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T W E N T Y S E V E N T H R E P O R T

A C T I V I T I E S I N T H E P E R I O D

O C T O B E R 1986 t o S E P T E M B E R 1987



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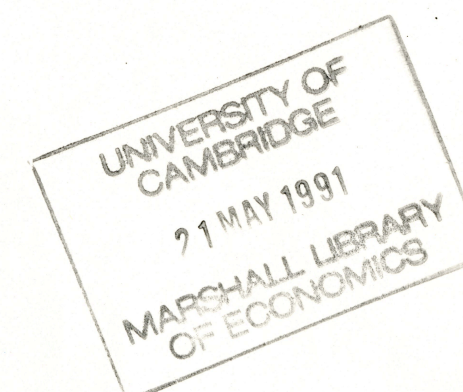
Director:
Professor Wynne Godley
Administrative Secretary:
Mrs. K. M. Wilson

ERRATUM

Department of Applied Economics Twentyseventh Report

The name of Brendan Burchell was accidentally omitted from the list of members of the Labour Studies Group (p. 14) and from that of members of the Social Change and Economic Life: The Northampton Labour Market project (p. 15).

Please could you emend the copy of our Annual Report which you were sent last week. I am sorry to put you to this trouble.



Ann Newton
Publications Secretary

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COMMITTEE OF MANAGEMENT, JANUARY 1987

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Dr A. Singh

DAE Members

Dr J.P. Dunne

M. Kitson

J. Rubery

Co-opted members

R.M. Blackburn

W. Macpherson

Assistant Staff Observer

Mrs M. Barnett

Invited to attend

Secretary to the Faculty

Secretary

Mrs K.M. Wilson

TWENTYSEVENTH REPORT OF THE
DEPARTMENT OF APPLIED ECONOMICS

(covering the year October 1986 to September 1987)

I RESEARCH ACTIVITIES

This section outlines the work done in 1986-87 on the research projects being conducted in the Department.

A ECONOMICS

GROWTH AND FLUCTUATIONS IN THE BRITISH ECONOMY:
PROJECTIONS FOR PLANNING

Project members

Professor Sir Richard Stone	Professor of Finance and Accounting University of Cambridge
Dr T.S. Barker	Senior Research Officer
Dr V.K. Borooah	Senior Research Officer (left February 1987 to take up a Chair at the University of Ulster)
Dr J.P. Dunne	Research Officer
Dr M.S. Kumar	Research Officer (left June 1987 to join the IMF)
Dr K. Lee	Junior Research Officer
Dr M.H. Pesaran	Reader, Faculty of Economics and Politics, (Principal Investigator)
Dr A.W.A Peterson	Lecturer, Faculty of Economics and Politics, University of Cambridge (Principal Investigator)

Mr R.G. Pierse Research Officer

Associate members

Mr T. Lawson Faculty of Economics and Politics,
University of Cambridge

Dr G. Meeks Faculty of Economics and Politics,
University of Cambridge

Mr M. Weale Faculty of Economics and Politics,
University of Cambridge

Professor L.A. Winters Department of Economics,
University College of North Wales

Visitors to the Project:

Professor Osmo Forssell University of Oulu, Finland

Mr L. Halpern Institute of Economics, Budapest

Funding

This project, which has now terminated, was funded partly by the ESRC, partly by Cambridge Econometrics (1985) Ltd (a company set up to provide a commercial service using the project's model), and partly by the University of Cambridge.

The objectives and organisation of the research

The aim of this project, which was under the direction of Dr T.S. Barker, was to study quantitatively, in as great detail as practicable, the present structure and future prospects of the British economy and the possibilities of influencing these prospects by means of economic policy. To do this, the project developed a multisectoral dynamic model of the economy (MDM).

The research activity of the project was organised around this model. Each member of the project contributed towards the improvement of existing relationships in the model, the introduction of new ones and the examination of the overall performance of the model and its projections.

Considerable effort went into the re-estimation of the relationships of the model for version 7 (MDM7). Papers on consumers' expenditure, investment and stockbuilding and the principal macro-equations in the model (covering consumption, average earnings and the exchange rate) were presented at the joint CGP/CE Conference held in Jesus College in June 1987. The re-estimation has been extended to the remaining sectors of the model (employment functions and the financial model apart). In addition a further set of error equations has been specified and estimated to account for the difference between the model solution for variables such as output and consumer prices and CSO estimates for these variables.

The work done by the project over the year will lead in due course to several publications. First, the book on the model (The Cambridge Multisectoral Dynamic Model of the British Economy) was seen through the final stages leading to publication. Since the Department took on the job of preparing camera-ready copy on the laser printer and since the book is over 500 pages long, this was a major undertaking. Cambridge University Press is publishing the book in February 1988. Second, another book The British Economy after Oil, which is a collection of papers following the 1986 CGP/CE Conference on Industry and the Economy, was also prepared for publication in the Department; it is being published by Croom Helm in December 1987. Third, the project organised an international conference on 'Disaggregation in Econometric Modelling' held in Queen's College, Cambridge, 1987. This proved very successful with 30-40 participants, about half from overseas. Another book, based on papers presented at the conference but with invited contributions from leading specialists in the field who were unable to attend, is also to be published. Members of the project presented two papers at this conference reporting on current research: 'Macro-to-micro linkage' and 'Aggregated versus disaggregated employment functions for the UK economy'.

Relationship with the ESRC Macroeconomic Modelling Bureau

The 1986 version of MDM6, together with the forecast produced by Cambridge Econometrics (1986/2), were sent to the ESRC Macroeconomic Modelling Bureau at the University of Warwick in October 1986. Members of the project attended the Bureau meeting in Warwick in July 1987.

Papers presented at Conferences

Conference on Disaggregation in Econometric Modelling, Queens' College, Cambridge, April 13th-14th 1987

Terry Barker	Macro-to-micro linkage: some experiments with the UK Commodity Flow Accounts
Hashem Pesaran and Richard Pierse	Aggregated versus disaggregated employment functions for the UK economy
Geoffrey Meeks	Aggregation versus disaggregation in modelling the company sector

Cambridge Growth Project/Cambridge Econometrics Conference on UK and European Economic Policies into the 1990s, Jesus College, Cambridge 24th-26th June 1987

Terry Barker and Massoud Karshenas	Developments in modelling
Richard Pierse	Macro equations
Paul Dunne	Industrial investment and stockbuilding
Terry Barker	Consumers' expenditure

European Meeting of the Econometric Society, Copenhagen, August 1987

K. Lee	Trade unions, relative wages and the employment of young workers
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Lectures and Seminars

K. Lee and V.K. Borooah	'The effect of changes in Britain's industrial structure on female relative pay and employment, 1960-80' (given to Queens' Seminar Group, February 1987)
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Publications

The following books and papers reporting the work of the project were published during the year from October 1986 or accepted for future publication.

Barker, Terry (1986) Tory optimism may end in sterling crisis. The Independent, 29 December 1986

Barker, Terry (1987) Storm clouds looming over the harvest fields. The Independent, 19 March 1987

Barker, Terry (1986) Modelling economic structure and change in the British economy. Vierteljahreshefte Deutsches Institut für Wirtschaftsforschung, Deutsches Institut für Wirtschaftsforschung, Heft 3

Barker, Terry (forthcoming) The Cambridge Multisectoral Dynamic Model and alternative strategies for full employment in the UK. To be published in a volume edited by M. Hopkins, International Labor Office, Geneva

Barker, Terry and William Peterson (eds) (forthcoming) The Cambridge Multisectoral Dynamic Model of the British Economy, Cambridge University Press, Cambridge

Borooah, V.K. (forthcoming) Politics and economics, in J. Eatwell, M. Milgate and P. Newman (eds) The New Palgrave: A Dictionary of Economic Theory and Doctrine

Borooah, V.K. and S.P. Chakravarty (forthcoming) An experiment in forecasting using the Kalman Filter, in J.J. Sztaudynger (ed) Problems of Building and Estimating Large Econometric Models, North-Holland, Amsterdam

Borooah, V.K. and K. Lee (forthcoming) The effect of changes in Britain's industrial structure on female relative pay and employment, 1960-80. Economic Journal

Borooah, V.K. and F. van der Ploeg (1986) Oligopoly power in British industry. Applied Economics, Vol. 18, pp. 583-598

Grady, J. and M.R. Weale (forthcoming) British Banking: 1960 to 1985. To be published by Macmillan plc

Dunne, J.P. (forthcoming) The structure of service employment in the UK, Chapter 6 in Barker and Dunne, The British Economy After Oil: Manufacturing or Services, Croom Helm

Dunne, J.P. (forthcoming) Longer term prospects for the UK economy. Evidence presented to the Treasury Public Expenditure Select Committee, November 1986, forthcoming in the Committee's Report, with T.S. Barker and G. Duffy

Dunne, J.P. (forthcoming) The employment consequences of military expenditure: a comparative assessment. World Employment Programme Research Working Paper, International Labour Office, Geneva, 1987

Dunne, J.P. (forthcoming) Using input output models to assess the employment effects of military expenditure: a comparative assessment. Paper presented at International Institute for Applied Systems Analysis Input Output Meeting, Warsaw, December, 1985. Papers and Proceedings (forthcoming), 1987

Dunne, J.P. (with P. Elias) (1987) Jobs after tops: an analysis of survey data from the training opportunities scheme. Institute for Employment Research, Research Report, February 1987

Dunne, J.P. (1987) Aspects of contemporary Marxist economics (review article). Scottish Journal of Political Economy, June 1982, Vol. 29, Nov. 2, pp. 215-221. Reprinted in J. Cunningham Wood (ed) (1987) Karl Marx's Economics: Critical Assessments, Croom Helm

Kumar, M.S. and M. Munasinghe (forthcoming) Pricing Energy for Equity and Efficiency. To be published by the ILO

Kumar, M.S. (1986) Financial Institutions, Conglomerate Organization and Economic Performance, with A. Hughes, A. Singh and A. Cosh. Forthcoming as an Office of Fair Trading Occasional Paper

Landesmann, M. (1986) UK policy and the international economy, in P. Nolan and S.H. Paine (eds) Rethinking Socialist Economics, Polity Press

Landesmann, M. (forthcoming) Industrial structures and international competition in the European Communities. DAE Occasional Paper

Landesmann, M. and R. Pierse (forthcoming) Industrial policies in the UK, 1973-1981, in a volume ed by A. del Monte on Industrial Policies in Europe, Naples

Landesmann, M. and A. Snell (forthcoming) Implications of a modernization strategy for the UK economy; in W. Krelle: Growth and Structural Change in the World Economy: Springer Verlag 1988, also appearing as Modernization of UK manufacturing and the unemployment problem, International Review of Applied Economics

