

**CENTRE FOR THE
MICROECONOMIC ANALYSIS
OF FISCAL POLICY**

IFS



**ANNUAL REPORT
2000–01**

E.S.R.C Centre for the
Microeconomic Analysis of Fiscal Policy
at the Institute for Fiscal Studies

ANNUAL REPORT
2000–01

In 1991, the ESRC and IFS created a new centre of academic excellence in microeconomic research – the Centre for the Microeconomic Analysis of Fiscal Policy. This report reviews the Centre's work for the period October 2000 to September 2001, the final year of its contract. In October 2001, the ESRC and IFS established the new Centre for the Microeconomic Analysis of Public Policy, with a commitment to extend this programme of research to cover a broader range of public policy areas.

Research at the Centre has covered several main areas: tax policy and work incentives; the distribution of income and the structure of tax and social security; consumer demand and saving behaviour; human capital investment; company taxes; investment and research and development; European tax co-ordination; and local government finance.

Alongside its research, the Centre has promoted academic dialogue in its subject areas, served as a training centre and conveyed findings to policymakers with enough clarity to influence decisions. By organising conferences, providing a base for foreign visitors, sponsoring young scholars and providing media briefings, and through its network of Research Associates and Fellows, the Centre has developed into a national and international resource.

Editors: Steve Bond and Emma Hyman

E·S·R·C Centre for the Microeconomic Analysis of Fiscal Policy

The Institute for Fiscal Studies
7 Ridgmount Street
London WC1E 7AE
Telephone: +44-(0)20-7291 4800
Fax: +44-(0)20-7323 4780
Email: mailbox@ifs.org.uk
Internet: www.ifs.org.uk

**E·S·R·C CENTRE FOR THE
MICROECONOMIC ANALYSIS OF FISCAL POLICY**

**ANNUAL REPORT
CONTENTS**

1. DIRECTORS' REVIEW	1
2. COMMUNICATION AND COLLABORATION	4
3. RESEARCH INFRASTRUCTURE: DATA, SIMULATION MODELS AND TRAINING	9
4. MAJOR RESEARCH FINDINGS	17
5. THE RESEARCH AGENDA AT THE CENTRE FOR PUBLIC POLICY	36
THEME A. WORK: LABOUR SUPPLY, WORK AND RETIREMENT	36
THEME B. SAVING: ASSETS, CONSUMPTION, AGEING AND PENSIONS	39
THEME C. WEALTH CREATION: INVESTMENT, INNOVATION AND HUMAN CAPITAL	40
THEME D. WELFARE: ITS SOURCES, LEVEL AND DISTRIBUTION	43
6. FINANCIAL SUMMARY	45
7. CENTRE OUTPUT	46
GROUP A: PUBLICATIONS AND DISSEMINATION	46
1. BOOKS AND MONOGRAPHS	46
2. CHAPTERS	46
3. REFEREED JOURNAL PAPERS	47
4. NON-REFEREED JOURNAL PAPERS	50
5. OTHER PUBLICATIONS	50
6. DATA-SETS	52
7. SOFTWARE	52
8. EDITORSHIPS	52
9. PRIZES AND HONOURS	53
10. SUMMARY OF PUBLICATIONS AND DISSEMINATION, 2000–2001	53
GROUP B: EXTERNAL RELATIONSHIPS	54
1. MEMBERSHIP OF COMMITTEES	54
2. MEMBERSHIP OF NETWORKS	54
3./4. OVERSEAS VISITORS AND FELLOWS	55
5. SUBSTANTIVE ADVICE AND CONSULTANCY	55
6. CONFERENCE PAPERS	55
7. MEDIA COVERAGE: NEWSPAPER ARTICLES	58
8. MEDIA COVERAGE: RADIO AND TV	58
9. CONFERENCES	60
10. INTERNATIONAL COLLABORATIVE RESEARCH PROJECTS	60
11. QUALIFICATIONS OBTAINED	61
12. SUMMARY OF EXTERNAL RELATIONSHIPS, 2000–2001	61

**E·S·R·C CENTRE FOR THE
MICROECONOMIC ANALYSIS OF FISCAL POLICY**

**RESEARCH CENTRE STAFF
2000–01**

THE MANAGEMENT TEAM

Centre Director	Richard Blundell
Centre Deputy Directors	Stephen Bond
	Costas Meghir
IFS Director	Andrew Dilnot
IFS Deputy Director	James Banks

RESEARCH PROGRAMME DIRECTORS

Consumption Sector	Ian Crawford
Corporate Sector	Stephen Bond
	Rachel Griffith
Personal Sector	Lorraine Dearden

RESEARCH STAFF AND SCHOLARS

Nicholas Bloom (Corporate Sector)	Julian McCrae (Personal Sector)
Laura Blow (Consumption Sector)	Michal Myck (Personal Sector)
Mike Brewer (Personal Sector)	
Tom Clark (Personal Sector)	Gillian Paull (Personal Sector)
Monica Costa Dias (Research Scholar)	Howard Reed (Personal Sector)
Ian Crawford (Consumption Sector)	Susann Rohwedder (TMR Scholar)
Lorraine Dearden (Personal Sector)	Barbara Sianesi (Research Scholar)
Carl Emmerson (Personal Sector)	Helen Simpson (Corporate Sector)
Emla Fitzsimons (Research Scholar)	Alex Klemm (Corporate Sector)
Christine Frayne (Personal Sector)	Zoë Smith (Consumption Sector)
Alissa Goodman (Personal Sector)	Jayne Taylor (Personal Sector)
Rachel Griffith (Corporate Sector)	Frank Windmeijer (Corporate Sector)
Renata Bottazzi (Research Scholar)	Matthew Wakefield (Personal Sector)

**E·S·R·C CENTRE FOR THE
MICROECONOMIC ANALYSIS OF FISCAL POLICY**

**RESEARCH CENTRE STAFF
2000–01**

RESEARCH FELLOWS

Orazio Attanasio (University College London)
Tim Besley (London School of Economics)
Martin Browning (University of Copenhagen)
Andrew Chesher (University College London)
Michael Devereux (University of Warwick)
Richard Disney (University of Nottingham)
Alan Duncan (University of Nottingham)
Hidehiko Ichimura (University College London)

Hamish Low (University of Cambridge)
David Miles (Imperial College)
Gareth Myles (University of Exeter)
Ian Preston (University College London)
John Van Reenen (University College London)
Ian Walker (University of Warwick)
Robert Walker (University of Nottingham)

RESEARCH ASSOCIATES

Jerome Adda (University College London)
Christian Dustmann (University College London)
Amanda Gosling (University of Essex)
Jonathan Haskel (Queen Mary and Westfield)
Christopher Heady (University of Bath)

Peter Lambert (University of York)
Stephen Machin (University College London)
Steve Redding (London School of Economics)
Kim Scharf (University of Warwick)
Gianluca Violante (University College London)

INTERNATIONAL RESEARCH ASSOCIATES

Manuel Arellano (CEMFI)
Olympia Bover (Bank of Spain)
Agar Brugiavini (Venice)
David Card (Berkeley)
Jason Cummins (New York)
Kevin Denny (University College, Dublin)
Bill Gale (Brookings)
Bronwyn Hall (Berkeley)
Dietmar Harhoff (Munich)
James Heckman (Chicago)

Hilary Hoynes (Berkeley)
Tor Jakob Klette (Oslo)
François Laisney (ZEW, Mannheim)
Arthur Lewbel (Boston College)
Thomas MaCurdy (Stanford)
Thierry Magnac (CREST, INRA, Paris)
Jean-Marc Robin (CREST, INRA, Paris)
Tom Stoker (MIT)
Frank Vella (Rutgers)
Guglielmo Weber (Padua)

ADVISORY COMMITTEE

John Vickers (Chair)
Mohammed Quraishi⁺
John Ball
Professor Charles Bean
Professor John Ermisch
Joanne Hindle
Professor Denise Lievesley
Peter Short

⁺ESRC Liaison Member

Office of Fair Trading
ESRC
Department for Work and Pensions
Bank of England
BHPS, Essex University
Miles Consulting
UNESCO
HM Treasury

1. Directors' Review

This report covers the final year of the ESRC Centre for the Microeconomic Analysis of Fiscal Policy, based at the Institute for Fiscal Studies. Launched in 1991, the Centre for Fiscal Policy has striven to provide microeconomic research of the highest scientific standard on issues of topical relevance for tax policy, transfer programmes and other areas of government involvement in the economy. The success of the Centre is reflected both in the quality of its academic publications, and in the contributions that Centre researchers have made to public debates on fiscal policy questions; not least in the run up to the 2001 General Election. The involvement of leading economists from both UK and international universities in the Centre's research programme, and their willingness to spend time visiting researchers based at the Centre, also speaks to the success of the Centre in meeting its aim of becoming a national and international resource.

Happily the work undertaken at the Centre for Fiscal Policy will not be stopping. Following a positive review of the Centre's past performance, and a favorable peer review of plans for the next five years, the ESRC has agreed to support a Centre for the Microeconomic Analysis of Public Policy to be based at the Institute for Fiscal Studies from October 2001. The new title indicates that our programme of microeconomic research will be extended to cover a broader range of public policy issues, reflecting increased policy and research interests in areas such as active labour market programmes, innovation and productivity, and the provision of health care. The research programme of the new Centre for Public Policy is summarised in Section 5 of this report.

At the same time, some of the work initiated at the Centre for Fiscal Policy has attracted support from other sources. For some years, our work on the effects of education and training has been supported by the Department for Education and Skills (DfES) through the Centre for the Economics of Education. In the last year, we have established a new ESRC-funded Centre for Economic Evaluation, which is part of a multidisciplinary ESRC Network on Evidence Based Policy. In the future, much of our methodological research will be based at the new Centre for Micro Data Methods and Practice (CeMMAP), launched with lectures by the Nobel Laureates Dan McFadden and James Heckman in Autumn 2001. This is a new joint venture the Institute for Fiscal Studies and University College London.

Evaluation of public policy is now an important activity of the Centre and has attracted co-funding from a number of other sources. Centre staff are involved in major evaluation projects looking at a range of policies, including the working families' tax credit (WFTC), the Education Maintenance Allowance (funded by the DfES), the New Deal for Young People (funded by the Leverhulme Trust) and the Excellence in Cities initiative (funded by the DfES). This policy evaluation work will be supplemented by the activities of the Centre for Economic Evaluation, and work on the development of evaluation methodologies will interact closely with that organised through the Centre for Micro Data Methods and Practice. These new initiatives will further strengthen our commitment to evidence-based policy and to the development of suitable research methods in parallel with our empirical analysis.

Maintaining high profiles in the media and in top academic journals has continued to be an important dual objective of the Centre over this past year. There have been a large number of radio and television appearances, 50 refereed publications and more than 40 books and book chapters. Our pre-Budget analysis, published in association with Goldman Sachs, continues to set the standard for analysis of public policy issues based on data and careful research. This highly valued service, provided by IFS and the Centre, receives extensive coverage in the press. We also provide pre-Budget seminars for the major political parties and produce a series of on-line Briefing Notes on current policy issues. Public interest in fiscal policy was

stimulated this year by the General Election campaign. Centre researchers were closely involved in the preparation of timely on-line Briefing Notes, which were brought together in *Election Briefing 2001* published by the IFS. Our research publications have also continued to be highly successful. Over this past year, research papers from the Centre have appeared or are forthcoming in such influential journals as *Review of Economic Studies*, *Journal of Political Economy*, *Economic Journal*, *Journal of Public Economics*, *Scandinavian Journal of Economics* and *Review of Economics and Statistics*. Researchers at the Centre continue to play an important role on the editorial boards of many journals. As an indication, *Econometrica*, the *Review of Economic Studies* and the *Economic Journal* are currently co-edited by members of the Centre staff.

Our international collaborative efforts have continued to be important, with a number of initiatives that generate collaborative research. This has partly developed from the close ties built up in research networks on savings and on innovation and productivity supported by European Union funding. A major collaborative effort with the NBER and the CEP, on evaluating the success of British economic policy over the last two decades, has formed the basis for an IFS/NBER/CEP edited volume to be published by the University of Chicago Press next year. In May 2001 the Centre organised a two-day international conference on World Tax Competition, together with the University of Michigan's Office of Tax Policy Research. The European networks augment the extensive research exchange we have in our areas of interest with researchers in North America. A number of Centre staff have visited for significant periods at universities in the US and continental Europe, and our collaboration with the NBER continues in a number of fields such as pensions, savings and consumption.

The success of the Centre relies on the availability and quality of data. We place great emphasis on these and we commit resources to making sure that this most important research infrastructure is maintained and developed. We keep the most recent waves of the major UK micro datasets, such as the Family Expenditure Survey, the Family Resources Survey and the British Household Panel Survey, which we use extensively in our research programme. We also make use of major administrative datasets, such as the Census of Production (ARD) for our work on location and productivity, and the JUVOS in our evaluation of welfare-to-work programmes. Increasingly, we also use foreign micro-data in our comparative research – examples include the US Consumer Expenditure Survey and data on participants in Swedish labour market programmes.

One important development at the Centre is our involvement in the collection of a new dataset, the English Longitudinal Survey of Ageing (ELSA), designed for the analysis of economic status and health as households age. IFS staff, in collaboration with the International Centre for Health and Society at UCL, the National Centre for Social Research and medical researchers at Cambridge University, have been involved in raising substantial funding from the US National Institute of Ageing and a number of government departments with which to design and collect a new panel dataset, linked with the Health Survey for England. The survey will go out into the field in March 2002. These data will contain unique detail on health, on economic and on psycho-social variables. They will also be comparable to the US Health and Retirement Survey and will become the basis for major interdisciplinary analysis of issues relating to retirement behaviour, pensions and the health of the elderly. In the course of the next year, we will be putting the questionnaire for the first wave in to the field, and we will be exploring possibilities for funding a major research programme to use this new resource. They will also form the first of a set of similar data sets now being proposed within the EU on Health, Pensions and Retirement issues.

Simulating policy reforms is, of course, a central part of our activities. In many cases, evaluation of public policy takes place before such policy is ever implemented and is based on our models of individual behaviour. A good example is the evaluation of the working families' tax credit. Evaluation is based on a labour supply model estimated using pre-reform data and exploiting earlier variation in the structure of the benefit and tax system. Our detailed model of the UK tax and benefit system plays a crucial role in this simulation work, as it does in our empirical research. We continue to work on this important but unsung linchpin of our research infrastructure, updating it, adapting it to new reforms as they occur and extending its ability to simulate past policy reforms as far back as the 1970s.

The exceptional research environment created at IFS by our research staff, Research Fellows, Research Associates and visitors has played a central role in the success of the Centre for Fiscal Policy. We hope that this report reflects the research developments and generation of new ideas over the last year, and provides an indication of the level and extent of research activities that have been pursued at the Centre. We hope that the new ESRC Centre for the Microeconomic Analysis of Public Policy will maintain these high standards, whilst extending our research interests to a broader range of public policy issues. We will strive to keep the new ESRC Centre open and attractive to the new ideas and new people who can help us to achieve this aim.

Richard Blundell and Costas Meghir

2. Communication and Collaboration

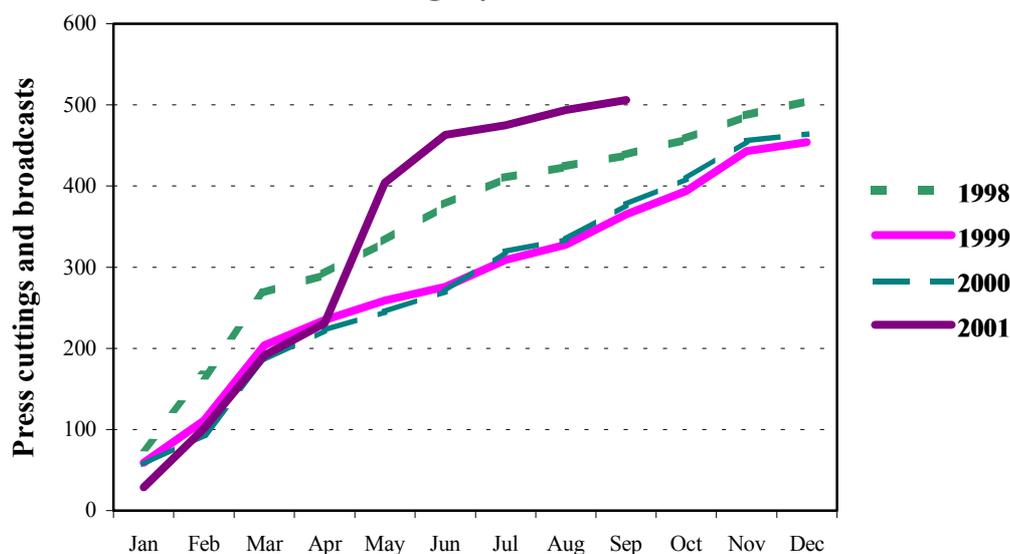
INFORMING AND INFLUENCING PUBLIC DEBATE

“I cannot imagine how we or any other journalists would manage without you.
Thank you and may you stay in business for ever”
Peter Abrams, Producer, *BBC News*

“Your *Election 2001 Briefing Notes* were particularly useful,
as we endeavoured to cut through the spin, and report the policy debate.”
Liam Halligan, Economics Correspondent, *Channel 4 News*

The most significant opportunity for public debate about fiscal policy during the past year was undoubtedly the general election. Drawing on Centre work in a range of policy areas – the public finances, spending on public services, welfare reform, living standards and inequality, corporate taxes and labour supply – IFS published a series of Briefing Notes in the run-up to the election. These notes, analysing the government’s performance over its previous term and examining the three main parties’ manifesto proposals, were published online and launched at press conferences at intervals throughout the election campaign. Before the election, we also published a printed Commentary, in which all the Election Briefing Notes were amalgamated. The number of enquiries taken by the press office rose sharply during May, and this was reflected in the press coverage statistics, as shown in the figure below. Full details of media appearances are given in Section 7.

Press coverage by month, 1998–2001



In addition to extensive appearances by staff on television and radio news programmes, Andrew Dilnot presented a programme in Channel 4’s *Politics Isn’t Working* series, looking at trends in inequality, in which he explained economic and statistical concepts in a way designed to engage interest from a wider public than might usually participate in this debate. He will also present a new series, *More or Less*, to start in November 2001 on BBC Radio 4, which aims to convey the relevance of numbers to a new and not necessarily highly numerate audience.

The IFS Green Budget, published in January, also attracted a great deal of media attention. This year, we held two events rather than one, presenting the findings in summarised form to the press in the morning and at greater length to corporate supporters of IFS work and to civil servants in the afternoon. Other conferences and briefings were held throughout the year,

giving civil servants, journalists and representatives of the business community a chance to hear and debate the findings of Centre research. Slides from conferences were made freely available online whenever possible. We have also continued to publish online Briefing Notes throughout the year to give journalists easy access to concise accounts of our public policy analysis. Our press office maintains an extensive list of media contacts, and we try to provide journalists with the facts and figures they need whenever possible.

One medium for dissemination to the general public is IFS's membership scheme, which allows individuals and institutions to subscribe to all publications and receive a newsletter with details of ongoing research. Corporate supporters of the Institute are also invited to attend a series of events where they can meet IFS staff to discuss research and public policy in general. We maintain a database of people interested in receiving details of new publications and conferences, many of whom now receive email alerts about new work. There are currently just over 1,400 people who regularly receive email updates, having requested this information through our website or because they were already receiving IFS circulars through the post.

Researchers from IFS are involved in encouraging an appreciation of the importance of economics for public policy issues amongst students. Over the last year, we have continued our lecture series on public policy at Oxford and Cambridge universities, with seminars on such topics as income distribution, pension provision, taxation of alcohol and tobacco, and government policies to promote investment, innovation and productivity. Centre researchers regularly contribute to a 'Fiscal Policy' section of *Economic Review* magazine, widely read by sixth-formers. Our Virtual Economy website is also specifically aimed at sixth-form and undergraduate students, allowing them to simulate microeconomic and macroeconomic effects of changes to tax and benefit policy. A related development, still under construction, is the Virtual Learning Arcade, a collection of models in which students can look at simulations of various scenarios, including alleviating child poverty, modelling the labour market and managing congestion in London.

INFORMING AND INFLUENCING ACADEMIC DEBATE

The Centre attaches high priority to developing links with other academics working in similar areas – both in the UK and internationally. Through discussion of ideas, dissemination of Centre research output to an academic audience and joint research projects in areas of common interest, the Centre strives to remain at the heart of the academic debate. An important part of this is the Centre's own network of Research Associates at academic institutions in the UK and abroad. Research Associates play a vital role in fostering academic debate at the Centre. As well as working directly with researchers at the Centre, they contribute greatly to the flow of ideas by presenting work they have done and discussing research projects undertaken at IFS.

International academic links have been strengthened by the participation of IFS researchers in Europe-wide research networks. Over the period of this report the European Commission funds the Training and Mobility of Researchers (TMR) programme into household and individual financial decision-making. Co-ordinated by CentER in Tilburg, the project brings together researchers from IFS, PROMETEIA (Italy), EXEC, HUB (Germany), DELTA-INRA (France) and the universities of Venice, Mannheim and Salerno. The main research topics include analysis of motives for saving, portfolio choice, diversification and taxes, and experimental work on time preference and attitudes towards risk. We are the UK partner in

an EU project on Fiscal Reforms and Household Welfare as well as an EU RTN project on Productivity and Innovation in Europe.

