WHO'S WHO IN ECONOMICS

Fourth Edition

Edited by Mark Blaug and Howard R. Vane
Who’s Who in Economics
Fourth Edition

Edited by
Mark Blaug
Professor Emeritus, University of London, UK;
Professor Emeritus, University of Buckingham, UK;
Visiting Professor, University of Amsterdam, The Netherlands;
and Visiting Professor, Erasmus University, Rotterdam, The Netherlands

and

Howard R. Vane
Professor of Economics, Liverpool John Moores University, UK

Edward Elgar
Cheltenham, UK • Northampton, MA, USA
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Preface

This reference work has an established history that stretches back over two decades. It began life as *Who’s Who in Economics: A Biographical Dictionary of Major Economists, 1700–1981* and was first published in 1983 by Wheatsheaf. The choice of this particular title for the book by the then-editors Mark Blaug and Paul Sturges begged two fundamental questions. First, what is an ‘economist’? Second, what is a ‘major economist’?

While there are many possible definitions of an economist the one chosen from the outset of the volume, after due consideration, is someone whose work is published in one of the hundreds of refereed journals of economics. It was recognised that this is unfair to the many dedicated teachers of economics who publish little or nothing, to business and government economists whose writings are rarely published, and to economists working for international agencies whose writings frequently remain anonymous. The choice of the publication criterion, however, was dictated by the prior choice of eminence in economics. The dictionary definition of ‘eminence’ is ‘one who stands high as compared with others, especially in his/her own calling’. But who is to judge high standing as compared with others? Presumably, none other than members of the peer group, which is to say that eminent or major economists are those who receive prizes and honorary degrees, are nominated and elected to offices in professional associations of economists, and who are frequently cited in the writings of other economists. In fact, we may virtually reduce the concept of eminence to frequency of citations, because the number of times particular economists are footnoted in journal articles over a period of years has been shown to be highly correlated with the award of Nobel prizes, with election to offices in leading professional associations, and with differences in salaries earned (see for example, Quandt, 1976; Bordo and Landau, 1979; Grubel, 1979; Hamermesh et al., 1982).

There are good reasons why scholars cite the works of other scholars. Nothing is as fundamental to science as the notion that scientific knowledge is public and freely available to all: there is no such thing as an inalienable property right in new ideas. The practice of citing authorities is therefore an attempt to provide incentives to intellectual pioneers by giving public recognition to their priority claims. For that reason all scientific communities develop informal mechanisms for penalising individuals who, in effect, infringe the property rights of others by failing to acknowledge their influences and sources of inspiration. Nevertheless, this informal mechanism operates imperfectly, and citation practices are frequently abused: witness the typical doctoral dissertation with endless citations of the works of the candidate’s supervisors, the common habit of advertising one’s own works by self-citations however irrelevant to the theme in question, the tendency of members of a particular school to cite each other, and the widespread inclination to cite ‘stars’ in the profession to show that the author is knowledgeable. However, there is the opposite tendency to refer to really famous scholars by name without citing their works, lest a citation be construed as an insult to the intelligence of one’s audience (Garfield, 1979).
Despite all these qualifications in equating scholarly ‘eminence’ with the frequency of citation counts, it is difficult to conceive of any other single objective indicator that is equally revealing of peer recognition of scientific achievement. In consequence, all living economists in this dictionary have been selected on the grounds that they are frequently cited by their colleagues.

Using citation counts for the 11-year period, 1970–80, from roughly 200 economics journals listed in the Social Sciences Citation Index (SSCI) as the main criterion for selecting the names of economists to be included, the first edition (Blaug and Sturges, 1983) contains biographical and bibliographical details of approximately 700 living and 400 dead economists. For the first edition the objective citation criterion for selection was supplemented by an informal count of citation frequencies in missing European and Asian journals and by adding a sprinkling of names of economists whose works are rarely cited but whose outstanding achievements in advising policymakers in business and government are widely acknowledged. In the latter case these subjective additions led to a flood of objections along the lines that ‘so-and-so should also have been included’ and in subsequent editions the objective method of citation frequencies has been rigidly adhered to.

The second edition of the volume *Who’s Who in Economics: A Biographical Dictionary of Major Economists*, edited by Mark Blaug, was published in 1986 by Wheatsheaf. Using citation counts from the SSCI for the 12-year period, 1972–83, the volume contains details on roughly 900 living and 400 dead economists. After a gap of some 13 years the third edition, this time with an abridged title of *Who’s Who in Economics*, edited by Mark Blaug, was published by Edward Elgar in 1999. For the third edition the enumeration period of citation counts was moved forward to a 13-year period, 1984–96, and the volume contains biographical and bibliographical details on roughly 1100 living and over 550 dead economists. In the latter case the entries for the over 400 dead economists carried forward from the second edition were written by Mark Blaug on the basis of standard sources, while those of roughly the 100 economists whose appeared in the second edition but who died in the 13-year gap between publication of the second and third editions were written by the economists themselves before their death.

For this new edition of *Who’s Who in Economics* we have introduced a number of changes. Apart from moving the period of citation counts forward to articles published in the 11-year period, 1990–2000 (previous editions of this dictionary used the method of citation frequencies over a given period irrespective of the year in which articles were published), the main change is to exclude anyone who died before 31 December 2001. The source of names selected for potential inclusion was obtained using *EconLit*, the American Economic Association’s electronic database which provides bibliographic information on more than 600 economic journals (not to mention books, dissertations and abstracts of working papers in economics) going back to 1969. Once we had obtained authored frequencies of articles published between 1990 and 2000 using *EconLit*, having experimented with different weights based on the impact factor of different journals (Laband and Piette, 1994), a rank order of economists by citation frequencies for those authored articles was produced using the SSCI (Institute for Scientific Information-ISI-Web of Science). The rank order of economists by citation frequencies revealed a number of natural breaks, one of which occurred around the number 1200. Hence, we ended up with 1168 authors identified for inclusion, of which some 900 were new names...
not found in the third edition of the book. The number 1168 is of course the result of an arbitrary cut-off point to allow the production of a manageable volume. Another change in this edition is to omit entries of dead economists for whom the third edition (Blaug, 1999) of this dictionary will have to be consulted. An electronic version of the third edition can be accessed via www.whoswhoineconomics.com.

As with earlier editions the authors of the entries for living economists are the economists themselves: each was asked to supply the relevant information, including a statement of their principal contributions to economics as they – and not we – conceive them. The following information was requested of them, selected under ten main headings.

1. Last name, all first names.
2. Year and place of birth (town/city, US state if applicable, and country).
3. Title of current post with start year, name and location of current employer.
4. Previous posts and employers with years.
5. Degrees received (in economics unless otherwise stated), university and year.
6. Main offices held, prizes won and honours received with years.
7. Editorial duties, if any, with years.
8. Principal field of interest, and up to two others, based on the classification listed in the American Economic Association’s Journal of Economic Literature.
9. Chief publications (limited to a maximum of 20 publications in total) in chronological order of publication under the headings of books and articles. For books: title, publisher and year of publication. For articles: title, journal, volume number, month/season and year of publication.
10. Statement of principal contributions to economics (in no more than 300 words).

As anyone who has ever been involved in editorial work of this kind will attest, entrants provided a disparity of information. Entries were standardised by us and then returned to entrants for their approval. This volume contains 699 new or up-dated entries and 44 repeated entries from the third edition, giving a response rate to our repeated mailings of 64 per cent.

Other changes introduced in this edition entail: the opportunity for entrants to decide the balance between books and articles up to a combined maximum of 20 publications (in previous editions entrants’ chief publications were limited to 10 books and 10 articles); the inclusion of ‘non-respondents’ both in the main body of the text and, as in the third edition Appendix 4, in Appendix 5 in the fourth edition; a change from the third edition in the presentation of Appendix 2 from ‘Index of country of residence if not USA’ to ‘Index of country of residence’ and Appendix 3 from ‘Index of country of birth if not USA’ to ‘Index of country of birth with year of birth’; and the inclusion of a new Appendix 4, ‘Index of affiliation, first degree and doctorate’. It is hoped that these changes to the appendices will lend itself more readily to analysis by interested parties. One of us made a heroic but foolhardy attempt in 1999 to estimate the total stock of living, publishing economists as 17 000, so that 6 per cent of that stock was identified for inclusion in the third edition of this dictionary (Blaug, 1999, p. xi). If so, the stock of living, publishing economists is now over 20 000, but by altering the dates covered we may have radically altered the proportion of economists selected, which makes the stock figure of 20 000 highly suspect. For those who relish
bibliometric analysis, particularly in respect of the Americanisation thesis, namely
that global economics looks more and more every day like American economics, we
note from Appendix 2 that the proportion of economists domiciled in the US has risen
steadily throughout the 20 years of the four editions of this book (see Frey and
Eichenberger, 1993; Eichenberger and Frey, 2000).

Producing this fourth edition has been a rewarding experience revealing the truly
amazing scope and spread of interests among practising economists. It has also been a
team effort. As editors our job of checking the final selection of economists and
reviewing and editing the entries has only been made possible by the valiant efforts of
a number of people involved in the project. In particular we would like to express our
gratitude to: Tom Coupé who initially prepared the rank order of citation frequencies;
Jo Bostock who dauntlessly contacted all the living economists, dealt with their and
our queries, standardised the format of the entries and painstakingly inputted the text;
Margaret Pugh who copy edited and proofread the text; and Dymphna Evans (Senior
Commissioning Editor) and Julie Leppard (Head of Editorial and Production Serv-
ices) who oversaw the production of the book from start to finish. Without their
collective inputs this fourth edition would not have seen the light of day.

Mark Blaug and Howard R. Vane

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## Abbreviations

### General
- **AB**: Bachelor of Arts (US)
- **Acad.**: Academic, Academy
- **Admin.**: Administration, Administrator
- **Adv.**: Advanced
- **AFDC**: Aid to Families with Dependent Children (US)
- **Ag.**: Agency
- **Agric.**: Agricultural, Agriculture
- **AHEAD**: Asset and Health Dynamics Among the Oldest Old
- **AM**: Master of Arts
- **Amer.**: America, American
- **Anthrop.**: Anthropology
- **Apl.**: Applied, Applications
- **App.**: Appendix
- **ARCH**: AutoRegressive Conditional Heteroskedasticity
- **ARFIMA**: AutoRegressive Fractionally Integrated Moving Average
- **ARIMA**: AutoRegressive Integrated Moving Average
- **ARM**: Adjustable Rate Mortgages
- **ARMA**: AutoRegressive Moving Average
- **ARMAX**: AutoRegressive Moving Average process with eXogenous variables
- **Assoc.**: Association, Associate
- **Asst**: Assistant
- **BA**: Bachelor of Arts or British Academy
- **B AgrSc**: Bachelor of Agricultural Science
- **BBA**: Bachelor of Business Administration
- **BComm**: Bachelor of Commerce
- **Bd**: Board
- **B Ec**: Bachelor of Economics
- **BEE**: Bachelor of Electrical Engineering
- **Behav.**: Behaviour, Behavior, Behavioural, Behavioral
- **BGS**: Bachelor of General Science
- **BLA**: Bachelor of Liberal Arts
- **B Lit**: Bachelor of Letters
- **BS**: Bachelor of Science (US)
- **BSc**: Bachelor of Science (UK)
- **BSEE**: Bachelor of Science and Electrical Engineering
- **BSFS**: Bachelor of Science in Foreign Service
- **BSS**: Bachelor of Social Science
- **BTech**: Bachelor of Technology
- **Bull.**: Bulletin
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<td>Bus.</td>
<td>Business</td>
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<td>CAPM</td>
<td>Capital Asset Pricing Model</td>
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<td>CATV</td>
<td>Cable Television</td>
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<td>CBD</td>
<td>Central Business District</td>
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<td>CBE</td>
<td>Commander of the British Empire</td>
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<td>CDR</td>
<td>Current Depth of the Recession</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CES</td>
<td>Constant Elasticity of Substitution</td>
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<td>CEX</td>
<td>Consumer Expenditure Survey</td>
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<td>Chap.</td>
<td>Chapter</td>
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<td>CIT</td>
<td>Credit Income Tax</td>
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<td>cl</td>
<td>Cum laude</td>
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<td>Co.</td>
<td>Company</td>
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<td>Co-op.</td>
<td>Cooperative, Cooperation</td>
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<td>Contributor, Contribution, Contributing</td>
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<td>Corp.</td>
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<td>Corres.</td>
<td>Corresponding, Correspondent</td>
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<td>CPI</td>
<td>Consumer Price Index</td>
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<td>CPS</td>
<td>Current Population Survey</td>
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<td>CTA</td>
<td>Commodity Trading Advisor</td>
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<td>CUSUM</td>
<td>Cumulated Sums</td>
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<td>D–F</td>
<td>Dickey–Fuller (test)</td>
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<td>DBA</td>
<td>Doctor of Business Administration</td>
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<td>DEA</td>
<td>Data Encryption Algorithm or Data Envelopment Analysis or Diplôme d’Études Approfondies</td>
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<td>DES</td>
<td>Diplôme d’études supérieures</td>
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<td>Devlp.</td>
<td>Development</td>
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<td>DGP</td>
<td>Data Generating Process</td>
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<td>DHL</td>
<td>Doctor of Humane Letters</td>
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<td>Dir.</td>
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<td>Disting.</td>
<td>Distinguished</td>
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<td>Div.</td>
<td>Division</td>
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<td>DL</td>
<td>Doctor of Laws</td>
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<td>DPhil</td>
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<td>DrOec</td>
<td>Doctor of Economics</td>
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<td>DSc</td>
<td>Doctor of Science</td>
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<td>DU</td>
<td>Doctor of the University</td>
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<td>EBIT</td>
<td>Earnings Before Interest and Taxes</td>
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<td>ECM</td>
<td>Expectation-Conditional Maximization</td>
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<td>Econ.</td>
<td>Economic, Economics, Economist</td>
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<td>ECU</td>
<td>European Currency Unit</td>
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<tr>
<td>Abbreviation</td>
<td>Definition</td>
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<td>Ed.</td>
<td>Editor, Editorial</td>
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<td>Edition</td>
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<td>Educ.</td>
<td>Education</td>
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<td>EITC</td>
<td>Earned Income Tax Credit</td>
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<td>EM</td>
<td>Expectation-Maximization</td>
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<td>Em.</td>
<td>Econometrics</td>
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<td>EMS</td>
<td>European Monetary System</td>
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<td>Eng.</td>
<td>Engineering</td>
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<td>ERC</td>
<td>Equity, Reciprocity and Competition</td>
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<td>ERM</td>
<td>Exchange Rate Mechanism</td>
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<td>ESOP</td>
<td>Employee Stock Ownership Plan</td>
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<td>ESSEC</td>
<td>Degree from École Supérieure des Sciences Économiques et Commerciales</td>
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<td>Europ.</td>
<td>European</td>
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<td>Exec.</td>
<td>Executive</td>
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<td>Explor.</td>
<td>Explorations</td>
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<tr>
<td>FAQ</td>
<td>Frequently Asked Question</td>
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<tr>
<td>FCOJ</td>
<td>Frozen Concentrated Orange Juice</td>
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<td>Fed.</td>
<td>Federal</td>
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<td>Fell.</td>
<td>Fellow</td>
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<td>FIGARCH</td>
<td>Fractionally Integrated Generalized AutoRegressive Conditional Heteroskedasticity</td>
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<td>Fin.</td>
<td>Financial, Finance</td>
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<td>FOB</td>
<td>Free on Board</td>
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<td>FX</td>
<td>Foreign Exchange</td>
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<td>GARCH</td>
<td>Generalized AutoRegressive Conditional Heteroskedasticity</td>
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<tr>
<td>GARP</td>
<td>Generalized Axiom of Revealed Preference</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GIS</td>
<td>Geographic Information System</td>
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<td>GLS</td>
<td>Generalized Least Squares</td>
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<td>GMM</td>
<td>Generalized Method of Moments</td>
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<tr>
<td>GNP</td>
<td>Gross National Product</td>
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<td>Govt</td>
<td>Government</td>
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<td>Grad.</td>
<td>Graduate</td>
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<td>GUSTO IIb</td>
<td>Global Use of Strategies to open Occluded Coronary Arteries IIb Investigators</td>
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<td>hc</td>
<td>Honoris causa</td>
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<td>Hist.</td>
<td>History, Historical</td>
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<td>Hon.</td>
<td>Honorary, Honorable, Honourable</td>
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<td>Hons</td>
<td>Honours</td>
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<td>HP</td>
<td>Hodrick–Prescott</td>
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<td>HRS</td>
<td>Health and Retirement Study</td>
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<td>HYE</td>
<td>Healthy Year Equivalents</td>
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<td>ICP</td>
<td>International Comparison Project</td>
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<td>IID</td>
<td>Independent Identically Distributed</td>
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ABBREVIATIONS

Inc. Incorporated
Incl. Including
Ind. Industry, Industrial
Info. Information
Inst. Institute, Institution, Institut
Instr. Instructor
IntI International
IPO Initial Public Offering
IRA Individual Retirement Account
ISLM Investment, Savings, Liquidity Preference, Money Supply
J. Journal
JD Doctor of Laws (US)
Jr Junior
Lab. Laboratory
Labs Laboratories
LBO Leverage Buy Out
LDC Less-Developed Country
Lect. Lecturer
LIBOR London Inter-Bank Offer Rate
LLC Limited Liability Company
LLD Doctor of Laws
LTCM Long-term Capital Management
Ltd Limited Company
MA Master of Arts or Moving Average (where used in journal titles only)
MAgrSc Master of Agricultural Science
MALD Master of Arts in Law and Diplomacy
Math. Mathematical, Mathematician
Maths Mathematics
MBA Master of Business Administration
mcl Magna cum laude
MCMC Markov Chain Monte Carlo
MComm Master of Commerce
MEd Master of Economics
Mem. Member
Mgmt Management
Min. Ministry
ML Maximum Likelihood
MM Master of Management
MNC Multinational Company
MP Member of Parliament
MPIA Masters in Public and International Affairs
MPP Master of Public Policy
MRI Magnetic Resonance Imaging
MS Master of Science
MSIA Masters in Industrial Administration
<table>
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<td>MSL</td>
<td>Master of Studies in Law</td>
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<td>Mt</td>
<td>Mount</td>
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<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
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<td>NAIRU</td>
<td>Non-Accelerating Inflation Rate of Unemployment</td>
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<td>NASDAQ</td>
<td>National Association of Securities Dealers Automated Quotations system (US)</td>
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<td>Natl</td>
<td>National</td>
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<td>NBD</td>
<td>Negative Binomial Distribution</td>
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<td>National Child Development Survey</td>
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<td>NCI</td>
<td>New Community Instrument</td>
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<td>NDEA</td>
<td>National Defense Education Act</td>
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<td>n.e.</td>
<td>No entry</td>
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<td>NIE</td>
<td>Newly Industrialized Economy</td>
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<td>NIT</td>
<td>Negative Income Tax</td>
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<td>NLSY</td>
<td>National Longitudinal Survey of Youth</td>
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<td>NRDA</td>
<td>National Resource Damage Assessment</td>
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<td>OBE</td>
<td>Officer of the Order of the British Empire</td>
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<td>OCS</td>
<td>Outer Continental Shelf</td>
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<td>OJT</td>
<td>On-the-Job Training</td>
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<td>OLG</td>
<td>Over-Lapping Generations</td>
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<td>OLS</td>
<td>Ordinary Least Squares</td>
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<td>OR</td>
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<td>Organisation</td>
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<td>Pacific-Basin Capital Market</td>
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<td>Pb</td>
<td>Paperback</td>
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<td>PCB</td>
<td>Polychlorinated Biphenyl</td>
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<td>Personal Communication Services</td>
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<td>PhB</td>
<td>Bachelor of Philosophy</td>
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<td>Philo.</td>
<td>Philosophy, Philosophical</td>
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<td>Price Independent Generalised Logarithmic</td>
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<td>Public Limited Company</td>
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<td>Political, Politique, Politics</td>
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<td>PPE</td>
<td>Philosophy, Politics and Economics</td>
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<td>PPP</td>
<td>Purchasing Power Parity</td>
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<td>Published, Publishing</td>
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<td>PX-EM</td>
<td>Parameter Expanded-Expectation Maximization</td>
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<td>Q.</td>
<td>Quarterly, Quarter</td>
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<td>QALYs</td>
<td>Quality Adjusted Life Years</td>
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<td>QoS</td>
<td>Quality of Service</td>
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<td>Quant.</td>
<td>Quantitative</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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ABBREVIATIONS

RE           Rational Expectations
Reconstr.    Reconstruction
REIT         Real Estate Investment Trust
Repr.        Reprinted
Res.         Research
Rev.         Review, Reviewer
ROPA         Realizing Our Potential Awards
Rt Hon.      Right Honourable
SB           Bachelor of Science (US)
SBIR         Small Business Innovation Research
Sc.          Science, Sciences, Scientific
ScD          Doctor of Science
Sch.         School
scl          Summa cum laude
SDF          Stochastic Discount Factor
SEO          Secondary Equity Offering
SFAS         Statement of Financial Accounting Standard
SIR          Sampling/Importance Resampling
SJ           Society of Jesus
SLAPP        Strategic Lawsuit Against Public Participation
SM           Master of Science
SME          Small and Medium Enterprise
Soc.         Society
Sr           Senior
STAR         Smooth Transition AutoRegressive
Stat.        Statistical, Statistician
Stats        Statistics
Stud.        Studies
Suppl.       Supplement
TARSUR       Threshold AutoRegressive Stochastic Unit Root
TARUR        Threshold AutoRegressive Unit Root
Tech.        Technical, Technology
Telecomm.    Telecommunications
Temp.        Temporary
TIMA         Threshold Integrated Moving Average
TRA          Tax Reform Act
Trans.       Translation
UIP          Uncovered Interest Parity
Univ.        University
VAR          Vector AutoRegression
VARMA        Vector AutoRegressive Moving Average
VAT          Value Added Tax
Vis.         Visiting
Vol.         Volume
WIC          Special Supplemental Nutrition Program for Women, Infants and Children
WTP/WTA      Willingness to Pay/Willingness to Accept
ABBREVIATIONS  xvii

**Associations, Institutions, Publishers**

A&U  Allen & Unwin
AA  American Agricultural Economics Association
AAA  American Accounting Association
AAAS  American Academy of Arts and Sciences
AAUP  American Association of University Professors
ACLS  American Council of Learned Societies
AEA  American Economic Association
AEI  American Enterprise Institute
AFA  American Finance Association
ANU  Australian National University
APFA  Asia-Pacific Finance Association
AREUEA  American Real Estate and Urban Economics Association
ASA  American Statistical Association
AT&T  American Telephones & Telegraph
BA  British Academy
BAAS  British Association for the Advancement of Science
BIT  Bureau International du Travail or ILO
CBO  Congressional Budget Office
CEA  Canadian Economic Association
CEMFI  Centro de Estudios Monetarios y Financieros
CEPR  Center/Centre for Economic Policy Research
CEPREMAP  Centre d’Études Prospectives d’Économie Mathématique Appliquée à la Planification, France
CESifo  Center for International Studies, Munich University and the Ifo Institute for Economic Research
CIR  Cox, Ingersoll & Ross
CIRANO  Centre Interuniversitaire de Recherche en ANalyse des Organisations
CNRS  Centre National de la Recherche Scientifique, Paris, France
CORE  Centre for Operations Research and Econometrics, Belgium
CPB  Central Planning Bureau
CREF  College Retirement Fund
CREST  Centre de Recherche en Économie et Statistique
CUP  Cambridge University Press
DAAD  (trans.) German–American Academic Council
DEFRA  Department of the Environment, Food and Rural Affairs (UK)
DELETA  Département et Laboratoire d’Économie Théorique et Appliquée
DETR  Department of the Environment, Transport and the Regions (UK)
DIW  Deutsches Institut für Wirtschaftsforschung (German Institute for Economic Research), Berlin
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<td>DRI</td>
<td>Data Resources Inc.</td>
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<tr>
<td>DTI</td>
<td>Department of Trade and Industry (UK)</td>
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<tr>
<td>EARIE</td>
<td>European Association for Research in Industrial Economics</td>
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<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<tr>
<td>EEA</td>
<td>Eastern Economic Association (US)</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<tr>
<td>EHA</td>
<td>Economic History Association (US)</td>
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<tr>
<td>EHS</td>
<td>Economic History Society (UK)</td>
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<tr>
<td>ELSE</td>
<td>Centre for Economic Learning and Social Evolution</td>
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<tr>
<td>Em Soc</td>
<td>Econometric Society</td>
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<tr>
<td>EMU</td>
<td>European Monetary Union</td>
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<td>ENPC</td>
<td>École Nationale des Ponts et Chaussées</td>
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<tr>
<td>ENSAE</td>
<td>École Nationale de la Statistique et de l’Administration Économique</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>ERN</td>
<td>Economics Research Network</td>
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<tr>
<td>ESRC</td>
<td>Economic and Social Research Council (UK)</td>
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<tr>
<td>ESSEC</td>
<td>École Supérieure des Sciences Économiques et Commerciales</td>
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<tr>
<td>ETH</td>
<td>Eidgenössische Technische Hochschule, Zurich</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAO</td>
<td>Food and Agriculture Organization, UN</td>
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<td>FCC</td>
<td>Federal Communications Commission</td>
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<td>FDA</td>
<td>Food and Drug Administration (US)</td>
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<tr>
<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
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<td>FHA</td>
<td>Federal Housing Association</td>
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<td>FMA</td>
<td>Financial Management Association</td>
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<td>FRB</td>
<td>Federal Reserve Bank (US)</td>
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<td>FTC</td>
<td>Federal Trade Commission (US)</td>
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<td>GNMA</td>
<td>Government National Mortgage Association</td>
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<td>HEW</td>
<td>Department of Health, Education and Welfare (US)</td>
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<tr>
<td>HMO</td>
<td>Health Maintenance Organizations (US)</td>
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<tr>
<td>HMSO</td>
<td>Her Majesty’s Stationery Office (UK)</td>
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<tr>
<td>HUP</td>
<td>Harvard University Press</td>
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<tr>
<td>IAB</td>
<td>Institut für Arbeitsmarkt und Berufsforschung (Institute for Employment Research)</td>
</tr>
<tr>
<td>IARIW</td>
<td>International Association for Research in Income and Wealth</td>
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<tr>
<td>IBE</td>
<td>Investors in Business</td>
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<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
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<tr>
<td>IEA</td>
<td>International Economic Association</td>
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<tr>
<td>IEEE</td>
<td>Institute of Electrical and Electronic Engineers (US)</td>
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<tr>
<td>IFS</td>
<td>Institute for Fiscal Studies (UK)</td>
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<tr>
<td>IIES</td>
<td>International Institute for European Studies (Stockholm)</td>
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<td>IIPF</td>
<td>International Institute of Public Finance</td>
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<tr>
<td>ILO</td>
<td>International Labour Office</td>
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</table>
ABBREVIATIONS

ILR Press
IMF
INEA
INFORMS
INSEAD
INSEE
IRRA
IRS
ISARA
JHUP
LSE
MEA
MIT
MITI
MSC
NAACP
NAO
NAS
NATO
NBER
NEA
N-H
NICHHD
NIESR
NIH
NIMH
NLRB
NOAA
NRC
NSF
NTA
NTIS
NUMMI
NYU
OECD
OESEC
OFT
OMB
ONS
OPEC
ORSA
ABBREVIATIONS

OUP       Oxford University Press
PAA       Population Association of America
PUF       Presses Universitaires de France
REIT      Real Estate Investment Trust
RES       Royal Economic Society (UK)
RSA       Regional Science Association (US)
RSS       Royal Statistical Society (UK)
S&P       Standard & Poor’s
SEA       Southern Economic Association (US)
SIAM      Society for Industrial and Applied Mathematics
SNF       (trans.) Centre for Research in Economics and Business Administration, Norway
SSHRCC    Social Science and Humanities Research Council of Canada
SSRC      Social Science Research Council, UK or USA
STICERD   Suntory and Toyota International Centres for Economics and Related Disciplines
SUNY      State University of New York
S-V       Springer-Verlag
TEC       Training and Enterprise Councils (UK)
TIAA      Teachers Insurance and Annuity Association (US)
TVA       Tennessee Valley Authority
UBC       University of British Columbia, Vancouver, Canada
UCLA      University of California, Los Angeles
UCP       University of Chicago Press
UN        United Nations
UNCTAD    UN Conference on Trade and Development
UNDP      UN Development Programme
UNESCO    UN Educational Scientific and Cultural Organisation
UNIDO     UN International Development Organisation
USAF      United States Air Force
USAID     US Agency for International Development
WEA       Western Economic Association (US)
WHO       World Health Organisation, UN
WTO       World Trade Organization
XLRI      Xavier Labor Relations Institute (India)
YUP       Yale University Press
ZEW       Zentrum für Europäische Wirtschaftsforschung (Centre for European Economic Research)
ZIF       Centre for Interdisciplinary Research, University of Bielefeld, Germany

Journals
AER       American Economic Review
AJAE      American Journal of Agricultural Economics
BE-Js EAP Berkeley Electronic Press’ Journals of Economic Analysis and Policy
ABBREVIATIONS

Bell JE  Bell Journal of Economics
BER  Bulletin of Economic Research
BJIR  British Journal of Industrial Relations
BNLQR  Banca Nazionale del Lavoro Quarterly Review
BOIS  Bulletin of the Oxford University Institute of Economics and Statistics
BPEA  Brookings Papers on Economic Activity
Camb JE  Cambridge Journal of Economics
CI  Canadian Journal of Economics
C-RPP  Carnegie-Rochester Conference Series on Public Policy
CSSH  Comparative Studies in Society and History
DE  De Economist
Ec  Economica
Econom  The Economist
EDCC  Economic Development and Cultural Change
EEJ  Eastern Economics Journal
EHR  Economic History Review
EI  Economic Inquiry
EJ  Economic Journal
EJPE  European Journal of Political Economy
Em  Econometrica
ER  Economic Record
ET  Economic Theory
Europ ER  European Economic Review
HOPE  History of Political Economy
IER  International Economic Review
IJEB  International Journal of Economics and Business
IJIO  International Journal of Industrial Organisation
ILRR  Industrial and Labor Relations Review
Int Lab Rev  International Labour Review
ITPF  International Tax and Public Finance
JAE  Journal of Applied Econometrics
JASA  Journal of the American Statistical Association
J Bank Fin  Journal of Banking and Finance
JBES  Journal of Business and Economic Statistics
J Bus  Journal of Business
J Comp E  Journal of Comparative Economics
JDE  Journal of Development Economics
J Dev Stud  Journal of Development Studies
JEBO  Journal of Economic Behaviour and Organization
JEDC  Journal of Economic Dynamics and Control
JEAA  Journal of the European Economic Association
JEEM  Journal of Environmental Economics and Management
ABBREVIATIONS

JEG Journal of Economic Growth
JEH Journal of Economic History
JEL Journal of Economic Literature
J Em Journal of Econometrics
JEMS Journal of Economics and Management Strategy
JEP Journal of Economic Perspectives
JET Journal of Economic Theory
J Eur EH Journal of European Economic History
J Farm E Journal of Farm Economics
J Fin Journal of Finance
J Fin E Journal of Financial Economics
JFQA Journal of Financial and Qualitative Analysis
JHE Journal of Health Economics
JHET Journal of the History of Economic Thought
JHR Journal of Human Resources
JI Bus Stud Journal of International Business Studies
JIFMA Journal of International Financial Management and Accounting
JIMF Journal of International Money and Finance
J Ind E Journal of Industrial Economics
J Int E Journal of International Economics
J Lab E Journal of Labor Economics
J Law E Journal of Law and Economics
JLEO Journal of Law, Economics and Organization
J Math E Journal of Mathematical Economics
JMCB Journal of Money, Credit and Banking
JME Journal of Monetary Economics
JOOP Journal of Occupational and Organizational Psychology
JPAM Journal of Policy Analysis and Management
JPE Journal of Political Economy
J Post Keyn E Journal of Post-Keynesian Economics
J Pub E Journal of Public Economics
J Reg S Journal of Regional Science
JRSS Journal of the Royal Statistical Society
JRSS-A Journal of the Royal Statistical Society – A Series
JRSS-B Journal of the Royal Statistical Society – B Series
JRU Journal of Risk and Uncertainty
JUE Journal of Urban Economics
Kyk Kyklos
MLR Monthly Labor Review
MS Manchester School of Economic and Social Studies
NAJE Not a Journal of Economics
NTJ National Tax Journal
ABBREVIATIONS  xxiii

OBES  Oxford Bulletin of Economics and Statistics
OEP  Oxford Economic Papers
OREP  Oxford Review of Economic Policy
PDR  Pakistan Development Review
QJE  Quarterly Journal of Economics
QREB  Quarterly Review of Economics and Business
RandJE  Rand Journal of Economics
REP  Revue d’Économie Politique
REStat  Review of Economics and Statistics
RESud  Review of Economic Studies
RIW  Review of Income and Wealth
RSUE  Regional Science and Urban Economics
Scand JE  Scandinavian Journal of Economics
SEJ  Southern Economic Journal
SJPE  Scottish Journal of Political Economy
Swed JE  Swedish Journal of Economics
Urb Stud  Urban Studies
WA  Weltwirtschaftliches Archiv
WBER  World Bank Economic Review
WD  World Development
WEJ  Western Economic Journal
YEE  Yale Economic Essays
ZGSS  Zeitschrift für die gesamte Staatswissenschaft
ZN  Zeitschrift für Nationalökonomie

Geographic
AL  Alabama
AR  Arkansas
AZ  Arizona
BC  British Columbia, Canada
CA  California
CO  Colorado
CT  Connecticut
DC  District of Columbia
FL  Florida
GA  Georgia
HI  Hawaii
IA  Iowa
ID  Idaho
IL  Illinois
IN  Indiana
KS  Kansas
KY  Kentucky
LA  Louisiana
MA  Massachusetts
MD  Maryland
ME  Maine
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<th>Abbreviation</th>
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<td>Michigan</td>
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<td>MN</td>
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<td>NSW</td>
<td>New South Wales (Australia)</td>
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<td>OR</td>
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<td>PA</td>
<td>Pennsylvania</td>
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<td>PRC</td>
<td>People’s Republic of China</td>
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<td>RI</td>
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<td>ROC</td>
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<td>WV</td>
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<td>WY</td>
<td>Wyoming</td>
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</table>
ABEL, Andrew B.

Born 1952, Washington, DC, USA.


Principal Fields of Interest E2 Consumption, Saving, Production, Employment, and Investment; G1 General Financial Markets; H3 Fiscal Policies and Behavior of Economic Agents.


Principal Contributions The unifying aspect of the research is the analysis of intertemporal decisions by consumers and firms, and the implications of these decisions for saving, investment, and asset prices. The analysis of consumers’ decisions has examined the importance of longevity uncertainty for consumption and saving and the implications for annuity markets. The role of transfer motives, gen-
erated by altruism or other motives such as accidental bequests arising from premature death, and the implications for Ricardian equivalence are analysed. The implications of social security for private portfolios are analysed. The development and application of a criterion to test for dynamic efficiency in the presence of aggregate uncertainty found that none of the countries examined is dynamically inefficient. The analysis of firms has focused on the capital investment decision when the firm faces a variety of costs of adjusting the capital stock. The research developed an augmented adjustment cost function that incorporates partial or complete irreversibility of investment as well as fixed costs of investment, and develops a q-theoretic model of investment in this more general framework. Research on asset prices has examined the role of habit formation and catching-up-with-the-Joneses features of utility functions as potential explanations of the equity premium puzzle and has examined the impact of the baby boom on stock prices.

ABREU, Dilip n.e.

ACEMOGLU, Kamer Daron

Born 1967, Istanbul, Turkey.  
Current Post Prof. Econ., MIT, Cambridge, MA, USA, 2000–.  
Principal Fields of Interest O1 Economic Development; O3 Technological Change; O4 Economic Growth and Aggregate Productivity.  
Principal Contributions
(1) The theory of 'directed technical change', whereby the profitability of various types of technologies determine their rates of innovations; a consequence of directed technical change is that there will be endogenous biased technical change towards factors that are becoming more abundant. (2) The theory of democratization and consolidation of democracies. (3) Various approaches for the question of why societies end up choosing inefficient policies and institutions, and the empirical documentation of the effect of these policies and institutions on long-run development. (4) Analysis of the effect of colonial institutions and policies on the institutional development in various parts of the world and the effect of these institutions on current economic performance. (5) The theory of training investments under market imperfections, where firms invest in the general skills of their employees because they can recoup the returns in the future thanks to market imperfections. (6) Various approaches to determining the quality distribution of jobs, especially on the link between labor market regulations and the quality distribution of jobs, and the relationship between inequality and the composition of jobs. (7) The theory of directed search, where rather than random search, the labor market is modeled such that employers post wages and workers decide to apply to some of the jobs that they sample.

ADAMOWICZ, Wiktor Lucian

Born 1959, Edmonton, Canada.

Current Posts Prof. and Canada Res. Chair Environmental Econ., Dept Rural Econ., Univ. Alberta, Edmonton, Alberta, Canada, 2001–.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; C2 Econometric Methods: Single Equation Models.


**Principal Contributions** My research interests are in developing methods that integrate environmental goods and services into economic analysis and designing policies and institutions that help capture the importance of environmental services in economic decision-making. My main research areas include environmental benefits estimation, economic assessment of environmental changes, and consumer choice modeling. My research interests also include the incorporation of economic perspectives into sustainable forest management and the development and implementation of economic instruments for environmental protection. I have advanced the field of combining stated and revealed preference methods for environmental valuation and demand analysis. The foundation paper with Louviere and Williams in 1994 has led to numerous applications in environment valuation, consumer choice, marketing, and health economics/medicine. I have also helped
develop the area of stated choice methods as applied to environmental economics. With my colleagues I have also developed methods, commonly used today, for assessing the statistical properties of welfare measures. More recently, with Swait, I have been assessing the role of choice context and complexity in consumer demand. I have helped develop methods to integrate economic analysis into sustainable forest management. Interdisciplinary work in this area is illustrated by my role in the Sustainable Forest Management Network of Centres of Excellence as the Program Leader (from 1998) where I am responsible for the scientific program and development of this national, interdisciplinary, multi-sector, research network. I have also supervised over 40 graduate students in the area of environmental and natural resource economics.

ADAMS, Richard M.

Born 1945, Concord, CA, USA.

Current Post Prof. Agric. and Resource Econ., Oregon State Univ., Corvallis, OR, USA, 1983–.


Principal Fields of Interest Q2 Renewable Resources and Conservation, Environmental Management; Q1 Agriculture.


ADAMS 5
6  ADDISON


Principal Contributions My research interests focus on the application of externality analysis to complex policy issues, including air quality, acid rain, water resources and global climate change. This research primarily addresses empirical problems at the interface between agriculture and the environment. My work in the early 1980s, with Thomas Crocker, on the agricultural impacts of air pollution, contributed substantially to applied policy analysis and influenced US EPA policy on air pollution control. For example, our 1984 article, in REStat on the quantity of natural science data needed for valid economic policy assessment, had an impact on agency procedures. The EPA used these findings to set ozone standards in the Clean Air Act and recognized the contribution with the Award for Research Excellence in 1987. Ongoing research on the topic of water resources, particularly with reference to the value of in-stream flows, is directed at regional problems including endangered fish species. Findings are being used to make decisions concerning public investments in habitat restoration and water leases. Recent research on climate change (with B. McCarl) is frequently referenced in the popular press and has been presented in congressional testimony. I am also engaged in outreach activities and have served on numerous government and professional committees, including the US EPA, the California Air Resources Board, the Federal Republic of Germany, the US Congress, the National Academy of Science, the US Department of Energy, and the California Energy Commission, and other agencies to provide input on the economics of environmental change. I believe this type of applied research and outreach assists in bridging the gap between agricultural economics and other disciplines and enhances our profession’s impact in solving major natural resource and environmental problems.

ADDISON, John T.


Current Posts Hugh C. Lane Prof. Econ., Univ. South Carolina, Columbia, SC, USA, 1997--; Prof.-at-Large, Freie Univ. Bozen, Italy, 2002--.


**Degrees** BSc, MSc, PhD LSE, 1967, 1968, 1971.


**Principal Fields of Interest** J0 Labor and Demographic Economics; General; P1 Capitalist Systems; I3 Welfare and Poverty.


**Principal Contributions** Early work focused on productivity bargaining, the theory of strikes, and methodological issues in economics. Research since 1980 has focused on the economic analysis of unions, job displacement, unemployment, and theoretical and applied work on government mandates (principally, advance
notice and European Union social policy). Current empirical research includes the effect of codetermination, unions, and employee involvement on firm performance using establishment data, and comparative work on unemployment duration and the employment consequences of job protection.

AGHION, Philippe

Born 1956, Paris, France.


Past Posts Res. Officer, CNRS, France, 1989–91; Asst Prof., MIT, 1987–89.

Degree PhD Harvard Univ., 1987.

Offices and Honours Fell., Em Soc, 1994; Fell., CEPR.


Principal Fields of Interest D0 Microeconomics: General; D8 Information and Uncertainty; D9 Intertemporal Choice and Growth.


Principal Contributions My main contributions so far have been: first, to the theory of industrial organisation where, together with Patrick Bolton, I have investigated the potential entry-deterrent effect of long-term contracts between suppliers and customers; second, to contract theory, where I have investigated some implications of contractual incompleteness for the internal organisation and the financial decisions of firms, emphasising the allocation of control rights as a major determination of both; third, to endogenous growth theory, where, mainly with Peter Howitt, I have attempted to formalise and systematise the old Schumpeterian ideas on growth, competition and business cycles. Whilst this modelling effort has put Schumpeter’s contribution back into mainstream economics, it has also opened up interesting avenues for future research on growth and its relationship to institutions, market structure, the organisation of firms and the distribution of income and opportunities across individuals in the economy.

AGRAWAL, Anup

Born 1958, Allahabad, India.

Current Posts Prof. and Powell Chair Fin., Culverhouse Coll. Bus., Univ. Alabama, Tuscaloosa, AL, USA, 1999–.

Degrees BCom (Hons) Univ. Bombay, 1977; MBA XLRI, 1979; PhD (Fin.) Univ. Pittsburgh, 1986.


Principal Fields of Interest G3 Corporate Finance and Governance; G1 General Financial Markets; K2 Regulation and Business Law.


Principal Contributions Most of my work has related to corporate finance and governance, and the efficiency of security markets. G.N. Mandelker and I empirically find that managers with large stock and option ownership in their firms make investment and financing decisions that increase firm risk and financial leverage. We also find that anti-takeover charter amendments by firms where institutions and blockholders own large equity stakes are less harmful to stockholders. R.A. Walkling and I find that managers of takeover targets suffer severe career consequences following takeover bids for their firms. J.F. Jaffe and I find that the short swing rule seems to deter target managers from insider trading. C.R. Knoeber and I find that firms’ choices of various mechanisms to control agency problems between managers and stockholders appear to be inter-related. For the most part, there is no systematic relationship between firm performance and the use of control mechanisms that are chosen within firms. In another paper, we find that firms where lobbying the government is more important put more politicians and ex-government officials on their boards of directors, and firms for whom the government is an adversary put more lawyers on their boards. We also find that managers of firms that face a greater threat of takeover are paid more, unless they are protected by golden parachutes or employment contracts. J.F. Jaffe, J.M. Karpoff and I find that the revelation of a fraud against a company does not appear to result in greater than normal turnover of its top managers and directors. On the efficiency of security markets, J.F. Jaffe, G.N. Mandelker and I find that the stock of acquiring firms under-performs over a five-year period fol-
AKERLOF and I examined seasonal anomalies in stock markets around the world.

AKERLOF, George Arthur

Born 1940, New Haven, CT, USA.
Current Post Prof., Univ. California, Berkeley, CA, USA, 1977–.
Degrees BA (Maths and Econ.) Yale Univ., 1962; PhD MIT, 1966.

Editorial Duties Assoc. Ed., QJE, 1983–.

Principal Fields of Interest D0 Microeconomics: General; E0 Macroeconomics and Monetary Economics: General; J0 Labor and Demographic Economics: General.


Principal Contributions I have contributed to three areas of economics: basic micro theory, macroeconomic theory and behavioural economics.

ALBERT, James H. n.e.

ALESINA, Alberto

Born 1957, Broni, Italy.
Current Post Prof. Econ. and Govt, Harvard Univ., Cambridge, MA, USA, 1993–.

Offices and Honours Olin Fellowship,


**Principal Fields of Interest** E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook; H6 National Budget, Deficit, and Debt; E5 Monetary Policy, Central Banking, and the Supply of Money.


**Principal Contributions** With my work I have bridged economics and politics. In particular, I have worked on the relationship between choices and effects of macro-economics, institutions and voting behavior. My theoretical and empirical work ranges from voting theory to monetary policy and policy to public finance. Topics include political business cycles, the effects of economic conditions on voting behavior, the effects of Central Bank independence, executive–legislative interaction in policy formation, the politics of budget deficits and fiscal adjustments, the politics and economics of welfare state reforms, the effects on the budget balance and composition of alternative budget institutions, stabilization of high inflation, the interaction of political institutions and long-term growth, the two-way relationship between income distribution and growth, the politics and economics of European economic integration, and, recently, politico-economic models of country formation, country break-up and secessions. In this context I have also worked on constitutional issues involving the process of European integration. I am also interested in social problems, welfare policies, income inequality and social capital. In my work I try to strike a balance between formal analytical modeling, formal statistical testing and a policy perspective.
ALLEN, Douglas Ward

Born 1960, New Westminster, BC, Canada.

Current Post Burnaby Mountain Endowed Univ. Prof., Simon Fraser Univ., Burnaby, BC, Canada, 2000–.


Principal Fields of Interest K0 Law and Economics: General; N0 Economic History: General; Q0 Agricultural and Natural Resource Economics: General.


Principal Contributions Almost all of my work has attempted to put empirical content to the theoretical argument made in my 1991 paper on transaction costs. In short, I believe that all economic institutions are designed to maximize wealth net of transactions costs. I have applied this theory to the organization of marriage, agricultural contracts, military history, homesteading laws, and the organization of churches.

ALLEN, Franklin

Born 1956, Amersham, Buckinghamshire, UK.

Current Post Nippon Life Prof. Fin. and Prof. Econ., Wharton Sch., Univ. Pennsylvania, Philadelphia, PA, USA, 1994–.

Past Posts Asst Prof. Fin., Assoc. Prof. Fin., Assoc. Prof. Fin. Econ., Prof. Fin. and Econ., Wharton Sch., Univ. Pennsy-
ALM, James Robert

Born 1950, Hammond, IN, USA.

Current Posts Prof. Econ. and Chair, Dept Econ., Andrew Young Sch. Pol. Stud., Georgia State Univ., Atlanta, GA, USA, 1999–.

Past Posts Instr. Econ., Robert Morris Coll., 1974–76; Prof. Econ. and Sr Res.

ALLENBY, Greg M. n.e.

Principal Field of Interest G0 Financial Economics: General.


Principal Contributions Over the years I have tried to understand phenomena that are difficult to understand in terms of standard neoclassical economics. The explanations have been based on rational maximizing behavior and usually involving introducing frictions such as asymmetric information and transaction costs. Such phenomena include credit rationing, sharecropping, reputation, financial innovation, IPO underpricing, the market for information, stock price manipulation, asset price bubbles, asset price volatility, differences in financial systems, technical analysis of stock prices, financial crises and contagion and the role of banks and other intermediaries.

**Degrees** BA (Chemistry and Econ.) Earlham Coll., Richmond, 1972; MA Univ. Chicago, 1974; PhD Univ. Wisconsin-Madison, 1980.


**Principal Fields of Interest** H0 Public Economics: General; H3 Fiscal Policies and Behavior of Economic Agents; H7 State and Local Government; Intergovernmental Relations.


**Principal Contributions** Most of my work has examined the many ways in which individuals respond to taxation, the welfare effects of these responses, and the subsequent effects on government revenues and the distribution of income. Specific areas that I have focused upon include housing, social security, and, especially, tax compliance and the income tax treatment of the family. With several
colleagues, I have examined the numerous factors that affect an individual’s tax compliance decision. Important and novel aspects of this work include the application of experimental economics methods to the study of tax compliance and the examination of tax compliance in developing and transition economies. With Leslie Whittington, I have quantified the magnitude of the ‘marriage penalty/marriage subsidy’, or the positive/negative change in income tax liability that occurs with marriage; I have also estimated the responses of individuals to this change in taxation, in their decisions to marry, to divorce, or to cohabit, as well as in the timing of these decisions. In other work, I have examined the factors that determine why governments enact fiscal policies (e.g., tax and expenditure limitations, state lotteries), as well as the effects of the enactment of institutional reforms (e.g., the line item veto, intergovernmental transfers). I have also worked extensively on fiscal and decentralization reforms overseas, including projects in Bangladesh, China, Egypt, Grenada, Hungary, Indonesia, Jamaica, Nigeria, the Philippines, the Russian Federation, Turkey and Uganda.

ALSTON, Julian Mark

Born 1953, Dromana, Victoria, Australia.

Current Post Prof., Dept Agric. and Resource Econ., Univ. California, Davis, CA, USA, 1994–.


Degrees BAgSc Univ. Melbourne, 1975; MAgSc (Agric. Econ.) La Trobe Univ., 1979; PhD North Carolina State Univ., 1984.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics: General; Q1 Agriculture.


Principal Contributions My research on the economics of agriculture has been generally motivated by an interest in understanding the implications of government policies for economic efficiency and for the functional distribution of income in the agricultural sector. My earlier work emphasized commodity policies, such as domestic farm programs and border policies, an area of continuing interest. My main contributions related to modeling and measuring impacts of these policies were in showing the distributional implications of particular policies, through factor markets, and the importance of accurately representing the instruments of policies and the characteristics of the markets to which they apply. My interest in policy also led to some more-fundamental work on measuring the nature of supply and demand for agricultural products. For instance, an interest in the economics of industry investments in commodity promotion led to contributions to the econometric analysis of demand for agricultural products, which illustrated the role of functional form and other specification choices as conditioning factors in hypothesis tests and elasticity estimates – specifically, giving rise to false evidence of structural change in demand and overestimates of demand response to advertising. Much of my more recent work has emphasized the economics of agricultural science and technology policy, including some conceptual contributions, on how to model and measure the size and distribution of benefits from agricultural R&D, especially in the context of market distortions, as well as various empirical and methodological contributions related to the measurement of agricultural productivity and rates of return to agricultural R&D. I have been working on the general ‘attribution problem’ of defining and measuring comparable streams of benefits and costs of agricultural R&D, taking account of international price and technology spillovers in distorted market settings, and measuring the distribution of research benefits, and this is an area of continuing interest.
ALTONJI, Joseph G.

Born 1953, New York, NY, USA.

Current Post Thomas DeWitt Cuyler Prof. Econ., Yale Univ., New Haven, CT, USA, 2002–.


Degrees BA (Econ., cl with departmental hons), MA Yale Univ., 1975, 1975; PhD Princeton Univ., 1981.


Principal Fields of Interest J0 Labor and Demographic Economics: General; E2 Consumption, Saving, Production, Employment, and Investment; D1 Household Behavior.

Principal Contributions I have worked on a number of topics. The first concerns the nature of labor market fluctuations. My early work examines the role of intertemporal substitution in labor supply in business cycles. I have also examined the contribution of sector-specific shocks to employment to aggregate fluctuations. The second area concerns intertemporal models of consumption and labor supply. One paper estimates the intertemporal substitution elasticity of labor supply. Another develops and implements simple tests of the permanent income hypothesis and the Keynesian consumption function that are valid in the presence of measurement error in survey data. Third, I have studied the prevalence of hours constraints and the link between hours constraints and job mobility. Fourth, I have worked extensively on the determinants of wage rates, including the return to labor market experience and job seniority, the effects of the quality and quantity of education on wages, intergenerational links in economic success, the return to education when educational outcomes are uncertain, and the role of employer learning and statistical discrimination in wage dynamics. Fifth, I have studied income redistribution and risk sharing within the extended family. My current research is on paid and unpaid leave from work, nominal wage rigidity, private schools, black–white differences in wealth holding, intergenerational transfers, and econometric methods.

AMIHUD, Yakov

Born 1947, Tel Aviv, Israel.

Current Post Ira Rennert Prof. Entrepreneurial Fin., Stern Sch. Bus., NYU, NY, USA, 2000–.


Principal Fields of Interest G0 Financial Economics: General; G1 General Financial Markets; G2 Financial Institutions and Services.

ing, Auditing and Fin., 3, 1988; 11. ‘Li-
quidity, maturity and the yields on US
Treasury securities’ (with H. Mendelson),
J Fin, 46, 1991; 12. ‘How (not) to inte-
grate the European capital markets’ (with
H. Mendelson), in A. Giovannini, C. Mayer
(eds), European Financial Integration
(CUP, 1991); 13. ‘Volatility, efficiency and
trading: evidence from the Japanese stock
market’ (with H. Mendelson), J Fin, 46,
1991; 14. ‘Exchange rates and the valuation
of equity shares’, in Y. Amihud, R.
Levich (eds), Exchange Rates and Corpo-
rate Performance (Irwin, 1994); 15. ‘Un-
expected inflation and stock return revis-
ted: evidence from Israel’, JMCB, 28,
1996; 16. ‘A new approach to the regula-
tion of trading across securities markets’
(with H. Mendelson), NYU Law Rev., 71,
1996; 17. ‘Market microstructure and se-
curities values: evidence from the Tel Av-
viv Stock Exchange’ (with H. Mendelson, B.
Lauterbach), J Fin E, 45, 1997; 18. ‘A new
governance structure for corporate bonds’
(with K. Garbade, M. Kahan), Stanford
Law Rev., 51, 1999; 19. ‘Iliquidity and
20. ‘Allocations, cascades and adverse se-
tlection in IPOs: evidence from the Tel Aviv
Stock Exchange’ (with S. Hauser, A. Kirsh),
J Fin E, forthcoming.

Principal Contributions My major
work is on the effect of securities markets
microstructure on asset pricing. In my ar-
ticles with Haim Mendelson we show that
expected returns are an increasing func-
tion of asset illiquidity since investors de-
mand to be compensated for their higher
cost of illiquidity. This extends the theory
that suggests that expected return is an
increasing function of risk. We also show
that in a dealership market, securities
prices are partly affected by the inventory
policy of market makers, and that return
volatility and autocorrelation both depend
on the trading mechanism by which the
securities are traded. We show the prob-
lems that are created by multi-market trad-
ing and propose regulatory solutions. My
recent work shows that changes in stock
market liquidity over time affect stock ex-
pected return. The expected excess return
on equities, usually considered a risk pre-
mium, is an increasing function of the
market’s expected illiquidity, while real-
ized return is negatively related to the
contemporaneous market’s unexpected
illiquidity. This effect is greater for small
stocks that are more sensitive to market
liquidity. My work with B. Lev and oth-
ers shows that ownership concentration
in companies affects corporate finance de-
cisions because of agency problems. In
particular it affects the propensity of com-
panies to take on risk and their choice of
investment financing (debt or equity). My
work on industrial organization (with
Mendelson) studies its effects on compa-
nies’ pricing and production decisions,
showing that price smoothing is a result
of companies’ market power. This has im-
plications for macroeconomics, since it
gives rise to a positive price–production
relationship (‘Phillips curve’) in industries
that produce goods that can be invento-
ried. I have also made contributions in
areas in corporate finance such as divi-
dend policy, initial public offerings, gov-
ernance structure in corporate bonds, and
the effect of exchange rate changes on
stock prices.

ANAND, Sudhir n.e.

ANDERSEN, Torben Gustav

Born 1957, Vilhelmina, Sweden.

Current Posts Nathan S. and Mary P.
Sharp Disting. Prof. Fin., Dept Fin.,
Kellogg Sch. Mgmt, Northwestern Univ.,
Evanston, IL, USA, 2000–; Res. Assoc.,
NBER, Cambridge, MA, USA, 2000–.

Degrees  MS (Econ. and Maths), (Cand Scient Oecon) Univ. Aarhus, 1985; PhD Yale Univ., 1992.


Principal Fields of Interest  G1 General Financial Markets; C2 Econometric Methods: Single Equation Models; F3 International Finance.


Principal Contributions  My work focuses on understanding, modelling and forecasting fluctuations in financial market prices. I emphasize economic interpretations, practical applications and development of associated econometric methodology. My first two papers represent return volatility as a latent information variable associated with another market activity variable: trading volume. It thus categorizes return variability as genu-
ine stochastic volatility rather than as an ARCH process. Subsequent papers explore GMM and Efficient Method of Moments (EMM) estimation of stochastic volatility models—showing that the latter approach allows for estimation of complex, empirically relevant continuous-time models. The EMM approach is arguably the most versatile technique for estimation of such models, rendering formal testing feasible across a broad variety of alternative models for interest rates and equity returns with relevance for term structure and derivatives pricing applications. A later theme is the use of intraday (high-frequency) data to estimate daily and lower-frequency volatility. Systematic intraday patterns (diurnal effects) and news announcements are very important in the high-frequency return data. The additional information in high-frequency data is critical in identifying long-memory features in return volatility and distinguishing this explanation from alternative accounts of such features in the data. The main innovation of my later work is the introduction of nonparametric volatility measures—realized volatility—from aggregated products of intradaily returns. Such measures improve radically on the signal-to-noise ratio in daily squared returns, both theoretically and empirically. As a consequence, they are ideal as explanatory variables (realized volatility) in out-of-sample comparison of competing forecasts. Direct time-series modelling of these observable volatility proxies holds great promise for improved volatility forecasting and high-dimensional (conditional) return covariance matrix modelling. Economically significant improvements to portfolio selection, volatility and conditional return distribution forecasting have been documented, but the exploration of realized volatility remains in its infancy.

ANDERSON, Eugene W. n.e.

ANDERSON, Simon Peter


Current Posts Commonwealth Prof. Econ., Univ. Virginia, Charlottesville, VA, USA, 2003--; Bd Mem., EARIE, 1997--.


Degrees BSc Southampton Univ., 1979; MA, PhD Queen’s Univ., Canada, 1982, 1985.


Principal Fields of Interest L1 Market Structure, Firm Strategy, and Market Performance; R3 Production Analysis and Firm Location; D4 Market Structure and Pricing.


Principal Contributions My thesis analysed models of competition via location in characteristics or geographical spaces. Emphasis was on equilibrium existence, extensions to different game forms, and alternative specifications. I then started work (especially with Andre de Palma and Jacques Thisse) on the foundations of discrete choice models and their application to modelling oligopoly with product differentiation. We showed the relation between representative consumer models, characteristics models, and the discrete choice approach, and showed how the CES representative consumer can be viewed as a discrete choice model. The book Discrete Choice Theory of Product Differentiation sums up developments in the field up to 1992. I have worked on several extensions since then, notably that there is excessive entry in oligopoly when the preference density is sufficiently regular. Recent research includes work on multiproduct firms, consumer search and firm pricing (revisiting the Diamond paradox and looking at the effects of consumer information on prices), pre-emptive entry, anti-dumping laws in international trade, and tax incidence and efficiency in differentiated products oligopoly. A major project concerned the effects of bounded rational behaviour on economic equilibria; in particular, explaining anomalous data from economic experiments and providing richer predictions than standard Nash equilibrium analysis. Current research includes work on price dispersion, surplus bounds in oligopoly, and the economics of creative industries. A major research area addresses the economics of advertising; first, how advertising finances the media, and second, firms’ choice of advertising content.

ANDREONI, James Raymond

Born 1959, Beloit, WI, USA.
Current Post Prof. Econ., Univ. Wisconsin-Madison, Madison, WI, USA, 1996–.
Past Posts Asst Prof., Assoc. Prof.,

**Degrees**
- BS Univ. Minnesota, 1981; 
- PhD Univ. Michigan, 1986.

**Offices and Honours**

**Editorial Duties**

**Principal Fields of Interest**
- H0 Public Economics: General; 
- D0 Microeconomics: General; 
- K4 Legal Procedure, the Legal System, and Illegal Behavior.

**Publications Articles:**
4. ‘Impure altruism and donations to public goods: a theory of warm-glow giving’, *EI*, 100, June 1990; 
6. ‘Reasonable doubt and the optimal magnitude of fines: should the penalty fit the crime?’, *RandJE*, 22, Autumn 1991; 
8. ‘Rational cooperation in the finitely repeated prisoner’s dilemma: experimental evidence’ (with J.H. Miller), *EI*, 103, May 1993; 
10. ‘Warm-glow versus cold-prickle: the effects of positive and negative framing on cooperation in experiments’, *QJE*, 110, Feb. 1995; 
11. ‘Auctions with adaptive artificial agents’ (with J.H. Miller), *Games and Econ. Behav.*, 10, 1995; 
12. ‘Cooperation in public goods experiments: kindness or confusion?’, *AER*, 85, Sept. 1995; 
13. ‘Do government subsidies increase the private supply of public goods?’ (with T.C. Bergstrom), *Public Choice*, 88, 1996; 
17. ‘The simple analytics of the environmental Kuznets curve’ (with A. Levinson), *J Pub E*, 80, May 2001; 
18. ‘Giving according to GARP: an experimental test of the consistency of preferences for altruism’ (with J.H. Miller), *Em*, 70, March 2002; 

**Principal Contributions**
My main contributions have been to the study of charitable giving and altruism. Why do people give to charity? I have explored the question of motives for giving theoretically, with survey data on charitable giving, and with experimental data. My theoretical work shows that treating charity as a pure public good alone, referred to as ‘pure altruism’, cannot explain the level of giving observed in the data. Rather, people must contribute for other impurely altruistic reasons, such as to experience the ‘warm-glow’ of giving. My experimental work has confirmed this. Using laboratory studies I make the point that people are not purely selfish and that much of the non-selfish behaviour can be explained with a simple neoclassical model of individual social-welfare functions. That is, fairness and altruism can fit a rational choice framework. Later work has turned to understanding the institutions that raise money for public goods, and which take advantage of these non-selfish preferences.
to help overcome free riding. This has led to theoretical, econometric and experimental studies of fund-raising. The notion is to breathe life into our economic models of charitable organizations, and to treat them as strategic players in the competition for donations and government grants. My theoretical research shows that common fund-raising strategies, such as leadership giving, are consistent with simple economic assumptions. We also confirm empirically that fund-raising activities by charities respond strategically to their changing environments, and we confirm experimentally that individuals respond to standard fund-raising techniques. This lays the foundation for future work to merge the models of individuals and organizations to learn how private institutions provide public goods.

ANDREWS, Donald W.K. n.e.

ANGRIST, Joshua D.

Born 1960, Columbus, OH, USA.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; C1 Econometric and Statistical Methods; General; I2 Education.

AOKI, 25


**Principal Contributions** My principal contributions are in the area of empirical labor economics, especially human capital, the economics of the family, and education. I have also made contributions to the development of econometric and statistical methods for program and policy evaluation.

ANSELIN, Luc n.e.

AOKI, Masahiko

Born 1938, Nagoya, Japan.

**Current Posts** Prof. Econ., Stanford Univ., Stanford, CA, USA, 1984–; Pres., Res. Inst. Econ., Trade and Ind., Tokyo, Japan, 2001–.