Lee, K. (forthcoming) Inflation and labour market adjustment: the UK experience, Economica

Lee, K. (1987) An empirical investigation of the causes of nominal wage inertia. Centre for Labour Economics, DP 271

Pesaran, M.H. (1986) Structural Keynesianism: an alternative to monetarism, in P. Nolan and S.H. Paine (eds) Rethinking Socialist Economics, Polity Press

Pesaran, M.H. (forthcoming a) Global and partial non-nested hypotheses and asymptotic local power, Econometric Theory

Pesaran, M.H. (forthcoming b) Econometrics, The New Palgrave: a dictionary of economic theory and doctrine, Macmillan

Pesaran, M.H. (forthcoming c) Non-nested hypotheses, The New Palgrave: a dictionary of economic theory and doctrine, Macmillan

Pesaran, M.H. (forthcoming d) The Limits to Rational Expectations, Basil Blackwell, Oxford

Pesaran, M.H. and M. McAller (forthcoming) Statistical inference in non-nested econometric models. Applied Mathematics and Computation

Pesaran, M.H. and B. Pesaran (forthcoming) An Interactive Time-Series Econometric Package for Data Processing, Estimation, Hypothesis Testing and Forecasting, Oxford University Press

Pesaran, M.H. and R. Tarling (1986) Changes in the UK male labour force in the post-war period, in A. Dogramaci (ed) Measurement Issues and Behaviour of Productivity Variables, Kluwer-Nijhoff, Boston, pp. 41-97

Peterson, A.W.A. (1986) Keynesian policies for voluntary unemployment, in Cahiers de Recherche Economique de Louvain, Vol. 52, No. 3-4, 1986; also forthcoming in J. Muysken and C. de Neubourg (eds) Unemployment in Europe, Macmillan

Peterson, A.W.A. (forthcoming) Supply functions in an input-output framework, in R.E. Miller, K. Polenske and A. Rose Frontiers of Input-Output Analysis: Commemorative Papers

Peterson, W. and Barker, T. Disaggregated model-building using a software support system. To be published in Proceedings of 3rd IFAC/IFORS/SEDC conference on the Modelling and Control of National Economics, Pergamon Press

Pierse, R.G. (with M. Lubrano and J.F. Richard) (1986) Stability of a UK money demand equation: a Bayesian approach to testing exogeneity, Review of Economic Studies, October

Pierse, R.G. (with M. Landesmann) (1986) Gli effetti delle politiche industriali in Gran Bretagna dal 1973 al 1981, Chapter 4 in A. Del Monte and S. Vinci (eds) La Politica Industriale in Europa e Negli Stati Uniti, Liguori Editore, Napoli

Ploeg, F. van der (forthcoming) Optimal control methods for the formulation of economic policy. Systems Science, Poland

Discussion Papers on Structural Analysis of Economic Systems

- 1 On the problems of aggregation in econometrics
M.H. Pesaran, R.G. Pierse and M.S. Kumar
- 2 The sterling exchange rate and the structure of prices and wages in the UK, 1970-1981
P. Ryan, M.S. Kumar and L. Osberg
- 3 Thinking about the future: constructing and using long term forecasts
L. Hesselman
- 4 The effect of changes in Britain's industrial structure on female relative pay and employment, 1960-1980
V.K. Borooah and K.C. Lee
- 5 Trade unions, relative wages and the employment of young workers
V.K. Borooah and K.C. Lee
- 6 The growth of public expenditure in the United Kingdom, 1960-86
V.K. Borooah

ASSESSING ECONOMIC POLICY IN THE UK AND EUROPE

Project Members:

M. Anyadike-Danes J-C Moreno-Brid
K.J. Coutts T.S. Ward (on leave 1986/7)
Professor W. Godley

Associates

T.F. Cripps
G. Zezza (University of Naples)

Sponsor: ESRC

This report covers the last year of a four-year programme which developed out of earlier research on the Effects of Economic Policy undertaken at the DAE and which was sponsored by the ESRC Macroeconomic Modelling and Forecasting Consortium. The project

aimed to integrate the treatment of national issues within a coherent framework of analysis of the world economy and Europe as a whole. The general aim was pursued at a number of levels simultaneously.

Macroeconomic Theory

Further work has been carried out in recasting macroeconomic theory within an explicit accounting framework that integrates balance sheet data with sectoral flows of funds. This approach has been beneficial in developing macroeconomic models of the determination of real aggregate demand, in which the role of the financial sector is treated explicitly. Another benefit of the approach is in the teaching of macroeconomic principles, in which stock variables are introduced within a coherent accounting framework into the earliest and most elementary exposition of ideas which the student encounters. The relationship of this approach to the work of Hicks, Modigliani and Tobin and of Barro and Grossman and Malinvaud has been explored in working papers. The pedagogic value of the approach has been contrasted with that of the IS-LM technique which has become the most popular framework for the teaching of macroeconomics in textbooks. A paper covering some of these issues was given at a conference in honour of Sir John Hicks commemorating 50 years since the publication of 'Mr Keynes and the Classics'.

Empirical studies

The theoretical work has been complemented by the use of simulation models, based on actual data of various economies. The work, which has mainly been carried out by Anyadike-Danes, has been organised around the construction of small highly aggregated macroeconomic models for which quite a large database has been assembled. A distinctive feature of models is in the integration of balance sheet and flow accounts and in implementation of a systematic approach to the inflation adjustment of these accounts. The distribution of income has also been given a more coherent treatment than is usual in simple macroeconomic models so that the linkages between inflation, employment and macroeconomic policy can be properly assessed.

The research strategy adopted has focussed on the empirical study of a few key structural relationships, whose properties have been explored using both analytical and simulation methods. One prominent example is the relationship determining the private sector's contribution to aggregate demand. In addition to the paper on private sector saving in the UK, a parallel study has been undertaken of related aggregates for the US which is now almost complete (the motive in undertaking the latter study being to establish the extent to which findings made using UK data could be generalised internationally). A small macroeconomic model of the Italian economy, constructed on similar principles, has been developed in collaboration with G. Zezza.

Another major area of research effort has been the assessment of an approach to the treatment of employment determination entirely different to that embodied in our model. One of the central propositions from the work of Layard and Nickell and various of their collaborators which seems to have become quite widely accepted is that there are reliable and quantitatively important links from real wages to employment. In a paper which is listed below it is demonstrated that such a finding may be an inappropriate deduction from the econometric evidence commonly cited in its support. An analytical critique of a stylised version of the Layard-Nickell model is also in the course of preparation. Its major finding is that the role of the "imperfect competition" assumption, taken by them to be an important distinguishing feature of their work, cannot in fact play the role assigned to it in their framework.

Coutts, Godley and Moreno-Brid produced a revised version of their paper on the behaviour of UK industrial pricing during the 1970s and 1980s. They argued that despite the high inflation rates and recession which had occurred during the period, there was no evidence to support the view that the average mark-up on unit costs at standard capacity utilization had become more responsive to the state of the business cycle. The paper set out an argument in favour of adopting a new measure of profit and provided some

evidence that the interest costs of holding stocks were shifted into prices rather than absorbed in the average mark-up. A version of this paper is being prepared for publication in a journal.

A small model of Britain's visible balance of payments has been developed by Coutts; it can be used to make forecasts of the medium-term UK manufacturing trade balance, conditional on assumptions about the growth of world trade, the growth of the UK economy and the UK real exchange rate. This analysis helps to establish the ex ante magnitude of net foreign exchange income required in the next 5 to 10 years when oil revenues decline. Alternative ranges of projections have been explored comparing specifications of trade equations used by London Business School, National Institute of Economic and Social Research and HM Treasury models.

Summary of main papers

Anyadike-Danes, M.K. (1987) 'Private sector saving in the UK', September 1987. DAE mimeo

Anyadike-Danes, M.K., Coutts, K.J., and Godley, W.A.H., (1987) 'IS-LM and real stock flow monetary models - a prelude to applied macroeconomic modelling' paper given at the conference in honour of Sir John Hicks, 'Fifty Years after IS-LM' University of Aalborg, Denmark. Forthcoming in publication of conference proceedings

Anyadike-Danes, M.K. and Godley, W.A.H. (1987) 'Real wages and employment: a sceptical view of some recent empirical work', DAE mimeo

Christodoulakis, N. and Godley, W.A.H. A dynamic model for the analysis of trade policy options, Journal of Policy Modelling 1987

Coutts, K.J., Godley, W.A.H. and Gudgin, G.D. (1987) Inflation accounting of whole economic systems, Studies in Banking and Finance, volume 2, Supplement to the Journal of Banking and Finance

Coutts, K.J., Godley, W.A.H. and Moreno-Brid, J.C. (1987) 'Industrial pricing in UK manufacturing industry under conditions of stagflation' (revised), DAE mimeo

Godley, W.A.H. and Zezza, G. (1987) 'A simple real stock flow monetary model of the Italian economy'. April 1987, DAE mimeo

Conferences attended, seminar given etc.

Professor Godley gave seminars at the Universities of Rotterdam, Naples and Lancaster. M.K. Anyadike-Danes and K.J. Coutts gave seminars at Queens' College, Cambridge.

Professor Godley and K.J. Coutts attended a conference in honour of Sir John Hicks at Aalborg University, Denmark in September 1987 and contributed a paper.

RECONCILIATION OF TRANSLATIONS AND BALANCES IN THE UK NATIONAL ACCOUNTS

Project Members: M. Anyadike-Danes
A. Homenidou-Stronge

Sponsor: DAE

The desirability of supplementing national income and expenditure and flow-of-funds data with sectoral balance sheet information has been a recurrent theme in the literature on macroeconomic modelling and policy evaluation. Some progress has already been made in this area: The National Income and Expenditure Blue Book, for example, has in 1987 contained for the first time a fairly comprehensive dataset starting in 1975. There are, however, two areas requiring attention: the provision of data for earlier years; and a set of accounts reconciling the financial flows with changes in stocks between balance sheet dates.

It is with both these areas that this project is concerned and our work upon them has been guided by two further considerations: a wish to complement rather than compete with similar work under way in the CSO on post-1975 data, and a desire to make our dataset as

generally useful as possible by adopting a scheme of classification for financial claims corresponding to that already available.

In order to satisfy the first objective we have focussed on the construction of balance sheet data beginning in 1966 to develop a dataset within the DAE that can, as simply as possible, be 'linked on' to the series regularly published by the CSO in Financial Statistics. The associated reconciliation accounts are designed to have this same, harmonised property. It has not, however, proved possible to provide the same degree of detail as will be found in the corresponding CSO accounts for the post-1975 period when, eventually, they become publicly available.