The Centre organises academic conferences and encourages participation by Centre researchers in conferences held elsewhere. In the last year, we have run many conferences, including: on financial support for families with children, on productivity measurement and on inequality measurement. In May 2001 the Centre hosted a two-day international conference on World Tax Competition, which we organised jointly with the Office of Tax Policy Research at the University of Michigan. Centre staff presented invited papers at the Econometric Society European Meeting in Lausanne in August 2001, and at the NBER Summer Institute in Boston. Distinguished visitors to the Centre during the last year have included:

Joshua	Angrist	(MIT)
Manuel	Arellano	(CEMFI)
Olympia	Bover	(Bank of Spain)
Martin	Browning	(University of Copenhagen)
David	Card	(Berkeley)
Bronwyn	Hall	(Berkeley)
Dietmar	Harhoff	(ZEW, Mannheim)
James	Heckman	(Chicago)
Mike	Hurd	(RAND)
Michael	Keen	(IMF)
Tor Jakob	Klette	(Oslo)
François	Laisney	(ZEW, Mannheim)
Arthur	Lewbel	(Boston College)
Thomas	MaCurdy	(Stanford)
Thierry	Magnac	(CREST, INRA, Paris)
Daniel	McFadden	(Berkeley)
Marten	Palme	(Stockholm School of Economics)
Krishna	Pendakur	(Simon Fraser University)
Isabelle	Perrigne	(University of Southern California)
James	Poterba	(MIT)
Jean-Marc	Robin	(CREST, INRA, Paris)
James	Smith	(RAND)
Tom	Stoker	(MIT)
Frank	Vella	(Rutgers)
Quang	Vuong	(University of Southern California)
Guglielmo	Weber	(Padua)
Robert	Willis	(Michigan)
Michael	Wiseman	(Urban Institute)

Our published research has also been influential. In the last year, research papers from the Centre have appeared or are forthcoming in leading journals such as *Review of Economic Studies*, *Journal of Political Economy*, *Economic Journal*, *Journal of Public Economics*, *Scandinavian Journal of Economics* and *Review of Economics and Statistics*. Centre researchers have also been invited to contribute survey papers on labour supply, aggregation and factor demand to the forthcoming volume 6 of North Holland's influential *Handbook of Econometrics* series, edited by James Heckman (Chicago) and Ed Leamer (UCLA).

Centre researchers continue to organise the ESRC Econometric Study Group, which runs seminars at IFS and a three-day annual conference at the University of Bristol. Invited speakers at this year's conference included Gary Chamberlain (Harvard), Siddhartha Chib (Washington University), Peter Schmidt (Michigan) and Alain Trognon (INSEE). The Centre also runs a seminar series in health economics, which focuses on microeconomic and

econometric modelling of health-related issues and which attracts a wide audience from universities, independent research institutes, government departments and industry.

The Public Economics Working Group, a joint Centre/University of Warwick initiative now in its seventh year, has aimed to stimulate greater research collaboration among UK academics by bringing together a group of leading researchers in public economics for regular workshops including seminar presentations and informal discussion of current research. These are attended by a core group of around 40 academics. In addition, increasing efforts have been made to involve younger researchers and to draw in researchers from institutes where there may be few others in the field. In April, a two-day conference was held at the University of Warwick at which ten papers were presented by a range of UK and international speakers.

The Centre continues to employ a number of Research Fellows from academic and research institutes around the country who are directly involved in initiating and directing research at the Centre. Recent appointments are Andrew Chesher (UCL), Hamish Low (Cambridge) and Robert Walker (Nottingham). Research Fellow Orazio Attanasio co-organises a consumption workshop at the NBER Summer Institute. Such activities strengthen our already close ties with researchers at the NBER and further enhance our links with academics in North America.

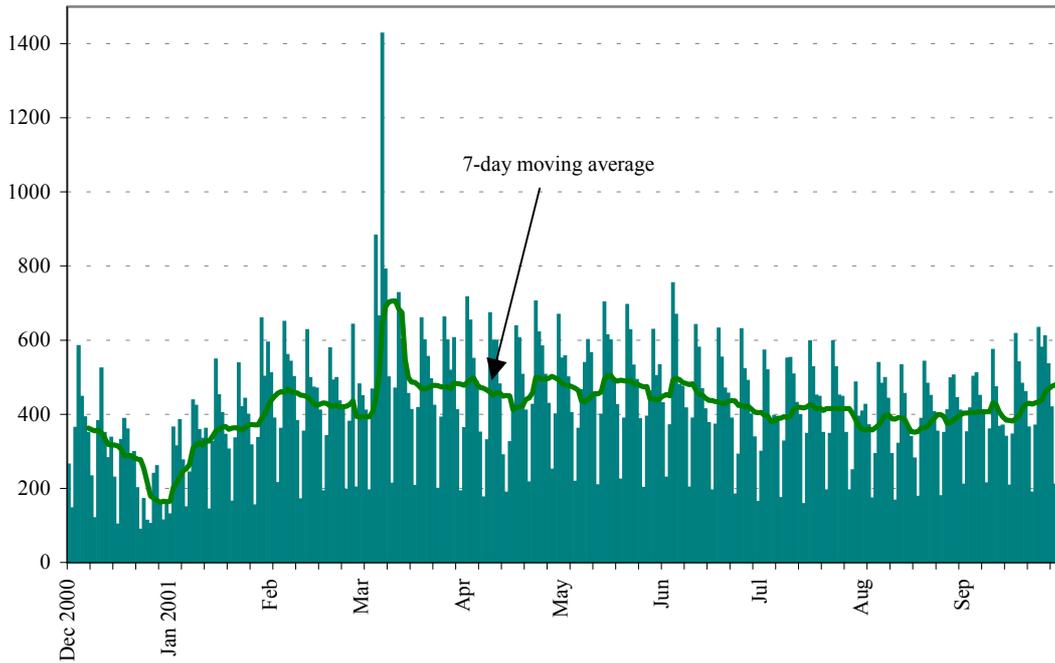
THE IFS WEBSITE

“I have visited the IFS web site for the first time today. I just wanted to say that I think it is one of the best I have seen. It is exceptionally well organized and easy to use. The layout is clear, functional and attractive. I don't feel bombarded with useless information. The budget analysis has been so well presented. I'll be a regular visitor from now on!”
John Tilston, *Dow Jones Newswires*, 9 March 2001

Over the past year, the number of publications made available free of charge online has increased. All IFS Working Papers are now published solely in an online format, as are our online Briefing Notes. This year, we have started to put Commentaries on the website, whilst continuing to sell printed copies and distribute them to subscribers. Current issues of IFS's journal, *Fiscal Studies*, are available to subscribers through the journal portal site, Ingenta, and issues older than three years, going back to 1994, are free for the general public to download from IFS's site. Staff and Research Fellows and Associates are represented on the site with their own pages, which provides an opportunity for them to make available their own papers relating to work in progress as well as published articles.

Over the last year, we have started to record more detailed statistics about site traffic. The number of visitors seems to reflect the academic year to some extent, falling off particularly over Christmas and in the summer. Over the last few months, access seems to have risen considerably, but it is too early to know whether this trend is in fact cyclical, as several new publications have been available on the site over the past few months and the autumn is, in any case, a busy time of year. Traffic to the site tends to increase around the Budget, and this year showed a smaller peak around the election as well. The Green Budget was downloaded over 11,300 times in the two months after it was published. The various sections of our election Commentary, each made available online as soon as the analysis was complete, were downloaded a similar number of times in total.

Unique daily visitors to website



We have continued to maintain Fiscal Facts, a popular area of the website, where tables show information about the UK tax and benefit system. For taxes, we give both current rates and thresholds, and rates and nominal thresholds back to 1973 for the main direct and indirect taxes. For benefits, we give details of rates and allowances, as well as numbers and types of claimants and levels of expenditure. Two Briefing Notes accompanying this section have been downloaded more often than any other document on the site: *A Survey of the UK Tax System* was accessed 30,771 times between January and June 2001. Other papers available here look at the distributional impact of fiscal changes since 1997 and the government's fiscal rules. We plan to extend this section to incorporate tables listing details of public spending over the years.

Plans to restructure the site are underway. We intend to construct a database containing information about all IFS events, publications and staff, but compatible with the ESRC's *Regard* model, which will allow data about the Centre's outputs to be transferred directly to staff at Regard. Pages will be generated from the database, ensuring that information is always up-to-date and that links to related material are provided in full. The site will also be searchable and browsable using a range of criteria, allowing the user to organise information in a variety of ways.

The section on the IFS site dedicated to the Centre has been expanded this year and contains details of all current Centre-funded work. The new database structure will include a field to designate the funding body, so that all publications can be grouped by centre or project. Users visiting the Centre's pages will therefore be able to view a complete list of the subset of IFS work funded by the ESRC, and those on the main IFS site will see the ESRC work as part of the Institute's overall research agenda. The site will also be able to generate a list of links to related work, publications, events and authors elsewhere on the site.

3. Research Infrastructure: Data, Simulation Models and Training

DATA

An important use of the Centre's core funding is to maintain and develop a wide range of microeconomic data-sets, building on the wealth of experience in this area at IFS. The work in setting up data-sets greatly facilitates ongoing research at the Centre itself, as well as acting as a resource for other users. We review below some of our most important data-sets and developments over the last year.

Family Expenditure Survey (FES)

The Family Expenditure Survey remains the primary source of UK household data on expenditures whilst also containing information on incomes. Though its sample size can no longer compete with that of some newer surveys, the FES provides a consistent annual cross-section of UK households from 1961 to 1999/2000. This makes it an unrivalled source of information on demographic, social and economic changes that have occurred over the last 40 years. We devote considerable resources to making the FES data consistent and accessible across different years of data. FES data are used regularly in the analysis of the effects of changes in tax policy; most recently, the data were used to produce a detailed analysis of the distribution of inflation rates across households since 1975. The expenditure data available in the FES have also been used in a number of other research projects, including comparisons of expenditure and inequality using stochastic dominance criteria and describing changes in household spending patterns and household composition over time. In addition, IFS's tax and benefit microsimulation model, TAXBEN, now runs on FES data from the present day as far back as 1978.

Contact: Zoë Smith

Family Resources Survey (FRS)

Data from 1994/95 to 1999/2000 from the Family Resources Survey, a large-scale household survey conducted by the Department for Work and Pensions (DWP), are now available at IFS. Fully processed data from 2000/01 should also be available very soon. The income data collected by the FRS are more detailed than those in the FES, and information is collected on a much larger number of households – around 25,000 compared with about 7,000 households in a typical year of FES data. Checked FRS data are now used as the principal input to our microsimulation using IFS's TAXBEN model when it is being used to model anything other than expenditure taxes. With additional complementary funding from the DWP, the FRS has been used by Centre researchers to help generate and to verify the official poverty statistics – Households Below Average Incomes. FRS data have also been used internally at the Centre for our work on the income distribution, much of which has been undertaken in the last year with co-funding from the Nuffield Foundation. The FRS has fed into a number of other projects, such as the evaluation of the Educational Maintenance Allowance.

Contact: Tom Clark

Labour Force Survey (LFS)

Since 1992, the Labour Force Survey has operated as a rolling panel where individuals are interviewed for five consecutive quarters, collecting a wide range of information on wages, employment and other aspects of the labour market for individuals both in and out of work. We now have LFS data from Spring 1992 to Spring 1999 set up, as well as the annual LFS

from 1991 back to 1975. This large data-set plays a major role in our research on wages, job search, training and other labour market issues in the twenty-first century. For example, a major new project on labour market dynamics and the benefit system, co-funded by HM Treasury and the ESRC Centre, relies heavily on the panel element of the LFS data.

Contact: Howard Reed

Programme of Research into Low-Income Families (PRILIF) Lone Parent Cohort

The PRILIF Lone Parent Cohort consists of an initial interview of 989 lone parents in 1991 with four reinterviews conducted roughly every 18 months until 1997. It provides recent histories of employment, family credit receipt and household structure. It also provides periodic information on work hours, wages and other income, as well as the usual demographic variables such as age and education of the respondent. Work co-funded by the Centre and the Inland Revenue has set this data up to be used both as a panel data-set (i.e. repeated observations on the same individuals) and as a continuous-time (or spell) data-set of women's employment, benefit and family circumstances.

Contact: Gillian Paull

British Household Panel Survey (BHPS)

The British Household Panel Survey continues to form the main source of annual panel data in the UK. Data from the first nine waves, covering 1991 to 1999, are currently available to researchers at the Centre. The main interest in the BHPS to date has revolved around the information on labour market histories. This has been used for a lot of recent Centre work on labour market dynamics, and, with this in mind, we are currently working on adapting the TAXBEN microsimulation model to run on BHPS data.

In addition, work co-funded by the Centre and the Inland Revenue has constructed a continuous-time (or spell) data-set of women's employment, benefit and family circumstances. This data-set is being constructed for the project 'The Long-Term Impact of In-Work Benefits' but will have many uses in other work looking at the linkages between changes in employment, income and family circumstances.

Other research uses the data to look at income and work over the lifecycle and uses data from the US to compare the patterns of wealth accumulation.

Contact: Gillian Paull

National Child Development Survey (NCDS) and 1970 British Cohort Study (BCS70)

This year has seen some important new developments in our work with the National Child Development Survey and the 1970 British Cohort Study. These are both panel surveys following groups of individuals born in the UK during one week in 1958 (NCDS) and one week in 1970 (BCS). Each cohort is followed up at approximately 10-year intervals. In 1999–2000, both of these cohorts were reinterviewed, with an identical questionnaire given to both cohorts. As part of our work under the ESRC Centre, we were granted early access to the newly collected data in February 2001, in order to conduct detailed cleaning of the wages and household income information. The result of our work has been the construction of important wage and income derived variables, which have now been deposited at the ESRC Data Archive at Essex for public use. These new derived variables will form the basis of much future research both at the Centre and in the wider academic community.

Contact: Alissa Goodman

Youth Cohort Study (YCS)

The Youth Cohort Study is a series of longitudinal surveys of young people just over school-leaving age in England and Wales. Starting in 1985, seven cohorts of individuals have been surveyed, each containing between 8,000 and 25,000 people. The survey takes place in the spring after individuals leave compulsory education and in the two years that follow. Due to the study's unique structure, the YCS data allow us to monitor closely the choices made by young people aged 16–19 about their education, training and employment year by year, while also providing detailed information about their qualifications, background and past experiences. Current work using the YCS will enable us to gain a better understanding of what determines how these choices are made and, in particular, to look at the potential impact of government policies on participation in both further and higher education.

Contact: Christine Frayne

Consumer Expenditure Survey (CEX)

The Consumer Expenditure Survey is a national survey from the USA with two separate components: the Diary, completed by respondents for two consecutive weeks (thus similar in many ways to the UK FES), and the Interview, with four quarterly interviews. Each component has its own questionnaire and addresses an independent sample of households. The Interview sample is selected on a rotating panel basis while the Diary sample is referred to repeated cross-sections of households. It is currently the only micro-level data-set reporting comprehensive measures of consumption expenditures for the US economy.

Contacts: Orazio Attanasio

Financial Research Survey (NOP-FRS)

The Financial Research Survey is an ongoing survey carried out by NOP Research Group which collects information on individuals' wealth. Nearly 5,000 individuals are interviewed each month and asked detailed questions about which financial assets they have and how much wealth (in bands) they have in each asset. The survey also collects demographic information and some data on incomes as well as summary information on other financial products, such as pensions, mortgages and insurance. Recent research at IFS has used NOP-FRS data from January 1997 to June 1998 to carry out a detailed analysis of wealth holding in the UK.

Contact: James Banks

Retirement Survey (RS)

The Retirement Survey is the first large-scale panel data-set in the UK to focus on individuals around the time of retirement. Two waves of data were collected on a sample of individuals born between 1919 and 1933. The first wave of the survey was conducted between November 1988 and January 1989 and comprised 3,543 'key respondents' (aged 55–69). About two-thirds of the original sample were reinterviewed in 1994. In this interval, 11 per cent of respondents are known to have died; the residual attrition is a combination of non-response and (perhaps) unreported mortality. The survey contains a rich set of demographic, economic and health variables about individuals and their spouses in both of the waves as well as employment history information and private pension history information.

Contact: Carl Emmerson

Local government data-sets

We have an extensive panel data-set that combines information on local authority tax and spending decisions with a wide range of locally varying and time-varying information. This includes information on local political and electoral developments, demographic and socio-economic indicators and some indicators of the quality of local service provision. This data-set has already been used to examine local spending decisions under different regimes of direct central control over council spending levels. These data will be used further in future work looking at other political economy issues.

Contact: Carl Emmerson

Other household data

We have also carried out work using a range of additional data-sets, such as the New Deal Evaluation Database (NDED) and the Programme of Research into Low-Income Families (PRILIF) data-set. We continue to make extensive use of other data-sets already available at IFS, such as the General Household Survey (GHS), the British Social Attitudes Survey (BSAS) and the Family and Working Lives Survey (FWLS). The new Centre for Public Policy plans to continue to develop and enhance these existing data-sets and to investigate the use of new and additional data sources where this will assist the development of new avenues of empirical research.

Contacts: Lorraine Dearden and Gillian Paull

Annual Census of Production (ACOP) Respondents Database (ARD), and micro data on business expenditure on research and development (BERD)

Since 1998, the plant-level data underlying the Annual Census of Production have been made available to academic researchers in the UK. The Centre has been one of the first users of this rich data-set. We have continued to work with the Office for National Statistics (ONS), HM Treasury, the Department of Trade and Industry (DTI) and other academic users to develop these data and examine their reliability. However, since May 2001, the time and resource costs of working with these data have increased, due to ONS restrictions that now only allow access at their premises. The ARD has been used extensively in research on productivity, entry and plant location, where we have matched in data from the DTI on Regional Selective Assistance grants.

Work using the micro data on BERD has looked at the internationalisation of UK R&D. As described in Section 5, we have also begun to match the BERD micro data to the ARD production data, using co-funding under HM Treasury's Evidence-Based Policy Fund.

Contacts: Rachel Griffith, Mike Hawkins and Helen Simpson

IFS–Leverhulme patents database

Using funding from the Leverhulme Trust, we have created a valuable data resource containing information on UK firms' patenting activity at the US patenting office, matched to company accounting data. In addition to information on patents taken out, the database also contains information on citations. The database has been used in research on firm productivity and is being used in work to investigate the relationship between product market competition and innovation.

Contact: Rachel Griffith

Other corporate and tax-revenue data

Research has used OECD industry-level data for developed countries. We have developed a useful data source by matching in various industry-level data-sets to these data, including information on skills and R&D. We have also collated data on corporate tax systems and tax revenues for European and other OECD countries.

We maintain access to company accounts data from Datastream International, which cover both UK and overseas companies. We have also developed data on share ownership structures and analysts' earnings forecasts for specific projects.

Contacts: Steve Bond, Rachel Griffith, Alexander Klemm and Julian McCrae

SOFTWARE AND POLICY SIMULATION MODELS

Microsimulation models play an important role in much of our research on consumer behaviour, labour supply behaviour and company investment behaviour. These have been developed with the aid of ESRC core funding over a number of years. The work of maintaining and upgrading models using the very latest data is time-consuming but essential to the more technical work that the Centre undertakes. We have also developed specialist programs to implement microeconomic procedures and these are widely used both at the Centre and elsewhere.

TAXBEN (tax and benefit model)

TAXBEN is a microsimulation model of the UK personal tax and social security systems. It can currently operate on data from the FES (1978–99 data) and the FRS (1994/95–98/99 data). The model includes a sophisticated Windows-based graphical user interface, full interfacing with Stata, Excel spreadsheet output and Access databases, and an example household routine that allows users to make up their own families. In the last year, the model has been extended backward to cover the years 1978–83. This allows the analysis of changes in labour supply and wage structures over a 20-year period. During 2001, Centre researchers developed the model so that it can look at the government's new tax credits. Indeed, the programming of the new tax credits into TAXBEN was one of the most important parts of the research process when considering how they would interact with other parts of the tax and benefit system, and whether they represent genuine integration of the tax and benefit systems.

As well as its constant use for the assessment of the distributional consequences of government tax and benefit plans, the model continues to be integral to a number of major Centre research projects. Most importantly, the model has been used in work on the labour market impact of tax and benefit reforms, including the proposed integrated child credit and employment tax credit and the pension credit. The model is maintained by experienced Delphi programmers, Tom Clark, Michal Myck and Howard Reed.

The Centre is now funding major improvements to the model, which have just started, including a full set of confidence intervals and statistical significance tests on all model outputs, better integration with maximum likelihood labour supply estimation programming,

and improvements to housing benefit modelling code, which will be used in innovative research to take place next year.

Contacts: Tom Clark and Howard Reed

SPAIN-III (Simulation Program for the Analysis of Incentives)

SPAIN is a menu-driven computer package, written in Gauss and designed to simulate labour supply responses to changes to the tax and benefit system. The package uses the tax and benefit model to simulate reforms to the tax system and summarises the behavioural impact of the reform both in aggregate and with reference to specific households. SPAIN can now use discrete models of household labour supply to simulate the joint responses of all household members. Quadrature methods are now used to integrate out wage rates for non-working households. Stochastic simulation methods are used to generate empirical confidence bands for simulated labour market responses. The latest version of SPAIN has been applied to model how the working families' tax credit affects work incentives.