**Principal Fields of Interest** P5 Comparative Economic Systems; G3 Corporate Finance and Governance; L2 Firm Objectives, Organization, and Behavior.

ARELLANO


Principal Contributions Most of my work has related to comparative institutional and organizational analysis. My recent book (10) provides a comprehensive game–theoretic framework for institutional analysis and synthesizes my previous work. It conceptualizes institutions as ‘shared beliefs in ways how the game is being played’ and analyzes such issues as: how institutions in economy, polity, and social exchanges are interrelated, why they are diverse across history and economies, and how they change. It illustrates analysis with diverse examples, some of which are drawn from my previous work on comparative corporate governance (books 1, 5, 6 and articles 7, 10) and comparative organizations (articles 6, 10). I have also introduced information and game theoretic tools for analyzing Japanese and other East Asian economic institutions in comparative perspective (books 2, 3, 4, 5, 7 and article 7). My early work (articles 2, 3) deals with organizational design to achieve an optimal outcome in the presence of externalities and increasing returns with more information requirements than prices. This information-systemic approach later evolved into analyzing various organizational modes such as hierarchies, information-sharing (articles 6, 7) and the Silicon Valley model (article 10).

ARELLANO, Manuel

Born 1957, Elda, Spain.

Current Post Prof. Econ., CEMFI, Madrid, Spain, 1991–.


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2001; Pres., Spanish Econ. Assoc., 2003; Fell., Em Soc, 2002–.


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; J0 Labor and Demographic Economics: General; J6 Mobility, Unemployment, and Vacancies.

**Publications**


**Principal Contributions** I am interested in the econometric analysis of the behaviour of households and firms. I am concerned, in particular, with the problem of distinguishing empirically between dynamic responses and unobserved heterogeneity in panel data models. In various articles (some of them with S. Bond, O. Bover, J. Labeaga, R. Carrasco), I have developed methods of inference that address this problem in various situations of interest in microeconometrics; including linear, discrete choice, and sample selection models. I am also interested in the sampling properties of estimation methods in this context, and by extension in other cross-sectional or time-series instrumental-variable models. J.D. Sargan and
I have developed Imhof approximations for the distributions of various estimators. C. Alonso-Borrego and I proposed symmetrically normalized estimators for dynamic panel data models. J. Alvarez and I obtained the asymptotic properties of dynamic panel data estimators when both the time-series and the cross-sectional dimensions tend to infinity. My other field of interest is empirical labour economics. I am specially interested in female labour force participation, unemployment, earnings dynamics, and in econometric methodology that is relevant to these issues. C. Meghir and I have considered methods for combining the information in labour force and family expenditure surveys, which we then used to estimate female labour supply elasticities for the UK. In other articles with Meghir, Bover, and Bover and Labeaga I estimated female labour supply elasticities or participation responses in various settings using data from the UK, Spain, and the US. O. Bover, S. Bentolila and I measured business-cycle and unemployment benefit effects on the exit rates from unemployment using Spanish duration data. In other work with the same co-authors, I studied changes in the Spanish conditional earnings distributions during the 1980s using a large Social Security panel subject to top censoring.

ARMSTRONG, J. Scott

Born 1937, Philadelphia, PA, USA.


Principal Field of Interest M0 Business Administration and Business Economics; Marketing; Accounting: General.


**Principal Contributions**

Major findings as follows. Developed ‘rule-based forecasting’: empirical testing showed that it improved the accuracy of extrapolation forecasts. Founded ‘casual forces’: they can improve the selection and weighting of extrapolation methods. Tested simulated interactions (role playing). Showed that prediction intervals for annual economic data should be asymmetric. Combining forecasts reduces forecast error in virtually all situations, with an average reduction of 13 per cent. Intentions data can produce substantial improvements in the forecast accuracy even when actual sales data exist. Founded the See-Sucker Theory: high expertise in forecasting has little relationship to accuracy in forecasting change. Found that econometric methods are more accurate than other methods for long-range forecasts. Showed that simple extrapolation methods are as accurate as more complex methods. Company earnings forecasts are more accurate than those by analysts. Trend factors in extrapolation models should be damped. The mean square error is inappropriate for comparing forecasting methods. Competitor-oriented objectives are detrimental to profits. Extrapolation across waves can be used to correct for non-response bias in mail surveys. Use of a portfolio matrix leads to less-profitable decisions. Monetary incentives always increase response rates of mail surveys. Business-reply postage is not cost-effective for mail surveys. Extensions of marketing studies typically fail to reproduce the original findings. Escalation bias does not generalize to marketing decisions. The method of multiple hypotheses is underutilized in management science. Less intelligible writing increases the perceived prestige of academics. The stakeholder role, in combination with social accounting, reduces the likelihood of socially irresponsible decisions by top management. Formal planning improves the performance of firms. Found that business school prestige rests upon research, not teaching. Founder of forecastingprinciples.com, a website designed to include all useful knowledge about forecasting.

**ARNOTT, Richard James**


**Current Post** Prof., Dept Econ., Boston Coll., Chestnut Hill, MA, USA, 1988–.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; H0 Public Economics: General; D8 Information and Uncertainty.


Principal Contributions My general interest has been in the application of microeconomic theory to issues in public policy. My specific interest has been urban economics. I have tended to work on overlapping long-term projects with long-term co-authors, gradually extending models in the direction of realism. My thesis research (under Joseph Stiglitz’s direction) dealt with the monocentric city model, especially the optimal city. From 1975–80, in both theoretical and simulation work (with James MacKinnon), I investigated elaborations of the model such as traffic congestion and durable housing. From 1980–85, I embarked on two new topics – moral hazard (with Joseph Stiglitz) and (following James Sweeney) housing markets with durable, quality-differentiated housing (with Ralph Braud, Russell Davidson and David Pines). From 1985–90, my theoretical work focused on elaborating William Vickrey’s model of rush-hour traffic congestion (with Andre de Palma and Robin Lindsey), and on the applied side, Alex Anas and I teamed up to develop practical housing market simulation models. During the early 1990s, I worked on the theory of congestible facilities with Marvin Kraus, and on imperfectly competitive models of the housing market based on idiosyncratic matching (with Paul Anglin and Masahiro Igarashi). Since then I have been examining property taxation and extending earlier work to treat such topics as the microfoundations of residential real estate cycles, parking policy, and transportation and land use in dispersed cities.
ARNould, Eric J. n.e.

ARTHUR, W. Brian

Born 1945, Belfast, Northern Ireland.

Current Post Citibank Prof., Santa Fe Inst., NM, USA, 1994–.


Principal Fields of Interest A1 General Economics; O3 Technological Change; L1 Market Structure, Firm Strategy, and Market Performance.


Principal Contributions Developed the modern approach to economic allocation under increasing returns; in particular developed a framework for analyzing the dynamics of lock-in to one of many possible equilibria under the influence of small, random events. Recent research: the economy and technology; formulating economic theory for how human agents ‘cognize’ problems, and how they operate under indeterminacy; the evolution of technology.

ASHENFELTER, Orley Clark

Born 1942, San Francisco, CA, USA.


**Editorial Duties**
- Ed., *AER*, 1985–;
- *Ricerche Econom.*, 1992–;
- *Labor Econ.*, 1992–.

**Principal Fields of Interest**
- C1 Econometric and Statistical Methods: General;

**Publications**


**Articles**:
1. ‘Estimates of the economic return to schooling from a new sample of twins’ (with A. Krueger), *AER*, Dec. 1994;
2. ‘Predicting the quality of an unborn grange’ (with R. Byron), *ER*, 71, March 1995;
6. ‘Estimates of the returns to schooling from sibling data: fathers, sons, brothers’ (with D.J. Zimmerman), *REStat*, 79, Feb. 1997;

**Principal Contributions**
Most of my research is designed to set out methods for, and the results of, empirical tests of economic models of aspects of the labour market. Some of the tests have even been successful!

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**ATKINSON, Scott E.**

**Born** 1944, El Paso, TX, USA.

**Current Post** Prof. Econ., Univ. Georgia, Athens, GA, USA, 1986–.

**Past Posts**
- Instr. Econ. and Hist., Colorado Acad., 1968–69;
- Environmental Econ., EPA, 1972–73;
- Sr. Econ., Dept Energy, 1973–79;
- Adjunct Prof. Econ., VA Polytech. Inst. and State Univ., 1979–81;
- Sr Econ., Amer. Petroleum Inst., 1979–81;
- Assoc. Prof. Econ., Prof. Econ., Adjunct Prof. Stats, Univ. Wyoming, 1981–86;

**Degrees**
- BA (Amer. Hist. and Literature) Williams Coll., 1966;

**Offices and Honours**
- Special Achievement Award for Outstanding Res., Fed. Energy Admin., 1975;
- Outstanding Hons Teaching Award, Univ. Georgia, 1989;
- Beta Gamma Sigma Hon. Soc., Univ. Georgia, 1989–;

**Editorial Duties**

**Principal Fields of Interest**
- C3 Econometric Methods: Multiple/Simultaneous
Equation Models; L5 Regulation and Industrial Policy; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions My research has concentrated on three main areas of economics: environmental, regulatory and industrial organization, and econometric methods and applications. In the first, I have investigated two principal topics. Bayesian methods were used to access the importance of priors on posterior estimates in health-effects and hedonic property value regressions, where pollution is an explanatory variable. The cost-effectiveness of various systems for trading the rights to degrade air quality was examined using mathematical programming techniques which incorporated air quality diffusion models. My initial study was among the first to examine the relative costs of emission and ambient permit systems relative to the current system. Another case study examined the incentive for utilities to engage in long-range acid deposition when local ambient permits are traded. More recently, the sequential and bilateral nature of permit trading was shown to capture only a portion of the potential gains from trade simulated by a mathematical program. Research in regu-
lation and industrial organization has concentrated on methodologies for measuring rent allocation, allocative inefficiency, and technical inefficiency using flexible functional forms for cost, profit, and more recently, distance functions. Expressing actual costs or profits as a function of shadow prices allows calculation of allocative inefficiency. Given panel data, input and firm-specific measures can be obtained. Technical inefficiency is jointly calculated as an input or output distance measure. These techniques have been demonstrated using airline, utility, and railroad data. In addition, rates of technical progress and growth in total factor productivity are derived from these distance measures. Recent extensions are the use of Bayesian techniques including Gibbs sampling. Other econometric contributions include simulation of small-sample properties of systems estimators, development of hedonic methods, and theoretical work establishing the small-sample bias of the bootstrap estimator in seemingly unrelated regressions and when forming confidence intervals for efficiency scores.

ATKINSON, Sir Tony

Born 1944, Caerleon, Monmouth, Wales.


Principal Fields of Interest G0 Financial Economics: General; I0 Health, Education, and Welfare: General; A1 General Economics.


ATTANASIO, Orazio Pietro

Born 1959, Naples, Italy. 


Principal Fields of Interest D1 Household Behavior; O2 Development Planning and Policy; G0 Financial Economics: General.


Principal Contributions n.e.

AUDRETSCH, David Bruce

Born 1954, Detroit, MI, USA.


mercialization, 2000–, Regional Sc., 2001–.

Principal Fields of Interest O3 Technological Change; L1 Market Structure, Firm Strategy, and Market Performance; L4 Antitrust Policy; L5 Regulation and Industrial Policy.


Principal Contributions The major focus of my work has been on the links between entrepreneurship, government policy, innovation, economic development and global competitiveness. While my dissertation and early research was on public policy, and in particular antitrust and competition policies, I noticed that the role of small firms and entrepreneurship was virtually ignored in economics. Thus, in the 1980s, working at a research institute in Berlin, I embarked on a large-scale research project devoted to the economics of small business, innovation and entrepreneurship. An important finding was that small firms are an engine of innovative activity. The early studies had a basis in industrial organization and focused on identifying, both empirically and theoretically the actual role played by small firms in the economy. My research expanded from focusing on the innovative activity of small firms to patterns of entry, survival, growth, and industry turbulence, and why these patterns vary systematically across industries. Gradually this gave rise to a more evolutionary view of markets and industries, which culminated in the publication of Innovation and Industry Evolution in 1995. This research on entrepreneurship led me to focus more on the implications of an economy shifting more towards knowledge-based activity. An important implication that began shaping my research in the mid-1990s was the importance of geography and spatial relo-
tionships, and in particular spatial clusters, networks and agglomerations in the generation of new knowledge and in the entrepreneurial process. My most recent research has moved towards linking entrepreneurship to economic growth at both the regional and national levels.

AUERBACH, Alan Jeffrey

Born 1951, New York, NY, USA.

Current Post Robert D. Burch Prof. Econ. and Law, Univ. California, Berkeley, CA, USA, 1994–.

Past Post Prof. Econ. and Law, Univ. Pennsylvania, 1983–94.

Degrees BA (Econ. and Maths) Yale Univ., 1974; PhD Harvard Univ., 1978.


Principal Fields of Interest H3 Fiscal Policies and Behavior of Economic Agents; H6 National Budget, Deficit, and Debt; E2 Consumption, Saving, Production, Employment, and Investment.


Principal Contributions Development of dynamic fiscal policy analysis, theoretical and empirical work regarding the real and financial behavior of firms in response to taxation.

AUSTEN-SMITH, David n.e.

AUSUBEL, Lawrence Marc

Born 1959, New York City, NY, USA.

Current Post Prof. Econ., Dept Econ., Univ. Maryland, MD, USA, 1992–.

Past Posts Asst Prof. Managerial Econ., Kellogg Grad. Sch. Mgmt, Northwestern

**Degrees**


**Offices and Honours**


**Principal Fields of Interest**

L0 Industrial Organization: General; D4 Market Structure and Pricing; C7 Game Theory and Bargaining Theory.

**Publications**

**Articles:**


**Principal Contributions**

Most of my work has related to industrial organization, game theory and microeconomic theory. My dissertation, *Partially-Revealing Equilibria*, and two of my early papers developed classes of economic models which exhibit partially-revealing rational expectations equilibria and applied the models in an analysis of insider trading. A second line of work, joint with R. Deneckere, studied the problem of sequential bargaining under incomplete information and applied the models in an analysis of insider trading. A second line of work, joint with R. Deneckere, studied the problem of sequential bargaining under incomplete information and the closely-related problem of durable goods monopoly. For the most interesting distributional assumptions, the ‘Coase Conjecture’ requires an assumption of stationary equilibrium. Without any stationarity assumption, we proved that a folk theorem holds, and there exist equilibria qualitatively close to that of classic monopoly. A third line of work has studied the theory of multi-unit auctions. My contributions include the development of an efficient ascending auction.
for homogeneous goods – now often referred to in the literature as the ‘Ausubel auction’ – and an extension to heterogeneous commodities. Joint work with P. Cramton has shown that demand reduction is endemic to and causes inefficiencies in standard uniform-price auctions. Joint work with P. Milgrom has yielded a theory of ascending auctions with package bidding and the development of an ‘ascending proxy auction’, as well as parallels with matching theory. A fourth line of work has empirically examined the credit card market and, later, personal bankruptcies. Despite the presence of 4,000 firms issuing credit cards in the US, interest rates have been exceptionally sticky and profitability has been extraordinarily high. Anomalies continue in the credit card market to the present day.

AYRES, Ian

Born 1959, Kansas City, MI, USA.

Current Post William Townsend Prof. Law, Yale Law Sch., New Haven, CT, USA, 1994–.


Honour Phi Beta Kappa, 1980.


Principal Fields of Interest D6 Welfare Economics; D4 Market Structure and Pricing; C4 Econometric and Statistical Methods: Special Topics.


AZARIADIS, Costas

Born 1943, Athens, Greece.

Current Post Prof. Econ., UCLA, Los Angeles, CA, USA, 1992–.


Principal Field of Interest E0 Macroeconomics and Monetary Economics: General.


Principal Contributions Implicit contracts; multiple equilibrium; poverty traps; dynamics of lifecycle models; general equilibrium implications of credit market frictions.

AZZAM, Azzeddine M. n.e.
BABCOCK, Bruce B. n.e.

BACKUS, David K. n.e.

BAGOZZI, Richard Paul

Born 1946, Detroit, MI, USA.

Current Post Prof. Mgmt, Jones Grad. Sch. Mgmt and Prof. Psychology, Rice Univ., Houston, TX, USA, 1999–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; I1 Health; M0 Business Administration and Business Economics; Marketing; Accounting: General.


Principal Contributions

My research crosses both methodological and substantive topics and is often multidisciplinary. Four distinct areas of emphasis are the following: (1) Structural equation modeling and its relationship to (a) the concept of construct validity, (b) the representation of unobservables and their relationship to observables, and (c) philosophy of science criteria. (2) The theory of mind and the theory of action in psychology and the social and management sciences. Here I have introduced or developed such ideas as ‘we intentions’, ‘self-regulation’, ‘trying’, ‘desires’, ‘social identity’, ‘volition’, ‘goal setting’, and ‘goal striving’ in decision making. 3. Emotions and their relationship to (a) cultural differences in decision making, (b) goal-directed behavior and ‘prefactual’ processes, and (c) self-conscious and social processes. (4) Applications of the above to marketing, organization behavior, pharmacy administration, health psychology, consumer behavior, salesforce behavior, communication, and ethnicity.

BAHMANI-OSKOOEE, Mohsen

Born 1951, Osku, Azarbaijan, Iran.

Current Posts Wilmeth Prof. Econ. and Dir., Center Res. Intl Econ., Univ. Wisconsin-Milwaukee, Milwaukee, WI, USA, 2001–.


Degrees BA Natl Univ. Iran, 1975; MA, PhD Michigan State Univ., 1979, 1981.


Principal Fields of Interest F3 International Finance; F1 Trade; E1 General Aggregative Models.


**Principle Contributions** I have contributed in five major areas. (1) Many studies have tried to identify factors that determine a country’s desire to hold international reserves. After reviewing the literature twice (in 1985 and 2002), I have identified the price of gold, a measure of exchange rate flexibility and the exchange rate itself to be other factors. (2) I have estimated import and export demand elasticities for more than 40 countries using different estimation techniques. The literature argues that in the short run, the trade balance deteriorates after devaluation and improvements come after some time, i.e., the J-curve phenomenon. I have introduced a method of testing the J-curve phenomenon using different econometric techniques. (3) Studies that have tried to test the hypothesis that a more productive country should experience a real appreciation in its currency, have used cross-sectional data and provided mixed results. I have expanded the literature in this area on two fronts. First, by using time-series data and modern econometric techniques, I have provided support for the hypothesis. Second, I have identified institutional factors such as law and order, corruption, etc. as other determinants of the real exchange rate. (4) In order to determine what happens to the international competitiveness of a country, we must construct a real effective exchange rate for each country. The IMF constructs such rates only for a sample of developed countries. I have constructed quarterly real and nominal effective exchange rates for more than 20 developing countries. (5) After analysing the developments of the black markets for foreign exchange, I have looked at the impact of black market rates on domestic inflation, domestic output, the demand for money, the trade balance income distribution, etc., using data from Iran.

**BAILLIE, Richard T.**

**Born** 1948, London, UK.

**Current Post** A.J. Pasant Prof. Econ. and Fin., Michigan State Univ., East Lansing, MI, USA, 1999–.


**Degrees** BSc Middlesex Univ., 1970; MSc Univ. Kent, 1972; PhD LSE, 1978.

**Offices and Honours** Cons., FRB,


Principal Fields of Interest C1 Econometric and Statistical Methods: General; F3 International Finance; G1 General Financial Markets.


Principal Contributions Throughout my career I have had a continuing interest in theoretical and applied time-series econometrics. My research has been approximately equally divided between econometrics and financial markets; particularly international finance. My initial research publications were in the theory of prediction from dynamic econometric models, including post-sample stability testing, evaluation of forecast confidence intervals and the properties of estimated impulse response weights. I subsequently extended these results to situations with ARCH volatility processes. In my applied econometric work, I have been forcibly impressed by the incredible and subtle forms of non-linearity that are present in economic and financial time series. Hence I worked on ARCH volatility processes, and then on the development and application of long-memory processes and
fractional integration, which appears to be of great relevance to many asset-pricing situations. In particular, I was involved in developing the long-memory ARCH volatility model, known as FIGARCH. In terms of work in international finance, I have worked extensively on aspects of the forward premium anomaly, and in the 1980s, used VAR analysis to show that the widely held assumptions of rational expectations and risk neutrality were inappropriate. Subsequently, I worked on modelling risk premiums and on various econometric explanations for the apparent excess returns over uncovered interest parity. I have estimated several models for time-dependent risk premiums and have concluded that this does not fully explain the anomaly. I have also written on the motivation and effects of central bank intervention in currency markets. My research has demonstrated how intervention can increase market volatility and lead to excess returns over uncovered interest rate parity. However, the research implies scepticism that intervention can effectively influence the levels of nominal exchange rates. I have also published work on models of exchange rate determination and on problems concerning commodity pricing.

BAKER, George Pierce

Born 1957, Boston, MA, USA.


Principal Fields of Interest M5 Personnel Economics; D2 Production and Organizations; J3 Wages, Compensation, and Labor Costs.


BAKER, Regina M. n.e.

BAKER, William Michael Douglas

Born 1959, Toronto, Canada.
Current Post Assoc. Prof. Econ., Univ. Toronto, Toronto, Canada, 1990–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; I0 Health, Education, and Welfare: General; H3 Fiscal Policies and Behavior of Economic Agents.

Principal Contributions Empirical analysis of the labour market outcomes of immigrants and of earnings dynamics, the impacts of labour market interventions; the economics of aging.

BALKE, Nathan S. n.e.

BALL, Laurence M. n.e.

BANERJEE, Abhijit Vinayak

Born 1961, Bombay, India.

Current Post Prof. Econ., Dept Econ., MIT, Cambridge, MA, USA, 1996–


Principal Fields of Interest O1 Economic Development; D8 Information and Uncertainty; E3 Prices, Business Fluctuations, and Cycles.

Principal Contributions While I have written papers in many areas of economics, there are four main areas where I believe my work has had a significant impact. The first is the study of imperfect credit markets: my early theoretical work with Newman on the relation between imperfect credit markets, income distribution and growth were among the very first papers that emphasized the profound implications of capital market imperfections for the theory of income distribution of growth. My later work with Aghion and Piketty and with Aghion and Philippe Bacchetta, provided a simple and accessible framework for studying the implications of imperfect capital markets for short-run macro policy. In recent work (including joint work with Duflo and Munshi), I have attempted to document that the credit market imperfections are in fact empirically important enough to be taken seriously. The second area is the study of the processes by which people influence each other’s choices. My papers on ‘Rumours’ and ‘Herd behavior’ were among the first papers of what has now become a very large literature. A third area where my work has been influential is in thinking about corruption. My paper on ‘Misgovernance’ was an attempt to argue that a significant part of corruption is a result of rules that we have set up for good reasons. My chapter, ‘Can anything be done about corruption?’, traces some of the practical implications of this point of view. Finally, my recent work on the relationship between historical inequities (particularly in the ownership of land) and current economic performance has attracted attention. In particular, my work with Gertler and Ghatak, on the productivity benefits from the redistribution of ownership rights in land, is perhaps the only relatively clear-cut evidence we have on this subject.

BANERJEE, Anindya

Born 1961, Calcutta, India.


Honour Gonner, Ponsonby and Stern Prize, 1983.


Principal Fields of Interest C3 Econometric Methods: Multiple/Simultaneous Equation Models; C5 Econometric Modeling.


Articles: 1. ‘Exploring equilibrium relationships in econometrics through static models: some Monte Carlo evidence’ (with D. Hendry, J. Dolado, G. Smith), OBES, 48, 1986; 2. ‘Tests of the life cy-

Principal Contributions I have worked on the theory and practice of integrated time series with particular reference to their implications for estimation, inference and forecasting. In my papers I have dealt with the issue of biases in the estimates of the cointegrating parameter, and worked on tests for cointegration in time series and panels, on structural breaks and forecasting with integrated series. More recently, in several papers, I have looked at the implications for economic modelling of series, such as inflation, being integrated of order one, and the estimation of polynomially cointegrated relationships.

BARBER, Brad M. n.e.

BARBERA, Salvador n.e.

BARBIER, Edward Burr

Born 1957, Washington, DC, USA.

Current Post John S. Bugas Prof. Econ., Dept Econ. and Fin., Univ. Wyoming, Laramie, WY, USA, 2000–.


Principal Fields of Interest O1 Economic Development; Q0 Agricultural and Natural Resource Economics: General; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions Most of my research has focussed on the interface between environmental and resource economics and economic development. My initial work for my PhD thesis, published as Economics, Natural Resource Scarcity and Development: Conventional and Alternative Views, expressed the need for economists to collaborate with scientists from other fields, notably ecology, to analyze complex environment and development problems. Since then, my applied work in this area has focussed on land degradation, wildlife management, trade and the environment, watershed management and water allocation, biological invasions, coastal and wetland use, tropical deforestation, and biodiversity loss. I am also known for my work in developing methods for valuing ecosystem functions and services, such as the role of coastal wetlands in supporting offshore fisheries, watershed protection and groundwater recharge. Early in my career, with David Pearce and Anil Markandya, I made several contributions to the economics of sustainable development, long before this field became popular with economists. My current interests focus more generally on understanding the role of natural resources in economic growth and development, particularly in resource-dependent low- and middle-income countries.

BARCLAY, Michael J. n.e.

BARDHAN, Pranab Kumar

Born 1939, Calcutta, India.

Current Post Prof. Econ., Univ. California, Berkeley, CA, USA, 1977–.


Principal Fields of Interest F1 Trade; O4 Economic Growth and Aggregate Productivity; Q1 Agriculture.


Principal Contributions My early work mostly involved formal models of economic growth and international trade. Since then my interests have branched out into the area of economic development, particularly agrarian institutions, implicit contracts in land, labour and credit transactions, and the interrelation-

ship between the state and social and economic structures, and in general gov-

erance and political economy issues in development.

BARRETT, Scott Alexander

Born 1957, Boston, MA, USA.


Degrees BS (scl) Univ. Massachusetts, 1979; MA UBC, 1983; PhD LSE, 1989.

Honours Resources for Future Disser-

Principal Fields of Interest  Q2 Renewable Resources and Conservation; Environmental Management; H4 Publicly Provided Goods.


Principal Contributions  Much of my research has been on the supply of international public goods and on international cooperation more generally. My first book develops a theory of treaty design, applied to environmental problems. The emphasis of the book is on how a treaty can strategically manipulate the incentives states have to participate in the treaty and to comply with it. I have also written on trade and environment, growth and environment, and on environmental policy in developing countries. A central concern of all this work has been with institutional failures – on the reasons why institutions fail, and on how they can be improved to help the environment and human well-being. My new research is on international cooperation in the control of infectious diseases.

BARRO, Robert J.

Born 1944, New York City, NY, USA.

Current Post  Robert C. Waggoner Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1987–.


Principal Fields of Interest  O4 Economic Growth and Aggregate Productivity; E0 Macroeconomics and Monetary Economics: General.


Principal Contributions Ricardian-equivalence and tax-smoothing results on public debt; monetary theories with incomplete information and rational expectations; unanticipated money as an empirical determinant of business fluctuations; the Keynesian model as a general disequilibrium system; application of rules, discretion, and reputation to monetary policy; theories of economic growth, convergence, and fertility choice; empirical determinants of growth and convergence across countries and regions.

BASU, Kaushik

Born 1952, Calcutta, India.

Current Posts Carl Marks Prof., Dept Econ., and Dir., Program on Comparative Econ. Devlp., Cornell Univ., Ithaca, NY, USA, 1996–, 2000–.


Degrees BA (Hons) St. Stephen’s Coll., Delhi Univ., 1972; MSc, PhD LSE, 1974, 1976.


Principal Fields of Interest D0 Microeconomics: General; O1 Economic Development; C7 Game Theory and Bargaining Theory.

what I had read in journals but from snatches of conversation overheard in buses, chats with street vendors and occasional visits to villages. This ‘method of the anthropologist’ I have cherished and tried to consciously nurture subsequently. My book, *The Less Developed Economy*, was well received and encouraged me to pursue several sub-fields within development, such as land tenure and sharecropping, and international credit and finance. While writing on these topics I was unwittingly beginning to develop and use methods, which are germane to industrial organization (IO) theory, and soon I found myself reading extensively in the field of IO. This led to active research in industrial economics and I have, over the years, published papers on collusion, entry-deterrance in oligopoly and product durability. From more or less the start of my academic career, I had an interest in game theory and in particular the problem of rationality and knowledge. This led me to the construction of some paradoxes and impossibility theorems concerning rational behavior in strategic environments. In the 1980s I worked briefly on social norms and political power, inspired by the then-unpublished essay on power by Vaclav Havel. That brief flirtation led to my recent work in political economy and critique of economic theory. Since the late 1990s I have been working on the problem of child labor and international labor standards

**Principal Contributions** My doctoral work was on social choice theory and welfare economics; I was also interested in moral philosophy, and have on occasions tried to contribute to the field. Having returned to India in the late 1970s, I became interested in the economics of development by a somewhat unusual route. Questions arose in my mind not just from
A&M Univ., College Station, TX, USA, 1989–.


Degrees BS Univ. California, Berkeley, 1966; MS, PhD Purdue Univ., 1968, 1970.


Principal Fields of Interest C9 Design of Experiments; C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty.


Principal Contributions My early work using experimental methods in economics focussed on individual choice behavior. In a series of experiments with John H. Kagel, we used laboratory animals and human subjects to provide a rigorous test of the Slutsky–Hicks theory of individual choice behavior. The same subject populations were also used to ex-
amine individual choice under uncertainty. This research provided support for the abstract Slutsky–Hicks theory in modeling both animal and human behavior. My later work, done in collaboration with John Van Huyck, involves a series of experiments designed to look at equilibrium selection and coordination in laboratory markets. This work has shown that coordination failures can result in large losses in efficiency. We have shown that, in some cases, institutions can be used to improve the efficiency of these markets.

BAUER, Paul William

Born 1959, Coshocton, OH, USA.

Current Post Econ. Advisor, FRB, Cleveland, Cleveland, OH, USA, 1986–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; D2 Production and Organizations.


Principal Contributions Most of my work has involved using cost functions to estimate scale economies, cost efficiency, and technical change. I have developed some new techniques for estimating cost frontiers that allow for both allocative and technical inefficiency and other techniques for exploring the sources of performance differences across firms. Much of this work has been done using data on the production of payment services. By examining Federal Reserve Banks’ costs of providing payment services, insight has also been gained into not just the production technology of private payments providers, but also into the service sector in general.

BAUMOL, William Jack

Born 1922, New York City, NY, USA.

Current Posts Prof. Econ., NYU, New York, NY, USA, 1991–; Sr Res. Econ.,


Editorial Duties At various times on ed. and/or advisory bds: AER, Kyk, JEL, J. Cultural Econ., JEP, Mgmt Sc., Econ. Notes (Italy), J. Econ. Educ., Impresa e Concorrenza (Italy), Theory and Hist. Econ. and Social Insts and Structures (USSR), Feminist Econ., Japan and the World Econ., Supreme Court Econ. Rev., Economia: Revista Quadrimestral (Portugal).

Principal Fields of Interest O4 Economic Growth and Aggregate Productivity; L0 Industrial Organization: General; D6 Welfare Economics.


**Principal Contributions** My most cited contributions span five fields: alternative objectives of the firm, the cost-disease, contestable markets, convergence of productivity of industrial economies and the free-market innovation machine. I have also helped Ralph Gomory in a substantial contribution to international trade theory. Older observation shows that firms pursue goals more complex than just profit maximization. I have showed that the behavioral consequences of alternative objectives such as maximization of sales can be analyzed mathematically in the same way as profit maximization, yielding results about firms’ behavior. The cost-disease analysis shows that many services including health care, education and live performing arts are, to a degree, handicrafts. It is therefore more difficult to increase their labor productivity than in manufacturing. So the cost of such services must rise persistently faster than the average for the economy – the rate of inflation causing severe policy problems. Contestable market analysis extends the perfect competition model to markets with large firms and scale economies, into which entry is costless. The entry threat forces firms to behave competitively and efficiently. This theoretically ideal behavior provides realistic guidelines for regulation and antitrust, unlike perfect competition. The old hypothesis that industrial economies tend to converge toward similar per capita incomes was first tested empirically by me and I also provided the testing methods. The leading industrial economies were shown to be converging, but much of the rest of the world is falling further behind. My most recent book analyzes why the capitalist economies have outperformed growth and innovation of any other type of economy. The key is the symbiotic role of independent inventors and corporate R&D. Because in high-tech industries innovation can be life or death for the firm, they are forced to turn out constantly improved products and processes and to license access to the innovations created by others.

BAXTER, Marianne n.e.

BAYE, Michael Roy

**Born** 1958, Dallas, TX, USA.

**Current Post** Bert Elwert Prof. Bus. Econ. and Public Pol., Kelley Bus. Sch. (KBS), Indiana Univ., Bloomington, IN, USA, 1997–.

**Past Posts** Asst Prof. Econ., Univ. Kentucky, 1983–85; Asst Prof. Econ., Assoc. Prof. Econ., Texas A&M Univ., 1985–91;

**Degrees** BS Texas A&M Univ., 1980; MS, PhD Purdue Univ., 1981, 1983.


**Principal Fields of Interest** D0 Microeconomics: General; D4 Market Structure and Pricing; L0 Industrial Organization: General.

**Publications**


**Principal Contributions** My research primarily focusses on pricing strategies and their impact on consumer welfare and firm profits. My early papers showed how to properly construct indices of prices when different firms charge different prices for the same product and consumers have imperfect information about firms’ prices. In subsequent research with P. Anglin, we extended these results to retail environments where consumers optimally search for more favorable prices.
My book and papers with D. Black showed that, by appropriately modifying price indices, cost-of-living measures and real wage indices to account for a progressive income tax, one could quantify the impact of ‘bracket creep’ on consumer welfare. This research contributed to the policy debate of the 1980s by documenting the ‘cost’ of various proposals to delay or repeal the indexation of the US federal income tax code. My more recent collaborative work utilizes tools from game theory and industrial organization to analyze the existence (and efficiency) of equilibrium strategies in mergers, auctions, and contests. Much of this research concerns pricing strategies in oligopoly environments where consumers view the products sold by different firms as close substitutes. This research applies to both conventional and online markets. Among other things, it shows that optimal pricing strategies by firms and information ‘gatekeepers’ can lead to equilibrium price dispersion when firms have identical costs, shoppers are well-informed, and firms’ products are perceived to be identical. Many of these pricing strategies are discussed in my managerial economics textbook, and are taught to business students around the world.

**Publications**


**Principal Contributions** My work has been focused on concern macroeconomics and international finance. Much of this was involved with the economics of optimum currency areas and, in particular, European monetary union. My efforts in this area have included developing a model of optimum currency areas, tests of the suitability of a single currency based on the theory of optimum currency areas, and exploring the implications of a single currency across a range of nations for the effectiveness of fiscal policies. This work also led to other research on the impact of fiscal rules on budgetary performance and the degree to which capital markets discipline fiscal profligacy. Other work has concerned measuring the extent of international capital mobility using the behaviour of real variables such as saving, investment, and consumption. In particular, I have been interested in comparing behaviour across countries with that within countries, so as to provide a meaningful metric with which to compare the international data. As an offshoot of this work, I have also taken an interest in historical parallels with the current period of high international capital mobility and with empirical evidence on the evolution of the international monetary system. Finally, I have also written quite extensively on the Japanese economy and, in particular, the impact of the bursting of the asset bubble in the early 1990s and the effectiveness of monetary policy at zero interest rates.

**BEAN, Charles Richard**

*Born* 1953, Basildon, Essex, UK.


**Degrees** BA Univ. Cambridge, 1975; PhD MIT, 1981.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; F4 Macroeconomic Aspects of International Trade and Finance; J6 Mobility, Unemployment, and Vacancies.


**Principal Contributions** Early work included an analysis of the operating properties of nominal income targets, and on the econometric estimation of rational expectations models containing ‘surprises’. Subsequent work centred on the causes of high European unemployment, concentrating in particular on the sources of persistence. Recent work includes contributions to the literature on European monetary union and inflation targets.

**BEAUDRY, Paul**

**Born** 1960, Montreal, Canada.

**Current Post** Prof., UBC, Vancouver, Canada, 1996–.


**Offices and Honours** Petro-Canada Young Innovator, 1997–2000; Canada Res. Chair, 2001–.


**Principal Fields of Interest** D0 Microeconomics: General; E0 Macroeconomics and Monetary Economics: General; J0 Labor and Demographic Economics: General.


**Principal Contributions** n.e.

**BECHUK, Lucian Arye**

Born 1955, Wroclaw, Poland.

**Current Post** William J. Friedman and Alicia Townsend Friedman Prof. Law, Econ., and Fin., Harvard Law Sch., Cambridge, MA, USA, 1998–.


**Degrees** BA (Maths and Econ.) Univ. Haifa, 1977; LLB Sch. Law, Univ. Tel Aviv, 1979; LLM (Master Law), SJD (Doctorate in Law), Harvard Law Sch., 1980, 1984; MA, PhD Harvard Univ., 1992, 1993.


**Principal Fields of Interest** G3 Corporate Finance and Governance; K0 Law and Economics: General; K2 Regulation and Business Law.

**Publications** n.e.

**Principal Contributions** n.e.

**BECK, Nathaniel Lawrence**

Born 1947, New York City, NY, USA.

**Current Post** Prof., Polit. Sc., Univ. California, San Diego, CA, USA, 1979–.


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; E5 Monetary Policy, Central Banking, and the Supply of Money; P1 Capitalist Systems.


**Principal Contributions** My work has been about the application of econometric methods to issues in the study of political economy. The most important work has been on the analysis of time-series–cross-sectional data, developing new methods for the analysis of such data and showing that some commonly used methods have very poor statistical properties. The methods have been applied to comparative work on the political determinants of economic performance in the advanced industrial democracies and the political economy of monetary policy in the US. Recent work has focussed on time-series–cross-sectional models with a binary dependent variable, and the analysis of such data using methods based in event history analysis. The methods developed have been applied to the study of international conflict.

**BECKER, Gary Stanley**

**Born** 1930, Pottsville, PA, USA.

**Current Posts** Univ. Prof. Econ. and Sociology, Grad. Sch. Bus., Univ. Chicago, Chicago, IL, USA, 1983–; Sr Fell., Hoover Inst., 1990–.


**Principal Fields of Interest** I2 Education; D1 Household Behavior.


Principal Contributions The first to provide a neoclassical analysis of discrimination in labour markets. Among the first to develop the implications of human capital theory. After analysing the allocation of time of economic agents, generalised the argument into the so-called ‘new economics of the family’, providing a standard explanation of such phenomena as marriage, divorce, the decision to have children, the decision to educate children, etc.

BECKER, William Edward

Born 1945, Racine, WI, USA.

Current Posts Prof. Econ., Indiana Univ., Bloomington, IN, USA, 1979–; Adjunct Prof. Intl Bus., Univ. South Australia, Adelaide, Australia, 1996–.


Principal Fields of Interest A2 Teaching of Economics; C1 Econometric and Statistical Methods: General; I2 Education.


**Principal Contributions** My scholarship is devoted to issues in education. Within the economics of education, it tends to be aimed at specifying and estimating alternative models of faculty behaviour and the assessment of personnel policies in higher education. It is also aimed at quantifying student outcomes and student response to incentives. In economics education, my work deals primarily with alternative ways to teach quantitative material in economics. It also addresses the content, teaching methods and ways in which undergraduate courses are taught and evaluated. For example, in a series of articles in the *American Economic Review* (May 2001, 1999, 1996), Michael Watts and I provide ongoing survey information on the state of teaching economics at the tertiary level.

**BEHRMAN, Jere Richard**

**Born** 1940, Indianapolis, IN, USA.


**Degrees** BA (Physics) Williams Coll., MA, USA, 1962; PhD MIT, 1966.


**Principal Fields of Interest** O0 Economic Development, Technological Change, and Growth: General; J0 Labor
and Demographic Economics: General; 10

Publications


Principal Contributions

Primary research interests in applied micro dimensions of economic development. Secondary research interests in human capital, household behaviour, intergenerational mobility and inequality in the US. Early work on: (i) market responsiveness in developing agriculture; (ii) limited flexibility and policy options in Latin America in response to fiscal, macro and foreign sector policies; (iii) advantages of trade liberalization in developing countries; and (iv) little negative impact of commodity market instabilities on developing economies. Extensive study of family background using US adult twins suggested that standard estimates of schooling returns are biased upwards substantially and that genetic variance is important. Studies on women in Latin America suggested that schooling impacts had been misunderstood due to a failure to control for family background and that integration of marriage with the labour market changes insights regarding investment and migration. Development and estimation of new intrahousehold models that suggested (i) strong parental inequality aversion, so parents do not follow pure investment strategy, (ii) parents favour girls in the US
though not in India, and (ii) US inter-generational mobility is limited. Studies of returns to schooling suggest that they are overstated in standard estimates by the failure to control for school quality and other biases. Recent studies of the impact of women’s schooling on children’s schooling with control for inter-generational-correlated endowments and assortative mating find that a significantly positive association in cross-sectional data becomes negative due to induced greater labour force participation with such controls in the US, but still has a positive significant impact if labour markets do not reward more schooling for women as in rural India. Recent studies have also illuminated the roles of social networks in the dissemination of innovations – with results that indicate (i) failure to consider networks as choices is misleading, (ii) social networks have significant effects in innovation dissemination and (iii) social networks primarily provide information, not reinforce norms.

BEIL, Jr, Richard Oliver

Born 1955, Fort Worth, TX, USA.

Current Post Assoc. Prof. Econ., Auburn Univ., Auburn, AL, USA, 1988–.


Principal Fields of Interest A2 Teaching of Economics; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


**Principal Contributions** My work has mostly dealt with incentives that either encourage people to coordinate their actions or keep people from being able to coordinate their actions. This work most often uses the tools of experimental economics to demonstrate that people often react differently from how much of the economics profession would have predicted. These results include coordination failure, lack of reliance on others’ rationality, and showing that increasing the number of consensual prohibitions (i.e., prohibitions against alcohol, drugs, prostitution, etc.) increases the amount of non-consensual crime (i.e., theft, murder, graffiti, etc.).

**BEKAERT, Geert**

**Born** 1964, Zottegem, Belgium.


Principal Fields of Interest F3 International Finance; C1 Econometric and Statistical Methods: General; G1 General Financial Markets.


Principal Contributions First, I have documented patterns of return predictability in international equity, foreign exchange and term structure markets but have also uncovered various statistical inference problems in standard econometric inferences regarding predictability. A combination of time-varying risk and correct statistical inference may account for the predictability patterns. For example, in Bekaert, Hodrick and Marshall (JME, 2001), we explain term structure predictability using a regime-switching model in which the population and data frequencies of observing the various regimes differ (an example of a statistical problem called a peso problem) but at the same time the regime switches bring about time-varying risk premiums. Second, in other research (mostly joint with Cam Harvey), I have used the financial liberalization process unfolding in many developing countries since the late 1980s as a laboratory to study international market integration. Liberalization should bring about integration with the global capital market with foreign investors bidding up local stock prices, and reducing the cost of equity capital which in turn may increase investment and economic welfare. It is
also possible that foreign investment has adverse effects, as the 1990s crises in Mexico and Southeast Asia have illustrated. My empirical results so far point toward overall beneficial rather than adverse consequences of equity market liberalization. Because capital market liberalization is a complex process, part of my work has focused on characterizing the degree of integration and ‘dating’ its occurrence. For example, I have proposed measuring the degree of integration directly from equity return data using a parameterized regime-switching model of integration versus segmentation. The model yields a time-varying measure of the extent of integration between 0 and 1.

BELK, Russell W. n.e.

BÉNABOU, Roland Jean-Marc

Born 1958, Paris, France.

Current Post Prof. Econ. and Public Affairs, Princeton Univ., Princeton, NJ, USA, 1999–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; D0 Microeconomics: General; Z1 Cultural Economics.


**Principal Contributions** I have made contributions in the following areas: (1) microfoundations of the welfare effects of inflation; imperfect competition and price dynamics; (2) search theory; (3) speculation and market manipulation; (4) local interactions, socio-economic stratification, and growth; (5) urban economics and club theory; human capital, peer effects, and education finance; (6) inequality and growth; income distribution and the determinants of the social contract; (7) political economy, influence; (8) macroeconomics with heterogeneous agents; (9) social mobility and the politics of redistribution; (10) economics and psychology; self-confidence, endogenous memory, self-deception; willpower and self-control, personal rules; intrinsic and extrinsic motivation.

**BENDOR, Jonathan**

**Born** 1950, New York City, NY, USA.  
**Principal Fields of Interest** D7 Analysis of Collective Decision-Making; D8 Information and Uncertainty; H4 Publicly Provided Goods.  

**Principal Contributions** A political scientist by training, my contributions to economics mainly result from long-standing collaboration with two economists (Dilip Mookherjee and Debraj Ray) and with a mathematical sociologist (Piotr Swistak). Mookherjee and I have worked in two areas: *n*-person collective action problems with imperfect monitoring, and a study of norms via Nash equilibrium analysis. In the former we show that decentralized regimes of conditional cooperation tend to collapse given noise and large *N*; certain types of centralized institutions (that punish selectively) are more effective. In the latter we analyze when norms (third-party sanction strategies) are better than dyadic strategies in upholding cooperation as Nash equilibria. Mookherjee, Ray and I have worked on models of aspiration-based reinforcement learning: actions that 'succeed' (exceed an aspiration level) are reinforced; those that 'fail' are inhibited. We examine stable states of the corresponding stochastic process; in repeated interactions the set of stable states is much smaller than the set of Nash equilibria of folk theorems. In related work with Daniel Diermeier and Michael Ting, we endogenize aspirations and show via computational methods that an aspiration-based model of adaptation solves the "paradox of voting": citizens vote in substantial numbers even when electorates are large and voting is costly. Piotr Swistak and I have used evolutionary game theory to study the emergence of cooperation and also the evolution of social norms (again, strategies with third-party sanctions). We show that given strong evolutionary pressures the only stable strategies are social norms. And although folk theorems hold – inefficient norms are evolutionarily stable – efficient norms turn out to be the most stable type.

**BENHABIB, Jess**

**Born** 1948, Istanbul, Turkey.

**Current Post** Paulette Goddard Prof. Polit. Econ., NYU, New York City, NY, USA, 1983–.


**Offices and Honours** Fell., Em Soc, 1992.


**Principal Fields of Interest** E0 Macro-

Principal Contributions Most of my work is in the areas of economic growth and business cycle fluctuations. I have studied how equilibrium models of growth and business cycles can generate cyclic and chaotic trajectories, and have explored the economic mechanisms that could explain the internal propagation dynamics of economic fluctuations. I have investigated how real business cycle models can yield a better fit to the data when agents can choose between leisure, market work and home production. My empirical work on growth has explored the role of external effects, and of vintage capital in accounting for growth. I have explored the role of social conflict on retarding economic growth, and in creating poverty traps below threshold levels of wealth. I have undertaken empirical work aimed at understanding the sources of economic growth, and in particular the role of education in catch-up and technology diffusion. I have investigated the problem of optimal taxation when the government cannot credibly commit to future tax policies. I have explored how imperfect competition and external effects can generate multiple equilibria that can be Pareto-ranked in standard growth and business cycle models, and I have investigated policies that can guide the economy to the selection of good equilibria. In particular I have explored the role of monetary policy in generating destabilizing multiple equilibria and liquidity traps, and I have studied the design of stabilizing monetary and fiscal policies to avoid multiplicities and their undesirable economic consequences.

**BENJAMIN, Harry Dwayne**

Born 1961, Orillia, Ontario, Canada.

**Current Post** Prof., Dept Econ., Univ. Toronto, Toronto, Ontario, Canada, 2000–.

**Past Posts** Res. Asst, Living Standards Unit, World Bank, 1986–87; Asst Prof.,

**Degrees**

**Offices and Honours**

**Editorial Duties**

**Principal Fields of Interest**
Economic Development; J2 Time Allocation; Work Behavior; Employment Determination and Creation; P2 Socialist Systems and Transitional Economies.

**Publications**


*Articles:*

**Principal Contributions**
My research has focused on a variety of labour market and public policy issues, pertaining to Canada, the US, and especially developing countries. In a Canadian context, I explored a variety of questions concerning immigration, minimum wages, and retirement. I am currently investigating issues related to aging and retirement, and possible linkages with public pension programmes. For developing countries, my main interests concern the empirical testing of various models of rural labour markets, and investigating the connections between labour market institutions and household welfare. My recent projects focus on the impact of economic transition and development on household well-being and behaviour in China and Vietnam.
These research topics include the role of education in rapidly expanding labour markets; the implications for income inequality and poverty; and the consequences of institutional reform for the health and well-being of the elderly.

BENSON, Bruce Lowell

Born 1949, Havre, MT, USA.


Principal Fields of Interest K4 Legal Procedure, the Legal System, and Illegal Behavior; D7 Analysis of Collective Decision-Making; N4 Government, War, Law, and Regulation.


Articles: 1. ‘Löschian competition under alternative demand conditions’, AER, 70, Dec. 1980; 2. ‘Tariff restrictions which lower price in the restricting country: an analysis of spatial markets’ (with J.

**Principal Contributions** M.L. Greenhut was my graduate-school mentor, and as a consequence, much of my early work was on spatial price theory and its applications. However, I also studied with Randall Holcombe, Svetozar Pejovich, and Eirik Furubotn, so I developed interests in public choice, property rights, and neo-institutional economics, and over time these interests expanded. Furthermore, when David Theroux asked me to contribute to a volume on gun control, I began documenting private responses to crime (initially to demonstrate that the dominant causal relationship ran from crime to guns for protection). As I explored this issue, I realised that the assumption dominating economics, that government provides and enforces the rules of the game, was not valid. This led to *The Enterprise of Law*, a number of articles on private policing, the Law Merchant, arbitration, and customary law, and another book, *To Serve and Protect*. This research continues, with a major focus on the evolution of both law and norms, and another with Brent Mast on the relationships between private security regulation, security market performance, crime, and the demand for public policing. A new research focus also emerged in the late 1980s as David Rasmussen and I started exploring the economics and politics of illicit drug policy. This ongoing collaboration has expanded to consider alcohol policy, generating a number of articles and a book on *The Economic Anatomy of a Drug War*. In the course of my career I have produced four books, over 110 academic journal articles, and more than 40 chapters for edited volumes, along with other publications.

**BENTOLILA, Samuel** n.e.

**BERGER, Allen N.**

**Born** 1953, St. Louis, MO, USA.

Past Post Adjunct Prof. Fin., Georgetown Univ., 1989.


Principal Fields of Interest G2 Financial Institutions and Services; E5 Monetary Policy, Central Banking, and the Supply of Money.


**Principal Contributions** I have published more than 85 professional economics and finance articles primarily focused on the performance of financial institutions. I have participated in the creation and dissemination of a number of innovations in the measurement of financial institution efficiency and productivity growth, including measures of scale and scope efficiency, frontier efficiency, and profit efficiency and productivity growth. As well, I have investigated a number of the determinants of these measures of performance, including technological progress, mergers and acquisitions, corporate governance, domestic deregulation, and the falling of international barriers. I have also researched the performance of institutions in terms of providing credit to informationally opaque small businesses. I was among the first to identify and measure the effects of relationship lending. My research has also examined how various contract features – including collateral, commitments, covenants, maturity, and pricing – can be used to mitigate information problems and increase credit availability. As well, I have studied the effects of industry consolidation, cross-border penetration, de novo entry, and credit scoring on the supply of small business credit. My research also includes the application of modern industrial organization tools to address issues of competition and market power on the performance of financial institutions. I have studied the effects of concentration, market share, and other factors on efficiency, profitability and profit persistence over time, credit availability, and prices. Some of my research has examined the effects of financial institution performance on the macroeconomy. I have investigated credit rationing and credit crunches, the procyclicality of bank lending, and price stickiness. As well, I have researched the effects of government policy changes that operate through financial institutions, such as changes in monetary policy, capital requirements, and supervisory toughness. Other topics in my research agenda include off-balance sheet activities, securitization, market value accounting, and the payments system.

**BERGER, Philip Gary**

**Born** 1962, Regina, Canada.

**Current Post** Prof. Accounting, Grad. Sch. Bus., Univ. Chicago, Chicago, IL, USA, 2002–.


Principal Fields of Interest M4 Accounting; G3 Corporate Finance and Governance; L2 Firm Objectives, Organization, and Behavior.


Principal Contributions My work falls into four broad areas. In corporate re-focusing, my studies examine the valuation of diversification and the antecedents and consequences of breakups following takeovers and internal restructurings. In corporate tax planning and organizational form choices, my work investigates how firms trade off tax considerations with nontax factors such as capital market imperfections when making organizational form, investing, and financing decisions. Within the area of valuation and sell-side analysts, my research has examined the use of financial statement information in firm valuation, the role played by sell-side analysts in this process, and how analyst behaviour is affected by firm and analyst characteristics. Finally, within the area of the relation between capital structure and agency costs I have studied the association between managerial entrenchment and capital structure.

BERMAN, Eli

Born 1960, Ottawa, Canada.

Current Post Assoc. Prof., and Mitchell Assoc. Prof. Sustainable Devlp., Rice Univ., Houston, TX, USA, 2002–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; Q0 Agricultural and Natural Resource Economics: General.


**Principal Contributions** My co-authors and I have studied ‘skill-biased technological change’, the tendency of new technologies to favour more educated workers. We have shown that it has been the principal cause of increased demand for education in manufacturing industries not only in the US, but also in other developed and middle-income countries. This same tendency of technology to complement education may explain why poorer countries are slow to converge in income/capita with OECD countries. My work on the economics of religious sects has extended the Iannaccone club good model to show how subsidies to sects can drastically exacerbate radical behaviour, leading to extreme reductions in labour supply and rapid increases in fertility. Those sharp changes were documented in joint work with Ruth Klinov for Ultra-Orthodox Jews in Israel. Recent work tends that model to explain destructive behaviour by radical Islamic militias. Linda Bui and I applied a treatment/comparison design to measuring the costs of smog reduction in Los Angeles, finding them to be surprisingly small. I have also studied the dynamics of vacancies and unemployment, immigration decisions and the value of language.

**BERNANKE, Ben S.**

Born 1953, Augusta, GA, USA.

**Current Post** Prof. Econ. and Public Affairs, Princeton Univ., Princeton, NJ, USA, 1994–.


**Degrees** BA (Econ.) Harvard Univ., 1975; PhD (Econ.) MIT, 1979.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; E5 Monetary Policy, Central Banking, and the Supply of Money; N1 Macroeconomics and Monetary Economics; Growth and Fluctuations.


Bernard, Andrew B.

Born 1963, Cleveland, OH, USA.

Current Post Assoc. Prof., Tuck Sch. Bus., Dartmouth Coll., Hanover, NH, USA, 1999–.


Principal Fields of Interest F1 Trade; D2 Production and Organizations; C1 Econometric and Statistical Methods: General.


Principal Contributions n.e.

Bernheim, B. Douglas n.e.

BERRY, Steven T. n.e.

BERTOLA, Giuseppe

Born 1960, Ivrea, Turin, Italy.

Current Post Prof. Ordinario, Faculty Sc. Polit., Univ. Torino, Turin, Italy, 2000–.


Principal Fields of Interest A0 General Economics and Teaching: General; E0 Macroeconomics and Monetary Economics: General; J0 Labor and Demographic Economics: General.


Principal Contributions My research studies macroeconomic interactions in the light of institutional features. I study the implications of employment protection and other labor market regulation for employment and wage patterns, and the im-
Applications of central bank intervention rules for the dynamic behavior of exchange rates and money market interest rates. I also work on the European Economic and Monetary Union process, on theoretical and empirical aspects of durable consumption patterns and households’ interactions with credit suppliers, and other applied topics.

BESLEY, Timothy John


Current Post Prof. Econ., LSE, London, UK, 1995–.


Principal Fields of Interest H0 Public Economics: General; H1 Structure and Scope of Government; O1 Economic Development.


Principal Contributions Most of my work has been on policy problems straddling an interest in developing and developed countries. Latterly this has been combined with an interest in political economy issues. Much of this work considers how non-market institutions work. This includes work on micro-finance in developing countries. Among my contributions in this area is a theoretical model of rotating savings
and credit associations (with Stephen Coate and Glenn Loury) and of group lending (with Stephen Coate). I have also written on property rights in agriculture including empirical studies in Ghana and India. The work on political economy has two main strands. With Stephen Coate, I have developed a model of representative democracy based on citizens as policy makers (the so-called citizen-candidate approach). This allowed us to look carefully at some welfare economic issues in government. It also gives a way of handling some multi-dimensional policy problems. My other main interest is in models where there are information problems between citizens and policy makers (political agency models). One significant application is to yardstick political competition (work with Anne Case). Another is to work on the media (with Robin Burgess and Andrea Prat). My work in the political economy area spans theory and empirics.

BESSEMBINDER, Hendrik (Hank)

Born 1956, Chemainus, BC, Canada.

Current Post Blaine Huntsman Presidential Chair Fin., David Eccles Sch. Bus., Univ. Utah, Salt Lake City, UT, USA, 2001–.


Office Dir., Western Fin. Assoc., 2000–02.


Principal Field of Interest G1 General Financial Markets.


**Principal Contributions** n.e.

**BHAGAT, Sanjai** n.e.

**BHAGWATI, Jagdish** n.e.

**BIKCHANDANI, Sushil** n.e.

**BINMORE, Kenneth George**

**Born** 1940, London, UK.

**Current Post** Prof. Econ., Bristol Univ., Bristol, UK, 2001–.


**Degrees** BSc, PhD (Maths) Imperial Coll., London Univ., 1962, 1965.


**Principal Fields of Interest** C7 Game Theory and Bargaining Theory; C9 Design of Experiments; H0 Public Economics: General.


Principal Contributions Proving limitation theorems for gap power series. Clarifying the role of the Nash bargaining solution in economic modelling. Pioneering the use of learning as an explanatory variable in experimental economics. Calling attention to the unsound foundations of the literature on refinements of Nash equilibrium. Naturalizing the theories of justice proposed by Harsanyi and Rawls to allow a proper treatment of interpersonal comparison of utility. Contributing to the literature on evolutionary models of economic dynamics. Designing multi-billion dollar telecom auctions.

BINSWANGER, Hans P.

Born 1943, Kreuzlingen, Switzerland.

Current Posts Dir., Rural Devlp. and Environment, Africa Region and Sr Adviser, Rural Devlp., World Bank, Washington, DC, USA, 1980–.


Principal Fields of Interest D0 Microeconomics: General; O0 Economic Development, Technological Change, and Growth: General; Q0 Agricultural and Natural Resource Economics: General.


Principal Contributions With my many collaborators, I have strengthened the theoretical underpinnings of agricultural and rural development, tested the underlying theories, estimated policy-relevant parameters, and synthesized knowledge in the areas of technical change, agricultural supply, behavior under risk, production relations, land markets, land reform, and the political economy of agriculture. A major line of inquiry concerns peasant behavior. Peasants are risk averse. Their incomes are covariant, which explains the imperfections in agricultural insurance and financial markets. Imperfect intertemporal markets, together with other material conditions of agriculture, explain key features of peasant behavior. Peasants are credit rationed. They have to rely on wealth and social networks for risk diffusion. The poorer ones cannot maximize profits but use their investments to reduce risk. Nevertheless, family farms usually have higher total factor productivity than other farm types. This is because of superior incentives to work and to invest. Land sales markets in many countries have failed to allocate land to efficient family farms. Imperfect intertemporal markets would be sufficient to explain this failure, and the resulting need to use land reform to effect this reallocation. But usually policy distortions contribute to imperfect land markets. Many distortions have been used to drive down the profitability of owner-operated family farms and induce peasants to offer themselves as workers or tenants to less-efficient large owners. The distortions explain agricultural stagnation, resource degradation, and rural poverty in many countries. When we try to explain why the distortions are adopted a striking paradox emerges: family farms are handicapped in the political arena by the same material conditions and market imperfections which lead to their economic superiority. They thus easily become victims of distortions, taxation, and urban bias.

**BIRCH, Stephen** n.e.

**BISHOP, John A.**

\textbf{Born} 1955, Norfolk, VA, USA. 

\textbf{Current Posts} Prof. Econ. and Grad. Dir., East Carolina Univ., Greenville, NC, USA, 1998–. 


Principal Fields of Interest D3 Distribution; D6 Welfare Economics; I3 Welfare and Poverty.


Principal Contributions The majority of my work has focussed on using the tools of stochastic dominance and statistical inference to draw conclusions about poverty, inequality, and welfare. The advantage of stochastic dominance as a tool in welfare economics is that its ordinal rankings are more widely acceptable than cardinal index numbers (such as the Gini). This work began by demonstrating the ranking power of the Lorenz curve in many different empirical settings when sampling variability is taken into account. Similar tools are applied to ranking welfare where we conclude that the first (rank) order dominance ordering is only marginally improved by second (generalized Lorenz) and higher order dominance in
many empirical applications. New inference tools have been developed to support the empirical issues undertaken. Finally, we apply the dominance approach to regional convergence of income distributions, policy evaluation, tax progressivity orderings, nutrition orderings, and mortality orderings. My current work includes a decomposition of the ordinary Lorenz curve and studying the relationship between Lorenz and concentration curves.

BLACK, Bernard S. n.e.

BLACKBURN, McKinley Lee

Born 1960, Greenville, SC, USA.

Current Post Prof., Univ. South Carolina, Columbia, SC, USA, 1987–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; J1 Demographic Economics; J3 Wages, Compensation, and Labor Costs.


Principal Contributions My work has primarily focussed on the determinants of individual-level wages and income. In particular, I have made contributions (primarily empirical) to the study of changes in earnings and income inequality (and poverty) over time and across countries. This work has been concerned both with measuring these changes, and examining the reasons for these changes. My contribu-
tions to the latter have primarily been associated with changes in the return to education in the United States since 1980. In work with David Bloom and Richard Freeman, we pointed out the role that demand and supply shifts in the labor market have played in these changes. David Neumark and I have worked on using cognitive-ability measures in wage equations to examine the level and changes in returns to education. A second major component of my work focused on the role that advance-notice legislation has played in the outcomes of displaced workers. John Addison and I studied the efficacy of such legislation in providing notice to workers, and the benefit that that notice provides to workers. In recent years, I have changed my focus towards the determinants of family decision-making. In particular, I have focussed on the role that welfare-system generosity may have played in the marital decisions of never-married women with children, as well as the role the welfare system plays in the divorce decisions of married mothers.

BLACKORBY, Charles

Born 1938, ND, USA.

Current Post Prof., UBC, Vancouver, Canada, 1978–.


Principal Field of Interest D0 Microeconomics: General.


Principal Contributions n.e.

BLANCHARD, Olivier Jean

Born 1948, Amiens, France.

Current Posts Class of 1941 Prof. Econ., MIT, Cambridge, MA, USA, 1994–; Chairman, Dept Econ., MIT, 1998–.


Principal Fields of Interest n.e.


Principal Contributions I started my research in the late 1970s by looking at the effects of forward-looking expectations in financial and goods markets, and studying the role of policy in that context. I then moved to the study of nominal rigidities, and tried to understand how small individual nominal lags and rigidities can build up into substantial aggregate price inertia. In the 1980s, high unemployment in Europe led me to question the idea of a natural rate of unemployment and rethink the determination of unemployment and wage determination. In the 1990s, I have been working mostly on the economic issues raised by transition in Eastern Europe. I now work on the macroeconomic aspects of product and labor market reforms.