Needless to say, in order to achieve a high degree of harmonisation a considerable amount of fairly detailed 'detective work' has been necessary. In order to ensure that our series beginnings match as closely as possible the classification adopted by the CSO for their post-1975 data, it has on a number of occasions proved necessary to make somewhat arbitrary assumptions about the allocation of financial claims between categories. But in order that future users of the data may make alternative allocation assumptions, should they so desire, the methods of data construction have been fully documented.

The project is now virtually complete. The data construction phase is finished and the tables recording the sectoral balance sheets and the associated reconciliation accounts are ready to be produced. Although the tables will initially be distributed in printed form it may also prove possible to provide copies on floppy disk. The detailed description of data sources and methods of construction is in draft and will soon be available.

LABOUR STUDIES GROUP

Members: Jill Rubery, Roger Tarling, (resigned April 1987)
Frank Wilkinson

Associate Members: David Canning, Christine Craig, Michael Kitson

Visitor: Dr Peter Brosnan (Victoria University of
Wellington, New Zealand)

1. International Working Party on Labour Market Segmentation

The Labour Studies Group continued its active involvement with the International Working Party throughout the year. This body is composed of researchers from 14 countries (11 West European with Hungary, the USA and Canada) and meets annually in different European countries. It provides a forum for reporting and comparing research findings and fostering international - and particularly inter-European - research collaboration.

In January 1987 Jill Rubery and Frank Wilkinson, as members of the Steering Committee of the International Working Party on Labour Market Segmentation, were invited by the ILO to attend a round table discussion on Social Change, Unemployment and the Labour Market. In July 1987 the International Institute for Labour Studies, ILO, Geneva, hosted the Ninth Conference of the International Working Party in Labour Market Segmentation at their training centre in Turin. The topic of the conference was 'Work organisation, social change and workforce flows', and Frank Wilkinson, Jill Rubery and Brendan Burchell presented papers.

2. Industrial Organisation and Competitiveness: an International Comparison of the Footwear Industry

Project members: Jill Rubery, Frank Wilkinson

Sponsor: Centre d'Etudes de l'Emploi

This project is concerned with a comparison of industrial organisation and competitiveness in the Italian, French and British shoe industries, undertaken in collaboration with a team from the Centre d'Etudes de l'Emploi, Paris and a team from the University of Modena, Italy.

The final report on the UK part of the project was completed in September. The next stage will be a meeting of the three research teams to discuss the country reports and to plan how to develop a synthesis and comparative analysis of the reports on the UK, France and Italy.

3. Social Change and Economic Life: The Northampton Labour Market

Project members: F. Wilkinson
R. Tarling (resigned April 1987)
J. Rubery
R. Jobling (Faculty of Economics and Politics)
C. Fraser (Social and Political Sciences)
C. Marsh (Social and Political Sciences)

Associate members: R. Blackburn, K. Prandy

Sponsor: ESRC

In March 1985 a Cambridge team was selected to participate in the ESRC's interdisciplinary Social Change and Economic Life initiative. This involves the study of six local labour market areas in England and Scotland, each one under the responsibility of a separate team. The Cambridge team is studying Northampton. The initiative is

coordinated at the national level of Dr Duncan Gallie of Nuffield College, Oxford.

The aims of, and work programme for, this project were fully described in the Annual Report for 1985/6. During the academic year 1986/7 the Work Attitudes and Work History Survey and the follow-up enquiry of 300 households have been completed. The tools for analysing the data and the analysis itself are progressing rapidly. John Devereux and Sara Horrell, research students linked to the project, have access to the data and are using parts of the set in their research. Brendan Burchell and Jill Rubery have written a paper on individuals' experience in the labour market using data derived from the survey, and Colin Fraser is analysing the pay satisfaction information.

The telephone survey of employers organised by the Policy Studies Institute has been completed and the data tapes are now available. The Cambridge team has almost finished the follow-up enquiry including more than 30 of the firms surveyed by telephone. The interviewing of a sample of employees in 20 of the firms included in the telephone survey is now more than half finished, and the background work for the Welfare Survey is well underway. It is expected that all of the fieldwork except the Welfare Survey will be finished by Christmas leaving the major task of completing the analysis and writing up the mass of information collected.

4. The Economic Effects of a Legal Minimum Wage

Project members: Frank Wilkinson, Peter Brosnan

Sponsor: GMBATU, NUPE and USDAW

This small project was completed between February and May 1987. It analysed the changing incidence of low pay and the possible impact of government policy on these trends. It examined explanations for low pay and the relationship between low pay and the level of economic activity, industrial efficiency and poverty. The economic impact of

the introduction of a minimum wage on labour costs, employment, collective bargaining, demand and public expenditure was also examined, and an evaluation of the overall effects on a sector by sector basis was undertaken.

5. The Service Sector

Project members: R.J. Tarling, M. Kitson, F. Wilkinson

Sponsor: Department of Employment

The objective of this study was to inform the sponsor about the factors contributing to employment growth in the service sector and the characteristics of the jobs being generated. It was, therefore, mainly a fact finding exercise rather than a project testing one or more specific hypotheses.

The main part of the project was based on approximately 170 interviews with firms in selected sectors and selected areas of the country. Nine sectors were chosen, eight of which showed the fastest employment growth within the service sector in the period 1981-84 and the ninth (sport and recreation) was included as a contrast because its employment had been declining. The geographical areas chosen were London, Leeds, York and Scarborough. They were selected in order to distinguish any north-south urban-rural differences. The questionnaire was designed to provide information on a wide range of aspects of service sector activity with questions on the sources of demand, its translation into employment needs and the use of labour.

Despite some problems in obtaining access in certain sectors, especially builders merchants, the interviews were completed in mid November 1986. The final report is currently undergoing minor revision. It is intended to publish a summary as a Department of Employment Gazette article.

Owing to the heterogeneous nature of service sector activity there are few general trends observable within the sector. One common feature is the poor strategic position of most firms in their respective markets. Few of those establishments interviewed had commercial strengths appropriate either to the threats or the opportunities that they faced. Thus, increased demand tended to be met by new entrants as existing establishments were poorly placed to acquire new business. Instability in the market tends to affect some employment characteristics. There is little training for staff development, minimal use of external sources, and job rotation and occupational flexibility only exist in a few sectors. Labour flexibility is more prominent in the sourcing of labour, some sectors relying on casual, temporary or seasonal labour.

A second common feature is flexible pay structures, which are the norm. For most sectors and most occupations pay is determined at the establishment level or lower. More importantly, a major component of pay is commonly subject to managerial discretion without reference to an established job evaluation structure.

Publications

Brosnan, P., and Wilkinson, F. (1987) Cheap Labour: Britain's False Economy, Low Pay Pamphlet 45, Low Pay Unit

Burchell, B., and Devereux, J. (1987) The influence of fathers' unemployment on the values of schoolchildren, Journal of Youth and Policy, Issue 42, Summer

Burchell, B., (1987) Book review, 'Long term unemployment' Journal of Youth and Policy, Issue 42, Summer

Rubery, J., (1987) Flexibility of labour costs in non-union firms, in R. Tarling (ed), 1987

Rubery, J., Tarling, R., and Wilkinson, F. (1987) Flexibility, marketing and the organisation of production, Labour and Society

Tarling, R. (ed) (1987) Flexibility and the Labour Market, Academic Press

Tarling, R., and Wilkinson, F. (1987) The level, structure and flexibility of costs, in R. Tarling (ed) 1987

Working Papers

Brosnan, P., and Wilkinson, F. (1987) A national statutory minimum wage and economic efficiency, DAE mimeo

Rubery, J., and Wilkinson, F. (1987) Industrial organisation and competitiveness: the footwear industry in the UK, DAE mimeo

Seminars

Frank Wilkinson and Jill Rubery Flexibility, marketing and the organisation of production. Labour Seminar, Faculty of Economics, Cambridge, November 1986

Frank Wilkinson Qualifications, access to jobs and recruitment patterns to local industry. Nene College, Northampton, March 1987

Frank Wilkinson Can Britain afford low pay? The case for a minimum wage. International Working Party on Labour Market Segmentation Conference, Turin, July 1987

Frank Wilkinson Trade Union, real wages and economic progress, Labour Institute of Economic Research, Helsinki, August 1987

Jill Rubery Employers' strategies, competition and labour market segmentation. Nuffield College, January 1987

Jill Rubery and Frank Wilkinson Social change, unemployment and the labour market: guest speakers of round table discussion, ILO, Geneva, January 1987

Jill Rubery (with Jane Humphries) Women and Recession, Seminar on Political Economy. Faculty of Economics, December 1986

Brendan Burchell and Jill Rubery The experience of individuals in the labour market. Presented to the IXth conference of the International Working Party on Labour Market Segmentation, July 1987, Turin and to the Social Stratification Conferences, Cambridge, October 1987

URBAN/RURAL SHIFT AND THE EVALUATION OF URBAN AND REGIONAL POLICIES IN BRITAIN

Project member: J. Rhodes

Sponsor: ESRC

The purpose of this two-year research project was to devise and begin to develop a new methodology for evaluating the impact of spatial policies - urban policy, regional policy and planning and development policies conducted at the local level. A new method is required for assessing the cost-effectiveness of government expenditures on these programmes for several reasons:-

- (i) the old method concentrated on evaluating regional policy in isolation;
- (ii) the reliance of existing methods on trends observed in the 1950s;
- (iii) the failure of existing methods to allow systematically for the influence of urban-rural shift;
- (iv) and because all spatial policies are now applied to sub-regions or even smaller areas.

The size of geographical area on which the new methodology should be based must be determined both by conceptual criteria and by the sheer practical difficulties of obtaining an adequate data base. Because current data collection has moved away from local employment exchange areas towards administrative areas a methodology to be developed for future purposes of policy evaluation should be based on data collected for administrative boundaries. This also permits analysis for the period 1971 to 1981. The choice between adopting administrative counties and local districts depends on the view taken about what constitutes 'a local economy'. The method should assess the impact of policies not just within 'designated boundaries' but within whole local economies. Only by doing this will reliable

estimates of net job creation emerge after allowing for both 'additionality' and displacement of all kinds throughout the local economy as a whole. It is a matter of judgement whether, on average, the Administrative County or the Local Authority District better represents 'local economies' - indeed the judgement might differ depending on the precise nature of the evaluation exercise being carried out. For the purposes of this exercise, which is particularly aimed at developing methodology, the view was taken that the Administrative County would be most appropriate on the grounds, firstly, that it was, for most although not all areas, a reasonably good basis for observing 'the local economy' and, secondly, that it enabled the exploratory analysis to be carried out at a more manageable scale, with fewer data difficulties.

Data problems for carrying out policy evaluation work for small geographical areas have now become quite severe. Traditionally employment data have been the only ones available for small area evaluation work. However Census of Employment data is becoming much less regular and much more subject to long delays. Censuses were not taken in 1978, 1979, 1980, 1982 and 1983. The 1984 Census results, which are urgently needed to develop this work further, have taken three years to emerge. Whilst expenditure and manpower cuts on statistical services have no doubt to be made there is a strong case for concentrating resources on a few key data sets rather than allowing deterioration in statistical services across the board.