Contact: Alan Duncan

SPIT (Simulation Program for Indirect Taxation)

SPIT is a microcomputer-based simulation program, written in Fortran, to analyse the welfare and revenue consequences of changes to indirect taxes. The simulations are based on estimation of demand systems using 17 years of FES data. This simulation is still distributed through the ESRC Data Archive, but the Centre is no longer using the model for its own research.

Contact: James Banks

Corporation tax model

This is a microsimulation model of the UK corporate tax system, based on company accounts data. The model estimates tax liabilities for individual firms and allows the simulation of alternative company tax regimes.

Contact: Steve Bond

DPD (Dynamic Panel Data)

Written in Gauss, DPD is a user-friendly program for the estimation of dynamic models using panel data. It is used widely by academic researchers and covers a range of standard estimators for panel data as well as new generalised method of moments (GMM) estimators developed at the Centre. It can input panel data of widely varying structures and is particularly designed for use with unbalanced company panel data in which both the number of firms in any given year and the number of years for any given firm are allowed to differ. The current version can be obtained from our website.

Contact: Steve Bond

NP-REG (Non-Parametric Regression)

Written in Gauss, NP-REG is a menu-driven computer package incorporating a range of non-parametric techniques, from basic Kernel density methods to more complex multivariate regression techniques. The package exploits procedures available within Gauss to produce a

graphical display of non-parametric regression results. NP-REG now includes procedures for the estimation of partially linear and shape-invariant semi-parametric regression models.

Contact: Alan Duncan

RESEARCH TRAINING

The Centre provides a unique training for young economists, combining a breadth of experience matched in few other environments. Researchers are expected to work on a range of topics, bringing academic rigour to public policy debate and policy relevance to scientific research. The Centre instils appreciation of the latest microeconomic and microeconomic techniques, coupled with an understanding of institutional reality and current policy debates. Researchers have regular contact with the range of the Centre's users: academics at the frontier of our research programme; policymakers, including civil servants and politicians; the business community, including industry and tax practitioners; and the media.

Presentation of research findings is emphasised and a wide range of presentational skills are developed. Researchers are encouraged to write up their findings for a wide range of different audiences, including publication in top academic journals, more accessible policy papers for IFS's own journal, *Fiscal Studies*, 'in-house' publications such as the IFS Commentary series and on-line Briefing Notes, and articles for the national media. Oral skills, too, are developed across a broad range: academic seminars, conference speaking and summarising research results in 'sound bites' for the broadcast media. Researchers are responsible for all dissemination of their research, including writing their own press releases and material for our website. As well as 'on-the-job' training, staff are encouraged to attend ESRC Media Training and Presentation to Policymakers courses.

Computing is very important to Centre research. Staff are encouraged to develop a whole range of computer skills necessary for the analysis of micro-datasets and for the preparation and presentation of written and graphical results. New researchers are trained in the effective use of microcomputer networks, programming languages and statistical packages (such as Gauss and STATA), and word-processing, spreadsheet and graphics packages.

The management and supervisory structure is based around three research programmes – the Consumption Sector, the Corporate Sector and the Personal Sector. Each full-time researcher is allocated to a programme, managed by one of the Programme Directors. Members of the Centre management team, Research Fellows and Senior Research Economists often supervise researchers on individual projects.

The Centre offers an effective training to individuals ranging from undergraduate students to those with postgraduate degrees, giving them a broad experience of rigorous applied microeconomics and an appreciation of policy issues. Research training is organised at four levels.

- Full-time Research Economists are recruited after completing their degree, often with some other work experience. Research Economists generally work in teams and under supervision on two or three projects a year. By doing so, they learn the skills and techniques associated with conducting and disseminating economic research.

- Research Economists without a postgraduate qualification are encouraged to study part-time for an MSc, whilst those arriving already with a postgraduate qualification have the opportunity to study part-time for a PhD. Researchers are currently registered for the MSc in Economics at Birkbeck College and for PhDs at University College London.
- Summer internships are offered to undergraduate or graduate students, who typically carry out short projects, usually for six weeks. This summer, students have worked on a range of topics, including public sector investment spending, the use of analysts' earnings forecasts to model company investment, and competition policy in the brewing industry.
- Each year, IFS offers a research scholarship in applied microeconomics. Scholars are based at IFS, giving them access to supervision and to the Centre's research facilities, and enrolled at University College London on the PhD programme. Current scholars are engaged in research on a wide range of issues, including the evaluation of labour market programmes, child labour supply, and housing.

4. Major Research Findings

It has been a remarkably productive and stimulating year in terms of research at the Centre. In this section, we present a detailed analysis of the findings of the research conducted during the final year of the Centre for Fiscal Policy. As well as a summary of developments, we detail a few selected publications in each area and give contact names of researchers working in each field. The range of research topics to be covered by the new Centre for Public Policy is presented in the following section.

HOUSEHOLD SAVING AND PENSIONS

Household saving

Research this year has described the household wealth distribution in the USA and the UK, and compared both wealth inequality and the form in which wealth is held. Unconditionally, there are large differences in financial wealth between the two countries at the top fifth of the wealth distribution. Even after controlling for age and income differences between the two countries, we show that the median US household accumulates more financial wealth than its UK counterpart. We explore a number of alternative reasons for these differences and reject some explanations as implausible. Some of the observed differences are due to what we refer to as ‘initial conditions’, in particular previously high rates of corporate equity ownership in the USA and housing ownership among young British households. But since these differences existed even in the early 1980s, initial conditions only provide a partial explanation. One other partial explanation may be that, due to forced and voluntary annuitisation of retirement incomes, older British households face considerably less longevity risk.

In a second related research project, we have attempted to address an interesting housing equity puzzle arising from our wealth comparisons – why younger households in the UK accumulate so much of their wealth in housing equity rather than diversifying in stock as is true for their US counterparts. In trying to address this puzzle we have built up a detailed picture of housing choices and wealth accumulation in both countries. Using BHPS and Panel Study of Income Dynamics (PSID) micro data sources, we have documented how housing and stock wealth has evolved for different age groups, for different demographic groups and for different education groups in both countries. The research has also shown that young adults in the UK leave their parental home later than in the USA, and that when they do leave they are much more likely to become home owners rather than use the rental market. Once they become home owners, they are much more likely to accumulate wealth in housing equity rather than in other investment instruments. Whilst the differential tax treatment of mortgages or the different institutional structures of the housing and stock markets in the two countries may matter, we argue that there is an important role for the differential volatility of house prices in the UK in driving cross-country differences. This research therefore investigates a simple empirical modelling framework that can explain the different gradients in housing equity and stock holdings over the life cycle across the two countries.

Research has also looked at the holdings of different types of financial assets, such as private pensions and equities, over the last five years using the FRS and the last 10 years using the BHPS. There has been an increase, in recent years, in membership of private pension schemes, in saving through personal pensions and in holdings of equities. However, these changes occurred differentially across the income distribution, with greater saving in the form of financial assets at the upper end, while personal pension take-up is more pervasive

across the whole distribution. There are also significant groups who hold few financial assets and many individuals who have opted out of the state component of the pension scheme, and indeed out of company pension schemes, yet do not seem to be doing any additional retirement saving. This research has also looked at whether the introduction of personal pensions in the late 1980s has led to an increase in aggregate saving and what the effect has been on the public finances in both the short and the long run. Given the voluntary nature of contracting out, it seems likely that the future reduction in public spending will not be sufficient – in present-value terms – to allow the government to recoup lost tax receipts.

There is also ongoing work within the Centre that uses data from the FES to analyse income and expenditure patterns around the time of retirement. This follows on from the paper by Banks, Blundell and Tanner, ‘Is there a retirement-savings puzzle?’, published in the *American Economic Review* (1998). This paper argued that the data could not be fully explained by a forward-looking consumption-smoothing model that controlled for changes in family size, mortality risk and labour market participation. The new research will attempt to discover whether the data can be fully explained by the model when unexpected income shocks occurring at retirement are taken into account. If not, then the research will attempt to discover whether the arrival of other adverse information explains the consumption profile or whether the data suggest that family behaviour does not conform to the consumption-smoothing paradigm that is the baseline for the analysis.

Banks, J., Blundell, R. and Smith, J.P. (2000), ‘Wealth inequality in the US and Great Britain’, IFS, Working Paper no. W00/20, and paper presented at Institute for Social Research (ISR) conference on Cross-National Comparative Research Using Panel Surveys, Ann Arbor, October.

Banks, J., Blundell, R. and Smith, J.P. (2001), ‘Assets at retirement in the US and UK’, paper for NBER conference on the Economics of Aging, Carefree, Arizona, May. Forthcoming in conference volume, D. Wise (ed.), University of Chicago Press.

Disney, R., Emmerson, C. and Smith, S. (2001), ‘Pension reform and economic performance in Britain in the 1980s and 1990s’, in R. Blundell, D. Card and R.B. Freeman (eds), *Seeking a Premier League Economy*, University of Chicago Press, forthcoming.

Disney, R., Emmerson, C. and Wakefield, M. (2001), ‘Pension reform and saving in Britain’, *Oxford Review of Economic Policy*, vol. 17, no. 1, pp. 70–94.

Contacts: James Banks and Carl Emmerson

Pensions

Centre research has continued to look at issues resulting from pension reforms in Britain that have increased the fraction of the workforce opting out of public provision and that have permitted individuals to choose their private provider. Workers in Britain can choose to belong wholly to the social security (public pension) programme, or to a company-provided plan (occupational pension), or to purchase their own individual pension. Using data from the British Household Panel Survey, research has shown that individuals who subsequently move job select pension arrangements that impose lower costs on job mobility. A feature of the British policy ‘experiment’, and of the data, is that we can differentiate between choice of actual pension arrangement by the individual and what pension arrangements were *offered* to that individual. This permits us to test indirectly whether the observed relationship arises from employer selection or from pension scheme design.

For low-income pensioners, the government has announced reforms of the means-tested benefit system. In particular, in the November 2000 Pre-Budget Report, it announced a substantial increase in the means-tested ‘minimum income guarantee’ and laid out plans for a structural overhaul of the operation of means-tested benefits for pensioners with the introduction of the pension credit. In presentations after the Pre-Budget Report, we outlined the immediate distributional effect and cost of the simple elements of the reform. In February 2001, further research was completed which examined the structural side of the reforms. This

considered not only the redistribution to pensioners produced by the move to pension credit, but also how the new structure fitted in with broader government policy on pensions and saving and how it would affect incentives to save once interactions with other means-tested benefits were considered. The research was published on-line as *Recent Pensions Policy and the Pension Credit*.

The Centre has also financed work on comparisons of pension systems in OECD countries. Despite significant variations in pension systems, countries are introducing surprisingly similar reforms. Many countries have raised pension ages, reduced the generosity of the way in which pensions are indexed and cut back on earnings-related schemes. There has been an increase in private sector coverage in all the countries studied except for New Zealand. Average pensioner incomes are not greatly divergent between these countries, with the main exception of Australia, which had a lower average pensioner income due to its reliance on means-tested benefits and lump-sum pay-outs from pension funds. There are significant differences in the distribution of income among pensioners. Countries, such as France, Germany and Italy, with extensive social insurance systems have higher levels of pensioner inequality due to the fact that the social security system is closely related to an individual's previous wages. The work has now been published in a book by Edward Elgar and was launched at a conference at IFS. As well as two presentations by Centre researchers, Professor Elsa Fornero, who is director of the Centre for Research on Pensions and Welfare Policies (CERP) in Turin, gave a presentation on recent developments in the Italian pension system.

Blundell, R., Meghir, C. and S. Smith, S. (2001), 'Pension Incentives and the Pattern of Early Retirement', forthcoming *Economic Journal*, 112, March.

Clark, T. (2001), *Recent Pensions Policy and the Pension Credit*, IFS Briefing Note no. 17.

Disney, R. and Emmerson, C. (2001), 'Labour mobility and the choice of private pension plans in the UK' (http://cerp.unito.it/english/Agenda/Program_events/conferenza_2001.htm), paper presented at: conference on Pensions and Labour Markets, Institute for the Study of Labor, Berlin, May; conference on Pension Policy Harmonization in an Integrating Europe, Centre for Research on Pensions and Welfare Policy, Turin, June.

Disney, R. and Johnson, P. (eds) (2001), *Pension Systems and Retirement Incomes across OECD Countries*, Cheltenham: Edward Elgar.

Contacts: James Banks, Carl Emmerson and Matthew Wakefield

CONSUMPTION GROWTH AND PRECAUTIONARY SAVING

Household consumption and precautionary models for saving have continued to be an important component of this year's research at the Centre. We have developed the research pursued in the previous year in a variety of dimensions.

The research on the way individual households smooth individual wage shocks has progressed in its attempt to incorporate labour supply responses. The research has focused on the participation issue, which is important at both a theoretical and a practical level. From a practical point of view, female labour force participation is important, if nothing else, because of the dramatic changes witnessed in the last 30 years. At the theory level, as participation decisions are particularly difficult to model because of their discreteness, we have developed a number of approximations that allow us to incorporate participation (along with labour supply) in a coherent model that attempts to decompose shocks in male earnings and female wages into permanent and transitory components. Our findings for the UK indicate that:

1. Unlike the inequality in male earnings, the inequality in female earnings has decreased. This finding is mainly explained by a decline in the variance of hours worked by females.
2. A large fraction of the increase in income inequality during the 1980s and 1990s is explained by an increase in the transitory variance, while most cohort and education groups experience a roughly constant level of permanent variance.
3. At the aggregate level, the variance of permanent shocks to income has increased because of cohort effects: younger cohorts have entered the labour market with higher levels of income inequality.
4. Another important component of ‘permanent’ inequality is that across education groups, which has increased during our period and has been pretty much reflected (at any horizon) into consumption inequality. This evidence stands in contrast to that in the USA, where high-frequency relative shocks to male wages are not reflected strongly in consumption.

At the level of the structural study of consumption behaviour, we have developed the use of synthetic cohort data for the estimation of an Euler equation for asset market participants. We have used these techniques to study the consumption volatility of stock owners in the UK. This approach is important and can be used to establish the plausibility of the Consumption Capital Asset Pricing Model (CCAPM). We have shown not only that the consumption of stock owners seems to be more volatile, but that it is correlated with risk premiums in a way that is not inconsistent with the implications of the CCAPM.

We have also continued to investigate the empirical performance of standard methods used to estimate the structural parameters of an Euler equation. In addition to the performance of the log-linear Euler equation, we have studied the performance of alternative estimators, such as the non-linear generalised method of moments (GMM) (both in the presence and in the absence of measurement error). We have also simulated into a simple life-cycle model the life cycle behaviour of the conditional variance of consumption growth and argued that such a variable is unlikely to cause major problems for the log-linearised Euler equation. We therefore argue that such a term is unlikely to explain the important role played by demographic variables in estimated Euler equations.

Attanasio, O., Banks, J. and Tanner, S., ‘Consumption volatility and asset holding’, *Journal of Political Economy*, forthcoming.

Attanasio, O., Berloffà, G., Blundell, R. and Preston, I. (2000), ‘From wage shocks to income and consumption shocks’, IFS, mimeo.

Attanasio, O. and Low, H. (2001), ‘Estimating Euler equations’, IFS, mimeo.

Contacts: Orazio Attanasio and James Banks

DEMAND

Our current research into demand continues the theme we have been developing of trying to understand consumer demand behaviour whilst making the minimum number of assumptions about preferences. If we assumed enough about consumers’ preferences, we could always make exact (albeit probably wrong) predictions about their behaviour in response to, for example, changes in the prices of certain goods. Unfortunately, this would not be very useful and would effectively be tantamount to assuming an answer. However, if we claimed that

consumer behaviour is entirely random and idiosyncratic, then we could not predict anything, even very roughly, about how consumers might react to changes in prices or incomes, and that would be rather nihilistic. In the UK, we have some of the best data in the world on household spending patterns, prices and incomes, and there appear to be many regularities and stable patterns of behaviour. If we cannot learn something about consumers' preferences for goods and services from these sorts of data, then we never will. The trick with this type of research is therefore to try to discover what we can about household demand behaviour whilst making the minimal set of assumptions necessary to identify it.

What we are interested in for many purposes (predicting the revenue effects of indirect tax changes, predicting market reactions to price changes) is the relationship between consumer demand, the prices of goods and the available budget. In recent work, we have developed a method for recovering bounds on how demand changes as prices are varied and the total budget held constant. This method makes no assumptions about consumers' preferences. It does not even assume that consumers have rational preferences, but rather tests this as a precursor to the recovery of their demand responses. The bounds are the best information we can get on demand responses, given the data at hand and the basic minimal theory of consumer demand. The drawback is that they are bounds on behaviour, and not point estimates. However, these bounds can be compared with more traditional (and assumption-laden) demand systems to see how the results of these systems are driven by the assumptions they make.

Other related work has used the same toolkit of ideas to look at a particular problem in price measurement. The retail price index does not provide a true measure of the increase in the cost of living. Yet the main use to which it is put requires that it is interpreted as a true cost-of-living index, or at least an approximation to one. The question arises: 'How good a measure of the cost of living is the RPI?'. This year, we published research on this which revealed two facts. The first was theoretical. The RPI is usually thought of as a Laspeyres price index (prices in a period are compared with those in some base period, using the base-period pattern of demand as weights), and Laspeyres indices are known to overstate the true increase in the cost of living (because the weights are fixed and do not allow for the fact that households will switch demands away from relatively expensive goods as prices change). As a result, it is usually thought that the RPI must overstate the true rate of inflation. However, the RPI is not a true Laspeyres index (the weights are, for basically unavoidable practical reasons, already out-of-date by the time they are first used). This has an unexpected benefit because it means that the assumption that the RPI overstates inflation is not correct. In fact, it could equally understate inflation – at least in theory. What is therefore required is empirical evidence comparing the RPI to 'the truth'. This was the second contribution of this research. The problem here is that no one knows what the truth is, because getting an exact measure of the true cost of living involves a number of potentially wrong assumptions about how consumers' demand changes as prices vary. Again, we used a method that does not make these assumptions and produces bounds on the true rate of inflation. Fortunately, we could make these bounds very narrow and the result was that, on average, the RPI does overstate inflation a little: over the period 1976 to 1997, the true annual average rate of inflation was between 6.28 and 6.37 per cent per year compared with 6.43 per cent per year using the RPI formulae. However, the RPI's performance is variable, and sometimes it gets it right, in the sense of being within the bounds we have in the true index.

Blundell, R., Browning, M. and Crawford, I. (2001), 'A locally ideal demand system', IFS, mimeo.

Blow, L. and Crawford, I. (2001), 'The cost of living with the RPI: substitution bias in the UK retail prices index', *Economic Journal*, vol. 111, pp. F357–82.

Contacts: Laura Blow, Richard Blundell and Ian Crawford

CORPORATE TAX

In May 2001, the ESRC Centre conference on World Tax Competition was held at IFS. It was organised in cooperation with the Office of Tax Policy Research, University of Michigan. Centre researchers prepared two papers for the conference.

One paper (Devereux, Griffith and Klemm, 2001) presents evidence on the development of taxes on income from capital since the mid-1960s. Several alternative measures are discussed, partly in the context of a detailed case study of the UK. Selected measures are used in an international comparison. The paper shows that effective tax rates on mobile capital have declined but that revenue has remained static or even increased. These two trends may be reconciled by an increase in corporate income. In turn, this may be due at least partly to a reclassification of activities as corporate, or possibly just a reclassification of income as corporate profit.

A second paper (Besley, Griffith and Klemm, 2001) investigates whether there is empirical evidence to support the idea that countries set their taxes interdependently. To test this idea, countries' reaction functions are estimated using a panel of data across countries, years and tax classes. The general finding is that taxes seem interdependent, and in a way that is consistent with the tax competition literature. Taxes on mobile factors react more than taxes levied on less mobile factors. This reaction is larger between countries where these factors are more mobile – for example, within the EU.

Work on these topics has continued. A forthcoming paper will complement the first of the conference papers by examining taxes on income from capital in the UK in more detail. More detailed data allow tax revenue comparisons across industries, which would not be possible at the OECD level. Preliminary results suggest that the banking sector plays an important role in explaining changes in UK tax revenues.

In addition to this empirical analysis of trends in corporate taxation, Centre researchers have undertaken theoretical research into the properties of alternative corporate tax bases. In particular, we have established the neutrality of alternative cash-flow tax bases under conditions of uncertainty, and developed the required tax treatment in the event of bankruptcy to ensure the neutrality of these taxes.

As described below, another area of work has looked at the design and effectiveness of corporate tax credits for research and development expenditure.

Besley, T., Griffith, R. and Klemm, A. (2001), 'Empirical evidence on fiscal interdependence in OECD countries', paper presented at the conference on World Tax Competition, 24–25 May, co-sponsored by the Office of Tax Policy Research and IFS.

Bond, S. and Devereux, M., 'Generalised R-based and S-based taxes under uncertainty', *Journal of Public Economics*, forthcoming.

Devereux, M.P., Griffith, R. and Klemm, A. (2001) 'Have taxes on mobile capital declined?', paper presented at the conference on World Tax Competition, 24–25 May, co-sponsored by the Office of Tax Policy Research and IFS.