BLANCHFLOWER, David Graham


Current Post Prof. Econ., Dartmouth Coll., Hanover, NH, USA, 1989–.


Honour Richard A. Lester Prize for most outstanding book in ind. relations and labor econ. in 1994, Princeton Univ.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J5 Labor–Management Relations, Trade Unions, and Collective Bargaining; J6 Mobility, Unemployment, and Vacancies.


Articles: 1. ‘Profit related pay: prose

**Principal Contributions**

My main interest over the years has been to understand the wage determination process. The early work, which developed out of my PhD thesis, was concerned with examining the size of the union/non-union wage differential in Britain. I then moved to look more generally at the role of ‘inside’ and ‘outside’ forces and how they affect the wage. This has involved looking on the one hand at the extent to which trade unions, the possession of a scarce skill or the level of profitability of the firm is able to influence the wage and on the other hand at the local labour market and its influence. The culmination of this work was the book *The Wage Curve*, jointly authored with Andrew Oswald. Here we claim to have found an empirical law! The book uses micro-data on nearly four million people across twelve countries and finds a negative relation between an individual’s wage and the local area unemployment rate. These results have been replicated by many other researchers. I have also been interested in the process by which jobs are generated. This work has been in two parts. First, in a series of papers I have examined the determinants of employment growth and the process of job creation and destruction in the British economy. In another group of articles I have looked at the self-employed. I have examined the extent to which they are faced by capital constraints. Over the last few years I have become particularly interested in cross-country comparisons of labour market behaviour using large-scale micro-data files.


Principal Fields of Interest 10 Labor and Demographic Economics: General; I0 Health, Education, and Welfare: General; I3 Welfare and Poverty.


part-time work and the interaction of market and family demands. A fourth strand has investigated the determinants of effective government policy, both theoretically and empirically. All of this research has tried to use economic theory and best-available methodologies to understand what influences outcomes among disadvantaged populations, and what policies can be most effective in improving economic well-being among poor families and low-wage workers.

BLAU, David Michael

Born 1951, State College, PA, USA.

Current Post Prof. Econ., Univ. North Carolina, Chapel Hill, NC, USA, 1985–.


Principal Fields of Interest J2 Time Allocation; Work Behavior; Employment Determination and Creation; J1 Demographic Economics.


Principal Contributions My main areas of research have been child care and retirement. My 1988 RESStat paper with P. Robins was the first empirical analysis of the impact of child care costs on employment behavior of women with young children in the US. I have also studied the demand for quality in child care and the ‘quality production function’. My 2001 book synthesizes economic research on child care for a broad audience, and proposes a new approach to child care policy.
Recently, I have studied the impact of child care subsidies instituted by welfare reform on the employment decisions of single mothers; and the impact of child care regulations on the child care and labor markets. My research on retirement began with a study of employment dynamics of older men that demonstrated a high frequency of movement in and out of employment, and a very sharp spike in labor force exit at the exact age of 65 (Em, 1994). I have also studied the joint retirement decisions of older married couples, showing a strong relationship between the labor force behavior of spouses that cannot be explained by financial incentives. With D. Gilleskie, I have analyzed the impact of retiree health insurance on retirement timing, seeking an explanation for the very high rate of labor force exit at age 65. Our findings indicate that retiree health insurance is associated with earlier exit from the labor force, but the economic mechanism that generates this association remains unclear.

BLAU, Francine D.

Born 1946, New York City, NY, USA.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J7 Discrimination; J1 Demographic Economics.


Principal Contributions One of my abiding interests has been the sources of gender differences in wages. A focus which began with my doctoral dissertation was on the measurement and wage consequences of employment segregation by sex. My empirical work has helped to establish the negative impact of such segregation, by establishment as well as by occupation, on women’s relative earnings. In work with Lawrence Kahn, I have explored the relationship between demographic pay differentials and overall wage structure, the array of prices the labor market establishes for skills and the rents received for employment in favored sectors. We have found that wage structure, especially the considerably higher level of wage inequality (i.e., higher rewards to skills and sectoral differentials) in the US than elsewhere, is responsible for the larger gender pay differential here than in many industrialized countries. Our analysis implies that in the face of rising wage inequality in the 1970s and 1980s, American women were swimming upstream in a labor market growing increasingly unfavorable for workers with below-average skills. We found that the gender pay gap nonetheless narrowed due to improvements in women’s relative qualifications and a decrease in the ‘unexplained’ wage differential between men and women. The latter may reflect an upgrading of women’s unmeasured labor market skills, a decline in labor market discrimination against women, and/or a shift in labor market demand favoring women over men.
Kahn and I have also investigated the sources of higher wage inequality in the US compared to other advanced nations, finding that it is related to our extremely decentralized wage-setting institutions. An important conclusion of this work is that while it is possible to use interventionist institutions like those that prevail in Europe to compress the inequality of pay, some loss of employment is likely to result.

BLINDER, Alan Stuart

Born 1945, Brooklyn, NY, USA.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics; General; E5 Monetary Policy, Central Banking, and the Supply of Money; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.


Principal Contributions My research has touched on a number of fields (e.g., consumption, Social Security) but has focussed on three: the distribution of income, inventories, and fiscal and (especially) monetary policy. I was also, during the 1970s and 1980s, one of the major defenders of Keynesianism and challenges from monetarism and the New Classical school. Since returning to academia from the Federal Reserve, I have focussed on central banking issues. Two of my most cited works were written very early in my career: ‘Does fiscal policy matter?’ (1973, with Robert Solow) and ‘Wage discrimination: reduced form and structural estimates’ (1973). The latter introduced a decomposition technique that is still widely used in labor economics. In the 1980s, I wrote a series of influential papers which emphasized the (at that point neglected) importance of inventories in business cycles, pointed out some sharp discrepancies between the theory and the stylized facts, and suggested some alternative theories (culminating in ‘Can the production smoothing model of inventory behavior be saved?’, 1986). Since leaving the Federal Reserve System, I have written two short books based on lecture series (Central Banking in Theory and Practice, 1998 and The Quiet Revolution, forthcoming) and several articles on central banking. I have also completed a book based on an extensive interview study on the reasons for price stickiness that I had started before entering government service (Asking About Prices, 1998). In my career, I have also written several books and articles on the recent macroeconomic history of the United States covering: the ‘Great Recession’ of the 1970s, the ‘Great Inflation’ of the late 1970s and early 1980s, and the boom of the 1990s. A new book on corporate downsizing (with William Baumol and Edward Wolff) is forthcoming.

BLOOM, David Elliot

Born 1955, New York, NY, USA.

Current Posts Clarence James Gamble Prof. Econ. and Demography and Chair, Dept Pop. and Intl Health, Harvard
Sch. Public Health, Boston, MA, USA, 1996–, 2001–.


Principal Fields of Interest Labor and Demographic Economics: General; 10 Health, Education, and Welfare: General; 00 Economic Development, Technological Change, and Growth: General.

Publications Books: 1. Higher Education in Developing Countries: Peril and Promise (with H. Rosovsky), (World Bank, 2000); 2. The Quality of Life in Rural Asia (with P. Craig, P. Malaney), (OUP, 2001); 3. The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change (with D. Canning, J. Sevilla), (Rand, 2002).


**Principal Contributions** My work has been divided among the fields of labor, population, health, education, demography, and environment. In the area of labor institutions I have focussed on arbitrator and negotiator behavior under different mechanisms of arbitration. My labor market work has focussed on pay and employment determination and the use of statistical analysis in testing hypotheses about labor market disparities. My work on population has focussed on the links between population dynamics and the pace of economic growth and development. This work demonstrates the contribution of demographic change to the growth of income per capita, mainly via the effect of population age structure. Related cross-country work shows that population health is both a cause and a consequence of economic growth and that there are four channels through which health affects economic performance: labor productivity, human capital accumulation, savings and investment, and demographic change. My health research has also identified economic determinants and consequences of the AIDS epidemic. In the area of education I have focussed on the contribution of higher education to national development, as well as the rationale, means, and consequences of expanding basic and secondary education in developing countries. My work on demography has identified key covariates of age patterns of first marriage and first birth, and the effects of pre-marital cohabitation and out-of-wedlock childbearing on marital stability. My work on environment has focussed on economic aspects of the generation and management of municipal solid waste, as well as the existence of poverty traps associated with indoor air pollution caused by the use of fuelwood in traditional ways.

**BLUME, Lawrence E.**

**Born** 1952, Rochester, NY, USA.

**Current Post** Prof. Econ., Cornell Univ., Ithaca, NY, USA, 1990–.


**Principal Fields of Interest** C7 Game Theory and Bargaining Theory; D5 General Equilibrium and Disequilibrium; D8 Information and Uncertainty.


**Principal Contributions**

Most of my research is concerned with the equilibrium analysis of economic and social systems. D. Easley and I have demonstrated the stability of rational expectations equilibrium under a variety of learning rules. Subsequently we have examined natural selection processes in markets, and have shown that these evolutionary forces are not sources of market efficiency. In recent work we have explored the implications of wealth dynamics for financial asset prices in the long run. I have also worked on the foundations of game theory. A. Brandenburger, E. Dekel and I characterized the underlying decision-theoretic logic of refinements of Nash equilibrium such as perfect and proper equilibrium. With W. Zame I explored the geometric structure of the Nash, perfect, proper and sequential equilibrium correspondences. My work in evolutionary game theory has been concerned with the dynamics of play in large populations. In particular, I have developed dynamic adjustment models that are useful for modelling social interactions. In recent work I have applied these models to problems in the enforcement of social norms. I have also made contributions to the theory of public goods, and to the economic analysis of law.

**BLUNDELL, Richard William**

*Born* 1952, Shoreham, Sussex, UK.

**Current Posts**


**Past Posts**


**Degrees**

BSc Univ. Bristol, 1973; MSc LSE, 1975.

**Offices and Honours**


**Editorial Duties**


**Principal Fields of Interest**

n.e.

**Publications**

BOCKSTAEL, Nancy E. n.e.

BOLDRIN, Michele n.e.

BOLLERSLEV, Tim

**Born** 1958, Copenhagen, Denmark.

**Current Posts** Juanita and Clifton Kreps Prof. Econ. and Prof. Fin., Fuqua Sch. Bus., Dept Econ., Duke Univ., Durham, NC, USA, 1998–.


**Degrees** MS (Econ. and Maths), (Cand. Scient. Oecon.) Univ. Aarhus, 1983; PhD Univ. California, San Diego, 1986.

**Offices and Honours** Faculty Res. Assoc., NBER, 1992–; Fell., Em Soc, 1999.


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; C2 Econometric Methods: Single Equation Models; G1 General Financial Markets.

**Publications** Articles: 1. ‘Generalized autoregressive conditional heteroskedasticity’, *J Em*, 31, 1986; 2. ‘Modelling the

**Principal Contributions**

The majority of my research has been concerned with modeling, forecasting, and understanding time-varying volatility in financial markets. Although risk and uncertainty play a central role in monetary and financial economics, it is only over the past decade that economists have begun to fully appreciate the importance of properly modeling the pronounced temporal dependencies in financial market volatility. The GARCH model and related procedures developed in some of my earlier work have figured very prominently in these developments. These tools are now available in a host of standard software packages and are routinely used by finance practitioners and economists throughout the world. More recently my interest has shifted toward the analysis of high-frequency, or tick-by-tick, financial data. This newly available data source holds the promise of important new insight into how information gets incorporated into asset prices and the functioning of markets, in turn allowing for better assessment of the effectiveness of macroeconomic policies and the implementation of improved risk management and oversight procedures. Meanwhile, as highlighted in a series of my recent papers, the proper statistical analysis of such data presents several new challenges vis-à-vis the procedures traditionally employed in time-series econometrics concerned with the analysis of daily or lower frequency economic data. The concept of realized vola-
tility developed in some of my most recent work affords a simplified way of dealing with many of these complications.

BOLTON, Gary

Born 1958, Utica, NY, USA.


Past Posts n.e.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


Principal Contributions My main interests have to do with issues in social capital; specifically, fairness, reciprocity and reputation, and how these issues help to support or deter the workings of the marketplace.

BOLTON, Patrick n.e.
BOLTON, Ruth Nancy


Current Post Prof. Marketing, Vanderbilt Univ., Nashville, TN, USA, 2002–.


Principal Contributions All of my work is in the area of marketing, primarily building econometric models of customer opinions and behaviour. My current work with K. Lemon models business customers’ purchase behaviour (e.g., repeat purchases, usage levels, cross-buying) for high-technology services sold in global markets. This work is part of a stream of research that links a company’s marketing actions to financial performance – based on the notion that customers are assets to be managed. I am especially interested in how organizations can increase the value of their customer base through service and support. For example, my work with J. Drew examined the formation of customer opinions in the telecommunications industry. My work with A. Smith examined how companies can design services and manage service changes over time, and how they can proactively manage service failures. A key
feature of many studies is that they model individual customer opinions and behaviour regarding services change over time. Another stream of research examines how context variables influence customer price sensitivity and firm pricing decisions – especially in retailing contexts. These two streams of research overlap in my research regarding customer response to the pricing of services.

BOND, Stephen Roy

Born 1963, Lincoln, UK.


Principal Fields of Interest C2 Econometric Methods: Single Equation Models; E2 Consumption, Saving, Production, Employment, and Investment; G3 Corporate Finance and Governance.


Principal Contributions My main contributions to economics have been the development of econometric methods for dynamic panel data (DPD) models, and the development of econometric models for the analysis of company investment behaviour. My work on panel data began with work on estimation and testing using Generalized Method of Moments procedures, together with Manuel Arellano, and has continued with the development of our DPD computer program. More recently I have worked on methods suitable for highly persistent data, principally with Richard Blundell; and on more accurate statistical inference, principally with Frank Windmeijer. My work on company investment has included the development of Euler equation specifications suitable for testing the importance of financing constraints, with Costas Meghir; and more recently the development of alternative measures of the average q ratio, with Jason Cummins. I also have a longstanding interest in the effects of corporate taxation on company investment and financial behaviour, developed principally in work with Michael P. Devereux.
BONGAARTS, John

Born 1945, Tegelen, The Netherlands.


Editorial Duties Chair Ed. Comm., Stud. Family Planning; 1985–.

Principal Field of Interest J1 Demographic Economics.


Principal Contributions My research has examined the determinants, consequences and policy implications of the contemporary global demographic transition. This work has focussed on the behavioral, socio-economic and program-
matic determinants of fertility declines in the developing world. These changes in reproductive behavior have been accelerated by family planning programs which were implemented in many countries in response to concern about the adverse consequences of rapid population growth. An analysis of the population projections for the 21st century indicates that population momentum is now a more important cause of future growth than high fertility. This finding calls for new and different policy responses. A set of related studies have quantified the contribution of population growth to global warming and to rising demand for food. In several recent studies I analyze the causes of very low fertility in the industrialized world, where population decline and rapid aging are expected to occur over the next few decades. Widely available fertility statistics were found to contain a ‘tempo’ distortion due to the rising mean age at childbirth. This result implies that women are experiencing higher fertility than conventional statistics suggest. A modest upturn in fertility in high-income countries with low fertility is therefore possible.

### BOOT, Arnould W.A. n.e.

### BOOTH, Alison Lee

**Born** year n.e., Melbourne, Australia.  

**Principal Fields of Interest** n.e.  

Principal Contributions My work is in the field of labour economics. Much of it has related to the economic theory of trade unions and investigation of their impact. I have also worked on the economics of employment protection, focusing on redundancy pay in particular, in order to provide an economic rationale for this institution. I have also worked with Gylfi Zoega on the economics of training in imperfectly competitive labour markets. More recently I have begun to investigate in more detail, with J. Frank and G. Zoega, various models of monopsony wage determination.

BORENSTEIN, Severin

Born 1957, Berkeley, CA, USA.


Degrees AB Univ. California, Berkeley, 1978; PhD MIT, 1983.


Principal Contributions

Nearly all of my work has focused on understanding firm pricing, competitive strategies, and market power, and their relationship to the efficiency of markets. It has been about equal parts empirical work and applied theory. I have contributed through theoretical and, mostly, empirical work to the study of price discrimination, focusing particularly on the practice in fairly competitive markets such as airlines and gasoline. I have worked extensively on understanding competition among airlines including one of the first studies to document the premium paid by passengers using hub airports. I have also studied competition in the gasoline and, most recently, electricity markets, including recent work with J. Bushnell and F. Wolak analyzing the cause of price increases during the summer-2000 California electricity crisis. In work with J. Farrell, I have examined the incentives for firms to operate efficiently and empirical evidence that they do not. I have also made some theoretical contributions to law and economics including examining incentives of insurance companies to use risk tests and the potential effects of laws that restrict such tests, studying the incentives for firms to settle lawsuits by issuing discount coupons for their products and the effects of such settlements, and with P. Courant analyzing rules for dividing human capital wealth in divorce.

BORJAS, George J.

Born 1950, Havana, Cuba.

Current Posts

Past Posts

Degrees

Offices and Honours

Editorial Duties

Principal Field of Interest
J0 Labor and Demographic Economics: General.

Publications
114 BÖRSCH-SUPAN


**Principal Contributions** My early work studied the economic impact of labor turnover and the determination of wage structure in government bureaucracies. In the early 1980s, my interests shifted to the study of the economic consequences of immigration. Initially, the research analyzed the determinants of immigrant earnings. Over time, my work matured to a more complete study of the economics of immigration, including the nature of the immigration decision; the impact of immigrants on the employment opportunities of native-born workers; the impact of immigration on the costs of maintaining programs in a welfare state; the source and magnitude of the economic benefits from immigration; and the intergenerational progress of immigrant families. My work has stressed the significance of controlling for differences in skills across immigrant cohorts when interpreting the positive correlation between immigrant earnings and time spent in the new country. My research has also isolated the factors that determine whether the endogenous immigration decision leads to a positively selected immigrant flow (where the flow is, on average, more skilled than the typical person in the country of origin) or a negatively selected flow. Finally, the work has shown that skill differentials among ethnic groups tend to persist from generation to generation. In recent years, my research has emphasized the importance of providing a more systematic cost–benefit accounting of the impact of immigration on host countries.

**Born** 1954, Darmstadt, Germany.

**Address** Prof. Econ., Univ. Mannheim, Gebäude, Germany, 2001–.


**Editorial Duties** (current) Assoc Ed., RSUE; Ed. Bd, J. Pension Econ. and Fin.

**Principal Fields of Interest** D1 Household Behavior; G2 Financial Institutions and Services; J3 Wages, Compensation, and Labor Costs.


**Principal Contributions** n.e.

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**BOSSERT, Walter**

**Born** 1962, Pforzheim, Germany.

**Current Post** Prof. Econ., Univ. Montreal, Montreal, Quebec, Canada, 2000–.


**Principal Fields of Interest** D7 Analysis of Collective Decision-Making; D6 Welfare Economics; D8 Information and Uncertainty.


**Principal Contributions** The primary focus of my work is the analysis of individual and collective decision-making. Most of my contributions are concentrated in the three areas described in the following. (a) Over the last decade, Charles Blackorby, David Donaldson and I have been engaged in a research project on the ethical aspects of social evaluation in situations where the composition and the size of the population vary. For example, decisions regarding the allocation of resources to prenatal care or the use of development-aid funds to provide education on population control are such that the resulting population differs from one feasible choice to another. In a series of articles, we have established the normative foundations of several classes of variable-population social-evaluation criteria. Furthermore, possible applications of our proposed evaluation rules have been discussed. (b) Most of my work in individual decision theory has focussed on non-probabilistic models of choice under uncertainty (such as choice under ignorance) and the related issue of evaluating the informational contents of feasible sets in the presence of uncertainty regarding the consequences resulting from the feasible choices. (c) Another ongoing project (part of which is carried out in collaboration with Yves Sprumont and Kotaro Suzumura) deals with rational choice, both at an individual level and in collective choice problems. We have examined conditions on observed (or observable) choices for various forms of rationalizability that can be used to test theories of individual and collective choice. Both abstract choice models with arbitrary domains and more structured economic environments have been analyzed. In addition, I have contributed to areas such as the measurement of inequality and poverty, the role of individual opportunities and responsibilities in social evaluation, informational issues in individual and social choice, bargaining theory and cooperative game theory.

**BOUND, John** n.e.


Degrees Dr Erasmus Univ., Rotterdam, 1981; PhD Univ. California, Berkeley, 1984.


Principal Fields of Interest H0 Public Economics: General; F2 International Factor Movements and International Business; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.


BOYCKO, Maxim n.e.

BRADLEY, Michael D. n.e.

BRANDENBURGER, Adam M. n.e.

BRANDER, James Alan

Born 1953, New Westminster, BC, Canada.

Current Post Prof., Faculty Commerce, UBC, Vancouver, BC, Canada, 1990–.

Past Posts Asst Prof. Econ., Queen’s Univ., Kingston, Ontario, Canada, 1979–84; Assoc. Prof., Faculty Commerce, UBC, 1984–90.


Principal Fields of Interest F1 Trade; L1 Market Structure, Firm Strategy, and Market Performance; Q2 Renewable Resources and Conservation; Environmental Management.


**Principal Contributions**

While doing my PhD (supervised by Ron McKinnon) at Stanford in the late 1970s, I began working on the effect of market structure on international trade. My thesis identified oligopoly as a potential cause of trade that could operate without factor proportions (or other) differences between countries, and that could cause pure intra-industry trade. After going to Queen’s University in 1979, I began work with Barbara Spencer on trade policy under imperfect competition. This work is usually credited as having started the area known as ‘strategic trade policy’. The central insight is that government policy instruments such as tariffs and subsidies can shift the strategic relationship between oligopoly firms, possibly shifting rents or profits from foreign to domestic claimants. This creates an apparent incentive for intervention. In the mid-1980s, after moving to the Commerce faculty at the University of British Columbia, I began working on the impact of market structure on financial decision-making, leading to papers with several co-authors including Tracy Lewis, Michel Poitevin and Barbara Spencer. This work focuses on the idea that financial structure can affect oligopolistic product market rivalries by serving as a commitment device, adding a new consideration to financial structure decisions. While on leave at the Australian National University in 1989–90, I collaborated with Steve Dowrick to investigate the effect of fertility on economic growth. Using panel data methods and new data just then becoming available, we demonstrated a negative effect of fertility on economic growth, providing a counterpoint to the then influential ‘popula-
tion neutrality’ view. More recently, I worked with Scott Taylor on the effect of trade liberalization on renewable resource management, and on the interaction between renewable resources and population dynamics. My most current research relates to venture capital finance, drawing on my earlier work in finance and industrial organization.

BREMER, Stuart A. n.e.

BRENNAN, Michael J. n.e.

BRESLOW, Norman E. n.e.

BRESNAHAN, Timothy F. n.e.

BRICKLEY, James A. n.e.

BROCK, William Allen

Born 1941, Philadelphia, PA, USA.

Current Post Vilas Res. Prof. Econ., Dept Econ., Univ. Wisconsin, Madison, WI, USA, 1990–.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C1 Econometric and Statistical Methods: General; E0 Macroeconomics and Monetary Economics: General.


**Principal Contributions** My early work on dynamic stochastic economic growth models with L. Mirman not only formulated this kind of model, but also located useful sufficient conditions for stochastic convergence to a generalized notion of steady state. This work served as a building block for the construction of modern dynamic stochastic intertemporal general equilibrium theory. My early work on monetary economics (i) formulated early notions of rational expectations, (ii) formulated an early version of the notion of a plethora of rational expectations equilibria, (iii) located sufficient conditions for uniqueness of equilibria and (iv) served as a building block for modern rational expectations monetary models. My early work with M. Magill, M. Majumdar, and J. Scheinkman, located useable sufficient conditions for global stability of general multisectoral optimal growth models for both stochastic and deterministic cases. My work with S. Magee and L. Young made early contributions to the modern literature on political economy. I developed, with W. Dechert, J. Scheinkman, and B. LeBaron, a general statistical method for detecting potentially useable patterns in residuals of fitted econometric models. J. Lakonishok, B. LeBaron, and I developed a general specification test that uses quantities gleaned from the behavior of the agents in the system that generated the data. Recently, C. Hommes and I developed an evolutionary theory of expectational schemes where full structural rational expectations are costly to obtain and compete with other less costly expectational schemes in generating net profits. S. Durlauf and I have recently developed an econometric approach to the identification and estimation of social interactions.

**BROMLEY, Daniel Wood**

**Born** 1940, Phoenix, AZ, USA.

**Current Post** Anderson-Bascom Prof. Apl. Econ., Univ. Wisconsin-Madison, Madison, WI, USA, 1986–.


**Principal Fields of Interest** B5 Current Heterodox Approaches; Q2 Renewable Resources and Conservation; Environmental Management; O1 Economic Development.

**Publications** *Books*: 1. *Economic Interests and Institutions: The Conceptual Found-
Received contributions of Public Policy (Blackwell, 1989);  
2. Environment and Economy: Property Rights and Public Policy (Blackwell, 1991);  
5. Sustaining Development: Environmental Resources in Developing Countries (Edward Elgar, 1999); 6. Economics, Ethics, and Environmental Policy: Contested Choices (ed. with J. Paavola), (Blackwell, 2002).


Principal Contributions I am concerned with the theory of ‘the commons’. There has been persistent conceptual incoherence in how the commons is understood and modeled. Economists have failed to comprehend the fundamental distinction between open-access regimes and common property regimes. I have conducted empirical work in Africa and South Asia, and I have written a number of books and articles to rectify this confusion. There now seems general understanding that common property regimes entail rights and duties for a defined group (the co-owners), while open-access regimes are un-owned free-for-alls. My second area concerns institutional economics. I am working out a theory of economic institutions (and of institutional change) that avoids the circular efficiency-based models of the ‘new institutional economics’. A coherent theory of institutional change requires that economists abandon the idea that institutions change in response to new relative prices, or in response to some undefined idea of ‘power’. In seeking to make institutional change endogenous, these approaches reduce institutional change (a collective undertaking) to the same individualistic and mechanical processes that now undermine the received theory of individual choice. In other words, if institutional change is made endogenous there is nothing to explain. One is left with a ‘theory’ in which institutions change when it is efficient for them to change (or the ‘powerful’ were able to force them to change), and if they do not change then it must be efficient that they do not change (or those with ‘power’ were able to prevent institutional change). I am now finishing a book that situates institutional change where it properly belongs — not as a subsidiary of price theory writ large, but as the purposeful outcome of...
collective action in restraint, liberation, and expansion of individual action. That is, after all, the essence of public policy. And public policy is nothing but institutional change.

BROWN, Stephen Jeffery

Born 1949, Melbourne, Australia.


Principal Fields of Interest G0 Financial Economics: General; G1 General Financial Markets; G2 Financial Institutions and Services.


Principal Contributions Most of my recent research has focussed on the in-
vestment management function within the area of financial economics. My early research dealt with the distinction between risk and uncertainty by considering a Bayesian approach to portfolio theory. Later work branched out to consider performance measurement issues crucial to the investment management function. My most-cited work with Jerold Warner considers an econometric evaluation of a variety of procedures designed to measure the reaction of stock prices to new information in the context of so-called ‘event studies’. Analysis of performance records raises the important issue of ex post conditioning – the fact that we are examining the records of managers who have survived. This has led to work with William Goetzmann and Stephen Ross on the role of ex post conditioning viewed in a more general context. More recent work has concentrated on performance and incentives in managed investment trusts and hedge funds.

BROWNING, Martin n.e.

BRUECKNER, Jan K.

Born 1950, Berkeley, CA, USA.

Current Post IBE Disting. Prof. Econ., Univ. Illinois, Urbana-Champaign, IL, USA, 1976–.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; H0 Public Economics: General; L9 Industry Studies: Utilities and Transportation.

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Principal Contributions My early work in urban economics focussed on spatial models of durable housing, showing how land-use depends both on location and the age of structures (articles 2, 3). A more-recent series of land-use papers explored the economics of urban growth controls, showing how they can enrich property owners while improving their quality of life (article 10). Spatial mismatch, whereby housing discrimination limits job access for minorities, has also been a focus of several recent theoretical papers (article 20). My early research in public economics developed an empirical test for efficient provision of local public goods, using the result that maximization of aggregate property value implies satisfaction of Samuelson’s efficiency condition (articles 1, 4, 5). Subsequent work analyzed particular instruments of local finance – land value taxation (article 6), impact fees (article 15) among others – and studied tax competition, with one paper (article 17) looking for empirical evidence of strategic interaction among communities in the choice of property tax rates. Other work in public economics explored reasons why heterogeneous communities may be optimal, overturning the principles of the Tiebout model (article 9). My work on the economics of mortgage markets has investigated the choice between fixed and adjustable rate mortgages (ARM), (article 8), the efficient form of ARM contracts (article 7), and the effect of asymmetric information in mortgage contracting (article 13). A related financial topic concerns the effect of homeownership on portfolio decisions (article 14). My initial research on the airline industry studied the economics of hub-and-spoke networks, focussing on the implications and measurement of economies of traffic density (articles 11, 12). More-recent airline research presented theory and evidence on the pricing of international travel by airline alliances, showing that alliances have procompetitive affects on fares for interline passengers (articles 16, 18). My latest work focusses on airport congestion pricing, recognizing that carriers internalize much of the congestion they cause (article 19).

BUCOVETSKY, Sam

Born 1952, Timmins, Ontario, Canada.

Current Post Assoc. Prof., Dept Econ., Faculty Arts, York Univ., Toronto, Ontario, Canada, 1990–.


Degrees BSc (Math and Econ.), Univ. Toronto, 1973; MSc LSE, 1974; PhD Yale Univ., 1979.


Principal Fields of Interest H0 Public Economics: General; C0 Mathematical and Quantitative Methods: General; L0 Industrial Organization: General.

use of distributional waits’, *CJ*, 17, 1984;
4. ‘Concurrent renting and selling by a durable-goods monopoly under threat of entry’ (with J. Chilton), *RandJE*, 17, 1986;
7. ‘Tax competition with two tax instruments’ (with J. Wilson), *RSUE*, 21, 1991;
8. ‘Choosing tax rates and expenditure levels using majority rule’, *J Pub E*, 46, 1991;
10. ‘Factor ownership, taxes, and specialization’, *CJ*, 26, 1993;
11. ‘Rent seeking and tax competition’, *J Pub E*, 58, 1995;
12. ‘Insurance and incentive effects of transfers between regions: equity and efficiency’, *ITPF*, 4, 1997;
15. ‘Efficient migration and redistribution’, *J Pub E*, forthcoming;

**Principal Contributions** I am quite proud (vain even) about my work on the Coase conjecture (with John Chilton, *RandJE*, 1984), on two-tier medical care (*CJ*, 1984), and on stockpiling of toilet paper (*RESud*, 1983). However, I think my papers on tax competition have actually been read by some other economists. In part, that may reflect readers’ curiosity as to how many papers one person can write using the same stylized matchbox models. But I hope the papers add something to the literature on the interaction among jurisdictions for which policy makers choose some fiscal instruments non-cooperatively.

**BUMPASS, Larry L.** n.e.

**BURKHAUSER, Richard Valentine**

**Born** 1945, Trenton, NJ, USA.

**Current Posts** Sarah Gibson Blanding Prof. Pol. Analysis and Chair, Dept Pol. Analysis and Mgmt, Cornell Univ., Ithaca, NY, USA, 1998–.


**Principal Fields of Interest** J0 Labor and Demographic Economics: General; I3 Welfare and Poverty.


Principal Contributions I have used my applied microeconomic training from the University of Chicago together with my applied theory of poverty measurement training from the Institute for Research on Poverty from the University of Wisconsin to evaluate the behavioral and distributional consequences of public policies. My contribution to this literature is the use of multi-period modeling of public policy outcomes. My early work on the retirement decision considered pensions as assets whose value varied over the life course and hence affected the decision to apply for such benefits and retire. It showed that the actuarially unfair nature of both private pensions and the US social security program were major factors in explaining exits from the labor force at specific ages and that ending mandatory retirement would have little effect on declines in retirement age. My more recent work uses this type of analysis to look at the timing of Social Security Disability Insurance benefit application. It has shown that even the application decisions of workers with severe disabilities are sensitive to policy variables, e.g., accommodation, ease of access and level of social security benefits. On the redistribution side of policy, I used lifecycle policy analysis to disentangle the insurance and redistributive components of social security and show how alternative tax and benefit rules could affect this balance. More generally, my work uses multi-period data to measure the dynamic nature of poverty and the degree that social security policies mitigate the adverse effects of economically risky life course events – retirement, disability, death of a spouse, divorce, etc. – both nationally and internationally. Finally, my work on the minimum wage

security income program’ (with M.C. Daly), in R. Moffitt (ed.), Means Tested Transfer Programs in the United States (UCP/ NBER, 2003).

Principal Contributions I have used my applied microeconomic training from the University of Chicago together with my applied theory of poverty measurement training from the Institute for Research on Poverty from the University of Wisconsin to evaluate the behavioral and distributional consequences of public policies. My contribution to this literature is the use of multi-period modeling of public policy outcomes. My early work on the retirement decision considered pensions as assets whose value varied over the life course and hence affected the decision to apply for such benefits and retire. It showed that the actuarially unfair nature of both private pensions and the US social security program were major factors in explaining exits from the labor force at specific ages and that ending mandatory retirement would have little effect on declines in retirement age. My more recent work uses this type of analysis to look at the timing of Social Security Disability Insurance benefit application. It has shown that even the application decisions of workers with severe disabilities are sensitive to policy variables, e.g., accommodation, ease of access and level of social security benefits. On the redistribution side of policy, I used lifecycle policy analysis to disentangle the insurance and redistributive components of social security and show how alternative tax and benefit rules could affect this balance. More generally, my work uses multi-period data to measure the dynamic nature of poverty and the degree that social security policies mitigate the adverse effects of economically risky life course events – retirement, disability, death of a spouse, divorce, etc. – both nationally and internationally. Finally, my work on the minimum wage

security income program’ (with M.C. Daly), in R. Moffitt (ed.), Means Tested Transfer Programs in the United States (UCP/ NBER, 2003).
has focussed on how the rise of multi-worker households has resulted in the decline of the minimum wage as an effective method of redistributing income to the working poor.

BURNSIDE, Alexander Craig

Born 1965, Montreal, Canada.

Current Post Prof. Econ., Univ. Virginia, Charlottesville, VA, USA, 2002–.


Editorial Duties Bd Eds, AER, 2001–.

Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F4 Macroeconomic Aspects of International Trade and Finance.


Principal Contributions Some of my early work concentrated on the role of unobserved input variation, in particular labour hoarding and capital utilization, in business cycle fluctuations. This work showed that these unobserved factors may be important shock propagators (articles 1, 7). Taking these factors into account (articles 3, 4, 5) also implies that increasing returns to scale and external effects are less likely to be the underlying reason we observe procyclical labour productivity in US data. My other early work focused on issues relating to empirical methods used in business cycle analysis and asset pricing (articles 2, 6). My later work has concentrated on international macroeconomics. My work on currency crises (article 10) suggests that predictable banking sector bailouts were a key cause of the Asian crisis of 1997. My work on hedging (article 9) suggests that banks’ exposure to exchange rate risk is a function of government guarantees to bank creditors. My work on foreign aid (article 8) argues that a key determinant of the growth impact of foreign aid injections is the policy environment in the recipient country.

BUTLER, Richard J.

Born 1950, Salt Lake City, UT, USA.

Current Post Prof. Econ., Brigham Young Univ., Provo, UT, USA, 2000–.

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**Degrees** BA Univ. Utah, 1972; PhD Univ. Chicago, 1979.


**Principal Fields of Interest** J3 Wages, Compensation, and Labor Costs; I1 Health; D8 Information and Uncertainty.


**Principal Contributions** I have published over 80 articles on health, disability, and workers’ compensation, as well as articles on discrimination, income inequality and education.
CABALLERO, Ricardo Jorge

Born 1959, Chile.

Current Post Ford Intl Prof. Econ., MIT, Cambridge, MA, USA, 2000–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General; G0 Financial Economics: General.


Principal Contributions I have done research on a wide range of macroeconomic and international economics themes, and on the boundaries between these and fields such as labor economics, productivity and R&D, and financial economics. The common methodological thread in this work is my acknowledgment of: (i) the substantial microeconomic heterogeneity exhibited in market economies, (ii) the ‘churn’ process arising from the dynamic nature of this heterogeneity, and (iii) the complexity and incomplete nature of microeconomic contractual relationships. From this perspective, I have built theories, and tested their empirical relevance, on a wide variety of aggregate variables and phenomena: consumption of durable and nondurable goods, savings, business investments, job creation and destruction, productivity growth and knowledge spillovers, exchange rates, financial flows, price rigidities, unemployment, growth, and systemic emerging market crises. At this time, I am extracting and integrating lessons from this research to enrich our answers to questions as diverse as: what are the costs of recessions? How do financial and contractual factors hamper aggregate economic per-
formance? What is a reasonable level of job destruction and unemployment in the aftermath of structural adjustment? What is the cost and why do some countries build social institutions that are later perceived as obstacles to flexible adjustment? Why do systemic crises occur? What is the optimal exchange rate mechanism in the presence of contractual incompleteness? How can we complete insurance markets for emerging economies? Which macroeconomic and structural policies should complement aggregate hedging strategies?

CALABRESI, Stephen G. n.e.

CALDWELL, John C. n.e.

CALDWELL, Pat n.e.

CALOMIRIS, Charles W. n.e.

CALVO, Guillermo A.

Born 1941, Buenos Aires, Argentina.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E5 Monetary Policy, Central Banking, and the Supply of Money; P2 Socialist Systems and Transitional Economies.


**Principal Contributions**

Most of my work seeks to understand why developing countries – especially emerging market economies (EMs) – suffer from low growth and high volatility and are so prone to currency or credit crises. Early on, this led me to look ‘behind’ the production function to understand the limits to firm expansion, possible inefficiencies, etc. I ended up writing with Stan Wellisz about a theory of firm hierarchies. Similarly, I wrote an early paper on the efficiency wage hypothesis of unemployment showing that unemployment results from real wage rigidities caused by asymmetries in the information between managers and workers. Another key strand of my work focusses on the ineffectiveness of public policy, including time inconsistency of optimal policy and the credibility of policy and policymakers, both developed in the context of rational expectations models. This showed that lack of credibility is endemic to public policy and not simply the result of unreliable policymakers. My recent research on currency and credit crises began with the 1993 Staff Papers article with Leonardo Leiderman and Carmen Reinhart. We argued that capital inflows in Latin America in part reflect developments in the United States. Mexico’s 1994/95 crisis appears to validate our view because US interest rates rose sharply during 1994. A central phenomenon revealed by my subsequent research on these issues is the sudden stop, namely, a sudden cut in international credit. All the current episodes in EMs display sizable sudden stops. The main challenge is to rationalize sudden stops that occur even when economic fundamentals are stable. My recent papers explore whether sudden stops stem from multiple equilibria, which in turn result from negative externalities generated during a sudden stop. Future projects include a systematic empirical analysis of sudden stops (e.g., do they precede or follow currency crises?) and developing the theory in a stochastic environment.

**CAMERER, Colin Farrell**

- **Born** 1959, Drexel Hill, PA, USA.
- **Degrees** BA Johns Hopkins Univ., 1977; MBA Univ. Chicago, 1979; PhD Univ. Chicago, 1981.
- **Principal Fields of Interest** C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


**Principal Contributions** My work applies psychological principles to economic decisions, in an effort to ‘reunify’ these social sciences in a synthesis called ‘behavioral economics’. My research has spanned many domains. In laboratory experiments we have studied how people learn to trust one another, and how speculative price bubbles boom and crash in experimental stock markets. My book on behavioral game theory summarizes the results of hundreds of experiments. Behavioral game theory gives precise predictions about how people who think only a couple of steps ahead, have both guilt and envy toward others, and learn from experience, are likely to behave. One component is a cognitive hierarchy theory that predicts behavior in one-shot games better than Nash equilibrium and provides initial conditions for another component, a statistical theory of learning over time. Besides conducting experiments, I look at field data. In a paper with Babcock, Loewenstein and Thaler I showed that New York City cab drivers seem to choose a daily ‘income target’ and quit when they reach it (which is contrary to the standard theory of labor supply). I also found that the market for betting on basketball games mistakenly thinks that teams have ‘hot hands’ (teams with winning streaks are overbet), and National Basketball Association coaches exhibit ‘escalation to commitment’ by keeping players who were highly-touted draft picks in the game even when other players would score more points. Ongoing research studies how people develop ‘codes’ to describe situations, as one facet of organizational culture. I am also doing ‘neural economics’—the study of how the brain operates when making economic decisions, using fMRI...
imaging of real-time brain activity in collaborations with neuroscientists. We are also planning experiments on development economics.

CAMERON, Trudy Ann

Born 1956, Matsqui, BC, Canada.

Current Post Raymond F. Mikesell Prof. Econ., Dept Econ., Univ. Oregon, Eugene, OR, USA, 2002–.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; H4 Publicly Provided Goods; C2 Econometric Methods: Single Equation Models.


Principal Contributions Most of my work relates to methodology concerning the use and interpretation of different types of stated preference choice data in the measurement of non-market values for public goods. My applications involve a variety of environmental goods such as non-commercial fisheries, water resources, public lands, green power options, climate change mitigation, and policies that reduce human morbidity and mortality. My most widely cited early work (article 5 and related papers) concerns a reparameterization of a conventional binary logit or probit model that allows referendum-contingent valuation data to be interpreted similarly to an ordinary multiple-regression model for the latent continuous willingness-to-pay variable. I continue to make extensive use of maximum likelihood techniques to explore more general specifications for different types of stated-preference data involving limited dependent variables. Relying heavily on formal random utility models, I have adapted them to accommodate uncertainty, information, heteroscedasticity, and, most recently, discounting. I incorporate the concepts of option prices, subjective risks, and latency-in-risks into stated preference choice models, and I have recently used web-based surveys to assess the sensitivity of stated preference choices to extensive randomized variations in survey instrument design. I have also addressed strategies for dealing with systematic nonresponse to stated preference surveys.

CAMPBELL, John Young

Current Post Otto Eckstein Prof. Apl. Econ., Harvard Univ., Cambridge, MA, USA.


Principal Fields of Interest G1 General Financial Markets; E2 Consumption, Saving, Production, Employment, and Investment; E4 Money and Interest Rates.


**Principal Contributions**

Financial theorists describe asset prices as expected present values of future payments, discounted to adjust for time and risk. If an asset price is high, then either its future dividends must be high, or its future returns must be low; these low returns may reflect low real interest rates or low excess returns on the asset relative to short-term debt. Much of my research develops this simple insight into a quantitative framework that can be used to analyze the variation of asset prices. I have found, for example, that most variation in aggregate stock prices can be attributed to variation in the market price of risk. I have taken a similar approach to the study of aggregate consumption behavior in relation to wealth and income. My most recent research examines the microeconomic problem of consumption and portfolio choice for long-lived investors.

**CANOVA, Fabio**

**CAPLIN, Andrew Stephen**

*Born* 1956, London, UK.

*Current Post* Prof. Econ., NYU, New York City, NY, USA, 1995–.


*Degrees* BA Cambridge Univ., 1978; PhD Yale Univ., 1983.

*Offices and Honours* Fell., Em Soc; Res. Assoc., NBER, 1988–.

*Principal Fields of Interest* E0 Macroeconomics and Monetary Economics: General; D0 Microeconomics: General; H0 Public Economics: General.


Principal Contributions I have broad interests in many fields of economics, in allied social sciences, and in the world of affairs. My current research focuses on areas of overlap between economics and psychology. A general theory is presented in article 14, with medical applications outlined in articles 18 and 19. Testing these theories calls for new methods of gathering data, and in this respect survey methodology has much to commend it. Applications of this methodology to issues in the theory of wealth accumulation, consumption, and portfolio choice are an active area of interest (articles 16 and 17). Much of my earlier research (articles 1, 2, 4, 7, 8 and 9) was dedicated to understanding links between individual inertia and macroeconomic dynamics. This remains an active area of research (article 12). An interest in aggregation also underlies joint research with Barry Nalebuff on the behavior of voting rules (articles 3 and 6), of imperfectly competitive markets (article 5), and of political-economic equilibrium (article 10). My interest in market inertia lies behind proposals for reforming the housing finance market (articles 11, 15 and book 1). Economists are very interested in institutions, but we remain profoundly ignorant about how they operate. By continuing to participate in the process of housing finance reform, I hope to improve my understanding both of why so many institutions function poorly, and of the role of ideas in the process of reform.

CARD, David Edward

Born 1956, Guelph, Canada.

Current Post Class of 1950 Prof. Econ., Univ. California, Berkeley, CA, USA, 1997–.


Degrees BA Queen’s Univ., Canada, 1978; PhD Princeton Univ., 1983.


Principal Fields of Interest J0 Labor and Demographic Economics: General; C5 Econometric Modeling.

Publications Books: 1. Small Differences that Matter: Labor Markets and Income Maintenance in Canada and the United States (with R. Freeman), (UCP,
138  CARROLL


*Principal Contributions* n.e.

**CARROLL, Christopher Dixon**

*Born* 1964, Baton Rouge, LA, USA.

*Current Post* Prof. Econ., Johns Hopkins Univ., Baltimore, MD, USA, 2000–.


*Degrees* BA Harvard Univ., 1986; PhD MIT, 1990.


*Principal Fields of Interest* D1 Household Behavior; D8 Information and Uncertainty; D9 Intertemporal Choice and Growth.


Principal Contributions My work has focussed principally on whether actual consumption and saving behavior is reasonably well approximated by a model in which typical consumers behave in ways close to the predictions of a dynamic optimization model. My early work emphasized that the behavior that emerges from the optimizing model is radically changed when a realistic treatment of uncertainty is incorporated. In particular, in such a context it can be optimal to engage in ‘buffer-stock’ saving, in which consumers have a target value for the ratio of wealth to permanent income. Such target saving behavior is sharply different from the predictions of the perfect foresight (PF) or certainty equivalent (CEQ) models that were the standard framework until recently, but these models are in much better agreement with empirical data than are the PF/CEQ models. More recent work has examined the consequences of habit formation for the short- and long-run dynamics of consumption. This work was motivated by empirical findings that exogenous increases in growth seem to lead to increasing saving rates, which is precisely the opposite of the predictions of the standard optimizing model. However, a model with consumption habits can in principle explain causality from income growth to saving: during periods of rapid income growth, income races ahead of consumption, which habits cause to adjust slowly. This model is much more consistent with the empirical patterns of saving and growth in the fast-growing Asian economies than is the traditional model. The model can also explain the ‘excess smoothness’ of aggregate consumption relative to the predictions of models with intertemporally separable utility.

CARROLL, Raymond J. n.e.

CARSON, Richard T.

Born 1955, Jackson, MS, USA.


Offices and Honours Publication of Enduring Quality Award, Assoc. Environmental and Resource Econ., 1999: Bd Dirs, Assoc. Environmental and Resource Econ., 1999--; Program Chair, 2nd World
Congress Environmental and Resource Econ., 2002; Chair, Dept Econ., Univ. California, San Diego, 2002–.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; C0 Mathematical and Quantitative Methods; General.


Principal Contributions Most of my work has been in the area of non-market valuation, that is placing a monetary value on goods not ordinarily bought and sold in the marketplace. I have done extensive work on the development of a survey-based approach to non-market valuation known as contingent valuation that is now widely used in environmental economics as well as in applied work on cultural, health, marketing, and transportation issues. My work on contingent valuation spans a large range and encompasses integration and clarification of underlying concepts from welfare economics, survey and experimental design issues, and the development of appropriate statistical techniques. My empirical contingent valuation work includes the assessment of the benefits of the US Clean Water Act, vis-
ibility improvements in the Grand Canyon, water reliability in Californian cities, drinking water risk reductions, an evaluation of the preservation of the Kakadu Conservation Zone in Australia and the rehabilitation of the Fez Medina in Morocco. I have also used contingent valuation techniques for natural resource damage assessment including the Exxon Valdez oil spill and DDT/PCB dumping off the coast of Los Angeles. Other environmental areas that I have worked on include: discounting health risks, voting behavior, outdoor recreation, siting hazardous waste sites, urban growth controls, coordination of US–Mexican environmental policy, tropical rainforests, and global climate change.

CARTER, Colin A. n.e.

CARTER, Richard B. n.e.

CASE, Anne Catherine

Born 1958, Elmira, NY, USA.


Principal Fields of Interest O1 Economic Development; I0 Health, Education, and Welfare: General; D1 Household Behavior.


Principal Contributions My early work
focussed on spatial interactions and explored the role of geography in economic behavior. In part through the research on spatial modeling, my work turned to empirical political economy, and the analysis of US state decisionmaking. Throughout, I have worked on household behavior, with a special focus on the impact of household structure for children’s outcomes. Since 1995, I have been conducting research in South Africa, quantifying the impact of several public programs, including the state old-age pension, the child support grant, and the education system. Currently, I am studying the relationship between socioeconomic status and health, in the US, the UK and South Africa.

CASON, Timothy N. n.e.

CAVES, Richard Earl

Born 1931, Akron, OH, USA.

Current Post Prof. Econ., Harvard Univ., MA, USA, 1962–.


Principal Field of Interest L0 Industrial Organization: General.


Principal Contributions Intersection between the fields of international trade and industrial organisation, including the effect of international trade on the structure and performance of national markets and on industrial policy, the structure and behaviour of multinational enterprises, export-led growth of national industries and economies, transnational comparisons of industrial organisation, countertrade agree-
ments, and effects of national and international influences on productive efficiency. Other research areas include the effects of regulation on industrial structure and behaviour, the consequences of resource commitments that create barriers to entry and exit, structural and behavioural components of horizontal product differentiation, pricing and promotional rivalry in the pharmaceutical industry, and investment rivalry in capital-intensive industries.

CECCHETTI, Stephen G.

Born 1956, Berkeley, CA, USA.
Current Post Prof. Econ., Ohio State Univ., Columbus, OH, USA, 1992–.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; E0 Macroeconomics and Monetary Economics: General; G0 Financial Economics: General.


inflation’ (with M. Bryan, R. O’Sullivan), 
DE, 149, Dec. 2001; 17. ‘Price level con-
vergence among United States cities: les-
sons for the European Central Bank’ (with 

Principal Contributions
My work is primarily empirical and spans a number 
of fields, beginning with my 1986 paper 
on the newsstand prices of magazines. In 
1988 I wrote a theoretical paper on staggered price setting in an attempt to pro-
vide a foundation for New Keynesian macroeconomics. During the 1990s, I 
worked on the dynamics of aggregate asset pricing. Beginning in 1988, I wrote a 
series of papers on the Great Depression. 
Since the mid-1990s, my work has been related to monetary and financial policy. 
Together with M. Bryan I have written a 
series of papers on the measurement of 
inflation. Our primary contribution in this area has been the development of the med-
ian CPI for the measurement of core in-
flation. In addition, I have examined how asset prices might be best introduced into 
inflation measurement. Beyond these, I 
have tried to provide a general framework for improving the way in which central bank policy functions. My focus has been on the best way to structure decisions and actions of central bankers.

CHALOUPKA, IV, Frank J. n.e.

CHAMBERS, Robert n.e.

CHAN, K.C.

Born 1957, Hong Kong.

Current Posts Dean, Sch. Bus. and Mgmt, Prof. Fin., Hong Kong Univ. Sc. and Tech. (HKUST), Clear Water Bay, Kowloon, Hong Kong, 2002–, 1994–.


Editorial Duties Assoc. Ed., Pacific Ba-
Ed., Intl Rev. Fin., 2000–.

Principal Fields of Interest G0 Financial Economics: General; G1 General Financial Markets.

Publications Articles: 1. ‘An exploratory investigation of the firm size effect’ (with N.-f. Chen, D. Hsieh), J Fin E, 14, Sept. 1985; 2. ‘Can tax-loss selling explain the January seasonal in stock re-
est rates’ (with G.A. Karolyi, F.A. Longstaff, A.B. Sanders), J Fin, 68, July 1992; 9. ‘Global financial markets and

**Principal Contributions** Most of my works are about estimating the risks of financial assets and understanding the economic determinants of financial risk measures. In a single-factor asset pricing model such as the CAPM, the risk measure of a financial asset is represented by beta, which is proportional to the covariance of the asset’s return with the market portfolio’s return. I worked with Nai-fu Chen to try to understand the economic reasons for firms to have different betas, and particularly, how betas change because of the business cycles as well as changes in the firm’s own fortune. I show that betas can vary over time, especially for firms that are close to being in financial distress, and that this feature should be incorporated in estimation of risks. Failure to do so will result in an erroneous rejection of the asset pricing model, or incorrectly assessing the risk of some investment strategies, such as the popular contrarian strategy. In the context of a multifactor asset pricing model, my works suggest what additional risk factors could capture the business cycle effect. My works can explain some of the well-known results in the asset pricing literature, such as those showing that small-cap stocks have higher returns than large caps, and stocks with higher leverage earn more than firms with lower leverage. I have also made contributions to the market microstructure literature. I study how the intra-day volatility in the cash and futures markets are related. I also investigate the bid–ask spreads and liquidity behavior in the NASDAQ market. Other contributions include a study on the behavior of the short-term interest rate and comparing various models popular in the fixed income literature.

**CHAN, Kalok**

*Born* 1961, Hong Kong, China.

**Current Post** Prof. Fin., Hong Kong Univ. Sc. and Tech., Hong Kong, 2000–.


**Degrees** BS Chinese Univ. Hong Kong, 1985; PhD (Fin.) Ohio State Univ., 1990. 


**Principal Field of Interest** G1 General Financial Markets.

Principal Contributions

My research contributions fall into three categories. The first area is on informational linkages between the derivatives market and the cash market. My research began with a study of the intraday relationship between the stock market and stock index futures market. My first two published papers illustrate that there are strong linkages between the two markets. Furthermore, the linkages between the two markets exist not only in terms of first moment (returns), but also in second moment (volatility). My subsequent studies extend the analysis to the linkages between stock options and underlying stocks and show that stock returns lead option returns more than vice versa. The second area is on market efficiency. Article 6 develops a theoretical model for information sharing across different securities. I show why the stock market index return exhibits positive autocorrelation and why large firms provide more information for small firms more than vice versa. My work with Bessembinder shows that the price movements in the futures market could be explained by changing risk premia, and are not inconsistent with market efficiency. I have also examined the profitability of trading strategies in international financial markets. The third area is on market liquidity. My work with Bessembinder and Seguin shows that volume in stock index futures is more closely associated with market-wide volatility, while volume in individual equities is more closely related to firm-specific volatility. My work with Fong shows that trades of different sizes will affect the volatility differently. I have also examined the determinants of bid–ask spread. My work with Chung and Johnson shows that the intraday bid–ask spread pattern of options differs from un-
derlying stocks. The work with Ahn and Bae finds that the market is self-adjusting in the provision of liquidity, since investors will provide liquidity when the market needs it.

CHAN, Louis K.-C. n.e.

CHARI, V.V. n.e.

CHAVAS, Jean-Paul

Born 1951, Pélussin, France.

Current Post Prof., Dept Agric. and Apl. Econ., Univ. Wisconsin, Madison, WI, USA, 1982–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; D8 Information and Uncertainty; E3 Prices, Business Fluctuations, and Cycles.

Principal Contributions My main contributions to economic analysis have been in the areas of decision-making under risk, the dynamic nature of agricultural markets and decision-making, and non-parametric testing of production and consumption relationships. My early work in the area of risk focused on producer welfare under risk and risk aversion. It developed producer surplus measures for the case when supply is risk responsive. It also yielded testable hypotheses regarding interactions among expected prices, risk and wealth terms in the analysis of supply response under risk and risk aversion. Several articles have applied theoretical results to the estimation of behavioral equations with risk terms. My work on the role of dynamics in agricultural markets and decision-making has helped better understand economic dynamics. This includes the investigation of nonlinear dynamics and chaos in agricultural markets, with a special focus on animal population dynamics. Also, my research has contributed to the emerging literature that seeks to test economic structure without the constraint of parametric assumptions. This involves the use of nonparametric methods to investigate technical change, to study supply response, and to estimate demand behavior. The analysis has provided new insights on the effects of R&D expenditures on productivity over time. Finally, I have contributed to analyzing the economic implications of sunk costs, information, and intertemporal uncertainty in resource allocation and welfare analysis.

CHEN, Nai-fu

Born 1950, Hong Kong.


Degrees AB (Maths), PhD (Maths) Univ. California, Berkeley, 1972, 1975; PhD (Fin.) UCLA, 1981.


Principal Fields of Interests G1 General Financial Markets; E5 Monetary Policy, Central Banking, and the Supply of Money; G2 Financial Institutions and Services.


Principal Contributions Most of my work is related to asset pricings in financial markets and their relation to the real economy. In particular, we (with Richard Roll and Stephen Ross) look at how macroeconomic forces, such as production, inflation and investors’ confidence, affect the stock market. As all stocks are subject to those risks, we (with K.C. Chan and Feng Zhang) examine the differences in structural characteristics between small vs. large stocks, value vs. growth stocks that would induce differences in price response to the same set of macroeconomic forces. We determine the risk and return tradeoffs in the market for those risks in accordance with the characteristics. My recent work is related to the stability of hard-fixed exchange rate systems such as currency boards. We (with Merton Miller and Alex Chan) show how the use of irrevocable commitments (irrevocable put options) can stabilize such arrangements – empirically confirmed with the Hong Kong experience during the 1997–98 financial crisis. We also show that integrating a 100 per cent reserve banking system into the exchange rate arrangement can simultaneously stabilize both the domestic financial system and the external value of the currency. With advances in financial engineering, we illustrate the desirability of a 100 per cent reserve universal banking system (100 per cent reserve for transaction accounts; loans and other investments securitized for non-guaranteed deposits while banks holding the residual tranches) over the prevalent fractional reserve banking system.

CHEUNG, Yin-Wong

Born 1957, Macau, China.

Current Post Prof. Econ., Univ. California, Santa Cruz, CA, USA, 1990–.

Past Posts Foreign Exchange Dealer, Bank of Tokyo, Hong Kong, 1980–83.


Principal Fields of Interest C2 Econometric Methods: Single Equation Models; E3 Prices, Business Fluctuations, and Cycles; F3 International Finance.


**Principal Contributions** I have published articles on a few topics, including econometric theory, exchange rate dynamics, finance, macroeconomics, and learning theory. My typical work is on empirical analysis of economic dynamics. My articles on the finite sample critical values of cointegration and unit root tests allow more accurate data analyses in a wide range of economic applications. I have developed two testing procedures: one tests for fractional cointegration and the other tests for causality in variance. The articles on testing for purchasing power parity contest the view that the parity does not hold, demonstrate the imprecision of a typical real exchange rate persistence measurement, and investigate the sources of persistence. Among other techniques, I applied the fractional integration method to examine exchange rate dynamics. In addition to drawing inferences from existing data, I produced some survey data on foreign exchange markets to investigate some issues in exchange rate economics. In the area of finance, I explored the well-known leverage effect and the interaction between stock prices and their fundamentals. In the area of macroeconomics, I have examined both dynamics of individual country output series and common business cycles between countries. I have also employed laboratory data to compare and evaluate competing theories of learning.

**CHIAPPORI, Pierre-André**

**Born** 1955, Monaco.

**Current Post** Prof. Econ., Univ. Chicago, Chicago, IL, USA, 1997–.


Principal Fields of Interest D1 Household Behavior; D8 Information and Uncertainty; D5 General Equilibrium and Disequilibrium.


Principal Contributions Multiplicity of equilibria under rational expectations A key characteristic of intertemporal models in economics is that expectations matter: the future of the system depends in part on what people believe it will be. The basic definition of rational expectations relies upon a ‘self-fulfillingness’ property, whereby behaviour to-day, as based on given (random) beliefs, does confirm ex post these beliefs. In many models, however, several self-fulfilling beliefs may co-exist. In several (co-authored) contributions, I characterize situations where such ‘sunspot’ solutions do exist. Household behaviour Traditionally, households are modelled as elementary decision units. My work explores an alternative setting, where household members have independent preferences, and make collective decisions that are assumed efficient. I prove that this general framework leads to strong empirical tests that generalize Slutsky symmetry. Also, I show when and how individual consumptions and the decision process can be recovered from household (aggregate) behaviour. Finally, the math-
mathematical techniques I develop for this purpose can be used to solve several traditional problems (aggregate market demand, etc.). Insurance theory Insurance companies currently use very rich data sets, which prove extremely useful for testing the predictions of decision and contract theory. The goal of this research is both to construct more realistic models of insurance contracts under asymmetric information (e.g., with moral hazard and adverse selection), and to develop relevant econometric procedures. One can thus evaluate the actual importance of adverse selection and moral hazard on insurance markets; conversely, these results allow us to improve considerably the efficiency of the companies’ premium policies.

CHIB, Siddhartha n.e.

CHICHILNISKY, Graciela n.e.

CHINTAGUNTA, Pradeep Kumar

Born 1963, Salem, India.

Current Post Prof. Marketing, Grad. Sch. Bus., Univ. Chicago, Chicago, IL, USA, 1995–.


Principal Fields of Interest M3 Marketing and Advertising; C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models.


**Principal Contributions** I am interested in studying demand at the household, store and market levels and using this knowledge to aid better allocation of firms’ resources across various instruments such as price, advertising, sales-force dollars, etc. Additionally, I am interested in forecasting the sales of experience goods (movies) and technology products.

**CHIRINKO, Robert S.**

**Born** 1953, Coatesville, PA, USA.

**Current Posts** Prof. Econ., Emory Univ., Atlanta, GA, USA, 1994--; Res. Fell., CESifo, Munich, Germany, 1999--.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; E2 Consumption, Saving, Production, Employment, and Investment; G0 Financial Economics: General.


**Principal Contributions** My research has focussed extensively on the acquisition of fixed capital by firms, and relies heavily on econometric tools to shed light on various issues. Much of my work quantifies the responsiveness of capital formation to tax and interest rates. Based on a large body of econometric results from a variety of specifications, my research suggests that the response is modest with the price elasticity of capital ranging from 0.25 to 0.40. Several new models of investment spending have been developed and estimated to obtain a better understanding of the decision to invest and the role of financial markets. For example, one framework estimates several different models of investment spending simultaneously, and evaluates two questions: do bubbles exist in equity markets and, if so, is investment spending stimulated? A similar framework has been used to understand the sources of procyclical productivity. Some of these new investment models have assessed the delicate relation between finance constraints and investment spending. I have also contributed to the analysis of deposit insurance, the cyclical properties of real wages and price/marginal cost markups, automobile safety regulation, and the quantitative importance of the Lucas Critique. More recent projects use investment data to test hypotheses about corporate governance, and study corporate finance and governance mechanisms using the unique institutional features in Canada, Germany, and the Netherlands.

CHISWICK, Barry Raymond

**Born** 1942, Brooklyn, NY, USA.


**Offices and Honours** Ford Foundation Doctoral Dissertation Fell., 1964–65; Fell., ASA Natl Council, 1976–77; Mem., Univ. NBER Conference Res. Income and

**Editorial Duties**


**Principal Fields of Interest**

J0 Labor and Demographic Economics: General; D1 Household Behavior; I0 Health, Education, and Welfare: General.