The analysis outlined here suggests that an alternative methodology based on these lines has considerable potential for coming up with more comprehensive, reliable, appropriate and convincing results than existing methodology can now deliver. However more work, relating to the specific conditions of the early 1980s, is required before the new approach is likely to render older methods redundant.

Some more detailed and more specific conclusions have emerged as follows:-

- (i) In the period 1971-81 one important factor explaining inter-county variations in employment growth is the industrial structure.
- (ii) Another important explanatory variable was the urban/rural structure of counties. However this was measured, coefficients were of the expected sign and statistically significant.
- (iii) Urban policy, in the form of dispersal from the cities, was a significant explanatory variable in some equations. The presence of a new or expanded town raised a county's employment growth rate by about six percentage points (or around 130,000 jobs in total for all new and expanded towns in the Midland and South East counties).
- (iv) There is some evidence, although not yet wholly convincing, that differences in wage levels do affect the rate at which counties increase their employment opportunities.
- (v) By contrast the restrictiveness of local planning policies does not determine which counties grow quickly and which counties grow slowly. The fastest growing counties tend to have the more restrictive planning policies. The growth of such counties may be "dampened" by planning policies but not by sufficient to prevent them from growing relatively quickly.
- (vi) An attempt to estimate the impact of regional policy on inter-county variations in employment growth had only limited success. No evidence could be detected of any positive effect in the 'All Industry' equations and in some of the manufacturing equations. This was attributed to the disproportionately severe recession of 1981 in the Assisted counties and to the 'plateau effect'. The latter takes place when losses of policy induced jobs from earlier periods equals or even exceeds and therefore disguises the new jobs being created by regional policy.

- (vii) There was some evidence, however, that regional investment incentives had a positive effect on manufacturing employment growth in the assisted counties once allowance was made for the very sharp decline in employment in 1981 in the traditional staple industries of several counties. The results suggest a regional policy impact of 9000 jobs per annum for the 1970s. This squares reasonably well with the results produced by the existing methodology. The impact of 9000 jobs per annum for the 1970s compares with estimates of 30,000 jobs per annum for the late 1960s.

Overall, the conclusion must be that this new suggested methodology shows early signs of promise which are sufficient to continue its development. The most urgent task is to test the model for the period 1981 to 1984 which can be done when the 1984 Census results finally emerge. It was for this period of the 1980s that the methodology was designed.

Publications

A summary of all previous work in this field was published in The Effects of Government Regional Economic Policy, B.C. Moore, J. Rhodes and P. Tyler, HMSO, 1986

'Spatial Variations in Employment Growth: A Study of Inter-County Disparities in Great Britain, 1971-81', John Rhodes and Jim Taylor, DAE mimeo, June 1987

'A New Approach to the Evaluation of the Impact of Spatial Policy', J. Rhodes, (in preparation)

URBAN EUROPE IN THE CRISIS AND OTHER URBAN AND REGIONAL WORK

Project Members: Iain Begg and Terry Ward

Sponsors: DAE and Federation Europeenne de Recherches
Economiques

The aim of this project, which has been undertaken with other members of FERE, is to document and analyse the impact of the prolonged recession in Europe on large cities. Case studies were made of two British cities - Sheffield and Southampton - and a report on the political, social and economic circumstances of urban Britain was produced.

Publications

Begg, I.G. (1986) 'Labour costs not only key to relocation problem', The Independent, 18 December

Begg, I.G. (1987) 'Urban Britain in the Crisis', DAE mimeo

Begg, I.G. and Cameron, G.C. (1987) 'When the Chips are down South', The Guardian, June 4th

Begg, I.G. and Cameron, G.C. (1987) 'High tech in Scotland', The Glasgow Herald, June 9th

Begg, I.G. and Cameron, G.C. (forthcoming) High-technology location and the Urban areas of Great Britain, forthcoming in Urban Studies

Begg, I.G. and Moore, B.C. (forthcoming) The future economic of urban systems, in Cadman, D. and Payne, G. (eds), Future Cities, Methuen

Seminars and Conference Papers

Begg, I.G. 'The future of Urban Britain'. Cambridge Faculty of Economics Political Economy Seminar, 5th March 1987

Begg, I.G. and Moore, B.C. 'The future of the British urban system'. Paper presented to 'The Other Economic Summit' on 'Future Cities', Oxford April 23rd 1987

Begg, I.G. 'Labour subsidies and the case against regional wage cuts for Northern Ireland'. Seminar at the Northern Ireland Office, Stormont, February 18th 1987

Begg, I.G. 'The regional distribution of high technology activity in Great Britain'. Paper presented to the IRER conference at the University of Neuchatel, Switzerland, September 24th 1987

TO ACQUIRE, ORGANISE AND WRITE SOFTWARE FOR AN INTERNATIONAL TRADE DATABASE

Project member: I.G. Begg

Sponsor: ESRC

The aim of this project, which has now terminated, was to construct a comprehensive trade data, covering a twenty-year span and providing consistent data on bilateral trade between each of 100 country-regions. Twelve commodity groups were distinguished. Software to permit access to the data has been written and tested.

Data were acquired from the United Nations Statistical Office for 1967 and 1970-83. These proved to contain some inconsistencies which have been resolved following discussions with the UNSO. Extracts from the data have been used by a working group of FERE as source material for a study of Europe in the World Economy. This formed the basis of three chapters of the report on 'Europe in the World Economy' submitted to the French Commissariat du Plan.

Publications

Begg, I.G. (forthcoming) 'Europe in the World Trading System', in FERE, Europe in the World Economy, OUP

Begg, I.G. (1987) 'Living with imbalance in the world economy' The Straits Times (Singapore), 20th May

THE CAMBRIDGE/DTI DATABANK

Project members: G. Meeks, J. G. Meeks and J. Wheeler
Associate member: Dr L. Slater
Sponsor: ESRC

This two-year project aims to extend, develop and distribute a long-run machine-readable databank of standardised accounts for UK companies. This year an additional year's set of accounts has been incorporated in the databank, which now spans the years 1948 to 1983. Copies of the databank have been supplied to other academics and to the ESRC Data Archive at Essex. A book, Company Finance and Performance, derived from and summarising parts of the databank was published by the Department of Applied Economics earlier in 1986.

COMPANY FAILURE AND RESCUE POLICY

Project members: A.W. Goudie, G. Meeks, J.G. Meeks
Sponsor: Leverhulme Trust

The aim of the project is to develop a macro-micro model of company failure and to use the model to assess the theory of the policy towards company failure. The model has been estimated and is reported in Papers 1 to 3 below. Paper 4 explores the properties of the model and uses them in the evaluation of exchange rate policy

Publications and papers

1. Goudie, A.W. (1987) A disaggregated model of company failure, Journal of the Royal Statistical Society, Series A, Spring
2. Goudie, A.W. and Hansen, S.L. (forthcoming), Dividend controls, Applied Economics
3. Goudie, A.W. and Meeks, G. (forthcoming) The company sector, Chapter 1 of Barker, T.S. and Peterson, A.W.A. (eds), The Cambridge Multisectoral Model, CUP

4. Goudie, A.W. and Meeks, G. (1987) 'Export and die: the exchange rate and company failure in a macro-micro model of the company sector', presented at the Cambridge Growth Project Conference on Disaggregated Economic Modelling, April 1987

OPEN ECONOMY MANAGEMENT: POLICIES TO COUNTER STAGFLATION

Project members: A.P. Blake
A.D. McKay (CASS doctoral student)
Prof. J.E. Meade
Associate: M. Weale
Prof. D.A. Vines (University of Glasgow)
Sponsors: ESRC, Centre for Economic Policy Research
and Department of Applied Economics

The purpose of this project, which is a continuation of an earlier Stagflation project, is to investigate the problems of economic policy face by a small open economy such as the United Kingdom. During the year we have identified the crucial role played by the working of the labour market in determining available policy options. We have shown that, if wages are sticky in real terms, it becomes necessary to rely on monetary policy for disinflation; while if wages are not strongly indexed, fiscal policy can be used instead. Only if wages are not strongly indexed is it possible to set out a policy framework consistent with a reasonably stable exchange rate.

We have also demonstrated that, in a model which keeps track properly of stock effects, economic policies which devote themselves solely to fighting inflation are likely to be unstable. National wealth will tend to rise or fall without limit. Accordingly, we have shown how this instability can be removed by the adoption of policies which attempt to keep national wealth close to a target value. If monetary policy is used to fight inflation, fiscal policy must be used to stabilise national wealth. If, on the other hand, fiscal policy is used to fight inflation, monetary policy can be used to keep national wealth near its target.

In such a system, the exchange rate can be given a role as an intermediate target. If monetary policy is used to fight inflation, an exchange rate target can be set with reference to price behaviour, and the interest rate and exchange rate used to prevent the exchange rate moving too far from its target. If monetary policy is used to stabilise wealth, the exchange rate can be set in the same way, but with reference to movements in the stock of wealth. Once again, interest rates and intervention are used to keep the exchange rate close to its target.

Simulations showing the effects of economic policies have been prepared both on the assumption that wages followed their historical behaviour pattern, and on the assumption that wages reform moved indexation effects in the wage equation. Not surprisingly, the economy proved much easier to regulate in the second case; only in this case can the real exchange rate be kept reasonably constant.

In his research connected with the project Andrew McKay has studied the question of early indicators of national income, and looked at some aspects of the revision process. This work has involved discussion with the Central Statistical Office.

Other Activities

In July 1987, we held a conference at Clare College Cambridge on 'Exchange Rate Targets, Monetary GDP Targets and Macroeconomic Policy'. This was attended by delegates from the Bank of England, HM Treasury, the IMF and the OECD, in addition to academics working in this area. From October 1986 until July 1987 Martin Weale was Houlton-Norman Fellow at the Bank of England.

