. In 1985 he also became a Distinguished Fellow of the American History of Economics Society.

Amongst his books are *Expectations, Investment and Income* (1938 and 1969); *Expectation in Economics* (1949 and 1952); *Mathematics at the Fireside* (1952); *Time in Economics* (1958 and 1967); *Economics for Pleasure* (1959 and 1968); *Decision, Order and Time in Human Affairs* (1961 and 1969); *The Years of High Theory* (1967 and 1983); *Epistemics and Economics* (1972); *Keynesian Kaleidics* (1974); *Imagination and the Nature of Choice* (1979); and *Business, Time and Thought: Selected Papers of G. L. S. Shackle* (edited by Stephen F. Frowen, 1988).

Hans Tietmeyer, Governor-Designate of the Deutsche Bundesbank became Deputy Governor on 1 August 1991, having joined its Board and the Central Bank Council on 1 January 1990. At the Bundesbank he has special responsibility for the Foreign Department and the Department of International Monetary Issues, Organisations and Agreements. From April to June 1990 he was suspended from these duties to become the Personal Adviser of the German Federal Chancellor for negotiations on the State Treaty establishing the inter-German Economic, Monetary and Social Union. After graduating and obtaining his doctorate in economics at Cologne University, Dr Tietmeyer held leading positions with the Federal Ministry of Economics in Bonn for twenty years from 1962 until 1982, which included the headship of the division responsible for basic issues of the economic system and of economic policy, the headship of the directorate responsible for the European Common Market and relations to third countries, and the headship of the directorate responsible for basic issues of economic, business cycle and growth policy; during his term of office with the Federal Ministry of Economics he finally became Head of the Directorate-General I, responsible for economic policy, in 1973, a position he held until he became State Secretary in the Federal Ministry of Finance in 1982. As State Secretary from 1982 until the end of 1989, he was personally commissioned by the Federal Chancellor to prepare the World Economics Summit (SHERPA). Dr Tietmeyer is a bearer of the Knight Commander's Cross (Badge and Star) of the Order of Merit of the Federal Republic of Germany, and has been awarded high honours by the Netherlands, Luxembourg, France, Austria, Belgium, Hungary and the Vatican City State.

Introduction

Philip Arestis

This collection of essays is, in a way, a sequel to *Contemporary Issues in Money and Banking* published in 1988 by Macmillan in honour of Professor Stephen F. Frowen, the gentle and quiet scholar (as G. L. S. Shackle so aptly put it in his Foreword to that volume), to mark the occasion of his sixty-fifth birthday. The present volume, published in honour of Stephen F. Frowen on his seventieth birthday, draws on some of the material published then, appropriately revised, but it also contains many additional contributions. Stephen has devoted his entire academic life to teaching and research in the area of money and banking. In Stephen's work the emphasis has always been on the latest developments in this area of study in an attempt to extrapolate in the future. It is, therefore, very fitting that this collection not only should focus on contemporary issues in Stephen's particular field of interest, but, indeed, concern itself with issues that are expected to be of interest well into the next century.

There is, of course, no presumption that the whole spectrum of contemporary issues in money and banking can be satisfactorily covered in the compass of a single volume. For the number of these issues is immense. The turmoil that the world economy has gone through in the 1980s and early 1990s has produced a great number of interesting and novel contributions in the discipline of economics, especially so in the area of money and banking. It is hoped that this collection will give the flavour of the most important contemporary developments as they form the main issues of the next century by throwing considerable light on them. At the top of the list of these issues would have to be financial innovations. The monetarist counter-revolution with its focus on the putative effects of money supply in free market economies inspired 'monetary targetry' as the central figure of economic policy. This modern formulation of monetarism encouraged, if not induced, the process of creative response by financial institutions which had been shaping up in various Western industrialised countries but deeply rooted in monetary developments in the USA in the early 1960s. This creativity expressed itself in the form of new financial procedures and structures resulting in financial evolution. Furthermore, the tremendous expansion and sophistication

of computer and information technology, and deregulation (especially of foreign exchange controls and thus integration of financial markets across countries) have indeed induced financial innovations not just at the domestic level but also at the international level. But when the international dimension of financial innovations is considered, the question of the appropriateness of the prevailing exchange rate system inevitably becomes one of the focal points of analysis. Developments in this arena are, therefore, of crucial importance, given that the aim of any exchange rate system is to create stability and reduce the degree of uncertainty in the international economic scene which would allow global growth to materialise. However, such stability has not always been forthcoming, especially so in the turbulent years of the 1980s and early 1990s. It is precisely for this reason that the European Monetary System (EMS) has been created: to promote closer monetary co-operation leading to monetary stability in Europe. The appraisal of this system is therefore another issue taken up in this volume. Economic co-operation and the place of monetary policy in such an environment is another burning issue which is touched upon in this volume. The final issue in this collection is financial liberalisation and economic development, concentrating on developing economies.