Contacts: Stephen Bond, Alexander Klemm and Julian McCrae

THE LOCATION DECISION OF THE FIRM

Work has investigated the effects of agglomeration benefits and Regional Selective Assistance grants on the location choices of new plants. These grants are linked to

employment targets, but are also aimed at attracting and retaining inward investment to designated areas of Great Britain. The research uses data on the population of new entrants to the British manufacturing sector, to which the grant offers have been matched.

The results suggest that agglomeration effects, particularly within the same industry as the new entrant, play an important role in determining plant location. Even taking into account these benefits, grants are also found to have an effect on location. This work has been presented at conferences to audiences comprising representatives from both the academic community and government departments.

Devereux, M.P., Griffith, R. and Simpson, H. (2001), 'The geography of firm formation', IFS, mimeo.

Contact: Helen Simpson

COMPANY INVESTMENT AND FINANCIAL BEHAVIOUR

Research on share prices and company investment has characterised the consequences of 'bubbles' in share prices for econometric estimates of the Q model of investment. 'Bubbles' refer to any deviations between stock market valuations and the present discounted value of expected future net distributions to shareholders. If these 'bubbles' are both persistent and correlated with relevant information about the firm's fundamental value, then conventional econometric estimates, which use the stock market value to construct measures of the Tobin's Q ratio, may fail to identify the Q model. Empirical research using data on US quoted companies shows that the Q model performs much better when a direct estimate of the firm's fundamental value, obtained by discounting analysts' forecasts of future earnings, is used in place of the stock market valuation. Financial variables such as cash flow are found to be insignificant conditional on this new measure of the Q ratio, suggesting that the evidence for an impact of financing constraints on the investment spending of US quoted companies may be much weaker than previously thought.

Research on uncertainty and investment has included both empirical research and the development of simulation models. Our econometric analysis has found that an increase in measures of uncertainty is associated with a weaker impact effect of demand shocks on firms' investment spending, although we do not find significant effects on the level of firms' capital stocks in the long run. These findings are consistent with the predictions of 'real options' models, in which investment is regarded as partially irreversible and hence sunk, and in which the 'real option' to delay investment is more valuable at higher levels of uncertainty.

As these models quickly become intractable analytically, we have also developed simulation models to study the implied effects of uncertainty on investment in more detail. Calibrating these models using data on sales and investment of US companies suggests that they can explain quantitatively significant impacts of uncertainty on short-run investment and employment dynamics.

Much of the Centre's recent work on capital market imperfections and investment was summarised in a paper prepared for a Treasury seminar on economic growth and government policy, and subsequently published by HM Treasury. Investigation of aggregate UK investment figures showed a major difference in recent years between current-price series for investment as a share of GDP and constant-price series for investment as a share of GDP. As the price of investment goods has fallen sharply relative to the general price level, current investment as a share of current GDP has risen much less than the ratio of these series expressed in constant prices.

- Bloom, N. and Bond, S. (2001), *UK Investment: High, Low, Rising, Falling?*, IFS Briefing Note no. 18.
- Bloom, N., Bond, S. and Van Reenen, J. (2001), 'The dynamics of investment under uncertainty', IFS, Working Paper no. W01/05.
- Bond, S. (2001), 'UK investment and the capital market', *Economic Growth and Government Policy*, HM Treasury (www.hm-treasury.gov.uk/mediastore/otherfiles/260.pdf).
- Bond, S. and Cummins, J. (2001), 'Noisy share prices and the Q model of investment', IFS, Working Paper no. W01/22.
- Bond, S., Elston, J., Mairesse, J. and Mulkay, B., 'Investment and financial factors in Belgium, France, Germany and the UK: a comparison using company panel data', *Review of Economics and Statistics*, forthcoming.

Contact: Steve Bond

PRODUCTIVITY AND INNOVATION

Productivity and innovation have once more been a focus of government policy. Work at the Centre has addressed both of these areas and contributed to the policy debate.

Productivity

Work has investigated the effects of inward investment on productivity. In a project funded by the Gatsby Charitable Foundation, research has documented differences in labour productivity between domestic and foreign-owned activity in the production sector in Great Britain. Differences have also been found in other characteristics such as investment per employee and the skill mix of the workforce. The results of this research have been presented at academic conferences, to HM Treasury and to government economists in Northern Ireland.

Recent work has investigated whether these observed differences in characteristics can explain the differences in labour productivity. This work has used matching techniques to enable establishments owned by foreign multinationals to be compared with their close domestic counterparts.

The project is being carried out in conjunction with the Institute for Manufacturing at Cambridge University. Researchers at the Institute for Manufacturing have collected qualitative case-study evidence from foreign- and domestic-owned plants in Great Britain, which will be used to shed light on the empirical results. Research has also looked at the greenfield entry of new plants to the production sector and the contribution of new entry to productivity growth.

Policy-makers in Europe have been concerned that a lack of product market competition has led productivity to lag behind that in the USA. Theoretical models are ambiguous about the direction of the effect that product market competition should have on productivity. On the one hand, increasing competition lowers firms' profits and thus reduces incentives to exert effort (the Schumpeterian effect); on the other hand, it reduces agency costs (or increases the risk of bankruptcy), thus increasing incentives to exert effort. Work at the Centre has investigated what empirical evidence suggests about the relationship between product market competition, and productivity levels and growth rates.

One paper (Griffith, 2001) uses the introduction of the EU Single Market Programme (SMP) as an instrument for the change in product market competition. It shows that the increase in product market competition brought about by the SMP led to an increase in overall levels of efficiency and growth rates. Further analysis shows that the increase in efficiency occurred in principal-agent-type firms, and not in those where managerial control and ownership were

more closely related. These results suggest that product market competition can play an important role in reducing agency costs and may explain some of the poor performance of European economies.

A second paper (Aghion, Bloom, Blundell, Griffith and Howitt, 2001) investigates whether the relationship between product market competition and innovation is monotonic. Using a new panel data-set on UK firms' patenting activity, the authors find an inverted U-shape in this relationship. This implies that innovation is lower both in very competitive and in monopolistic markets. The highest amount of innovation occurs at intermediate levels of competition.

Innovation

Policies to promote research and development (R&D) are high on the government's agenda. R&D and innovation are seen as key drivers of economic growth and important for raising UK productivity. Centre researchers were active in commenting on HM Treasury's 2001 Consultative Document on R&D tax credits.

One area of work considered recent trends in UK R&D performance. It showed that UK R&D is more internationalised than that of other G5 countries, and that it is becoming increasingly internationalised at a faster rate. A rising share of UK R&D is funded from abroad, and UK firms are undertaking more of their R&D overseas. Using an international panel of countries, this work showed that R&D in one country responds to a change in the price in another 'competitor' country. This suggests that UK innovation policies could play an important role in determining whether increasingly footloose R&D locates in the UK or moves overseas.

Another area of research investigated the economic impact of the government's proposed new UK R&D tax credit. Using the model developed in Griffith, Redding and Van Reenen (2001a), the benefit of the credit is measured by looking at the effect on value added in the short and long runs. This is simulated from existing econometric estimates of the tax-price elasticity of R&D and the effect of R&D on productivity. This research suggests that, in the long run, the increase in GDP far outweighs the costs of the tax credit. The short-run effect is far smaller, with the effect on value added only exceeding cost if R&D grows at or below the rate of inflation.

Work on innovation and productivity has used a new data-set on UK firms' patenting activity at the US patenting office. Patent citations are a potentially powerful indicator of technological innovation. Research has found that patents have a significant impact on firm-level productivity and market value. But, while patenting feeds into market values immediately, it has a slower effect on productivity, potentially because of the need for investment in equipment and training to embody patents into new products and processes. Higher market uncertainty is also found to reduce the effect of new patents on productivity. This is consistent with a 'real options' effect that has been found to be important in the literature on tangible investment.

Aghion, P., Bloom, N., Blundell, R., Griffith, R. and Howitt, P. (2001), 'Empirical estimates of the relationship between product market competition and innovation', IFS, mimeo.

Bloom, N. and Griffith, R. (2001), 'The internationalisation of UK R&D', *Fiscal Studies*, vol. 22, pp. 337-55.

Bloom, N., Griffith, R. and Klemm, A. (2001), *Issues in the Design and Implementation of an R&D Tax Credit for UK Firms*, IFS Briefing Note no. 15.

Bloom, N., Griffith, R. and Van Reenen, J., 'Do R&D tax credits work? Evidence from an international panel of countries 1979-97', *Journal of Public Economics*, forthcoming.

Bloom, N. and Van Reenen, J. (2000), 'Patents, productivity and market value in a panel of British firms', IFS, Working Paper no. W00/21. Forthcoming in *Economic Journal*.

- Griffith, R. (2001), 'How important is business R&D for economic growth and should the government subsidise it?', *Economic Growth and Government Policy*, HM Treasury (www.hm-treasury.gov.uk/mediastore/otherfiles/255.pdf).
- Griffith, R. (2001), 'Product market competition, efficiency and agency costs: an empirical analysis', IFS, Working Paper no. W01/12.
- Griffith, R., Redding, S. and Van Reenen, J. (2001a), 'Mapping the two faces of R&D: productivity growth in a panel of OECD manufacturing industries', Centre of Economic Policy Research, Discussion Paper no. 2457.
- Griffith, R., Redding, S. and Van Reenen, J. (2001b), 'Measuring the cost-effectiveness of an R&D tax credit for the UK', *Fiscal Studies*, vol. 22, pp. 375–99.
- Griffith, R. and Simpson, H. (2001a), 'Characteristics of foreign-owned firms in British manufacturing', IFS, Working Paper no. W01/10. Forthcoming in R. Blundell, D. Card and R. Freeman (eds), *Seeking a Premier League Economy*, University of Chicago Press.
- Griffith, R. and Simpson, H. (2001b), 'Plant creation in British manufacturing', IFS, mimeo.
- Griffith, R., Simpson, H. and Windmeijer, F. (2001), 'Understanding productivity differences between foreign and domestic firms', IFS, mimeo.

Contacts: Rachel Griffith and Helen Simpson

ECONOMETRIC METHODS FOR PANEL DATA

We have continued research on finite sample inference for linear generalised method of moments (GMM) estimators in dynamic panel data models, originally funded by ESRC grant no. R000223068. This research compares the finite sample performance of a range of tests of linear restrictions. These include standard asymptotic Wald tests based on one-step and two-step GMM estimators; two bootstrapped versions of these Wald tests; a version of the two-step Wald test that uses a more accurate asymptotic approximation to the distribution of the estimator; the LM test; and three criterion-based tests that have recently been proposed. We find that the corrected Wald test and a simple test based on the difference between the Sargan tests in the restricted and unrestricted models work well in most situations, and that inference based on bootstrapped Wald tests for two-step GMM results can be seriously misleading.

We have continued our research on projection estimators in autoregressive panel data models. Our projection approach yields estimators that coincide with known GMM estimators for models where stationarity is not imposed on the initial conditions and for models that satisfy mean stationarity. This approach allows us further to obtain a simple linear estimator for models that satisfy covariance stationarity, which, although not fully efficient, performs very well in simulations.

Software has been written in Gauss for the estimation of dynamic count data models allowing for multiplicative individual effects, and this has been made publicly available.

- Blundell, R., Griffith, R. and Windmeijer, F., 'Individual effects and dynamics for count data models', *Journal of Econometrics*, forthcoming.
- Bond, S., Bowsher, C. and Windmeijer, F. (2001), 'Criterion-based inference for GMM in autoregressive panel data models', *Economics Letters*, vol. 73, pp. 379–88.
- Bond, S. and Windmeijer, F. (2001), 'Finite sample inference for GMM estimators in linear panel data models', IFS, mimeo.

Contacts: Steve Bond and Frank Windmeijer

HEALTH

Centre research has built on previous work on the characteristics of those with private medical insurance (PMI). The new research used the Family Resources Survey to look at the impact of the July 1997 Budget decision to remove the tax subsidy on PMI to those aged over 60. The work shows that, among the group affected, there was a 0.7 percentage point decrease in the number of people covered by such insurance – equivalent to nearly 4,000 individuals. While this will clearly have led to increased demands on the NHS, the cost of treating these individuals is likely to have been substantially lower than the £135 million annual cost of the subsidy.

Centre research also contributed to the HM Treasury Health Trends Review on the likely future costs of the NHS. This work looked at the effect of demographics on NHS expenditure over the next 50 years. It showed that a central estimate of these costs is that real increases in expenditure of 0.7 to 0.8 per cent a year are likely to be needed over the next 20 years, after which demographic pressures are likely to ease. However, there is a great deal of uncertainty over these costs – for example, if most of the increase in life expectancy is due to healthy rather than unhealthy ageing, then the required increases could be half the central estimate. Further research looking at the relationship between age, time to death and healthcare demands would be extremely useful.

Work in progress is analysing the smoking decisions of UK households and individuals. Using different information on tobacco consumption from the General Household Survey and the British Household Panel Survey, we look at the extent to which prices have affected individuals' decisions regarding whether to smoke and how much to smoke. Attention is paid to controlling for the effects of past smoking behaviour and we also evaluate the degree to which there is heterogeneity in responses in the population, focusing in particular on differences by gender, education, age and income groups.

Banks, J., Blow, L. and Windmeijer, F. (2001), 'Cigarette taxes and smoking behaviour in the UK', IFS, mimeo.
Emmerson, C., Frayne, C. and Goodman, A. (2001), 'Should private medical insurance be subsidised?', *Health Care UK*, Spring 2001, pp. 49–65 (King's Fund, London).

Contacts: Christine Frayne, Alissa Goodman and Frank Windmeijer

EDUCATION AND TRAINING

Centre researchers have undertaken major new work in this area in conjunction with the Centre for the Economics of Education (CEE) sponsored by the Department for Education and Skills (formerly Department for Education and Employment). In February, Richard Blundell gave an invited lecture on the methodological issues in estimating the returns to education. This work formed the basis of a paper, which was published as a CEE Discussion Paper in September 2001 and is now under revision for the Royal Statistical Society journal.

We have commenced research using the 1999/2000 waves of the British Cohort Study (BCS70) and the National Child Development Survey (NCDS). At this stage, we have focused on comparing estimates of the returns to education for the two cohorts when they were both aged in their early thirties (1991 for the NCDS and 1999/2000 for the BCS70). This research has also looked at how the returns to education for the NCDS cohort have changed over the 1990s and links these findings to changes in inequality over the same period.

- Blundell, R., Dearden, L and Sianesi, B. (2001), 'Estimating the returns to education: models, methods and results', Centre for the Economics of Education, Discussion Paper no. 16.
- Dearden, L., Goodman, A. and Fiorini, M. (2001), 'Inequality and the changing returns to education and ability: evidence from the BCS70 and NCDS cohort', paper presented at the NIESR conference at the British Academy on Education and Inequality, 28 September.

Contact: Lorraine Dearden

INEQUALITY, INCOME DISTRIBUTION AND LIVING STANDARDS

Centre researchers have advanced considerably in analysing inequality in the last year. We have created a consistent set of Family Expenditure Survey data on household incomes from 1961 to 1999/2000 and on household spending from 1975 through to 1999/2000. This work has been carried out as part of a project funded by the Nuffield Foundation, but has drawn heavily upon many years of data preparation funded by the Centre. In addition, ongoing work with the Department for Work and Pensions continues to ensure we have an up-to-date and consistent set of income data from the Family Resources Survey. We have used these data to produce two publications on trends in inequality in the last year. One of them (IFS Election Briefing Note *Living Standards under Labour*) was co-funded by the ESRC Centre and made an important contribution to the election policy debate.

New Centre research conducted in conjunction with colleagues at the Centre for Economic Performance has also used the new National Child Development Survey and BCS data to conduct a cross-cohort comparison of intergenerational income mobility. The research has found that mobility appears to have fallen in a cross-cohort comparison of people who grew up in the 1960s and 1970s (1958 birth cohort) as compared with the cohort who grew up in the 1970s and 1980s (1970 birth cohort). The results show that the sensitivity of labour market earnings to parental income rises, thereby showing less intergenerational mobility for the more recent cohort. This supports theoretical notions that a wider wage and income distribution slows down the extent of mobility up or down the distribution across generations.

- Blanden, J., Gregg, P., Goodman, A. and Machin, S., 'Intergenerational mobility: has Britain become more mobile?', Centre for Economic Performance, Discussion Paper, forthcoming.
- Clark, T. and Goodman, A. (2001), *Living Standards under Labour*, IFS Election Briefing Note no. 4.

Contacts: Tom Clark and Alissa Goodman

TAXES, BENEFITS AND SOCIAL SECURITY

Distributional consequences of fiscal reform since 1997 and reforms proposed during the election campaign

The election campaign in Spring 2001 provided an opportunity to look back at the cumulative impact of reforms introduced in the current government's first term, as well as to analyse the proposals made by the main parties during the election campaign.

The distributional impacts of the fiscal reforms offered by the three main parties during the election were quite different. The Conservative Party's £8 billion of tax cuts gave most benefit to the middle deciles. The Labour Party's new proposals were limited to the new credits, discussed below, and offered a strongly progressive package. But these two parties were offering only spending increases or tax cuts; the Liberal Democrats were offering tax rises as well as spending increases, which would have led to a redistributive package.

- Brewer, M., Clark, T. and Wakefield, M. (2001), *Labour's Proposals*, IFS Election Briefing Note no. 9.
- Clark, T., Myck, M. and Smith, Z. (2001), *Fiscal Reforms Affecting Households, 1997–2001*, IFS Election Briefing Note no. 5.
- Clark, T. and Reed, H. (2001), *The Conservatives' Proposals*, IFS Election Briefing Note no. 7.
- Emmerson, C., Myck, M. and Wakefield, M. (2001), *The Liberal Democrat Proposals*, IFS Election Briefing Note no. 8.
- Myck, M. (2000), *Fiscal Reforms Since May 1997*, IFS Briefing Note no. 14.

Contacts: Tom Clark and Howard Reed

The new tax credits and the reform of social security

The UK government has announced that three new credits or tax credits are to be introduced from 2003. An integrated child credit will bring together the different strands of support for children in the working families' tax credit, income support and the children's tax credit, to create an integrated system of financial support for children. An employment tax credit will support low-paid workers without children – the first time such a group has received direct support. A pension credit will replace income support for pensioners, with the key reform being a 40 per cent withdrawal rate against private income rather than the 100 per cent withdrawal rate in income support.

Centre researchers have examined various aspects of these credits. A particular concern for all three credits has been the paucity of information released by the government: it has generally been insufficient to tell how the credits will work in practice, how much they will cost and who will benefit. Research funded by the Centre has explored the options facing the government and shown how the cost and distributional impact will depend on policy choices yet to be made. In the absence of official discussion of these issues, the Centre's research has played a vital role in informing the policy debate.

- Brewer, M. (2001), *The Structure of Welfare*, IFS Election Briefing Note no. 11.
- Brewer, M., Clark, T., Myck, M., Reed, H. and Wakefield, M. (2001), 'Prospects for personal tax and benefit reforms', in A. Dilnot, C. Emmerson and H. Simpson (eds), *The IFS Green Budget: January 2001*, IFS Commentary no. 83.
- Brewer, M., Myck, M. and Reed, H. (2001), *Financial Support for Children: Options for the New Integrated Child Credit*, IFS Commentary no. 82.
- Clark, T. (2001), *Recent Pensions Policy and the Pension Credit*, IFS Briefing Note no. 17.

Contacts: Mike Brewer and Tom Clark

Evaluating the generosity of government financial support for children

When it announced the integrated child credit, the UK government hoped that it would '[help] parents to understand what they could expect to receive, and [facilitate] public debate about the correct level of support in the context of the Government's aim to abolish child poverty within a generation'. The principle of horizontal equity can be interpreted as requiring that households with the same pre-transfer incomes and the same consumption needs should receive the same post-transfer incomes. The generosity of support to families with children should be analysed with respect to such a baseline. Although not without problems, equivalence scales form an important part of such a procedure: the comparison of financial support to families with children with a corresponding equivalence scale, both over time and between countries, should give a more accurate picture of generosity than comparisons of cash values alone. Work co-funded by the ESRC Centre and the Leverhulme Trust has analysed the potential advantages and drawbacks of such comparisons, illustrating with comparisons between the US and UK systems.

Banks, J. and Brewer, M. (2001), 'Understanding the generosity of financial support to families with children', paper presented at International Social Security conference, Sweden, June. Forthcoming in J. Bradshaw et al. (eds), *International Studies on Social Security*, Volume 8, Aldershot and London: Ashgate.

Contact: Mike Brewer

Modelling take-up of means-tested benefits

Distributional analyses of tax and benefit measures frequently assume 100 per cent take-up: in other words, that all who are eligible for transfers from the government do receive them. In practice, take-up of means-tested benefits is not 100 per cent, nor is non-take-up random, and this can bias any analysis that relies upon calculations of net family incomes (for example, labour supply models and distributional analysis of Budget measures).

Work co-funded by the ESRC and the Inland Revenue has examined the determinants of the take-up of family credit, a means-tested benefit available until October 1999 to low-income working families in the UK. This will form a baseline for future work funded by the Inland Revenue evaluating the impact of the working families' tax credit.

Blundell, R., Brewer, M., Suárez, M-J., Walker, I. and Zhu, Y. (2001), 'Modelling take-up of family credit and the working families' tax credit', IFS, mimeo.