Publications

Christodoulakis, N. and Weale, M.R. (1987) The Stock Exchange in a Macroeconomic Model, Economic Modelling, Vol 4, pp 341-354

Weale, M.R. (forthcoming). The reconciliation of volumes, values and prices in the National Accounts, Journal of the Royal Statistical Society

Papers Presented at Conferences

Blake, A.P. and Weale, M.R. (1987) 'Exchange Rate Targets and Wages Formation'. Presented to Conference on 'Exchange Rate Targets, Money GDP Targets and Macroeconomic Policy', Clare College, Cambridge, July 1987

Christodoulakis, N., Meade, J.E. and Weale, M.R. (1987). 'Exchange Rate Regimes and Stock Instability'. Presented to the European Meeting of the Econometric Society, Lyngby, Denmark, August 1987

McKay, A.D. (1987) 'Can Estimates of Money GDP be made more timely?' Presented to Conference on "Exchange Rate Targets, Money GDP Targets and Macroeconomic Policy", Clare College, Cambridge July 1987, and to the European Meeting of the Econometric Society, Lyngby, August 1987

Meade, J.E. (1987) 'Monetary Policy and Fiscal Policy: the Assignment of Weapons to Targets'. Presented to Conference on 'Exchange Rate Targets, Money GDP Targets and Macroeconomic Policy', Clare College, Cambridge July 1987

Vines, D.A. (1987) 'Money GDP Targets and Fiscal Policy in an Open Economy'. Presented to Conference on 'Exchange Rate Targets, Money GDP Targets and Macroeconomic Policy', Clare College, Cambridge July 1987

Weale, M.R. (1987) 'Wealth Constraints and Consumer Behaviour'. Presented to the European Economic Association, Lyngby, August 1987

Other Papers

Blake, A.P. (1987) 'Simulation and Control of a Linearised Treasury Model with Rational Expectations'. Presented to HM Treasury Academic Panel

Christodoulakis, N. and Weale, M.R. (1987) 'Exchange Rate Management in a Simulation Model', DAE mimeo

McKay, A.D. (1987) 'Revision and the Residual Error in the UK National Accounts', DAE mimeo

STUDY OF THE WIDER ECONOMIC EFFECTS OF THE YOUTH
TRAINING SCHEME (YTS) AND THE YOUNG WORKERS SCHEME
(YWS)

Project members: B.M. Deakin and C.F. Pratten
Associate: J.P. Dunne
Sponsor: Department of Employment

The objectives of the project which is now completed were to examine and quantify the economic influences of the two special training and employment subsidies upon firms, and also to trace those influences which are transmitted to other parts of the economy.

In the first stage of research the impact of these two schemes upon firms in eight industries was analysed from data assembled from 240 field research interviews. The influence of the schemes upon output, employment, skill shortages, training, profits, development, competition and prices was examined and reported.

The second stage was concerned with the wider economic effects of YTS in particular. The Cambridge Growth Project model was used to trace the influence of YTS upon the main macroeconomic variables, and an analysis of macroeconomic effects by sector of the economy was also made.

Publications

'Economic effects of the Youth Training Scheme' by B.M. Deakin and C.F. Pratten. Department of Employment Gazette, October 1987. (Press reports and comments on this publication appeared in The Times and in the Financial Times for 8 October 1987)

It is expected that the results of the whole project will be published in due course. Consideration will be given to drawing upon the results of the research currently in progress for the Manpower Services Commission on the costs and benefits of the YTS to supplement the results already obtained.

SURVEY TO ASSESS THE NET COSTS AND BENEFITS TO FIRMS OF
THE YOUTH TRAINING SCHEME (YTS)

Project members: B.M. Deakin, C.F. Pratten and I.C. Begg
Sponsor: Manpower Services Commission (MSC)

This project, which began in August 1987, aims to extend our knowledge of the operation and effects of subsidies to youth training and employment. Information and opinion is being sought from 100 firms which participate in the YTS. A pilot survey was successfully completed, and field research is currently in progress to assess the costs and benefits of this scheme by a searching inquiry into the training methods and forms of work experience organised by firms in eight industry classes.

ECONOMIES OF SCALE

Project member: C.F. Pratten
Sponsor: Commission of the European Communities

Mr C. Pratten was asked to make a survey of estimates of the economies of scale, and to provide estimates of the effects of the completion of the EC market via economies of scale, as part of a wider EC study of economies of scale and the internal market. The survey will be submitted in October 1987. It is planned to carry out

further work on economies of scale in 1988 and 1989 including up-dating earlier estimates of scale economies and assessing the implications for economies of scale of the resurgence of small firms.

ADJUSTMENT PROBLEMS AND POLICIES IN AN INTEGRATED WORLD ECONOMY

Project member: M. Panić
Sponsor: A Sainsbury Family Trust

This project - divided into two parts to be published by Macmillan as two separate books - analyses the causes and the consequences as well as the institutional and policy implications (international and domestic) of global economic integration.

The first of the two books, National Management of the International Economy will be published in January, 1988.

Work on this book has involved collecting a large amount of interesting background material, and drafting a number of background papers, and a book on The Postwar International Financial System: Its Origins and Evolution. This book is an extension of the work on international finance done for National Management. It completes the analysis of the workings of an integrated world economy, leading to the third and final book that will come out of this project: Domestic Policy Options in an Open Economy.

The Postwar International Financial System differs from the existing literature in one very important respect. Instead of simply describing Bretton Woods negotiations and subsequent developments, it analyses the origins and evolution of the postwar system within a clearly defined framework. The framework is intended to make it relatively easy to understand the reasons behind the competing plans

presented at Bretton Woods and the institutional set-up that resulted from the negotiations, as well as the reasons why the postwar system took a totally different form.

Books and papers

M. Panić: National Management of the International Economy, (London: Macmillan and New York: St. Martin's Press). Publication date: February 1988

M. Panić: 'The Postwar International Financial System - Its Origins and Evolution' (London: Macmillan and New York: St. Martin's Press), forthcoming

M. Panić and M.S. Kumar: International Interdependence and the Debt Problem, in S. Borner and A. Taylor (eds), Structural Change, Economic Interdependence and World Development (vol.2 of the Proceedings of the Seventh World Congress of the International Economic Association) Macmillan, London 1987

M. Panić and C. Schioppa: Europe's Long-Term Capital Flows since 1971, in A.P. Thirlwall and I. Gordon (eds), European Factor Mobility - Trends and Consequences (London, Macmillan), forthcoming

M. Panić: Mysterious Relationships (review of a book about the Bank of England), Times Literary Supplement, 24th July 1987

STRUCTURAL CHANGE AND INTERNATIONAL COMPETITION IN OECD ECONOMIES, 1973-1986

Project members: M.A. Landesmann
T.S. Barker
J.R. Wells

Associate members: R. Rowthorn (Cambridge University)
G. Erber (German Institute of Economic Research,
West Berlin)
S. Nakamura (Waseda University, Japan)

Sponsors: ESRC and the Anglo-German Foundation

This project, which started in July 1986, analyses the patterns of industrial structural change which occurred in the principal OECD economies (West Germany, France, UK, Italy, USA, Japan) since 1973 and evaluate the implications of these changes for the longer-term industrial specialisation and competitive position of the different national economies.

The first phase of the project attempted to analyse the nature and strength of 'structural breaks' which occurred in the output, productivity and employment performance of the different manufacturing industries since 1973. These changes were compared across the different OECD economies in order to evaluate the strength and direction of the respective 'restructuring processes'. The periods in which important processes of structural change occur are also marked by changes in behavioural relationships (such as the relationships which determine productivity performance, or the determinants of the allocation of investment across industries). We have undertaken a number of cross-section and time-series econometric exercises which show these changes in behavioural relationships accompanying 'restructuring processes' (see M. Landesmann and G. Erber, 1987).

The changes in the 'supply side' characteristics of the industries in the different OECD economies are introduced, in a second phase of this project, into an econometric model which attempts to evaluate the importance of these changes for the longer-term competitive performance of national industries in domestic and world markets. [For an outline of this model see M. Landesmann (1987a and b).] This model is built around a market share determination system which introduces longer-run supply side variables. [Earlier estimates of such a system are in M. Landesmann, 1986; these are currently being revised to include the USA and Japan in addition to the EEC countries.]

Work on the project also includes some more detailed cross-country comparisons of structural change with colleagues in West Germany, Italy, France and Japan. The UK-West German comparison is financed by an additional grant from the Anglo-German Foundation.

Publications and working papers

- M. Landesmann (1986) 'Relate competitive performance and market shares determination, mimeo.
- M. Landesmann (1987a) Demand versus supply determinants of disproportional growth in open economies; in: M. Ciaschini (ed), Input-Output Analysis: Current Developments, Chapman and Hall, London
- M. Landesmann (1987b) International competition - a computable model of disproportional growth in interdependent economies, Osaka City University Economic Review
- M. Landesmann (1987c) Views on economic crisis, international economic relations and trade policy in inter-war Germany; Osaka City University Economic Review
- M. Landesmann and G. Erber (1987) 'Structural change in OECD economies since 1973', 70 pages, mimeo
- M. Landesmann and A. Snell (1987a): Implications of a modernization strategy for the UK economy; in V. Krelle (ed), The Future of the World Economy: Economic Growth and Structural Change, Springer Verlag.
- M. Landesmann and A. Snell (1987b) 'The economic consequences of Mrs Thatcher for UK manufacturing exports', mimeo

M. Landesmann and A. Snell (forthcoming) Modernisation of UK manufacturing and the unemployment problem; International Review of Applied Economics

R.E. Rowthorn and J. Wells (1987) De-industrialisation and Foreign Trade, Cambridge University Press, Cambridge

J. Wells (1987) Empleo en America Latina: una busqueda de opciones (PREALC-ILO, Santiago, Chile). To be published as (1988) Latin America at the Cross-roads (Croom Helm)

RISK, INFORMATION AND QUANTITY SIGNALS IN ECONOMICS

Project members on DAE research staff

L. Anderlini
C. Doyle

Teaching Officers who participate in the Project:

Professor P. Dasgupta
Professor F.H. Hahn
Dr T. Kehoe
Dr D.M.G. Newbery

Associate members:

Dr A. Brandenberger
Dr D. Canning
Mr. R. Evans
Dr. H. Sabourian

Visitor to the Project:

Professor J. Geanakoplos (Yale)
Professor H. Polemarchis (Columbia)

Sponsor:

ESRC

The project's purpose is to investigate both at a fairly general and abstract level and in particular contexts the consequences of 'missing markets', asymmetric information, market dependent information and strategic behaviour. The theory which is emerging has strikingly different implications than does the Walrasian one (on

which, for instance, much Government and Monetarist policy is based). We have in this last year been increasingly interested in strategic behaviour on the part of dominant agents and agencies in an economy. In particular, we have done more on cooperative outcomes in repeated interactions among economic agents, and on the microeconomics of technological change. There has thus been a slight shift in emphasis, away from economies with a large number of small agents.

Economic Theory Discussion Papers:

The following discussion papers have been produced in the academic year 1986/87.