**Publications**


**Principal Contributions**

Research has focussed on the theoretical and empirical analysis of investment in human capital, employment and earnings. Public policy
research complemented by senior staff position on the President’s Council of Economic Advisers and consulting for various government agencies, commissions and international organizations. Involved in the development and early application of the ‘human capital earnings function’, now a standard technique for analyses of earnings. Demonstrated its usefulness for estimating rates of return to schooling and for analyzing income distribution, differences among racial/ethnic groups, and immigrant assimilation. Pioneered empirical research on regional income distribution using a human capital model. Research on the income transfer system, public education policies, discrimination, racial and ethnic minorities, screening, private vs. public schooling, and unemployment compensation. Estimated the first econometric model of the supply and demand for nursing-home care and the first economic model for analyzing optimal hospital size and bed occupancy rates. Pioneered a series of systematic studies on US minorities (Chinese, Japanese, Hispanics and Jews). Pioneered systematic research on the economic adjustment and impact of immigrants. Focus on human capital investment, earnings, employment, occupation and language skills, thereby opening a new field of research for economists. Model based on skill transferability and self-selection shown to be robust for understanding immigrant adjustment. Modeling impact of immigrants on a multifactor economy. The first to model the links among immigrant assimilation, the economic impact of immigration, and explicit and implicit immigration policies. Extensive research on models of the determinants of dominant language proficiency among linguistic minorities and on the endogeneity between language skills and labor market outcomes. Current research focuses on immigrant adjustments and impacts, the economics of language, the determinants of racial/ethnic group differences in skill and economic outcomes, and the economics of religion.

CHOU, Ray Y. n.e.

CHRISTIANO, Lawrence Joseph

Born 1952, Algiers, Algeria (US citizen since birth).

Current Post Alfred P. Chase Prof. Econ., Northwestern Univ., Evanston, IL, USA, 1992–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles.

Publications Articles: 1. ‘Why does inventory investment fluctuate so much?’, JME, 21, 1988; 2. ‘Money does Granger cause output in the bivariate output money relation’ (with L. Ljungqvist), JME, 22, Sept. 1988; 3. ‘Understanding Japan’s saving rate: the reconstruction hypothesis’, FRB Minneapolis Q. Rev., 13, Spring 1989; 4. ‘Unit roots in real GNP: do we know, and do we care?’ (with M. Eichenbaum), C-RPP, 32, 1990; 5. ‘Opti-

**Principal Contributions** Construction of econometrically estimated, general equilibrium models of the business cycle, with special emphasis on the channels of monetary transmission. Development of tools for applied time-series econometrics. Development of the economic theory of optimal monetary and fiscal policy. Analysis of models of monetary policy when policy makers do not have the ability to commit to future policy. Development of methods for approximating the solution to dynamic general equilibrium models.

**CHRISTIE, William G.** n.e.

**CLAESSENS, Stijn**

Born 1959, Udenhout, The Netherlands.


Degrees Kandidaats (Law), Doctorandus

Offices and Honours Mem., AFA, 1984–; Fell., CEPR, 2001–.


Principal Fields of Interest F3 International Finance; G0 Financial Economics: General; O1 Economic Development.


Principal Contributions My policy and research interests are in external finance and domestic financial sector issues. Specific areas of interest are: asset-liability management and risk management for developing countries; alternative forms of external finance, including portfolio flows; financial sector development and reform in developing countries; internationalization of financial services; corporate governance; and bank and enterprise restructuring in transition economies and developing countries. I have published extensively in these areas and edited several books. My contribution to the field has been the analysis of debt reduction schemes for developing countries in the mid-1980s, initiating work on portfolio flows in the early 1990s, analyzing enterprise and bank restructuring in transition economies in the mid-1990s, and reviewing the process of financial restructuring
in East Asia. In corporate governance, I have drawn attention to the issue of expropriation in weak corporate governance environments and the importance of ownership structures in firm valuation and performance. My principal role at the World Bank was to help governments develop strategies for external debt restructuring and asset-liability management; and to provide advice on financial sector restructuring and reform. I have provided advice and led World Bank missions to Belarus, Brazil, Bulgaria, China, Chile, Colombia, Costa Rica, Hungary, India, Indonesia, South Korea, Kyrgyz Republic, Malaysia, Mexico, Nigeria, Papua New Guinea, the Philippines, Poland, Romania, Russia, Slovakia, Thailand, and Turkey.

CLARK, Andrew Eric


Principal Fields of Interest J0 Labor and Demographic Economics: General; I0 Health, Education, and Welfare: General; Z1 Cultural Economics.


Principal Contributions My work has largely focused on the interface between psychology, sociology and economics; in particular, I have used job and life satisfaction scores, and other psychological indices, as proxy measures of utility. One research field has been that of relative utility or comparisons (to others like you, to others in the same household, and to yourself in the past). I find evidence of such comparisons with respect to both income and unemployment. This work has spilled over into theoretical and empirical work on evidence for and the implications of following behaviour and learning from others’ actions. My recent work has
involved collaboration with psychologists to map out habituation to life events (such as job loss, marriage, and divorce) using long-run panel data. In addition, direct measures of utility allow us to carry out more direct tests of popular models of the labour market. In this spirit, I have worked on unemployment, quits, efficiency wages, and labour market rents. A current large-scale research project concerns individual well-being and income inequality. Earlier work covered trade-union bargaining theory. I have also written on the economics of drug legalisation. My contribution to jazz guitar remains, sadly, non-existent.

CLARK, Gordon Leslie

Born 1950, Yallourn, Australia.


Principal Fields of Interest G2 Financial Institutions and Services; R3 Production Analysis and Firm Location.


**Principal Contributions** I am an economic geographer, with a continuing interest in the long-term structure and performance of urban and regional economic systems. Empirical research has included the US (North America), North East Asia and Europe. My research has sought to integrate measures of regional economic performance with an understanding of the role and significance of institutions (the firm, unions, state regulation) – by implication, my research attributes these institutions great significance in affecting the path and rate of accumulation. With Neil Wrigley, I have developed a theoretical-cum-analytical approach to this issue based upon sunk costs; unlike more conventional treatments of the topic, this approach emphasizes the costs of decision-making where ‘exit’ is made problematic by virtue of the accumulation in certain places of firm-specific costs and liabilities. Extending these ideas, more recent research has focused on the management and investment of pension fund assets – beginning with the institutions and industrial structure of the related Anglo-American financial services sector and extending the analytical framework to European pensions in the context of global finance. In this work, the analytical focus is empirical and theoretical being concerned with the interaction between nation-state institutional frameworks and the logic driving global financial markets. Here, my theoretical contributions have focused upon investment decision-making, going beyond models of individual risk aversion to the interaction between individuals and their constituent groups thereby demonstrating the role that institutional heuristics may play in structuring financial decision-making.

**CLARK, William Arthur Valentine**

**Born** 1938, Christchurch, New Zealand.

**Current Post** Prof. Geography and Stats, UCLA, Los Angeles, CA, USA, 1970–.


**Degrees** BA (Geography and Hist.), MA (Geography) Univ. New Zealand, 1960, 1961; PhD (Geography) Univ. Illinois, 1964.


Principal Fields of Interest R2 Household Analysis; R3 Production Analysis and Firm Location; R4 Transportation Systems.


Principal Contributions The overarching research focus has been on demographic change at both local and metropolitan scales and the links between demographic change and changing housing markets. Within this broad context research has focussed on residential mobility and housing tenure choice (including studies of the impacts of housing change on commuting and labor force participation) and residential segregation. Models of housing search and tenure choice have used demographic variables to predict the probability of becoming an owner and the geographic variations in homeownership. A geographic analysis of residential relocation and commuting has shown that workers are sensitive to residence–work separation and adjust their commute distance when they make residential location changes. A formal model of the response to commuting distances estimates the probability of moving closer to the place of work with greater residence–work separation. Schelling’s model of residential preferences has been empirically validated with residential choices in a set of US metropolitan areas and has established the important role of preferences in creating patterns of residential separation in large metropolitan areas in the United States.
COATE, Stephen Thomas

Born 1957, St Albans, Hertfordshire, England.

Current Post Kiplinger Prof. Public Pol., Dept Econ., Cornell Univ., Ithaca, NY, USA, 1998–.


Principal Fields of Interest D7 Analysis of Collective Decision-Making; H1 Structure and Scope of Government; D6 Welfare Economics.


Principal Contributions My early work primarily focussed on two topics: the design of transfer programs for the poor and disadvantaged and informal credit and insurance institutions. The former body of work yielded insights into how programs can be structured to deal with the various incentive problems that arise with poor support. It also provided insights into the problems of affirmative action programs. The latter body of work improved understanding of the function and performance of various institutions commonly observed in developing countries. My later work focussed on political economy, in particular on understanding why politically determined policies might be inefficient. It yielded a deeper understanding of the sources of ‘political failure’. This strand of work also yielded an alternative theory of electoral competition which has a number of advantages over existing approaches. My current work studies the merits of various political institutions, such as citizen initiatives and elected regulators, and also seeks to provide guidance on the regulation of campaign finance. I have also made a number of conceptual contributions to the theory of policy analysis.
COCHRANE, John H.

**Born** 1957, Chicago, IL, USA.

**Current Post** Theodore O. Yntema Prof. Fin., Grad. Sch. Bus., Univ. Chicago, IL, USA, 1994–.


**Degrees** SB (Physics) MIT, 1979; PhD Univ. California, Berkeley, 1986.

**Offices and Honours** Res. Assoc., NBER, 1994–; Dir., NBER Asset Pricing Program, 1999–.

**Editorial Duties** Ed., *JPE*, 1998–.

**Principal Fields of Interest** G0 Financial Economics: General; E0 Macroeconomics and Monetary Economics: General.

**Publications**


**Principal Contributions** Most of my research concentrates on the intersection between macroeconomics and finance: using financial data to understand the important shocks to the macroeconomy, and understanding the real macroeconomic risks that drive asset prices in financial markets. I have worked on both the consumption (preferences; habit persistence) and the production sides of these questions; on volatility tests, and understanding that they are the same thing as return forecasting regressions; on the question whether economic fluctuations are permanent or transitory and some of the related unit root econometric questions; on estimating and understanding the effects of monetary policy; and lately on the fiscal theory of the price level. I also made brief forays into health economics, characterizing private-sector contracts that would solve the problem that sick people get
dropped from health insurance, and into the monetary and macroeconomics of transitions from socialist to market economies.

COE, David Theodore

Born 1947, Panama City, Panama.

Current Post Asst Dir., Asia and Pacific Dept, and various positions, IMF, Washington, DC, USA, 1988–.


Degrees BSc (High Hons) Univ. Maryland, 1970; MSc LSE, 1971; PhD Univ. Michigan, 1978.


Principal Fields of Interest O3 Technological Change; O4 Economic Growth and Aggregate Productivity; F1 Trade.


Principal Contributions My research has been primarily empirical and closely related to policy issues. An early paper on wages (article 2), which included a section on ‘Hysteresis in the natural rate’, was one of the first to address empirically the issue of the persistence of unemployment in Europe. A number of papers focussed on structural determinants of the natural rate of unemployment and the issue of labor market reforms. In the paper with D. Snower, we showed that labor market reforms were complementary in the sense that the effect of each reform is greater when implemented in conjunction with other reforms than in isolation. Interest in the natural rate led to a number of papers estimating potential output and total factor productivity as a function of, inter alia, the stock of R&D capital (à la Griliches). E. Helpman and I extended this internationally by constructing a stock of foreign R&D
capital in order to estimate international R&D spillovers. This paper and subsequent collaborations have stimulated a large literature on international R&D spillovers. Interest in trade, which plays a role in R&D spillovers, has led to a number of recent empirical, non-linear gravity model papers.

COGLEY, Timothy

Born 1958, Chicago, IL, USA.

Current Post Assoc. Prof., Arizona State Univ., Tempe, AZ, USA, 1999–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; C3 Econometric Methods: Multiple/Simultaneous Equation Models.


Principal Contributions I am best known for research on the propagation puzzle in real business cycle models. More recently, I have explored how the law of motion for inflation and other nominal variables has evolved over time.

COLE, Harold Linh


Current Post Prof., UCLA, Los Angeles, CA, USA, 2000–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F3 International Finance; N1 Macroeconomics and Monetary Economics; Growth and Fluctuations.

CONSTANTINIDES, George M.

Born 1947, Nicosia, Cyprus.

Current Post Leo Melamed Prof. Fin., Grad. Sch. Bus., Univ. Chicago, Chicago, IL, USA, 1983–.


Univ. Piraeus, 1999; Dir./Trustee, DFA family of funds and trusts, 1983–.

**Editorial Duties**


**Principal Fields of Interest**

G1 General Financial Markets; D0 Microeconomics: General; E0 Macroeconomics and Monetary Economics: General.

**Publications**


**Principal Contributions**

Theoretical and empirical study of the prices and returns of financial assets and derivatives in incomplete markets (incomplete consumption insurance) and imperfect markets (transaction costs, taxes, borrowing constraints). Notably, I have addressed the causes of the historically observed premium of equity returns over bond returns. I have also addressed the pricing and hedging of fixed-income securities, options, futures and other derivatives and the effects of transaction costs and taxes on the pricing and hedging of derivatives and on portfolio management.

COOK, R. Dennis n.e.

COOKE, William Nelson

Born 1948, East Alton, IL, USA.

**Current Posts**

Prof., Dir., D.A. Fraser Center for Workplace Issues, Coll. Urban, Labor and Metropolitan Affairs, Wayne State Univ., Detroit, MI, USA, 1990–, 1998–.

**Past Posts**

Asst Prof., Assoc. Prof., Sch.

Degrees

Editorial Duties

Principal Fields of Interests

Publications


Principal Contributions
Most of my work has focussed on understanding four general issues in labor relations. First, my earliest work focussed on union representation, namely, on the contextual and behavioral determinants of union certification election outcomes and of first-contract negotiation outcomes. These contributions were the first of their kind to provide theoretical and econometric analyses of employee cost–benefit voting behavior in the case of election outcomes.
and of relative power in the case of first-contract negotiation outcomes. Second, in two studies (with G. Gautschi and A. Mishra, G. Sprietzer and M. Tschirhart), we demonstrated the salient effects of political appointment biases and small-group dynamics on the decision-making behavior of individual members of the NLRB regarding the regulatory resolution of unfair labor practice disputes between employers and unions. These studies provided the first such theoretical and empirical inquiries of the regulatory behavior of NLRB members. Third, my work has focussed on the effects of union–management cooperation and related employee participation and group-based pay incentives on firm-level performance. Based on a broader, original theoretical model of the dynamics of absolute, relative, and total organizational power in union and nonunion firms, this line of my research has helped to sort out the conditions under which firms either enjoy positive collective voice effects or suffer negative union restriction effects on performance. Fourth, and most recently, my research has focussed on the influence of different national industrial relations systems factors on multinational company foreign direct investment (FDI) decision-making. Providing the first such analytical and empirical analyses regarding FDI, this work has demonstrated the perceived negative influence of restrictive workplace regulations, union representation, and centralized collective bargaining structures on the distribution of FDI across highly developed and developing countries.

COOLEY, Thomas Ferguson

Born 1943, Rutland, VT, USA.
Current Post Paganeli-Bull Prof. Econ., Stern Sch. Bus., NYU, New York City, NY, USA, 1999–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; C1 Econometric and Statistical Methods: General; H0 Public Economics: General.


Principal Contributions

The development and application of quantitative dynamic general equilibrium theory to problems in macroeconomics with particular emphasis on business cycles, monetary theory, public finance, political economy and economic growth.

COOPER, Joseph

Born 1933, Boston, MA, USA.


Principal Fields of Interest H1 Structure and Scope of Government; B5 Current Heterodox Approaches; K4 Legal Procedure, the Legal System, and Illegal Behavior.


**Principal Contributions** Much of my work concerns the contextual determinants of the structure of political institutions and political behavior in such institutions. As such, it has important implications for conditioning rational choice accounts of the origins and operation of majority rule institutions as well as political behavior in such institutions. While recognizing the importance of self-interest and utility maximization, I have emphasized the impacts of institutional setting and norms as well as of mixed motivations in explaining the evolution of congressional rules and procedures, the committee system, voting behavior, and leadership style. I have also been concerned with the broader distributions of task, power, and authority among the Congress, the President, and bureaucratic agencies, micro and macro causes of change in the structure of these relationships, and consequences of change for representative government in the United States.

**COOPER, Russell W.** n.e.

**CORCORAN, Mary** n.e.

**CORNWELL, Christopher M.**

**Born** 1959, Charlotte, NC, USA.

**Current Post** Prof. Econ., Dept Econ., Terry Coll. Bus., Univ. Georgia, Athens, GA, USA, 2002–.


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; J0 Labor and Demographic Economics: General; I2 Education.


**Principal Contributions** Broadly speaking, my primary contributions fall into the areas of applied econometrics and labour economics. My econometric research has focused on the estimation of panel-data models. The 1990 *Journal of Econometrics* paper derived estimators for correlated random-effects models with heterogeneous slopes, applying the procedures to a production frontier with time-varying, firm-specific efficiency levels. A comprehensive treatment of simultaneous equations models with unobserved effects was published in the *Journal of Econometrics* (1992). My 1994 *Review of Economics and Statistics* paper was the first to apply panel-data methods to estimate the economic model of crime. My work with Atkinson in the *Journal of Econometrics, International Economic Review* and the *Journal of Business and Economic Statistics* has provided solutions to several important problems in the parametric estimation of firm-specific efficiency and productivity with panel data. In labour economics, I have been concerned with the effects of implicit pension contracts (*Journal of Human Resources*, 1991 and my Upjohn monograph with Dorsey and MacPherson); the relationship between...
marriage and wages (my 1997 Economic Inquiry paper); and more recently, the role of merit-based financial aid on college attendance and the stratification of college enrolments by income and race.

COX, Donald

Born 1954, Lawrence, MA, USA.  
Current Post Prof. Econ., Boston Coll., Chestnut Hill, MA, USA, 1995–.  
Principal Fields of Interest D1 Household Behavior; J0 Labor and Demographic Economics: General; O1 Economic Development.  
Principal Contributions My main contributions have been in the area of intergenerational transfers. Some questions I have investigated include: ‘Why do par-
I distinguish between underlying motives for private transfers, such as altruistic feelings or exchange motives, and purposes of transfers, such as the alleviation of borrowing constraints. I have found, in US data, little evidence for the altruistic motive for private transfers; the evidence tends instead to favor the exchange motive. I also find that private transfers appear to be targeted toward liquidity-constrained consumers. Part of the reason why there could be little evidence for altruistic transfers in the United States might be that public transfers have already crowded out many of them. For this reason I turned to evidence from developing countries, where public safety nets are often smaller and less widespread. I have found stronger evidence for the ‘crowding out’ of private transfers by public ones in developing countries. More recently I have become interested in the relationship between biology and economics in family behavior. My recent work distinguishes between sisters and brothers and between mothers and fathers when investigating underlying motivations for private transfers. I have also started to depart from the now standard ‘altruism/exchange’ dichotomy to explore alternative motives for private transfers, including motivations that involve imitative behavior and those that encompass the nastier side of human nature. I have also carried out work on the earnings of women, public/private differences in educational outcomes, borrowing and consumption, and intergenerational correlations in consumption.

CRAFTS, Nicholas Francis Robert

Born 1949, Nottingham, England.
Degree BA Cambridge Univ., 1970.
Editorial Duties Ed., EHR, 1999–.
Principal Fields of Interest N1 Macroeconomics and Monetary Economics; Growth and Fluctuations; O4 Economic Growth and Aggregate Productivity.
Principal Contributions

My most important work has involved reinterpreting the British industrial revolution. This has involved both revising estimates of economic growth and rethinking the economics of the growth process. This has shown that growth during the industrial revolution was much slower than was previously believed and that productivity improvement was centered on a few sectors rather than pervasive. Some of this research has been conducted with C.K. Harley and T.C. Mills. More recently, partly in joint work with S.N. Broadberry, I have re-examined Britain’s post-World War II relative economic decline and have offered an explanation based on the incentive structures facing managers of firms and politicians which stresses the importance of an absence of competition and over-commitment to full employment during the early postwar period.

Cramton, Peter C.

Born 1957, Chicago, IL, USA.

Current Post Prof. Econ., Univ. Maryland, College Park, MD, USA, 1996–.


Degrees BS (Eng.) Cornell Univ., 1980; PhD (Bus.) Stanford Univ., 1984.

Offices and Honours Outstanding Sr, OR Faculty, 1980; Stanford Merit Fellowship, 1981–83; Dean’s Award for Service to Stanford Univ., 1983–84; Leonard J. Savage Thesis Award, outstanding dissertation in Bayesian Econ., 1984.

Principal Fields of Interest C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty; D0 Microeconomics: General.

Principal Contributions Since 1993, my main focus has been in the emerging area of market design. The goal of this area is to improve the efficiency of markets through the effective design of the trading process. The area has blossomed in recent years as the result of two complementary forces: advances in information technology and communication – largely enabled by the Internet, and the deregulation of major industries (telecommunications, electricity, gas, and transportation). The main task in this research is to understand how market design impacts market outcomes. The work produces fundamental theory, and yet is intensely practical – a combination rarely seen in academics. The central focus of my work has been in extending auction theory to the sale or purchase of multiple items. Interestingly, prior to the mid-1990s auction theory focused almost entirely on the sale of a single good (with a few very notable exceptions by William Vickrey and Robert Wilson). This is remarkable, given that auctions almost always involve the sale of multiple items. The work demonstrates that although many of the insights from single-item auction theory carry forward, there are fundamental new issues when auctioning many items. My work extends the theory and then applies it in many settings, such as the government sale of spectrum licenses, the design of wholesale electricity markets, and the development of emission trading schemes. Most of my early work was in bargaining. I sought to explain the important role that time and information played in determining bargain outcomes. The work is both theoretical and empirical. The main application of the work is to union contract negotiations. My recent work demonstrates the impact of collective bargaining legislation, strike replacements, and employee stock ownership plans (ESOPs) on bargaining outcomes.

CRAWFORD, Vincent P.

Born 1950, Springfield, OH, USA.

Current Post Prof. Econ., Univ. California, San Diego, CA, USA, 1985–.


**Degrees**  

**Offices and Honours**  

**Editorial Duties**  

**Principal Fields of Interest**  
C7 Game Theory and Bargaining Theory; C9 Design of Experiments; D7 Analysis of Collective Decision-Making.

**Publications**  


**Principal Contributions** Early work (articles 1–4, 8–9) considered adaptive learning in games, bargaining and arbitration, implementation, and mechanism design. Article 5 proposed a coordination-with-commitment explanation of bargaining impasses, in the spirit of Schelling’s *The Strategy of Conflict*. Article 6 studied strategic communication when one privately informed player has an opportunity to send a message with no direct payoff implications (‘cheap talk’) to another, who then makes a decision that affects the welfare of both. If preferences do not diverge too much there are informative equilibria, in which the sender introduces intentional vagueness into his message. Article 7 developed models of two-sided matching in markets where transactions are indivisible and heterogeneous; it studied competitive equilibrium/core allocations and the extent to which they can be decentralized using procedures like ascending-bid auctions. Article 10 studied investment incentives and efficiency in a long-term relationship that is governed by a series of short-term contracts, identifying conditions under which short-term contracting leads to inefficient investment. Article 11 investigates conditions in which the impossibility of convergence to a mixed-strategy equilibrium for adaptive learning (article 1) extends to ‘evolutionary’ models. Article 12 studied the existence and comparative statics of mixed-strategy equilibria when preferences need not satisfy the independence axiom. Article 13 characterized optimal strategies in repeated coordination games. Articles 14–17 interpret the results of game experiments and analyze the emergence of coordinating conventions in history-dependent learning processes with strategic uncertainty. Article 18 reports experiments designed to study strategic sophistication, the extent to which behavior in games reflects attempts to predict others’ decisions, taking incentives into account, in normal-form games with various patterns of iterated dominance. The design allows subjects to search for hidden payoff information, and subjects’ deviations from the search patterns suggested by equilibrium analysis help to predict their deviations from equilibrium decisions.

**CREEL, Michael D.** n.e.

**CREMER, Helmuth** n.e.

**CROCKER, Keith John**

*Born* 1954, Medina, OH, USA.

*Current Posts* William Elliot Prof. Insurance and Risk Mgmt, Pennsylvania State Univ., Univ. Park, PA, 2003–.

*Past Posts* Asst Prof. Econ., Univ. Virginia, 1980–86; Assoc. Prof., Prof. Econ.,

**Degrees**

**Editorial Duties**

**Principal Fields of Interest**
- D8 Information and Uncertainty; L1 Market Structure, Firm Strategy, and Market Performance; L2 Firm Objectives, Organization, and Behavior.

**Publications**

**Articles:**
1. ‘Vertical integration and the strategic use of private information’, *Bell JE*, 14, Spring 1983;
2. ‘The efficiency of competitive equilibria in insurance markets with asymmetric information’ (with A. Snow), *J Pub E*, 26, 1985;
3. ‘A simple tax structure for competitive equilibrium and redistribution in insurance markets with asymmetric information’ (with A. Snow), *SEJ*, 51, April 1985;
4. ‘Efficient adaptation in long-term contracts: take or pay provisions for natural gas’ (with S. Masten), *AER*, 75, Dec. 1985;
5. ‘The efficiency effects of categorical discrimination in the insurance industry’ (with A. Snow), *JPE*, 94, April 1986;
8. ‘Pretia ex machina? Prices and process in long-term contracts’ (with S. Masten), *J Law E*, 34, April 1991;
12. ‘Divisionalization, franchising, and divestiture incentives in oligopoly’ (with M. Baye, J. Ju), *AER*, 86, March 1996;
13. ‘Hardball and the soft touch: the economics of optimal insurance contracts with costly state verification and endogenous monitoring costs’ (with E. Bond), *J Pub E*, 63, Jan. 1997;

**Principal Contributions**
Most of my work has been concentrated in two areas: empirical analyses of contract design, and the role of private information in insurance markets. With respect to the former, my work has considered the role of various provisions in long-term contracts – including unilateral options, duration, price adjustment, and meeting-the-competition clauses – in minimizing the transaction costs of effecting exchange. With respect to the latter, my interest has been with the functioning of insurance markets in the presence of asymmetric information, and the role of risk classification tools to mitigate the potential for market failure. More recently, I have examined models of costly state falsification and claims fraud in insurance settings.

**CROPPER, Maureen L.**

**Born** 1949, Jersey City, NJ, USA.

**Current Posts**
- Principal Econ., Pol. Res. Dept, World Bank, Washington, DC,


**Principal Fields of Interest** Q0 Agricultural and Natural Resource Economics: General; R1 General Regional Economics; I1 Health.


**Principal Contributions** Although some of my early work dealt with the extraction of exhaustible and renewable resources, most of my research has focused on three areas: valuing health benefits, estimating hedonic models and studies of US environmental policy. The work on valuing health benefits includes examining the effects of age and latency on the value of reducing mortality rates. I have examined this both in the context of individual life-cycle models and empirically, from a social viewpoint, by asking people to make choices between saving lives now and in the future. Related work examines the preferences of the general public for saving lives of persons of different ages and through programs that have different qualitative characteristics. Also in the health area are attempts to examine the effect of air pollution on morbidity and mortality, in the United States, India and Taiwan. Work on hedonic models includes a Monte Carlo study of the effects of the form of the hedonic price function on the accuracy of the hedonic model in measuring the marginal value of the product attributes and a similar study that compares the hedonic model with discrete choice models. Empirical hedonic work includes measuring the value of urban amenities. In the area of US environmental policy, I have examined the value of a statistical life implicit in US Environmental Protec-
tion Agency (USEPA) regulations and have looked at the influence of special interest groups in USEPA rule making.

CRUCINI, Mario John

Born 1962, Sudbury, Ontario, Canada.

Current Posts Assoc. Prof. and Vice-Chairman, Dept Econ., Vanderbilt Univ., Nashville, TN, USA, 1999–.


Principal Fields of Interest E1 General Aggregative Models; E3 Prices, Business Fluctuations, and Cycles; F0 International Economics: General.


Principal Contributions I have extended quantitative business cycle theory to the open economy with the aim of improving our understanding of various facets of international business cycles. Much of this work has been rewarding collaboration with co-authors Marianne Baxter, David Backus and James Kahn. The topics explored range from the importance of asset market structure for the character of international business cycles to the role of the tariff war in the propagation of the Great Depression. More recently my research has re-examined conventional wisdom on two basic theoretical propositions: the law-of-one-price and purchasing power parity. The foundation of this research is an extensive data collection effort funded by the National Science Foundation. The data on absolute prices of individual retail goods spans both international and intranational locations. The goal of this work is to synthesize cross-sectional and time-series evidence on micro-real exchange rates and develop implications for both macroeconomic and microeconomic theories of price determination. My collaborators in this area of research are Christopher Telmer, Mototsugu Shintani and Marios Zachariadis.
CUKIERMAN, Alex

Born 1938, Paris, France.


Principal Fields of Interest E3 Prices, Business Fluctuations, and Cycles; E5 Monetary Policy, Central Banking, and the Supply of Money; E0 Macroeconomics and Monetary Economics: General.


Principal Contributions Until 1985, investigated the interactions between relative price variability and inflation within equilibrium frameworks in which money is fundamentally neutral, with particular emphasis on the relationships among the following: the distribution of inflationary...
expectations across individuals, inflation variance, inflation uncertainty, relative price variability, and general nominal uncertainty. Contributed to the development of the argument that slow learning about permanent changes in productivity causes stagflation. Participated in development of macro-inventory models of the business cycle with particular emphasis on employment, interest rates and the transmission of monetary policy. Investigated the effects of wage indexation on macroeconomic stability and the real effects of nonneutral tax structures in inflationary environments. Did empirical work on the inflation-induced distortions of the national accounts. Work since 1986 proceeded along two parallel paths. One on central bank strategy, credibility and independence and the other on modern political economy with particular emphasis on the effects of asymmetric information and the two-way interaction between political factors and fiscal policy. In the first area developed extensive cross-country indices of legal (including new central banks of economies in transition) and of actual central bank independence, investigated the relation between seigniorage and political instability and the consequences of imperfect credibility. In the second area provided an explanation for ‘policy reversals’ like that of Nixon opening the door for the international legitimization of China. Recent work deals with the interactions between monetary institutions and labor market institutions including implications for European Monetary Union, transparency in monetary policy, the optimal width of exchange rate bands in the presence of currency attacks, detection and consequences of asymmetries in central objectives, and monetary policy with unobserved potential output.


**Publications**


**Principal Contributions**

Most of my work has related to financial intermediation, the financial management of insurance companies, and the structure of financial services markets. A particular emphasis in the last decade has been my work on the efficiency and productivity of financial institutions and the structure of insurance markets in the United States and Europe. This work has focussed on changes in financial markets resulting from globalization, consolidation, and the convergence of banking and insurance markets. I have also contributed to the financing of catastrophic risk and the pricing of options on ‘exotic underlyings’. Other areas of interest include the evaluation of solvency in the insurance industry and the economic analysis of moral hazard.
CURRIE, Janet Marion

**Born** 1960, Kingston, Canada.

**Current Post** Prof. Econ., UCLA, Los Angeles, CA, USA, 1996–.


**Principal Fields of Interest** H0 Public Economics; General; I0 Health, Education, and Welfare; General.


**Principal Contributions** Most of my
work in the past decade has focussed on measuring the effects of anti-poverty programs on children. Although the intent of most such programs is to alleviate child poverty and to interrupt the inter-generational transmission of poverty, previous economic analyses of welfare programs had tended to emphasize the effects of such programs on parents’ behavior. This evaluation research has emphasized the potential heterogeneity of treatment effects; the importance of controlling for the non-random selection of program participants; and the question of whether improvements in welfare could be gained in more efficient ways. Results suggest that in-kind programs may have greater benefits for children than cash transfers to parents. In-kind programs that I have studied include Medicaid (means-tested health insurance), Head Start (a preschool intervention for poor children), and a variety of nutrition programs. My research shows that all of these programs have had positive effects on the health and well-being of poor children, although in many cases the improvement in outcomes could have been achieved more efficiently. Other areas I have contributed to include the analysis of the effects of legal structure on collective bargaining outcomes, and experimental tests of bargaining theory.

CUTLER, David M.

Born 1965, Cleveland, OH, USA.

Current Post Prof. Econ., Dept Econ. and Kennedy Sch. Govt, Harvard Univ., Cambridge, MA, USA, 1997-.


Principal Fields of Interest H0 Public Economics: General; I0 Health, Education, and Welfare: General.


Principal Contributions My research is concentrated in health economics, including measuring the health of the population and understanding how medical and non-medical factors influence health. I have shown that increased medical spending is associated with substantial improvements in health, whose value is greater than the dollars spent. As a result, spending increases are not an allocation problem for society, although they may present distributional issues. I have also examined the influence of public insurance coverage on private insurance coverage, finding evidence of crowd-out between the two.
DARITY, Jr, William Alexander

Born 1953, Norfolk, VA, USA.


Principal Fields of Interest O1 Economic Development; J7 Discrimination; B0 Schools of Economic Thought and Methodology: General.


**Principal Contributions** Theory and applied research on racial and ethnic inequality; social psychological impact of joblessness; interpreting Keynes’s concept of unemployment; north–south models of trade and growth; role of the Atlantic slave trade and slavery in the Americas on uneven development.

**DAVIS, Steven J.** n.e.

**DE GREGORIO, José**

**Born** 1959, Santiago, Chile.

**Current Posts** Prof., Centro de Economía Aplicada, Departamento de Ingeniería Industrial, Univ. Chile (on leave), 2000–; Mem. Bd, Central Bank Chile, 2001–.


**Offices and Honours** Marcos Orrego Puelma Award, for the best student graduated during the year, Civil Eng., Univ. Chile, 1984; MIT and Ford Foundation Fellowships, 1986–88; NBER dissertation support award, 1989; Award to the best teacher, Ind. Eng. Dept, Univ. Chile, 1997; Presentation at the Forum Public Pol. lecture, UCLA, 2002.


**Principal Fields of Interest** F4 Macroeconomic Aspects of International Trade and Finance; E5 Monetary Policy, Central Banking, and the Supply of Money; O4 Economic Growth and Aggregate Productivity.


**Principal Contributions** My academic work has centered mainly in two areas. First, in macroeconomics in open economies my main work has focussed on the determinants of real exchange rates, stabilization policies and monetary policy. More recently I have focussed on topics such as crisis, contagion and exchange rate regimes. My second main area is development economics, where I started working on economic growth, with particular focus on the effects of inflation, financial markets, and growth performance in Latin America. I have also worked extensively on economic policy. I was the chief advisor for the Chilean Finance Minister during 1994–97. Then, in 2000–01, I became a minister in President Ricardo Lagos’s first cabinet, responsible for three ministries: Economy, Mining and Energy. In 2001 I was nominated by the President to be a member of the Board of the Central Bank of Chile – governed independently by a board of five members – and confirmed by Congress to a 10-year tenure.

**DE JAVRY, Alain**

**Born** 1939, Versailles, France.

**Current Posts** Prof., Dept Agric. and Resource Econ., Univ. California, Berkeley, CA, USA, 1967–; Prof., Centre d’Études et de Recherches en Développement Intl (CERDI), Univ. Auvergne, Clermont-Ferrand, France, 1996–.


Editorial Duties  Ed. Advisory Bd, Agric. Econ., 1998–.

Principal Fields of Interest  O1 Economic Development; N5 Agriculture, Natural Resources, Environment, and Extractive Industries; I3 Welfare and Poverty.


Principal Contributions  Main contributions to economics have been in the fields of rural development and poverty reduction strategies in Latin America, Africa, and Asia. Economic modelling concerned household behaviour and determinants of collective action in rural communities. Empirical analysis related to issues of household income strategies, land reform, technological change, the role of agriculture in economic development, and the logic of contracts. I have worked with most international development agencies, usually evaluating programmes directed at poverty reduction.

DE JONG, Robert Martin


Current Post  Assoc. Prof., Michigan
Born 1952, Manchester, UK.

Current Posts Leverhulme Prof. Ind. Econ., Univ. Bristol, Bristol, UK, 2001–.


Degrees BSc (Econ.), MSc LSE, 1973, 1974.


Principal Fields of Interest D0 Microeconomics: General; H0 Public Economics: General; L0 Industrial Organization: General.


Principal Contributions
(i) Arc elasticity of labour demand may be greater in the short run. (ii) A production tax may raise oligopoly profits. (iii) A toll may benefit road users even if they receive none of the proceeds. (iv) Asymmetric information can cause excess lending. (v) House prices are the major influence on UK business formation. (vi) Abolition of private property may enhance economic efficiency. (vii) Unrealistic optimism explains the main features of business lending. (viii) Commodity bundling enables an oligopolist to extend market power. (ix) Subsidising entry to risky occupations may enable everyone to gain when private insurance involves costly monitoring. (x) Asset ownership may demotivate managers contrary to standard property rights theory of the firm. (x) Strategic trade theory implies, counterfactually, that low-cost exporters would be the most subsidised and that price controls dominate subsidies as export promotion devices. (xi) Standard models of patent races imply that firms choose R&D strategies which are excessively risky from the social perspective. (xii) If two identical objects are sold in a private value auction, the equilibrium implies that on average the second item fetches more than the first, but this trajectory is reversed if the winner of the first round has the option of buying the second item for the same price. (xiii) Asymmetric information may result in the insured having lower accident probabilities than the uninsured and in socially excessive coverage. (xiv) Evidence that the self-employed overestimate their future income by more than employees do. (xv) Allowing close seconds to benefit from R&D breakthroughs is welfare enhancing. (xvi) Stock holding is lower in more competitive industries. (xvii) Competitive firms rely excessively on monitoring rather than on performance pay to motivate their workers.

DE PALMA, André

Born 1952, Etterbeek, Belgium.


Past Posts Post-doctoral Res. Fell., McMaster Univ., 1982–83; Mem., CORE, Catholic Univ. Louvain, 1984; Vis. Prof., Econ. Dept, Queen’s Univ., Canada, 1985; First Asst., Econ. Dept, Univ. Libre de Bruxelles, 1986; Asst Prof., Assoc. Prof., Dept Urban and Regional Planning, Civil Eng. Dept, Northwestern


**Offices and Honours** Minna James Heinemen Stiftung, Germany, 1978; Mem., Assoc. Internatl de Micropsychologie, 1980–90; 1st Prize, Fonds Natl de la Recherche Sc./Bell Téléphone, Belgium, 1987; Mem., Sc. Comm., World Conf. on Transport Res. Soc., 1995--; Best article of Canadian Transportation Res. Forum (with R. Lindsey), 2001; Mem., CESifo, Germany, 2002--.


**Principal Fields of Interest** R4 Transportation Systems; D4 Market Structure and Pricing; L9 Industry Studies: Utilities and Transportation.

**Publications**


**Principal Contributions** I am a specialist in transportation economics, large-scale models, industrial organization and applied finance. I have published more than 140 articles in international journals, including *Transportation Research, Transportation Science, American Economic*
Review, Review of Economics Studies, Econometrica, European Journal of Operations Research, as well as three books (MIT Press and PUF). I have earned several research grants during my career (in particular: US/NSF, Belgium Department of Transportation, Fonds National de la Recherche Scientifique/Switzerland and French Department of Transportation). I have participated in several EEC projects: DYNA (a dynamic traffic model for real-time applications), AIUTO (models and methodologies for the assessment of innovative urban transport systems and policies options) and TRACE (costs of private road travel and their effects on demand, including short- and long-term elasticities), MC–ICAM (Marginal Cost Pricing in Transport—Integrated Conceptual and Applied Model Analysis) and TIPP (Transport Institutions in the Policy Process) and am currently a member of the Scientific Committee of MC–ICAM which specialises in the implementation of marginal cost pricing in transport. I started organising the annual French Transportation Day in 1998. My multi-disciplinary approach and interests led me from physics to studying social systems and from modelling social systems to economics. I was the first economist to introduce the concept of pricing as a strategic variable in discrete choice models applied to industrial economy. Currently, I am working in discrete choice models (welfare measures), portfolio optimisation and theoretical/applied (with the further development of my proprietary software METROPOLIS) analysis of road pricing.

DE VRIES, Casper George


Current Post Prof. Econ., Erasmus Univ., Rotterdam, The Netherlands, 1992–.


Degrees BA, MA Erasmus Univ., 1976, 1980; MS, PhD Purdue Univ., 1982, 1983.

Principal Fields of Interest C7 Game Theory and Bargaining Theory; E5 Monetary Policy, Central Banking, and the Supply of Money; F3 International Finance.


Principal Contributions My research interests are focused on international monetary issues, like foreign exchange rate determination and exchange rate risk, the issues surrounding the euro, and risk management in financial markets. In my research on financial risks, I have specialized in calculating the risks on extreme events by means of statistical extreme value analysis. My other research interests concern contest and auction theory, which can be applied to the theory of lobbying. I have published widely in leading internationally refereed journals.

DEANGELO, Linda n.e.

DEATON, Angus Stewart

Born 1945, Edinburgh, Scotland.


Principal Fields of Interest O1 Economic Development; I0 Health, Education, and Welfare: General; D1 Household Behavior.


**Principal Contributions** My work has been concerned with the wellbeing and behavior of households and individuals; with demand systems, with consumption and saving, with intra-household allocation, and with health. I have tried to work on these topics broadly, at both micro-economic and macroeconomic levels, and using data from developing as well as industrialized countries. I have been concerned with using theory to interpret data, and using data to discover whether theory is even broadly on the right lines. I am also much interested in measurement, with methods for organizing data that will cast light on issues of theory and policy. In the last decade, I have focussed on policy issues in economic development and particularly on the use of household survey data to illuminate issues of development policy. I have also worried about the effects of commodity price fluctuations on primary producing countries, and have tried, mostly unsuccessfully, to discover what makes world commodity prices behave as they do. I have tried to understand the relationship between population ageing, saving, and inequality of consumption, income, and wealth. Most recently, I have worked on wellbeing in a broad sense, with a particular focus on income and on health, and on the relationship between them. Why is it that rich people live longer than poor people, at a moment in time, across countries, and over history, and what are the policy implications of the answer? I am afraid that I have usually been better at ruling out explanations than confirming them, and of showing what is not true than what is.

DECHOW, Patricia M. n.e.

DEININGER, Klaus n.e.

DEKEL, Eddie

 Born 1958, New York, NY, USA.

current Posts Prof. Econ., Northwestern Univ., Evanston, IL, USA, 1993–; Prof. Econ., Tel Aviv Univ., Tel Aviv, Israel, 1998–.


Degrees BA Tel Aviv Univ., 1981; PhD Harvard Univ., 1986.

Offices and Honours Alfred P. Sloan Foundation Fellowship, 1990–92; Fell., Em Soc, 1997–.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty.

Publications Articles: 1. ‘Rationalizability and correlated equilibria’ (with A. Brandenburger), \textit{Em}, 55, 1987; 2. ‘Asset demands without the independence axiom’,
DETEMPLE, Jêrome Benoit

Born 1957, Creutzwald, Moselle, France.

Current Posts Prof. Fin. Econ., Sch. Mgmt, Boston Univ., Boston, MA, USA, 1999--; Res. Assoc., CIRANO, Montreal, Canada, 1999--.


Principal Fields of Interest G1 General Financial Markets; D5 General Equilibrium and Disequilibrium; D9 Intertemporal Choice and Growth.


Principal Contributions Incomplete information and heterogeneous beliefs: my early work showed that a dynamic consumption-portfolio choice problem with incomplete information about the drift of returns can be transformed into an equivalent model with complete information. This simple insight paved the way for the study of economies with heterogeneous beliefs. In collaboration with S. Murthy I developed a class of tractable dynamic models in which agents rationally disagree over the distributions of unobserved fundamentals and beliefs evolve stochastically in response to news. Heterogeneity in beliefs emerges as an important factor underlying the behaviour of asset prices, the interest rate and the volume of trade in asset markets. Habit formation: F. Zapatero and I solved the consumption-portfolio choice problem for individuals that display consumption habits in complete market models with Brownian information structure and Ito price processes. An extension of this model, which allows for a more flexible class of preferences with habit formation, was considered in joint work with I. Karatzas. American option pricing: in collaboration with Mark Broadie I developed several numerical procedures for the computation of American option prices. We also studied the valuation of American-style capped options and options written on multiple assets. While these results were obtained in settings where the underlying prices follow geometric Brownian motions they can be extended to more general diffusions, as shown in joint work with W. Tian. Portfolio allocation: recent work with R. Garcia and M. Rindisbacher deals with the implementation of asset allocation models. Our approach, based on Monte Carlo simulation, enables us to compute the intertemporal hedging components of asset demands that were originally identified by R.C. Merton. This method is very flexible and handles large numbers of assets and state variables as well as arbitrary utility functions.

DEVEREUX, Michael Peter


Current Posts Prof. Econ. and Fin., Warwick Univ., UK; Res. Fell., IFS, London, UK, 1998–.


**Principal Fields of Interest** H3 Fiscal Policies and Behavior of Economic Agents; E2 Consumption, Saving, Production, Employment, and Investment; F2 International Factor Movements and International Business.


DEWATRIPONT, Mathias n.e.

DIAMOND, Douglas W. n.e.

DIAMOND, Peter Arthur

**Born** 1940, New York City, NY, USA.

**Current Post** Inst. Prof., MIT, Cambridge, MA, USA, 1997–.


**Degrees** BA (Maths) Yale Univ., 1960; PhD MIT, 1963.

**Offices and Honours** US SSRC Fell., 1965; Guggenheim Foundation Fell.,


Principal Fields of Interest H0 Public Economics: General; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions Early work was on infinite horizon preferences and growth theory. Positive and normative analyses have reconsidered the implications of the Walrasian model in the presence of overlapping generations, in the absence of some markets (especially insurance markets), in the absence of the ability to costlessly redistribute income among individuals, and in the absence of a Walrasian auctioneer. Both basic research and policy analyses have been done on the public provision of retirement income.

DIEBOLD, Francis X.

Born 1959, Philadelphia, PA, USA.


Degrees BS (Fin. and Econ.), PhD


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; G0 Financial Economics: General; E0 Macroeconomics and Monetary Economics: General.


**Principal Contributions** Research centers on applied time-series econometrics and extends into macroeconomics and finance. Early and ongoing research program in modeling asset return volatility, with particular attention to foreign exchange rates, helped to establish the fact that volatilities of dollar spot exchange rates in the post-1973 float fluctuate and are highly persistent. Related contributions to volatility modeling focus on temporal aggregation, diagnostic testing, multivariate models with factor structure, estimation, and prediction. Second, research program on evaluation of the predictive ability of indexes of leading economic indicators, duration dependence in US and international business cycles, and assessing the stabilization of the postwar economy. Third, research program on low-frequency dynamic econometric models, focussing on ‘long-memory’ models for macroeconomics and financial time series. Fourth, research program on numerical and simulation methods in econometrics; contributions include bootstrap algorithms for testing for structural change in dynamic econometric models, techniques for the exact maximum likelihood estimation of observation-driven models, and construction of a very general framework for assessing agreement between (generally misspecified) dynamic general equilibrium models and data. Fifth, research program on forecasting; contributions concern optimal prediction under asymmetric loss, the evaluation of point and interval forecasts, the evaluation of volatility forecasts, and the measurement of predictability. Most recent research program centers on financial econometrics, specifically the interface between forecasting and finance, with emphasis on volatility forecasting and risk management.

**DIMASI, Joseph A.**

**Born** 1954, Boston, MA, USA.

**Current Post** Dir. Econ. Analysis, Tufts Center Study of Drug Devlp., Tufts Univ., Boston, MA, USA, 1987–.


**Degrees** BA (Maths and Econ.) Univ. Massachusetts, 1975; PhD Boston Coll., 1984.


**Principal Fields of Interest** O3 Technological Change; L6 Industry Studies: Manufacturing; I1 Health.

**Publications Articles:** 1. ‘The appropriate specification of constant elasticity demand functions’ (with D. Schap), Social Choice and Welfare, 2, 1985; 2. ‘The wage gradient in a multi-nucleated city’ (with M. Peddle), Regional Sc. Perspectives, 16, 1986; 3. ‘The effects of site value taxation in an urban area: a general equilibrium computational approach’, NTJ, 40, 1987; 4. Property tax classification and welfare in urban areas: a general equilibrium computational approach’, JUE, 23, 1988; 5. ‘Cost of innovation in the pharmaceutical industry’ (with R.

**Principal Contributions** My early work focussed on issues in urban economics and local public finance. I developed urban spatial location models to investigate the welfare effects of various property tax policy changes in an urban area and applied computable general equilibrium techniques to solve those models. A key result produced by this work was that consumer welfare is enhanced by taxing business property at lower rates than residential property. Most of my research has focussed on innovation in the pharmaceutical and biotechnology industries. In a series of papers that utilize unique datasets on aspects of the drug development process, I have examined various regulatory practices and initiatives that impact the speed with which new drugs can be developed and approved for marketing, risks in new drug development, trends in the cost of new drug development, and changes in the structure and performance of the pharmaceutical and biotechnology industries. I have recently joined Henry Grabowski and John Vernon to examine economic rates of return to new drug development, and I have used a large pharmacy claims dataset to examine pricing dynamics for pharmaceutical products.
DINARDON John n.e.

DINOPoulos Elias n.e.

DIXIT, Avinash Kamalakar

Born 1944, Bombay, India.

Current Post John F. Sherrerd ’52 Univ. Prof. Econ., Princeton Univ., NJ, USA, 1989–.


Degrees BSc (Maths and Physics) Bombay Univ., 1963; BA (Maths) Univ. Cambridge, 1965; PhD MIT, 1968.


Principal Fields of Interest F1 Trade; D9 Intertemporal Choice and Growth; H0 Public Economics: General.


Principal Contributions Theoretical research in several areas of economics, including international trade, industrial organisation, public finance, investment and growth, political economy, and the new institutional economics. The work consists of mathematical models of choice and interaction that help us understand the performance of firms, markets, and governments.
DIXON, William J. n.e.

DOLADO, Juan J.

Born 1955, Zaragoza, Spain.

Current Post Prof. Econ., Univ. Carlos III de Madrid, Spain, 1997–.


Principal Fields of Interest C4 Econometric and Statistical Methods: Special Topics; J6 Mobility, Unemployment, and Vacancies; E4 Money and Interest Rates.


Principal Contributions My research has focused on the three areas: (i) the econometric analysis of non-stationary series; (ii) the role of institutions in the workings of labour markets; and (iii) the transmission effects on monetary policy on real output, employment and prices. Within area (i), contributions have been made on co-integration, causality and the development of new econometric techniques for models involving long-memory processes. Within area (ii), research has
centred on: the role of employment protection legislation in labour market adjustment, the effects of minimum wages on employment and wage bargaining, the determinants of persistence in unemployment, and the effects of over-education on the working of the labour market. Finally, as regards area (iii), articles have been written on: the monetary-policy transmission mechanisms in Spain, the credibility and delegation problems in the control of monetary policy by an independent central bank, and the cost–benefit analysis of achieving price stability.

DOLLAR, David Richard

Born 1954, St. Louis, MO, USA.


Principal Fields of Interest O1 Economic Development; O4 Economic Growth and Aggregate Productivity.


Principal Contributions My work focuses on the integration of developing countries with the global economy. Developing countries that have become more open to trade through reduced tariffs and non-tariff barriers and through improvements in trade institutions (customs, ports) have experienced accelerated growth. These reforms have not had any systematic effect on household income inequality, so that the accelerated growth has led to significant poverty reduction, especially in Asia. Foreign aid has also accelerated growth, but its impact is conditional on good economic policies. While aid effec-
tiveness depends on recipients' policies, donor agencies have had little influence over those policies. Domestic political economy overshadows any impact of conditionality. These results underpin the 'selectivity' approach to foreign aid, in which large-scale aid is targeted to developing countries with reasonably good economic policies without a lot of detailed conditionality. My research on integration includes both cross-country statistical analyses as well as case studies based on fieldwork in China, India, and Vietnam. Recent work focuses on the impact of integration on investment and productivity at the firm level in developing countries.

DONALDSON, David n.e.

DONOHUE, III, John J.

Born 1953, Alexandria, VA, USA.


Principal Fields of Interest HO Public Economics: General; J0 Labor and De-
mographic Economics: General; L5 Regulation and Industrial Policy.


Principal Contributions Most of my work has related to public policy as well as law and economics. I have shown how many theoretical predictions of law and economics are extremely sensitive to initial assumptions. For example, an early theory suggested that risk aversion would lead litigants under a British rule in which the loser would pay attorney’s fees to settle more frequently than they would under the American rule where litigants pay their own expenses, and a later theory argued that there would be fewer settlements under the British rule because optimism by litigants would shrink the expected inducement to settle. I showed that bargaining should lead to no change in settlement behavior, and surprisingly the Coase Theorem was overlooked. I have engaged in a great deal of empirical evaluation of the impact of law and public policy, showing (with James Heckman) that federal civil rights initiatives did improve the economic prospects of blacks in the decade beginning in 1975. With Heckman and Petra Todd, I also investigated the impact of NAACP litigation in improving black schooling quality in the pre-Brown v. Board of Education era. I have also worked extensively on the changing nature of employment discrimination litigation (with Peter Siegelman), showing the shift from hiring to firing cases and the dramatic drop in class action lawsuits.
Siegelman and I have also investigated the major policy choices involved in fighting crime and argued that we may have gone too far with incarceration and not gone far enough with social programs. Steve Levitt and I also demonstrated that crime dropped most sharply in states that had high abortion rates and we set forth an argument that abortion legalization would reduce the number of unwanted children, who are at greater risk of involvement in criminal activity.

DORNBUSCH, Rudiger (1942–2002)

Born 1942, Krefeld, West Germany.


Principal Fields of Interest F3 International Finance; E0 Macroeconomics and Monetary Economics: General.


Principal Contributions Work on ex-
change-rate problems and open economy macroeconomics.

DOW, James


Principal Fields of Interest G1 General Financial Markets; M1 Business Administration.

other areas of economics and business, including bounded rationality, corporate governance and leadership. Publications include articles in JPE, RES, EM, Journal of Finance, and Review of Financial Studies. Past academic administrative tasks include research dean at London Business School and head of department at the European University Institute.

DOWRICK, Steve

Born 1953, Dublin, Eire.

Current Posts Prof. Econ. and Australian Res. Council Sr Fell., ANU, Canberra, Australia, 1997–2000–.

Past Posts many and varied.

Degrees BA Cambridge Univ., 1983; PhD Warwick Univ., 1987.

Offices and Honours Fell., Acad. Social Sc. in Australia, 1997.


Principal Fields of Interest O4 Economic Growth and Aggregate Productivity; C4 Econometric and Statistical Methods: Special Topics; J5 Labor–Management Relations, Trade Unions, and Collective Bargaining.


Principal Contributions I pioneered (in collaboration with Duc-Tho Nguyen) the econometric analysis of cross-country convergence, using panel data to establish technology transfer as a likely cause of convergence amongst OECD countries, as opposed to changes in capital intensity.
Subsequent work has identified the role of industrialisation, public goods and fertility in economic growth. More recent work, with Mark Rogers, has created a bridge between competing theories of economic growth – establishing that endogenous sources of technological progress, combined with international technology transfer (facilitated by high levels of educational attainment) operate in tandem with neo-classical convergence due to diminishing returns to capital. In several papers I have identified the index number problems that beset international comparisons of economic aggregates such as GDP per capita. Together with John Quiggin, I have developed a new method of constructing utility-consistent multilateral indexes (‘Afriat indexes’) which avoid the substitution bias inherent in fixed-price methods. In earlier work, I established a game-theoretic framework for analysing the problem of unions bargaining with employers in the context of oligopolistic product markets. This framework produced new results on the relationship between wages, profits, trade union structure, the centralisation of bargaining and market power. It also led to analysis of trade union attitudes to labour-saving technological change.

DRANOVE, David

Born 1956, New York City, NY, USA.

Current Posts Walter McNerney Disting. Prof. Health Ind. Mgmt, Kellogg Sch. Mgmt, Northwestern Univ. (KSMNWU), Evanston, IL, USA, 1999–; Dir., Center Health Ind. Market Econ., KSMNWU, 2001–.


Degrees BA (Genetics), MBA Cornell Univ., 1977, 1979; PhD Stanford Univ., 1983.


Principal Fields of Interest 11 Health; L1 Market Structure, Firm Strategy, and Market Performance; L2 Firm Objectives, Organization, and Behavior.


Principal Contributions

Most of my research focuses on the industrial organization of health care markets. In theoretical studies with M. Satterthwaite, and empirical studies with W.D. White, M. Shanley and C. Simon, I have examined how hospitals and physicians cope with purchasers who are increasingly sensitive to price. We have shown why and how selective contracting by managed care organizations has led to lower provider prices, followed by provider consolidation and concerns about quality. More recent research with C. Capps, S. Greenstein and M. Satterthwaite examines the consequences of provider consolidation and recommendations changes in health care antitrust policy, including new methods for defining provider markets. My recent book, The Economic Evolution of American Health Care, pulls these ideas together in a single volume. Much of my remaining health economics research examines the validity of conventional wisdoms in health care, such as the theories of ‘supplier-induced demand’ and ‘cost-shifting’. Again combining theory with empirical evidence, I have shown that these well-accepted theories are inapplicable to competitive health care markets. My work with W. White shows that providers can no longer raise prices in response to cutbacks in government payments, but instead must reduce quality and access. I have also published several studies (and one book) on the economics of the pharmaceutical industry, as well as general papers about strategic management. The latter studies include establishing a new benchmark for identifying strategic groups, and explaining how firms exploit cost advantages. My other principal contribution to economics is as co-author (with David Besanko and Mark Shanley) of the textbook, The Economics of Strategy. This book combines economic principles with detailed real world examples to shed light on fundamental topics in business strategy. It has been adopted for the MBA classroom by leading business economists in the US and abroad.

DRAZEN, Allan

Born 1950, St. Louis, MO, USA.

Current Posts Jack and Lisa Yael Prof. Comparative Econ., Berglas Sch. Econ.,
Tel Aviv Univ., Ramat Aviv, Israel, 2000–;
Prof. Econ. and Co-Dir., Center for Intl Econ., Univ. Maryland, College Park, MD, USA, 1990–.


Degrees SB, PhD MIT 1972, 1976.


Principal Fields of Interest P1 Capitalist Systems; F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance.


Principal Contributions In my first published paper, I showed how human capital accumulation can change basic Ricardian equivalence results and was one of the first to study hysteresis in factor accumulation. E. Helpman and I presented a framework for studying how expected future policies affect current macroeconomic dynamics and showed how uncertainty about how budget deficits will be closed in the future may yield no simple correlation between deficits and inflation even when the latter drives the former. With G. Bertola I extended this argument in one of the original papers showing how fiscal contraction can be expansionary. With C. Azariadis I was one of the first to consider the effect of human capital in formal growth models and show how externalities in the process of human capital accumulation can lead to multiple equilibria in the growth process. With N.
Gottfries I presented the first dynamic insider–outsider model of unemployment. My main area of research over the past decade has been in political economy. With co-authors, I introduced the war of attrition model as a way to model the failure to adopt economic reform; presented the first formal model of the benefit of crises for economic reform as well as tests of the argument re-examined the relation between credibility and reputation; and considered several models and implications of policy as signals of policymaker intentions or constraints. This work has been applied in international macroeconomics. I summarized much of the work in political economy in macroeconomics in my 2000 book, considered by many the leading graduate text in political economy.

DREW, James Howard

Born 1950, Margaretville, NY, USA.


Degrees BA (Maths and Philo.) Williams Coll., 1972; Dip Math Stats Cambridge Univ., 1976; PhD (Stats) Iowa State Univ., 1981.

Offices and Honours Chartered Stat., RSS, 1993; GTE Chairman’s Leadership Award, 1997; Warner Award for Tech. Innovation, 1999; Verizon Excellence Award, 2002.

Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; M3 Marketing and Advertising.


Principal Contributions My co-authors and I have attempted to link concepts in survey sampling, quality management, customer behaviour and data mining to improve operational efficiencies in telecommunications companies. R. Bolton and I developed some early longitudinal models in services marketing, and these were later incorporated into quality improvement models. With other colleagues, customer lifetime value models were developed and customer segmentation schemes were created using a mix-
ture of data mining and classical statistical techniques.

DUFFIE, Durrell n.e.

DUFOUR, Jean-Marie n.e.

DUMAS, Bernard n.e.

DUNCAN, Greg John

Born 1948, St. Paul, MN, USA.
Current Post Edwina S. Tarry Prof. Educ. and Social Pol., Northwestern Univ., Evanston, IL, USA, 1995–.
Offices and Honours Doctor (hc) Univ. Essex, 1999; Fell., AAAS, 2001–.
Principal Fields of Interest I3 Welfare and Poverty; C8 Data Collection and Data Estimation Methodology; Computer Programs.


**Principal Contributions** Much of my career has been spent at the University of Michigan working on and ultimately directing the Panel Study of Income Dynamics (PSID) data collection project. The PSID has conducted annual interviews with a large and representative set of US families for over 30 years. The enormous utility of the longitudinal economic and social data from its national sample of families has made PSID one of the most widely used social science data sets in the world. I have also helped start similar panel studies in Germany, the United Kingdom, and other European Community countries. My own research has focussed on issues of economic mobility both within and across generations. My 1984 book *Years of Poverty, Years of Plenty*, documented the surprising degree of economic mobility in the United States. More recently, I have studied the impact of economic deprivation, welfare reform and residential mobility programs on children’s development.

**DURLAUF, Steven Neil**

**Born** 1958, Los Angeles, CA, USA.

**Current Post** Kenneth J. Arrow Prof. Econ., Univ. Wisconsin, Madison, WI, USA, 2002–.


**Editorial Duties** Co-Ed., *JAE*, 1996–;


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; C1 Econometric and Statistical Methods: General; O0 Economic Development, Technological Change, and Growth: General.


**Principal Contributions** My most important research lies in the area of social interactions and economic behavior. In this work, I have attempted to integrate substantive ideas from sociology into formal economic models. Specifically, this work has involved the modeling of the influences of group memberships on individual outcomes. Groups can affect individuals via peer group influences, role model effects, information flows via social networks, etc. Examples of such group memberships include residential neighborhoods, schools, and ethnicity. Social interactions generate both income inequality and incentives for economic segregation. Hence much of my research has been involved in developing a ‘memberships theory of poverty’. A key principle in much of my research has been the integration of theoretical modeling with econometric analysis. This has meant that when possible, I have endeavored to develop theoretical models that in principle are readily estimable using available econometric techniques. This idea has meant that much of my recent research has focused on questions of identification of social interactions. Issues concerning the identification of spillover effects have also animated much of my research on economic growth. An additional aspect of my work on interactions has been the effort to employ complex systems methods to model economic systems. The mathematics of complex systems is a useful language in describing populations of heterogeneous interacting agents. As such, these methods have proven very useful in the formal study of social interactions. One aspect of this work has been the introduction of techniques from statistical mechanics into social science.
EASYLEY, David Alan

Born 1952, Lexington, KY, USA.