Contact: Mike Brewer

Dynamic modelling of labour supply and the tax-benefit system

Estimation of the effects of specific reforms, such as the working families' tax credit and the 10p starting rate of income tax, on people's decisions to work or not, has long been an integral part of Centre research. In 2001, work started on a new 'labour supply estimation' project co-funded by HM Treasury, the Inland Revenue and the ESRC Centre. The project aims to build a dynamic model of labour supply responses which incorporates information on movements into and out of work over a period from 1995 to 2001. The econometric model uses data from the Labour Force Survey panel, which tracks individuals' labour market status quarterly over a 15-month period. Entry into and exit from work are related to the financial incentives to move into or leave work, as well as other factors that may affect the probability of transition. The eventual objective is an easy-to-use and continuously updated model of the employment effects of tax and benefit changes which can be added on to microsimulation models such as TAXBEN and the Treasury's IGOTM model and which will allow policy-makers and academics to derive accurate estimates of the effects of policies on flows into and out of work. The project is scheduled to end in December 2002.

Myck, M. and Reed, H. (2001), 'Developing the theory of work incentives: towards a dynamic model of labour supply, taxes and benefits', IFS, mimeo.

Contact: Howard Reed

LABOUR MARKET PARTICIPATION AND WAGES

Hours of Work, Employment and the Welfare Reform

Welfare policy toward low-income families in the UK experienced a significant shift toward “in-work” benefits in the late 1980s and 1990s. Although a form of in-work benefit existed in the UK since the late 1970s, the shift in policy began in earnest with the introduction of the Family Credit in 1988 - a minimum working hours based credit for families with children. After a number of reforms during the early 1990s, Family Credit was replaced by the Working Families Tax Credit in 1999. Over this period the generosity of these “in-work” benefit schemes also increased, enhancing the emphasis that has been placed in welfare reform in the UK on supplementing low incomes in work for adults with dependent children. There are now over one million recipients contrasting with less than 250,000 when Family Credit was introduced. Expenditure per recipient has also increased dramatically over this period, rising fourfold in real terms.

But what of the impact on the labour market? There have been two main target groups for “in-work” benefit policy reform in the UK. These target groups reflect a rise in the proportion of families with no parent working in the 1980s and early 1990s. For single parents and low skilled couples with children, labour market attachment steadfastly refused to rise after the sharp fall in the early 1980s recession – quite against the overall trend. Single parent employment rates fell by twenty percentage points in the early 1980s and have remained well below that experienced by many of the UK’s European neighbours. For women with unemployed husbands, the fall in employment was even more marked, remaining at little over 20%. Over the same period the overall trend for married mothers saw a continuing growth and employment among single women without children remained around the 80% level.

Our research finds strong evidence that targeted groups respond to the incentives in their labour supply behaviour. For example, we can point to the concentration of hours of work for lone parents at the 16 hours per week eligibility point. And the movement in this concentration from 24 to 16 when the minimum hours eligibility point was changed in the 1992 budget. We also found important impacts of the WFTC reforms. These suggest an important impact on single parents drawing more than 30,000 into work and off income support. For couples there are offsetting effects. A significant percentage of men in workless couples are predicted to move into employment. A further and larger group of mothers in workless couples are predicted to move into work. These positive increases in employment for workless couples with children is offset somewhat by a decrease in the level of employment in couples with children where both spouses are working, reflecting the income effect. The impact on workless families is therefore likely to be much more substantial than on overall participation.

We have also worked on a direct comparison with similar reforms to the Earned Income Tax Credit (EITC) in the US. This analysis has led to several important findings. First, in-work benefits in the US are structured in such a way as they generate larger financial incentives to work compared to the UK. The UK in-work benefits are counted as income in the computation of important out-of-work benefit programs like Housing Benefit. The significant benefit reduction rate in these programs eats away at the in-work benefit leading to very small gains to working. In the US, by contrast, the EITC is not counted as income for the calculation of any other transfer program so the household sees the full gain of the in-work benefit. We conclude that the interaction between in-work benefits and other means tested benefits is of central importance in understanding the precise change in incentives that reforms to the in-work benefit system have delivered. Second, in the US, the expansions to the in-work benefits occurred at a time when the out-of-work benefits were being reduced. In particular, welfare programs underwent major reforms leading to a decline in the value of staying out of the labor force for single mothers. Thus the increase in incentives to work through the EITC was strengthened by the decline in the generosity of out-of-work benefits. In the UK, by contrast, the out-of-work programs either maintained levels of generosity or in some cases actually increased generosity in step with the increases in the in-work programs.

The combination of these two forces meant that the expansions of the UK in-work programs generated rather modest increases in the incentives to work.

Blundell, R. 'Welfare reform for low income workers', *Oxford Economic Papers*, Vol.53, No.2, 189-214.
Blundell, R and H. Reed. 'The Employment Effects of the Working Families Tax Credit' IFS Briefing Note No. 6 (April 2000). <http://www.ifs.org.uk/publications/briefnotes.shtml>
Blundell, R. and Hoynes, H. 'Has In-Work Benefit Reform helped the Labour Market?' NBER Working Paper 8546, <http://papers.nber.org/papers/W8546>

Contact: Howard Reed, Mike Brewer

Labour Market Participation and Collective Decision Making

There have been dramatic changes in the participation rates for men and women in the UK in the past 20 or so years. Male participation has decreased from 95% to 75% while female participation has increased overall. These changes may have been associated with important welfare effects, both through the overall changes in resources available to household consumption, and through the change in the balance of power within households. However the standard household model, referred to as the unitary model, has little to say about the impact of these momentous changes on the relative position of men and women.

To answer such questions, as well as for addressing important issues in the policy analysis debate we need to address explicitly the way that resources are shared within a household. To this effect we develop the collective model of labour supply and consumption, we show identification and we estimate it on a sample of couples without children. The results have clear implications about household sharing and the impact of changing relative market opportunities between men and women.

The standard unitary model implies three broad groups of testable restrictions, which the collective model relaxes. The first set of restrictions covers the standard consumer demand restrictions of symmetry of the Slutsky substitution matrix. The second set of restrictions relate to income pooling. This is the condition which implies that, as far as the household's utility-maximizing choice of family labor supplies and consumption are concerned, one can combine all sources of non-labor income into a single unearned income measure. This is a controversial assumption in the welfare reform debate since it implies that the source of non-labor income is irrelevant in within-family allocation decisions. The final set of restrictions in the unitary model relate to the nonparticipation conditions which state that if one individual is at a corner solution, it is the reservation wage of that individual rather than the market wage that affects the labor supply decision of the partner. As in the case of the income pooling assumption, this is far from innocuous, implying as it does that the value of paid work as an 'outside option' for a nonparticipant does not influence the allocation of consumption and leisure within the household.

The model we present draws on the collective labor supply model developed in Chiappori (1988). This approach effectively relaxes the income allocation rule among individuals so that this allocation may depend on relative wages and other variables in a way that reflects the bargaining position of individuals within the family, rather than reflecting the marginal conditions underlying the joint optimizing framework of the traditional unitary approach. Even when individuals within the family are altruistic and allocations are Pareto efficient, the allocation rule can deviate from the optimal rule in the unitary model.

Blundell, R., Chiappori, P-A., Magnac, T. and Meghir, C. (2001), 'Collective labor supply: heterogeneity and nonparticipation', IFS, Working Paper no. W01/19.

Contact: Costas Meghir

Evaluation of the Swedish active labour market programmes

This project, co-funded by IFAU (Office of Labour Market Policy Evaluation) in Uppsala, exploits a very large and comprehensive new data-set to evaluate the effectiveness of the Swedish labour market policy on various labour market outcomes of participants. We have used non-parametric statistical matching techniques to assess programme impacts on various outcomes over time (including employment probability, probability of regular education and benefit collection probability), as well as on job-finding rates, job retention and a number of outcomes should individuals lose their jobs again. When taken as a whole, the impact of the programmes has been mixed. The programmes have increased employment rates among participants, but have also allowed some people to remain significantly longer on unemployment benefits and more generally in the unemployment system.

When evaluating the differential performance of six main types of programmes for adult workers entitled to unemployment benefits, the best-performing (as well as cheapest) measure is found to be employment subsidies, though it is argued that it is the second-best performer – trainee replacement schemes – that should attract policy interest.

Sianesi, B. (2001a), 'An evaluation of the Swedish active labour market programmes', IFAU, Working Paper no. 2001:5.

Sianesi, B. (2001b), 'Differential effects of Swedish active labour market programmes for unemployed adults during the 1990s', IFS, mimeo; IFAU, Working Paper, forthcoming.

Sianesi, B. (2001c), 'Swedish active labour market programmes in the 1990s: overall effectiveness and differential performance', *Swedish Economic Policy Review*, forthcoming.

Contacts: Costas Meghir and Barbara Sianesi

PUBLIC FINANCES AND PUBLIC SPENDING

Centre research at IFS has continued to inform and contribute to public debate on taxation, public spending and borrowing. Much of this was centred around the November 2000 Pre-Budget Report, the publication of IFS's January 2001 *Green Budget*, the March 2001 Budget and the run-up to the June 2001 general election. Centre researchers gave two presentations to BBC journalists before the Budget to help inform their coverage of the event. Seminars were also given at the House of Commons to each of the three major parties in the run-up to the Budget. On the day of the Budget, Centre researchers were on site at the BBC to assist with the Budget programme. IFS conferences were held on the days after both the Pre-Budget Report and the Budget, which enabled us to present our initial analysis to large numbers of people from politics, the media and the civil service. Slides from the conferences were made available on the IFS website. Andrew Dilnot, IFS Director, gave evidence to the Treasury Select Committee after both the Pre-Budget Report and the Budget.

Centre research contributed once again to the publication of the IFS Green Budget, which was launched at the end of January 2001 at a conference attended by 120 people. Prior to this, we held an additional conference specifically for the press, which was attended by about 65 people and which generated considerable media discussion – writing in the *Financial Times* (1 February 2001), Samuel Brittan said, 'The Green Budget ... provides much the best indication of British public finances in advance of the Budget statement'. The Green Budget was made available on the IFS website, free of charge, alongside slides from the conference.

The full document and individual chapters were downloaded around 11,300 times during the first two months they were available. The research looked in detail at a variety of issues raised in both the Pre-Budget Report and previous Budget announcements. In particular, the Green Budget assessed the state of the public finances and offered a summary of the government's record on taxation and public spending. We also discussed tax and benefit reform, taxation of fuel, tax policy relating to companies and longer-term welfare reform.

Tax and spending issues were at the very heart of the policy debate between the parties in the 2001 general election. As soon as the election was called, we informed this debate by releasing a series of 'Election Briefing Notes' reviewing various economic aspects of public policy during the 1997–2001 Parliament – the many topics covered included the strength of the public finances and the public services. The work was launched at a conference attended by 40 people, mostly journalists. We then devoted considerable time to researching in detail the numbers behind the different parties' proposals. During the campaign, IFS researchers estimated the likely financial effects of each of the major parties' tax and benefit policies for different types of families. This work was made available as Election Briefing Notes on our website, downloaded over 11,000 times during May and June. Finally, we brought together all this work into our 'Election Briefing' Commentary, launched at a second conference, attended by some 30 people.

One striking finding of the review of public spending that we conducted for the election was the apparent steep decline in public investment over the last 25 years. This prompted Centre researchers to investigate more fully which elements of public spending had been squeezed, as well to consider how far the decline mattered. The results of this research will soon be published in an on-line Briefing Note.

We improved the 'Fiscal Facts' section of the IFS website, which has proved extremely popular with users, by adding a paper explaining the fiscal rules that govern UK policy formation.

In a number of meetings, we shared our expertise with interested outside groups. We have discussed reforms and potential reforms with political parties, the International Monetary Fund and the chairs of the HM Treasury and Department for Work and Pensions Select Committees. Official and diplomatic representatives from a wide range of countries – including France, the USA, Australia and Japan – have been able to meet with us, sometimes to pose specific questions and sometimes to receive informal 'tutorials' providing an overview of the UK budgetary system.

- Clark, T. and Dilnot, A. (eds) (2001a), *Election Briefing 2001*, IFS Commentary no. 84.
- Clark, T. and Dilnot, A. (2001b), 'Q, Have taxes risen under Labour? A, Well, it depends who's asking', *Independent*, 10 May.
- Clark, T., Elsby, M. and Love, S., 'Twenty-five years of falling investment? Trends in capital spending on public services', IFS Briefing Note.
- Dilnot, A. and Emmerson, C. (2000), 'Not much to play with come the main event', *Financial Times*, 9 November.
- Dilnot, A., Emmerson, C. and Simpson, H. (eds) (2001), *The IFS Green Budget: January 2001*, IFS Commentary no. 83.
- Emmerson, C. (2000), 'Can Budget 2001 cut taxes?', presentation given to the Hansard Society's Coming Year in Parliament Conference on 1 December.
- Emmerson, C. (2001), 'Public spending in the coming parliament', presentation given to the Hansard Society's Post Election Planning Conference on 30 May.
- Emmerson, C. and Frayne, C. (2001a), *The Government's Fiscal Rules*, IFS Briefing Note no. 16.
- Emmerson, C. and Frayne, C. (2001b), 'Options for Budget 2001', presentation given to BBC journalists at White City on 27 February and Millbank on 28 February.
- Frayne, C. (2001), 'The economic year ahead', presentation given to the Hansard Society's Coming Year in Parliament Conference on 19 July.

Goodman, A. and Reed, H. (2001), 'Widespread cuts in tax mean Chancellor offers something for everyone: losers are scarce', *Financial Times*, 8 March.

Contacts: Tom Clark, Andrew Dilnot, Carl Emmerson and Christine Frayne

5. The Research Agenda at the Centre for Public Policy

We are embarking on a new five year programme of research as part of the new Centre for the Microeconomic Analysis of Public Policy. In this section, we summarise the research programme that is to be undertaken by this new ESRC Centre over the coming year. This research programme develops some areas that have been core activities of the Centre for Fiscal Policy, and extends the scope of our microeconomic research interests to a broader range of public policy issues. This look forward is divided into the four broad themes of work, savings, wealth creation and welfare that will provide the organisational structure for the activities of the new Centre for Public Policy (CPP).

THEME A. WORK: LABOUR SUPPLY, WORK AND RETIREMENT

1. Labour Market Responses to Tax and Benefit Reforms and Other Policy Interventions; Take-Up of Benefits

Intertemporal modelling of tax and benefit reforms

Centre research over the next two years is aiming to examine how the tax and benefit system creates incentives for individuals to alter their dynamic pattern of labour supply using both a theoretical background incorporating the tax and benefit structure and empirical work to estimate actual responses. For example, individuals may smooth their hours of work in order to avoid paying tax in the higher-rate band.

In empirically testing any model, it might be hypothesised that different types of workers or individuals might have characteristics that make particular patterns in their dynamic work behaviour more or less likely than for other types of individuals. For example, workers for whom the wage returns to job tenure are lower may be more likely to move into and out of employment. Comparing behaviour between these different groups of potential workers would seek to investigate the testable hypotheses from the theoretical model. Changes in policy over time would also allow an examination of the policy impact on labour market choices.

Contact: Gillian Paull

The detail of the new tax credits

The Inland Revenue published a consultation document on the integrated child credit and the employment tax credit in July 2001. In earlier work, we discussed why and how the government might introduce an integrated child credit. On the whole, we were supportive of the aims behind the integrated child credit, which are to simplify and streamline financial support for children. Although the integrated child credit will affect a larger number of families, the employment tax credit is perhaps a more significant reform, as it represents a genuine extension of support to new groups. In this work, Centre researchers will focus on three questions. What might the credits cost and who could benefit? (We shall be updating earlier estimates in the light of information in the consultation document.) Why is the government extending support to low-paid families without children through an employment tax credit? What do we now know about how the two credits will work and what are the most important issues that the government is still considering?

Contact: Mike Brewer

Housing benefit reform: time to grasp the nettle?

When elected in 1997, the government pledged to examine ways to reform the housing benefit system, long regarded as an expensive and inefficient way of subsidising housing for low-income renters. This examination produced a Green Paper (published in April 2000) which featured few concrete proposals, and in the last two years the government has focused much more on reform of other aspects of state support – tax credits, for example. This means that the housing benefit reform question persists. Centre researchers propose to examine the options for reform, pointing out the potential winners and losers, the arguments for and against moving from administration by local authorities to a centrally organised system, the impact of housing benefit on equilibrium rents and house prices and labour mobility, and other central topics.

Contact: Howard Reed

Trends in social security reform in the UK

The announcement of the new tax credits, discussed in Section 4, confirms an increasingly apparent trend in the Labour government's approach to social security reform. This has seen an increase in non-insurance benefits at the expense of insurance benefits, and a tendency to increase means-tested rather than universal benefits. At the same time as these changes, the government has increased the responsibilities of claimants of out-of-work benefits, transferring some of the reforms in the New Deals to traditionally 'inactive' benefit claimants. Future research will document this trend, compare it with similar reforms under previous governments and examine the government's own justification. We will also analyse the impact of the reforms on the number of people facing means tests and joint assessments, and how this will affect incentives to work, save and form a couple. The hope is to seek contributions from others on other aspects of welfare reform under Labour to form material for a day-long conference.

Contact: Mike Brewer

Evaluating the working families' tax credit

Work funded by the Centre will complement a large research project funded by the Inland Revenue to evaluate the impact of the WFTC on labour supply, wages, incomes and childcare. Centre-funded work will seek to reconcile *ex ante* predictions of the labour supply impact with observed trends in participation for lone parents and women in couples with children.

Contacts: Richard Blundell, Mike Brewer, Howard Reed and Ian Walker

The long-term impact of family credit

Family credit was an in-work cash benefit available to those with children working 16 hours a week or more. It aimed to encourage parents into the labour market and to supplement income levels for poorer working families. However, the high withdrawal rate for higher earnings also created a disincentive for longer hours of work. The aim of this research is to measure the longer-term effects of family credit by linking changes in immediate behaviour for benefit recipients to alterations in future employment after family credit. The results will permit an assessment of the ability of in-work benefits to improve women's position in the labour market. The project will use data on women of working age from the PRILIF Lone Parent Cohort and the British Household Panel Survey.

Contact: Gillian Paull

Welfare analysis of fiscal and social security reforms in Europe: does the representation of family decision processes matter?

Any policy discussion of fiscal and social security reforms relies on the ability to estimate effectively the impact of reforms on people's decisions about whether and how much to work. This project pulls together resources from several European countries and focuses on labour supply decisions made by people in couples. In cooperation with centres from Belgium, France, Germany, Italy and Spain, Centre researchers will consider some country-specific and some general fiscal reforms.

The aim of the project is to analyse decision-making processes within households. To do this, we intend to compare predictions of the effects of these reforms on labour supply using two different methods of modelling the labour supply decisions of people in couples. Until now, research has usually assumed couples to be single decision-making units, thereby ignoring the economic processes taking place within couples. Such an approach overlooks the intra-household distribution of resources, which may have an important bearing on individual decisions concerning work.

The first stage of the project (January–July 2001) consisted of comparisons of the countries' tax systems and data sources, as well as of methodological discussions as to how to conduct the modelling of couples' behaviour. The second stage, due to end within the next six months, is to implement the agreed methodology in all centres and provide results for comparison.

Contact: Michal Myck

2. Microsimulation of Tax and Benefit Reforms

Some major innovations to the TAXBEN model are planned for the next year. The disability benefit calculation routines are being rewritten for work that we plan to do with the 1996–97 Disability follow-up to the Family Resources Survey. With the aid of new research results on the non-parametric estimation of standard errors on distributional results, it will soon be possible to incorporate standard errors into TAXBEN's distributional tables. TAXBEN will be augmented with optimal control routines so that researchers can examine the trade-offs implicit in the design of means-tested benefits – for example, how an in-work benefit can be designed with certain restrictions on its distributional effects in such a way as to maximise the increase in participation subject to a cap on spending. We are also planning to develop a Java-based front-end which can be run over the Internet, an interface that would eventually allow journalists and other interested parties to run their own microsimulations directly from the IFS website.

Towards the abolition of child poverty

Future Centre work will examine how realistic the government's pledge to abolish child poverty is. How much would it cost to eliminate child poverty completely on the government's preferred definition? What would it mean for benefit levels and for the structure of work incentives? How much more difficult would it be to achieve such an objective if the widening-out of the wage distribution that has been observed over the past 25 years continues, meaning that the poorest households fall further behind the richest? The work will use the TAXBEN microsimulation model and the Family Resources Survey data to simulate the effects of tax and benefit changes and changes to the structure of wages on the child poverty index.

Contact: Mike Brewer

A broader approach to analysing in-work benefits

We are hoping to organise interdisciplinary work on the issue of labour supply and the benefit system, as an outgrowth of a conference scheduled to be held in early 2002. The focus will be on the work incentive effects of recent reforms, such as the working families' tax credit. IFS has traditionally analysed such reforms from a purely economic angle, but the reforms may have major effects that work through other channels. In particular, changes to the way that benefits are administered and the expansion of the numbers entitled to them may – for psychological or sociological reasons – affect take-up behaviour and the perceived relation between work and reward. Indeed, the belief that such effects are important seems a major part of the government's motivation. But there is, as yet, little conclusive evidence on these matters. An interdisciplinary approach thus seems especially urgent in evaluating these changes.