100. Price-Setting Oligopoly With Customer Search Costs
by M. Bray. October 1986
101. Trust as a Commodity
by P. Dasgupta. April 1986
102. Options and Equilibrium
by H.M. Polemarchakis and Bon-Il Ku. July 1986
103. Central Banks and Moral Hazard
by L. Anderlini, November 1986
104. On an Axiomatic Approach to Refinements of Nash Equilibrium
by A. Brandenburger and D. Dekel. First version: June 1986.
Revised version: October 1986
105. The Simple Economics of Research Portfolios
by P. Dasgupta and E. Maskin. Revised version: November 1986
106. Adapting to Undernourishment. The Clinical Evidence and its Implications
by P. Dasgupta and D. Ray. First version: June 1986.
Revised version: October 1986
107. Portfolio Choice, Exchange Rates and Indeterminacy.
by H.M. Polemarchakis. November 1986
108. Agricultural Institutions for Insurance Stabilization
by D.M. Newbery. February 1987
109. Asset Markets and Equilibrium Processes,
by J. Dutta and H.M. Polemarchakis. January 1987

110. Optimal Monetary Policy in a Market Clearing Economy with Supply Shocks.
by D. Canning. May 1987
111. Cost Recover from Optimally Designed Roads.
by D.M. Newbery. May 1987
112. Determinacy of Equilibrium in Large-Square Economies.
by T.J. Kehoe, D.K. Levine, A. Mas-Colell and W.R. Zame.
First version: May 1986. Revised version: June 1987
113. Steady States and Determinacy of Equilibria in Economies with Infinitely Lived Agents.
by T.J. Kehoe, D.K. Levine and P.M. Romer. May 1987
114. Indeterminacy in Applied Intertemporal General Equilibrium Models
by T.J. Kehoe and D.K. Levine. First version: December 1986. Revised version: March 1987
115. Refund Promises and Trial Periods on Signals of Quality
by Chris Doyle, July 1987

Publications and other Papers Connected with Project
Individual members' publications, etc., are listed separately.

This list does not contain a number of articles that have been contributed by past and present members and associates of the Project for a volume of essays entitled: Economic Theory of Information, Games and Missing Markets, edited by Hahn (forthcoming Oxford University Press).

Dasgupta

Positive Freedom, Markets and the Welfare State. Oxford Review of Economic Policy, 2, (1986)

Inequality as a Determinant of Malnutrition and Unemployment: Theory, (with D. Ray), Economic Journal, 96, (1986)

Inequality as a Determinant of Malnutrition and Unemployment: Policy, (with D. Ray), Economic Journal, 97, (1987)

Trust as a Commodity, in D. Gambetta (ed.), Trust: Making and Breaking Cooperative Relations, Basil Blackwell (Oxford), forthcoming

Adapting to Undernourishment: The Biological Evidence and its Implications, (with D. Ray), paper presented to WIDER (Helsinki) conference on Poverty and Hunger: The Poorest Billion. Forthcoming, Oxford University Press, edited by J. Dreze and A. Sen

The Economics of Bargaining (joint editor with K. Binmore), Basil Blackwell (1987)

Economic Organizations as Games (joint editor with K. Binmore), Basil Blackwell (1987)

The Simple Economics of Research Portfolios (with E. Maskin), Economic Journal, 97, (1987)

Patents, Priority and Imitation, or, the Economics of Races and Waiting Games, Economic Journal, (forthcoming March, 1988)

The Economics of Parallel Research, in Hahn (ed.), (forthcoming)

Learning-by-Doing Market Structure and Industrial and Trade Policies, (with J.E. Stiglitz), Oxford Economic Papers, (forthcoming, 1988)

Exhaustible Resources, in The Fragile Environment, edited by Ron Laskey, Cambridge University Press (forthcoming)

Anderlini

Theoretical Modelling of Banks and Bank Runs, in Hahn (ed.), (forthcoming)

Doyle

Strategy Variables and Theories of Industrial Organisation, in Hahn (ed) (forthcoming)

Bargaining and Incentive Compatible Taxation of Profits, mimeo, August 1987

Hahn

Neoclassical growth theory; The Auctioneer; 'The Hahn Problem'; Conjectures; Contributions to The New Palgrave (Eatwell and Newman, eds), Macmillan, 1987

On involuntary Unemployment, Economic Journal, March 1987

Newbery

Wage Rigidity, Implicit Contracts, Unemployment and Economic Efficiency (with J.E. Stiglitz), Economic Journal, June 1987

When do futures markets destabilise spot prices, IER, August, 1987

Missing Markets: Consequences and Remedies, in Hahn (ed) (forthcoming)

Agricultural Institutions for Insurance and Stabilization, in The Economic Theory of Agrarian Institutions, P. Bardhan (ed), (forthcoming)

Commodity Price Stabilisation, in Public Policy and Development, (eds D. Lall and M.F.G. Scott) (forthcoming)

On the accuracy of the mean-variance approximation for futures markets, mimeo, Giannini Foundation, Berkeley, September, 1987

WAGE DETERMINATION IN IMPERFECT LABOUR MARKETS

Project member: David Canning

Sponsor: ESRC Postdoctoral Fellowship Scheme

The aim of this project, which has now terminated, was firstly to examine wage and employment determination at the micro-economic level, both theoretically and empirically. Wage bargaining is modelled as a non-cooperative game. Secondly, a theoretical model is constructed showing how a simple economy would operate given the hypotheses that the labour market behaves.

Work on the fundamental ideas behind wage bargaining has produced two conclusions. First, a necessary condition for strikes is that both sides have some private information, and, second, arbitration, even by an uninformed third party, will tend to make both sides better off (in expected terms) even though it does not always stop strikes from occurring. Another line of enquiry has been to examine the concept of 'wage leadership'. The idea is that the outcome of negotiations in one firm will signal general conditions to others and affect their bargaining process. It is shown that industries or firms where the workers are strong, in the sense that the firm is usually profitable and can afford to pay large wage increases, or the firm finds a strike very expensive, will be wage leaders. Strikes or large pay rises in these firms send signals to other works. Firms in which workers settle for low amounts without a strike are not wage leaders, and the outcome conveys no information because the workers have not 'tested' the firm.

Publications and Papers

- [1] Bargaining Theory, forthcoming in Hahn (ed), Economic Theory of Information, Games and Missing Markets (OUP)
- [2] Optimal Monetary Policy in a Market Clearing Economy with Supply Shocks, Economic Theory Discussion Papers No. 110, Cambridge University, May 1987
- [3] Monetary Policy versus Wage Adjustment as a Response to Real Shocks. Forthcoming in the Economic Journal Supplement
- [4] Industrialisation and Economic Growth, forthcoming in Oxford Economic Papers
- [5] Convergence to Equilibrium in a Sequence of Games with Learning, DAE mimeo, 1987
- [6] Economic Growth in Northern Ireland: Problems and Prospects (with J. Rhodes and B. Moore), in Beyond the Rhetoric (ed. P. Teague), Lawrence and Wishart (forthcoming)

Conferences and Seminars

Paper [4] was presented at the RES-AUTE conference in Aberystwyth in April 1987. Paper [1] was presented to a seminar at the University of York, while [2] was presented to seminars at the University of Essex and the London School of Economics.

WIDER PROJECT ON WORLD MACROECONOMICS

Project Members: A. Hughes
A. Singh

Sponsor: World Institute of Development Economic Research

The World Institute of Development Economic Research at Helsinki, which is part of the UN University, has embarked on a large research programme on world macroeconomic policies. It is a collaborative research effort involving economists from several countries, under the overall direction of Professor S.H. Marglin of Harvard University. Mr. Hughes and Dr. Singh are undertaking the following studies:

- (a) Historical Analysis of Postwar capitalism in the Advanced Capitalist Countries, with Special Emphasis on Britain and France (in collaboration with Alain Lipietz of CEPREMAP, Paris and Andrew Glyn of the University of Oxford).

This study is concerned with analysing the foundations of the period of world wide prosperity from 1950-73. It uses the comparative experience of advanced industrial countries to address the question of the relative importance of external and internal considerations in determining the rate of growth and the level of employment. It describes and analyses the common features that make it useful to think of a postwar 'mode of regulation' common to the developed market economies. It seeks to examine the differences between countries, such as the UK, France, W. Germany and Japan, that made them function differently, as well as the changes that took place within and between the Boom (1945-73), the Inter-Shock Period (1973-79), and the Global Recession (1979-present). Special attention is given to investigating whether the institutional structures put in place after World War II were self-contradictory in positing, for instance, both wage and profit led growth -- that is, in requiring high wages for the maintenance of aggregate demand, high profits as a stimulus to capital accumulation, and both high wages and high profits to stimulate the growth of productivity. This study also seeks to answer the question whether international considerations, for instance, the emergence of competition from the newly industrialising countries, the integration of EEC markets, the changes in the international monetary system and the development of a world capital market merely complicated matters; or were fundamental in precluding a resolution of internal contradictions that would have been tractable in a different, more agreeable, international environment.

- (b) Comparative Analysis of Asian and Latin American Responses to the World Economic Crisis

This study is concerned with analysing the reasons why Asian countries with very different structures -- for instance, China,

India, and South Korea -- managed to weather the current world recession better than Latin American countries -- for instance Brazil, Chile, and Mexico. It seeks to investigate to what extent, if any, the differential performance of countries in the two continents can be linked to systematic differences in economic structure or to the particular policies followed by them.

Progress of the Research

1. The following papers, representing the results of the research carried out so far on the two projects, were revised and prepared for publication during 1986-87. They will be published by the World Institute of Development Economic Research in two separate volumes.

A. Glyn, A. Hughes, A. Lipietz and A. Singh, The Rise and Fall of the Golden Age: An historical analysis of post-war capitalism in the developed market economies

A. Hughes and A. Singh, The World Economic Slow-down and the Asian and Latin American Economies: A Comparative Analysis of Economic Structure, Policy and Performance

2. During the last academic year, Dr. Singh presented seminar papers on these and related subjects at the Institute of World Economics, Chinese Academy of Social Sciences, in Beijing, China and at Harvard University and at the University of Notre Dame in the United States.

3. After a meeting of researchers at Helsinki in July, 1987 (attended by Mr. Hughes), WIDER has agreed to start on the second phase of the World Macroeconomic Project. This is concerned with questions of economic openness and national autonomy in an increasingly interdependent world economy. In this phase of research, Mr. Hughes, Dr. Singh and Dr. Cosh will carry out a study of how the pattern of industrial finance is affected by financial openness.

Using a combination of survey research and interviews, researchers will investigate how the internationalization of capital markets affects

the attitudes of financial managers with respect to commitments to domestic industries whose securities are held in their portfolios. Does openness undermine the ability of domestic industry to secure long-term investment finance, for example?

In a second study, Dr. Singh and Professor Sukhamoy Chakravarty (from Delhi School of Economics) will consider the question of desirable forms of economic openness in southern countries in the present context of the world economy.