Principal Fields of Interest D0 Microeconomics: General; D8 Information and Uncertainty; G1 General Financial Markets.


Principal Contributions I work in both finance and microeconomic theory. In economic theory my research, joint with Larry Blume, has focussed on learning and evolution in markets. Our early work was among the first to explain the difficulty of learning rational expectations. Our more recent research has explored the potential for wealth dynamics to yield rational expectations equilibria in markets with some non-rational agents. In our most recent research we have shown that if asset markets are dynamically complete, then rational traders are selected for and prices converge to their rational expectations equilibrium values. In related work, Blume and I have also shown that a retained earnings dynamic selects for firms that act as if they are rational profit maximizers. My research in finance, joint with Maureen O’Hara, is in the area of market microstructure. We were among the first to analyze how market makers set security prices in the presence of differential information. More recently we have developed theoretical microstructure models of the dynamics of bids, asks and prices and empirically implemented and tested these models. Our most recent work has examined whether market microstructure has implications for asset pricing. We have found both theoretically and empirically that it does; differential information generates a bid–ask spread in markets and its presence leads to significant differences in required rates of returns on assets.
EASTERLY, William n.e.

EATON, Jonathan

Born 1950, Los Angeles, CA, USA.

Current Post Prof. Econ., Dept Econ., NYU, New York, NY, USA, 2002–.


Principal Fields of Interest F1 Trade; O4 Economic Growth and Aggregate Productivity; F2 International Factor Movements and International Business.


Principal Contributions My first major research project, with Mark Gersovitz, concerned developing country external borrowing. We sought to provide a framework to analyze theoretically and empirically the market for sovereign debt. The self-enforcing nature of sovereign debt contracts generated an interest in how governments achieve objectives beyond their jurisdictions more generally, which led to work with Maxim Engers on sanctions. During the 1980s international economists began to apply game theory to study trade policy. An influential paper suggested that countries could achieve strategic benefits by subsidizing exports. Gene Grossman and I showed that the direction of intervention depended very much on aspects of market structure that policy makers were unlikely to know about. An implica-
tion of this work was that the nature of competition among rivals really matters. Engers and I explored competition between duopolists in a dynamic setting that provided insight into issues of timing in price setting. Another topic of interest is economic growth, which I explored in my dissertation. Sam Kortum and I have since returned to this topic, seeking to quantify the contributions of innovation and diffusion to world growth. Kortum and I also examine the role of technology in trade. Our work examines how the competing forces of technology and geography shape production and trade patterns in manufacturing. Kortum and I, along with Andy Bernard and Brad Jensen, have applied this work to examine the productivity and export behavior of individual US manufacturing plants. Another interest has been on the role of cities in growth. Zvi Eckstein and I examined the evolution of urban agglomerations in France and Japan over the periods of their industrialization, finding remarkable stability in relative size and ranking. We offered as an explanation a dynamic model of cities as locations where workers acquire and use city-specific skills.

EDWARDS, Sebastian

Born 1953, Santiago, Chile.

Principal Fields of Interest F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance; O1 Economic Development.
Principal Contributions

My research has focussed on macroeconomic policy in developing and transition economies. Most of my work is applied. I have focussed mostly on four areas. (a) Exchange rates economics, including issues related to detecting ‘misalignment’, and the choice of exchange rate regime. (b) International trade and openness reforms. Here I have worked both on the opening of the trade account as well as on the opening of the capital account. Recent work has dealt with the effectiveness of capital controls. During the 1980s I did work on the optimal sequencing of reform which later became quite central in discussion on the transformation of the former communist economies. (c) Inflation and stabilization policies, including crisis prevention. My work on the topic has emphasized the political economy of inflation, and the use of exchange rate as anchors during stabilization programs. I have analyzed in detail the experiences of Latin American and Asian countries. (d) Broad issues related to economic reform and economic growth. Here my work has dealt with a number of case studies. My 1991 book on Chile focussed on an early case of a profound market-oriented reform. My 1995 book on Latin America documented, evaluated and assessed the economic reform process in that part of the world during the 1982–95 period. The analysis in that book spans from the debt crisis of 1982 to the Mexican currency crisis of 1994. Much of my research has implied fieldwork. I have done research in Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Egypt, El Salvador, Guatemala, Honduras, Indonesia, Korea, Mexico, Morocco, New Zealand, Nicaragua, Tanzania and Venezuela. I have been a consultant to a number of governments, multilateral institutions, international banks and multinational companies.
2. Longer Hours or More Jobs? (with P. Schumann), (ILR Press, 1982);


Principal Contributions Early in my career my interests focussed on the interaction of government and the labor market. One strand of research was directed towards public-sector labor markets per se and addressed issues such as the demand for labor, the effects of unions on wages and productivity, compensating wage differentials for fringe benefits and the effects of public-sector dispute resolution procedures. Throughout this research program I stressed the applicability of maximizing models to the government sector and the value of using sophisticated econometric methods. A second strand of research focussed on evaluating the effects of labor market programs, legislation and institutions on labor market outcomes, with the goal of providing information that would be useful to policymakers. Among the topics I have studied here are minimum wage laws, the overtime pay premium, the unemployment insurance system, pension reform legislation, the effects of regulation on labor earnings and comparable worth. My research led naturally to the writing of two labor economics and labor relations texts oriented towards the use of economics in policy analysis. Over the last 20 years my research interests shifted first to analyses of the incentive effects of compensation policies and then to resource allocation issues in education. The years I spent as a Cornell Vice-President led me to my current focus on the economics of higher education.

EHRLICH, Isaac

Born 1938, Tel Aviv, Israel.


**Principal Fields of Interest** K4 Legal Procedure, the Legal System, and Illegal Behavior; D8 Information and Uncertainty; I0 Health, Education, and Welfare: General.

**Publications**


EICHENGREEN, Barry

**Principal Contributions** Applications of general economic theory to study diverse human behavior and social institutions, with particular emphasis on the role of human capital, time, information, and uncertainty. The most provocative illustration concerns participation in illegitimate activities and the development of a ‘market model’ of crime. Use of optimization and equilibrium analysis along with econometric methodology to explain variations in the incidence of crime and law enforcement across place and time has challenged received theories in criminology, and opened up a new research frontier. Work on behavior under uncertainty has provided a new framework for studying the joint demand for market insurance, self-insurance, and self- and life-protection. Work on asset management focusses on the micro-foundations of efficient capital markets by allowing for the role of information production in the management of risk and portfolio selection. Work on advertising links advertising and other selling efforts by firms to the demand for information by consumers, and to the division of labor between buyers and sellers in information production. Work on health and longevity views length, or quantity of life, as a distinct good, along with quality of life, recognizing the uncertainty of life span. It analyzes investment in health and longevity as integral parts of both human capital theory and behavior toward risk. Insights concern both the trend and significant diversities in life expectancies and in private assessments of ‘value-of-life-saving’ across population groups. Recent work on endogenous economic growth applies human capital theory to explain the process of growth and development. The work highlights the role of intergenerational links within families and firms in human capital formation, and the contribution of specific motivating and institutional forces in influencing the diversity and pace of productivity growth. It also links economic growth with the aging of the population, and assesses the incentive effects of conventional social insurance plans on the economy’s growth path.

EICHENBAUM, Martin n.e.

EICHENGREEN, Barry

**Born** 1952, Berkeley, CA, USA.


**Principal Fields of Interest**  F2 International Factor Movements and International Business; F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance.

**Publications**


**Principal Contributions** My research shows how elements of international finance and economic history can be combined to shed light on questions of his-
tological, theoretical and policy relevance. My book *Golden Fetters: The Gold Standard and the Great Depression 1919–1939* (1992) analyzed the role of the international monetary and financial system in the onset and spread of the slump of the 1930s, developing what is now known as the international explanation for the Great Depression. That book considered the gold standard as a transmission and propagation mechanism, emphasizing the role of democratic politics in eroding the credibility of gold standard commitments and international political conflicts in limiting the scope for international cooperation. *Globalizing Capital: A History of the International Monetary System* (1996) showed how the same approach, combining elements of international finance and economic history, could be used to shed light on the long-term development of the international monetary system. My more recent work has focussed on the causes of financial crises and policy responses to contain their repercussions. *Toward a New International Financial Architecture* (1999) identified structural weaknesses in the international financial system and helped to set the official reform agenda. *Financial Crises and What to Do About Them* (OUP, 2002) identified shortcomings of that agenda and evaluated progress in implementing it. Among the concepts and literatures with which I am associated are the international interpretation of the Depression (in *Golden Fetters*), the bipolar view of sustainable exchange rate regimes (first articulated in *International Monetary Arrangements for the 21st Century*, Brookings Inst., 1994), and the cross-country empirical literature on the causes of speculative attacks (pioneered in collaborative work with Andrew Rose and Charles Wyplosz).

**Principal Contributions** n.e.

**ENGEL, Charles**

*Born* 1956, Houston, TX, USA.

*Current Post* Prof. Econ., Dept Econ., Univ. Wisconsin, Madison, WI, USA, 2000–.


*Principal Fields of Interest* F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance.


**Principal Contributions** n.e.

**ENGLE, Robert F.**

**Born** 1942, Syracuse, NY, USA.

**Current Post** Prof. Econ., Univ. California, San Diego, CA, USA, 1977–.


**Principal Fields of Interest** C4 Econometric and Statistical Methods: Special Topics; G1 General Financial Markets.


**Principal Contributions** My research has introduced some of the most influential concepts in modern econometrics: ARCH/GARCH models, cointegration, weak exogeneity, band spectrum regression, and most recently the autoregressive conditional duration (ACD) model. In well over 100 academic journal articles and three books, I have applied these methods to analyze equities, options, currencies, and interest rates and am now studying empirical market microstructure.

**EPPLE, Dennis Norbert**

**Born** 1946, Perry County, IN, USA.

**Current Post** Thomas Lord Prof. Econ., Carnegie-Mellon Univ., Pittsburgh, PA, USA, 1996–.


Principal Fields of Interest H7 State and Local Government; Intergovernmental Relations; H0 Public Economics: General; L0 Industrial Organization: General.


Principal Contributions My research interests are in the areas of public economics and industrial organization. One focus of my research is on understanding population sorting and its consequences. We observe people sorting by income and demographic characteristics across neighborhoods, schools, municipalities, and colleges and universities. The groupings that arise affect outcomes via spillover effects in neighborhoods, peer effects in schools and colleges, and collective choice of tax and expenditure policies in municipalities. My colleagues and I have developed models to explain sorting and to investigate its consequences. For example, in the case of primary and secondary schools, we have investigated how the distribution of educational achievement and household welfare differ under various organizational.
structures, including neighborhood public schools, open-enrollment public schools, and voucher-supported private schools. In the case of municipalities, we have developed models to understand sorting into jurisdictions and voting over policy alternatives within jurisdictions. In the case of colleges and universities, we have developed a model of quality competition and associated implications for admission and financial aid policies. We have also investigated how admission and financial aid policies are affected by preferences for racial and economic diversity. Our empirical research has provided evidence in various contexts, including municipalities, secondary schools, and colleges and universities. Another research focus is learning by doing. Arguably the most important manifestation of changing knowledge in firms is changing productivity. Hence, our goal has been to understand how productivity improvements relate to an organization’s own past production experience as well as the experience of related organizations. By estimating cost and production functions that incorporate the interdependencies among producing organizations, we have developed methods for quantifying the rate of knowledge acquisition and the extent to which knowledge is retained and transferred. We have applied these methods in franchises, in multi-shift plants, and in multi-plant production programs.

EPSTEIN, Larry G.

Born 1947, Linz, Austria.

Current Post Elmer B. Milliman Prof. Econ., Univ. Rochester, Rochester, NY, USA, 1998–.


Degrees BSc (Maths) Univ. Manitoba, Winnipeg, Canada; MA (Maths) Hebrew Univ., Jerusalem, 1970; PhD UBC, 1977.


Principal Fields of Interest D8 Information and Uncertainty; D9 Intertemporal Choice and Growth; C6 Mathematical Methods and Programming.


**Principal Contributions**

My research has focused on the modelling of intertemporal preferences. Early work considered nonstochastic settings, while more recently I have focused on environments with risk or uncertainty. The model of preference over intertemporal consumption programmes that is standard in dynamic economic analysis corresponds to the expected-additive-discounted-utility functional form. I have concentrated on the formulation of generalized models, called ‘recursive utility’, that make a difference. By the latter I mean that recursive utility delivers either (1) added analytical power and therefore new theoretical insights, or (2) new testable implications regarding market behaviour (in asset markets, for example). Examples of the former include clarification of (i) the role of endogenous time preference as a factor in the long-run distribution of wealth across households; (ii) the separate roles played by the degree of intertemporal substitutability in consumption as opposed to the degree of risk aversion as determinants of the structure of asset returns in equilibrium; and (iii) the implications for asset pricing of aversion to ‘Knightian uncertainty’ or ambiguity, as opposed to risk. One example of new testable empirical implications is the two-factor (consumption growth and the market return) model of asset returns delivered by a suitable parametric specialization of recursive utility. My work beginning in the mid-1980s was stimulated in large part by developments in decision theory that were in turn driven by the need to explain the paradoxes of Allais and Ellsberg, two glaring descriptive failures of the expected utility model. My research differed from the bulk of this decision theory literature through its focus on standard market-based questions, rather than behaviour in the laboratory, as the principal driving force behind the formulation and evaluation of generalized models of preference.

EREV, Ido n.e.

ERICSSON, Neil Reinhard

**Born** 1954, Chicago, IL, USA.


**Degrees** BA Yale Univ., 1976; MSc (Em. and Math. Econ.), PhD LSE, 1978, 1982.

Principal Contributions My research focusses on the empirical modeling of macroeconomic time series. There are three main strands in this work: analysis and development of econometric tools for empirical modeling, substantive empirical applications, and pedagogical exposition of these tools. My research is in the spirit of the LSE or Hendry econometric methodology, and several contributions are in collaboration with David Hendry. The first strand of my research includes tests of non-nested hypotheses, error-correction tests of cointegration, cointegration tests in the presence of structural breaks, tests of parameter constancy, forecast comparisons, forecast encompassing tests, measures of forecast uncertainty, comparison of models with seasonally adjusted versus seasonally unadjusted data, comparison of models with original versus phase-averaged data averaged over phases of the
business cycle, conditional subsystem modeling, tests of rational expectations, and constructive algorithmic data mining. Analyses of these techniques use analytical asymptotic and finite sample approximations, Monte Carlo simulation, and empirical evidence. The second strand includes detailed empirical econometric modeling of US, UK, Greek, and Argentine money demand, the US trade balance, the G-10 trade-weighted dollar exchange rate, Venezuelan consumers’ expenditure, Australian inflation, the UK housing market, and output and inflation for the G-7 countries. The third strand includes extended expository reviews of the LSE econometric methodology, cointegration, distributed lags, model evaluation and design, exogeneity, forecasting, the Lucas critique, monetary conditions indexes, and Monte Carlo simulation. This work has arisen out of and has contributed to courses that I have taught at George Washington University, University of Maryland, University of Pennsylvania, Federal University of Rio de Janeiro, University of São Paulo, the International Monetary Fund, and several foreign central banks. My current research concentrates on monetary policy, models of inflation and of monetary aggregates, convergence across countries, and empirical model design, the last particularly with computer-assisted model simplification procedures.

EVANS, Charles L.

Born 1958, Greenville, SC, USA.

Current Posts Vice Pres. and Econ. Advisor, FRB, Chicago, IL, USA, 1991–.


Principal Fields of Interest E3 Prices, Business Fluctuations, and Cycles; E4 Money and Interest Rates; F4 Macroeconomic Aspects of International Trade and Finance.


Principal Contributions Most of my research is in the field of monetary economics. Christiano, Eichenbaum, Marshall and I have worked to quantify the effects of exogenous monetary policy shocks on economic activity and financial markets in the post-war period. Building on these
empirical findings, we have investigated the roles of alternative nominal rigidities in accounting for these conditional moments within dynamic general equilibrium models. In related work on the Great Depression, Bordo, Erceg and I have found evidence that monetary contractions accounted for about half of the US economic downturn from 1929–33. I have also made empirical contributions to the literature on productivity fluctuations.

EVANS, George William

Born 1949, New York City, NY, USA. Current Post Prof., John B. Hamacher Chair of Econ., Univ. Oregon, Eugene, OR, USA, 1994–.


Principal Fields of Interest E3 Prices, Business Fluctuations, and Cycles; E5 Monetary Policy, Central Banking, and the Supply of Money.


Principal Contributions I have investigated a number of theoretical and empirical topics in macroeconomics including tests for speculative bubbles, the effect of sectoral imbalance on unemployment, the decomposition of aggregate output into trend and cycle, and the formulation of theoretical models of endogeneous fluctuations. The work on ‘rational bubbles’ has examined the statistical evidence for the presence of bubbles in foreign exchange rates and in stock prices. Econometric work on business cycles showed how to extract the cyclical component of GDP using multivariate forecasting methods. My greatest interest, however, has been in the formulation and study of expectational stability and learning in stochastic, dynamic models with multiple equilibria. In these models, economic agents are typically assumed to have bounded rationality in making forecasts – e.g., to use simple or sophisticated extrapolative rules. Because agents learn and adapt to forecast errors, they may, in the long run, approximate full rationality. The techniques developed are used, in particular, to determine when the economy can become trapped into cycles, ‘sunspot equilibria’ or hyperinflationary paths, and how macroeconomic policy can steer the economy away from these inefficient outcomes. Related recent research has included the study of how complementarities can lead to ‘growth cycles’ generated by self-fulfilling fluctuations in business confidence and investment, the effects of fiscal restrictions on inflation and monetary stability, and the role of expectations and learning in optimal monetary policy design.
Principal Contributions

In my research, I use econometrics to address questions in macroeconomics. Early on, I investigated the effects of monetary policy on inflation and output. In the 1980s, my research largely focused on estimating the effects of budget deficits. The resulting articles found no evidence of large effects. More recently, I have attempted to evaluate growth theories empirically, finding little support for those that predict appreciable endogeneity of growth rates either across countries or over time.

EVANS, William N. n.e.
FAFCHAMPS, Marcel

Born 1955, Liège, Belgium.


Principal Contributions My work to date has revolved around risk coping and market institutions, with a focus on Africa and South Asia. Ten years of empirical research on agricultural and manufacturing markets in Africa are summarized in my forthcoming book on market institutions in Africa. The book shows that, contrary to common perceptions, community-based sanctions for breach of contract are weak or inexistent. Interpersonal trust, and hence networks, play a key role
in contracting. Much of the often observed importance of ethnicity in business communities can be ascribed to network effects. Breach of contract is common but seldom leads to the end of a commercial relationship. Negotiation is the primary mode of resolution for contractual disputes. Debt recovery is achieved through harassment. Courts and laws only play a marginal role. My work on risk shows that concerns about flexibility explain why farmers work little, that African livestock are not used as a buffer against shocks, that risk sharing takes the form of transfers and personal loans among family and friends, that firms accumulate inventories as protection against failed supplies, and that wealth accumulation by the poor to finance profitable but non-divisible investment is extremely difficult. I have also made contributions to our understanding of spatial issues, most notably how mobile capital affects the location of economic activity and how local pecuniary externalities can shape village life.

FAMA, Eugene F.

Born 1939, Boston, MA, USA.


Principal Field of Interest G0 Financial Economics: General.


Principal Contributions n.e.

FAN, Jianqing n.e.

FARBER, Henry S. n.e.

FÄRE, Rolf G.

Born 1942, Lund, Sweden.
Current Post Prof., Oregon State Univ., OR, USA, 1998–.
Principal Fields of Interest C6 Mathematical Methods and Programming; D2 Production and Organizations; O3 Technological Change.

Principal Contributions  The theoretical contribution consists of axiomatic developments of production. The empirical contribution consists of developing activity analysis models for estimating efficiency and productivity.

FARMER, Roger Edward Alfred


Degrees BA (1st Class Hons), MA Manchester Univ., 1976, 1977; PhD Univ. Western Ontario, 1982.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles; D9 Intertemporal Choice and Growth.


Principal Contributions  For a period of forty years, following the publication of Keynes’s General Theory of Employment, Interest and Money, the dominant paradigm in macroeconomics was based on Keynesian theory. The General Theory has two principal themes. The first is that the operation of the market system can lead to a highly inefficient allocation of
resources; the Great Depression is the leading example. The second is that market economies are frequently in a situation of ‘disequilibrium’, that is, the wage at which labour is traded in the market is not one at which demand equals supply. To describe this possibility Keynes coined the term ‘involuntary unemployment’. Generations of economists, following Keynes, saw macroeconomics as distinct from microeconomics in part because macroeconomics dealt with the consequences of trading at disequilibrium prices. In the 1970s the rational expectations revolution, initiated by R.E. Lucas, Jr, T.J. Sargent and others, introduced the assumption that markets are always in equilibrium. In standard equilibrium models, efficiency and equilibrium go hand in hand. During the Great Depression, 25 per cent of the labour force became unemployed in the space of three years and, since this situation is difficult to envisage as efficient, many macroeconomists rejected the use of equilibrium models. My research has its roots in the ‘rational-expectations revolution’ but it goes considerably beyond the vision of the initial rational-expectations economists. I work with general equilibrium models in which equilibria are inefficient. My principal focus has been on dynamic general equilibrium models that display ‘indeterminacy’ as vehicles for quantitative assessments of macroeconomic policy. These models make small departures from the assumptions of standard general equilibrium theory but they lead to very different conclusions. My 1993 book on self-fulfilling prophecies showed how to use models with indeterminate equilibria to explain quantitatively how beliefs (self-fulfilling prophecies) can independently cause business fluctuations.

FARRELL, Joseph


Current Posts Prof. Econ. and Chair of Competition Pol. Center, Univ. California, Berkeley, CA, USA, 1990–, 1999–.


Degrees MSc (Maths), PhD Oxford Univ., 1976, 1981.


Principal Fields of Interest n.e.

FEARON, James Dana

Born 1962, Princeton, NJ, USA.
Principal Fields of Interest D7 Analysis of Collective Decision-Making; C7 Game Theory and Bargaining Theory.

Principal Contributions I have used tools from microeconomic and game theory to study some prominent questions in the political science field of international relations, such as (1) What explains ‘the democratic peace’ (the fact that democracies fight hardly at all against each other but often against nondemocracies)? (2) Under what conditions do efforts to deter foreign attack succeed or fail? (3) What is the full set of explanations for interstate war that assume rational states? (4) How do intermingled ethnic groups manage to maintain peaceful everyday relations in weak states, and when do such arrangements break down?

FEENSTRA, Robert C. n.e.

FEHR, Ernst n.e.

FELDMAN, Maryann P. n.e.

FELDMAN, Roger Dean


Principal Fields of Interest I1 Health; L0 Industrial Organization: General; J0 Labor and Demographic Economics: General.


that employees are quite sensitive to the out-of-pocket premiums of the various choices and that total premiums generally are lower in firms that pay a defined contribution to the health insurance premium. I used these results to investigate the potential anti-competitive effects of health plan mergers. A separate strand of my research has focused on the US Medicare program. From 1995 to 2000, I assisted the Centers for Medicare and Medicaid Services (CMS) in designing a demonstration of competitive pricing for Medicare health plans. I have been involved in public service on the staff of the President’s Council of Economic Advisers and as a consultant for numerous federal and state health care agencies.

FELDSTEIN, Martin Stuart

Born 1939, New York, NY, USA.


of Amer., 1998, Eli Lilly, 2001; Disting.
Service Award, Tax Foundation, 1983,
1999; Mem., Exec. Comm., Trilateral
Commission, 1984, 1994--; Robeco
Bernhard Harms Prize, Weltwirtschafts
Inst., Germany, 1988; Advisory Bd, CBO,
1989, FRB, NY, 1990, Daimler Chrysler
Corp., 1990, FRB, Boston, 1995, Kiel
Inst., 2001; Tinbergen Lecture, Netherlands
Royal Econ. Soc., 1992; Schumpeter
Lecture, Europ. Econ. Assoc., 1994;
Richard Ely Lect., 1996; Corres. Fell.,
BA, 1998; Hon. Fell., Nuffield Coll., Ox-

Editorial Duties Ed. Bds, AER, JPE,
REStud, Public Interest, Natl Interest, vari-
ous years; Bd Contrib., Wall Street J.

Principal Fields of Interest H2 Taxa-
tion, Subsidies, and Revenue; H3 Fiscal
Policy and Behavior of Economic Agents;
E0 Macroeconomics and Monetary Eco-
nomics: General.

Publications Books: 1. Economic
Analysis for Health Service Efficiency:
Econometric Studies of the British Na-
tional Health Service (N-H, 1967); 2. Hos-
pital Costs and Health Insurance (HUP,
1981); 3. Capital Taxation (HUP, 1981);
4. Inflation, Tax Rules and Capital For-
mation (UCP, 1981); 5. Economic and Fi-
nancial Crises in Emerging Market Coun-
tries (UCP, 2003).

Articles: 1. ‘Corporate taxation and
dividend behavior’, RESstud, 37, 1970; 2.
‘Hospital cost inflation: a study of non-
profit price dynamics’, AER, 61, Dec.
1971; 3. ‘The welfare loss of excess health
insurance’, JPE, 1973; 4. ‘Social secu-
rity, induced retirement and aggregate
capital accumulation’, JPE, 82, 1974; 5.
‘Unemployment compensation: adverse
incentives and distributional anomalies’,
NTJ, 27, June 1974; 6. ‘Personal taxation
and portfolio composition: an econome-
metric analysis’, Em, 44, 1976; 7. ‘The wel-
fare cost of capital income taxation’, JPE,
86, 1978; 8. ‘The effect of the capital
gains tax on the selling and switching of
common stock’ (with S. Yitzhaki), JPE,
86, 1978; 9. ‘Domestic savings and inter-
national capital flows’ (with C. Horioka),
EI, 90, 1980; 10. ‘The effect of marginal
tax rates on taxable income: a panel study
of the 1986 tax reform act’, JPE, 103,
1995; 11. ‘Tax avoidance and the dead-
weight loss of the income tax’, RESstat,
81, 1999; 12. ‘Potential effects of two
percent personal retirement accounts’
(with A. Samwick), Tax Notes, 1998; 13.
‘Individual risk in an investment-based
social security system’ (with E.

Principal Contributions Quantitative
studies in public economics, including
Tax, transfer and spending programs.
Studies of social insurance programs (so-
cial security pensions, unemployment in-
surance, health insurance). Analyses of
the interaction between fiscal structure
and macroeconomic policy. Studies of
capital formation. Effects of these pro-
grams on capital formation and employ-
ment.

FERNANDEZ, Raquel n.e.

FERRIER, Gary Donald

Born 1958, Green Bay, WI, USA.

Current Posts Assoc. Prof. Econ. and
Holder of Lewis E. Epley, Jr Professor-
ship, Univ. Arkansas, Fayetteville, AR,
USA, 1993–.

Past Posts Asst Prof. Econ., Southern

Degrees BA Univ. Wisconsin, 1980; 

Offices and Honours Fulbright Res.

Principal Fields of Interest D2 Pro-
duction and Organizations; L2 Firm Ob-
jectives, Organization, and Behavior; C4
Publications


Principal Contributions

Most of my work has related to the calculation and explanation of cost economies, and efficiency and productivity using frontier production and cost functions. Contributions include the development of new frontier models (e.g., a switching frontier model), extensions of existing frontier models (e.g., the bootstrapping of confidence intervals for DEA efficiency scores), and comparisons of competing frontier models. In addition, my work has examined the consistency of frontier efficiency scores with other measures of firm performance. My work has helped to advance our understanding of the determinants of
efficiency and productivity by examining the effects of ownership, strategic choices, human resource management practices, market structure and other firm characteristics on both static and dynamic performance. Much of my work has used financial institutions, especially commercial banks, and hospitals for their empirical applications.

FERSHTMAN, Chaim n.e.

FERSON, Wayne E.

Born 1951, Middleborough, MA, USA.


Principal Fields of Interest H0 Public Economics: General; E0 Macroeconomics and Monetary Economics: General; M5 Personnel Economics.


Principal Contributions n.e.

FISCHER, Stanley

Born 1943, Lusaka, Zambia.

Current Posts Pres., Citigroup Intl, and Vice-Chairman, Citigroup Inc., Washington, DC, USA, 2001–.


Degrees BSc, MSc Univ. London, 1965, 1966; PhD MIT, 1969.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; F3 International Finance; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions Analysis of the actual and potential roles of activist policy in stabilizing the economy. Early research (with J.P. Cooper) examined the effects of lags and uncertainty on the effectiveness of policy; subsequent research has concentrated on the role of policy when expectations are rational but prices not immediately flexible. In this context, I developed a simple macro model with long-term nominal labor contracts that generate price-stickiness, giving short-term Keynesian results and long-term classical results. Analysis of the effects of, and reasons for, the presence or absence of indexation of wages and asset returns. Showed that indexation of wages is stabilizing for output when shocks are nominal but not when they are real; have analyzed the view that indexing is itself inflationary, first with exogenous policy, later through its effects on the choice of policy. Showed how index bonds would be priced if they were introduced, and examined welfare economics of their introduction. Analysis of the real effects and costs of inflation (research started jointly with F. Modigliani), showing the role of slowly changing institutions in making inflation costly. Analysis of seigniorage and reasons for use of a national currency. Analysis of stabilization programs; and of the transformation of the formerly socialist economies. Education of MIT graduate students and, through *Macroeconomics* (book 1), many undergraduates.

FISHBURN, Peter C.

Born 1936, Philipsburg, PA, USA.

Current Post Retired.


Principal Fields of Interest D0 Microeconomics: General; D7 Analysis of Collective Decision-Making; D8 Information and Uncertainty.


Principal Contributions My early work focused on expected utility theory (von Neumann and Morgenstern, Savage) and decision theory, including axiomatisations, analyses with incomplete information, and multivariate models. This led naturally to social choice theory in the late 1960s, and during the 1970s my research was divided about evenly between individual decision theory and social choice theory. These interests continue today, and the early 1980s saw concentrated efforts on new nonlinear utility theories and the practical assessment of alternative election schemes. Concurrently, I have become more interested in several areas of discrete mathematics, including partially ordered sets, graph theory and combinatorial geometry.

FLOOD, JR, ROBERT P.

Born 1949, Syracuse, NY, USA. Current Post Sr Econ., IMF, Washington, DC, USA, 1989–.


Offices and Honours Norman Kaplan Prize, Univ. Rochester, 1984; Columbia Futures Center Fell., 1984.


Principal Fields of Interest E4 Money and Interest Rates; F3 International Finance.


**Principal Contributions** At the outset of the rational expectations revolution, Lucas pointed out that crucial estimated parameters would be predicted to change with government policy change. Much of my work has been devoted to exploring this insight. In particular, in work with Peter Garber, I have explored theory and econometrics involving agents’ anticipations of dramatic future policy changes—regime switches. This work began when I studied the German hyperinflation in which reform was anticipated strongly during the final months of the experience. This policy switching work naturally extended to the study of the anticipated attacks on price-fixing regimes, such as fixed exchange rates, a fixed currency price of gold and the fixed currency price of a bank deposit. Anticipations of dramatic events often seem to be based not on typical current fundamentals. Price movements based on such anticipations therefore look very similar to price bubbles since their movement need not match current movements in typical fundamentals. The work on anticipated policy switching naturally led to the study of price bubbles. My work in international finance consists, in part, in applying the policy switching insights to the open economy business cycle and optimal currency area literature and in bringing rational expectations to the study of two-tier foreign exchange markets. More recently, my research has involved identifying and studying the market structural shifts that seem to accompany exchange-rate-regime changes.

**FOGEL, Robert William**

Born 1926, New York City, NY, USA.  


Principal Field of Interest  N0 Economic History: General.


Principal Contributions The application of economic models and statistical methods to the analysis of long-term trends in economic development. Much of the research has focused on the retrieval of data capable of illuminating the relationship between the current and past behaviour of households. Data sets linking together up to ten generations have been constructed to analyse the interaction of economic and cultural factors on such variables as the savings rate, the female participation rate, fertility and mortality rates, economic and social mobility, and migration rates.

FORMBY, John Paul

Born 1940, Carollton, GA, USA.

Current Post James Patrick and Elizabeth Brannan Hayes Prof. Econ., Univ. Alabama, AL, USA, 1989–.


Principal Fields of Interest D0 Microeconomics: General; D3 Distribution; D6 Welfare Economics.


**Principal Contributions** Much of my early work focussed on price discrimination and its effects on output and welfare. A number of joint contributions have been made to the measurement and understanding of overall tax progression and the vertical equity effects of government-induced redistributions. A series of recent related papers additively decompose what is widely interpreted as ‘vertical equity’ into vertical equity and vertical inequity components. Together, vertical equity and inequity sum to ‘net vertical equity’. Much of the so-called ‘reranking term’ in tax-induced income rerankings, which is often interpreted as a measure of horizontal inequity, is in fact vertical inequity. Perhaps my most important work, joint with John Bishop, Paul Thistle, W. James Smith, Buhong Zheng, Hoseong Kim and others, involves using dominance methods and distribution free statistical inference procedures to evaluate welfare, inequality, poverty and mobility. A series of papers related to this work demonstrates that regional income distributions in the United States changed dramatically in the 1970s. Historically, the US South had smaller absolute incomes (after adjusting for differences in the cost of living) and more unequal relative incomes than the rest of the country. In the 1970s both the relative and absolute income distributions of the US South converged to the Non-South, with the degree of convergence being sensitive to the equivalence scale used to adjust for household size and composition. At the same, the three regions that make up the Non-South (North, West and Midwest) diverged from one another. Most recently, my research has focussed on poverty, low-wage work and labor market policies designed to improve the well-being of low-income working families. This work has been supported by grants from the Employment Policy Institute and W.E. Upjohn Institute for Employment Research. Each of these organizations plan to publish the results of this work.

**FORSYTHE, Robert**

**Born** 1949, Pittsburgh, PA, USA.


**Offices and Honours** Alexander Henderson Award for Excellence in Econ. Theory, 1975; Univ. Faculty Scholar, Univ. Iowa, 1985–88; Mem., Bd Advisors Artificial Intelligence, 1990–93; Pres., Econ Sc. Assoc., 1993–95; Regents Award for Faculty Excellence, Univ. Iowa, 2002.


**Principal Fields of Interest** G1 General Financial Markets; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


Principal Contributions My early work focussed on how the stock market affected the decisions made by firms. While at Cal Tech, I became interested in experimental methods and how the laboratory could be used as the natural place to test and refine economic theories. Much of what we do and believe as economists still remains untested and I became (and remain) excited by the potential of experiments to remedy this. My experimental work has largely centered on two areas: examining theories of asset valuation and testing alternative selection criteria in experimental games. After some initial laboratory studies, my work on asset valuation led me to be one of the founders of the Iowa Electronic Market (IEM). This is the only real-monied futures market operated by an educational institution in the world. It provides classes around the world with an experimental learning opportunity while at the same time serving as our research laboratory. With it we can not only look at a market’s ability to predict decidedly non-market events such as elections, but we can also use it to study individual trading behavior. I continue to be fascinated by how the unique data generated by this large-scale field experiment can be used to give fresh insights. My work on examining selection criteria in experimental games has led me to consider a variety of games. Bargaining games, coordination games and battle-of-the-sexes games all have multiple Nash equilibria, and we have been able to identify a number of these strategic settings where players are unable to successfully coordinate their actions in order to reach a mutually advantageous equilibrium. Most of this work has focussed on identifying the underlying cause of these coordination failures as well as looking at the potential of alternative institutions, such as preplay communication and forward induction, to overcome them.


Principal Fields of Interest H5 National Government Expenditures and Related Policies; I1 Health.


FRANK, Robert Harris

Born 1945, Coral Gables, FL, USA.


Degrees BS (Maths) Georgia Tech., 1966; MS (Stats), PhD Univ. California, Berkeley, 1971, 1972.


Principal Fields of Interest D1 Household Behavior; D3 Distribution; D6 Welfare Economics.


Principal Contributions Standard utility functions assume that people care only about present and future consumption in absolute terms. I have attempted to expand this list of concerns in a principled way, adding other motives that can be shown to facilitate resource acquisition in competitive environments. One strand of my work has focussed on the strategic role of emotions. Although self-interest models predict that people will not donate anonymously to charities, vote in presidential elections, risk injury to help strangers, or cooperate in one-shot prisoners’ dilemmas, people routinely engage in such behaviors, often at considerable personal cost. The sentiments that motivate these behaviors facilitate solution of social dilemmas and a variety of other commitment problems, provided these sentiments can be discerned by others. For example, if sympathy motivates cooperation in one-shot prisoners’ dilemmas, then sympathetic individuals who are able to identify similar others are able to reap the gains of mutual cooperation. This strand of my work suggests that markets often yield better results than predicted by standard models. A second strand of my work has focussed on how concerns about relative position alter the conclusions of standard models. Such models hold, for example, that wages in competitive labor markets mirror individual productivity, but the distribution of wages is more compressed than that if workers care about intra-firm relative income. Standard models similarly suggest that individuals spend their incomes in ways that maximize welfare. But if utility depends
not just on absolute consumption, but also on relative consumption, individual spending decisions yield an excess of goods for which positional effects are strong (such as housing, cars, and clothing), and a deficit of goods for which positional effects are weak (such as safety, leisure, and environmental amenities). This strand of my work suggests that markets often yield worse results than predicted by standard models.

FRANKEL, Jeffrey Alexander

Born 1952, San Francisco, CA, USA.


Degrees BA (High Hons) Swarthmore Coll., 1974; PhD MIT, 1978.


**Principal Fields of Interest**

F0 International Economics: General; E0 Macroeconomics and Monetary Economics: General; G0 Financial Economics: General.

**Publications**


**Principal Contributions**

Developed empirical models of exchange rate determination – of the conventional monetary variety as well as less-conventional models of chartists and fundamentalists. Found some evidence of effects of intervention in the foreign exchange market, using daily data. Pointed out that common failures to detect reversion to purchasing power parity were attributable to low power. Performed various tests of international integration of financial markets and good markets, in both cases emphasizing long time series or a wide cross-section. Studied financial liberalization and currency regimes in Japan, emerging market economies of East Asia, and Latin America; including early papers with country fund data and on early-warning crisis indicators. Introduced the use of survey data to measure expectations of participants in the foreign exchange market. Substantiated (in three ways) skepticism that bias in the forward exchange rate is to be attributed to a time-varying exchange risk premium. One method of attack was the survey data. Another was a theoretical argument that much of exchange risk is diversifiable, and therefore requires no compensation. A third econometric technique, used to test the risk premium hypothesis, turned out to have widespread application for testing whether investors
determine their asset demands from principles of optimal diversification (the technique of constrained asset share estimation). Applied the overshooting model to agricultural and mineral commodity price determination. Developed two measures of market perceptions of monetary policy: real commodity prices and a measure of steepness of the interest rate yield curve. Showed how model uncertainty is an obstacle to international policy coordination. Helped popularize use of the gravity model of bilateral trade, including (1) to estimate whether regional integration exceeds the ‘natural’ level, and (2) to test effects of globalization on (a) growth and (b) the environment. Explored endogeneity of the optimum currency area criteria (i.e., of trade and cyclical symmetry).

FRANSES, Philip Hans


Degrees MSc Univ. Groningen, 1987; PhD (Em.) Erasmus Univ., 1991.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; M3 Marketing and Advertising; G1 General Financial Markets.


**Principal Contributions**

Empirical findings: students’ supply responsiveness is very sizable; high-level job markets are subject to cobweb-type fluctuations; return to college training in the West has dropped in era of educational expansion; minorities have progressed in era of anti-bias activity in US; slow economic progress of blacks in US is due to loss of voting rights and consequent governmental discrimination at turn of century; trade unions have a sizable non-wage effect, best analysed in ‘exit–voice’ framework (effects include reduced turnover, greater fringe benefits, reduced inequality); measurement error in longitudinal data biases estimates considerably; unions reduce profits of concentrated industries; and decline of union representation in US due to severe management opposition.

**FRENCH, Kenneth R.**

Born 1941, Basel, Switzerland.


**Principal Fields of Interest** A0 General Economics and Teaching: General; D7 Analysis of Collective Decision-Making; Z1 Cultural Economics.


Articles: 1. ‘An empirical study of po-

**Principal Contributions** Early work was in the then fashionable fields of economic growth and income distribution. Since the late 1960s I have increasingly become interested in the application of the economic approach to new fields, among them environmental economics. My main research area has been modern political economy (public choice). I have constructed theoretical models of the interactions of the economy and politics (politico-economic models, sometimes called political business-cycle models), and have econometrically tested them for various representative (US, UK, Germany) and direct (Switzerland) democracies. In addition to voters, government and public bureaucracy, the Central Bank’s behaviour has also been taken into account. The research has now shifted to integrating and measuring the shadow (or hidden) economy; to the study of the (far-reaching) consequences of public choice for the theory of economic policy; and to the application of public choice to international problems (international political economics). Among the other ‘non-market’ areas, I have contributed to the economics of the arts. While I am convinced that the economic model of behaviour is superior to most others, I endeavour to improve its performance (in collaboration with psychologists and sociologists) by taking new aspects of human behaviour into account.

**FREY, William H.** n.e.

**FRIEDEN, Jeffry Alan**

*Born* 1953, Louisville, KY, USA.

**Current Post** Prof., Dept Govt, Harvard Univ., Cambridge, MA, USA, 1995–.


**Principal Fields of Interest** F4 Macroeconomic Aspects of International Trade and Finance; P1 Capitalist Systems; D7 Analysis of Collective Decision-Making.


Principal Contributions Political economy of international monetary and financial relations. Political economy of international banking and finance, both contemporary and historical. Political economy of international monetary policy, especially exchange rate policy. Work on the gold standard, European monetary integration, contemporary exchange rate policy.

FRIEDMAN, Benjamin M.

Born 1944, Louisville, KY, USA.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; H6 National Budget, Deficit, and Debt; E4 Money and Interest Rates.


Articles: 1. ‘Targets, instruments and indicators of monetary policy’, JME, 1,

Principal Contributions The principal goal of most of my research has been to further understanding of how financial markets work and why what happens in financial markets matters for nonfinancial economic activity, and to seek ways of exploiting that understanding for improved policy decisionmaking. The central principle that has influenced my approach has been that economic behaviour in general and financial behaviour in particular depend importantly on prevailing institutional structures, including legal and regulatory restrictions as well as aspects of business organisation and practice in the broadest sense. As a result, many familiar classical propositions, describing the functioning of perfect markets populated exclusively by atomistic traders possessing full information, no longer apply. My earliest work focused explicitly on aspects of monetary and fiscal policies consistent with this central line of thinking. I next devoted a substantial part of my work to studying the determination of asset returns, especially returns on long-term debt instruments. I also examined the portfolio behaviour of risk-averse investors and borrowers that underlies the determination of asset returns. I then returned to a more direct focus on fiscal and monetary policies, and my work included a book on the Reagan era US fiscal policy followed by a series of papers on specific monetary policy issues, including the shortcomings of price or inflation targeting as a guideline for the conduct of monetary policy, contradictions inherent in the familiar call for increased transparency in monetary policy, and the threat to monetary policy from the electronic revolution in banking. In an entirely different area of inquiry, I have just completed a book on ‘the moral consequences of economic growth’. The question that this book explores is whether – and if so, under what circumstances and via what mechanisms – rising living standards foster such tendencies as openness of opportunity, tolerance, social mobility, commitment to fairness, and either the creation of democratic political institutions or the strengthening of these institutions where they already exist. The hypothesis that economic growth (rather than the level of income) nurtures these positive developments has a number of im-
important implications, among them that the market mechanism, left unimpeded, will systematically under-provide economic growth so that there is a resulting role for public policy to stimulate growth beyond the market-determined rate of increase.

FRIEDMAN, Daniel

Born 1947, Oakland, CA, USA.

Current Post Prof. Econ., Univ. California, Santa Cruz, CA, USA, 1985–.


Principal Fields of Interest D4 Market Structure and Pricing; C7 Game Theory and Bargaining Theory; B4 Economic Methodology.


Principal Contributions I explore the boundaries of the economics discipline marked by the three (unrealistic but useful) assumptions of selfish preferences, optimization, and equilibrium. The evolutionary games articles relax the equilib-
rium assumption and emphasize the new applications in international trade and industrial organization. The psychology articles relax the optimality assumption and point to new economic applications in institutional economics. Work in progress on other regarding preferences will open new perspectives on labor economics and contracting theory. Laboratory methods are quite useful in all these activities.

FRIEDMAN, Milton

Born 1912, Brooklyn, NY, USA. 

Degrees BA Rutgers Univ., 1932; AM Univ. Chicago 1933; PhD Columbia Univ., 1946.

Lifetime Achievement Award, 1997; Dr (Econ., hc), Univ. Prague, 1997.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; N1 Macroeconomics and Monetary Economics; Growth and Fluctuations; D0 Microeconomics: General.


Principal Contributions Methodology of positive economics; permanent income theory of consumption; understanding the role of money in determining the course of events, in particular the monetary source of the US Great Depression; analysis of inflation, its sources, consequences, and possible cures, concept of natural rate of unemployment and accelerationist theory of Phillips curve; role and operation of monetary policy; theory of capital; demonstration that Gibson paradox is of very limited applicability and is to be explained much more along the lines of Irving Fisher than of John Maynard Keynes; and derivation of a stable demand curve for money covering more than a hundred years and applicable to the US and the UK.

FROOT, Kenneth A.

Born 1957, New York, NY, USA.


Principal Fields of Interest G0 Financial Economics: General; F3 International Finance.


Principal Contributions n.e.

FUDBENGER, Drew

Born 1957, New York, USA.

Current Post Prof., Harvard Univ., Cambridge, MA, USA, 1993–.


Degrees AB Harvard Univ., 1978; PhD MIT, 1981.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D2 Production and Organizations; D8 Information and Uncertainty.


Principal Contributions Much of my early work focused on the application of game theory to problems in industrial organization, as reflected in the monograph Dynamic Models of Oligopoly. Since then I have focused on more abstract issues in game theory. In the mid to late 1980s I worked on the possibilities that repeated play offers for maintaining reputations and for allowing ‘cooperative’ equilibria; this and related work is summarized in my essay in the Laffont volume. Since then much of my work has been concerned with the learning-theoretic foundations of equilibrium in games and the related question of the role of learning in the diffusion of innovations.

FUHRER, Jeffrey C.

Born 1957, New Rochelle, NY, USA.

Current Posts Sr Vice Pres. and Dir. Res., FRB, Boston, MA, USA, 2002–.

Past Posts Sr Econ, Asst Vice Pres.


**Honours** Phi Beta Kappa, Princeton Univ., 1979; Allyn Young Teaching Prize, Harvard Univ., 1985.

**Editorial Duties** Ed. Bd, *AER*, 1998–.

**Principal Fields of Interest** E5 Monetary Policy, Central Banking, and the Supply of Money; E3 Prices, Business Fluctuations, and Cycles; C5 Econometric Modeling.


**Principal Contributions** The overarching focus of my work has been the desire to develop structural representations of the macroeconomy that are suitable for monetary policy analysis. I began this course in the late 1980s with George Moore (deceased), then at the Federal Reserve Board of Governors. We discovered what we viewed to be serious deficiencies in the prevailing models of price-setting that rendered them useless for monetary policy analysis. Since that time, my work has explored the interactions among inflation, output, and interest rates – the minimal set of variables required to describe the interaction between monetary policy and the macroeconomy. After a series of papers that explored the importance of inflation persistence in the data and its implications for structural models, I examined the relationship between monetary policy and interest rates, and monetary policy and consumption/investment decisions. Throughout, I have benefited from my earlier professional association with George Moore, who taught me a tremendous amount about the application of rigorous methods for solving and estimating dynamic rational expectations models.
FUJITA, Masahisa

Born 1943, Yamaguchi Prefecture, Japan.


Degrees BS (Eng.) Kyoto Univ., 1966; PhD (Regional Sc.) Univ. Pennsylvania, 1972.


Principal Fields of Interest R1 General Regional Economics; O4 Economic Growth and Aggregate Productivity; F1 Trade.


Principal Contributions Most of my work has related to the fields of spatial economics, including location theory, urban economics, regional development, international trade, economic geography and regional science. My first book examined the optimal growth in multi-regional and multi-sector economics, including the cases with increasing returns. My second book developed a unified theory of urban land use and city size by using the bid rent approach. My third book with Krugman and Venables represents the first synthesis of the so-called new economic
geography, showing how a common general equilibrium approach that emphasizes the three-way interaction among increasing returns, transportation costs, and the movement of productive factors can be applied to a wide range of issues in urban, regional and international economics. My fourth book with Thisse combines the traditional location theory, models of systems of cities, micro-foundations of urban structure, and monopolistic competition models from the new economic geography, and presents a unified theory of spatial economics involving the agglomeration of economic activities.

FULLERTON, Don

Born 1953, Stuttgart, Germany.

Current Post Addison Baker Duncan Centennial Prof. Econ., Univ. Texas, Austin, TX, USA, 1994–.


Principal Fields of Interest D0 Microeconomics: General; H2 Taxation, Subsidies, and Revenue; Q2 Renewable Resources and Conservation; Environmental Management.


**Principal Contributions** In early work with Shoven and Whalley, a computable general equilibrium (CGE) model of the US tax system is used to evaluate efficiency and distributional effects of reforms such as integration of personal and corporate taxes or the switch to a consumption tax. I also use the model to find the peak of the Laffer curve and how that peak relates to assumptions about elasticities. With King, I calculate marginal effective tax rates, accounting for statutory rules, depreciation allowances, investment tax credits, and other policies. These cost-of-capital calculations are then incorporated into the CGE model and used for policy simulations. Later, with Diane Rogers, life-cycle decision making is used to calculate the lifetime incidence and distributional effects of each different US tax instrument. In environmental economics, Tom Kinnaman and I develop a theory of optimal pricing of garbage and recycling, and proceed to measure the elasticity of demand for collection of garbage and curbside recycling. One paper uses a sample of households in one town before and after the implementation of a price per bag of garbage, while another paper uses a sample of cities with and without a price per bag. Other environmental work includes toxic waste cleanup costs, the sulfur dioxide compliance of regulated utilities, a theory of green design for less packaging and more recyclability, second-best pollution taxes that raise revenue while correcting externalities, and calculation of tax and subsidy rates on car characteristics and gasoline that best substitute for the ideal but unavailable Pigovian tax on car emissions. Finally, with Julia Coronado, I am working on the lifetime distributional effects of US Social Security taxes and benefits, accounting for the cap on the wage tax, the spousal and survivor provisions, income sharing within the household, and income-differentiated mortality.

**FURSTENBERG, Frank F.**

**Born** 1940, Baltimore, MD, USA.

**Current Post** Zellerbach Family Prof. Sociology, Univ. Pennsylvania, Philadelphia, PA, USA, 1967–.


**Degrees** BA (Sociology) Haverford Coll., 1961; PhD (Sociology) Columbia Univ., 1967.


**Principal Fields of Interest** D1 Household Behavior; I2 Education, I3 Welfare and Poverty.

**Publications**


**Principal Contributions** My work has primarily concerned the welfare of children and families. My work on teenage childbearing examines the consequences of early parenting over the life course of young mothers and their children. My book on the impact of neighborhoods and family strategies examines how local contexts influence family decision making.
GAFNI, Amiran n.e.

GALE, Douglas Maxwell

Born 1950, Ottawa, Canada.

Current Post Prof. Econ., NYU, New York City, NY, USA, 1996–.


Degrees BSc Univ. Trent, 1970; MA Carleton Univ., 1972; PhD Univ. Cambridge, 1975.


Principal Fields of Interest D5 General Equilibrium and Disequilibrium; G0 Financial Economics: General; C7 Game Theory and Bargaining Theory.


Principal Contributions Cooperative and non-cooperative game-theoretic foundations of monetary equilibrium; the budget constraint of the firm as an optimal debt contract and developed implications for investment behavior; equivalence between competitive equilibria and subgame perfect equilibria of dynamic matching and bargaining games; models of general equilibrium with incomplete information; optimal design of securities in general equilibrium; dynamic coordination games; models of social learning; model of liquidity preference and asset.
price volatility; comparative study of financial systems; financial crises and contagion; monotone games; money and asset prices; complexity and competitive equilibrium.

GALE, William G.

Born 1959, Alexandria, VA, USA.


Principal Fields of Interest H0 Public Economics: General; E2 Consumption, Saving, Production, Employment, and Investment.


Principal Contributions My current research focusses on taxation, budget and fiscal issues, and pensions and saving behavior. My tax research has focussed on fundamental tax reform, the estate tax,
tax simplification, tax-deferred saving plans and the effects of aggregate tax cuts. My work on budget and fiscal issues has examined ways to improve the measurement of the federal government’s fiscal status and the implications of those adjustments for fiscal policy. My studies of private saving behavior and pensions have examined the extent to which contributions to pensions and other tax-deferred saving plans represent an increase in net national saving, the adequacy of personal saving for retirement, the measurement and interpretation of aggregate saving measures, and the role of intergenerational transfers in aggregate capital accumulation. Earlier in my career, I also researched the effects of federal credit subsidies.

GALI, Jordi n.e.

GALLANT, A. Ronald

Born 1942, San Diego, CA, USA.


Degrees AB (Maths) San Diego State Univ., 1965, MBA (Marketing) UCLA, 1967; PhD (Stats) Iowa State Univ., 1971.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling; G0 Financial Economics: General.


**Principal Contributions** I am interested in fitting models from the sciences to data for the purpose of statistical inference. Typically these models will involve a nonlinear parametric component that describes features of the model where the underlying scientific theory is explicit and a nonparametric component that accounts for features where the scientific theory is vague. Appropriate statistical methods for these problems are usually computationally intensive. Methodological interests are in developing statistical methods and numerical algorithms for fitting these models. Theoretical interests are in deriving the statistical properties of proposed methods, particularly the asymptotic properties of estimators of functionals of the nonparametric component. Applied interests are primarily within economics and finance.

**GALOR, Oded**

**Born** year of birth not known, Jerusalem, Israel.

**Current Posts** Prof. Econ., Brown Univ., Providence, RI, USA, 1990–; Chilewich Prof. Econ., Hebrew Univ., Jerusalem, Israel, 1996–; Dir., Minerva Centre for Macroecon. and Growth, 1999–; Core Faculty, Pop. and Training Center, Brown Univ., 2000–.


**Principal Fields of Interest** 00 Economic Development, Technological Change, and Growth; General; J1 Demographic Economics.


Principal Contributions My most significant contributions to economics have been in the fields of: income distribution and macroeconomics, the transition from stagnation to growth, and evolution and growth. In addition I have contributed to population economics, and the study of migration, technology and wage inequality, and poverty traps. Income Distribution and Growth: The traditional viewpoint about the relationship between income distribution and economic growth suggests that income distribution has no significant effect on macroeconomic activities and economic growth. I challenged the traditional viewpoint and argued that in the presence of credit markets imperfections and non-convexities in the production of human capital, income distribution plays an important role in the determination of aggregate economic activity and economic growth. From Stagnation to Growth: The understanding of the long transition from Malthusian stagnation to sustained economic growth is currently viewed as one of the most significant research challenges facing economists interested in growth and development. The inconsistency of exogenous as well endogenous growth models with the evolution of economies throughout most human history has led me recently to the development of unified endogenous growth models in which the evolution of population, technology, and output growth is consistent with the process of development in the last millennia. I propose a theory that generates an endogenous take-off from a Malthusian regime, through a Post-Malthusian regime, to a demographic transition and a sustained growth regime. Evolution and Growth: This research develops an evolutionary growth theory concerning the interplay between the evolution of mankind and economic growth since the emergence of the human species. The theory suggests that the struggle for survival that had characterized most of human existence generated an evolutionary advantage to human traits that were complementary to the growth process, triggering the take-off from an epoch of stagnation to sustained economic growth.

GALSTER, George Charles

Born 1948, Toledo, OH, USA.

Current Post Clarence Hilberry Prof. Urban Affairs, Coll. Urban, Labor and Metropolitan Affairs, Wayne State Univ., Detroit, MI, USA, 1996–.


Degrees BA Wittenberg Univ., 1970;
BS (Org. Sc.) Case Western Reserve Univ., 1971; PhD MIT, 1974.


**Principal Fields of Interest** R0 Urban, Rural, and Regional Economics: General; R2 Household Analysis; J7 Discrimination.


**Principal Contributions** My work...
focusses on urban housing markets, especially their structure, class and racial dimensions, neighborhood dynamics, and welfare implications. It is characterized by multi-disciplinary perspectives and an eye for policy applicability. With J. Rothenberg I developed a submarket model of metropolitan housing markets and showed how it could explain housing problems and neighborhood dynamics, and inform policy interventions. Other major strands of my housing-related work: (1) developed and tested a model of how neighborhood social interactions affect the maintenance behavior of homeowners; (2) explored theoretically and empirically the nature, causes, dynamics and consequences of neighborhood change; (3) created the concept of ‘urban opportunity structure’ to understand behavioral impacts and welfare implications of intrametropolitan variations in neighborhood; and (4) evaluated the efficiency and equity of a variety of housing policies, including home repair subsidies, public housing desegregation, first-time homeownership assistance, tenant rental subsidies, neighborhood racial integration maintenance and scattered-site public housing. A second ongoing theme in my work relates to racial-ethnic discrimination, segregation and interracial economic disparities. My work was the first to model these phenomena as part of a simultaneous-equation system whose parameters could be estimated. Other research investigated discrimination in housing, mortgage, and home insurance markets using a variety of different techniques, including paired testing. More recently, I have been engaged in an ongoing study to measure the dimensions of metropolitan sprawl and relate these to various economic and social outcomes.

GARFINKEL, Irwin

Born 1943, Pittsburgh, PA, USA.


Principal Fields of Interest I0 Health, Education, and Welfare: General; I3 Welfare and Poverty; J0 Labor and Demographic Economics: General.


Principal Contributions Nearly all of my work involves estimating the benefits and costs of social welfare policies. My most important general work involves investigations of the efficiency and social effects of income testing benefits. Much of my research has focussed on single mothers and their children. Twenty years ago, my research on income testing and single mothers and their children led me to develop a proposal for a new child support assurance system (CSAS). CSAS was designed to aid single mothers outside the welfare system. I have been conducting research on the old and newly emerging child support assurance systems ever since. The CSAS proposal helped shape Wisconsin’s pioneering child support reforms, which in turn helped shape the Child Support Act of 1984, the Family Support Act of 1988 and the Personal Responsibility and Work Opportunity Act of 1996. I am currently the co-principal investigator (with Sara McLanahan) of the Fragile Families and Child Well-Being Study, a longitudinal survey of 4700 (mostly) unwed parents and their children.

GARRETT, Geoffrey n.e.

GEANAKOPOLOS, John n.e.

GELFAND, Alan E. n.e.

GEORGE, Edward I. n.e.

GERONIMUS, Arline T. n.e.

GEROSKI, Paul Andrew

Born 1952, New Rochelle, NY, USA.


Principal Fields of Interest L0 Industrial Organization: General; M0 Business Administration and Business Economics; Marketing; Accounting: General.


Articles: numerous journal publications.

Principal Contributions Applied industrial organization, and, in particular, empirical studies of the causes and the consequences of entry, the determinants of innovation, the effects of market structure on price dynamics, the effect of innovation on productivity growth, the relationship between corporate performance (profits, growth, productivity growth, stock market evaluation) and innovation, and the effects of recessions on corporate performance.

ERTLER, Mark n.e.

ERTLER, Paul J. n.e.

ERTNER, Robert H. n.e.

GHYSELS, Eric

Born 1956, Brussels, Belgium.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; G1 General Financial Markets.


**Principal Contributions** Early research focused primarily on the questions pertaining to modelling seasonal economic time series. The book recently published by CUP, co-authored with Denise Osborn, provides details of various contributions in this area. In recent years I have focused my research on empirical asset pricing questions. Various contributions were made ranging from modelling the dynamics of betas, modelling of market volatility, to estimation of risk neutral and objective probability measures in the context of continuous time asset pricing models.

**GIBBONS, Robert Scott**

**Born** 1958, Palo Alto, CA, USA.

**Current Posts** Sloan Disting. Prof. Org. Econ. and Strategy, Sloan Sch. Mgmt and Dept Econ., MIT, Cambridge, MA, USA, 2001–.


**Principal Fields of Interest** D2 Production and Organizations; L1 Market Structure, Firm Strategy, and Market Performance; L2 Firm Objectives, Organization, and Behavior.


**Articles**: 1. ‘Piece-rate incentive schemes’, J Lab E, 5, 1987, 2. ‘Layoffs and lemons’ (with L. Katz), J Lab E, 9,

Principal Contributions As a graduate student at Stanford Business School, I studied game theory and agency theory, hoping to apply them to life inside organizations (articles 1, 3, 5). This applied attitude towards theory motivated my first book, Game Theory for Applied Economists. As an assistant professor at MIT, I encountered serious empirical work for the first time. Because there was little data on life inside organizations, I focussed on labor economics, collaborating with empirically oriented colleagues (such as Larry Katz and Hank Farber) to build and test theoretical models (articles 2, 4, 6, 14). I tried to encourage such combinations of theory and evidence as co-editor of the Journal of Labor Economics. Returning to a business school (at Cornell) renewed my exposure to those interested in organizations. My work in labor economics (with Mike Waldman) focussed on careers in organizations (articles 7, 8) and I began to try to explain organizational economics to organizational researchers outside economics (articles 6, 11). Since returning to MIT, my research (with George Baker and Kevin J. Murphy) has focussed on ‘relational contracts’ (i.e., informal agreements that are so dependent on the parties’ shared experience that the agreement cannot be enforced by a court, but may be enforced by the parties’ concerns for their reputations). I see relational contracts as widespread, both within and between firms, and as a crucial determinant of organizational performance (articles 5, 10, 11, 12, 13, 15). I am now trying to foster the development of organizational economics, by creating new doctoral courses at MIT and a new Working Group on Organizational Economics at the National Bureau of Economic Research, and by writing a second book, Organizational Economics.

GILBOA, Itzhak

Born 1963, Tel Aviv, Israel.

Current Posts Prof. Econ. Berglas Sch. Econ., Tel Aviv Univ., Israel, 1997–; Fell., Cowles Foundation, Yale Univ., New Haven, CT, USA, 2002–.


**Principal Fields of Interest** D8 Information and Uncertainty; C7 Game Theory and Bargaining Theory; D1 Household Behavior.


**Principal Contributions** Most of my work deals with what is commonly viewed as less-than-‘perfect’ rationality. In decision under uncertainty, I first worked on non-additive probabilities, introduced by David Schmeidler. Together we developed the related model of maxmin expected utility with respect to a set of priors. The main motivation was a decision maker’s inability to specify a prior over a state space in the absence of statistical data. More recently, we introduced case-based decision theory, suggesting that, when even the state space is hard to formulate, people make decisions mostly by analogies to past cases. The theory gives rise to the notions of satisficing behavior and aspiration levels. In game theory, I studied the computational complexity of solution concepts. In particular, in a joint work with Eitan Zemel, we showed that Nash equilibria are hard to compute. Examining the foundations of the equilibrium concept, Akihiko Matsui and I suggested best-response dynamics in large populations and developed a set-valued solution concept based on it. This concept assumes that agents are myopic and respond optimally to the current environment. Such behavior may or may not yield convergence to Nash equilibria. Other works dealt with individual decision making with imperfect discernibility. The work with Robert Lapson showed that choice data actually available contain more information than is typically assumed. Thus, one may behavioral define cardinal utility, as well as derive additively separable functionals from conceptually weak axioms. More recent research topics include repeated consumer choices, as well as descriptive and normative implications of satisficing behavior.