Underlying all these issues, however, is the question of policy in general, a topic with which the late George Shackle, a very close and long-standing friend of Stephen F. Frowen, opens this volume. In fact, the theme of Chapter 1 concerns the businessman's precautionary thoughts about what responses might be forthcoming with respect to future trading results, in view of what the businessman had assumed for working purposes to be the 'best possible'. Some businessmen regarded 'planning' as useless in face of the endless changes and uncertainties of the modern world. The valid response is to ask what *can* happen, at best and at worst, as a sequel to specific action, but also to be prepared for these scenarios to be transcended by the actual course of events. What this chapter is really concerned with is policy, in a deeper and more carefully structured sense, where profit is defined as the signal for reconsideration of plans. This chapter, therefore, provides a firm theoretical foundation for policy analysis in general, within which issues in monetary and banking policy could be analysed.

One important aspect of the contemporary economic policy debate is price flexibility and asset price flexibility in particular. More concretely, the argument is that asset price flexibility can influence the

financial system and have a permanent impact on employment and output. Paul Davidson in Chapter 2 begins with the orthodox classical theory claims that a co-ordinated fall in *all* wages and prices will have no effect on employment and output flows. This conclusion follows from the axiom of neutral money – a logical foundation of classical and neoclassical analysis. Keynes, on the other hand, claimed that the neutrality of money was a special case which was not compatible with the facts of experience. Instead, Keynes argued that a modern entrepreneurial money-using economy was one where money was never neutral in either the long run or the short run. The effects of tight monetary and fiscal policies are analysed, in an attempt to not only slow the rate of increase in product prices (inflation) but also attempts to force the reduction of spot asset prices of real estate and/or equity securities in a non-neutral monetary system. The experience of the USA economy since 1987, when deliberate policies undertaken to reduce real estate values were initiated is used to illustrate the argument developed in this chapter. Arguments are presented to indicate that the recession of the 1990s is different from those of the previous post-war downturns, and a strong recovery will require more than merely reducing interest rates.

One other aspect of economic policy that is often discussed is monetary stability, and Hans Tietmeyer takes this issue on board in Chapter 3. Monetary stability is not just a topic with a long academic tradition. It is, indeed, the subject of many social and political controversies at present. What is involved in most cases is the degree of significance to be accorded to it compared with other economic policy objectives. In addition to its economic function a sound monetary and financial system is also of substantial social significance. The stability of the value of money must, however, be distinguished clearly from the exchange rate stability of a currency, which is also frequently referred to. The instability of exchange rates *vis-à-vis* other currencies can in fact be a decisive obstacle to achieving domestic economic stability. Instead of exchange rate stability, however, there is another aspect which always belongs to the concept of monetary stability, that is the stability of a country's entire financial system, and to that of the commercial banks, in particular. Where confidence in banks and other financial institutions is shaken, neither money, nor the financial system as a whole, can properly fulfil their functions. What the absence of monetary stability actually means is extensively discussed in this chapter. But the arguments for monetary stability entail a socio-ethical dimension which is, unfortunately, often overlooked.

Hans Tietmeyer argues that altogether inflation definitely violates the postulate of social justice, both within societies and in their relations to one another. Comprehensive competition policy and monetary stability are component parts of an economic order which wants to combine the social policy imperative and market economy laws in harmony. Precisely this is what the concept of social market economy means, which has become the proven economic and social policy guideline in Germany after the war. It is also true, however, that much has been translated into practice only imperfectly. But the concept should not be blamed for this.