B SOCIOLOGY

REPRODUCTION OF SOCIAL INEQUALITY

Project Members: Dr R.M. Blackburn
Dr K. Prandy

Associates: Professor A. Stewart, University of Edinburgh
Dr L. Miller-Bernal, Wells College,
New York

Sponsor: ESRC

This project, which commenced in May 1978, was designed to continue and extend the work of the group, and earlier projects (described in previous Annual Reports) were incorporated.

The project is concerned with the general area of social inequality and social change, addressing a number of problems of theoretical and practical importance. A basic feature is the attempt to move towards a more dynamic model of social stratification which takes account of processes of reproduction of societies.

The research involves a number of themes relating to social stratification, including white-collar unionism, the labour market, careers, unemployment and perceptions, understandings and evaluations of social inequality.

Publications

Blackburn, R.M., 'Ideologies of Work', in D. Rose (ed.), Social Stratification and Economic Decline, Hutchinson, forthcoming

Blackburn, R.M., 'Understanding unemployment: the need for a social perspective', International Journal of Sociology and Social Policy, forthcoming

Papers

Blackburn, R.M., 'The social creation of unemployment', ALSISS Conference on Social Science Perspectives on Unemployment

THE IMPORTANCE OF SOCIAL STRATIFICATION

Project members: Dr K. Prandy
Dr R.M. Blackburn
Sponsor: ESRC

The project examines the argument that there is greater coherence in stratification arrangements than has previously been shown to exist. It re-analyses existing data sets to test our contention that relationships are stronger than previously found and evaluate the results, rather than seek to uncover new relationships.

The project has had two basic aims, the first of which was an improvement of the Cambridge scale of occupations. Only one other comparable continuous measure is available for British occupations, that developed by Hope and Goldthorpe as part of the Nuffield Social Mobility Study. That, like the original Cambridge scale, was based on the 1970 OPCS classification which has now been superseded. The rationale of the Cambridge scale made it possible to study ways in which it could be improved. Conversion to the 1980 OPCS scheme is also easier because much of our own data has been coded to a finer scheme than that provided by OPCS.

Improvement of the Cambridge scale was potentially possible because it is based on patterns of social interaction - friendship and, in subsequent development, marriage. An iterative procedure was used, in which all those grouped into an occupation were given the mean score of all those with whom they interacted. After the estimates based on the original Cambridge score, at each stage the mean was used as a new estimate. In terms of an internal criterion, the correlation between respondents' and friends' occupations' scores, there was a noteworthy improvement. By including wives, as well as some female respondents and friends, we were able to give separate scores for female-incumbent occupations. This is the first time as far as we know what occupations performed by women have been

explicitly incorporated into any such measure, or anything similar.

The second aim of the project was to use the improved measure in the secondary analysis of a number of existing datasets with the hope of showing how stronger correlations could be obtained. We have concentrated on the two major areas of social mobility and voting behaviour, using the data from the main Nuffield study and its sub-sample follow-up and from the 1979 and 1983 British General Election studies. Our analyses show that in almost all respects a continuous measure of occupation is preferable to one using a division into a limited number of social classes. No evidence on the internal homogeneity, or boundaries between such 'classes' is forthcoming. The revised Cambridge scale is shown to be preferable in nearly every instance to its rival the Hope-Goldthorpe scale. This is true not only for friendship and marriage relations, but also for relations between generations and others involving incumbents of occupations. It is also true for education (income is more doubtful) and for political variables (party identification in six out of seven cases and reported vote in eleven out of thirteen).

The consistency of these findings confirms that the Cambridge scale offers an improvement over anything else available. The consequences of this have been developed in more extensive analyses which form the bases for publications in preparation. One significant implication is that the inadequacies of previous measurement have led to underestimation of the importance of social stratification.

Further work is planned to adapt the scale to the proposed Standard Occupational Classification, to refine the treatment of women's occupations, and to develop a system of modification so as to benefit from additional research data on occupations as it becomes available.

Publication plans for the scale are linked to those for the Occupational Classification and Coding Scheme project.

Papers

Prandy, K., 'The revised Cambridge scale of occupations'. Social Stratification Seminar

AN OCCUPATIONAL CLASSIFICATION AND CODING SCHEME FOR SOCIAL RESEARCH

Project members: K. Prandy and R.M. Blackburn

Sponsor: ESRC

This project represented a radical new departure in the area of occupational classification, made possible by computerisation. A quite different approach ensued once the emphasis was shifted from a printed to a machine-based form. In the former case the main concern had been with the overall structure of a classification, trying to develop, at best, one that had the greatest potential utility to a wide variety of users. Unfortunately, there is no one ideal classification, and in Britain at present there are at least three widely-used official classifications. One of these, used by the Office of Population Censuses and Surveys, has changed radically three times this century. Comparisons between sets of data codes to different schemes, at the present and over time, are beset with numerous difficulties.

Our approach has not primarily been concerned with developing a new classification, although we have done something of the sort in a limited way in proposing subdivisions for some of the present OPCS categories. Rather, we have concentrated on the relations between various schemes, and on developing an index of occupational titles that could serve as a means of coding to any of the schemes that are or have been used. Essentially what we have done is to compile a set of 'building blocks' of basic occupational groups. Each is basic in the sense that none of the classifications being considered divides up that group. It may well be the case that in one classification scheme

basic group 'x' may be combined as an 'occupation group' with basic group 'y', while in another it may be combined with basic group 'z'. Once coded to either scheme there is no way of disentangling group 'x' from group 'x+y' on the one hand or group 'x+z' on the other. However, by maintaining the separate identity in the coding scheme of basic group 'x', 'y' and 'z' they can obviously be treated separately, if necessary. Equally importantly, though, given the computer-based nature of the scheme, it is very easy to make temporary conversions of the basic groups into any of the other schemes, making comparisons quite straightforward. Each basic group, which can be represented by a 4-digit code number, constitutes a unique combination of codes from all of the schemes that have been incorporated. This table of the 4-digit number and the various other codes allows for an automatic look-up of the specific code needed.

In a provisional form, the scheme has already been used in a major social survey, that carried out by the teams in the ESRC's Social Change and Economic Life Initiative (see above, pp. 15-16 for details of this interdisciplinary project). Dr Prandy acted as a consultant for the occupational coding, and independent evaluation indicates that the scheme has worked very well from the practical point of view. We hope that this experience will encourage other researchers, and in fact we have already had two further inquiries.

Dr Prandy has continued as a member of the Steering Group overseeing the revision of the Classification of Occupations and Dictionary of Occupational Titles (CODOT), financed by the Manpower Services Commission. One advantage of this is that it enables him to keep up with developments in the proposed Standard Occupational Classification (SOC), so that this can also be incorporated in the Cambridge scheme. Somewhat ironically, several government departments, including OPCS, have had to turn to us as the only source of computer-based versions of their own indexes of occupational titles, and this has enabled a small amount of additional funding to be secured.

Publication

A provisional version of the classification and coding scheme in machine-readable form has been lodged with the ESRC Data Archive. It is proposed to produce a printed version, probably comprising two volumes. The first would contain the index, preceded by a section giving advice on its use and on the general issue of interviewing for and coding occupational data, while the second would contain the classified version of the scheme. The latter would enable reference to the volume proposed for the new SOC, which would contain descriptions and definitions of jobs, to the existing CODOT and, if the backward extension can be carried out, also to an equivalent 1927 volume. Thus our publications would complement the official ones, as well as providing considerably more than any of them. The question of whether the extension will go ahead, and the need to wait for the final version of SOC (and perhaps also of the International Standard Classification of Occupations, currently being revised) are delaying publication, but the fact that the whole scheme is computer-based means that progress can be fairly rapid once the final form has been determined.

Papers

A workshop to publicise the classification was held in April 1987 under the auspices of the ESRC. Dr Blackburn gave an account of the origins of the scheme; Dr Prandy described both the new scheme and the Cambridge scale.

While on leave Dr Prandy gave two seminars each in the Sociology Departments at the Australian National University and the University of Tasmania, one on the technical aspects of the Cambridge scale, the other on the results and theoretical implications of testing it.

OTHER ACTIVITIES OF THE SOCIOLOGY GROUP

The group has maintained its association with colleagues in other institutions. In particular Professor A. Stewart and Mr J. Holmwood of the University of Edinburgh, and Dr L. Miller-Bernal of Wells College, have collaborated in our work. Dr Peter Whalley, Dr Liliane Floge, Dr Steve Crawford, Mr David Lovatt and Dr Vladimir Masat were visitors to the Department.

As in previous years the group was host to the Social Stratification Seminar.

Dr Prandy was a Visiting Fellow at the Australian National University, Dr Blackburn continued to act as the local representative for the ESRC Data Archive. He was also the DAE Data Protection Officer.

The monograph series Cambridge Studies in Sociology is edited by the group.

The Sociology group contributed to the joint DAE, Faculty and Social and Political Sciences Seminar Series.

Close links with Social and Political Sciences (SPS) were maintained DAE sociologists contributed to graduate supervision, undergraduate teaching, examining (including the Chairmanship) and administration.

II PUBLICATIONS

NEW PUBLICATIONS

During the year the Department prepared camera-ready copy (using the laser printer) for the following books:

The Cambridge Multisectoral Dynamic Model of the British Economy
edited by T.S. Barker and W. Peterson (480pp. approx). To be
published by CUP in the Cambridge Studies in Applied
Econometrics Series (Spring 1988)

The British Economy after Oil: Manufacturing or Services? edited
by T.S. Barker and J.P. Dunne with a Foreword by Lord Ezra
(180 pp. aprox), Croom Helm (November 1987)

DAE ECONOMICS REPRINTS

This series contains articles published by members and associates of the Department in journals, conference proceedings and elsewhere. It is distributed free of charge to interested libraries and academic institutions. The following titles were added in the series during the year.