Principal Field of Interest G3 Corporate Finance and Governance.


Principal Contributions Most of my work focusses on how financial distress, and legal processes for dealing with financial distress, affect the management, governance, financing, and valuation of corporate enterprises. In several studies I show that the US Chapter 11 bankruptcy process is associated with extremely high job turnover and reputational losses for CEOs and directors. In related research, M. Vetsuypens and I show that financial distress also results in large compensation losses for CEOs, as well as a marked shift away from cash-based compensation to strong equity-based compensation. In other research with K. John and L.H.P. Lang, I analyze how distressed companies choose between filing for Chapter 11 and informally restructuring their debt out of court. I have also shown that debt levels in financially distressed companies typically remain very high even after these companies restructure their debt, although the reduction in debt is relatively much
greater when firms restructure in Chapter 11 (as opposed to privately settling with creditors out of court). In research with E. Hotchkiss and R. Ruback, I analyze how companies are valued by competing financial claimholders in Chapter 11, and show that values presented in court are often significantly biased in favor of influential claimholders or senior executives. In a couple of clinical studies with H. DeAngelo and L. DeAngelo, I analyze the factors that led to the bankruptcy of two large insurance companies that invested heavily in high-yield (‘junk’) bonds. I have studied the activities and strategies of so-called ‘vulture investors’ who specialize in buying and selling the financial claims of bankrupt or distressed companies. In joint work with P. Healy, C. Noe and K. Palepu, I have also shown that conglomerate firms attract better coverage by financial analysts when they break themselves apart through corporate spin-offs, improving the efficiency of capital markets.

Glaeser, Edward Ludwig

Born 1967, New York, NY, USA.

Current Post Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1998–.


Editorial Duties Ed., QJE, 1998–.

Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; K0 Law and Economics: General.


Principal Contributions n.e.

Glewwe, Paul William

Born 1958, St. Paul, MN, USA.

Current Post Assoc. Prof., Dept Apl. Econ., Univ. Minnesota, Minneapolis, MN, USA, 1999–.

Degrees BA Univ. Chicago, 1979; PhD Stanford Univ., 1985.

Principal Fields of Interest O1 Economic Development; I2 Education.


Principal Contributions My initial research interest was economic growth and inequality in developing countries, with particular interest in inequality. My research using household survey data from Sri Lanka brought to my attention the strong influence of education on income and, more generally, on inequality. My position at the World Bank provided the opportunity to assist in the design of household surveys, and I took advantage of this to learn more about survey design and to collect data that focuses on the role of education in developing countries, such as Ghana, Jamaica, the Philippines and Kenya. Much of my research now focuses on the impact of education policies on student academic achievement, and the impact of that achievement on income and other outcomes (e.g., child health). Difficulty in estimating the impact of education policies on achievement has led me in the late 1980s to participate in a few randomised trials of education policies (e.g., Kenya and Honduras).

GLOMM, Gerhard

Born 1957, Gerstetten, Germany.

Current Post Prof. Econ., Indiana Univ., Bloomington, IN, USA, 2000–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; H0 Public Economics: General; H5 National Government Expenditures and Related Policies.

Publications Articles: 1. ‘Public vs. private investment in human capital: endogenous growth and income inequality’, JPE, 100, 1992; 2. ‘Optimal intertemporal consumption decisions under the threat

Principal Contributions Most of my work is related to economic growth and how economic growth is influenced by public policies and public institutions. In joint work with B. Ravikumar and S. Baier, we found that changes in public expenditures or in public institutions may have larger growth effects than changes in taxation. My recent work has focused on political economy of education reform. In joint work with B. Ravikumar and P. Bearse, we found that education vouchers may garner enough political support to beat public provision of education if vouchers are means tested. In models calibrated to the US we found that adopting vouchers may impart substantial welfare losses to the poor and potentially large welfare gains to the rich.

GLOSTEN, Lawrence R.

Born 1951, Eugene, OR, USA.


Degrees AB Occidental Coll., 1973; PhD (Managerial Econ. and Decision Sc.) Northwestern Univ., 1980.


Principal Fields of Interest G1 General Financial Markets; G2 Financial Institutions and Services.


Principal Contributions I am principally known for my work on the operation of securities markets. My first major contribution provided an understanding of how private information comes to be
reflected in securities markets. This paper also explained how the existence of private information leads to trading frictions—namely the spread between bid and offer. Subsequent work developed the empirical implications of this theory and using intra-day data confirmed some of the predictions of the theory. Further theoretical analysis deals with the design of exchanges. A frequently cited paper establishes that a limit order book exchange, such as that seen in Paris is ‘inevitable’ in that competition would seem to lead naturally to such an exchange. I have also done work modelling the volatility of stock returns, and the model has become a standard one. Finally, I have proposed a method for evaluating hedge fund performance that has enjoyed some popularity.

GOETZMANN, William N.

Born n.e.


Principal Fields of Interest n.e.


**Principal Contributions** n.e.

**GOLDIN, Claudia**

**Born** 1946, New York City, NY, USA.  
**Current Post** Henry Lee Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1990–.

**Principal Fields of Interest** N0 Economic History: General; J0 Labor and Demographic Economics: General.  


Principal Contributions My research is in the general area of American economic history and has covered topics that range widely, including slavery, emancipation, the post-bellum South, the family, women in the economy, the economic impact of war, immigration, New Deal policies, inequality, technological change, and most recently education. Most of my research interprets the ‘present through the lens of the past’ and explores the origins of current issues of concern, such as the reasons for immigration restriction, the causes of increased female labor force participation, the impact of technological change on the wage structure, and the role of education in ameliorating inequality. In my book, Understanding the Gender Gap, I explored why the female labor force increased at certain moments in US history, why women earn less than men, and why change in gender roles is often slow. More recently, I have examined the social and economic impacts of the ‘pill’ and, in my Marshall lectures, why the significance of gender in US history first rose and then declined. My most recent research concerns the interrelationships among education, inequality, and technological change. It investigates why educational attainment increased at certain junctures in US history, what roles were played by public and private concerns, and what impact educational advance has had on economic well-being and opportunity.
GOLDSCHEIDER, Frances K. n.e.

GOLLIER, Christian

Born 1961, Brussels, Belgium.

Current Post Prof. Econ., Univ. Toulouse, France, 1992–.


Principal Fields of Interest D8 Information and Uncertainty; D9 Intertemporal Choice and Growth; E4 Money and Interest Rates.


Principal Contributions Most of my work up to now has been devoted to the analysis of optimal decisions under uncertainty. The time and state additivity assumptions that are classically made for the decision criterion yields a rich set of properties for optimal choices and equilibrium prices. Savings, portfolio and insurance decisions are my main points of interest. For example, with John Pratt, I determine the conditions under which the presence of a zero-mean background risk reduces the demand for an independent portfolio risk, or, with Richard Zeckhauser,
I examine the conditions under which a longer time horizon raises the demand for stock. I also examine the shape of the yield curve, the effect of information on savings, of wealth inequality on the equity premium, or of a change in the distribution of returns on the asset demand. Many of these works generate conditions on the utility function that are related to its third and fourth derivatives.

GOMPERS, Paul Alan

Born 1964, Cherry Point, NC, USA.


Principal Fields of Interest G1 General Financial Markets; G2 Financial Institutions and Services; G3 Corporate Finance and Governance.


**Principal Contributions** I specialize in research on financial issues related to venture capital and private equity funds as well as start-up, high growth, and newly public companies. After spending a year working as a research biochemist for Bayer Chemical AG, I attended Oxford University on a Marshall Fellowship where I received an MSc in economics, completing my PhD in Business Economics at Harvard University in 1993. I spent two years as an Assistant Professor of Finance at the Graduate School of Business, the University of Chicago, where I created a new course entitled ‘Entrepreneurial Finance and Management’. My course development efforts at the Harvard Business School focus on issues affecting entrepreneurial firms and their investors, sources of financing for emerging companies, and private equity funds. My research focuses on the structure, governance, and performance of private equity funds; sources of financing, incentive design, and performance of private firms; and long-run performance evaluation for private equity investments and newly public companies. My work on private equity funds has examined the relationship between general partners and their portfolio companies. I have investigated factors affecting the structure, timing, and monitoring activities by the general partner and how these factors affect the success or failure of entrepreneurial firms. Similarly, I have examined the relationship between institutional investors and private equity fund managers. This work has examined a large collection of partnership agreements and examined issues of compensation, covenants and restrictions, as well as distribution policy and performance. I have also examined factors affecting the valuation of private equity transactions as well as the risk and return of private equity investments. Other research efforts examine the institutional and market factors that influence the performance of newly public companies.

**GONZALO, Jesús**

**Born** 1959, Soria, Spain.

**Current Post** Prof. Em., Univ. Carlos III de Madrid, Spain, 2001–.


**Principal Fields of Interest** C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models; C5 Econometric Modeling.

**Publications** Articles: 1. ‘Cointegration and aggregation’, *Res. in Econ.*, 47, 1993; 2. ‘Five alternative methods of estimating long run equilibrium relationships’, *J Em,*
Principal Contributions The three main issues in econometric time series are related to: persistence (long-memory), non-linearity (asymmetries) and volatility (extreme values). Until now my research has been concentrated in the first two themes producing the following contributions. On persistence/long-memory: (1) power of the Dickey–Fuller (D–F) test for a unit root is larger than the equivalent t-statistics for a stationary root; (2) asymptotic distributions of the principal component and canonical correlation estimators of a cointegrating vector; (3) the existence of spurious cointegration (with probability equal to one). This shows how important it is to study properly the univariate properties of the time series before analysing their possible cointegration; (4) permanent-transitory decomposition of a cointegrated system, where the permanent as well as the transitory components are observable variables; (5) information criteria to detect the number of threshold regimes to avoid the use of complicated non-standard distributions; (6) a D–F test for fractional processes. With respect to non-linearity/asymmetry: (1) threshold models with unit roots in some regimes (TARUR models), specially designed for variables measured in rates that show certain persistency but have to be stationary; (2) stochastic unit root models where the randomness of the unit root is driven by a threshold economic variable (TARSUR models); (3) information criteria to detect the rank of cointegration; (4) threshold moving average models (TIMA models) designed to identify shocks according their sizes; (5) subsampling confidence intervals for threshold parameters. This method makes it possible to test hypotheses on those parameters without having to solve the nuisance parameter dependency. Recently, I have been working in the last of these issues, volatility-extreme values, proposing a method to determine which extreme values are really extremes.
GOODHART, Charles A.E.


Editorial Duties Treasurer, RESstud, 1968–75.

Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E4 Money and Interest Rates; E5 Monetary Policy, Central Banking, and the Supply of Money.


Principal Contributions After two books on banking history (USA and UK 1890–1913), I concentrated on monetary theory, application and policy, first as an academic, then as adviser to the Bank of England. I was closely involved in formulation and implementation of UK monetary policies from 1968 until 1985; in debates on methods of monetary control I opposed monetary base control. After returning as an academic to LSE, I continued to work on monetary policy and banking issues, but also turned to studies on high-frequency foreign exchange data. I was appointed external member of the Monetary Policy Committee of the Bank of England when it was formed in 1997. Subsequently I worked on financial regulation and systemic stability. I am more widely known for two less serious pieces, first as one of the earliest researchers into the relationship between macroeconomic developments and political popularity, and second as the author of ‘Goodhart’s law’:
any statistical regularity, notably in the monetary area, will break down when pressure is placed upon it for control purposes.

GOODWIN, Barry Kent

Born 1960, Titusville, FL, USA.

Current Post Andersons Endowed Chair, Agric., Environmental and Devlp. Econ., Ohio State Univ., Columbus, OH, USA, 2001–.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics: General; C1 Econometric and Statistical Methods: General; F0 International Economics: General.


Principal Contributions I have published on topics of importance to international trade, agricultural economics, and agricultural policy. My work on market integration is frequently cited. Also I have a long-standing research program investigating risk management and insurance policies in agriculture.
GORDON, Robert James

Born 1940, Boston, MA, USA.


Principal Fields of Interest P5 Comparative Economic Systems; E3 Prices, Business Fluctuations, and Cycles; O4 Economic Growth and Aggregate Productivity.


Principal Contributions Demonstrated that inflation depends both on demand pressure and supply shocks and that excess demand stems from pressures on the central bank to accommodate wage push, supply shocks and fiscal deficits. Validated the greater inertia of inflation in the postwar US than in either the prewar US or in other postwar countries (especially the UK and Japan). Developed unified theoretical and empirical analysis of why US inflation was so high in the 1970s and so low in the 1990s. Path-breaking research on price measurement for durable goods showed an upward bias in official price indexes of 3 percent per year and developed new techniques to adjust for improvements in performance and energy efficiency. Demonstrated that matched-model price indexes miss substantial components of price increases and decreases captured by hedonic indexes, implying that official price indexes are biased upward for some products and downward for others. Developed a sceptical interpretation of the late 1990s ‘New Economy’ and revival in productivity growth, arguing that
the former was a minor invention in historical context and that the latter was partially exaggerated by temporary cyclical effects.

GORDON, Roger Hall

**Born** 1949, Oak Bluffs, MA, USA.

**Current Post** Prof. Econ., Univ. California, San Diego, La Jolla, CA, USA, 2001–.


**Principal Fields of Interest** H2 Taxation, Subsidies, and Revenue; F2 International Factor Movements and International Business; P5 Comparative Economic Systems.


**Principal Contributions** Much of my research has explored various effects of the corporate income tax, for example: (1) forms of compensation change in response to corporate vs. personal tax rates; (2) firms shift between corporate vs. noncorporate form in response to rate differences; (3) firms’ financial policy changes in response to domestic vs. foreign corporate tax rates as well as domestic personal vs. corporate tax rates; (4) the mix of industries in a country changes in response to foreign vs. domestic corporate rates by industry; (5) the use of portfolio vs. direct investment responds to the corporate vs. personal tax treatment of foreign-source income; and (6) the amount of entrepreneurial activity is affected by personal vs. corporate tax rates. These effects are in addition to those on investment and savings. In fact, exist-
ing taxes on capital income appear to collect no revenue on net, relative to cash-flow taxes at the same rates. My research has also examined the optimal use of corporate tax. While the incidence of the tax falls entirely on labor in a small open economy if capital is freely mobile, results change if capital is less mobile. How they change depends on the reasons for the immobility, e.g., asymmetric information between countries, or a hedging role for domestic equity. If a country is not a price taker in the world capital market, then the corporate tax can also be used to exploit this market power. I have also examined the use of factor apportionment and border corrections to eliminate the gains from transfer pricing. Some of my research has also examined firm and government behavior in transition economies. Among the topics studied have been: productivity growth in Chinese firms; effects of the tax structure on government incentives; and effects of controls on relative wage rates on labor flows among firms.

GORTON, Gary n.e.

GOTTSCALK, Peter n.e.

GOULDER, Lawrence H.

Born 1951, Cleveland, OH, USA.


Principal Contributions Much of my work examines the environmental and economic impacts of US and international environmental policies. I often employ a general equilibrium analytical framework that integrates the economy and the environment and links the activities of government, industry, and households. My work has helped bring out how environmental policy instruments such as pollution quotas, permits and taxes affect factor markets throughout the economy. A major theme of this work is that environmental policy instruments interact significantly with pre-existing factor taxes (such as income and sales taxes) and that, as a result, some of the most important impacts of environmental policies emerge in factor markets. This general equilibrium analysis yields very different cost estimates for various environmental policies, relative to the estimates that would emerge from sector-specific or partial equilibrium studies. In addition, the general equilibrium approach changes significantly the rankings of alternative environmental policy approaches in terms of cost-effectiveness.

GRAMLICH, Edward Martin

Born 1939, Rochester, NY, USA.
Current Post Governor, Fed. Reserve Bd, Washington, DC, USA, 1997–.


Principal Fields of Interest

E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook; E0 Macroeconomics and Monetary Economics: General.

Publications


Principal Contributions

My early work was in macroeconomics, building a small macro model for my thesis and then being part of a project to build a large one at the Federal Reserve Board. One of the interesting projects I became involved in was the question of how to model the fiscal behaviour of state and local governments – a framework I developed then and have used since to look at all kinds of questions regarding grant behaviour, conversion of grants to block form, public employment and swings in state and local saving. Later I became interested in questions of poverty and unemployment and took a job at the Office of Economic Opportunity. Ideas for papers on the distributional impact of the business cycle and minimum wages originated there. In addition, I was introduced to the fascinating question of programme evaluation, first with the performance contracting experiment and later continuing with my benefit–cost text. This focuses particularly on the evaluation of distributitional programmes. These earlier interests continued when I moved to Michigan, and were supplemented by a new one. Tax cut fever was in the air at the time, and I began
working on the analytics of tax limitation amendment, with new colleagues Paul Courant and Daniel Rubinfeld. Later on my career was enriched by public services. I served as Deputy and Acting Director of the Congressional Budget Office in 1986–87, and working on budget deficits and national survey preoccupied me for some years later. From 1994–96 I chaired the Quadrennial Advisory Council on Social Security and these issues became important to me thereafter. In late 1997, I was appointed as a Governor of the Federal Reserve Board in Washington, DC, ironically the same agency as for my very first professional job.

GRANGER, Clive William John

Born 1934, Swansea, Wales.

Current Post Prof. Econ., Univ. California, San Diego, CA, USA, 1974–..


Degrees BA (Maths), PhD (Stats) Univ. Nottingham, 1955, 1959.


Principal Fields of Interest C4 Econometric and Statistical Methods: Special Topics; G1 General Financial Markets; B4 Economic Methodology.


Greenaway, David

Born 1952, Glasgow, UK.


Principal Fields of Interest F1 Trade; F2 International Factor Movements and International Business; O1 Economic Development.

Publications Books: 1. International Trade Policy: From Tariffs to the New Protectionism (Macmillan, 1983); 2. The Economics of Intra Industry Trade (with C.R.


Principal Contributions Broadly speaking my work falls into three areas: international trade, economic development and globalisation and labour market adjustment. A major research theme with respect to the first has been monopolistic competition and international trade in general and the determinants of intra-industry trade in particular. In collaboration with Chris Milner, I have contributed to the measurement and explanation of the phenomenon in the UK and elsewhere, helping to demonstrate that the growth and pattern of the phenomenon is determined by inter-country and inter-industry differences. My work on trade and development has focused principally on the structure and pattern of intervention and its impact on economic performance. As well as investigating the impact of intervention on relative incentives in a theoretical context, a range of papers have estimated the impact of intervention across a number of developing countries. These have contributed to the literature targeted at highlighting the costs of protection. Present work, supported by a Leverhulme Programme Grant, focuses on the impact of globalisation on a range of economic processes including adjustments in labour markets. Principal current interests are the characteristics of firms that enter and exit export markets and, more generally, firm level adjustment to trade and foreign direct investment.
GREENWALD, Bruce C.N.

Born 1946, New York, NY, USA.

Current Posts Heilbrunn Prof. Fin. Econ., Columbia Univ., NY, USA, 1991–.


Principal Fields of Interest D8 Information and Uncertainty; G2 Financial Institutions and Services; D2 Production and Organizations.


Principal Contributions My work arises from the revolutionary change in economics in the late 1960s and early 1970s when economists began to look at information (who knows what?) as more than just another kind of uncertainty. By examining the consequences of the distribution of information rather than just the amount available, economists were able to substantially extend the reach of useful economic analysis, in particular this was true of situations in which some agents are better informed than others (asymmetrical information distribution). In these situations, agents’ actions may reveal information to other agents that fundamentally undermines the efficacy of the original action. The action with which my research has been concerned is the simple decision to sell by a supplier with superior information. This may involve a firm deciding to sell additional equity at the going market price or an individual deciding to leave one firm for another at the wage available to him or her in the market or a wide range of insurance situations where a well-informed agent offers to sell some of the risks (and rewards) of his or her actions to a less well-informed buyer. In every case the fact of sale conveys strong negative information and this will tend to discourage both buyers and sellers. The resultant breakdowns of the markets involved either wholly or partially mean that economic prescriptions based on the assumption of free, unfettered exchange are no longer applicable. The consequences of this failure are pervasive. Most important, firms cannot in general share risks by selling appropriately designed financial instruments. They must, therefore, absorb these risks through the
cushion provided by their existing stocks of uncommitted cash flow (wealth). The greater firm wealth, the greater firm activity and the more rapidly they are prepared to take advantage of risky new opportunities. Losses in firm wealth reduce such activity leading to both amplified cyclical fluctuations in output, price rigidities and lower overall productivity growth. These phenomena also provide a new interpretation of the role and efficacy of monetary policy.

GREENWOOD, Jeremy n.e.

GREGG, Paul Anthony

Born 1960, Shrivenham, Oxfordshire, UK.


Degrees BA Kent Univ., 1982; MSc (Ind. Relations) LSE, 1985.

Principal Fields of Interest J6 Mobility, Unemployment, and Vacancies; I3 Welfare and Poverty; J1 Demographic Economics.


Principal Contributions Major contributions have been the development of
the concept and analysis of ‘workless households’ and showing the divergence between individual and household measures of worklessness. Most of my other research is applied analysis of developments in the UK labour market of unemployment, wages, etc. In particular the evidence of scarring effects from unemployment on people’s future wages and employment chances including the cost of job loss. In a related field the rise of child poverty and the relationships between family income in childhood and child wage and other outcomes have been studied. Perhaps as important has been policy work as a member of the Council of Economic Advisers at the Treasury. Here I have worked with teams developing the New Deal programmes with a particular responsibility for the Gateway element and the extension of these programmes to lone parents, the disabled and partners of claimants. Also I have worked on the government’s tax credits and welfare reform agendas. Policy advice was also influential in the development of the government’s assault on child poverty and attempts to widen opportunity, including the Educational Maintenance Allowance and the Sure Start programmes.

GREGORY, Allan W. n.e.

GREGORY, Robin Scott

Born 1950, Berkeley, CA, USA.
Current Post Sr Researcher, Decision Res., Vancouver, BC, Canada and Eugene, OR, USA, 1984–.

Degrees BA Yale Univ., 1972; MA (Natural Resource Econ.), PhD (Econ. and Psychology) UBC, 1974, 1982.

Principal Fields of Interest Q2 Renewable Resources and Conservation, Environmental Management; Q3 Nonrenewable Resources and Conservation; D7 Analysis of Collective Decision-Making.


**Principal Contributions** My work seeks to bring to economics a more accurate description of what people value and how they make choices under uncertainty, and then to combine this with prescriptive advice to decision makers about ways to address difficult value tradeoffs and to create policy alternatives that will best meet these personal and social objectives.

**GREIF, Avner**

**Born** 1955, Tel Aviv, Israel.

**Current Post** Bowman Family Endowed Prof. Humanities and Sc., Dept Econ., Stanford Univ., Stanford, CA, USA, 2001–.


**Principal Fields of Interest** N0 Economic History: General; C7 Game Theory and Bargaining Theory.


Game theory has provided a new way to study institutions, their historical development, and their influence on economic, social, and political outcomes. It enables departing from and extending the long tradition in economics and political science of studying institutions as laws and rules specified and enforced by the state. Studying such state-mandated institutions limits our ability to study the institutional foundations of the state and non-state-mandated institutional foundations of exchange. My theoretical and empirical research has utilized this analytical framework together with primary sources to conduct a comparative analysis of institutions. I have particularly concentrated on institutional foundations of markets and states in past and contemporary societies. These analyses highlighted, in particular, the role of social norms in guiding behavior, the cultural foundations of market institutions, and institutional remedies for the ability to use coercive force to allocate resources.

**Principal Contributions** My research largely deals with the quantifiable relations between politics and the macroeconomy. One strand of this work (articles 1–3, 6, 12, 15, 17, 18) investigates the effects of political incentives on macroeconomic policymaking. Here I show that the Federal Reserve is not independent of politics. Another strand (articles 4, 8, 11, 14, 16, 19) studies the effect of government policies on the economy, including the effect of government on secular economic growth, the relationship between money growth and interest rates, and the causes and effects of inflation uncertainty. Finally I study the power of economic reasoning to explain political phenomena (articles 5, 7, 9, 10, 13, 20).

**GRILLI, Vittorio** n.e.

**GRINBLATT, Mark** n.e.

**GROGGER, Jeffrey**

**Born** 1959, Hartford, CT, USA.


**Principal Fields of Interest** J0 Labor and Demographic Economics: General; I0 Health, Education, and Welfare: General; I3 Welfare and Poverty.


**Principal Contributions**
Most of my work deals with problems of the low-income population. Within this broad area, I have focussed primarily on the economics of crime; the causes and consequences of early childbearing; and most recently, US welfare reform. In the economics of crime, I have written on the effects of capital punishment; on the consequences of crack cocaine; and the effectiveness of anti-gang policies. I also pointed out that economic theory would suggest (and the data confirm) that the link between the job market and crime should work through wages, rather than unemployment, in contrast to much previous research in the area. Regarding early fertility, S. Bronars and I devised a means of using twin births to provide estimates of the effects of unwed childbearing that were not confounded by unobserved preferences for leisure. We also noted that twin births could be used to construct a natural experiment to address the contentious question of whether welfare begets welfare babies. More recently, I have focussed on the effects of welfare time limits, which are arguably the most fundamental of the welfare reforms imposed in the US during the 1990s. Theoretical and empirical work (some with C. Michalopoulos) indicates that time limits reduce welfare receipt the most among families with the youngest children, which may have implications for the well-being of children in poor families.

**GROSHEN, Erica Lynn**

**Born** 1954, Wiesbaden, Germany.

**Current Post** Asst Vice Pres., Res. and Market Analysis Group, FRB, New York, NY, USA, 1984–.


Principal Contributions My research focusses on employers in the labor market. Until the 1980s, most economics stressed the effects of demographic factors and training on wages and other outcomes. Employers were relatively neglected, both because commonly-used data sets provided little information on employers, and in perfectly competitive markets, apparent wage differences among employers are either temporary or mis-measured compensation or human capital. My research documents the extent, pervasiveness and permanence of wage variations among employers, and explores alternative explanations for their existence. I estimate that the standard deviation of wages among employers within industry is 10–15 percent of the mean – as large as industry and union/non-union wage variation. These differentials are highly persistent and linked to observable establishment characteristics (e.g., product, technology, union affiliation, and proportion of females). However, they are apparently not due to errors or sorting by measures of human capital (education, age, or tenure). This research is possible because I have acquired data gathered from employer records. While employer salary surveys have limitations, their virtues have been largely unexploited. A related paper finds that over half of the gender wage gap is due to segregation among occupations, while the rest is due to segregation among employers. Another finds that senior workers lose some of their employer-specific differentials after a hostile takeover. I also find that the 1980s increase in wage inequality was due largely to increasing occupational wage differen-
tials, not employer or individual disper-
sion. Another extension contrasts em-
ployer and occupational wage changes in
theories of the welfare effects of infla-
tion. Previous research suggests that low
inflation rates are harmful because higher
nominal wage growth adds beneficial
‘grease’ to relax downward nominal wage
rigidity. My work supports that finding
but also finds that low inflation avoids
disruptive, unintended wage variations
(‘sand’) from mistakes or symmetrical
rigidities. Thus, ‘grease’ and ‘sand’ ef-
fects can offset each other at low levels of
inflation.

GROSSKOPF, Shawna Patricia

Born 1950, Detroit, MI, USA.

Current Post Prof. Econ., Oregon State
Univ., Corvallis, OR, USA, 1998–.

Past Posts Assoc. Prof. Econ., Prof.
Econ., Southern Illinois Univ., 1977–87,
1987–98.

Degrees BA Kalamazoo Coll., 1972;
MS, PhD Syracuse Univ., 1977, 1977.

Offices and Honours Mattersdorf
Award, 1977; Kerstin Hesselgren Prof.,
Sweden, 1996; Hon. Dr, Gothenburg

Editorial Duties Ed. Bds, J. Produc-
tivity Analysis, 1992–, Health Care Mgmt
Sc., 1997–.

Principal Fields of Interest D2 Pro-
duction and Organizations; I1 Health; H7
State and Local Government; Intergov-
ernmental Relations.

Publications Books: 1. The Measure-
ment of Efficiency of Production (with R.
Färe, C.A.K. Lovell), (Kluwer-Nijhoff,
1985); 2. Cost and Revenue Constrained
Production, Bilkent University Lecture se-
ries (with R. Färe), (S-V, 1994); 3. Pro-
duction Frontiers (with R. Färe, C.A.K.
Lovell), (CUP, 1994); 4. Intertemporal Pro-
duction Frontiers (with R. Färe), (Kluwer-
Nijhoff, 1996); 5. Index Numbers: Essays
in Honor of Sten Malmquist (ed. with R.

Articles: 1. ‘The relative performance
of publicly owned and privately owned
electric utilities’ (with R Färe, J Logan), J
Pub E, 26, 1985; 2. ‘The role of the ref-
erence technology in measuring productive
efficiency’, EJ, 96, June 1986; 3. ‘Meas-
uring plant capacity utilization, and tech-
nical change: a nonparametric approach’
(with R. Färe, E. Kokkelenberg), JER, 30,
1989; 4. ‘Economies of scope in the pro-
vision of local public services’ (with S.
Yaisawarng), NTJ, 43, March 1990; 5. ‘A
distance function approach to price effi-
ciency’ (with R. Färe), J Pub E, 43, 1990;
6. ‘Local public sector bureaucrats and
their input choices’ (with K. Hayes), JUE,
33, 1993; 7. ‘Economics of diversification
in the banking industry: a frontier
approach’ (with G. Ferrier, K. Hayes, S.
Yaisawarng), JME, 31, 1993; 8. ‘Productiv-
ity growth, technical progress and effi-
ciency change in industrialized countries’
(with R. Färe, M. Norris, Z. Zhang), AER,
84, March 1994; 9. ‘Nonparametric tests
of regularity, Farrell efficiency and good-
ness-of-fit’ (with R. Färe), J Em, 69, 1995;
10. ‘A comparison of shadow prices and
reimbursement rates of hospital services’
(with J. Clement, V. Valdmanis), Annals
OR, 67, 1996; 11. ‘Budget-constrained
frontier measures of fiscal equality and
efficiency in schooling’ (with K. Hayes,
1997; 12. ‘Productivity and efficiency in
the US: effects of business cycles and pub-
llic capital’ (with D. Boissio, K. Hayes),
RSUE, 30, 2000; 13. ‘On the determin-
ants of school district efficiency: com-
petition and monitoring’ (with K. Hayes,
‘Accounting for air pollution emission in
measuring state manufacturing productiv-
ity growth’ (with R. Färe, C. Pasurka), J
Principal Contributions My graduate training was in state and local public finance, financed in part by a grant from the Ford Foundation to study the economics of education. I consider my contributions in state and local finance to be in merging modern microeconomic theory and performance measurement to issues in performance of the public sector, including local governments, hospitals, schools, etc. My work in the area of performance measurement has led to both theoretical and empirical contributions in the area of growth and development, performance in banking, electric utilities, etc. Another area of interest has been in the modelling and estimation of performance in the presence of undesirable byproducts.

GROSSMAN, Gene M.

Born 1955, New York, USA.


Degrees BA Yale Univ., 1976; PhD MIT, 1980.


Principal Fields of Interest F1 Trade; D2 Production and Organizations; D7 Analysis of Collective Decision-Making.


Principal Contributions My early work focussed on the positive and normative effects of trade policy. I was interested in the effects on resource allocation of non-standard forms of protection, such as border tax adjustments, domestic content requirements, and other offshore assembly provisions, and in evaluating various efficiency arguments for trade intervention in the presence of market distortions such as imperfect competition, missing insurance markets, and asymmetric information in infant industries. In a series of empirical studies I also attempted to assess the impacts of import competition on wages, employment, and returns to capital in various industries in the United States. During the late 1980s and early 1990s I collaborated with Elhanan Helpman on research into the determinants of aggregate growth. Our work cast industrial innovation as the engine of long-run growth and examined the market incentives for innovation in general equilibrium. A major goal of this project was to understand the implications of international trade and trade policy for growth and welfare in an open, innovating economy. Shortly thereafter I collaborated with Alan Krueger on an evaluation of the environmental impacts of a potential North American Free Trade Association (NAFTA) agreement. Using cross-national and time-series data, we identified an inverted U-shaped relationship between the national per capita income and the concentration of certain air pollutants. In subsequent research, we generalized our findings to other types of environmental degradation. In the mid- to late-1990s, Helpman and I examined the interaction between politicians, special interest groups and voters that determines a nation’s trade and other redistributive policies. Most recently, we have been studying outsourcing relationships and the determinants of the organizational form of firms in international equilibrium.

GROSSMAN, Michael

Born 1942, New York City, NY, USA.


Editorial Duties Assoc. Ed., JHE, 1982–.

Principal Fields of Interest I1 Health; J1 Demographic Economics; D1 Household Behavior.

Publications Books: 1. The Demand for Health: A Theoretical and Empirical Investigation (Columbia Univ. Press for NBER, 1972); 2. The Economic Analysis


**Principal Contributions** My research has focussed on economic models of the determinants of adult, child, and infant health in the US; economic approaches to cigarette smoking, alcohol use, and the use of illegal drugs by teenagers and young adults; empirical applications of rational addiction theories; and the determinants of interest rates on tax-exempt hospital bonds. My work on adult health used human capital theory and the household production function model of consumer behavior to construct and estimate a model of the demand for health. Empirically, I established that years of formal schooling completed is the most important correlate of a variety of end result measures of health and that the schooling effect is causal. My research on child health identified mother’s schooling as the key home environmental variable contributing to improved health outcomes. My studies of infant health showed how policies with regard to abortion, family planning services, medical care services for low-income women and the rapid growth of neonatal intensive care impact on low birthweight and infant mortality. My investigations of the demand for cigarettes, alcohol, cocaine, and marijuana by teenagers and young adults established that these behaviors are quite sensitive to price. I also helped demonstrate the empirical
relevance of the rational addiction approach to the consumption of these items by showing that current consumption is negatively related to future prices as well as to current prices. This implies that consumers take account of the harmful future consequences of their current decisions. My work on tax-exempt hospital bonds suggested that issuance of these bonds in a competitive environment has a substantial negative effect on their interest rates.

GROSSMAN, Sanford Jay

Born 1953, Brooklyn, NY, USA.


Principal Fields of Interest G0 Financial Economics: General; F4 Macroeconomic Aspects of International Trade and Finance; C0 Mathematical and Quantitative Methods: General.


**Principal Contributions** Understanding the informational role of prices, corporate structure, contracting, and trading strategies.

GRUBER, Jonathan H. n.e.

GUILKEY, David K. n.e.

GÜL, Faruk n.e.

GÜTH, Werner n.e.
H

HAAS, Peter M. n.e.

HADDAD, Lawrence James

Born 1959, Johannesburg, South Africa.


Degrees BSc (Food Sc. and Food Econ.) Univ. Reading, 1980; MA (Resource Econ.) Univ. Massachusetts, 1982; PhD (Food Res.) Stanford Univ., 1988.


Principal Fields of Interest O1 Economic Development; D1 Household Behavior; I0 Health, Education, and Welfare; General.


Principal Contributions Much of my work has been on testing the unitary model of the household and identifying its limitations in modelling individual behaviour such as investment in children’s education and nutrition. Income is not pooled within households and income in the hands of women tends to have a larger impact, controlling for overall household income, on outcomes in the areas of health, food intake and education. The work has also illustrated the returns to women and to their households of improving women’s ability to get access to assets. I have also spent a great deal of time working to establish the strength of the empirical causal links between income and consumption (not as strong as one might think), income and nutrition (same story, even in the long run), consumption and nutrition (strong when complementary inputs such as clean water, care and health inputs are available), and nutrition and income (adult nutrition has a positive, large and significant effect on work that rewards physical capacity and labour productivity). More recently I have become interested in social capital issues (Does it work? How does it work? How to measure it? What can public policy do to stimulate it?) and the role it may or may not play in the movement of households out of poverty.

HAFER, Rik W. n.e.

HAKKIO, Craig S. n.e.

HALL, Alastair Robert

Born 1959, Woking, Surrey, UK.

Current Post Prof. Econ., North Carolina State Univ., Raleigh, NC, USA, 1992–.


Degrees BA (1st Class Hons), PhD Warwick Univ., 1981, 1985; MSc Southampton Univ., 1983.

Honours Outstanding Teacher Award, Coll. Mgmt, North Carolina State Univ., 2002.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling.

Principal Contributions

My principal contributions have been to the literatures on unit root testing in univariate time-series models and inference based on Generalized Method of Moments (GMM) estimators. I have made two main contributions to the literature on unit root testing in autoregressive moving average (ARMA) models. First, I showed that an instrumental variable estimator can be used to perform inference regarding the presence of a unit root. Second, I considered the impact of using the data to select the order of the ARMA model on the limiting distribution of the unit root test, and provided conditions under which this limiting distribution is unaffected. My work on GMM has focussed on developing or analyzing statistics used to test the types of hypotheses that arise in economic models. Specifically, I have developed methods for testing the structural stability of the model, and also for discriminating between two non-nested models. I also established the consistency of the commonly used overidentifying restrictions test statistic and showed how its large sample behavior is sensitive to the method of covariance matrix estimation.

**HALL, Peter** n.e.

**HALL, Robert Ernest**

**Born** 1943, Palo Alto, CA, USA.


**Degrees** BA Univ. California, Berkeley, 1964; PhD MIT, 1967.


**Principal Fields of Interest** E3 Prices, Business Fluctuations, and Cycles; J4 Particular Labor Markets; C1 Econometric and Statistical Methods: General.
Publications  


Principal Contributions  
As an undergraduate, I worked with D. Jorgenson; this led to our 1967 joint paper on taxes and investment. This paper develops the ‘Hall–Jorgenson formula’ which shows how tax considerations affect the user cost of capital. I have pursued this line of thought on several subsequent occasions, most recently in my work with A. Rabushka on tax reform, which argues for a straightforward consumption tax. During the early 1970s I worked mainly on labor issues from a macro point of view. I published quite a number of papers that stressed the importance of turnover in understanding unemployment and related issues. I have returned to these topics in the late 1990s.

In 1976 I came up with my single best idea, in thinking about the implications of rational expectations for consumption. The essence of the idea is that consumption is the personal equivalent of a security valuation – it embodies all current information about an individual’s well-being. Like a security valuation, consumption should evolve as a random walk, loosely speaking. My paper on this point stimulated dozens of responses and extensions. In the mid-1980s I launched a research program on the relation between cyclical productivity, market power, and increasing returns. In the 1990s, I pursued topics in the agglomeration of economic activity over time and over space. Recently, I have worked on the role of securities markets in macro models and on fluctuations in labor markets.

HALL, Stephen George Frederick

Born 1953, London, UK.

Current Post  
Prof. Econ., Imperial Coll. Sc., Tech. and Medicine, London Univ., London, UK, 1995–.

Past Posts  

Degrees  

Offices and Honours  
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Principal Fields of Interest A1 General Economics; C1 Econometric and Statistical Methods: General.


Principal Contributions I worked in the areas of macroeconomic modelling, econometrics and the application of techniques to macroeconomic policy formation. In macroeconomic modelling, a range of model solution techniques were developed for models using rational expectations (RE) including the stacked solution algorithm for RE models. In econometrics I was an early contributor to the development of cointegration and the understanding of the identification problem in cointegrated systems.

HALTWANGER, John Couch

Born 1955, Bethesda, MD, USA.


Principal Fields of Interest E2 Consumption, Saving, Production, Employment, and Investment; J2 Time Allocation; Work Behavior; Employment Determination and Creation; L0 Industrial Organization: General.


Articles: 1. ‘Rational expectations and the limits of rationality: an analysis of
heterogeneity’ (with M. Waldman), AER, 75, June 1985; 2. ‘Unemployment rate dynamics and persistent unemployment under rational expectations’ (with M. Darby, M. Plant), AER, 75, Sept. 1985; 3. ‘Limited rationality and strategic comple-
ments: the implications for macroeconom-
struction responses to oil price changes and other shocks’ (with S. Davis), JME, 48, Dec. 2001.

Principal Contributions Most of my work has been related to the adjustment and reallocation dynamics at the micro business level and the relationship of these dynamics to aggregate fluctuations. The book Job Creation and Destruction with Steven Davis and Scott Schuh lays out the measurement methodology, the key issues and the basic facts of the processes of job creation and destruction. It is ap-
parent from the facts presented in this book that modern market economies exhibit tremendous churning with high rates of reallocation of outputs and inputs across businesses. The adjustment dynamics at the micro level are often quite lumpy, which is a theme I have explored with numerous co-authors including Ricardo Caballero, Russell Cooper and Eduardo Engel. In addition, the ongoing process of creative destruction is quite important for understanding aggregate productivity dynamics. Much of aggregate productivity growth is accounted for by the realallo-
cation of outputs and inputs from less pro-
ductive to more productive businesses. The pace and efficiency of this creative de-
struction process potentially varies across time, sectors and countries and depends on the structure and institutions of prod-
uct, labor and credit markets. Understand-
ing the connection between productivity growth and reallocation is the focus of much of my current research including joint work with Martin Baily, Eric Bartelsman, Lucia Foster, C.J. Krizan, and Milan Vodopivec. I have also made con-
tributions to the study of unemployment rate dynamics, the adoption of technol-
ogy and its impact on the demand for skilled workers, the evolution of the distribution of wages, and the role of limited rationality in the behavior of the economy.

HAMAO, Yasushi

Born 1955, Tokyo, Japan.


Principal Fields of Interest G1 General Financial Markets; G2 Financial Institutions and Services; G3 Corporate Finance and Governance.


Principal Contributions My specialities are international finance, particularly Japanese financial markets and institutions. Since institutional characteristics and historical development are quite different from the US markets, Japanese financial markets offer excellent opportunities to test theories and hypotheses in finance that are developed based mostly on the US system. An earlier work of mine was to establish a standard database for the study of Japanese financial markets, which can be used to examine asset pricing models for Japan. L. Chan, J. Lakonishok and I found that firms’ fundamental characteristics such as book-to-market ratio and size are significant in determining a cross-section of stock returns in Japan. Our study predated that of E. Fama and K. French on the US market. In the area of the integration of international capital markets, J. Campbell and I studied long-run capital market integration between the US and Japan. With R. Masulis and V. Ng, I applied conditional heteroskedasticity models to examine short-term dynamics of international stock market returns. We found that there are spillovers in volatility surprises among stock markets in the US, UK and Japan, but this effect is not symmetric. My work with J.P. Mei focuses on the question of whether foreign investors fare better or worse in equity investment in Japan. I have also studied microstructure of the Tokyo Stock Exchange (TSE), which is an electronic limit-order market. My work with J. Hasbrouck was one of the first to examine the characteristics of the TSE trading. Recently, I have extended the analysis using more detailed high-frequency data. In the fixed income securities area, J. Campbell and I looked at the dynamics of interest rates and term structure of interest rates in Japan. N. Jegadeesh and I studied bidding behaviour of different dealers in the Japanese Government Bond primary markets. I have also done research on Japanese corporate finance and banking.

HAMERMESH, Daniel

Born 1943, Cambridge, MA, USA.


Degrees BA Univ. Chicago, 1965; PhD Yale Univ., 1969.

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Principal Fields of Interest J2 Time Allocation; Work Behavior; Employment Determination and Creation; I0 Health, Education, and Welfare: General; J0 Labor and Demographic Economics: General.


Principal Contributions Since my dissertation, I have worked on various aspects of the demand for labor, including: studies of substitution among workers of different demographic groups; attempts to provide better estimates of the aggregate labor demand elasticity; examination of how the minimum wage affects labor demand; the impact of overtime regulations, and applications of these and other estimates to the evaluation of current and proposed labor-market policies; analysis of the nature of adjustment costs in factor demand. Much of my work in the last two decades has been on the allocation of time, including studies of time use, expectations about horizons and their role in life-cycle models. Substantial work also on academic labor markets, particularly on the returns to scholarly productivity and the economic analysis of scholarly interactions.

HAMILTON, James Douglas

Born 1954, Denver, CO, USA.

Current Post Prof. Econ., Univ. California, San Diego, CA, USA, 1992–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; C1 Econometric and Statistical Methods: General.


Principal Contributions My research has played an important role in establishing that oil supply shocks have significant disruptive effects on the US economy. People were quite incredulous when I reported in 1980 that six out of the seven postwar recessions were preceded by a sharp increase in crude oil prices. The position is substantially less controversial today, as we have seen the same relation hold for the three recessions the US has experienced since then. I have also contributed to the evidence that monetary policy prior to 1929, and problems with the international gold standard, were key factors in initiating and propagating the Great Depression. Both positions were again initially somewhat maverick but have now become mainstream consensus.

I also developed an approach to modeling economic time series that exhibit stark changes in regime, proposing the class of Markov-switching time-series models. One application of this method is an algorithm for characterizing the shifts between phases of the business cycle and dating the beginning and end of economic recessions. Other applications include changes in monetary policy or exchange rate regimes, currency crises and describing financial market volatility. *Time Series Analysis* helped synthesize advances in time series analysis over the last quarter century and make these accessible to students and researchers. I am also interested in building statistical descriptions of monetary policy that incorporate institutional details of the US money market. In other work, I have noted that a stock market ‘bubble’ behaves exactly like the response to an unobserved economic fundamental, proposed a common framework and language for nonparametric and parametric statistical inference, allowing the benefits of both approaches to be exploited together, and developed new approaches to forecasting discrete-valued time series,
such as predicting the dates when the Federal Reserve is going to change its target value for the federal funds rate.

HAMILTON, James T.

Born 1961, Alexandria, VA, USA.


Degrees BA (Econ. and Govt, xcl), PhD Harvard Univ., 1983, 1991.


Principal Fields of Interest D7 Analysis of Collective Decision-Making; Q2 Renewable Resources and Conservation; Environmental Management; L9 Industry Studies: Utilities and Transportation.


tion as news: media and stock market re-
ture on North Carolina elections in 1992’ (with H.F. Madd), Public Choice, 87, June 1996; 7. ‘Cleaning up superfund’ (with W.K. Viscusi), Public Interest, 124, Summer 1996; 8. ‘Private interests in “public interest” programming: an economic as-
cies’ (with W.K. Viscusi, P.C. Dockins), JEEM, 34, Nov. 1997; 12. ‘Exercising property rights to pollute: do cancer risks and politics affect plant emission reduc-
tions?’, JRU, 18, Aug. 1999; 13. ‘Are risk regulators rational? Evidence from haz-
ardous waste cleanup decisions’ (with W.K. Viscusi), AER, 89, Sept. 1999; 14.

**Principal Contributions** My research is part of the broad field of political economy which treats outcomes in both politics and economics as the result of individual decisions made under conditions of scarcity. My work focuses on the political economy of environmental regulation and media policy. A common set of questions motivates my empirical work on the environment and media: what explains the magnitude and distribution of externalities, defined as costs or benefits that are not fully reflected in the decisions of producers and consumers? How does the logic of collective action – which indicates that individuals with a common interest may fail to become organized or active in promoting that interest – affect the origin and distribution of externalities? How can the provision of information be used as a policy instrument to deal with externalities? These questions are interesting because they help explain situations where the pursuit of individual self-interest leaves society collectively worse off. They are also important in policy terms, since understanding how property rights are defined and exercised when externalities arise may ultimately lead to improvements in social welfare.

**HAMNETT, Chris**

**Born** 1946, Louth, Lincolnshire, UK.

**Current Post** Prof. Geography, King’s Coll., London, UK, 1996–.


**Principal Fields of Interest** R0 Urban, Rural, and Regional Economics: General; I3 Welfare and Poverty; N3 Labor and Consumers, Demography, Education, Income and Wealth.


**Articles** 1. ‘Housing the two nations: socio-tenurial polarization in Britain, 1961–81’, *Urb Stud.*, 21, 1984; 2. ‘The changing socio-economic structure of
Principal Contributions These are in several main areas. (1) Research on the changing occupational and social structure of London and other global cities. (2) Work on the structure of the British owner-occupied housing market, including analysis of regional house prices. (3) Analysis of the changing structure of the London housing market, including work on flat break-ups (condo conversions) and flat conversion and housing tenure polarisation. (4) Work on the scale, importance and structure of inheritance in Britain, particularly looking at housing inheritance and wealth and equity extraction by elderly home owners. (5) Theoretical work on explanation of gentrification. (6) Critical theoretical work on social polarisation, and the analysis of earnings and income inequality. (7) Analysis of privatisation, focusing on the key role of politics rather than economics.

HANCOCK, Diana n.e.

HANEMANN, W. Michael n.e.

HANNAH, Timothy H.

Born 1944, Aberdeen, WA, USA.


Principal Fields of Interest D4 Market Structure and Pricing; L0 Industrial Organization: General; G2 Financial Institutions and Services.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models.

Peter Phillips, I developed the Fully Modified Estimator for cointegrated regressions. Several of my papers deal with the problem of testing for structural change of unknown timing, including treatment of the case of cointegrating regressions. Other papers have focused on estimation and inference in nonlinear models, focusing in particular on time-series models, including Markov switching and threshold autoregressive (TAR) models. Other recent contributions concern time-series bootstrap methods.

HANSEN, Gary D. n.e.

HANSEN, Lars Peter

Born 1952, USA.

Current Post Homer J. Livingston Disting. Service Prof., Dept Econ., Univ. Chicago, IL, USA, 1998–.


Principal Fields of Interest n.e.


Principal Contributions n.e.

HANSBURN, Henry Baethke

Born 1945, Highland Park, IL, USA.

Current Post Prof. Law, Yale Law Sch., New Haven, CT, USA, 1973–.


**Offices and Honours** Guggenheim Foundation Fell., 1985–86.

**Principal Fields of Interest**

K0 Law and Economics: General; L2 Firm Objectives, Organization, and Behavior; K2 Regulation and Business Law.

**Publications**


**Principal Contributions** Scholarship has focused principally on the law and economics of organizational ownership and structure including, beyond conventional investor-owned firms, nonprofits, mutuals, cooperatives, condominiums, trusts, and partnerships. I have also written on other aspects of basic legal relationships, with a particular focus on property rights.

**HANSON, Gordon Howard**

**Born** 1964, Berkeley, CA, USA.

**Current Post** Prof. Int'l Relations and Pacific Stud., Univ. California, San Diego, CA, USA, 2001–.


**Degrees** AB Occidental Coll., 1986; PhD MIT, 1992.


**Principal Fields of Interest**

F1 Trade; F2 International Factor Movements and International Business; R0 Urban, Rural, and Regional Economics: General.

**Publications**


**Principal Contributions** My research examines how globalization affects labour markets, industry structure, and industry location in national and regional economies. In early work, I found that trade liberalization in Mexico contributed to a shift in industrial activity and regional wage differentials in favour of locations with relatively good access to foreign markets. I also found that regional wage patterns in the US and Mexico are consistent with economic geography models based on increasing returns to scale. In later work with R. Feenstra, I have estimated the impact of technological change and international trade on the structure of wages in the US and Mexico. We found that in both countries foreign outsourcing has contributed to an increase in the relative demand for and relative wages of skilled labour. In the US, the wage impacts of foreign outsourcing were smaller than those of technological upgrading. In work with A. Spilimbergo, I have examined illegal immigration in the US from Mexico. We found that attempted illegal immigration from Mexico is highly responsive to changes in Mexican wages and that border enforcement is ineffective at impeding illegal entry. In work with N. Gandal and M. Slaughter, I have examined how regions and nations adjust to labour-supply shocks. In the US and Israel, we found that adjustment occurred primarily through open-economy mechanisms (trade, factor, or technology flows) and not closed-economy mechanisms (region or country-specific wage changes).

**HANUSHEK, Eric Alan**

**Born** 1943, Lakewood, OH, USA.


Degrees BS USAF Acad., 1965; PhD MIT, 1968.


Principal Fields of Interest 12 Education; H0 Public Economics: General; J0 Labor and Demographic Economics: General.


Principal Contributions My work has involved empirical public finance and labor economics. Much of it has had a focus on behavior that is directly relevant to public policy issues with a special emphasis on education problems. The education analysis has been most focussed on production relations in schools and the implications of empirical findings for policy. The key insight developed in a series of papers is that variations in resources devoted to schools are not closely related to student performance. This finding has immediate implications for school policy including the structure of financing arrangements for schools. It also has implications for the more general analysis of public programs, where outcome measures are frequently lacking and in-
puts are used as a measure of program quality. These analyses have been developed both in the US and in developing countries, where many similarities to developed countries are found. Other investigations have centered on the determination of individual incomes and wages, housing policy, social experimentation, statistical methodology, and the economics of discrimination. The thrust of most of the analysis has been to relate economic analysis and findings to understanding better the underlying behavior and the appropriate scope for governmental policy. My academic work has been complemented by direct involvement in government policy making. Early in my career I worked at the Council of Economic Advisers and the Cost of Living Council. Subsequently I returned to government as Deputy Director of the Congressional Budget Office. These positions both provided me with insights about government policy making and allowed me to apply economic analysis to policy development.

HARDLE, Wolfgang n.e.

HARDOUVELIS, Gikas A.

Born 1955, Poulithra, Arcadia, Greece. 


Principal Fields of Interest G1 General Financial Markets; E4 Money and Interest Rates; F3 International Finance.


**Principal Contributions** I have been interested in applied policy questions in the area of monetary economics and finance. In the mid-1980s I analyzed the issue of Federal Reserve credibility as an inflation fighter by examining the way markets responded to various Fed announcements. It turns out that credibility does not come easily. It also turns out that in the 1980s, a time when most macroeconomists discounted the presence of a liquidity effect, market participants perceived its existence. The information content of the term structure of interest rates is another area I have focussed on, particularly its predictive power for real economic activity. The behavior of the stock market is another area of interest. I developed a new test for rational speculative bubbles and applied it to Japan. But most of my work concentrated on the role of a long-forgotten policy tool: margin requirements, that is, official restrictions on broker financing for the purpose of buying stocks. In today’s environment of looking for ways to control not only inflation, but asset price bubbles as well, margin requirements are bound to return to center stage. In a series of papers, I have shown that changes in margin requirements are effective in controlling excess stock price volatility. Article 20 further shows that the optimal policy rule is to reduce margins during times of crises and re-instate them at higher levels during good times. In the past three years I have become a general economist, having to provide economic analysis and political advice on a broad range of topics from energy and telecom liberalization, to labor market reforms, productivity issues, competitiveness, bureaucracy minimization, tax simplification, financial regulation, etc.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D2 Production and Organizations; D8 Information and Uncertainty.


Principal Contributions Although I began my career studying monetary theory, I quickly switched to the economics of information, contracts and agency. My earliest contributions in this area (with Artur Raviv) were to show how the tradeoff between risk aversion of an agent and the need to provide incentives determines optimal agency contracts. I then developed a version of the ‘Revelation Principle’ (with
Robert Townsend) and applied the technique to the design of auctions, monopoly pricing (both with Artur Raviv), and intra-firm resource allocation (with Raviv and Charles Kriebel). As my interest shifted toward corporate finance, Raviv and I showed how some anomalies in the way firms and markets behave with respect to calling of convertible debt could be explained by asymmetric information. I have also made contributions to explaining the design of securities, especially their voting rights, capital structure, securities pricing and volume, and capital budgeting schemes (all with Raviv), the evolution of wages (with Bengt Holmström), and, lately, the design of organizations (with Raviv).

HARRIS, Richard Ian David


Current Post Prof. Econ., Dept Econ. and Fin., Univ. Durham, Durham, UK, 2001–.


Principal Fields of Interest L1 Market Structure, Firm Strategy, and Market Performance; O3 Technological Change; R0 Urban, Rural, and Regional Economics: General.


Principal Contributions In (mostly) earlier work I made contributions to evaluating differences in the performances of UK regional economies, including a book based on my PhD thesis. More recently I have worked on plant-level data looking at such issues as what determines productivity differences in UK manufacturing, the impact of foreign direct investment, and the entry/exit impacts of firm turnover. Occasionally I have done some applied econometric work based around unit root and cointegration modelling.

HARRISON, Ann E. n.e.

HARRISON, Bennett

Born 1942, Jersey City, NJ, USA.

Current Post Prof. Polit. Econ. and Planning, MIT, Cambridge, MA, USA, 1983–.


Principal Fields of Interest 00 Economic Development, Technological Change, and Growth: General; J4 Particular Labor Markets; R0 Urban, Rural, and Regional Economics: General.


Principal Contributions
I have always been interested in the spatial aspects of industrial and employment change: how they affect workers of different races and genders, and the economic vitality of local communities. My first book was a study of the Black ghetto in New York City called Harlem. Two years later, my doctoral dissertation was published, which extended my researches on the social and economic organisation of the urban ghetto to comparative analyses of twelve such areas located across the country. I came to the Urban Planning Department of MIT in 1973 to develop a new curriculum in the field of ‘community economic development’. Studying the poor, their neighbourhoods, and even their cities as a way of trying both to understand and to remedy their condition seemed increasingly inadequate; the problem lay in the development and functioning of broader, more fundamental social and political institutions. In 1974 and 1975, I became a consultant to the Massachusetts Legislature and helped to formulate a series of recommendations on state economic policy designed to facilitate the rebuilding of a balanced economic base. I then obtained a research grant to conduct more extensive inquiries into the changing economic structure of the Massachusetts and New England economies. During the course of the New England research, Barry Bluestone and I were approached by a consortium of major unions (principally the United Auto Workers) and public policy organisations and asked to conduct an investigation of the magnitude and consequences of plant shutdowns in the US. This led to the most exciting research effort of my life, which culminated in the publication in 1982 of our book, The Deindustrialization of America.

HARRISON, Glenn W. n.e.

HART, Oliver Simon D’Arcy


Principal Fields of Interest D2 Production and Organizations; G3 Corporate Finance and Governance; K2 Regulation and Business Law.


Principal Contributions I have worked on contract theory, the theory of the firm, the determinants of corporate financial structure, bankruptcy reform and privatization.

HARTWICK, John Martin

Born 1944, Arvida, Quebec, Canada.

Current Post Prof. Econ., Queen’s Univ., Kingston, Ontario, Canada, 2002–.


Degrees BA Carleton Univ., 1966; PhD Johns Hopkins Univ., 1969.

Honours Phi Beta Kappa, 1969.


Principal Fields of Interest O1 Economic Development; D8 Information and Uncertainty; Q3 Nonrenewable Resources and Conservation.


**Principal Contributions** My work on investing exhaustible resource rents in new produced capital has attracted the most attention. A recent paper with Kirk Hamilton provides an interesting extension to economies not on constant consumption trajectories. I have devoted much attention to accounting issues involving exhaustible resources. Measuring economic depreciation has been a focus. Comparing the energy accounts in classical mechanics to those for aggregate economies has preoccupied me. Quite natural entities such as capital, consumption and change in capital value figure in the physics accounts. And I have devoted much attention to modeling countries ‘living off’ the exports of natural resources such as timber, oil or plain agricultural commodities.

**HARVEY, Andrew Charles**

**Born** 1947, Cottingham, Yorkshire, England.

**Current Post** Prof. Em., Univ. Cambridge, Cambridge, UK, 1996–.


**Degrees** BA Univ. York, 1968; MSc (Stats) LSE, 1969.

**Offices and Honours** Fell., Em Soc, 1984, BA, 1999.

**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models.

**Publications**


**Principal Contributions** My main contributions have been in time-series econometrics. I have been particularly concerned with the development and application of state space methods.
HAUSER, John Richard

Born 1949, Scranton, PA, USA.


Principal Fields of Interest M3 Marketing and Advertising; D1 Household Behavior.


**Principal Contributions** My primary contributions are in the area of marketing science and, in particular, the design and marketing of new products, the development of products that are profitable because they satisfy customer needs, strategies to defend profitability in light of new entrants, and methods to test the market potential of new products. I have also contributed to the methodological literature with respect to measuring consumer satisfaction, consumer needs, consumer perceptions, consumer preferences, and consumer risk preferences and with respect to identifying market structure and testing quantal choice models. I have been called on to testify with respect to marketing research and other methodological issues relating to consumer measurement. Another line of research includes metrics for research and development and for product development and, in particular, I have been able to develop practical means to use agency theory to set the metrics to enhance profitability. My research on product development has also led me to the study of consumer behavior including how consumers allocate their budgets, how consumers allocate their time when searching for information, how consumers use agendas to effect decisions, and how consumers simplify their decision processes with consideration sets.

**HAUSMAN, Jerry Allen**

**Born** 1946, Weirton, WV, USA.

**Current Post** MacDonald Prof. Econ., MIT, Cambridge, MA, USA, 1992–.


**Principal Fields of Interest** D0 Microeconomics: General; C1 Econometric and Statistical Methods: General; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.


Principal Contributions  My major research activity has been the methodological development and application of econometrics. I have done research into the simultaneous equations model, the discrete choice model, panel data, and weak instruments to develop new econometrics models and methods to overcome problems which existed in each of these areas. I have also been interested in tests of the adequacy of the specification of econometric models. I have developed specification tests which can be used in a variety of circumstances to test for correct specifications. I have done research on the effects of errors in variables on econometric estimators. I have been engaged in the development of estimation techniques which overcome or alleviate this problem. Another area of methodological and applied interest has been the design and analysis of social and economic experiments. I have done research on the negative income tax experiments and also experiments in electricity and telephone pricing and electricity conservation activities. One primary area of applied research has been in public finance. I have estimated models of labour supply which explicitly take account of the tax system which creates nonlinear budget sets. My research has indicated the potential of large deadweight loss from the current US income tax system. I have also considered the effects of the welfare system in the US and social security on economic activity including labour-force participation, retirement behaviour, and savings behaviour. My applied research has also led to the development of empirical methods to calculate exact consumers’ surplus and deadweight loss to make welfare calculations. The research indicates that approximate methods are inadequate for empirical measurement of deadweight loss. Most recently, I have been developing methods to estimate the value of new goods to consumers and the effect of regulation on the introduction of new goods. I have also investigated bias in the CPI from failure to introduce new goods or account for quality change using correct methods.
HAVEMAN, Robert H.

Born 1936, Grand Rapids, MI, USA.

Current Post John Bascom Emeritus Prof. Econ., Univ. Wisconsin-Madison, Madison, WI, USA, 1970–.


Degrees BA Calvin Coll., 1958; PhD Vanderbilt Univ., 1963.


Principal Fields of Interest H0 Public Economics: General; I3 Welfare and Poverty; H6 National Budget, Deficit, and Debt.


Principal Contributions My research over the past decade has been in the general area of applied welfare economics. In this field, I have made contributions to the development of microdata simulation
modeling, measuring poverty and economic wellbeing, and analyzing the determinants of changes in poverty and earnings inequality. A related area has focused on the disabled population and I have studied the determinants of labor supply and transfer recipiency among the disabled, and the determinants of the wellbeing of people with disabilities, including tracking their economic status over time. Most recently, I have focused my research on the determinants of children’s attainments and success, using 25 years of panel data on 2000 children. The children’s attainments that I have studied most extensively are education, teenage nonmarital childbearing, and labor market success. Along with these research efforts, I have also written extensively on the social policy issues, welfare reform, and antipoverty policy.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C5 Econometric Modeling; C7 Game Theory and Bargaining Theory.