Contact: Tom Clark and Howard Reed

THEME B. SAVING: ASSETS, CONSUMPTION, AGEING AND PENSIONS

3. Saving and Consumption Behaviour

Our past research into consumption over the life cycle has tended to focus on household behaviour and has defined a household's characteristics as being synonymous with those of the head. Recent research has begun to consider the household as a veil for individual behaviours and is focusing on following individuals rather than households. For example, a household consisting of a 45-year-old head, their adult child who has just entered the labour market and their retired parent is composed of individuals at very different stages in their life cycles in terms of consumption and saving behaviour. In this research, we will begin to examine individual consumption over the life cycle, paying particular attention to life-stage transitions such as starting work, leaving the parental home and setting up home with a partner.

Consumption growth and precautionary saving

In the future, research in this area will continue to focus on the evaluation of models of consumption growth over the life cycle. Having studied the properties of estimators that are commonly used in the literature by exploiting simulation techniques, we plan to use these techniques again in a number of dimensions: first, to propose new estimators that are relevant when one is trying to estimate discrete choices; and second, to evaluate how well approximated or log-linearised models perform.

In terms of estimation of preferences, we plan to estimate richer models of consumer choice that allow for more flexible preferences and, in particular, models that allow for non-separabilities between labour and consumption as well as intertemporal non-separabilities (models with habits and durables).

We plan to use both UK and US data and use new data sources that have recently become available. In the UK, we plan to integrate the use of the FES, which has been explored extensively, with the use of the BHPS and the GHS, which are, in some situations, complementary data sources. As for the US data, we plan to compare extensively the results obtained using the interview and the diary sample of the family expenditure survey.

Contacts: Orazio Attanasio and Ian Crawford

4. Wealth Holding: Portfolios and Housing

Research over the few next years will continue to look at household portfolios over the life cycle, and particularly at and after retirement. One aspect of this will be the continuation of our analysis of differences in the distribution of saving, wealth and household portfolios between the UK and other countries, namely the USA and Europe. As increasingly more longitudinal data become available in these areas, we will be able to increase both the depth and the scope of our analysis substantially over what has been possible in the past, given previous data limitations.

With respect to the comparison of the relative importance of housing wealth and financial assets in the USA and the UK, once the second wave of wealth data becomes available in the BHPS later this year, we will be able to evaluate our model of the effects of volatility in the housing market. This will involve linking changes in financial wealth, changes in housing wealth and changes in income or needs over time in the panel dimension of the data. Parallel analysis for the PSID data will provide the first comparative study of changes in wealth in the 1990s between the two countries. As a by-product of this analysis, we will be creating a wealth measure for BHPS data that will be computed on a consistent basis across waves, and we intend to make the resulting data publicly available via the ESRC Data Archive as well as using the measure as an input to a number of further projects within the Centre and in IFS research projects more generally.

Contacts: James Banks and Carl Emmerson

5. Pensions

Future IFS work on pensions and saving will look at the longer-term effects of the pension credit on individuals' incentives to save for retirement. In particular, we plan to investigate the implications of both the planned introduction of the pension credit and the government's stated aim of earnings-indexing the minimum income guarantee for other types of saving and pension provision, including ISAs, stakeholder pensions and the proposed state second pension.

Previous Centre-funded research that looked at the characteristics of those in the government's target group for stakeholder pensions – that is, those earning between around £10,000 and £20,000 a year without a private pension – showed that it was not obvious that they should be placing any savings in a pension. This is because the majority of people in this earnings group already had a private pension, while those who did not were more likely to experience lower earnings or periods of unemployment and tended to have little or no savings. Further research will look at the actual take-up of stakeholder pensions, in particular among this target group to see whether it has been the case that these groups have not chosen to save in this form. We will also examine any subsequent policy developments – for example, any moves towards greater compulsion for retirement saving.

Contacts: Carl Emmerson and Matthew Wakefield

THEME C. WEALTH CREATION: INVESTMENT, INNOVATION AND HUMAN CAPITAL

6. Taxes and Investment

Future work on company investment will measure variation across firms or industries in the risk premium and economic depreciation components of the user cost of capital, and assess whether this variation can be used to estimate the effects of changes in user cost on the capital intensity of production. In particular, high-frequency data on equity returns can be used to obtain measures of the risk premium, which may display more exogenous variation across firms and time than has been found for standard measures of the cost of capital. The effects of these covariance risk measures on investment can also be contrasted with the effects of the share price volatility measures used in much of the recent research on uncertainty and investment.

Contacts: Steve Bond and Alex Klemm

Tax competition

We plan to continue our empirical work to investigate interdependence in tax-setting behaviour between countries. Work will consider what has happened to taxes on mobile factors across countries, and how this relates to predictions from the literature on tax competition. The research aims to test theories of tax competition by estimating the interdependence of tax-setting behaviour between OECD countries for different classes of tax, such as corporate income taxes, labour income taxes and excise duties. We intend to evaluate initiatives aimed at dealing with tax competition, such as the EU Code of Conduct and the OECD ‘Harmful’ Tax Competition project. Work will also look specifically at the taxation of mobile factors in the UK, how to measure the burden of taxation on these factors and developments over recent decades.

Contacts: Rachel Griffith, Alex Klemm and Julian McCrae

7. Productivity and Innovation

The broad aim of this area of research is to improve our understanding of how public policy affects the incentives and ability of the private sector to generate wealth.

Direct innovation policies: understanding rates of return to R&D; R&D tax credits

One area of work will look directly at policy to affect innovation. Research in this area aims to increase our understanding of rates of return to R&D, and the effects of R&D tax credits. Using funding from HM Treasury through the Evidence-Based Policy Fund, we will work on linking the micro data on production activity (ARD data) with the micro data on business enterprise research and development (BERD data). Research using these data will aim to estimate the private and social rates of return to R&D, and gain an understanding of the differences between small and medium-sized enterprises (SMEs) and larger firms, and differences in rates of return to different types of R&D. We will carry on our policy work on R&D tax credits. Preparatory work will continue for conducting an evaluation of the UK R&D tax credit for SMEs, using matching techniques to compare firms that are eligible for the credit with similar firms that are not.

Contacts: Rachel Griffith and Mike Hawkins

Mapping the UK production sector

Work will continue to increase our understanding of the drivers and economic implications of the geographic distribution of economic activity. Research will continue to assess the effects of Regional Selective Assistance grants on plant location, and how any impact is affected by

the existence of agglomeration economies. Work will also focus on the industrial and geographic distribution of new entrants, and the determinants of the level of entrepreneurial activity (entry rates). We plan to look at the effects of entry on market structure and at the role of entry in productivity growth. We also plan to address some of these issues more broadly through the development of new micro data-sets outside the manufacturing sector.

Contacts: Rachel Griffith, Mike Hawkins, Helen Simpson and Julian McCrae

Foreign firms: combining qualitative and quantitative evidence

We plan to continue research on how foreign firms differ from their domestic-owned counterparts, and on the effects of foreign firms on productivity. This body of work, which has been supported by the Gatsby Charitable Foundation, involves combining quantitative research methods with qualitative case-study evidence. Econometric work will use matching estimators to document differences between foreign- and domestic-owned firms. The case-study evidence will be used to shed further light on the reasons for any differences, such as differential access to technology, or organisational structures. We will focus on specific industries – cars, electrical engineering and pharmaceuticals – and look at the effects of entry of foreign firms.

Contacts: Rachel Griffith, Helen Simpson and Frank Windmeijer

Technology transfer and spillovers

We plan to build on existing research using industry-level data examining the determinants of productivity growth, and factors that affect the ability of countries to catch up to the technological frontier. We will also investigate the micro analogue of this model and examine the importance of factors such as geographic proximity and technology sourcing for technology transfer and spillovers at the firm level. We also plan to extend this firm-level work to look more directly at knowledge flows using data on patent citations.

Contacts: Rachel Griffith, Mike Hawkins and Helen Simpson

Product market competition and innovation and productivity

Research will continue into the effects of product market competition on innovation and productivity. We plan to examine further the mechanisms through which product market competition affects firms' productivity, such as whether there are differential effects on efficiency across classes of firms where agency costs are more or less likely to be prevalent. Work using the patents database will continue to explore the relationship between the intensity of product market competition and innovation, in particular testing for the presence of non-monotonicities in this relationship. This area of work will form part of the 2001 Zeuthen lectures.

Contacts: Richard Blundell and Rachel Griffith

8. Training, Education, Human Capital and Wages

At the Centre, most of our work will concentrate on using the new BCS and NCDS cohort data to look at a range of issues on this topic, including: the returns to education and training; the impact of education and training on other labour market outcomes; the determinants of educational choices; and the impact of school quality on education and labour market outcomes. In all these areas, interesting and important cross-cohort comparisons will now be possible for the first time. Many of these comparisons will be crucial for informing policy on

education and training, which has hitherto relied heavily upon evidence derived solely from the 1958 cohort, which, previous to this new data release, was last interviewed in 1991.

Contacts: Richard Blundell, Lorraine Dearden and Alissa Goodman

THEME D. WELFARE: ITS SOURCES, LEVEL AND DISTRIBUTION

9. Inequality and Social Welfare

Looking forward, the following year will see the completion of a number of pieces of work on analysis of inequality that are currently in progress. In particular, first, we will soon publish a major IFS report charting various measures of inequality in both spending and income right through to 2000, giving special attention to reconciling the two. Second, empirical work linking economic inequality with household welfare (by using non-parametric tests of stochastic dominance) will soon be complete. Finally, we have Centre-funded work in train to bring together our tax and benefit modelling with our inequality work, so that we can examine directly the impact of tax and benefit policies on inequality. As well as all this planned output, we will soon be ready to deposit our rich data sources (with documentation) at the ESRC Data Archive.

In addition to analysis of inequality using cross-sectional data, the next year should see the completion of work now underway using the new cohort studies data to analyse trends in income inequality and income mobility across generations. Using combined data from the National Survey of Health and Development (born in 1946), the NCDS (born in 1958) and the BCS (born in 1970), work already begun will assess how living standards and inequality have changed across these three cohorts. This will add an important new element to our understanding of the important changes in income inequality that have taken place over the last 30 years. This work is outlined in more detail in Section 3 (Data).

Contacts: Tom Clark and Alissa Goodman

10. Welfare Measurement and Cost of Living

The incorporation of demographics into consumer preferences has always been of great interest for the process of making welfare comparisons across different household types – households with and without children, for example. We are often interested in assessing how much more income a family of one type would need in order to be as well off as a reference type of household (its ‘equivalence scale’). The way in which demographics are allowed to affect preferences has implications for the pattern of demands for goods and services across different household types. Simple and appealing methods of specifying the effects of demographics can lead to implausible restrictions on these demands, which are strongly rejected by the data. Our research will focus on ways to incorporate demographics that are still relatively simple to understand in welfare terms but relax the restrictive nature of the implications for cross-household demands. Working out the cross-household demand restrictions for different models will allow us to recover the important preference parameters (such as those necessary for calculation of ‘equivalence scales’) both parametrically and semi-parametrically.

Contacts: Laura Blow and Ian Crawford

11. Health and Other Public Services

Health

The government has identified reducing health inequalities as one of its priority areas and is currently conducting a cross-departmental review into what policies might achieve this. Centre research will draw together evidence on the links between childhood circumstances and future health status, and will use panel surveys such as the NCDS, the BCS and the BHPS to examine how income and health inequality have evolved over time.

Directly related to smoking and socio-economic health inequalities is the incidence of coronary heart disease (CHD). We will review the evidence that links lifestyle choices to the incidence of CHD. We will further investigate inequalities in the *delivery* of healthcare.

From individual longitudinal patient data on acute myocardial infarction (AMI) treatments and outcomes in Scotland over a 10-year period, we will identify the quality of healthcare given to AMI patients by individual hospitals. Linking these hospital quality measures to hospital resourcing information, we will establish which types of hospital have been more successful than others in treating AMI patients.

Contacts: Christine Frayne, Alissa Goodman and Frank Windmeijer

6. Financial Summary

The table below summarises how the ESRC's financial contribution to the Centre was spent. The ESRC Centre contributes around 35 per cent of IFS income. The remainder is derived from IFS membership subscriptions, publication sales, conference income and general project funding. In addition to other ESRC support, general project funding comes from research trusts (such as the Nuffield Foundation, the Leverhulme Trust, the Gatsby Foundation and the Joseph Rowntree Foundation), government departments (such as the Department for Work and Pensions, HM Treasury, the Department for Education and Skills, the Department of the Environment, Transport and the Regions, the Legal Services Commission and the Inland Revenue), the European Union (under programmes such as TMR) and other bodies, including the Bank of England, BBC TV and Goldman Sachs. In addition, the IFS Tax Law Review Committee has been supported by a consortium of private sector firms, government departments and professional bodies.

Salary costs make up the bulk of expenditure within the Centre. IFS determines its own salary structure through internal discussion with staff and by referral to its Executive Committee, with negotiations taking into account prevailing levels of remuneration in both the Civil Service (primarily the Government Economic Service) and universities. IFS operates a personal pension scheme under which it matches the contribution of the employee.

Other expenditure covers payments to Research Fellows and Associates (15 are financed, at least in part, by the Centre), the cost of the Research Scholars (including their fees paid to University College London), secretarial costs, overheads (at an average of 50 per cent of direct salaries), computing, travel and miscellaneous costs.

RESEARCH CENTRE BREAKDOWN OF COSTS, 2000–2001 (Academic Year)

Research staff	361,363
Research Fellows and Associates	38,913
Research Scholars	32,232
Summer interns	2,471
Total research staff	434,979
Secretarial support	22,539
Computing costs	25,200
Conference costs	1,835
UK travel	10,623
Overseas travel	13,505
Overheads	228,759
Miscellaneous	56,805
Total costs	794,244

7. Centre Output

GROUP A: PUBLICATIONS AND DISSEMINATION

1. BOOKS AND MONOGRAPHS

- Blundell, R., Card, D. and Freeman, R. (eds) (2001), *Seeking a Premier League Economy*, Chicago: University of Chicago Press, forthcoming.
- Brewer, M., Myck, M. and Reed, H. (2001), *Financial Support for Families with Children: Options for the New Integrated Child Credit*, Commentary no. 82, London: IFS.
- Cebulla, A., Heinelt, H. and Walker, R. (2001), *Unemployment and the Insurance Compensation Principle in Britain and Germany*, London: Anglo-German Society.
- Clark, T. and Dilnot, A. (eds) (2001), *Election Briefing 2001*, Commentary no. 84, London: IFS.
- Dilnot, A., Emmerson, C. and Simpson, H. (eds) (2001), *The IFS Green Budget: January 2001*, Commentary no. 83, London: IFS.
- Disney, R. and Johnson, P. (eds) (2001), *Pension Systems and Retirement Incomes across OECD Countries*, Cheltenham: Edward Elgar.
- Hammond, P. and Myles, G. (eds) (2000), *Incentives, Organization and Public Economics: Papers in Honour of James Mirrlees*, Oxford: Oxford University Press.
- Harmon, C., Walker, I. and Westergaard-Nielsen, N. (eds) (2001), *The Returns to Education across Europe*, Cheltenham: Edward Elgar.
- Howard, M. and Walker, R. (2000), *The Making of a Welfare Class? Benefit Receipt in Britain*, Bristol: Policy Press.
- Karen, K., Walker, R., Ashworth, K. and Howard, M. (2001), *Staying in Work: Thinking about a New Policy Agenda*, Sheffield: Department for Education and Employment.
- Loumidis, J., Stafford, B., Youngs, R., Green, A., Arthur, S., Legard, R., Lessof, C., Lewis, J., Walker, R., Corden, A., Thornton, P. and Sainsbury, R. (2001), *Evaluation of the New Deal for Disabled People Personal Adviser Pilot*, Research Report no. 144, London: Department of Social Security.
- Miles, D. (2001), *Macroeconomics: Understanding the Wealth of Nations*, John Wiley.
- Walker, R. and Kellard, K. (2001), *Staying in Work: Policy Overview*, Sheffield: Department for Education and Employment.

2. CHAPTERS

- Ashworth, K., Hill, M. and Walker, R. (2001), 'A new approach to poverty dynamics', in D. Rose (ed.), *Researching Social and Economic Change*, London: Routledge.
- Attanasio, O. and Rios-Rull, V. (2001), 'Consumption smoothing and extended families: the role of government sponsored insurance', in N. Lustig (ed.), *Shielding the Poor: Social Protection in the Developing World*, Inter-American Development Bank, forthcoming.
- Attanasio, O. and Szekely, M. (2000), 'Household saving in East Asia and Latin America: inequality, demographics and all that', in B. Pleskovic and N. Stern (eds), *Annual World Bank Conference on Development Economics*, Washington, DC: World Bank.
- Banks, J. and Tanner, S. (2001), 'Household portfolios in the UK', in L. Guiso, M. Halliasos and T. Jappelli (eds), *Household Portfolios*, Chicago: MIT Press, forthcoming.
- Blundell, R. (2001), 'Endogeneity in Nonparametric and Semiparametric Regression Models', cemmap Discussion Paper, in Hansen, L. (ed), *Advances in Econometrics*, North Holland, forthcoming.

- Blundell, R., Meghir, C. and S. Smith, S. (2001), 'Pension Incentives and Retirement in the UK', forthcoming in D. Wise and J. Gruber (eds), *Pension Incentives and Social Security around the World*, NBER, University of Chicago Press.
- Chevalier, A. and Walker, I. (2001), 'Returns to education in the UK', in C. Harmon, I. Walker and N. Westergaard-Nielsen (eds), *The Returns to Education across Europe*, Cheltenham: Edward Elgar.
- Disney, R., Emmerson, C. and Smith, S. (2001), 'Pension reform and economic performance in Britain in the 1980s and 1990s', in R. Blundell, D. Card and R. Freeman (eds), *Seeking a Premier League Economy*, Chicago: University of Chicago Press, forthcoming.
- Emmerson, C. and Johnson, P. (2001), 'Pension provision in the United Kingdom', in R. Disney and P. Johnson, *Pension Systems and Retirement Incomes across OECD Countries*, Cheltenham: Edward Elgar.
- Hammond, P. and Myles, G. (2000), 'Introduction', in P.J. Hammond and G.D. Myles (eds), *Incentives, Organization and Public Economics: Papers in Honour of James Mirrlees*, Oxford: Oxford University Press.
- Harmon, C., Walker, I. and Westergaard-Nielsen, N. (2001), 'Introduction', in C. Harmon, I. Walker and N. Westergaard-Nielsen (eds), *The Returns to Education across Europe*, Cheltenham: Edward Elgar.
- Itaya, J.-I., de Meza, D. and Myles, G. (2000), 'Who should provide public goods?', in P.J. Hammond and G.D. Myles (eds), *Incentives, Organization and Public Economics: Papers in Honour of James Mirrlees*, Oxford: Oxford University Press.
- Trickey, H. and Walker, R. (2001), 'Steps to compulsion within British labour market policies', in I. Lødemel and H. Trickey (eds), *An Offer You Can't Refuse: Workfare in an International Perspective*, Bristol: Policy Press.
- Walker, R. (2000), 'Welfare policy: tendering for evidence', in H. Davies, S. Nutley and P. Smith (eds), *Evidence and Public Policy*, Bristol: Policy Press.
- Walker, R., Goodwin, D. and Cornwell, E. (2000), 'Work patterns in Europe and related social security issues: coping with the myth of flexibility', in D. Pieters (ed.), *Yearbook of the European Institute of Social Security, 2000*, London: Kluwer Law International.

3. REFEREED JOURNAL PAPERS

- Attanasio, O. (2000), 'Consumer durables and inertial behavior: estimation and aggregation of (S,s) rules for automobile purchases', *Review of Economic Studies*, vol. 67, pp. 667–96.
- Attanasio, O., Banks, J. and Tanner, S. (2001), 'Consumption volatility and asset holding', *Journal of Political Economy*, forthcoming.
- Attanasio, O., Berloff, G., Blundell, R. and Preston, I. (2001), 'From Earnings Inequality to Consumption Inequality', forthcoming *Economic Journal*, 112, March.
- Attanasio, O. and Hoynes, H. (2000), 'Differential mortality and wealth accumulation', *Journal of Human Resources*, vol. 35, pp. 1–29.
- Attanasio, O. and Jappelli, T. (2001), 'Intertemporal choice and the cross-sectional variance of marginal utility', *Review of Economics and Statistics*, vol. 83, pp. 13–27.
- Attanasio, O. and Rios-Rull, V. (2000), 'Consumption smoothing in island economies: can public insurance reduce welfare?', *European Economic Review*, vol. 44, pp. 1225–58.
- Banks, J., Blundell, R. and Brugiavini, A. (2001), 'Risk pooling, precautionary saving and consumption growth', *Review of Economic Studies*, forthcoming October.