The stability of currency issue is taken up by Otmar Issing in Chapter 4. He suggests that the success or failure of a central bank is measured by the degree of stability of its currency. The Bundesbank's high world-wide reputation emanates from the D-Mark being a (relatively) hard currency. This experience has been reflected in the Maastricht Agreement, *inter alia*, in the convergence criterion which is geared to price trends in the three 'best performing' countries and, above all, in the fact that monetary stability will be the primary objective of the European Central Bank System. The setting of the target of monetary stability requires that the central bank, wherever possible, does not allow any inflationary scope to arise. In this connection, monetary targets have proved to be the best strategy. A strict money stock rule as proposed by Friedman faces serious theoretical and empirical objections. The discussion of feed-back rules cannot yet be regarded as having been settled, not even on the theoretical plane. Given the conflict between what is politically feasible and what is economically sensible, the objective of absolute price stability becomes ambiguous. Irrespective of the theoretical controversies about some aspects of monetary policy, there is no denying the fact that the success of monetary policy in combatting inflation and the real cost of this fight depend not only on the independence of the central bank, but also on the 'stability culture' in society. The social consensus about the leading role played by the central bank in the field of stabilisation, and market participants' confidence in the central bank's ability to fight inflation, enable an easing of inflationary pressures without excessive friction losses in terms of output and employment. Ultimately, each society will have the inflation rate it deserves, and the contradiction between the 'goals and reality of central bank policy' will dissolve.

Victoria Chick in Chapter 5 considers the implications of financial innovations for Keynesian monetary theory. In the latter, the rate of

interest was determined by the (exogenous) supply of money and a demand for money whose volatile element had to do with investors' choice between money and financial assets for speculative purposes. The demand for credit was treated as exogenous, and bank deposits were the passive results of loans, limited by reserves. This theory is out of touch with significant elements of present-day reality: banks now actively seek deposits, competing for the attention of the modern equivalents of Keynesian speculators, i.e. financial managers; banks also actively seek lending outlets, and not just for investment in the traditional sense. When banks actively manage both their assets and their liabilities, the demand for credit, the banks' willingness to supply it, the activities of financial managers and the supply of money are all interrelated. The relationship between the rate of interest and investment requires a new specification. This chapter takes some of the necessary steps towards such a specification.

Charles Goodhart in Chapter 6 examines the implication of financial innovations for 'bank regulation'. He is concerned with the problem of bank regulation as it has manifested itself following the experience of bank failures, Johnson Matthey in the UK, Continental Illinois in the USA, and Canadian Commercial Bank. The author discusses the inequitable treatment between large and small banks if large banks are always to be prevented from failing, and the moral hazard problems when all banks enjoy similar protection. The elimination of the distinction between illiquidity and insolvency due to the growth of wholesale money markets and liability management exacerbates the problem of bank regulation. Deposit insurance may help here but it is recognised that it is practically impossible to calculate banking risk *ex ante*, and there are many reasons why deposit insurance premiums cannot be objectively related to any such risk measurements. The author proposes the adoption of a general co-insurance, co-responsibility approach in order to mitigate some of the problems arising from 100 per cent deposit insurance coverage.

Chapter 7 continues within the theme of Chapter 6. Dirk Schoemaker argues the internationalisation of banking has significantly decreased the effectiveness of national banking regulations. The introduction of the home country concept for supervision, in combination with supervision on a consolidated basis, and the establishment of common capital adequacy requirements are important achievements in increasing the effectiveness of supervision of international banks. However, certain countries appeared to have continued

to compete through laxity of supervisory standards in order to attract the headquarters of international banks. This chapter investigates whether home country deposit insurance can offer home country supervisors an incentive for sound supervision. The main idea is that home supervisors would be faced with the costs when any of the banks under their supervision fails. The present deposit insurance schemes reveal many dissimilarities, and some countries do not have a scheme at all. Some kind of harmonisation of the existing schemes and home country jurisdiction over bank failures are required for establishing home country deposit insurance. This chapter discusses appropriate minimum standards which need to be harmonised. It also discusses home country deposit insurance within the European Community, which would supplement the Second Banking Directive and introduce home country control over authorisation and free establishment of branches throughout the EC (without involvement of the host countries). At an international level the analysis suggests home *and* host country deposit insurance. Although home supervisors might play a leading role, there are advantages of co-operation between the home and host supervisors. Furthermore, joint deposit insurance will substantially reduce the foreign exchange problems of home country deposit insurance. However, it is questionable whether joint home and host country deposit insurance is feasible in practice.

Chapter 8 addresses an important issue that relates to Europe. Ted Gardener explores some of the key issues that confront bankers and students of banking in the development and analysis of banking strategy in the post-1992 Europe. The 1992 SEM (Single European Market) has stimulated many specific, European questions about the development of EC banking and financial systems. In one sense it is an important laboratory for appraising the major influences on the development of banking strategies in a deregulating financial environment. The two main sections of the chapter examine strategic issues and the question of strategic choice. The chapter explores *inter alia* the Cecchini views on bank strategy within their (1988) micro-economic study on the economics of 1992. Although much of the Cecchini general scenario on banking strategies is supported, it is argued that Cecchini ignored many important influences that shape practical banking strategies. Some of these criticisms of Cecchini arise from two major research studies that the author has recently undertaken (for the Ministry of Finance, Norway and EFTA) that replicated the Cecchini microeconomic methodology on EFTA country financial sectors. The second part of the chapter develops one of

its major themes that capital adequacy, a bank strategic influence not explored by Cecchini, will be a major influence on post-1992 European banking strategies.