**Principal Contributions** My principal contributions include: a game-theoretic method for allocating costs from a production process with an application to setting ‘fair’ telephone charges, improved understanding of the role of finitely-additive measures in the foundations of statistics as a mathematically rigorous analog of improper priors, a very general framework for modeling the evolution of the term structure of interest rates and valuing interest-rate derivatives resulting in arbitrage-free models which can be chosen to reproduce given variance-covariance structures, new models for the evolution of good forecasts for time-series data which can be used to understand the quality of these forecasts and as a basis for modeling future forecasts and observations to improve the inventory/stock-out tradeoffs, and a new approach to the measurement and regulation of risk based on a simple set of axioms.

HEATON, John n.e.

HECKMAN, James J.

**Born** 1944, Chicago, IL, USA.

**Current Post** Henry Schultz Disting. Service Prof., Univ. Chicago, Chicago, IL, USA, 1994–.


**Principal Fields of Interest** J0 Labor and Demographic Economics: General; H0 Public Economics: General; C1 Econometric and Statistical Methods: General.


Principal Contributions A major focus of my lifetime research had been on the development and application of methods for evaluating economic and social programs including tax, subsidy and affirmative action policies. This has led me into solutions for econometric problems that arise from using self-selected samples of program participants to evaluate programs: it has also led me to develop econometric procedures that account for heterogeneity in preferences and responses to interventions. I have investigated a variety of approaches to social program evaluations, ranging from theory-free ‘treatment effect’ approaches to partial equilibrium and general equilibrium frameworks and comparisons among the efficacy of these alternative frameworks. I stress the implicit economic assumptions that justify various empirical approaches in economics and have contributed to the empirical foundations of economic models used to evaluate policy programs in a series of papers that test among competing economic paradigms.

HELPMAN, Elhanan

Born 1946, Dzalabad, USSR.

Current Posts Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1997–; Prof. Econ., Tel Aviv Univ., Tel Aviv, Israel, 1981–.


Degrees BA, MA (Econ. Stats) Tel Aviv Univ., 1969, 1971; PhD Harvard Univ., 1974.


Principal Fields of Interest F0 International Economics: General; O3 Technological Change; O4 Economic Growth and Aggregate Productivity.


Principal Contributions My research interests have changed over time. They have included economic theory, public economics, urban economics and macroeconomics. But I have always maintained an interest in international economics. My contributions include studies of the balance of payments, exchange rate regimes, stabilization programs and foreign debt. Most important, however, are my studies of international trade, economic growth and political economy. I am a cofounder of the ‘new trade theory’ and the ‘new growth theory’, which emphasize the roles of economies of scale and imperfect competition.

HELSELY, Robert Warren

Born 1955, Knoxville, TN, USA.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; H0 Public Economics: General.

HENDERSON, John Vernon

Born 1947, Vancouver, BC, Canada.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; R3 Production Analysis and Firm Location.


Principal Contributions I consider myself to be an applied microeconomic theorist. My research consists mostly of conceptual studies of problems in urban economics and public finance. The general problems that I have worked on include: the implications of growth and uncertainty for urban land prices; the microfoundations of agglomeration economies; land developers and the process of city formation; the private provision of collective goods; the new institutions of local government, including private governments and gated communities; the economics of crime; and innovation in cities.


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Principal Contributions The central focus of my work is urbanization and economic geography. Initial theory developed the first models of the positive and normative properties of a system of cities. Current theory is focussed on city formation and urban growth and inequality in models with endogenous economic growth and exogenous population growth. Empirical work examines production patterns across cities, measurement and identification of scale externalities, and evolution of urban populations and industrial locations. Current work investigates patterns in the USA, Korea, and Indonesia. I have also made significant past contributions in the area of fiscal federalism, modeling traffic flows and congestion mitigation, Tiebout modeling, tenure choice and consumption of housing, land-use regulation, and community choice of revenue instruments. Recent work includes the effects of air quality regulation on industrial location, productivity and air-quality, and the modeling of community formation, product differentiation, edge city location, and developer pricing in Tiebout-type models.

HENDERSON, Rebecca Marta


Current Posts Eastman Kodak Leaders for Manufacturing Prof. Mgmt, Sloan Sch., MIT, Cambridge, MA, USA, 1999–; Res. Assoc., NBER, USA, 1999–.


Degrees BS (Mechanical Eng.) MIT, 1981; PhD Harvard Univ., 1988.

Offices and Honours Phi Beta Kappa, 1988; Admin. Sc. Q. Award for Scholarly Contrib., 1996.


Principal Fields of Interest L0 Industrial Organization: General; L1 Market Structure, Firm Strategy, and Market Performance; L2 Firm Objectives, Organization, and Behavior.


**Principal Contributions** My work is focused in the economics of technological change. I have tried to show that organizational structure and purpose may profoundly affect the evolution of industries. I have also made a contribution to the literature that explores the role of public universities in stimulating economic growth.

**HENDRY, David Forbes**

**Born** 1944, Nottingham, Nottinghamshire, England.


**Principal Field of Interest** Cl Econometric and Statistical Methods: General.


Principal Contributions My research from 1970–90 was directed towards writing Dynamic Econometrics (book 5), which integrates empirical modelling for economic time series. There are six main strands to this effort: deriving and analysing methods of estimation and inference for non-stationary time series (see book 3); developing Monte Carlo techniques for investigating the small-sample properties of possible methods (see book 8, with an earlier release in 1991); implementing appropriate tools in computer programs (the AUTOREG library, summarized in J Em, 1980, since adapted to Windows as seen in book 9, now in its 10th version, with Jürgen A. Doornik); exploring alternative modelling strategies and ‘methodologies’ (see book 2); analysing concepts and criteria that would provide a viable basis for modelling economic time series, culminating in automatic procedures for model selection (see book 10, with Hans-Martin Krolzig); and testing these developments by simulation and in empirical investigations of consumption, money demand, inflation and the housing market, leading to over 75 papers. My second main interest is the history of econometric thought because of the insights available from thoughtful earlier analyses when technique was less dominant (summarized in book 4, with Mary S. Morgan). My research since 1990 mainly concerns economic forecasting and policy analysis, jointly with Michael P. Clements, and Grayham E. Mizon, respectively. We have investigated the conceptual foundations of economic forecasting when the econometric model in use does not coincide with the process generating the data in a non-stationary economy subject to intermittent structural breaks: delineated the main determinants of forecast failure and developed a taxonomy of
forecast errors; evaluated alternative forecasting methods; analysed the role of causal information; shown how to robustify forecasts against location shifts, and related the approach to the use of econometric models in policy analysis (see books 6 and 7), leading to more than 30 papers.

HERMALIN, Benjamin E.

Born 1962, New York, NY, USA.


Principal Fields of Interest L2 Firm Objectives, Organization, and Behavior; G3 Corporate Finance and Governance; L1 Market Structure, Firm Strategy, and Market Performance.


Principal Contributions My principal contributions have been in the area of contract renegotiation, boards of directors, and the intersection of agency theory and firm competition. In contract renegotiation, articles with A. Edlin and M. Katz show that, in many circumstances, renegotiation allows parties to profitably exploit observable, but unverifiable information in their contract designs; hence, raising doubts about the presumed negative consequences of unverifiable information for
efficient contracting. Work on corporate boards, with M. Weisbach, has established a number of empirical regularities about boards, as well as offering a robust theory of why boards function as they do. The introduction of agency theory into models of competition and strategic interaction has offered explanations for a number of important phenomena, such as why otherwise identical firms may adopt different incentive schemes for their managers.

HERSCH, Joni

Born 1956, Chicago, IL, USA.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; D1 Household Behavior; K4 Legal Procedure, the Legal System, and Illegal Behavior.


Principal Contributions Much of my work examines the labor market effects of household time allocation, risk-taking behavior, and wage structures. My early work on household time allocation showed that women undertake a disproportionate share of household responsibilities, and this time allocation has a direct negative impact on women’s earnings. Additional work with Leslie Stratton confirmed and
extended analysis of the role of household responsibilities on earnings. My analyses of risk-taking behavior address both labor market and consumer risk decisions. I found that relative to comparable men, women are more risk averse in their personal decisions such as smoking and seatbelt use. Consistent with women’s generally safer behavior, many researchers viewed compensating differentials for job injury risk as being concentrated largely among blue-collar males. I found that women work in jobs with substantial injury risks and earn risk premiums comparable to those of blue-collar men. My research with W. Kip Viscusi examined the influence of individual heterogeneity on compensating differentials for job injury risk. We found that workers of different riskiness are sorted into noncompeting groups, and face different market offer curves, so that riskier workers receive lower premiums for jobs of equal riskiness than otherwise similar but less risky workers. My work on wage structures examines job match quality, promotions, and wage–tenure profiles. I developed and tested a model showing that seeming mismatches occur because overqualified workers require less training time, although are more likely to quit if not promoted, while underqualified workers are less likely to quit. Patricia Reagan and I examined structural models of the wage–tenure relation and job match quality, and demonstrated that efficient wage–tenure profiles are steeper for women than men as a direct result of their shorter expected working lives. Current work examines the choice and effect of judge or jury trial on legal outcomes.

HESTON, Alan Wiley

Born 1934, Portland, OR, USA.


Principal Fields of Interest O0 Economic Development, Technological Change, and Growth: General; N0 Economic History: General; C8 Data Collection and Data Estimation Methodology; Computer Programs.


Articles: 1. ‘An approach to the sacred cow of India’, Current Anthropol., April 1971, repr. in Ethnology and Explanation (Little, Brown, 1982), and I. Vogeler (ed.), Dialectics of Third World Development (Allanheld, Osmun, 1983); 2. ‘Real GDP per capita for more than one hundred countries’ (with I. Kravis, R. Summers),
Principal Contributions

Much of my research has focused on issues of measurement of price and real quantities both over time and across countries. A part of this work has been focused specifically on South Asia, including both economic history since 1500 as well as contemporary issues. My major contribution to the field has been in association with the International Comparison Programme (ICP) of the United Nations in which I was directly involved from its inception in 1968 until 1985 when I returned to Pennsylvania from being Chief of the Price Statistics section of the UN Statistical Office. In these benchmark ICP studies, Robert Summers and I worked with Irving Kravis who had worked with Milton Gilbert on the early OEEC comparisons and was the director of the work at Pennsylvania. These benchmark studies provided estimates of the purchasing power parity (PPP) of countries with which one could better convert national currency measures such as per capita income or wages. A basic finding of the ICP was that conversions of national accounts to a comparable currency at exchange rates in any year will systematically underestimate the incomes of poorer countries. And from year to year, estimates using PPPs as converters were much more stable than exchange rate conversions. As a consequence most economic analysis today uses PPPs as the conversion factor. In our own analysis of the benchmark studies, Summers and I have found that when conventional subaggregates of national accounts are converted at PPPs they often present very different shares of investment, education and health expenditures than are obtained at national prices. We have also reworked the benchmark studies to obtain aggregates such as services and commodities, and tradables and nontradables that have provided new insights into differences in the economic structure of world economies. Subsequently Robert Summers and I developed extensions of the benchmark comparisons over time and space into a System of Real National Accounts termed the Penn World Table (PWT). This extension in its latest version includes over 150 countries for some or all the years 1950–95 for about 30 variables. The availability of national accounts aggregates that are comparable across time and space in PWT has allowed researchers to examine empirically a number of issues in economic growth as well as demography and other social science areas. These data are available on a website – pwt.econ.upenn.edu.
HESTON, Steven L. n.e.

HEYWOOD, John Spencer

Born 1957 Cedar Rapids, IA, USA.


Principal Contributions n.e.

HINES, Jr, James Rodger

Born 1958, Chicago, IL, USA.

Current Posts Prof. Econ., Dept Econ., Univ. Michigan, Ann Arbor, MI, USA, 2001–; Prof. Bus. Econ., Univ. Michigan...


**Degrees** BA, MA Yale Univ., 1980, 1980; PhD Harvard Univ., 1986.


**Principal Fields of Interest** H8 Miscellaneous Issues; H2 Taxation, Subsidies, and Revenue; H3 Fiscal Policies and Behavior of Economic Agents.


**Principal Contributions** My research area is public finance, with a focus on the effects of taxation in open economies. This research analyzes the taxation of foreign income, and its effects on foreign direct investment (FDI) and other activities of multinational corporations. Low tax rates encourage FDI – doing so, as Eric Rice and I found, not only by improving after-tax rates of return to investment, but also by encouraging firms to reallocate taxable income between jurisdictions. In other work I note that home country tax systems influence the attractiveness of low tax foreign jurisdictions, thereby accounting for at least some of the spatial distribution of FDI within the United States, and the pattern of American investment abroad. Some of my work considers the impact of specific tax provisions. Findings indicate that the US tax treatment of asset depreciation, interest deductions,
R&D expenses, foreign royalty income, export income, foreign tax credit ‘baskets’, and the deferral of active foreign income all influence the way in which American multinational corporations organize their financing and operations. Other public finance research of mine analyzes of the effects of tax credits and depreciation rules on capital investment, the effects of intergovernmental grants and business-cycle conditions on subnational government expenditures, deadweight loss measurement, features of optimal taxation, the tax exemption for nonprofit organizations, and alternative measures of tax incidence. Anne Case, Harvey Rosen, and I analyze empirically the extent to which fiscal policies of American states influence fiscal policies of similarly-situated states, finding evidence of considerable spillover effects. And elsewhere I argue that standard accounting methods seriously misstate the size of the public sector, with implications for the effect of government activity on economic growth.

HIRSCH, Barry Thomas

Born 1949, Washington, DC, USA.

Current Post E.M. Stevens Disting. Prof. Econ., Trinity Univ., San Antonio, TX, USA, 2000–.


Degrees BA Univ. Virginia, 1972; PhD Univ. Virginia, 1977.


‘Evaluating the labor market performance of veterans using a matched comparison group design’ (with S.L. Mehay), *JHR*, 38, Summer 2003; 16.


**Principal Contributions** I am an applied labor economist whose research focusses on wage determination and labor unions. A 1986 book with Addison surveys economics research on unions. My 1991 book and several articles examine unions and firm performance. Union effects on productivity and productivity growth vary across firms, but on balance are zero or negative. Union effects on market valuation and profitability are negative. Unions tax quasi-rents associated with market share, physical capital, and intangible capital. In response, union firms invest less and grow more slowly. Research with Schumacher shows that Census earnings imputation methods cause union wage gaps to be substantially understated. Panel analysis reveals similar union wage effects across skill groups following employer and employee sorting. Macpherson and I author an annual *Data Book* and maintain a website (unionstats.com) providing researchers with union data compiled from the Current Population Surveys, disaggregated by state, city, industry, and occupation. I study wages and unions in regulated and deregulated industries. In trucking, union wages and premiums fell sharply following deregulation. Unions retain bargaining power in airlines, exercising that power when carriers are prosperous and showing restraint when carriers suffer losses. Compensation of union postal employees is higher than in comparable private employment, as evidenced by wages, benefits, entrant gains, quits, and applicant queues. Workers earn less in occupations with high densities of women or African-Americans. Articles with Macpherson and Schumacher indicate that racial density does not have a causal effect; rather it is a proxy for unmeasured worker and job skills following sorting. Some but not all of the lower pay in ‘female jobs’ results from worker preferences, experience, scheduling, and working conditions. The effect of military service on civilian earnings is examined in work with Berger and Mehay. Service has a net payoff for black enlistees, but not whites. Vietnam-era service had negative effects primarily for white draftees.

**HIRSCHMAN, Elizabeth C.** n.e.

**HIRSHLEIFER, David Adam**

*Born* 1958, Los Angeles, CA, USA.

*Current Post* Ralph M. Kurtz Chair Fin., Fisher Coll. Bus., Ohio State Univ., Columbus, OH, USA, 1999–.


*Degree* PhD Univ. Chicago, 1985.

Award for Best Paper on Investments at Western Fin. Assoc. Meeting; Best Paper Award, Nat'l Taiwan Univ. Intl Conf. Fin., Taiwan, 1998; Smith–Breeden Award for Best Paper in *J Fin*, 1999.

**Principal Fields of Interest**
- D0 Microeconomics: General
- G0 Financial Economics: General
- G3 Corporate Finance and Governance

**Editorial Duties**

**Publications**

**Principal Contributions**
One strand of research deals with hedging, prices and organization of commodity markets. This emphasizes the determination of equilibrium hedging and futures prices together with prices and positions in the later spot market. This work relates non-participation in futures markets to futures risk premia and producer hedging, and examines the fundamental sources of futures risk premia. A second strand concerns strategic issues in takeover contests. In tender offer contests, bidders’ possession of information that target shareholders do not have can cause shareholder skepticism and bid failure. Thus, target defensive strategies (e.g., anti-takeover amendments or poison pills), by changing asymmetry of information and by altering bidding incentives, may sometimes increase target
shareholders’ willingness to tender. In sequential auctions with multiple bidders (e.g., takeover contests), small costs of bidding can lead to outcomes very different from the conventional English auction solution. Sequential auctions can be viewed as a learning process in which bidders quit when they learn they are destined to lose, and delays also convey useful information. Contests are predicted to involve large jumps in bids that are highly informative, so that the auction ends after just a few bids. A third strand examines learning by observation of others and how this can lead to failures of information aggregation as in information cascades, and thereby to fads and fashions. A fourth strand examines how agency problems and reputational concerns cause managers to make non-optimal choices among risky projects. Owing to information asymmetry, managers may be either unduly conservative or risk prone even when contracts are designed optimally to induce correct effort and project choice. A fifth strand examines how psychological biases of investors and managers affect corporate financial decisions and the prices of securities. This includes the effects of overconfidence, emotions, and limited attention on firm and investor behavior.

HITCHENS, David Michael Warren Naunton

**Born** 1948, Cardiff, South Wales, UK.  
**Current Post** Prof. Apl. Econ., Queen’s Univ., Belfast, Northern Ireland, UK, 1995–.  
**Degrees** BSc Univ. Coll., Cardiff, 1970; PhD Univ. Aston, 1974.  
**Principal Fields of Interest** L5 Regulation and Industrial Policy; L6 Industry Studies: Manufacturing; L8 Industry Studies: Services.  
**Articles:** 1. ‘The inheritance of top wealth leavers: some further evidence’ (with C.D. Harbury), *EJ*, 86, 1976; 2. ‘Productivity, machinery and skills in a sam-
HODGSON, Geoffrey Martin

Born 1946, Watford, UK.


Principal Fields of Interest B2 History of Economic Thought since 1925; B4 Economic Methodology; B5 Current Heterodox Approaches.

Publications Books: 1. Socialism and Parliamentary Democracy (Spokesman, 1977; trans., Italian, Spanish, Turkish,


**Principal Contributions** I have always been interested in the big questions of how socio-economic systems work, and how individuals relate to economic institutions. These themes were present in my critical engagement with Marxism in the 1970s and reflected in my enduring interest in institutional and evolutionary economics, since the early 1980s. *Capitalism, Value and Exploitation* (1982) reflects my early concern with Marxian and Sraffian value theory. *The Democratic Economy* (1984) exhibits an interest in the analysis of the production process and stressed the inevitability of mixed economies. Subsequent works showed a more explicit engagement with the ‘old’ institutional economics. *Economics and Evolution* (1993) is a critique of the core assumptions of neoclassical economics and an attempt to outline an alternative approach. This was followed by work on an institutionalist theory of economic growth. An interest in the role of metaphor in economics and the sources of creativity, combined with a concern about the fashionable but often ill-informed use of the ‘evolutionary’ label, led to the book *Economics and Evolution* (1993). Subsequent work has continued to address the history, methodology and conceptual foundations of institutional and evolutionary economics. Particular attention has been given to key institutions such as the firm, linking with Nelson–Winter type work and other evolutionary and ‘competence-based’ approaches. *Economics and Utopia* (1999) explored possible scenarios for a post-capitalist future and examines the implications of the learning economy. *How Economics Forgot History* (2001) examined the problem of historical specificity in economics, and the past contributions to this methodological issue by members of the German historical school and others. If I have made a contribution, then it is to add a little to our understanding of how economic institutions work, and to unearth some of the forgotten contributions of others to this project.
HODRICK, Robert James

Born 1950, Williamsport, PA, USA.


Principal Fields of Interest F3 International Finance; G1 General Financial Markets; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions My career began as an international macroeconomist with a specialization in time-series mod-
elling. While at Carnegie-Mellon in the late 1970s, I had the opportunity to work with Ed Prescott on the development of a way of characterizing business cycles that came to be known as the HP filter. I also collaborated with Lars Hansen in the application of his generalized method of moments to issues in international finance. We demonstrated how to use data, like forward exchange rates, that are sampled more frequently than the forecast interval, and we developed a latent variable model of the risk–return trade-off. Sanjay Srivastava and I pushed the analysis into foreign currency futures. While working at the IMF in 1981, I met Bob Flood who was working at the Federal Reserve Board. We wrote several papers on international business cycles with rational expectations, and we became interested in the fact that there may be differences between what agents rationally expect to happen and what actually happens in a given sample. Since asset prices reflect expectations, testing asset pricing models becomes quite difficult. In research with Geert Bekaert and David Marshall, I demonstrate how anomalies in the term structure of interest rates may be attributable to such an idea. As computers have become faster, I realized that there are often big differences between the asymptotic distributions of test statistics and their small sample distributions, even in samples of 30 years of monthly data. My most recent research involves the development and appropriate testing of asset pricing models of exchange rates, stock prices, and bond prices. My work with Xiaoyan Zhang demonstrates how to use the HP filter to allow the parameters of asset pricing models to depend on the state of the business cycle.

HOFFMAN, Elizabeth n.e.

HOFFMAN, Saul D. n.e.

HOLMSTRÖM, Bengt Robert

Born 1949, Helsinki, Finland.

Current Post Paul A. Samuelson Prof. Econ., Dept Econ., MIT, Cambridge, MA, USA, 1997–; Prof. Econ. and Mgmt, Sloan Sch. of Manag., Massachusetts Inst. of Tech., Cambridge, MA, 1994–.


**Principal Fields of Interest**  
D2 Production and Organizations; G3 Corporate Finance and Governance; E4 Money and Interest Rates.

**Publications**  
**Articles:**  

**Principal Contributions**  
My research has been focused on the economics of contracting and organizations. My early work on moral hazard illuminated the role of information and its value in structuring optimal incentive contracts. My later work on moral hazard (much with Paul Milgrom) has been concerned with robustness of incentive contracts and the need to design balanced incentives when agents engage in multiple tasks. Multi-tasking leads to the view that firms emerge in order to mute and restructure excessively strong market incentives using a multitude of instruments. Weak incentives, monitoring of inputs and bureaucratic rules all form a logical system of incentives that often characterize the employment relationship. Career concerns has been another long-standing interest of mine and influenced my thinking about incentives. Most of us try to impress, in various ways, the people who can impact our professional lives. Such behaviour can be viewed as an effort to influence the way people learn about our characteristics. Career concerns can provide employees very powerful incentives to behave diligently even in the absence of formal incentives. Just as importantly, they can be a source of significant incentive problems. At times employees may become excessively cautious (when they are close to being promoted for instance); at other times they may take undue risks. The negative and positive manifestations of career concerns are very important (and visible) in the political arena and have been used in political economy models. I have also worked (with Jean Tirole) on the supply and demand for liquidity in the corporate sector. Our approach is contractual and builds on one simple imperfection: a part of the firm’s financial returns cannot be pledged to outside investors. This can lead to a shortage of aggregate liquidity (collateral), which lim-
its real investments, and a role for government to manage and create aggregate liquidity.

HOLTHAUSEN, Robert W. n.e.

HOLTZ-EAKIN, Douglas n.e.

HOLZER, Harry Joseph

Born 1957, Somers Point, NJ, USA.


Degrees AB, PhD Harvard Univ., 1978, 1983.

Offices and Honours Teacher-Scholar Award, Michigan State Univ., 1988; Disting. Faculty Award, Michigan State Univ., 1998; Leslie Whittington Award, Georgetown Univ., 2002.

Principal Fields of Interest J0 Labor and Demographic Economics: General; J3 Wages, Compensation, and Labor Costs; J6 Mobility, Unemployment, and Vacancies.


Principal Contributions Much of my work has focused on the labor market problems of low-wage workers, particularly minorities in urban areas. My earliest work focussed on job search issues
and youth unemployment, including the role of reservation wages and use of informal job search. For a period in the late 1980s and early 1990s, I analyzed employer wage-setting and hiring behavior using data from a large national survey of firms. I then began administering my own employer surveys, and have surveyed over 7000 firms over the past decade. Much of my work during this time period has focused on employer demand for minorities, how this demand is affected by a variety of factors (such as their skill needs, spatial locations, discrimination and affirmative action), and how it affects employment outcomes of minority workers. At various times, I have also considered the role of on-the-job training in affecting employee productivity and earnings. Finally, I have recently focused on employer demand for welfare recipients and ex-offenders, and how this demand constrains employment outcomes of these individuals. I have also recently analyzed trends in employment among young minority men and their determinants.

HOMMES, Cars H.


Current Post Prof. Econ. Dynamics, Dept Quant. Econ., Univ. Amsterdam, Amsterdam, The Netherlands, 1999–.


Principal Fields of Interest E3 Prices, Business Fluctuations, and Cycles; D0 Microeconomics: General; C0 Mathematical and Quantitative Methods: General.


Principal Contributions Most of my work concerns modeling of dynamic phenomena in economics and finance. Applications of nonlinear dynamics (e.g., local stability, bifurcations and chaos) play an important role throughout my work. I believe this is important, since the economy
is inherently nonlinear. Simple nonlinear systems buffeted with small noise may explain a significant part of observed stylized facts in economic and financial time-series data. Modeling of expectations and learning has been one of the main topics throughout my work. Whereas linearity and predictability are quite natural in a world where agents have rational expectations, non-linearity and limited predictability are key features of bounded rationality. Our dynamic models may be viewed as simple stylized models in behavioral economics and finance. Much of the work on bounded rationality is in fact an attempt to back off from full rationality. The philosophy underlying my work is that agents use simple behavioral strategies in a complex, unknown environment. These simple behavioral rules may not be perfect, but within a class of simple rules agents try to optimize and find a rule that performs reasonably well. In joint work with Buz Brock we have developed a notion of adaptive rational equilibrium dynamics, characterized by evolutionary selection of competing forecasting strategies. Fractions of agents using one particular strategy change over time, according to their performance (measured, for example, by realized profits or forecasting accuracy) in the recent past. In this work the ‘wilderness of bounded rationality’ is thus disciplined by evolutionary forces. In other recent work, jointly with Gerhard Sorger, we have developed the notion of consistent expectations equilibria, where agents try to learn an optimal, linear rule in an unknown nonlinear environment. Along these consistent expectations equilibria, although the forecasting rules are misspecified and not perfect, forecasting errors are unbiased and uncorrelated.

HONORÉ, Bo Emo n.e.

HOPENHAYN, Hugo A. n.e.

HOROWITZ, Joel Lawrence

Born 1941, Pasadena, CA, USA.

Current Post Charles E. and Emma H. Morrison Prof. Market Econ., Dept Econ., Northwestern Univ., Evanston, IL, USA, 2001–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling.


Articles: 1. ‘A generalized moments specification test of the proportional hazards model’ (with G.R. Neumann), JASA, 87, 1992; 2. ‘A smoothed maximum score estimator for the binary response model’, Em, 60, 1992; 3. ‘The role of the list price in housing markets: theory and an econo-

Principal Contributions Most of my recent work has been in econometrics with emphasis on three topics: semi- and non-parametric estimation, bootstrap methods, and inference with incomplete or contaminated data. My work in semi- and non-parametric estimation has been directed toward relaxing restrictive assumptions that are often made in econometric modeling for reasons of mathematical convenience. These assumptions are frequently inconsistent with available data and can lead an investigator to draw highly misleading conclusions. I have developed ways to estimate and test binary-response models, transformation and proportional hazard models, models for panel data, and additive models under weak assumptions. In addition, V.G. Spokoiny and I have developed specification tests that have optimal power in a certain sense under weak assumptions. My research on the bootstrap is aimed at improving the large-sample approximations that are regularly used to carry out inference in applied econometrics. These approximations are often very inaccurate with the sample sizes that are available. The bootstrap can often achieve a much more accurate approximation. My research has shown how to use the bootstrap in a variety of inferential situations for both cross-sectional and time-series data. Incomplete or contaminated data arise in many applications. An example is non-response to one or more questions on a survey. Incomplete or contaminated data typically make the population quantities of interest non-identified unless one makes untestable assumptions about the process through which data become missing or contaminated. However, C.F. Manski and I have shown that informative bounds on population quantities can be identified without making such untestable assumptions. We have also shown how to estimate the bounds and have demonstrated their usefulness in applications.
HOSHI, Takeo

born 1960, Nanyo, Yamagata, Japan.


degrees BLA (Social Sc.) Univ. Tokyo, 1983; PhD MIT, 1988.


principal fields of interest G0 Financial Economics: General; G3 Corporate Finance and Governance; E5 Monetary Policy, Central Banking, and the Supply of Money.


principal contributions My research has focussed on the analysis of Japanese working, especially its financial system. The collaborative work with Anil Kashyap and David Scharfstein (which yielded articles 2, 3, 4 and chapters in some books) found the role of relationship banking in mitigating some agency problems in financial transactions. More recently, Anil Kashyap and I examined the source of the Japanese banking problem in the 1990s and found it in the slow and incomplete financial deregulation. These articles and other papers written for books formed the basis for my book with Anil Kashyap. The book analyzes the development of the Japanese financial system in the past 150 years and discusses the likely future path. We found that the Japanese financial system started as rather a market-oriented, security-based system with little government intervention but it started to go through a major transformation during the interwar period. The post-war financial system, which was bank-oriented and characterized by heavy government intervention, is now again experiencing a major change. This research makes contributions to the economic research on the comparative financial system and more generally the evolution of economic institutions.

HOWARTH, Richard B.

born 1962, Portsmouth, NH, USA.

current post Assoc. Prof., Dartmouth Coll., Hanover, NH, USA, 1998–.

past posts Staff Scientist, Lawrence
HOWARTH 387


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; Q3 Nonrenewable Resources and Conservation; Q4 Energy.


Principal Contributions My research program has emphasized the theoretical aspects of: (1) discounting, sustainability, and intergenerational fairness; and (2) the role of social status in motivating consumer behavior and the implications for applied welfare economics. My applied research has focussed on the issues of climate change, energy efficiency, and the conservation of ecological resources.
HOWITT, Peter Wilkinson

Born 1946, Toronto, Ontario, Canada. 

Current Post Lyn Crost Prof. Social Sc., Brown Univ., Providence, RI, USA, 2000–.


Principal Field of Interest E0 Macroeconomics and Monetary Economics: General.


Principal Contributions My early work was in the field of disequilibrium adjustment. I wanted to understand how a decentralized market economy could normally find itself in something resembling a coordinated state. My idea was to introduce into general equilibrium theory the firms that create markets and coordinate transactions in actual economies. Market-making firms keep the system running when people’s plans don’t mesh, and it is up to them to restore equilibrium when the system is shocked. They were missing from standard general equilibrium theory, in which coordination was assumed to take place costlessly, through some unspecified process. Later my attention turned to policy issues. My experience studying Canadian monetary policy convinced me of the importance of Wicksell’s cumulative process, according to which people’s plans don’t mesh, and it is up to them to restore equilibrium when the system is shocked. They were missing from standard general equilibrium theory, in which coordination was assumed to take place costlessly, through some unspecified process. Later my attention turned to policy issues. My experience studying Canadian monetary policy convinced me of the importance of Wicksell’s cumulative process, according to which a central bank’s attempt to stabilize interest rates could lead to accelerating inflation. Wondering why this Wicksellian idea had disappeared from the
literature, I realized it could not be analyzed using the rational-expectations-equilibrium approach that dominated monetary theory. That is, it concerns the efficacy of disequilibrium coordination mechanisms, which the equilibrium approach cannot analyze by virtue of its assumption that the economy is never out of equilibrium. I discovered that under very general assumptions the attempt by a central bank to stabilize interest rates introduces positive feedback loops that prevent these mechanisms from guiding the economy to an equilibrium. In 1987 I met Philippe Aghion, and with him started an entirely new research program, namely that of rebuilding growth theory on the basis of Schumpeter’s concept of creative destruction. This work is still ongoing, and has reinforced my belief in the central coordinating role of firms; Schumpeterian entrepreneurs create and operate the markets through which economies are continually adjusting to technological change. I am now working on transforming my ideas of market-making firms into a general theory of macroeconomic systems.

HSIEH, David A. n.e.

HUANG, Roger D.

Born 1955, Rangoon, Burma.


Degrees BSIM (Ind. Mgmt) Purdue Univ., 1975; MA (Fin.), PhD (Fin.) Univ. Pennsylvania, 1978, 1980.


Principal Fields of Interest G1 General Financial Markets; F3 International Finance; G2 Financial Institutions and Services.


**Principal Contributions** n.e.

**HUBBARD, Robert Glenn**

**Born** 1958, Orlando, FL, USA.


**Principal Fields of Interest** G3 Corporate Finance and Governance; H3 Fiscal Policies and Behavior of Economic Agents; L2 Firm Objectives, Organization, and Behavior.


**Principal Contributions** My research has been concentrated in eight programs of study: (1) investigating determinants of product-market contracting in the presence of asymmetric information; (2) investigating determinants of financial marketing contracting in the presence of asymmetric information; (3) analyzing determinants of the level and cyclical variability of price–cost markups; (4) deriving and testing models of the effects of tax policy on business investment decisions; (5) deriving and testing models of the effects of tax policy on household saving decisions in the presence of borrowing constraints; (6) evaluating the importance of uninsured idiosyncratic risk and capital-market imperfections in explaining the level and distribution of household saving; (7) deriving and testing models of the effect of capital-market friction on business investment and financing decisions; and (8) analyzing consequences for the monetary transmission mechanisms of informational imperfections in financial markets.

**HULL, John Campbell**

**Born** 1946, Ealing, England.

**Current Post** Prof. Fin., Univ. Toronto, Toronto, Canada, 1988–.


**Principal Fields of Interest** G1 General Financial Markets; G2 Financial Institutions and Services; G3 Corporate Finance and Governance.


**Articles** 1. ‘The pricing of options on assets with stochastic volatilities’ (with A. White), J Fin, 42, June 1987; 2. ‘Hedging the risks from writing foreign currency options’ (with A. White), JIMF, 6, June 1987; 3. ‘The use of the control variate technique in option pricing’ (with A. White), JFQA, 23, Sept. 1988; 4. ‘As-

**Principal Contributions**

My books *Options, Futures, and Other Derivatives* (now in its fifth edition) and *Fundamentals of Futures and Options Markets* (now in its fourth edition) have been translated into many languages and are widely used. In addition to being very popular for graduate and undergraduate courses, they are standard reference texts for practitioners throughout the world. Most of my research has been joint with my colleague, Alan White. My early research reached conclusions on the impact of stochastic volatility on both the pricing of options and the effectiveness of delta hedging. I then moved on to consider the pricing of interest rate options. This led to what has become known as the Hull–White one-factor model and the development of numerical procedures for implementing a wide range of one-factor no-arbitrage models. I have studied the implementation of the LIBOR market model and the relationship between the pricing of interest rate caps and swap options. I have also developed procedures for extending the binomial tree methodology so that it can handle path-dependent options. Recently my research has focused on market risk, credit risk, and model risk. In the market risk area I have written two articles dealing with the calculation of value at risk. They show how the historical simulation approach can be extended to incorporate volatility updating and how the model building approach can be extended to incorporate non-normal probability distributions for daily changes in market variables. My credit risk research has been concerned with the valuation of credit default swaps, both plain vanilla deals and those that are dependent on the default correlations between two or more companies. Finally my model risk research proposes a methodology for calculating potential errors in a model as it is actually used by traders.
HYLLEBERG, Svend

Born 1944, Hørup, Denmark.

Current Post Prof., Dept Econ., Sch. Econ. and Mgmt, Univ. Aarhus, Aarhus C, Denmark, 1986.


Principal Field of Interest C1 Econometric and Statistical Methods: General.


Principal Contributions My principal contribution is the work on time-series econometrics, in particular modelling of seasonality.
ICKES, Barry William

Born 1955, Los Angeles, CA, USA.

Current Post Prof. Econ., Pennsylvania State Univ., Univ. Park, PA, USA, 1983–.


Principal Fields of Interest P2 Socialist Systems and Transitional Economies; F4 Macroeconomic Aspects of International Trade and Finance; O1 Economic Development.


Principal Contributions My early research was on the problems of Soviet-type economies. Some of this work focused on problems of economic fluctuations under central planning. I also worked on incentive problems in planned economies. I then turned to the economic analysis of transition. This work has focused on enterprise
behaviour and financial development in transition economies. My recent work has investigated the role of initial conditions in transition, with primary emphasis on Russia. My work with Gaddy and Ericson on Russia’s virtual economy studies the barriers to economic restructuring, and the mechanisms used to avoid this. I have also worked on international business cycles.

IHLANFELDT, Keith

Born 1950, Belleville, IL, USA.

Current Posts Prof. Econ. and DeVoe Moore Eminent Scholar, Florida State Univ., Tallahassee, FL, USA, 2000–.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; H7 State and Local Government; Intergovernmental Relations; I3 Welfare and Poverty.


Principal Contributions Most of my work has focused on social problems that plague large US cities, including poverty, crime, and racial discrimination in housing and labor markets. The portion of my work that is most frequently cited concerns the spatial mismatch hypothesis, which states that poverty in the inner city is related to a loss in job opportunities caused by employment suburbanization. This work shows that joblessness, crime, and school dropping out are all higher within minority communities because of the decentralization of lower-skill jobs within urban areas.

IKENBERRY David L.

Born 1960, East Lansing, MI, USA.

Current Posts Prof. Fin., Chairman, Dept Fin., Univ. Illinois, Champaign, IL, USA, 2002–, 2003–.


Principal Fields of Interest O1 Economic Development; G3 Corporate Finance and Governance.


**Principal Contributions** I teach investment and corporate finance to both graduate students and executives. My research concerns a broad array of empirical issues in finance. A substantial portion of my work has focussed on issues relating to long-horizon stock returns, a young and often debated area of inquiry in finance. Much of my work has frequently challenged fundamental notions of informational efficiency in equity markets. Past studies have focussed on unexpected long-horizon return performance relating to specific corporate events including stock splits, exchange listings and proxy fights. My more general work on the unusual properties of long-horizon returns has been used to help explain why professional money managers frequently underperform the S&P 500 index, even when investing in S&P stocks. Perhaps my most noted work concerns stock repurchase programs, a transaction of growing importance around the world. For example, a recent paper takes advantage of some of the unique aspects of the Canadian market to provide additional insight into issues about how and why firms repurchase stock. My work in this area continues to generate substantial interest in both the academic and corporate communities. I frequently speak to academic, government and corporate officers, and the broad investment communities about current research efforts, my research and the economic role of repurchases. My research is regularly mentioned in the popular press in such publications as The Wall Street Journal, Forbes, Fortune, Smart Money, Barron’s, Business Week and The Economist. I am a frequent guest on various television programs including CNBC, Bloomberg Television and the Nightly Business Report.

**IMBENS, Guido W.** n.e.

**INMAN, J. Jeffrey** n.e.

**INNES, Robert D.**

- **Born** 1959, San Rafael, CA, USA.
- **Current Post** Prof., Econ. Dept and Dept Agric. and Resource Econ., Univ. Arizona, Tucson, AZ, USA, 1993–.
- **Degrees** BA (Highest Hons), MBA (Fin.), PhD (Agric. and Resource Econ.) Univ. California, Berkeley, 1981, 1984, 1986.
- **Editorial Duties** Ed. Bd, JEEM, 2001–.
- **Principal Fields of Interest** D0 Microeconomics: General; K0 Law and Economics: General; Q0 Agricultural and Natural Resource Economics: General.

**Principal Contributions** I have made research contributions in finance, agricultural policy, industrial organization, law and economics, and environmental economics. In finance, I have studied the design of credit contracts when there are either hidden actions or hidden attributes of prospective borrowers, helping understand the prevalence of debt-type contracts and their policy implications. On agricultural policy, I have studied stereotypical government interventions in stochastic economies with incomplete contingent claim markets; two season subsistence farming and its implications for developing countries’ agricultural policy; soil depletion in stochastic dynamic frameworks, with implications for government insurance; optimal nutrition policy; and the optimal design of government crop insurance programs in a political economy. My work with Rich Sexton advances industrial organization literatures in two ways: identifying efficiency benefits of exclusionary contracts that require buyers to purchase only from a particular seller, when buyers behave strategically; and providing a new explanation for price discrimination, with implications for government anti-trust policy. My recent work in law and economics focusses on the optimal self-enforcement of law, the economics of takings, the optimal design of liability rules, and enforcement-driven motives for the ex ante regulation of potentially harmful activities. In environmental economics, I have studied both generic issues in policy design and specific problems in environmental regulation vexed by imperfect information and/or limited liability, including automobile pollution, live-
stock waste, endangered species, and safe drinking water. Recent work identifies economic motives for intertemporal emission permit programs and studies how environmental policies can be structured to provide optimal incentives for innovation in pollution abatement technologies.

ITO, Takatoshi n.e.
J

JACKSON, Matthew Owen

Born 1962, Elmhurst, IL, USA.
Current Post Edie and Lew Wasserman Prof. Econ., California Inst. Tech., Pasadena, CA, USA, 1997–.


Principal Fields of Interest D7 Analysis of Collective Decision-Making; C7 Game Theory and Bargaining Theory; D4 Market Structure and Pricing.

**Principal Contributions** My contributions have primarily been in micro-economic theory, and in particular in the understanding of how the design of institutions such as markets, voting systems, and social networks, affects the behaviour of the individuals involved and the resulting economic welfare. My research uses game-theoretic reasoning to understand the incentives provided by various mechanisms for collective decision making. The specific topics to which I have contributed are implementation theory, mechanism design, social choice theory, auction theory, game theory, coalition formation, and the analysis of social and economic networks.

**Principal Contributions** My main contribution has been in the area of instrumental variables estimation and estimating the returns to education. With John Bound and Regina Baker, I showed that using instruments with a low correlation with the endogenous explanatory variable could lead to inconsistent estimates (if there is even a small correlation between the ‘instruments’ and the error in the structural equation) or estimates that are nearly as biased (in a finite sample) as those from ordinary least squares. These results have had broad applicability, beyond just estimating the returns to education. John Bound and I have also critiqued the use of quarter of birth as an instrument to estimate the returns to education. In work with Marianne Page I have examined ‘sheepskin’ effects in the returns to education and found that they may be as important as years of schooling. In recent work with Melissa Clark I have also found that there are important ‘sheepskin’ effects in the returns to the General Educational Development examination, particularly for the foreign-born. Other work has examined job stability and mobility in the
US (with Ann Huff Stevens), the measurement of educational attainment in the Current Population Survey, the impact of immigration on natives’ wages, and the determinants of location choices of immigrants.

JAFFE, Adam B.

Born 1955, Cleveland, OH, USA.

Current Posts Fred C. Hecht Prof. Econ. and Chair of Econ., Brandeis Univ., Waltham, MA, USA, 1994–.


Offices and Honours Faculty Res. Fell., Res. Assoc., NBER, 1985–94; Coordinator, NBER Innovation Pol. and Economy Group, 1999–.


Principal Fields of Interest O3 Technological Change; L4 Antitrust Policy; L5 Regulation and Industrial Policy.


Principal Contributions I began my career with the empirical measurement of the phenomena of technological opportunity and spillovers of R&D among firms. I showed that a firm’s patent portfolio can be used to characterize its ‘technological position’, and that its productivity, profits and market value can then be shown to be affected by this position (technological opportunity), and by the extent of research effort of ‘nearby’ firms (spillovers). I later extended this approach to showing that universities contribute to commercial innovation within US states. More recently, I have used patent citations data to investigate the rate at which technological knowledge spreads across institutional and geographic boundaries. I have explored how this kind of microeconomic evidence on returns to research and knowledge diffusion can be incorporated explicitly into macroeconomic models of economic growth. In another line of research, I have investigated empirically the contribution of endogenous economic incentives and explicit government policies in determining the rate of a number of ‘diffusion’ phenomena. I showed that flood-control investments and agricultural prices both contributed to the conversion of forested wetlands to farmland in the US Mississippi valley, and that energy prices (but not building codes) explain part of the diffusion of insulation and other energy-conserving building technologies in the US. In related work, I have analyzed the extent to which the diffusion of energy-conserving technologies is characterized by market failures, and the implications for public policy. I have analyzed theoretically and empirically the extent to which induced technological change results from, and affects the consequences of, environmental policy interventions. Finally, I have analyzed how the impact and effectiveness of public programs to support research and innovation can be measured, and how such programs can be designed to facilitate such measurement.

JAGANNATHAN, Ravi

Born 1949, Madras (now Chennai), India.


Principal Fields of Interest

G1 General Financial Markets; G2 Financial Institutions and Services; C5 Econometric Modeling.


Principal Contributions

A number of models have been proposed to explain how investors value assets. Differences among the various asset pricing models arise from the fact that they start with different assumptions that restrict investor preferences, their initial wealth, the information available to them, the process governing the arrival of new information in the economy and the type of market frictions that are allowed. Lars Hansen and I developed diagnostic methods to evaluate asset pricing models and understand what is missing in each model. Zhenyu Wang and I showed how the performance of the widely used Sharpe–Lintner–Black Capital Asset Pricing Model (CAPM) can be substantially improved by (a) taking into account the return to human capital when measuring the return on the market portfolio and (b) allowing the model parameters to vary with the business cycle. Most asset pricing models assume that security markets are frictionless and securities are priced as though taxes do not matter. My work with Fumio Hayashi, John Boyd and Murray
Frank suggests that at the margin, stock prices drop on average by a dollar for each dollar of additional dividend on the ex-dividend day providing empirical support for this view. My work with Glosten and Runkle provides new insights into the nature of the stochastic process that drives stock returns. We showed how modifying the standard GARCH-M model to allow positive innovations to stock returns has a different impact on conditional volatility than negative innovations. This modification improves the model performance. Glosten and I showed that valuing performance of an active portfolio manager is equivalent to valuing a particular contingent claim on the stock index portfolio. In general the form of the contingent claim is not known and we demonstrated that the contingent claim can be approximated by a series of options.

JAIN, Dipak C.

Born 1957, Tezpar, India.


Principal Fields of Interest A2 Teaching of Economics; M0 Business Administration and Business Economics; Marketing; Accounting: General.
Publications


Principal Contributions

JAMES, Christopher n.e.

JANSEN, Dennis William

Born 1956, St. Louis, MO, USA.

Current Post Prof. Econ., Dept Econ., Texas A&M Univ., College Station, TX, USA, 1994–.


Offices and Honours Natl Merit Scholar, 1975; Mrs Victor Humphries Fellowship, 1978; Earhart Foundation Fellowship, 1988; Res. Fell., Private Enter-


Principal Fields of Interest  E0 Macroeconomics and Monetary Economics: General; G0 Financial Economics: General; C1 Econometric and Statistical Methods: General.


Principal Contributions  My contributions can be classified as follows. I have written a series of articles that investigate theoretical issues regarding alternative monetary policy rules. These papers explore the macroeconomic implications of money, interest rate, nominal income, and inflation rules for monetary policy, as well as the interaction of policy rules and certain private sector behavior such as nominal wage contracts. A related set of empirical papers attempts to provide a description of US monetary policy behavior. I have also written a series of articles that apply extreme value theory to problems in economics and finance. These include descriptive studies of financial asset returns, applications of extreme value theory to the problem of portfolio selection, and development of new estimators of the tail index. In addition, I have written a number of articles looking at various empirical characterizations of macroeconomic and financial variables, including potential nonlinearities, outliers, cointegrating relationships, as well as a characterization of stochastic or deterministic trends.
JAPPELLI, Tullio

Born 1956, Naples, Italy.

Current Post Prof. Econ., Univ. Salerno, Salerno, Italy, 1995–.


Editorial Duties Co-Ed., Giornale degli Economisti, 1997–.

Principal Fields of Interest E2 Consumption, Saving, Production, Employment, and Investment; D1 Household Behavior.


Principal Contributions n.e.

JARROW, Robert Alan

Born 1952, Hackensack, NJ, USA.

Current Post Prof. Fin. and Econ., Johnson Grad. Sch. Mgmt, Cornell Univ., Ithaca, NY, USA, 1979–.

Past Posts none.


Principal Field of Interest General Financial Markets.


Principal Contributions My work relates to the pricing and hedging of the risks in trading financial securities. I have studied two market settings: competitive markets and markets where there is a large trader. In competitive markets I have analyzed the term structure, foreign currency, commodity, and credit risk. Here I have developed models useful for the pricing and hedging of various derivative securities. Of these models, those that are most used in practice are the Heath–Jarrow–Morton term structure model and the Jarrow–Turnbull reduced form credit risk model. In markets where there is a large trader, I have analyzed conditions under which the markets cannot be manipulated and developed models for the pricing of derivatives in these manipulative-free settings. I have also contributed to the theoretical foundations of arbitrage pricing theory and risk management theory, more generally.

JEFFERSON, Gary H.

Born 1943, Lynn, MA, USA.

Current Post Carl Marks Prof. Intl Trade and Fin., Brandeis Univ., Waltham, MA, USA, 1984–.

Degrees  AB (Hist.) Dartmouth Coll., 1966; MA and MALD Fletcher Sch. Law and Diplomacy, Tufts Univ., 1970; MSc LSE, 1980; PhD Yale Univ., 1985.


Principal Fields of Interest  O0 Economic Development, Technological Change, and Growth: General; P0 Economic Systems: General.


Principal Contributions  (i) Creating and using large enterprise data sets to analyze the impact of China’s economic transition on Chinese enterprise behavior and performance; (ii) analyzing total factor productivity change in Chinese industry, while accounting for a wide range of statistical issues that bear on its reliable
measurement; and (iii) extending the literature on R&D and innovation in the US, and other OECD economies to the emerging innovation sector in Chinese industry and demonstrating the increasingly important role that R&D is playing in China’s economy. I am presently investigating China’s science and technology take-off (i.e., the rapid rise in its R&D spending/GDP ratio) within the context of similar experiences of various OECD economies. In addition to these contributions and research areas, my current research focusses on models of (i) the technology multiplier, which analyzes the channels through which technical change impacts on living standards, including factor accumulation and rates of savings and fertility and (ii) the commons economy, which links the weak monitoring of economic institutions to broad macroeconomic externalities, including inflation, crowding out, and financial repression. Finally, having brought scholars and staff from numerous Chinese universities and agencies to the US to study and participate in the study of the research issues described above, I have expanded their understanding of the power and possibilities of economic analysis and contributed to the creation of an increasingly able group of Chinese economists and statisticians, who are now performing and processing economic research within China.

JEGADEESH, Narasimhan n.e.

JENKINS, Stephen Pryse

Born 1956, Marton, New Zealand.


Principal Fields of Interest D3 Distribution; I3 Welfare and Poverty; J0 Labor and Demographic Economics: General.


**Principal Contributions** Much of my research has concerned issues related to income distribution, often from a measurement or applied angle. Examples include: the growth in UK income inequality and poverty during the 1980s, characterisation of systematic relationships between choice of equivalence scale and estimates of inequality and poverty, measurement of horizontal inequity and discrimination, and analysis of income and poverty dynamics and their determinants. I have also proposed or popularised various graphical devices and ‘easy estimation’ methods (typically accompanied by free programs that work with widely available software): e.g., three I’s of poverty curves for poverty analysis, computation of indices of inequality, poverty, tax concentration and progressivity, and estimation of discrete-time hazard regression models.

**JENSEN, Michael C.**

**Born** 1939, Rochester, MN, USA.


**Editorial Duties** Founding Ed., J Fin E, 1978–.

**Principal Field of Interest** M2 Business Economics.


**Articles:** 1. ‘The adjustment of stock prices to new information’ (with E. Fama et al.), IER, 10, Feb. 1969; 2. ‘Risk, the pricing of capital assets, and the evaluation of investment portfolios’, J Bus, 42, April 1969; 3. ‘Theory of the firm: mana-
JESSOP, Bob (Robert) Douglas

**Born** 1946, Dartford, Kent, UK.

**Current Post** Prof. Sociology, Univ. Lancaster, Lancaster, UK, 1990–.


**Degrees** BA (Sociology) Univ. Exeter, 1967; PhD (Econ. and Polit.) Cambridge Univ., 1972.

**Offices and Honours** Doctor (hc) Roskilde Univ., Denmark, 1997; Ashby Prize, Environment and Planning, 2002.


**Principal Fields of Interest** P1 Capitalist Systems; H1 Structure and Scope of Government; F2 International Factor Movements and International Business.


Principal Contributions As a post-disciplinary social scientist inspired by Marx’s pre-disciplinary critique of political economy, my principal contributions to economics have been in the field of the critique of orthodox economics and the development of a heterodox evolutionary and institutionalist understanding of various economic practices and institutions in the capitalist era. Thus my principal areas of research relevant to the field of economics concern the social embeddedness of the capitalist economy and its structural coupling and co-evolution in relation to other institutional orders (especially the state considered as an institutional ensemble) and the lifeworld (or civil society). I have worked on theories of the capitalist state for more than 25 years, developed a sympathetic critique of the Parisian and other regulation approaches and highlighted the role of state and discourse in the regularization of the inherently improbable nature of capital accumulation, elaborated a series of claims about the transformation of the Keynesian Welfare National State into an emergent Schumpeterian Workfare Postnational Regime, and developed a neo-Schumpeterian approach to entrepreneurial cities and the development of cross-border regions. I have also worked more recently on issues of globalization and regionalization, time–space distantiation and time–space compression, and the role of spatio-temporal fixes in securing islands of relative economic stability within an otherwise inherently unstable world economy.

JOHANNESSON, Magnus

Born 1964, Eksjö, Sweden.


Honour  Fulbright Award (Res. Scholar), 1992–93.


Principal Fields of Interest  11 Health; C9 Design of Experiments; D6 Welfare Economics.

Publications  


Principal Contributions  Part of my work has been related to the application of welfare economics to the economic evaluation of health care programs. I have for instance worked with developing methods for valuing and aggregating health changes in cost–benefit and cost-effectiveness analysis. Another area of research has concerned the determinants of health and the inequality in health. Much of my work has also been in the area of experimental economics and behavioral economics, where I have worked on, for instance: hypothetical versus real purchase decisions, hyperbolic discounting, anchoring, and social preferences.
JOHANSEN, Søren

Born 1939, Hellerup, Denmark.

Current Post Prof. Math. Stats, Univ. Copenhagen, Denmark, 1964–.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C1 Econometric and Statistical Methods: General; C5 Econometric Modeling.


Principal Contributions I have worked with the theory of cointegration and its applications in economics.

JOHN, Kose n.e.

JOHNSON, Eric J.

Born 1954, Passaic, NJ, USA.


**Degrees**
- BA (Human Communication, Highest Dept Hons) Rutgers Univ., 1976;

**Offices and Honours**

**Editorial Duties**
- *Marketing Sc.*, 1985–94,
- *J. Consumer Psychology*, 1994–,
- *J. Interactive Marketing*, 1997–,

**Principal Fields of Interest**
- M3 Marketing and Advertising; D1 Household Behavior.

**Publications**


**Principal Contributions**
- As a psychologist with specific interests in markets, games and consumer behaviour,
have concentrated on understanding the cognitive processes involved in judgement, valuation and choice, and in demonstrating the relevance of principle from behavioural decision research to economics. Specifically, I have done work in introducing process tracing analysis to the study of games, to the analysis of preference reversals and to understanding the selection of choice processes. A second stream of work has examined the role of representations in pricing and choice including work in mental accounting and consumer choice. Finally, I have also been interested in the role of behavioural factors such as affect, availability and framing in the perception of risk.

JOHNSON, George Edwards

**Born** 1940, Boston, MA, USA.

**Current Post** Prof. Econ., Univ. Michigan, Ann Arbor, MI, USA, 1966–.


**Degrees** MA, PhD Univ. California, Berkeley, 1964, 1968.

**Principal Fields of Interest** J4 Particular Labor Markets; I3 Welfare and Poverty.


**Principal Contributions** In the first part of my career I was interested in straightforward questions about how labour markets work and also in how to integrate unionism into an economic framework. In the 1970s I became interested in how government policies influence labour market outcomes. Since the mid-1980s I have been working on theoretical and empirical questions involving determinants of the distribution of earnings.

JONES, Charles I. n.e.

JONES, Derek Charles

**Born** 1946, Middlesbrough, Cleveland, UK.

**Current Post** Prof., Hamilton Coll., Clinton, NY, USA, 1984–.


Principal Fields of Interest  J5 Labor–Management Relations, Trade Unions, and Collective Bargaining; P5 Comparative Economic Systems; J0 Labor and Demographic Economics: General.


Principal Contributions I undertook some of the first econometric analyses of producer cooperatives in western economies (mainly the UK, US, France and Italy). Some findings challenged the conventional wisdom that such firms were inherently inefficient and unstable. Subsequently my work has expanded to include theoretical and empirical analysis of a broader range of forms of corporate governance and employee participation and employee ownership for firms in several developed countries (notably Japan and the UK). A second research area is transition economics, with contributions in several areas including the determinants of economic performance (and the potential benefits of insider ownership), the determinants of CEO compensation, the determinants of wages and the roles of labor unions. This work has concentrated on Bulgaria, the Baltic Republics and Russia. Future contributions are anticipated from work-in-progress in two other areas – economic development in depressed communities and the new economy and internet economics. Note that, as is evident from the list of cited works, I have had the good fortune to work and publish with a number of excellent collaborators.

JONES, Larry E.

Born 1953, Sacramento, CA, USA.
Current Post Prof. Econ., Univ. Minnesota, Minneapolis, MN, USA, 1999–.

**Principal Contributions**

Most of my recent work has concentrated on the theory underpinning models of growth in dynamic general equilibrium models. My focus has been on the role played by central governments in determining the development possibilities in these settings. In particular, I have studied the relationship between various aspects of fiscal and monetary policy on the equilibrium long-run rate of growth.

**JÖNSSON, Bengt Göran**

**Born** 1944, Helsingborg, Sweden.  

**Degrees**


**Editorial Duties**


**Principal Fields of Interest**

I1 Health; D6 Welfare Economics; H5 National Government Expenditures and Related Policies.

**Publications**


Principal Contributions Most of my work is related to economic evaluation of new medical technology, international health care cost comparisons, and the organisation and financing of health care systems. Main contributions are in the areas of methods and application of cost-effectiveness and cost–benefit analysis in health care, and in the analysis of determinants of variations in international health care expenditures.

JORGENSON, Dale W.

Born 1933, Bozeman, MT, USA.


Degrees BA Reed Coll., 1955; AM, PhD Harvard Univ., 1957, 1959.


Principal Fields of Interest C5 Econometric Modeling; E2 Consumption, Saving, Production, Employment, and Investment; O4 Economic Growth and Aggregate Productivity.


Principal Contributions My contributions to economics are in the areas of investment, productivity, econometrics, welfare, and growth. The common element in these five bodies of research is a model of capital as a factor of production introduced by me in 1963. The key innovation in this model is the concept of the cost of capital, which incorporates the tax structure for capital income as a determinant of demand for capital services. The cost of capital and the closely related notion of the marginal effective tax rate have generated a voluminous literature. The cost of capital has been incorporated into both conventional macro-econometric models and general equilibrium models of the impact of tax policy. Marginal effective tax rates played an important role in the proposals that led to the Tax Reform Act of 1986 in the United States. These measures are now available for literally dozens of countries. My research on productivity, initiated in 1966, has generated complete systems of national accounts suitable for econometric modeling. The cost of capital is imbedded in these systems as the price of capital services. Data from the systems of national accounts underlie the econometric modeling of producer and consumer behavior in my seminal papers of 1971, 1973, and 1975. These papers introduce econometric methods for representing technology and preferences that have been widely applied in practice. Econometric models of producer and consumer behavior are the building blocks of my intertemporal general equilibrium models. The intertemporal price system balances demand and supply for products and factors of production and links asset prices to discounted values of future capital services. This forward-looking feature is combined with backward linkages among investment, capital stock, and capital services in modeling the dynamics of long-run growth empirically.

JORION, Philippe


Principal Fields of Interest F3 International Finance; G1 General Financial Markets; G2 Financial Institutions and Services.


Principal Contributions Most of my work deals with financial risk management. Early research focussed on portfolio optimization in the presence of estimation risk, i.e., uncertainty in parameter inputs. I also studied asset allocation among international investments. This involves forecasting currency movements and volatility. My paper on purchasing power parity (PPP) was the first to show that PPP holds over the recent flexible exchange rate period. The papers with Will Goetzmann deal with the effect of survivorship in equity markets. We show that the high historical equity premium obtained for US stocks is an artifact of survival. Later work focussed on risk measurement methods, learning from financial disasters such as Orange County and long-term capital management. My book on Value at Risk (VAR), aimed at finance practitioners, has become a best-seller in its field and has contributed to the spread of risk management practices across the world.
JOSKOW, Paul L.

Born 1947, New York City, NY, USA.

Current Post Elizabeth and James Killian Prof. Econ. and Mgmt, MIT, Cambridge, MA, USA, 1978–.


Degrees BA Cornell Univ. 1968; MPhil, PhD Yale Univ., 1971, 1972.


Principal Fields of Interest L5 Regulation and Industrial Policy; L2 Firm Objectives, Organization, and Behavior; L1 Market Structure, Firm Strategy, and Market Performance.


Principal Contributions

My research has focused on three primary areas. First, a great deal of my research has been devoted to understanding the causes and consequences of government regulation of industrial markets and, more generally, the relationships between government and business. I believe that to understand the causes and effects of government regulation, one must have an understanding of alternative normative and positive theories of government regulation, a detailed understanding of the industries being regulated, as well as an appreciation for the institutional arrangements that have evolved for regulating them. Thus, my research has focused on conceptual issues associated with government regulation of industry as well as numerous empirical studies of regulation and regulatory reform in the electric power sector, the property casualty insurance industry, the hospital sector, and various primary energy markets. This work has led as well to more general empirical studies of economies of scale, the diffusion of new technologies, and firm performance using data drawn from these industries. More recently, this work has led me to focus on issues associated with the political economy of regulation and the performance of market-based mechanisms for controlling pollution. Second, my research has examined empirically alternative vertical governance arrangements between enterprises at different levels of the production chain. This work has been motivated by recent theoretical work on incomplete contracts, asset specificity and information asymmetries. I have written several papers examining the choice between vertical integration and contracts between coal suppliers and electric utilities, and the factors that determine the duration and price-adjustment features of long-term contracts. Third, my research has examined alternative normative approaches to economic regulation, antitrust and competition policy. Most recently, these interests have drawn me to work on issues associated with privatization, restructuring, competition and regulatory reform in network industries in developed and developing countries.

Joulfaian, David n.e.

Jovanovic, Boyan n.e.

Joyce, Theodore n.e.