- Banks, J., Disney, R. and Smith, Z. (2000), 'What can we learn about pension reform from Generational Accounts for the UK?', *Economic Journal Features*, vol. 110, pp. F575–97.
- Banks, J. and Emmerson, C. (2000), 'Public and private pension spending: principles, practice and the need for reform', *Fiscal Studies*, vol. 21, pp. 1–63.
- Banks, J. and Rohwedder, S. (2001), 'Lifetime saving patterns and pension arrangements in the UK', *Ricerche Economiche*, Special Issue on international comparisons of household saving behaviour, vol. 55, pp. 83–107.
- Besley, T. and Burgess, R. (2001), 'Political agency, government responsiveness and the role of the media', *European Economic Review*, vol. 45, pp. 629–40.
- Besley, T. and Case, A. (2000), 'Unnatural experiments? Estimating the incidence of endogenous policies', *Economic Journal*, vol. 110, pp. 672–787.
- Bingley, P. and Walker, I. (2001), 'Household unemployment and the labour supply of married women', *Economica*, vol. 68, pp. 157–85.
- Bingley, P. and Walker, I. (2001), 'Housing subsidies and work incentives', *Economic Journal*, vol. 111, pp. c86–103.
- Bloom, N. and Griffith, R. (2001), 'The internationalisation of UK R&D', *Fiscal Studies*, vol. 22, pp. 337–55.
- Bloom, N., Griffith, R. and Van Reenen, J. (2001), 'Do R&D tax credits work? Evidence from an international panel of countries 1979–97', *Journal of Public Economics*, forthcoming.
- Blow, L. and Crawford, I. (2001), 'The cost of living with the RPI: substitution bias in the UK retail prices index', *Economic Journal*, vol. 111, pp. F357–82.
- Blundell, R. and Costa Dias, M. (2000), 'Evaluation methods for non-experimental data', *Fiscal Studies*, vol. 21, pp. 427–68.
- Blundell, R. (2001), 'Welfare reform for low income workers', *Oxford Economic Papers*, Vol.53, No.2, 189-214.
- Blundell, R. (2001), 'James Heckman's Contributions to Economics and Econometrics', *The Scandinavian Journal of Economics*, 103(2), 191-203.
- Blundell, R., Duncan, A., McCrae, J. and Meghir, C. (2000), 'The labour market impact of the Working Families' Tax credit', *Fiscal Studies*, vol. 21, pp. 75-104.
- Blundell, R. and Hoynes, H. (2000), 'Has In-Work Benefit Reform helped the Labour Market?', NBER Working Paper 8546, <http://papers.nber.org/papers/W8546>.
- Blundell, R., Meghir, C. and Smith, S. (2001), 'Pension Incentives and the Pattern of Early Retirement', forthcoming *Economic Journal*, 112, March.
- Blundell, R., Griffith, R. and Windmeijer, F. (2001), 'Individual effects and dynamics for count data models', *Journal of Econometrics*, forthcoming.
- Bond, S., Bowsher, C. and Windmeijer, F. (2001), 'Criterion-based inference for GMM in autoregressive panel data models', *Economics Letters*, vol. 73, pp. 379–88.
- Bond, S. and Devereux, M. (2001), 'Generalised R-based and S-based taxes under uncertainty', *Journal of Public Economics*, forthcoming.
- Bond, S., Elston, J., Mairesse, J. and Mulkay, B. (2001), 'Investment and financial factors in Belgium, France, Germany and the UK: a comparison using company panel data', *Review of Economics and Statistics*, forthcoming.
- Brewer, M. (2001), 'Comparing in-work benefits and the reward to work for families with children in the US and the UK', *Fiscal Studies*, vol. 22, pp. 41–77.
- Browning, M. (2000), 'The saving behaviour of a two person household', *Scandinavian Journal of Economics*, vol. 102, pp. 235–51.
- Browning, M. and Collado, D. (2001), 'The response of expenditures to anticipated income changes: panel data estimates', *American Economic Review*, vol. 91, pp. 681–92.
- Browning, M. and Crossley, T. (2000), 'Luxuries are easier to postpone: a proof', *Journal of Political Economy*, vol. 108, pp. 1022–6.

- Browning, M. and Crossley, T. (2001), 'The life-cycle model of consumption and saving', *Journal of Economic Perspectives*, vol. 15, no. 3, pp. 3–22.
- Browning, M. and Crossley, T. (2001), 'Unemployment insurance levels and consumption changes', *Journal of Public Economics*, vol. 80, pp. 1–23.
- Bulkley, I. and Myles, G. (2001), 'Individually rational union membership', *European Journal of Political Economy*, vol. 17, pp. 117–37.
- Bulkley, I., Myles, G. and Pearson, B. (2001), 'On the membership of decision-making committees', *Public Choice*, vol. 106, pp. 1–22.
- Dearden, L., Ferri, J. and Meghir, C. (2001), 'The effect of school quality on educational attainment and wages', *Review of Economics and Statistics*, forthcoming.
- Dearden, L., McIntosh, S., Myck, M. and Vignoles, A. (2001), 'The returns to academic and vocational qualifications in Britain', *Bulletin of Economic Research*, forthcoming.
- Disney, R., Emmerson, C. and Wakefield, M. (2001), 'Pension reform and saving in Britain', *Oxford Review of Economic Policy*, vol. 17, no. 1, pp. 70–94.
- Gosling, A., Machin, S. and Heghir, C. (2000), 'The Changing Distribution of Male wages in the UK, 1966-1992', IFS Working Paper 94/13, *Review of Economic Studies*, October 2000
- Griffith, R., Redding, S. and Van Reenen, J. (2001), 'Measuring the cost-effectiveness of an R&D tax credit for the UK', *Fiscal Studies*, vol. 22, pp. 375–99.
- Meghir, C. (2000), The effects of School Quality on Educational Attainment and Wages (with L. Dearden and J. Ferri), IFS Discussion Paper W00/22 forthcoming *Review of Economics and Statistics*
- Myles, G. (2000), 'Wasteful government, tax evasion, and the provision of public goods', *European Journal of Political Economy*, vol. 16, pp. 51–74.
- Myles, G. (2001), 'Economic mismeasurement and the bias in policy choice', *Journal of Public Economic Theory*, vol. 3, pp. 139–66.
- Myles, G. (2001), 'Taxation and international oligopoly', *Economics Bulletin*, vol. 8, pp. 1–9.
- Myles, G. (2001), 'Consumer and trade prices in general equilibrium with imperfect competition', *Business and Economic Letters*, forthcoming.
- Myles, G. and Uyduranoglu, A. (2001), 'Product quality and environmental taxation', *Journal of Transport Economics and Policy*, forthcoming.
- Perroni, C. and Scharf, K. (2001), 'Tiebout with politics: capital tax competition and constitutional choices', *Review of Economic Studies*, vol. 68, pp. 133–54.
- Raimondos-Mueller, P. and Scharf, K. (2001), 'Optimal design of transfer pricing rules: a non-cooperative approach', *Oxford Economics Papers*, forthcoming.
- Santos Silva, J.M.C. and Windmeijer, F. (2001), 'Two-part multiple spell models for health care demand', *Journal of Econometrics*, vol. 104, pp. 67–89.
- Scharf, K. (2000), 'Why are tax expenditures for giving embodied in fiscal constitutions?', *Journal of Public Economics*, vol. 75, pp. 365–87.
- Scharf, K. (2001), 'Can international capital tax evasion explain the foreign tax credit puzzle?', *Canadian Journal of Economics*, vol. 34, pp. 465–80.
- Sianesi, B. (2001), 'Swedish active labour market programmes in the 1990s: overall effectiveness and differential performance', *Swedish Economic Policy Review*, forthcoming.
- Van Reenen, J. (2001), 'The new economy: reality and policy', *Fiscal Studies*, vol. 22, pp. 307–36.
- Walker, R. (2000), 'Learning if policy will work: the case of New Deal for Disabled People', *Policy Studies*, vol. 21, pp. 313–45.
- Walker, R. (2001), 'Can work work? A preliminary assessment of the "welfare to work" strategy', *Zeitschrift für Sozialreform*, vol. 47, pp. 437–63.
- Walker, R. (2001), 'Great expectations: can social science evaluate New Labour's policies?', *Evaluation*, vol. 7, pp. 305–30.

4. NON-REFEREED JOURNAL PAPERS

- Attanasio, O. and Banks, J. (2001), 'The assessment: household saving — issues in theory and policy', *Oxford Review of Economic Policy*, vol. 17, no. 1, pp. 1–19.
- Banks, J. and Tanner, S. (2000), 'Housing wealth and saving in the UK', *Housing Statistics*, February.
- Emmerson, C., Frayne, C. and Goodman, A. (2001), 'Should private medical insurance be subsidised?', *Health Care UK*, Spring, pp. 49–65 (King's Fund, London).
- Walker, R. (2001), 'Telling it as it is', *SPA News*.

5. OTHER PUBLICATIONS

- Banks, J., Blundell, R. and Smith, J.P. (2000), 'Wealth inequality in the US and Great Britain', IFS, Working Paper no. W00/20.
- Besley, T. and Burgess, R. (2001), 'Political economy of government responsiveness: theory & evidence from India', CEPR, Discussion Paper no. 2721.
- Besley, T. and Coate, S. (2001), 'Issue unbundling via citizens' initiatives', CEPR, Discussion Paper no. 2857.
- Bloom, N. and Bond, S. (2001), *UK Investment: High, Low, Rising, Falling?*, IFS Briefing Note no. 18 (www.ifs.org.uk/corpact/bn18.pdf).
- Bloom, N., Bond, S. and Van Reenen, J. (2001), 'The dynamics of investment under uncertainty', IFS, Working Paper no. W01/05.
- Bloom, N., Emmerson, C. and Frayne, C. (2001), *The Main Parties' Tax and Spending Proposals*, IFS Election Briefing Note no. 10 (www.ifs.org.uk/election/ebn10.pdf).
- Bloom, N., Griffith, R. and Klemm, A. (2001), *Issues in the Design and Implementation of an R&D Tax Credit for UK Firms*, IFS Briefing Note no. 15 (www.ifs.org.uk/innovation/bn15.pdf).
- Bloom, N. and Van Reenen, J. (2000), 'Patents, productivity and market value in a panel of British firms', IFS, Working Paper no. W00/21. Forthcoming in *Economic Journal*.
- Blundell, R., Chiappori, P-A., Magnac, T. and Meghir, C. (2001), 'Collective labor supply: heterogeneity and nonparticipation', IFS, Working Paper no. W01/19.
- Blundell, R., Costa Dias, M., Meghir, C. and Van Reenen, J. (2001), 'Evaluating the employment impact of a mandatory job search assistance program', IFS, Working Paper no. W01/20.
- Blundell, R., Dearden, L and Sianesi, B. (2001), 'Estimating the returns to education: models, methods and results', Centre for the Economics of Education, Discussion Paper no. 16.
- Blundell, R. and Powell, J.L. (2001), 'Endogeneity in semiparametric binary response models', CeMMAP, Working Paper no. CWP05/01.
- Blundell, R. and Hoynes, H. (2001), 'Has In-Work Benefit Reform helped the Labour Market?' NBER Working Paper 8546 (<http://papers.nber.org/papers/W8546>).
- Bond, S. (2001), 'UK investment and the capital market', *Economic Growth and Government Policy*, HM Treasury (www.hm-treasury.gov.uk/mediastore/otherfiles/260.pdf).
- Bond, S., Bowsher, C. and Windmeijer, F. (2001), 'Criterion-based inference for GMM in autoregressive panel-data models', IFS, Working Paper no. W01/02. Published in *Economics Letters*.
- Bond, S. and Cummins, J. (2001), 'Noisy share prices and the Q model of investment', IFS, Working Paper no. W01/22.
- Bond, S., Hoeffler, A. and Temple, J. (2001), 'GMM estimation of empirical growth models', Nuffield College, Working Paper no. 2001-W21.
- Bond, S., Klemm, A. and Simpson, H. (2001), *Labour and Business Taxes*, IFS Election Briefing Note no. 6 (www.ifs.org.uk/election/ebn6.pdf).

- Brewer, M. (2001), *The Structure of Welfare*, IFS Election Briefing Note no. 11 (www.ifs.org.uk/election/ebn11.pdf).
- Brewer, M. and Gregg, P. (2001), 'Eradicating child poverty in Britain: welfare reform and children since 1997', IFS, Working Paper no. W01/08.
- Brewer, M., Clark, T. and Wakefield, M. (2001), *Labour's Proposals*, IFS Election Briefing Note no. 9 (www.ifs.org.uk/election/ebn9.pdf).
- Clark, T. (2001), *Recent Pensions Policy and the Pension Credit*, IFS Briefing Note no. 17 (www.ifs.org.uk/pensions/bn17.pdf).
- Clark, T. and Goodman, A. (2001), *Living Standards under Labour*, IFS Election Briefing Note no. 4 (www.ifs.org.uk/election/ebn4.pdf).
- Clark, T. and McCrae, J. (2001), 'Issues arising in tax and benefit modelling: the case of family credit', IFS, Working Paper no. W01/17.
- Clark, T., Myck, M. and Smith, Z. (2001), *Fiscal Reforms Affecting Households, 1997–2001*, IFS Election Briefing Note no. 5 (www.ifs.org.uk/election/ebn5.pdf).
- Clark, T. and Reed, H. (2001), *The Conservatives' Proposals*, IFS Election Briefing Note no. 7 (www.ifs.org.uk/election/ebn7.pdf).
- Crawford, I. (2000), *The Distributional Effects of the Proposed London Congestion Charging Scheme*, IFS Briefing Note no. 11 (www.ifs.org.uk/consume/gla.pdf).
- Dearden, L., Ferri, J. and Meghir, C. (2000), 'The effect of school quality on educational attainment and wages', IFS, Working Paper no. W00/22.
- Dustmann, C. and Meghir, C. (2001), 'Wages, experience and seniority', IFS, Working Paper no. W01/01.
- Emmerson, C. (2001), *Should We Let People Opt Out of the Basic State Pension?*, IFS Election Briefing Note no. 12 (www.ifs.org.uk/election/ebn12.pdf).
- Emmerson, C. (2001), *Public Spending: What Are the Options beyond March 2004?*, IFS Election Briefing Note no. 13 (www.ifs.org.uk/election/ebn13.pdf).
- Emmerson, C. and Frayne, C. (2001), *The Government's Fiscal Rules*, IFS Briefing Note no. 16 (www.ifs.org.uk/public/bn16.pdf).
- Emmerson, C. and Frayne, C. (2001), *Overall Tax and Spending*, IFS Election Briefing Note no. 2 (www.ifs.org.uk/election/ebn2.pdf).
- Emmerson, C. and Frayne, C. (2001), *Spending on Public Services*, IFS Election Briefing Note no. 3 (www.ifs.org.uk/election/ebn3.pdf).
- Emmerson, C. and Leicester, A. (2000), *A Survey of the UK Benefit System*, IFS Briefing Note no. 13 (www.ifs.org.uk/taxsystem/benefitsurvey.pdf).
- Emmerson, C., Myck, M. and Wakefield, M. (2001), *The Liberal Democrat Proposals*, IFS Election Briefing Note no. 8 (www.ifs.org.uk/election/ebn8.pdf).
- Griffith, R. (2000), *How Important Is Business R&D for Economic Growth and Should the Government Subsidise It?*, IFS Briefing Note no. 12 (www.ifs.org.uk/innovation/randdcredit.pdf).
- Griffith, R. (2001), 'Product market competition, efficiency and agency costs: an empirical analysis', IFS, Working Paper no. W01/12.
- Griffith, R., Redding, S. and Van Reenen, J. (2001a), 'Mapping the two faces of R&D: productivity growth in a panel of OECD manufacturing industries', Centre of Economic Policy Research, Discussion Paper no. 2457.
- Griffith, R. and Simpson, H. (2001) 'Characteristics of foreign-owned firms in British manufacturing', IFS, Working Paper no. W01/10. Forthcoming in R. Blundell, D. Card and R. Freeman (eds), *Seeking a Premier League Economy*, Chicago: University of Chicago Press.
- Meghir, C. and Palme, M. (2001), 'The effect of a social experiment in education', IFS, Working Paper no. W01/11.
- Meghir, C. and Pistaferri, L. (2001), 'Income variance dynamics and heterogeneity', IFS, Working Paper no. W01/07.

- Miles, D. and Cerny, A. (2001), 'Risk, return and portfolio allocation under alternative pension systems with imperfect financial markets', CEPR, Discussion Paper no. 2779.
- Myck, M. (2000), *Fiscal Reforms Since May 1997*, IFS Briefing Note no. 14 (www.ifs.org.uk/taxben/fiscalreform.pdf).
- Paiella, M. (2001), 'Limited financial market participation: a transaction cost-based explanation', IFS, Working Paper no. W01/06.
- Rosati, N. (2001), 'A measurement error approach to the study of poverty', IFS, Working Paper no. W01/13.
- Sianesi, B. (2001), 'An evaluation of the Swedish active labour market programmes', IFAU, Working Paper no. 2001:5.
- Sianesi, B. and Van Reenen, J. (2000), 'The returns to education: a review of the macro-economic literature', CEE, Discussion Paper no. 6.
- Smith, Z. (2000), *Vehicle Excise Duty Discounts in Rural Areas*, IFS Briefing Note no. 10 (www.ifs.org.uk/consume/ved.pdf).
- Walker, I. (2000), 'The operation of the National Lottery', Memorandum and Oral Evidence to the Culture Media and Sport Committee, HC 56-II, November.
- Walker, R. and Wiseman, M. (2001), 'Britain's New Deal and the next round of U.S. welfare reform', University of Wisconsin-Madison, Institute for Poverty Research, Discussion Paper no. 1223-01.
- Windmeijer, F. (2000), 'A finite sample correction for the variance of linear two-step GMM estimators', IFS, Working Paper no. W00/19.

6. DATA-SETS

- Besley, T., Labour Regulation in India.
- Besley, T., Cross State Data Set on US Political Institutions.
- Crawford, I. and Smith, Z., compilation of FES/RPI expenditure data, 1974 to 1997/98.
- Goodman, A., National Child Development Survey.

7. SOFTWARE

- Windmeijer, F., LFMEXP, a programme written in Gauss for the estimation of dynamic count panel data models with multiplicative fixed effects.

8. EDITORSHIPS

- Attanasio, O., Editor, *Oxford Review of Economic Policy*, Special Issue on household saving, Spring 2001.
- Attanasio, O., Managing Editor, *Review of Economic Studies*.
- Banks, J., Editor, *Oxford Review of Economic Policy*, Special Issue on household saving, Spring 2001.
- Banks, J., Associate Editor, *Research in Economics*.
- Besley, T., Co-Editor, *American Economic Review*.
- Blundell, R., Co-Editor, *Econometrica*.
- Blundell, R. Editorial Board, *Fiscal Studies*.
- Bond, S., Editorial Board, *Fiscal Studies*.
- Bond, S., Associate Editor, *Economica*.

Browning, M., Board of Editors, *Journal of Economic Literature*.
 Browning, M., Associate Editor, *Econometrica*.
 Brugiavini, A., Editorial Board, *Fiscal Studies*.
 Crawford, I., Managing Editor, *Fiscal Studies*.
 Disney, R., Editorial Board, *Fiscal Studies*.
 Meghir, C., Editor of the *Economic Journal*.
 Meghir, C., Editor of *Econometrica*.
 Miles, D., Managing Editor, *Fiscal Studies*.
 Myles, G., Managing Editor, *Fiscal Studies*.
 Myles, G., Production Editor and Editorial Board, *Review of Economic Studies*.
 Myles, G., Associate Editor, *Journal of Public Economic Theory*.
 Preston, I., Managing Editor, *Fiscal Studies*.
 Scharf, K., Editorial Board, *Fiscal Studies*.
 Scharf, K., Associate Editor, 2001 RES Conference Issue, *Economic Journal*.
 Walker, I., Editorial Board, *Fiscal Studies*.
 Weber, G., Editorial Board, *Fiscal Studies*.

9. PRIZES AND HONOURS

Blundell, R. Elected Member of Executive Committee of the Econometric Society.
 Blundell, R. Elected Honorary Member of the American Economic Association.
 Blundell, R. Elected Vice-President, European Economics Association.
 Redding, S., awarded Philip Leverhulme Prize Fellowship, 2001–03.