Chapter 9 raises a very interesting and topical question, that of international policy co-ordination. In this chapter Elias Karakitsos concentrates on the international transmission of monetary policy. He suggests that the impact of monetary policy is highly asymmetrical in its effects on the USA and Europe. These asymmetries are explored within a theoretical framework where two factors are identified: the first is the difference and the extent of wage bargaining in Europe and the USA (real wage rigidity in Europe and nominal wage rigidity in the USA), and the second is the difference in the degree of capital mobility in the two money markets. These propositions find empirical support within the confines of HM Treasury's World Economic Prospects model. The overall conclusion on the asymmetries between Europe and the USA is in terms of a higher European degree of 'supply-side' openness rather than wage rigidity as is commonly thought. The policy implication is that co-ordination should benefit Europe more than the USA, especially so in the presence of 'supply-side' shocks.

The next four chapters concentrate more closely on questions of monetary policy. In Chapter 10 Philip Arestis, Iris Biefang-Frisancho Mariscal and Peter Howells examine the composition of the various monetary aggregates recorded and targeted in the UK since 1967. The chapter also looks at the reasons for their choice, at the methods used to influence their behaviour and at the impact of institutional changes upon the choice of aggregates and the control methods. Since the mid-1960s, the UK authorities have at various times published twelve different monetary and credit series, nearly all of which have at some time been 'targeted', though some for periods as short as two years. The case for targeting is briefly reviewed along with the history of these series and the circumstances which gave rise to their publication and selection for targeting. The triumph of pragmatism over both theory and, often, econometric evidence is stressed. Monetary control techniques used in the UK since 1971 are also reviewed and the continuity of the approach that relies upon interest rates to influence the flow of bank lending is highlighted. The discussion stresses in particular the importance of *relative* interest rates and reveals the doubts that were expressed quite early in official circles about the ability of variations in the general level of rates to produce the appropriate change in relativities. It also looks at the empirical

evidence of what happened to the key relativities when the authorities varied the general level of rates. This confirms some of the early anxieties that relativities could move in a 'perverse' fashion in response to official changes in absolute rates. However, the magnitude of this perversity depends upon the proportion of assets which bear interest, being most marked when recorded interest rates are paid on 100 per cent of deposits (for example). Since institutional changes in the last twenty years have increased the proportion of money which pays interest, they have made the desired manipulations of relativities increasingly difficult to achieve. Most recently, the replacement of M3 by the M4 definition in 1989 produced a steep increase which took the interest-bearing proportion of broad money in the UK above 90 per cent. This suggests that a return to explicit monetary targets will require something other than variations in official interest rates for their achievement.

Keith Cuthbertson in Chapter 11 considers the issue of control of the money supply as a means to control inflation, which, of course, is a central area of study in monetary economics. This chapter offers an overview of some of the key arguments in this debate and presents some new evidence which illustrates the difficulties involved in assessing the merits of a policy of controlling the money supply. The overall conclusion in practical terms is rather negative. It is that we have little or no firm evidence that a policy of fairly tight control of a narrow or broad monetary aggregate in the UK is either feasible or desirable now, or in the foreseeable future. Our degree of ignorance is such that apart from the rather weak statement that 'authorities will take some form of corrective action if the growth in broad money exceeds 15 percent p.a. or falls below 3 percent over a run of years', there is little the applied economist can constructively say within the framework of a 'simple policy rule' for monetary targeting. The above conclusion of course arises from one's assessment of the range of phenomena addressed by economic theories in this area and of the empirical evidence to back up such theories. An assessment of theories of the money supply process is attempted to argue that the 'banking firm' is a complex dynamic entity subject to changing managerial goals. No simple model such as the monetary base approach can adequately capture this dynamic behaviour. Given the well documented 'problems' with demand for money functions in a period of financial innovation, the arguments in favour of 'money' as providing a nominal anchor are extremely weak. The chapter illustrates some of these practical problems using the demand for bank advances

(BA) and liquid assets (LA) by Industrial and Commercial Companies as examples. Movements in either of these monetary aggregates are responsible (in an arithmetic sense) for a substantial proportion of movements in a broad monetary aggregate such as sterling-M3, which was a targeted aggregate in the UK for much of the 1980s. However, our analysis shows that it is exceedingly difficult to obtain stable asset demand functions for these aggregates even using sophisticated econometric techniques. This suggests caution when using such equations as a basis for policy advice. The chapter concludes with the view that one should use a 'portfolio approach' and fiscal instruments in providing a further short-term stimulus to investment (e.g. increased capital allowances, increased public sector infrastructure).