No. 109 Balancing the National Accounts: The adjustments of Initial
Estimates - A Neglected State in Measurement
Richard Stone

No. 110 Asyptotic Power Comparisons of Tests of Separate
Parametric Families by Bahadur's Approach
M.H. Pesaran

No. 111 The New Classical Macroeconomics: A Critical Exposition
M.H. Pesaran

No. 112 The Reconstruction of the Supply Side of the Labour
Market: The Relative Autonomy of Social Reproduction
Jane Humphries and Jill Rubery

No. 113 Model Design and Simulation and Random Shocks in a Simple
Growth Model
Richard Stone

No. 114 The Accounts of the UK Public Sector 1972-1982
M.R. Weale

No. 115 Quantity and Price Effects in an Analysis of World Trade
Based on an Accounting Matrix
M.R. Weale

No. 116 A Balanced System of National Accounts for the United
Kingdom
Terry Barker, Frederick van der Ploeg and Martin Weale

No. 117 Testing for Structural Stability and Predictive Failure: A
Review
M.H. Pesaran, R.P. Smith and T.S. Yeo

No. 118 Economic, Social and Political Factors in the Operation of
the Labour Market
C. Craig, J. Rubery, R. Tarling and F. Wilkinson

No. 119 Forecasting the Economic Recession in the UK 1979-1982: A
Comparison of Model-Based ex ante forecasts
T. Barker

No. 120 The Context of Prediction (and the paradox of confirmation)
T. Lawson

No. 121 Uncertainty and Economic Analysis
T. Lawson

No. 122 Efficiency and Equity Criteria in Energy Pricing with
Practical Applications to LDCS in Asia
D.M.G. Newbery

No. 123 Formation of Inflation Expectations in British Manufacturing
Industries
M.H. Pesaran

No. 124 The Structure of Personal Sector Short-Term Asset Holdings
Martin Weale

No. 125 Pricing Policy
D.M.G. Newbery

DAE SOCIOLOGY REPRINTS

The following titles were added during the year:

- No. 11 The distributional implications of de-industrialization
David Lovatt and Brian Ham
- No. 12 Gender and Earnings: the failure of market explanations
A. Stewart, R.M. Blackburn and K. Prandy
- No. 13 Political responses to unemployment
Colin Fraser, Catherine Marsh and Ray Jobling

III OTHER ACTIVITIES

DAE LIBRARY

During the period October 1986 to September 1987 the Department received 154 periodicals: 14 of these were in exchange for the Department's Reprint Series and 44 were gifts, the remainder being purchased. The library has acquired 103 books, 694 pamphlets and 184 government publications.

COMPUTING

The past year has seen further enhancement of the computing facilities in the Department. £10,000 was spent on obtaining a range of equipment usable both as personal computers and as terminals for the mainframe.

Software developments have included the acquisition and use of several personal computer software packages. Together with the new equipment, this has meant a substantial improvement in the ability of members of the Department to exploit up-to-date econometric and data-handling techniques. In addition, advances in software enables the production of camera-ready, typeset books and articles.

TEACHING FOR THE UNIVERSITY

During the year members of the Research Staff gave lectures for undergraduate examination courses in the following areas:

- The post-war international monetary system
- Theory and measurement in social stratification
- Theories of production and technical change
- The state, the family and the labour market
- Exercises in mathematical economics
- Stocks and flows in macroeconomic analysis

and for M.Phil students in the following areas:

- Modern microeconomic theory
- Philosophical issues in economics
- International economic integration
- The determinants of industrial performance

They also gave seminars for Research Students, and supervised post-graduate students for the degrees of M.Phil and Ph.D.

TEACHING FOR COLLEGES

Nearly all members of the Research Staff undertook undergraduate supervision teaching for the Colleges. Eight members were Directors of Studies in Economics and two in Social and Political Sciences.

SERVICE ON UNIVERSITY BOARDS AND COMMITTEES

Members of the Department's research staff served on the following bodies during the year:

- The Committee of Management of the Department
- The Appointments Committee of the Department
- The Faculty Board of Economics and Politics

IV FINANCE

During the financial year (1 August 1986 to 31 July 1987) the Department's annual expenditure was £728,727 compared with £722,044 in 1985/86. 87.06% of the expenditure was on stipends, salaries and wages.

The University Grant rose from £270,827 in 1985/86 to £299,511 in 1986/87.

The following are the principal new or additional payments by outside bodies which have been accepted during the year for payment over various periods:

	£
Economic and Social Research Council	22,500
Gatsby Charitable Foundation	28,000
Anglo-German Foundation	2,850
NUPE	2,988
	£56,338

V STAFF

RESEARCH STAFF

ACTING DIRECTOR Professor W.A.H. Godley, MA (Cantab)
MA (Oxon), Fellow of King's College

ASSISTANT DIRECTOR B.M. Deakin, MA (Cantab), MA
(Oxon), Fellow of Magdalene College

SENIOR RESEARCH OFFICERS

T.S. Barker, MA (Edinburgh), MA PhD (Cantab), Downing College

R.M. Blackburn, MA (Cantab), PhD (Liverpool), Fellow of Clare College, Head of Sociological Research

V.K. Borooah, MA (Bombay), MA (Southampton), MA (Cantab), PhD (Southampton), Fellow of Queens' College

K.J. Coutts, MA (Cantab), Fellow of Selwyn College

M.A. Landesmann, MA (Vienna), MA (Cantab), D.Phil (Oxon), Fellow of Girton College

M. Panic, MA (Cantab), MA (Econ) (Sheffield), PhD (Cantab) (under Special Regulations), Fellow of Selwyn College

K. Prandy, BA (Open University), BSc (Econ) (London), MA (Cantab), PhD (Liverpool), Fellow of Fitzwilliam College

C.F. Pratten, BA (Bristol), MA (Cantab), Fellow of Trinity Hall

J. Rhodes, BA (Liverpool), MA (Cantab), Fellow of Wolfson College

J.C. Rubery, MA (Cantab), Fellow of New Hall

R.J. Tarling, MA (Cantab), Fellow of St. Catharine's College

T.S. Ward, BA (Wales), MA (Cantab), MA (Econ) (Manchester), Fellow of Fitzwilliam College

S.F. Wilkinson, MA (Cantab), Fellow of Girton College

RESEARCH OFFICERS

M.K. Anyadike-Danes, B.Econ (Sydney), M.Econ (Sydney), PhD (London), Fellow of Downing College

I.G. Begg, BA (Strathclyde), MA (Cantab), Darwin College

B. Burchell, BSc (Birmingham), PhD (Warwick)

J.P. Dunne, BSc (Bristol), PhD (Edinburgh)

A.W. Goudie, MA (Cantab), Fellow of Robinson College

M. Kitson, BA (Cantab), Fitzwilliam College

M.S. Kumar, PhD (Cantab), Fellow of Sidney Sussex College

K. Lee, BA (Sheffield), MSc (Bristol), Fellow of Queens' College

R.G. Pierse, MA (Oxon), MSc (London)

M.R. Weale, MA (Cantab), Fellow of Clare College

JUNIOR RESEARCH OFFICERS

L. Anderlini, BSc (Rome), MPhil (Cantab), PhD (Cantab), Fellow of St John's College

A. Blake, BA (Liverpool), MA (Essex)

C. Doyle, BSc (Cardiff), MA (Warwick), Fellow of Caius College

A. Homenidou-Stronge, BA (Athens), MA (Leeds), PhD (Cantab)

POST-DOCTORAL FELLOWS

D.J.H. Canning, BA (Belfast), PhD (Cantab), Fellow of Pembroke College

PUBLICATIONS SECRETARY

Mrs A. Newton, MA (Cantab)

RESEARCH ASSOCIATES

Dr A.D. Cosh, Department of Engineering, Fellow of Queens' College

Dr N.M. Christodoulakis, Athens School of Economics, Greece

Mrs C. Craig

Professor P. Dasgupta, Faculty of Economics and Politics, Fellow of St. John's College

Dr C. Fraser, Social and Political Sciences, Fellow of Churchill College

Dr G. Gudgin, Northern Ireland Economic Research Centre, Belfast

Professor F.H. Hahn, Faculty of Economics and Politics, Fellow of Churchill College

Mr A. Hughes, Faculty of Economics and Politics, Fellow of Sidney Sussex College

Mr R. Jobling, Faculty of Economics and Politics, Fellow of St John's College

Dr T.J. Kehoe, Faculty of Economics and Politics, Fellow of Clare College

Mr T. Lawson, Faculty of Economics and Politics, Kings' College

Mrs C. Marsh, Social and Political Sciences, Fellow of Newnham College

Professor J. Meade, Fellow of Christ's College

Dr B. McCormick, University of Southampton

Dr G. Meeks, Faculty of Economics and Politics, Fellow of Queens' College

Dr J.G. Meeks, Fellow of Robinson College

Dr B.C. Moore, Department of Land Economy, Fellow of Downing College

Dr D. Newbery, Faculty of Economics and Politics, Fellow of Churchill College

Dr P. Nolan, Faculty of Economics and Politics, Fellow of Jesus College

Dr M.H. Pesaran, Faculty of Economics and Politics, Fellow of Trinity College

Dr A.W.A. Peterson, Faculty of Economics and Politics, Fellow of Christ's College

Mr P. Petit, CEPREMAP, Paris

Dr A. Singh, Faculty of Economics and Politics, Fellow of Queens' College

Professor A. Stewart, University of Edinburgh

Professor Sir Richard Stone, Fellow of King's College

Professor D.A. Vines, University of Glasgow

VISITING SCHOLARS, OCTOBER 1986 - SEPTEMBER 1987

Mr G.M. Anderson, Office of the Premier, S. Australia

Mrs V.K. Borooah, University of Southampton

Dr M. Bray, London School of Economics

Dr P. Brosnan, Victoria University of Wellington, New Zealand

Dr M.F. Charette, University of Windsor, Ontario, Canada

Dr S. Crawford, Bates College, Lewiston, USA

Professor A. Duarte, University of Alicante, Spain

Dr L. Floge, Bowdoin College, Brunswick, USA

Professor O. Forssell, University of Oulu, Finland

Professor G. Galleotti, University of Perugia, Italy

Ms T. Garrido, University of California at Berkeley, USA

Professor J.M. Gutierrez-Diez, University of Valencia, Spain

Dr L. Halpern, Institute of Economics, Budapest, Hungary

Mr R.J. Howard, Footscray Institute of Technology, Australia

Professor D. Jackson, University of Wollongong, Australia

Dr C. Lever-Tracey, Griffith University, Australia

Mr D. Lovatt, Brentwood, Essex

Mr V. Masat, Research Institute of Socio-Economic Information
and Automation in Management, Prague, Czechoslovakia

Dr L. Miller-Bernal, Wells College, Aurora, New York, USA

Mr D. Na-Songkhla, Government of Thailand

Dr A. Romagnoli, University of Ferrara, Italy

Professor R. Scazzieri, University of Bologna, Italy

Professor J. Taylor, University of Lancaster

Dr P. Whalley, Loyola University of Chicago, USA

Professor A. Williams, Massey University, New Zealand

Professor T.A. Wilson, University of Toronto, Canada

Mr G. Zezza, University of Naples, Italy

ASSISTANT STAFF, OCTOBER 1986 - SEPTEMBER 1987

Mrs I. Bailey

Mrs A.L. Mills

Mrs M.J. Barnett

Mrs S. Moore

Ms M.V. Clark

Mrs O.E. Peppercorn

Mrs R. Coe

Miss S.D. Seal

Miss D.M. Day

Mrs E.P. Smith

Mrs S.L. Douglas

Mrs S. Swann

Ms T.C. Gurner

Mr J.M. Turner

Miss C.A. Hudson

Mrs B.P. Watson

Mrs C.A. Hutcheson

Mrs K.M. Wilson

Miss A. Mason

Mrs. P.A. Wilson