10. SUMMARY OF PUBLICATIONS AND DISSEMINATION, 2000–2001

GROUP A:

PUBLICATIONS AND DISSEMINATION

1. Books and monographs	13
2. Chapters	15
3. Refereed journal papers	56
4. Non-refereed journal papers	4
5. Other publications	53
6. Data-sets	4
7. Software	1
8. Editorships	25
9. Prizes and honours	4

GROUP B: EXTERNAL RELATIONSHIPS

1. MEMBERSHIP OF COMMITTEES

Attanasio, O., Elected Member, Council of the European Economic Associations
Banks, J., Chair, Working Group on 'Economic and Socio-Economic Issues in Ageing',
UNECE International Expert Conference on Ageing, Burgos, September 2001 in
preparation for 2002 Ministerial Conference on Ageing
Besley, T., Chair, Task Force on Decentralisation organised by Initiative for Policy Dialogue
Besley, T., Council Member, European Economics Association
Besley, T., Council Member, Royal Economic Society
Besley, T., Member, Clare Group of Economists
Blundell, R. Member: National Academy of Science Panel, Research Agenda for an Aging
World.
Blundell, R. Member: Research Committee, European University Institute, Florence
Blundell, R. Member: ESRC National Longitudinal Strategy Committee.
Blundell, R. Member: British Academy, Research Committee.
Blundell, R. NIESR, Governing Board.
Blundell, R. Econometric Society Council, Executive Committee.
Blundell, R. Council Member, European Economics Association.
Blundell, R. Frisch Prize Committee, Econometric Society.
Bond, S., Member, ESRC Politics, Economics and Geography Research College.
Dearden, L., Steering Group on Neighbourhood Disadvantage and Childcare, Joseph
Rowntree Foundation
Dearden, L., Reality Group on Workforce Development, Policy and Innovation Unit, Cabinet
Office
Dearden, L., Skills and Training Assessment Review Group, Department for Education and
Skills
Scharf, K., Conference Committee, Royal Economics Society (2000–03)
Walker, R., Member, Advisory Committee, Research Centre on Micro-Social Change,
Institute for Social and Economic Research, Essex University
Walker, R., Member, Informal Group on Welfare to Work, Prime Minister's Policy Unit
Walker, R., Member, Low Income Group, States of Jersey
Walker, R., Member, Research Recommending Group, Department for Education and
Employment

2. MEMBERSHIP OF NETWORKS

Attanasio, O., Coordinator, RTN New Approaches to the Study of Economic Fluctuations,
University College London
Banks, J., Member, EU Fifth Framework Network to Design the Survey of Health and
Retirement in Europe; coordinated by Axel Boersch-Supan (Mannheim)
Banks, J., Member, EU TMR Network in Savings, Pensions and Retirement; coordinated by
Arie Kapteyn (Tilburg, RAND)
Besley, T., Fellow, European Development Network
Blundell, R., Member, RTN New Approaches to the Study of Economic Fluctuations,
University College London
Blundell, R., Member, RTN Productivity and Innovation Network, University College
London
Blundell, R., Member, EU Fifth Framework Network to Design the Survey of Health and
Retirement in Europe; coordinated by Axel Boersch-Supan (Mannheim)

Blundell, R., Member, EU TMR Network in Savings, Pensions and Retirement; coordinated by Arie Kapteyn (Tilburg, RAND)
 Griffith, R. Member, RTN Productivity and Innovation Network, University College London
 Redding, S., EU TMR Network on Economic Geography, CEPR
 Redding, S., Research Affiliate, CEPR International Trade Programme
 Scharf, K., Research Affiliate, CEPR
 Scharf, K., Research Affiliate, International Center for Tax Studies (ITCS), Toronto
 Scharf, K., Research Fellow, CESifo, Munich
 Walker, I., Principal Investigator on ESRC's Evidence-Based Policy Network 'node' at IFS
 Windmeijer, F., Member, Technological Change in Health Care (TECH) Research Network
 Windmeijer, F., Research Fellow, IZA, Bonn

3./4. OVERSEAS VISITORS AND FELLOWS

Joshua Angrist (MIT)	Marten Palme (Stockholm School of Economics)
Martin Browning (University of Copenhagen)	Krishna Pendakur (Simon Fraser University)
David Card (Berkeley)	Isabelle Perrigne (Univ. of Southern California)
Bronwyn Hall (Berkeley)	James Poterba (MIT)
Dietmar Harhoff (ZEW, Mannheim)	Jean-Marc Robin (CREST, INRA, Paris)
Mike Hurd (RAND)	James Smith (RAND)
Michael Keen (IMF)	Quang Vuong (Univ. of Southern California)
Tor Jakob Klette (Oslo)	Guglielmo Weber (Padua)
Arthur Lewbel (Boston College)	Robert Willis (Michigan)
Thierry Magnac (CREST, INRA, Paris)	Michael Wiseman (Urban Institute)
Jason Cummins (NYU)	Ulf Von Kalkreuth (Deutsche Bundesbank)
Daniel McFadden (Berkeley)	

5. SUBSTANTIVE ADVICE AND CONSULTANCY

Banks, J. and Wakefield, M., 'Share ownership in the UK', in *Stockholding: A European Comparison*, l'Observatoire de l'Épargne Européenne (OEE), Paris
 Blundell, R. National Academy of Science Panel, Research Agenda for an Aging World.
 Blundell, R. Member: ESRC National Longitudinal Strategy.
 Walker, I., HMT Evidence-Based Policy Fund funded 'Whitehall Summer Placement' at Department for Work and Pensions
 Walker, R., Adviser, comprehensive social policy strategy, States of Jersey
 Walker, R., Adviser, evaluation strategy, UK Department of Transport, Local Government and the Regions (formerly Department of the Environment, Transport and the Regions)

6. CONFERENCE PAPERS

Banks, J., 'The English Longitudinal Study of Ageing', presented at: EU TMR meeting, Venice, February 2001; Health and Retirement Survey (HRS) Steering Group, Ann Arbor, June 2001; Survey of Health and Retirement in Europe conference, Evian, August 2001; London School of Hygiene and Tropical Medicine / Nuffield conference on Ageing, London, September 2001.

- Banks, J., Blundell, R. and Smith, J.P., 'Wealth inequality in the US and Great Britain', presented at Institute for Social Research (ISR) conference on Cross-National Comparative Research Using Panel Surveys, Ann Arbor, October 2000.
- Banks, J., Blundell, R. and Smith, J.P., 'Assets at retirement in the US and UK', invited paper for NBER conference on the Economics of Aging, Carefree, Arizona, May 2001. Forthcoming in D. Wise (ed.), conference volume, Chicago: University of Chicago Press.
- Banks, J., Blundell, R. and Smith, J.P., 'Household portfolios in the US and UK', presented at BHPS conference, Colchester, June 2001.
- Banks, J. and Brewer, M., 'Understanding the generosity of government financial support to families with children', presented at International Social Security conference, Sigtuna, Sweden, June 2001. Forthcoming in J. Bradshaw et al. (eds), *International Studies on Social Security*, Volume 8, Aldershot and London: Ashgate.
- Besley, T., 'From micro to macro: public policies and aggregate economic performance', Economic Growth & Government Policy papers, presented at an HM Treasury Seminar, 11 Downing St, October 2000.
- Besley, T., 'Citizens' initiative', Economics Departmental Seminar Series, University College London, January 2001.
- Besley, T., 'Government responsiveness in India', presented at Polarisation and Conflict, Barcelona, January 2001.
- Besley, T., Griffith, R. and Klemm, A., 'Empirical evidence on fiscal interdependence in OECD countries', presented at the World Tax Competition conference co-sponsored by the Office of Tax Policy Research and IFS, May 2001.
- Bloom, N., Bond, S. and Van Reenen, J., 'The dynamics of investment under uncertainty', NBER Summer Institute, July 2001.
- Blundell, R., 'Nonparametric Engel Curves and Revealed Preferences', (with Martin Browning and Ian Crawford), Invited Lecture, Econometric Society Far East Meetings, Kobe, July 2001.
- Blundell, R., 'Semiparametric Engel Curves with Endogenous Expenditure', with Chunrong Ai and Xiaohong Chen, Econometric Society European Meeting, Lausanne, August 2001.
- Blundell, R., Dearden, L. and Sianesi, B., 'Estimating the returns to education: models, methods and results', invited presentation RSS Section A meeting, May 2001.
- Bond, S., 'What goes up? 'Bubbles' Vs. Fundamentals in the Recent Behaviour of Stock Markets', invited address, Norwegian Research Council conference, Oslo, March 2001.
- Bond, S. and Cummins, J., 'Noisy share prices and the Q model of investment', Econometric Society European Meeting, Lausanne, August 2001.
- Browning, M., invited address, Young Economists Meeting, Copenhagen, January 2001.
- Browning, M., invited address, Arne Ryde Symposium, Lund University, August 2001.
- Browning, M., invited address, European Econometric Society Summer Meetings, Lausanne, August 2001.
- Dearden, L., Goodman, A. and Fiorini, M. (2001), 'Inequality and the changing returns to education and ability: evidence from the BCS70 and NCDS cohort', presented at the NIESR conference at the British Academy on Education and Inequality, 28 September.
- Devereux, M., Griffith, R. and Klemm, A., 'Have taxes on mobile capital declined?', presented at the World Tax Competition conference co-sponsored by the Office of Tax Policy Research and IFS, May 2001.
- Devereux, M., Griffith, R. and Simpson, H., 'The geography of firm formation', presented at: Royal Economics Society conference, Durham, April 2001; European Economic Association 2001 Congress, Lausanne, August 2001.
- Disney, R. and Emmerson, C., 'Labour mobility and the choice of private pension plans in the UK' (http://cerp.unito.it/english/Agenda/Program_events/conferenza_2001.htm),

- presented at: conference on Pensions and Labour Markets, Institute for the Study of Labor, Berlin, May 2001; conference on Pension Policy Harmonization in an Integrating Europe, Centre for Research on Pensions and Welfare Policy, Turin, June 2001.
- Emmerson, C. 'Can Budget 2001 cut taxes?', presented at Hansard Society's Coming Year in Parliament conference, December 2000.
- Emmerson, C. 'Public spending in the coming parliament', presented at Hansard Society's Post Election Planning conference, May 2001.
- Emmerson, C. and Frayne, C. 'Options for Budget 2001', presentation given to BBC journalists, White City, 27 February 2001 and Millbank, 28 February 2001.
- Frayne, C., 'The economic year ahead', presentation given to the Hansard Society's Coming Year in Parliament Conference, July 2001.
- Griffith, R., Redding, S. and Van Reenen, J., 'Mapping the two faces of R&D: productivity growth in a panel of OECD industries', presented at: American Economic Association Meetings, New Orleans, January 2001; Dynamics, Economic Growth, and International Trade (DEGIT), Vienna, June 2001.
- Horstmann, I. and Scharf, K., 'The new federalism: distributional conflict, voluntarism and segregation', presented at Alabama, Stanford, Toronto, Western Ontario, Queens, UBC, Simon Fraser, Colorado, Copenhagen, IFS, Bristol, Exeter, Birmingham, Maynooth, 2000 Econometric Society Meetings in Boston (invited).
- Horstmann, I., Scharf, K. and Slivinski, A., 'Voluntarism and segregation', presented at the 2001 Econometric Society Meetings in New Orleans (invited), Munich, Lausanne, Stockholm.
- Miles, D., 'Should monetary policy be different in a greyer world?', presented at Deutsche Bundesbank, May 2001.
- Miles, D., 'The influence of ageing on capital accumulation', presented at Kiel Week conference, June 2001.
- Myles, G., 'Tax and benefit competition', presented at Econometric Society, New Orleans, January 2001.
- Overman, H., Redding, S. and Venables, A., 'The geography of trade, production, and income: a survey of empirics', presented at Spring International Trade and Investment Meeting, NBER, Cambridge, Massachusetts, March 2001.
- Redding, S. and Venables, A., 'Economic geography and international inequality', presented at: conference on Empirical Investigations in International Trade, Boulder, Colorado, November 2000; CEP Stoke Rochford Conference, Stoke Rochford, May 2001; CEP RLAB conference, London, July 2001; European Economic Association conference, Lausanne, August 2001.
- Redoano, M. and Scharf, K. (2000), 'The political economy of policy centralisation: direct versus representative democracy', presented at Milan, IFS, Warwick.
- Simpson, H., 'Productivity growth: evidence from plants', presented to economists in the Northern Ireland civil service, Belfast, April 2001.
- Simpson, H., 'The geography of firm formation', presented at London School of Economics, CEP Friday Seminar Series, June 2001.
- Walker, I., 'Wages, work and education', American Economic Association conference, New Orleans, January 2001.
- Walker, R., invited paper, German Historical Institute seminar on Learning from Diversity in Federal Systems, Washington, DC, November 2000.
- Walker, R., 'Does the welfare state create a dependency culture?', presented at Rotherham Metropolitan Borough Council conference on Welfare Rights and Money Advice, Rotherham, March 2001.
- Walker, R., 'Sustainable employment: what can we say?', invited opening address to a joint Department for Education and Employment / Department of Social Security seminar

- on Lone Parents and Employment Sustainability, University of Loughborough, May 2001.
- Walker, R., 'The New Labour of research: lessons from 1997 to 2001', invited opening address, Government Social Research Conference, Newcastle, Northern Ireland, June 2001.
- Windmeijer, F., 'Cigarette taxes and smoking behaviour in the UK', presented at International Health Economics Association Third International Conference, York, July 2001.
- Windmeijer, F., 'Finite sample inference for GMM estimators in linear panel data models', Econometric Society European Meeting, Lausanne, August 2001.

7. MEDIA COVERAGE: NEWSPAPER ARTICLES

- Clark, T. and Dilnot, A., 'Q, Have taxes risen under Labour? A, Well, it depends who's asking', *Independent*, 10 May 2001.
- Dilnot, A. and Emmerson, C., 'Not much to play with come the main event', *Financial Times*, 9 November 2000.
- Goodman, A. and Reed, H., 'Widespread cuts in tax mean Chancellor offers something for everyone: losers are scarce', *Financial Times*, 8 March 2001.

8. MEDIA COVERAGE: RADIO AND TV

National Television

BBC1, 1 O'clock News	A. Dilnot	3.11.00, 5.12.00, 7.3.01, 10.5.01, 15.5.01, 16.5.01, 28.9.01
BBC1, 6 O'clock News	A. Dilnot	30.10.00, 8.11.00, 5.12.00, 11.5.01
BBC1 9 O'clock News	A. Dilnot	8.11.00, 5.12.00
BBC1, 10 O'clock News	A. Dilnot	10.5.01, 11.5.01, 15.5.01, 21.5.01, 22.5.01, 25.6.01
	C. Emmerson	30.5.01
	A. Goodman	5.6.01
BBC1, 11 O'clock News	A. Dilnot	11.5.01
BBC1, Around Westminster	A. Dilnot	5.11.00
BBC1, Breakfast News	T. Clark	21.2.01, 16.5.01
	A. Dilnot	22.10.00, 6.11.00, 6.12.00
	A. Goodman	27.6.01
BBC1, On the Record	A. Dilnot	26.11.00, 25.1.01
	C. Emmerson	25.2.01
BBC1, Panorama	A. Dilnot	3.6.01
BBC1, Vote 2001	A. Dilnot	8.6.01
BBC1, Watchdog	N. Bloom	19.2.01
BBC2, Budget Special	A. Dilnot	7.3.01
BBC2, Election Live	A. Dilnot	16.5.01
BBC2, Pre-Budget Report Special	A. Dilnot	8.11.00
BBC2, Westminster Live	A. Dilnot	6.3.01, 10.5.01
BBC2, Working Lunch	C. Emmerson	15.1.01
BBC News 24	M. Brewer	21.2.01

	T. Clark	10.5.01
	A. Dilnot	8.11.00
	C. Emmerson	5.2.01
BBC World	A. Dilnot	6.3.01
Bloomberg Television, Money Live	T. Clark	25.1.01
Bloomberg Television, News	T. Clark	8.6.01
	A. Dilnot	6.11.00, 31.1.01
Channel 4 News	T. Clark	21.2.01, 9.5.01
	A. Dilnot	2.10.00, 8.3.01, 14.5.01, 15.5.01, 1.6.01
Channel 4, Politics Isn't Working	A. Dilnot	2.6.01
Channel 4, Powerhouse	T. Clark	1.5.01
HTV, Ageing documentary	A. Dilnot	29.10.00
HTV, Punchbag	A. Dilnot	15.10.00
ITN, Budget Special	A. Dilnot	7.3.01
ITN, Lunchtime News	T. Clark	21.2.01
ITN, News at Ten	A. Dilnot	6.3.01
Reuters Television	A. Dilnot	23.5.01
	C. Emmerson	31.1.01
Simply Money Television	C. Emmerson	5.3.01
Sky Television, Money Programme	J. Freedman	23.4.01
Sky Television, News	T. Clark	21.5.01
	A. Dilnot	31.1.01, 16.5.01
	C. Emmerson	15.5.01, 23.5.01, 30.5.01
Regional Television		
BBC1, South of Westminster	A. Dilnot	27.5.01, 4.6.01
Television Outside the UK		
Al-Jazeera (UAE)	M. Myck	7.6.01
CNN, News	A. Dilnot	4.6.01
RTE (Eire) Primetime	T. Clark	31.5.01
YLE (Finland)	C. Emmerson	1.6.01
National Radio		
BBC Radio 1, Newsbeat	A. Dilnot	10.5.01
BBC Radio 4, Analysis	T. Besley	12.4.01
	A. Dilnot	23.11.00, 5.4.01, 4.8.01
BBC Radio 4, Budget Special	C. Emmerson	7.3.01
BBC Radio 4, PM	A. Dilnot	13.12.00, 11.5.01
	C. Emmerson	10.5.01, 17.5.01, 22.5.01
	C. Frayne	25.7.01
BBC Radio 4, Today	A. Dilnot	4.12.00, 23.1.01, 8.2.01, 19.2.01, 7.3.01, 10.5.01
BBC Radio 4, Westminster Hour	A. Dilnot	8.10.00, 4.3.01, 19.8.01
BBC Radio 4, World at One	A. Dilnot	5.12.00, 9.1.01, 5.2.01, 24.4.01, 29.5.01, 4.6.01
	C. Emmerson	6.4.01
BBC Radio 4, World Tonight	A. Dilnot	30.10.00, 16.2.01, 6.3.01, 7.3.01, 11.4.01, 18.4.01, 15.5.01
BBC Radio 4, World This Weekend	A. Dilnot	22.10.00, 4.2.01, 13.5.01, 28.9.01

BBC Radio 5, Drive Time	A. Dilnot	22.11.00, 5.2.01, 7.3.01
BBC Radio 5, Late Night Live	A. Dilnot	9.3.01, 21.5.01
BBC Radio 5 Live	A. Dilnot	31.10.00, 8.11.00, 9.1.01, 9.5.01, 16.5.01
	C. Emmerson	21.2.01
BBC Radio 5, News Extra	A. Dilnot	5.12.00
BBC World Service	A. Dilnot	23.1.01, 6.3.01, 7.3.01, 29.3.01, 7.5.01, 11.5.01, 8.6.01, 17.9.01
	C. Emmerson	21.2.01
Local Radio		
BBC Radio Scotland	T. Clark	16.5.01
	A. Dilnot	8.11.00
BBC Radio Wales	A. Dilnot	9.1.01, 11.5.01
	T. Clark	23.5.01
	C. Emmerson	15.2.01, 23.2.01, 10.5.01, 24.8.01
	C. Frayne	4.3.01
	Z. Smith	31.1.01
BBC Radio (other regions)	A. Dilnot	7.3.01
	C. Emmerson	2.3.01
	A. Goodman	26.6.01
LBC	M. Myck	3.6.01

9. CONFERENCES

- IFS conference on Financial Support for Families with Children: Options for the Integrated Child Credit, January 2001
- IFS conference, Green Budget 2001, January 2001
- IFS conference, Post-Budget Briefing, March 2001
- IFS conference, Election Briefing: Labour's First Term, May 2001
- IFS conference, Election Briefing: Manifestos, May 2001
- IFS / University of Michigan conference on World Tax Competition, May 2001
- Besley, T., Royal Economic Society / Treasury conference to Encourage Undergraduates to Study Economics at Graduate Level, March 2001.
- Blundell, R. Far East Meetings of the Econometric Society, July 2000.
- Walker, R., Session Organiser and Chair, Annual Conference of the Association of Public Policy Analysis and Management, Seattle, November 2000
- Windmeijer, F., Organiser, ESRC Econometric Study Group Conference, Bristol, July 2001
- Windmeijer, F., Local Organiser, 10th European Workshop on Econometrics and Health Economics, IFS, September 2001

10. INTERNATIONAL COLLABORATIVE RESEARCH PROJECTS

- Besley, T., World Bank project on Decentralization in India.
- Blundell, R. NBER project on International Social Security, Pensions and Retirement.
- Blundell, R. NBER/IFS/CEP project on British Economic Policy and Performance over the last 20 years.
- Blundell, R. RTN Network of Productivity and Innovation.

- Blundell, R. TMR Network on Savings and Pensions.
- Blundell, R. EU Network on Welfare analysis of fiscal and social security reforms in Europe.
- Scharf, K., Social Science and Humanities Research Council award for investigating democracy and voluntary activity
- Walker, I., RTN Fourth Framework Project, ‘Welfare Analysis of Fiscal and Social Security Reforms in Europe: Does the Representation of Family Decision Processes Matter?’
- Walker, R., 2000, ‘Learning from British Welfare Policy’, a review of British welfare-to-work policy with a view to informing the US policy debate; funded by the Rockefeller Foundation, New York; undertaken in collaboration with Dr Michael Wiseman; value: £30k
- Walker, R., 2000, ‘Welfare to Work: A Case for Evidence-Based Policy Making’, a multi-method project to explore the role of US evidence in the development of British welfare-to-work policy that involves systematic review, meta-analysis of US welfare-to-work experiments and depth interviews with policy-makers; funded by the ESRC and Rockefeller Foundation, New York; value: £150k

11. QUALIFICATIONS OBTAINED

Bloom, N., PhD, University of London.

12. SUMMARY OF EXTERNAL RELATIONSHIPS, 2000–2001

GROUP B:

EXTERNAL RELATIONSHIPS

1.	Membership of committees	23
2.	Membership of networks	17
3./4.	Overseas visitors and fellows	23
5.	Substantive advice and consultancy:	
	UK	4
	Non-UK	2
6.	Conference papers	44
7.	Newspaper articles	3
8.	Radio and TV	156
9.	Conferences	11
10.	International collaborative research projects	10
11.	Qualifications obtained	1