Chapter 12, by Christian Bordes, Eric Girardin and Velayoudom Marimoutou, examines the performance of P-Star in the French case over the 1970s and the 1980s, an issue that is touched upon in Chapter 11. It has several specificities. This is the first study of this type concerning the French case. The latter is indeed interesting for a number of reasons. The construction of P-Star is more complex than in the USA case – where the velocity of M2 seems to be stationary around a constant mean – since, in France, the different measures of velocity do not share this characteristic. From this vantage point, the French case is similar to the German one, which has been studied in previous works. However, it departs from the latter inasmuch as, contrary to Germany, France witnessed deep transformations in its financial system in the middle of the 1980s. This implies that the analysis of the French case is more difficult than in the German one where it is rather straightforward to isolate the long-term movement in velocity. Another specificity of the present study lies in the econometric method used. We start from a very general model describing interactions between money, economic activity, prices and the rate of interest. This model is estimated and tested with the Johansen cointegration method for broad and narrow monetary aggregates. The results show that over the 1970s and the 1980s, there does exist a long-term relationship between the overall price level and money supply. With narrow aggregates (M1 and M2), money supply, output and the long-term rate of interest are weakly exogenous, while prices are not. It is thus possible to interpret the relationships between these variables in terms of a price equation. We are then able to use a standard two-step Engle-Granger method to get a long-term price equation and an error correction mechanism for inflation. The estimates

obtained imply that P-star represents a reliable indicator of the long-term movement in the overall price level and that the price gap is a good indicator of the future short-run movement of this price level. Within the perspective of the building of European monetary union, this result is reassuring since it shows the similarity in the French and German situations with respect to movements in the overall price level. Within the context of the deepening of the co-ordination of monetary policies during phase two, it is thus possible to consider using P-star in a systematic way in order to analyse movements in monetary conditions and draw implications in terms of the conduct of policy. In order to strengthen this conclusion, one should of course next examine the situation of other member countries.

Chapter 13 is also concerned with the effect of monetary policy. George Hadjimatheou deals with the interesting question of whether the existence of 'liquidity constraints' in the consumption function affects the impact of monetary policy. In perfect money markets, the degree of tightness of monetary policy can be measured by the level of interest rates; however, this proposition is untenable when money markets are imperfect. In the latter case no single variable can act as a reliable signal of market shifts in demand and supply. It is argued that *one* potential candidate under these conditions is 'liquidity constraints' working through consumers' expenditure. The relative importance of such constraints varies with the business cycles and is positively related to unemployment. Furthermore, the presence of 'liquidity constraints' impairs the effectiveness of monetary policy when it is used to take the economy out of a recession. Governments can help to remove 'liquidity constraints' by intervening between lenders and borrowers. Monetary and fiscal policies have an important role to play in this context. Thus, Keynesian policies are given credence in macroeconomic management.

In Chapter 14 Philip Davis and Brian Henry are concerned with the suggestion that financial spreads are useful indicators of real activity. There have been recently a number of papers in the USA which report tests for information (by which read statistical significance) in financial spreads in a multi-variate dynamic model of output. The models proposed for output and methods of estimating these differ between the different papers, but in what has been a variety of approaches each undertaken within a VAR framework, persuasive evidence has appeared that financial spreads may have an informational role. The USA exercises have focused on the spread between

yields on commercial paper and Treasury bills. Other spreads figuring in the empirical work have included the long corporate bond-government bond yield differential; the yield curve differential and, in the UK only, reverse yield gaps (bond less equity yield). This chapter reviews the issues of interpretation and estimation of VAR models which use financial spreads, and provides some new evidence using the UK as the example. It first provides an economic interpretation of the spreads we shall use and their likely significance; then it discusses some econometric issues in estimating VAR models and outlines issues which arise with policy analysis using these models; a further section provides an empirical illustration of a VAR model which includes financial spreads. The final section offers conclusions, and proposals for further work. It is concluded that the empirical evidence suggests financial spreads may have an indicator function in the UK especially in informing about short-run movements in the real economy. This general conclusion echoes similar findings in the USA. The significance and stability of the models which are reported, particularly those including spreads, as well as their effect on forecasting performance, are quite encouraging.

Finally, Chapter 15, by Philip Arestis and Panicos Demetriades, deals with financial issues of developing countries. In developing economies borrowing from the banking system continues to be the most important, if not the only, source of obtaining finance for most firms. In providing the vital link between saving and investment the banking system was traditionally seen by policy makers as a crucial aspect of the development effort. Thus, government intervention in this area has been extensive. The most important forms of such intervention were interest rate ceilings, directed credit programmes and high reserve requirements. The poor development record of many LDCs in the 1960s and 1970s led to a questioning of these (and other) policies not only in academic circles but also in policy-making circles. 'Financial liberalisation', initially advocated by academic economists like R. McKinnon and E. Shaw in the early 1970s, received the important backing of international organisations, such as the IMF and the World Bank, and became a popular policy reform in many developing countries in the 1970s and 1980s. The results from these reforms continue to give rise to hot debate. Even though many of these reforms were by any standards unsuccessful the pro-liberalisation view has been that this was because certain important prerequisites were not met at the outset of the reforms. In particular, it is now argued that 'macroeconomic stability' and 'adequate' bank

supervision should precede any attempt to liberalise the financial system. A critical analysis of the issues relating to the role that financial liberalisation can play in the process of economic development is provided. This chapter examines the McKinnon/Shaw position, and then goes on to present alternative models of financial development, where special emphasis is given to the neostructuralist critique of McKinnon/Shaw. The empirical evidence on the subject is also discussed with special emphasis on the financial reforms of the 1970s and 1980s. The chapter concludes by examining the changes that occurred in the liberalisation thesis in response to the poor results obtained from the reforms.

Stephen Francis Frowen, born in Germany on 22 May 1923, was educated first at the Universities of Cologne, Würzburg and Bonn, and subsequently continued his studies at the Universities of Leeds and the London School of Economics. He obtained his MA in Economics in 1948.

His professional life has been devoted single-mindedly to monetary economics. His practical experience in banking was gained at the London Accepting House, Wm. Brandt's Sons and Co. Ltd in the early 1950s. He then became Assistant Editor and later Editor of the world's oldest banking journal, established in 1844, *The Bankers' Magazine* (now *Banking World*), a prestigious position which gave him free access to banks at all levels. This was followed by becoming the Economic Adviser to the Industrial and Commercial Finance Corporation Ltd (he also served as adviser and consultant to *UNIDO*, Vienna, in 1981–2). Stephen F. Frowen then joined the National Institute of Economic and Social Research before entering academic life. His teaching career started at the University of Birmingham, continued at Woolwich Polytechnic (now Greenwich University), the University of Surrey (for twenty years) before accepting a Professorship at the University of Frankfurt. In October 1987 Stephen F. Frowen became the first Bundesbank Professor of Monetary Economics in the Free University of Berlin – a new chair established by the German Central Bank, the Deutsche Bundesbank, on the occasion of the 750th anniversary of the City of Berlin. Throughout his career he maintained close contacts with his native country through regular guest lectures at numerous German universities and visiting professorships.

On his return to England from his Berlin appointment in 1989, University College London bestowed the title of Honorary Research

Fellow in the Department of Economics upon him. Far from being retired, Stephen F. Frowen accepted an appointment as Senior Research Associate at the Von Hügel Institute, St. Edmund's College, University of Cambridge, in 1991, where he has since organised several major conferences and conducts research on some of the ethical issues in the field of money and banking. As a long-term project, he has embarked on the preparation of the *Collected Writings of G. L. S. Shackle*, to be published by Macmillan.

His publications concentrate on monetary policy issues, a field in which, jointly with colleagues and former research students, he has undertaken a series of empirical studies. Many papers also cover specific issues in banking. To the history of economic thought he contributed by translating into English Knut Wicksell's *Value, Capital and Rent*, originally published in German in 1893.

Stephen F. Frowen is a special sort of person to his friends and colleagues: George Shackle in the Foreword to the 1988 volume (*Contemporary Issues in Money and Banking*) has said it all. But I just wish to add that it is not only Stephen as a scholar, but also his human qualities expressed by his kindness, generosity and courtesy, and above all his readiness to help people, that we will all remember him for in years to come.