Judd, Kenneth Lewis

Born 1953, Madison, WI, USA.
Current Post Sr Fell., Hoover Inst., Stanford, CA, USA, 1988–.

Degrees BS (Maths), BS (Computer Sc.), MS (Maths), MS, PhD Univ. Wisconsin, 1975, 1975, 1977, 1979, 1981.

Offices and Honours Alfred E. Sloan Fellowship, 1985; Fell., Em Soc, 1990;

**Editorial Duties**


**Principal Fields of Interest**


**Publications**


**Principal Contributions**

My principal contributions have been in two areas. First, my papers on taxation in dynamic economies examined both incidence and optimality issues. The principal and consistent finding is that taxing capital income is much more distortionary than taxing consumption or labor income. Second, my papers and book on computation have shown how economists can make use of numerical analysis methods to build reliable and efficient algorithms to solve economic problems.

**JUHN, Chinhul** n.e.

**JUSELIUS, Katarina Ingeborg**

*Born* 1943, Turku, Finland.

**Current Post** Prof., Inst. Econ., Univ. Copenhagen, Denmark, 1997–.


Principal Fields of Interest

C3 Econometric Methods: Multiple/Simultaneous Equation Models; C5 Econometric Modeling; C8 Data Collection and Data Estimation Methodology; Computer Programs.

Publications


Principal Contributions

Most of my work has been related to the econometric analysis of the cointegrated VAR-model and how to formulate empirical models that can distinguish between short- and long-term dynamic responses of economic behavior. Focus has been on the role of nonstationarity in empirical economics and reconciling the time-series information in macroeconomic data with available theories. With Søren Johansen I have developed procedures for formulating and testing hypotheses on the cointegration rank, on long-run structural relations, short-run adjustment behavior, and on generic and empirical identification of the short- and long-run structures. For almost two decades I have addressed questions related to the determination of nominal growth in open economies based on the cointegrated VAR model for I(2) data. In this context I have suggested empirical procedures which can distinguish between long- and medium-run price homogeneity, and which can address questions of the dynamics of pulling and pushing forces within a system of equations. Recent work with Johansen has formalized the question of inflation control and mon-
etary policy rules within the VAR framework. I have attempted to explain the mechanisms behind inflation by comparing macroeconomic behavior in small, large, open, closed, regulated, and deregulated economies/ regimes. In this context I have used econometric procedures to identify parameter changes, structural breaks, and changing regimes. Some of my recent research includes the analysis of hyperinflation based on the cointegrated VAR model with explosive roots applied to Latin American and Eastern European economies. Lately I have also addressed questions related to the changing macroeconomic environment associated with the European economic integration and the subsequent lifting of restrictions on trade with goods and capital. In particular I have been able to explain empirically the high levels of European unemployment rates and the declining inflation rates with the convergence towards a sustainable European purchasing power parity level.

JUST, Richard E.

**Born** 1948, Tulsa, OK, USA.

**Current Post** Disting. Univ. Prof., Univ. Maryland, College Park, MD, USA, 1995–.

**Past Posts** Assoc. Prof. Agric. Econ. and Stats, Oklahoma State Univ., 1972–75; Prof. Agric. and Resource Econ., Univ. California, Berkeley, 1975–85; Prof. Econ., Brigham Young Univ., 1979–80; Prof. Agric. and Resource Econ., Univ. Maryland, 1985–92; Prof. and Chair Agric. and Resource Econ., Univ. Maryland, 1992–95.

**Degrees** BS Oklahoma State Univ., 1969; MA (Stats), PhD Univ. California, Berkeley, 1971, 1972.


**Principal Fields of Interest** Q1 Agriculture; D6 Welfare Economics; D2 Production and Organizations.


JUSTER

Born 1926, Hollis, NY, USA.


Degrees BS (Educ.) Rutgers Univ., 1949; PhD Columbia Univ., 1956.

Principal Fields of Interest D1 Household Behavior; C8 Data Collection and Data Estimation Methodology; Computer Programs.


Principal Contributions Much of my professional career has been spent in studying the behaviour of households, initially in its cyclical aspects with respect to purchase decisions and saving rates, then in its secular aspects with respect to the use of resources to produce well-being, more recently in its relation to population ageing. In analysis of cyclical behaviour, much of the work has focused on the role of expectational or anticipatory phenomena in explaining consumer decisions. This interest leads naturally to the use of survey data of one kind or another in analysis of purchase and saving decisions. The work on secular trends in household behaviour, which is focused on the generation of well-being, had its original roots in a concern with the degree to which conventional national income measurements misrepresented both the distribution and the change over time in household income. There is a natural progression in this work from a concern over the deficiencies of the conventional trans-
actions-based GNP measures of output and income to the development of a comprehensive framework for the measurement of well-being, where the ultimate resource constraints are represented by the stock of wealth accumulated in the past and available time. The most recent work on population ageing focuses mainly on the analysis of retirement decisions. An important part of the work is the development of measures relating to health, wealth, and intra-family transfers, and the role of these factors in labour supply decisions at older ages. Another important part of the work in this area revolves around the development of more valid and reliable measures of household wealth, and of the income from wealth, including not only tangible and financial wealth but also wealth in the form of pension and social security rights to future income flows.
KAGEL, John H.

Born 1942, New York, USA.

Current Posts Univ. Chaired Prof. Apl. Microecon. and Dir., Econ. Lab., Ohio State Univ., Columbus, OH, USA, 2000–.


Degrees BA Tufts Univ., 1964; MPIA (Econ. Devlp.) Univ. Pittsburgh, 1966; MS, PhD Purdue Univ., 1968, 1970.


Principal Fields of Interest D8 Information and Uncertainty; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


Principal Contributions
The application of experimental methods to the study of economics. Use of laboratory methods provides the opportunity to conduct controlled experiments involving precise and demanding tests of economic theory with rewards and punishments of real consequence. Early work dealt with individual choice, most notably in a series of experiments employing pigeons and rats. This work provides (arguably) the first rigorous empirical support for the Slutsky–Hicks theory of individual choice. It also extends the domain of application of economic principles to animal behavior, contrasting economic choice models with models from psychology and biology. Later work involved the study of game-theoretic models of behavior, auction theory, industrial organization theory, and learning to achieve equilibrium. This work has clearly demonstrated the existence of the winner’s curse among inexperienced bidders in common value (mineral rights) auctions and the breakdown of the comparative static (policy) predictions of the theory in the presence of a winner’s curse. These breakdowns extend to experienced bidders in novel situations, in part, because learning is context dependent. In contrast, in private value auctions, where there are no item valuation considerations, bidders are responsive to the underlying strategic considerations and behavior is consistent with the comparative static prediction of the theory. In industrial organization theory we have demonstrated the existence of reputation effects (predatory pricing) in the chain-store game and sophisticated signaling behavior in an asymmetric information, entry limit pricing game. Although there is clear evidence of the ‘snowball’ effects of a little bit of ‘irrationality’ underlying asymmetric information, sequential equilibrium models of reputation formation, we find important deviations from sequential equilibrium behavior as well. The refinements literature fails to characterize equilibrium outcomes in our signaling games, which are best characterized by a simple adaptive learning model.

KAHN, Charles Milton

Born 1952, Memphis, TN, USA.


Principal Fields of Interest D8 Information and Uncertainty; G2 Financial Institutions and Services; C7 Game Theory and Bargaining Theory.

Publications Articles: 1. ‘The solution of linear difference models under rational expectations’ (with O.J. Blanchard), Em, 48, July 1980; 2. ‘Wage–employment contracts’ (with J. Green), QJE, 98, suppl., 1983; 3. ‘The durable goods monopolist and consistency with increasing costs’, Em, 54, March 1986; 4. ‘Limited contract

**Principal Contributions** My early work focused on the theory of labour contracts: how overtime, severance pay, or up-or-out clauses can mitigate information differences, and macroeconomic implications of these solutions. Subsequent work has investigated effects of incentives and information on design of financial institutions. Charles Calomiris and I developed a theory of demandable debt as a disciplinary device for monitoring banks, and looked at other historical arrangements for private bank monitoring. Most recently, several papers written with William Roberds have analysed the incentive properties of arrangements, both historical and modern, for making payments, through central banks or private intermediaries, and developed a theory of payment, based on limitations on contract enforcement. Dilip Mookherjee and I developed efficiency standards and methods for analysing side trading by subgroups in economies with imperfect information and uncertainty. Related work with Emilson Silva reformulated the analysis of free riding in local public goods as a problem of moral hazard in teams and used this analysis to examine questions of corruption and tax collection. Other work investigated maintenance of monitoring in financial markets and real estate markets in the presence of trades by third parties. I have also made contributions to more technical issues in economic theory: developing techniques for handling the durable goods monopoly problem in continuous time, for analysing optimal contracts with infinite states, without arbitrarily imposing continuity, and for extending coalition-proof equilibrium to infinite games. With Richard Engelbrecht-Wiggans I characterized equilibria in multiunit simultaneous auctions. With
Stefan Krasa, I have shown pervasive non-existence of competitive general equilibrium in economies with American options. Under the guidance of Robert Fogel, I wrote on technical topics in American economic history. Discussions with Olivier Blanchard while I was a graduate student led to my inclusion in a paper developing the basic technique for solving large classes of linear rational expectations models.

KAHN, Lawrence Max

Born 1950, Spartanburg, SC, USA.
Current Post Prof. Labor Econ. and Collective Bargaining, Cornell Univ., Ithaca, NY, USA, 1994–.
Degrees BS (Maths, High Hons and High Distinction) Univ. Michigan, 1971; PhD Univ. California, Berkeley, 1975.
Offices and Honours Second Vice Pres., MEA, 1988–89.
Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J5 Labor–Management Relations, Trade Unions, and Collective Bargaining; J6 Mobility, Unemployment, and Vacancies.
Principal Contributions My research has focussed on aspects of labor econom-
ics including the economic effects of labor market institutions, job search, and discrimination. My early work on search found evidence consistent with the idea that workers search systematically among firms, sampling their preferred firms first, rather than contacting firms at random. I studied the connection between union wages and job search in several papers; for example, Morimune and I found that in highly unionized labor markets, all else equal, nonunion workers had more spells of unemployment than in less highly organized areas, suggesting that workers were queuing for the plum union jobs. Some of my work on race has focused on customer discrimination in professional sports. Specifically, in research with Sherer, I found that, all else equal, white professional basketball players in the 1980s earned roughly a 20 percent pay premium relative to comparable black players and that adding white players increased fan attendance. These findings suggested the existence of customer discrimination, which may be more resistant to competitive forces than employer or co-worker discrimination. Recently, I have analyzed the impact of labor market institutions on wage and employment outcomes in an international comparative context. In work with Blau, I found that highly centralized wage-setting regimes such as those found in many European countries lead to compressed wage structures in general, due in part to the high wage floors that unions negotiate and that the government or employers extend to nonunion workers. Since women are at the bottom of the wage distribution in all countries, these wage floors greatly reduce the gender pay gap in these countries relative to that in the more laissez-faire United States. However, I have also found that a cost associated with these wage floors is reduced employment opportunities of youth in many European countries.

KAHNEMAN, Daniel

Born 1934, Tel Aviv, Israel.


Principal Fields of Interest
n.e.

Publications


Principal Contributions
Much of my research has been concerned with an exploration of the characteristics and mechanisms of bounded rationality. In a longstanding collaboration with the late Amos Tversky we studied the psychology of judgment under uncertainty and of decision making under risk. We identified several heuristics that are used to simplify judgment tasks. These heuristics, notably representativeness, availability and anchoring on salient values, often lead quickly to reasonable answers but they also produce systematic biases, notably a neglect of base rate, non-regressive predictions, anchoring on uninformative values, overweighting of recent experiences and many others. We offered prospect theory as a descriptive alternative to expected utility theory, which is marked by the attachment of utility to gains and losses, and by loss aversion – overweighting of losses relative to gains. Tversky and I also studied the process of framing, in which people’s sensitivity to inconsequential aspects of decision prob-
lems leads them to violate a fundamental rule of rationality, labeled ‘extensionality’ or ‘invariance’. With Richard Thaler and Jack Knetsch I studied the endowment effect and the rules of fairness that govern economic transactions. With Knetsch and with Ilana Ritov I studied the psychology of statements of willingness to pay and the associated flaws of the contingent valuation method. With Cass Sunstein and David Schkade I have studied related issues that arise in the setting of punitive damages by juries, and the characteristics of moral intuitions that are relevant to the law. A major focus of my research is an exploration of the logic and the psychology of a Benthamite conception of utility, using real-time measures of experienced utility, as well as retrospective assessments of episodes and forecast of the utility of future experiences.

KALAI, Ehud

Born 1942, Tel Aviv, Israel.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D0 Microeconomics: General; D8 Information and Uncertainty.


Principal Contributions My early work concentrated on Nash’s bargaining problem. In 1975, with M. Smorodinsky, I showed that Nash’s 1953 solution is not unique – different reasonable axioms lead to different solutions. Later, I axiomatized the egalitarian solution, showing that interpersonal utility comparisons of a Rawlsian type are a consequence of primitive assumptions such as monotonicity. Subsequently, with Samet, I generalized the egalitarian solution and results, from bargaining problems to general coalitional games. Also within the area of coalitional games, Postlewaite, Roberts and I studied the effect of restricting trade through partial trading structures, and Zemel and I introduced and studied games of flow. In social choice theory, Schmeidler and I formulated and proved a cardinal-utility version of Arrow’s Impossibility Theorem, and with Muller and with Ritz I characterized the domains of individual preferences that escape the Impossibility Theorem. Rosenthal and I constructed arbitration procedures for uninformed arbitrators dealing with informed noncooperative bargainers. Later, I formalized a preplay bargaining procedure that resolves the prisoner’s dilemma, and subsequently, with Samet, I showed that preplay consensus-reaching by unanimity rules is Pareto efficient. The latter study also led us to develop the concept of persistent equilibrium. My recent interests are in large games: complexity, learning and robustness. Motivated by results on game-playing automata of Neyman and Rubinstein, Stanford and I developed a general measure of strategic complexity for repeated games. In learning theory, Lehrer and I established a model of subjectively rational agents, who learn with time to play Nash or correlated equilibrium. Jackson and I studied learning in recurring games, and Ledyard and I applied learning to problems of repeated implementation. I currently study equilibria of games with many anonymous players, showing that they have strong robustness properties that make them more suitable for economic and computer science applications.

KAMIEN, Morton Isaac

Born 1938, Warsaw, Poland.


Degrees BA City Coll., New York, 1960; PhD Purdue Univ., 1964.

Offices and Honours Fell., Em Soc, 1995; Dr Econ. (hc) Purdue Univ., 2001.

Principal Fields of Interest D4 Market Structure and Pricing; L1 Market Structure, Firm Strategy, and Market Performance; O3 Technological Change.
Publications


Principal Contributions My interest in the economics of technical change stemmed from the claim in the popular press in the late 1950s and early 1960s that automation was reducing job opportunities for the unskilled. Technological advance was thought to be the source of structural unemployment with a bias against the unskilled. I sought to analyse this question by determining the profit-maximising behaviour of a firm through time when its production function was endogenous and subject to change. My interest then turned to the question of whether a competitive market system led to over- or under-investment in technical advance. On the one hand the inability of firms to capture all the rewards from technical advance suggested under-investment while on the other hand, the race to be first suggested over-investment. N.L. Schwartz and I attempted to analyse this question by determining how rapidly a firm would develop an innovation when faced with the probability that unknown rivals were also attempting to achieve the same innovation. This model was extended in several directions, culminating in an effort to explain empirically observed phenomena which led to the theory of patent races. My interest in limit pricing stemmed from the belief that previous work on this subject was not founded on profit-maximising behaviour of the incumbent firm as it required it to price so as to delay entry for ever, and it also required that it know exactly the cost function of any potential entrant. N.L. Schwartz and I replaced this assumption with the supposition that the probability of entry was an increasing function of the incumbent firm’s current price. My interest at present has turned to interaction among firms in formation of cooperative research efforts and competition through time.

KAMINSKY, Graciela L. n.e.

KANBUR, Sanjiv Madhwarao Ravi

Born 1954, Dharwar, India.

Current Posts T.H. Lee Prof. World Affairs and Prof. Econ., Cornell Univ., Ithaca, NY, USA, 1997–.

KANDEL 443


Principal Fields of Interest D3 Distribution, H0 Public Economics: General; O1 Economic Development.


Principal Contributions My interests lie at the intersection of public economics and development economics, especially with the analysis of income distribution and poverty. I have made contributions to the theoretical and empirical analysis of many topics in this area – the impact of risk taking on income distribution, the Kuznets inverted U hypothesis, the theory of targeting, intrahousehold inequality, macroeconomic policy and income distribution, etc. I have a particular interest in bridging the worlds of academic analysis and policy implementation.

KANDEL, Shmuel

Born 1951, Tel Aviv, Israel.

Current Posts Dean, Prof. Fin., Faculty Mgmt, Tel Aviv Univ., Israel, 1999–; Vis. and Adjunct Prof. Fin., Wharton Sch., Univ. Pennsylvania, Philadelphia, PA, USA, 1990–.


Offices and Honours Nimrod Lapid Prize, Stats Dept, Tel Aviv Univ., 1978; Allon Fellowship, 1988; Batterymarch Fellowship, 1988; Smith–Breeden Prize, J Fin, 1996; Maurice and Gertrude Deutch Chair, Tel Aviv Univ., 1996–.

Principal Fields of Interest G1 General Financial Markets; G2 Financial Institutions and Services.


Principal Contributions n.e.

KANDORI, Michihiro

Born 1959, Sapporo, Japan.

Current Post Prof. Econ., Univ. Tokyo, Tokyo, Japan, 1999–.


Degrees BA Univ. Tokyo, 1982; PhD Stanford Univ., 1989.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty; L1 Market Structure, Firm Strategy, and Market Performance.


**Principal Contributions**

I have been working on the possibility of cooperation in long-term relationships (repeated games). My early works examined how cooperation is sustained when players change their trading partners over time. In particular, I examined such issues as group sanction, cooperation sustained by contagion in anonymous random matching games, and the folk theorem with overlapping generations of players. I also examined what kind of information is necessary to achieve cooperation in long-term relationships. I proved the basic relationship between observability and efficiency and also showed that communication plays a vital role in achieving cooperation, when players receive diverse imperfect information about each other’s action (i.e., in repeated games with imperfect private monitoring). I have also been working on the evolution of social conventions or equilibria and demonstrated that the randomness in adjustment process can uniquely select a particular equilibrium in the long run, even though multiple equilibria or conventions can potentially be present in a society. I and my co-authors introduced a general technique to characterize the long-run stochastically stable outcomes, a basic analytical tool in the stochastic evolutionary game theory. We showed that the risk dominance equilibrium is selected in the long run in coordination games, and I have provided various applications.

**KANNINEN, Barbara J.** n.e.

**KAPLAN, Steven N.** n.e.

**KAPLOW, Louis**

Born 1956, Chicago, IL, USA.

**Current Posts**


**Past Posts**


**Degrees**


**Offices and Honours**


**Editorial Duties**


**Principal Fields of Interest**

H2 Taxation, Subsidies, and Revenue; K1 Basic Areas of Law; L4 Antitrust Policy.
Publications


Principal Contributions I am co-author of numerous articles in economics and law journals, a text on antitrust law, a survey on law and economics and a book, *Fairness versus Welfare*, at the intersection of economics, moral philosophy, and law. I am working on books on distributive justice and on income redistribution and the tax system. I am on the editorial boards of a number of journals and have been an economic and legal consultant to various government entities and private parties.


Principal Fields of Interest G1 General Financial Markets; F3 International Finance.


Principal Contributions I have made contributions to the analysis of international financial markets, international asset pricing models and models of investment decision-making. My early papers focused on measuring and modeling financial market risks for pricing and trading stocks, bonds, and derivatives. This research program evolved into the study of how market risks are priced differently in international markets. The important methodological contributions arise from the importance of modeling of the joint dynamics of conditional market variance and covariance risks, particularly with high-frequency financial asset price data. My more recent institutional contributions have stemmed from my specialization in the study of internationally cross-listed shares of stocks and their importance for global investors in managing risks, for corporate issuers in raising capital and in governance issues, for market traders in providing liquidity, and for regulators in formulating public policy.

KARRAS, Georgios

Born 1962, Athens, Greece.
Current Post Prof. Econ., Univ. Illinois, Chicago, IL, USA, 2001–.
Principal Fields of Interest E0 Macroeconomics and Monetary Economics:
General; F4 Macroeconomic Aspects of International Trade and Finance.

Publications


Principal Contributions My research has focused on both the business-cycle and long-run growth aspects of macroeconomics. In various articles I have tested some of the predictions of different growth theories and their convergence implications. In a number of other articles I have examined the sources of business-cycle fluctuations and the importance of fiscal and monetary policies, including the role of the economy’s openness to international trade for the potency of monetary policy, and the consequences of monetary integration and dollarization.

KASHYAP, Anil K. n.e.

KASS, Robert E. n.e.

KATZ, Jonathan N. n.e.

KATZ, Lawrence Francis

Born 1959, Ann Arbor, MI, USA.


Editorial Duties Ed., *QJE*, 1991–.

Principal Fields of Interest J0 Labor and Demographic Economics: General; I0


Principal Contributions Most of my research is related to issues in labor economics and the economics of social problems. My early work examined unemployment and wage determination. I helped delineate the role of sectoral shifts and aggregate shocks in unemployment fluctuations, showed the importance of taking account the layoff-recall process in studying US unemployment, and estimated the impacts of unemployment insurance. I also contributed to the development of the theoretical and empirical implications of efficiency wage models. I helped document the nature and persistence of inter-industry wage differentials and helped show how patterns of inter-industry wage differentials could be used to test theories of wage determination. My joint work with Olivier Blanchard developed a new approach to modeling regional labor markets and showed the importance of migration in explaining the adjustment of US states to economic shocks. Much of my recent work has focussed on documenting and understanding changes in the US wage structure and earnings inequality in an historical and international comparative context. I helped develop a supply–demand institutions framework for empirically assessing differences and changes in wage structures across countries and over time. My research has shown the roles played by skill-biassed technological changes, fluctuations in the rate of growth of the relative supply of
more-educated workers, and international trade and immigration in shaping the US wage structure. Claudia Goldin and I have been studying the economic history of educational advance, technological change, and economic inequality in the United States over the past 150 years. My research has also examined the economics of social interactions and neighborhood effects; the impact of asymmetric information on the labor market; the effects of the birth control pill on women’s careers and on marriage markets; and the evaluation of policies including wage subsidies, minimum wages, and housing mobility programs.

KATZ, Michael Louis

Born 1957, Oakland, CA, USA.


Editorial Duties Co-Ed., JEMS.

Principal Fields of Interest D0 Microeconomics: General; L4 Antitrust Policy; L5 Regulation and Industrial Policy.


Principal Contributions One of the founders of the theory of network effects in oligopolistic markets.

KAU, James B.

Born 1943, Pasco, WA, USA.


Offices and Honours Competitive Pa-

Principal Fields of Interest G1 General Financial Markets; R1 General Regional Economics; H1 Structure and Scope of Government.


Principal Contributions Initial research was concentrated on urban spatial structure and the examination of urban housing production processes using alternative production functions. Research also studied how land values are determined and how spatial variation affects the land market. Several papers explored urban population density and structure. The second main body of research focuses on the determinants of congressional voting. The research began with the question of the determinants of recent regulatory legislation, much of which does not seem explicable in terms of the now standard economic theory of regulation. The conclusion reached is that ideology appears to be the explanation for much of the new legislation. This result means that those who claim that economic factors are the basis of all legislation should be required to document their claim. Finally, this research led to a very general model of the legislative process. Current research concentrates on the pricing of mortgages as derivative assets, often called the option-pricing approach to mortgage valuation. The research examined fixed rate mortgages as well as insurance on such mortgages, considering both the right to default and to prepay. The analysis employs a model with two-state variables, one for the interest rate process and one
representing the value of the property. Other work developed a similar model to value servicing, guarantee fees, the underlying commercial and multifamily mortgages and mortgage-backed securities. The most recent papers examine adjustable rate mortgages within the same framework with emphasis placed on understanding path-dependence problems.

KAUL, Gautam

Born 1954, Patna, Bihar, India.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling; C8 Data Collection and Data Estimation Methodology; Computer Programs.


Principal Contributions My main contribution to economics is to ask good questions, and then attempt to address them in
the most rigorous fashion. Most of the questions I have been interested in are related to financial economics, and specifically to the workings of financial markets. My research is empirically oriented, with a major focus on methodology.

KEALY, Mary Jo n.e.

KEANE, Michael P. n.e.

KEEBLE, David Etherton

Born 1939, Luton, UK.


Degrees BA (Geography), MA (Geography), PhD Cambridge Univ., 1961, 1965, 1966.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; R3 Production Analysis and Firm Location; O3 Technological Change.


5. ‘Enterprising behaviour and the urban–
rural shift’ (with P. Tyler), Urb Stud., 32,
Sept. 1995; 6. ‘Small firm creation and
growth, regional development and the
north–south divide in Britain’ (with J.
Bryson), Environment and Planning A, 28,
Sept. 1996; 7. ‘Small firms, innovation
and regional development in Britain in
the 1990s’, Regional Stud., 31, June 1997;
8. ‘The creation and growth of small busi-
ness service firms in post-industrial Brit-
ain’ (with J. Bryson, P. Wood), Small Bus.
Econ., 9, Sept. 1997; 9. ‘Internationalisa-
tion processes, networking and local em-
beddedness in technology-intensive small
firms’ (with C. Lawson, H. Lawton Smith,
B. Moore, F. Wilkinson), Small Bus.
Econ., 11 Sept. 1998; 10. ‘Regional net-
working, collective learning and innova-
tion in high-technology SMEs in Europe’
(with F. Wilkinson), Regional Stud., 33,
June 1999; 11. ‘Why do business service
firms cluster? Small consultancies, clus-
tering and decentralisation in London and
southern England’ (with L. Nachum),
Transactions Inst. British Geographers,
27, Jan. 2002; 12. ‘Sources of increasing
returns and regional innovation in the
United Kingdom’ (with S. Athreye), Re-

Principal Contributions My work has
investigated a range of key theoretical,
empirical and policy issues concerned with
manufacturing and service industry loca-
tion dynamics and regional economic re-
structuring in the UK and European Un-
ion. Specifically, it has contributed to
understanding the determinants and policy
implications of firm relocation and mi-
gation, of regional and urban–rural vari-
ations in new firm creation and small firm
growth and innovativeness, of regional dis-
parities in economic structure and per-
formance especially between central and
peripheral regions of western Europe and
the UK north–south divide, and of small
firm clustering in high-technology activi-
ties, media industries and business ser-
VICES. Key theoretical contributions include
a new theory of the urban–rural shift of
business activity (‘enterprising behaviour
theory’) and enhanced understanding of
the role of collective learning and net-
working processes in the regional cluster-
ing of small high-technology, media and
business service firms.

KEELER, Theodore Edwin

Born 1945, Enid, OK, USA.
Current Post Prof. Econ., Univ. Cali-
fornia, Berkeley, CA, USA, 1983–.
Past Posts Asst Prof. Econ., Assoc.
Prof. Econ., Univ. California, 1971–77,
82.
Degrees AB Reed Coll., 1967; SM,
Offices and Honours Phi Beta Kappa,
NSF Fellow, 1967–69, 1970–71; Princi-
pal Investigator, Transportation Cost Study
(NSF), 1973–75, Sloan Foundation Project
in Transportation, 1977–80, DOT Centers
Grant, 1988–90, Robert Wood Johnson
Editorial Duties Ed. Bd, MIT Press
Stud. in Regulation, 1980–85; Ed., Res.
in Transportation Econ., 1980–85; Assoc.
Principal Fields of Interest II Health;
L5 Regulation and Industrial Policy; L9
Industry Studies: Utilities and Transpor-
tation.
Publications Books: 1. Railroads,
Freight, and Public Policy (Brookings
Inst., 1983); 2. Regulating the Automo-
bile (with R. Crandall, H. Grunsepect, L.
Lave), (Brookings Inst., 1986).
Articles: 1. ‘The economics of passen-
ger trains’, J Bus, 44, April 1971; 2. ‘Air-
line regulation and market performance’,

**Principal Contributions** My contributions have all been in applied, empirical microeconomics. Early work on the transportation industries included studies of optimal pricing, investment, regulation and taxation in air, rail and truck in intercity transportation, and auto, rail, and bus in urban transportation. A strong focus of this research was the likely benefit of deregulation in the air, rail, and trucking industries. Subsequent work in the 1980s and early 1990s considered the effects of this deregulation (which had occurred subsequent to the previous papers) on the efficiency of transportation markets and the safety of transportation, with the broad result that lower regulation enhanced efficiency without reducing safety. Since the early 1990s, my work has focussed on issues of pricing, taxation, and regulation in the cigarette and hospital service industries. One thread of the work on cigarettes has emphasized the effects of taxation, regulation, advertising, education, and nicotine replacement drugs on cigarette consumption. Another thread has focussed on oligopoly behavior in the cigarette industry and the effects of that behavior on cigarette consumers. Work on the hospital industry has focussed on two themes: excess capacity and regulation. The results indicate, first, that the cost of excess bed capacity is much higher in US hospitals than most previous research would indicate; and second, that government efforts to force cross-subsidization between paying and non-paying hospital patients have not worked as intended and have caused economically inefficient outcomes.
KEEN, Michael James


Principal Fields of Interest H0 Public Economics: General; D0 Microeconomics: General.


Principal Contributions My work has sought to apply simple theory, and even simpler empirics, to a range of real issues in public finance, including especially international taxation, redistribution, and the design of commodity and corporate taxes.

KEHOE, Patrick J. n.e.

KENKEL, Donald Scott

Born 1959, Ames, IO, USA.


Principal Field of Interest II Health.


Principal Contributions Broadly speaking, the goal of my research agenda is to use the economic approach to inform public policy on health promotion and disease prevention. Most of my research has been about health-influencing decisions that are made outside the health care sector. My research suggests that individuals who are better informed and who have more schooling make healthier choices about smoking, drinking, exercise, and medical care. My contributions to the economics of alcohol and tobacco have been mainly empirical, policy-relevant estimates. For example, I estimated that both deterrence and tax policies can reduce heavy drinking and drunk driving. D. Ribar and I estimated the effects of alcohol abuse on young adults’ earnings. With P. DeCicca and A. Mathios, I estimated that higher cigarette taxes may have little impact on youth smoking. In addition to empirical studies of health behaviors, another strand of my research agenda has addressed economic evaluation methods for health, in particular how to place a monetary value on the health effects of public policies for cost–benefit analysis.

KENNAN, John

Born 1947, Dublin, Ireland.

Current Post Prof. Econ., Univ. Wisconsin, Madison, WI, USA, 1992–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; C7 Game Theory and Bargaining Theory; E3 Prices, Business Fluctuations, and Cycles.


**Principal Contributions**

Most of my articles appear in accounting journals. I examined how trading volume and bid–ask spreads at the time of an information event in financial markets can be used in conjunction with price to infer the properties of the pre-existing and the newly arriving information. I also devised a simple statistical method to infer the properties of financial analysts’ information from their forecasts of earnings, namely, the level of uncertainty and consensus. I used this method to find that consensus decreases after public earnings announcements by firms, which I conjecture to arise from vigorous private information gathering triggered by the arrival of public information.

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**KIMBALL, Miles S.** n.e.

**KING, Mervyn Allister**


Degree BA Univ. Cambridge, 1969.

Offices and Honours Richards Prize,


Principal Fields of Interest H2 Taxation, Subsidies, and Revenue; E5 Monetary Policy, Central Banking, and the Supply of Money; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.


Principal Contributions Study of the economics of capital markets has been divided between economics departments and finance groups in business schools. Interaction between the two has been less than one might have hoped (as a glance at the references to each other’s literature demonstrates). I see my own work as an attempt to bridge the gap between the two traditions of public and private finance. This was not my goal when I started research. After I took the Cambridge Tripos, Richard Stone invited me to join his Growth Project, a group concerned with the empirical analysis of the UK economy. My initial interest was in investment but this later broadened into a general concern with public policy and the capital market. Early papers related to dividends, investment, taxation, unanimity of shareholders and corporate financial policy, and culminated in my book Public Policy and the Corporation. The systematic analysis of the effects of taxation on corporate financial policy and investment decisions developed by Joseph Stiglitz and myself showed that the traditional view of the incidence of corporate taxation was inadequate. Financial policy was crucial in determining effective tax rates. This led to the so-called ‘new view’ of corporate taxation (associated with the names of Alan Auerbach, David Bradford and myself) according to which the differential taxation of dividends and capital gains was capitalised in lower stock.
market values with no consequence for the incentive to invest out of retained earnings. Empirical studies showed that effective tax rates on investment were much lower than previously thought and that in the UK the tax was virtually non-existent. It is clear that many policies have effects rather different from those believed to result by the government that instituted them, a lesson reinforced by my experience as a member of the Meade Committee and co-author (with John Kay) of the book, The British Tax System, and that economic analysis can help to determine the climate of opinion within which policies are formed. More recently I have worked on the theory and practice of inflation targets in the conduct of monetary policy during my appointment at the Bank of England.

KING, Robert G. n.e.

KIRCHSTEIGER, Georg n.e.

KIRMAN, Alan Peter

Born 1939, London, UK.


Principal Fields of Interest D0 Microeconomics: General; D4 Market Structure and Pricing; D8 Information and Uncertainty.


Articles: 1. ‘Arrow’s theorem: many agents and invisible dictators’ (with D. Sondermann), JET, 5, 1972; 2. ‘Fairness, equity and envy’ (with A. Feldman), AER, 63, Sept. 1973; 3. ‘Dynamic oligopoly with inventories’ (with M. Sobel), Em, 42, March 1974; 4. ‘Stochastic communication and coalition formation’ (with C. Oddou, S. Weber), Em, 54, Jan. 1986; 5. ‘What or whom does the representative individual represent?’, JEP, 6, Spring

**Principal Contributions** I started my research by applying non-cooperative game theory to the theory of international trade. But I was advised that this was going nowhere and I moved into general equilibrium theory with excursions into welfare, game theory and social choice. Over the years, however, I have been intrigued by the way in which markets organise themselves and have tried to apply stochastic graph theory and reinforcement learning to understand this sort of problem. I have also looked at herd behaviour, in part, inspired by ants. I have analysed data from markets such as the Marseilles fish market in detail and looked at financial time series to see how the predictions from the simple models derived, in part, from statistical mechanics’ hold up. The basic idea is that the aggregate behaviour of an interactive system of individuals cannot be reduced to that of the average individual. Aggregation in such systems is a complicated affair and the interaction between economic agents other than through markets plays a role. One lesson that we can learn is that the behaviour of individuals may be very simple and much less sophisticated than that normally attributed to them. Yet at the collective level rationality may emerge. The construction and functioning of an ants’ nest is complex, yet none of the individual ants has intentions or a view of the whole and each acts within a very limited sphere. Such a model is clearly inappropriate for economics but provides a useful countervailing benchmark to the standard market model. For this reason, I have become convinced that the problem of how rather simplistic individuals organise and coordinate their activities is more important for an understanding of markets than the problem of efficiency and existence of equilibrium which occupy such a central role in economics.

**KIYOTAKI, Nobuhiro** n.e.

**KLEMPERER, Paul David**

**Born** 1956, Southampton, England.


Degrees BA (Eng., 1st Class Hons with Distinction) Cambridge Univ., 1978; MBA (Top Student Award), PhD Stanford Univ., 1982, 1986.


Principal Fields of Interest L0 Industrial Organization: General; D4 Market Structure and Pricing; L4 Antitrust Policy.


Principal Contributions Article 1 introduced the concept of strategic complementarity, commonly used in many fields including macroeconomics, growth theory, oligopoly, trade theory, and game theory. Article 5 develops a framework for analysing the intensity of competition in an industry. Others have since used it to analyse management incentive schemes and pricing arrangements between manufacturers and retailers, and for practical applications, e.g., in electricity markets. I developed the theory of competition when consumers have switching costs between firms (or are ‘brand loyal’), (articles 3, 8, 10). I generalize to other cases where firms’ current market shares are important for their future profits; explain introductory offers, price wars and limit pricing; examine industry profitability, ease of new entry, and evolution of market.
structure; show how the business cycle and exchange-rate expectations affect prices (article 4); analyse firms’ product choices; and help explain the existence of multi-product firms and the nature of competition between them (article 7). Article 13 analyses public policy towards tobacco. Article 6 was the first economic analysis of optimal patent breadth. I have developed connections between auction theory and ‘standard’ economic theory, showing how mainstream economic questions that do not seem related to auctions can be addressed using auction-theoretic techniques (article 16). Examples include explaining why firms may ration customers (article 17); analysing wars of attrition (article 14); demonstrating that rational traders participate in buying ‘frenzies’ which sometimes lead to crashes in, e.g., stock and housing markets, and explaining investment ‘booms’ and ‘busts’ (article 9). In pure auction theory, article 11 compares a public auction (e.g., of a business to be privatized) with negotiating a sale; article 2 shows that private information need not imply inefficiency in trade; articles 12 and 15 show that small asymmetries between bidders can critically affect the profitability of auctions (e.g., takeover battles); and article 18 develops surprising results about common-value auctions. I have designed auctions, including the British telecom auction that raised $34 billion, and written articles on practical auction design (see www.paulkleinman.org).

KLEPPER, Steven I. n.e.

KLING, Catherine Louise

Born 1960, Detroit, MI, USA.

Current Posts Prof. Econ. and Head, Resource and Environmental Pol. Div., Center for Agric. and Rural Devlp, Iowa State Univ., Ames, IA, USA, 1996–.


Degrees BBA Univ. Iowa, 1981; PhD Univ. Maryland, 1986.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; H2 Taxation, Subsidies, and Revenue.


**Principal Contributions** My research interests focus on two areas of environmental economics: nonmarket valuation and incentive-based systems for the control of pollution, particularly non-point sources from agriculture.

KNETSCH, Jack Louis

**Born** 1933, Kalamazoo, MI, USA.

**Current Posts** Prof. Econ. (Emeritus) and Prof. Res. Mgmt (Emeritus), Simon Fraser Univ., Burnaby, BC, Canada, 1974–.


**Offices and Honours** Pres., WRSA, 1985–86.


**Principal Fields of Interest** Q2 Renewable Resources and Conservation; En-
vironmental Management; C9 Design of Experiments; D6 Welfare Economics.

Publications


Principal Contributions

One early study was among the first to use land-value changes as an indirect measure of the benefit provided by an amenity resource. Further contributions have been made in the assessment of nonpecuniary values in such areas as recreation and environmental quality. More recent work has centered on alternative techniques of assessing changes in economic welfare. This has included issues of fairness and the appropriate choice of bases for measurement as well as observed differences between people’s valuation of gains and losses. Another major area of research has been the economic analysis of various legal rules and institutions. This has included compulsory acquisition, assignments of entitlements, compensation claims, matrimonial property and regulatory change. Current work centers on implications of findings from experimental and behavioral economics research to issues such as environmental valuations and to policy analyses.

KNETTER, Michael M. n.e.

KOCHERLAKOTA, Narayana-R. n.e.

KOHN, Robert n.e.

KOOP, Gary n.e.

KORENMAN, Sanders

Born 1961, New York, NY, USA.

Current Posts Prof., Sch. Public Affairs, Baruch Coll., City Univ., New York,
KOSE, John n.e.

KOTHARI, S.-P. n.e.

KOTLIKOFF, Laurence J.

Born 1951, location n.e.

Current Post Prof. Econ., Boston Univ., Boston, MA, USA, 1984–.


**Principal Field of Interest** H5 National Government Expenditures and Related Policies.


**Principal Contributions** n.e.
KOVENOCK, Dan

Born 1956, Madison, WI, USA.

Current Post Prof., Dept Econ., Krannert Sch. Mgmt, Purdue Univ., West Lafayette, IN, USA, 1994–.


Degrees BSc (Maths and Econ.) Hebrew Univ., Jerusalem, 1977; PhD Univ. Wisconsin-Madison, 1983.


Principal Fields of Interest L0 Industrial Organization: General; C7 Game Theory and Bargaining Theory; D0 Microeconomics: General.


Principal Contributions My work has focussed primarily on the game-theoretic modeling of strategic interaction in economic environments. My 1980 note with Kenneth Hendricks and Kenneth Judd was the first to examine the use of the core as a solution concept in the context of overlapping generations models. My 1989 paper with Hendricks on the gambling arising in oil exploration was one of
the early theoretical models of an information cascade. In the late 1980s and throughout the 1990s, together with Raymond Deneckere and collaborators, I carried out a lengthy research agenda demonstrating the power of Bertrand–Edgeworth modeling in industrial organization. Among our contributions were the construction of strategic models of dominant firm price leadership and the use of excess capacity as a barrier to entry. We also demonstrated the power and limitations of the price theoretic foundations of the Cournot quantity setting model, by proving that the well-known Kreps–Scheinkman result on the equilibrium of a game of capacity pre-commitment followed by price setting was robust to moderate cost differences, but did not hold for arbitrary cost differentials. Among my other contributions are included some of the early empirical and theoretical analyses (with Gordon Phillips) of the interaction of capital structure choices and product market behavior, and the first theoretical piece (with Michael Baye) on the use of ‘beat or pay’ price advertisements. Together with Baye and Casper G. de Vries, I also contributed to the study of theoretical models of rent seeking in firms and organizations. We were the first to completely characterize the equilibrium in the all-pay auction under complete information and also made contributions to the study of Tullock’s model of rent seeking and linear models of contests under incomplete information.

KREPS, David M.

Born 1950, New York, NY, USA.

Current Posts Paul B. Holden Prof. Econ. and Sr Assoc. Dean, Grad. Sch. Bus., Stanford Univ., Stanford, CA, USA, 1984--; Sr Prof. by Special Appointment, Bitan Berglas Sch. Econ., Tel Aviv Univ., Tel Aviv, Israel, 1992--.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty; L2 Firm Objectives, Organization, and Behavior.


**Principal Contributions** Early work concerned axiomatic choice theory, especially in dynamic choice settings where the temporal resolution of uncertainty played a role. I also made contributions to the theory of rational expectations equilibria and arbitrage in multiperiod asset markets. In the 1980s my interests turned to dynamic (extensive form) games and the problem of out-of-equilibrium beliefs and out-of-equilibrium behavior. More recent interests have concerned model choice in the presence of unforeseen contingencies, adaptive learning and equilibrium, the transference of reputation, socially acquired norms and expectations, organizational inertia, and the dynamic formation of preferences. Throughout, the unifying theme in my research is dynamic decision making and how it is significantly richer (and more complex) than a once-and-for-all choice of an optimal strategy.
Principal Fields of Interest  J0 Labor and Demographic Economics: General; H0 Public Economics: General; I0 Health, Education, and Welfare: General.


Principal Contributions  Most of my work has tried to use appropriate empirical methods to test important economic questions, such as estimating the economic value of years of schooling and school quality, the reasons for rising wage dispersion, the impact of the minimum wage on employment, or the impact of growth on the environment. I have sought out ‘natural experiments’ where one can be reasonably confident that exogenous events were responsible for the key identifying information in the model. The goal has been to provide evidence that would be convincing to an intelligent sceptic, regardless of the direction of the results. Often this has required the collection and use of new data sets. My emphasis has been on providing evidence that can lead to more appropriate theoretical modelling of economic phenomena, broadly defined, and in developing strategies for empirical analyses that can be used to answer a number of questions.
KRUEGER, Anne O.

Born 1934, Endicott, NY, USA.


Degrees BA Oberlin Coll., 1953; MS, PhD Univ. Wisconsin, 1956, 1958.


Principal Field of Interest F0 International Economics: General.


Principal Contributions My early work was focused on international trade and payments theory and its relevance for the understanding of the international economy. This led to asking how much of income differentials was accounted for by differences in factor endowments, whether racial discrimination could be explained in terms of a trade model and how highly restrictionist trade regimes really functioned. This led, first, to the effort to quantify domestic resource costs, and second, to a concern with the broader costs of
individual restrictions, encompassed in part by the concept of rent-seeking. An opportunity to analyse the Korean experience with trade and growth then led to questions about that interrelationship. Questions arising from policy reform efforts while I was at the World Bank led me to concentrate on political economy issues in policy reform.

KRUGMAN, Paul R. n.e.

KUMBHAKAR, Subal Chandra

Born 1954, Kumardihi, Purulia district, West Bengal, India.

Current Post Prof. Econ., SUNY, Binghamton, NY, USA, 2001–.


Principal Fields of Interest D2 Production and Organizations; C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models.


**Principal Contributions**

My main area of research is applied microeconomics (microeconometrics) with a focus on estimation of efficiency in production. I use production, cost, and profit function approaches to estimate efficiency in production. My research in this area involves use of micro data – both cross-sectional and panel data. My cross-sectional efficiency models are applied to US and Utah dairy farmers, Texas schools, and Indian agriculture. I have formulated a variety of panel data models to measure efficiency, which are applied to US railroads and airlines; Swedish agriculture, banking, manufacturing, electricity distribution, and public administration; electric utilities in Texas; and Spanish banking. Some of my models are now widely used in the efficiency and productivity literature. My book, *Stochastic Frontier Analysis* (with Knox Lovell), (CUP, 2000), is on econometric estimation and modelling of stochastic frontier models incorporating technical and/or allocative inefficiencies under a variety of situations. Determinants of inefficiency and decomposition of productivity growth in the presence of inefficiencies are also addressed. The book also deals with estimation of production and allocative efficiency using an alternative approach (the shadow price approach). Some of my other research, not related to efficiency measurement, includes: measuring the effect of ESOP on productivity; estimation of adverse selection and moral hazards; estimation of total factor productivity (TFP) in Indian public transportation, electric utilities in Texas, Swedish and Japanese manufacturing industries, and the Spanish and Indian banking industries; and estimation of risk and risk preference function under production and price risks. My current research includes modelling and estimation of price and output risks, dynamic efficiency, dynamic factor demand, deregulation and TFP change, and decomposition of TFP growth. I am also working on non-parametric econometric estimation of stochastic frontier models, input demand systems, simultaneous equation systems based on production and price risks, and Markov switching stochastic frontier models (with E.G. Tsonias).

**KUTTNER, Kenneth Neil**

**Born** 1960, Los Angeles, CA, USA.

**Current Post** Asst Vice Pres., FRB, NY, USA, 1997–.


**Degrees** AB Univ. California, Berkeley, 1982; PhD Harvard Univ., 1989.


**Principal Fields of Interest** E5 Monetary Policy, Central Banking, and the Supply of Money; E4 Money and Interest Rates.

**Publications**

*Articles*: 1. ‘Money, income, prices, and interest rates’ (with B.M. Friedman), *AER*, 82, June 1992; 2. ‘Another look at the evidence on money-in-...

**Principal Contributions** My research has touched on a variety of diverse topics in macroeconomics and financial economics, but three contributions in particular are worth noting. One is on the information content of money and interest rates; and in particular, the spread between commercial paper and Treasury bill rates. A series of papers with B.M. Friedman documented the deteriorating link between money and economic activity, highlighted the predictive properties of the paper-bill spread, identified the source of those properties, and analysed the causes of the decline in the spread’s forecasting power over the 1990s. A second contribution is the development of a new method for estimating potential output, based on multivariate unobserved components models. The method provides a flexible procedure for detrending real output, while incorporating additional information on the state of the economy. The methodology was originally developed for the US, but variations on it have subsequently been used in a number of countries around the world. A third research contribution deals with the financial effects of monetary policy. The main innovation introduced in this work was to use data on the prices of Federal funds futures contracts to separate unanticipated from anticipated policy actions. Research on the bond market’s behaviour showed that this distinction is key to understanding the market’s response to policy actions. The same is also true for equities, which is a topic of current research.

**KWIATKOWSKI, Denis** n.e.

**KYDLAND, Finn E.**

**Born** 1943, Norway.

**Current Post** Prof. Econ., Carnegie-Mellon Univ., Pittsburgh, PA, USA, 1982–.


**Offices and Honours** John Stauffer Natl Fell. Public Pol., Hoover Inst., Stanford, CA, USA.

**Principal Fields of Interest** E3 Prices, Business Fluctuations, and Cycles; E5 Monetary Policy, Central Banking, and
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the Supply of Money; J0 Labor and Demographic Economics: General.

Publications n.e.
Principal Contributions n.e.
LABAND, David Neil

Born 1956, Newport News, VA, USA. 
Current Post Prof. Forest Econ., Auburn Univ., Auburn, AL, USA, 2000–.


Principal Fields of Interest A1 General Economics; D0 Microeconomics: General; H0 Public Economics: General.


Principal Contributions Most of my work is empirically based and has centered around four major themes: (1) the production of scientific knowledge, (2) occupational following, (3) the informational content of advertising, and (4) transfer activity.
LAFONT, Jean-Jacques Marcel

Born 1947, Toulouse, France.


Editorial Duties Assoc. Ed., Econ. Letters, REP, IJEB.

Principal Fields of Interest A1 General Economics; C0 Mathematical and Quantitative Methods: General.


Principal Contributions Contributions to the theory of incentives, to general equilibrium theory and to the methods of econometrics.

LAFONTAINE, Francine

Born 1958, Montreal, Quebec, Canada.


**Editorial Duties**


**Principal Fields of Interest**

L2 Firm Objectives, Organization, and Behavior; D2 Production and Organizations; M5 Personnel Economics.

**Publications**

**Articles:**


**Principal Contributions**

Most of my work consists of empirical analyses of various aspects of franchising and franchise contracting, using incentive and contract theory perspectives. In particular I have examined empirically what leads firms to adopt franchising as a way of doing business, what determines the terms of the contracts they use, and the effect of franchising for example on pricing decisions. I have also analysed public policy issues as they apply to franchising. Finally, in recent years, I have examined empirically the reasons behind certain contractual arrangements in the motor carrier industry.

LAI, Kon Sun n.e.

LAKE, David A.

**Born** 1956, Middletown, CT, USA.

**Current Post** Prof., Dept Polit. Sc., Univ. California, San Diego, CA, USA, 1992–.


**Degrees** BA (Govt and Intl Relations) Clark Univ., 1978; MA (Govt), PhD (Govt) Cornell Univ., 1981, 1984.

**Offices and Honours**


**Editorial Duties**

**Principal Fields of Interest**  F0 International Economics: General; H0 Public Economics: General; N4 Government, War, Law, and Regulation.

**Publications**  


**Principal Contributions**  
My principal contributions are in international political economy and the application of economic theory to political phenomena. Three areas of work are of direct relevance to economics. First, debunking the widely held idea, originally associated with Charles Kindleberger, that a single leader is required for international economic order, I demonstrate that hegemony is neither a necessary nor a sufficient condition for international economic openness or stability. I also show, however, that British trade policy strongly conditioned American policy in the 19th and early 20th centuries, permitting the latter to free ride until just before World War I. Second, where the literature on public goods has emphasized the free-rider problem, I focus on the monopoly power of the state and democracy as a constraint on the state’s ability to extract monopoly rents when providing public services. I show that democracies (1) provide higher levels of public health and education; (2) create more human capital and enjoy
higher rates of growth; (3) are smaller, if unitary, and larger, if federal, than autocracies; and (4) are less likely to fight wars with one another and more likely to win those wars they do fight. Third, I use insights from transaction costs economics to study political relationships between states, such as alliances, economic unions, or empires. Examining the range of possible institutions between otherwise sovereign entities, I find that states are more likely to enter hierarchical relationships when there are large benefits from pooling resources and efforts, there are specific assets at risk, and the costs to the dominant party of governing the subordinate are not too large. I apply this approach to American security policy, the rise and decline of the Russian empire, and governance institutions in the global economy.

LAKONISHOK, Josef n.e.

LAL, Rajiv n.e.

LALONDE, Robert J. n.e.

LAM, Pok-Sang

Born 1958, Hong Kong.

Current Post Assoc. Prof., Ohio State Univ., Columbus, OH, USA, 1985–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles; G1 General Financial Markets.


Principal Contributions Most of my work has related to three areas. The first area is the macroeconomics of consumer durable goods expenditures. I numerically investigated the \((S, s)\) policy rule for the consumers facing transaction costs and uncertainty in labor income. I found evidence for this policy rule in panel data. I further showed that the aggregate expenditures based on this policy rule match the observed persistence of the time series. The second area is the Markov switching model in time-series analysis. The seminal work was due to J.D. Hamilton. I generalized his model to handle the cases in which the noise component is stationary, the probabilities of switching are duration dependent, and the mean growth rates are duration dependent. I implemented the generalized models to US GNP data. The third area is the consumption asset pricing model. In a sequence of papers, S.G. Cecchetti, N.C. Mark and I investigated the ability of the Lucas asset
LAMOUREUX, Christopher G. n.e.

LANG, Larry Hsien Ping

Born 1956, Taiwan.

Current Post Chair Prof. Fin., Chinese Univ. Hong Kong, Hong Kong PRC, 1997–.


Degrees BA Tunghai Univ., Taiwan, 1978; MA Natl Taiwan Univ., 1980; MA (Fin.), PhD (Fin.) Wharton Sch., Univ. Pennsylvania, 1985, 1986.


Principal Fields of Interest G3 Corporate Finance and Governance; G1 General Financial Markets; G0 Financial Economics: General.


**Principal Contributions** I have contributed to the economics literature mainly in the area of corporate finance and governance. I have worked on the following areas. First, I worked on how default companies choose private workout or Chapter 11. I further analyzed the determinants of the choices. This bankruptcy paper was published in 1990 in *J Fin E*. Second, from the late 1980s to the mid-1990s, I applied the concept of Tobin’s q to corporate finance and governance areas. I separated US firms into firms with $q > 1$ and firms with $q < 1$. I found supporting evidence that firms with $q > 1$ are firms with good investment opportunities and firms with $q < 1$ are firms with overinvestment. I successfully explained the dividend announcement effects, merger and acquisitions announcement effects, and corporate leverage decisions. All four papers testing this idea were published in *J Fin E* (2 in 1989, 1 in 1992 and 1 in 1996). Third, I worked on the performance of corporate diversification and I found that corporate diversification hurts corporate performance. This paper was published in 1994 in *JPE*. Fourth, starting from 1998 until now, I have worked on the ultimate ownership around the world and the expropriation of minority shareholders. I have documented the ultimate ownership structures for nine East Asian countries (*J Fin E*, 2000) and 13 Western European countries (*J Fin E*, forthcoming). Using Asian and European ultimate ownership data, I have worked on the topics about the effect of the separation of ownership from control. I have documented that the separation of ownership and control explains dividend policies in Asia and Europe (*AER*, 2001). I have also documented that this separation hurts share value (*J Fin*, forthcoming).

**LARCKER, David F.** n.e.

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**LARROQUE, Guy Raymond**

**Born** 1946, Paris, France.

**Current Post** Prof., École Polytech., Head, Macroecon., CREST-INSEE, Paris, France, 2001–.


**Offices and Honours** Fell., Pres., Em Soc, 1979–, 2002; Mem., Academia Europaea.


**Principal Fields of Interest** D5 General Equilibrium and Disequilibrium; E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions n.e.

LASTRAPES, William Dean

Born 1958, Lafayette, LA, USA.

Current Posts Prof. Econ. and Dept Head, Univ. Georgia, Athens, GA, USA, 2002–.


Editorial Duties Assoc. Ed., \textit{J. Macroecon.}, 1999–, \textit{J. Econ. and Bus.}, 1999–.

Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F4 Macroeconomic Aspects of International Trade and Finance; G0 Financial Economics: General.


**Principal Contributions**

Chris Lamoureux and I have uncovered a number of important patterns regarding stock return volatility using the ARCH class of models – that information flows as proxied by trading volume can explain persistence in return volatility, that discrete regime shifts can lead to the appearance of permanent volatility shocks, and that implied volatilities from options prices do not account entirely for the time-series structure of return variance. Most of my other work has been a careful application of vector autoregression (VAR) methods to understanding the sources of fluctuations in the economy. In sole-authored research, as well as in collaboration with others such as George Selgin, I have estimated the dynamic responses of interest rates, equity prices, home prices, wages and exchange rates to nominal shocks. These empirical findings have influenced the development of macroeconomic theory.

**LAZEAR, Edward Paul**

Born 1948, New York City, NY, USA.

**Current Posts**


**Past Posts**


**Degrees**


**Offices and Honours**


**Editorial Duties**

Principal Fields of Interest  
D0 Microeconomics: General; J0 Labor and Demographic Economics: General; M3 Marketing and Advertising.

Publications  


Principal Contributions  
Personnel economics, culture and language, pricing strategies, emerging economies.

LE-BRETON, Michael n.e.

LEAHY, John V. n.e.

LEBARON, Blake D. n.e.

LEE, Charles M.C. n.e.

LEE, Jong-Wha

Born 1960, Taebaek, Korea.

Current Posts  
Prof. Econ., Korea Univ., Seoul, Korea, 1993–; Adjunct Prof., Econ., Div., Res. Sch. Asia and Pacific Stud., ANU, Canberra, Australia, 2001–.

Past Posts  

Degrees  

Honours  
Fulbright Grad. Degree Study Award, 1987–91; China–Korea Young Scholar Award, 1996; Mae-Kyung Econ. Award, 1997; Chung-Ram Award, 1997.

Editorial Duties  

Principal Fields of Interest  
E0 Macroeconomics and Monetary Economics: General; O0 Economic Development, Technological Change and Growth: General; F4 Macroeconomic Aspects of International Trade and Finance.

Publications  

**Principal Contributions** Empirical analysis of the determination of economic growth; new measurement of human capital across countries; on the role of trade and foreign direct investment in economic development; issues related to East Asian economies.

**LEE, Ronald Demos**

**Born** 1941, Poughkeepsie, NY, USA.

**Current Post** Prof., Demography and Econ., Univ. California, Berkeley, CA, USA, 1979–.


**Principal Fields of Interest** J1 Demographic Economics; H6 National Budget, Deficit, and Debt.

**Publications**


Principal Contributions In a series of papers, I developed, estimated, and interpreted Malthusian models of the interaction of population size, fertility, mortality, and real wages in pre-industrial England. I found that rapid population growth depressed the real wage, and conversely. Higher real wages induced more rapid population growth, through both fertility and mortality. In the resulting system, external shocks had a half-life of about 70 years, so convergence was slow. Another series of papers developed new methods for stochastic forecasts of fertility, mortality, and population size and age distributions. The mortality forecasting method has been widely accepted and used, including by government agencies. These stochastic population forecasts then formed the core of stochastic projections of government budgets over long (75-year) horizons. The stochastic budget forecasts have been particularly influential for social security. Related work estimated the fiscal impact of immigration based on an innovative longitudinal approach, finding that on average immigrants had a large fiscally beneficial effect at the Federal level, and a smaller adverse effect at the state and local level. Similar analysis showed that, on average, a birth in the US has a positive long-term fiscal impact of about $200,000 around the year 2000. This positive fiscal impact is an externality to childbearing. I have chaired two influential reports of the National Academy of Sciences, one on the effects of population on economic development in the Third World, and another on the determinants of fertility in the Third World.
LEEPER, Eric M.

**Born** 1958, Isfahan, Iran.

**Current Posts** Assoc. Prof. Econ., Indiana Univ., Bloomington, IN, USA, 1995--; Faculty Res. Fell., NBER, USA.


**Degrees** BS George Mason Univ., 1980; PhD Univ. Minnesota, 1989.

**Editorial Duties** Guest Ed., *C-RPP*, Nov. 1998.

**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; E5 Monetary Policy, Central Banking, and the Supply of Money; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.


**Principal Contributions** Most of my work is related to macro policy. In my work on the interactions between monetary and fiscal policy I showed that the price level is uniquely determined even under a nominal interest rate peg if fiscal behavior makes the net-of-interest deficit insensitive to the state of government indebtedness. That work also established that fiscal policy can have impacts of nominal demand even if taxes are lump sum – in contrast to the Ricardian proposition. My empirical work focuses on identifying exogenous shifts in monetary policy to separate the effects of policy on the economy from the endogenous response of purposeful policy to the economy. This work has succeeded in identifying the dynamic impacts of exogenous changes in monetary policy. It has also tried to link various empirical approaches to this important problem. Extensions of that work assess use of an empirical model as a basis for central bank choices will destabilize the model in the way the Lucas critique predicts.
LEHRER, Ehud n.e.

LEIDERMAN, Leonardo n.e.

LELAND, Hayne E.

Born 1941, Boston, MA, USA.

Current Post Arno Rayner Prof. Fin. and Mgmt, Haas Sch. Bus., Univ. California, Berkeley, CA, USA, 1978–.


Degrees BA, PhD Harvard Univ. 1964, 1968; MSc LSE, 1965.


Principal Fields of Interest D8 Information and Uncertainty; G2 Financial Institutions and Services; G1 General Financial Markets.


Principal Contributions Theory of the firm and capital structure under uncertainty; markets with asymmetric information, financial structure and intermediation; dynamic investment strategies, transactions costs, and portfolio insurance.

LEMIEUX, Thomas n.e.

LERNER, Josh

Born 1960, Chicago, IL, USA.


Offices and Honours Faculty Res. Fell., Corp. Fin. and Productivity Programs, 1995–99; Coorganizer, Innovation Pol. and Econ. Group, NBER, 1999–.

Principal Fields of Interest G2 Financial Institutions and Services; O3 Technological Change.


Principal Contributions My research focusses on the structure of venture capital organizations, and their role in transforming scientific discoveries into commercial products. I also examine the impact of intellectual property protection, particularly patents, on the competitive strategies of firms in high-technology industries.

LEVINE, David I.

Born 1960, Phoenix, AZ, USA.


Editorial Duties Ed., Ind. Relations, 1993–.

Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J5...
LEVIN


Principal Contributions My research focuses on how market factors, fairness, ability to pay, and incentives determine compensation. I also examine what combinations of human resource practices such as training and employee involvement can contribute to effective workplaces; what market and government failures may inhibit such workplaces; and what public policies can help. My recent focus is understanding how institutions such as microfinance and community groups affect the process of economic development, particularly investments in children.

LEVIN, David K.


Principal Fields of Interest  C6 Mathematical Methods and Programming; C7 Game Theory and Bargaining Theory.


Articles:  1. ‘Comparative statics and perfect foresight in infinite horizon economies’ (with T. Kehoe), Em, 53, 1985;
2. ‘Reputation and equilibrium selection in games with a patient player’ (with D. Fudenberg), Em, 57, 1989;
3. ‘Efficiency and the value of money’, RESJ, 56, 1989;
4. ‘Maintaining a reputation when strategies are imperfectly observed’ (with D. Fudenberg), RESJ, 59, 1992;
5. ‘On characterizing equilibria of models with externalities and taxes as solutions to optimization problems’ (with T. Kehoe, P. Romer), ET, 2, 1992;
6. ‘Steady state learning and Nash equilibrium’ (with D. Fudenberg), Em, 61, 1993;
7. ‘Self-confirming equilibrium’ (with D. Fudenberg), Em, 61, 1993;
8. ‘Debt constrained asset markets’ (with T. Kehoe), RESJ, 60, 1993;
9. ‘The folk theorem with imperfect public information’ (with D. Fudenberg, E. Maskin), Em, 62, 1994;
10. ‘When are agents negligible?’ (with W. Pesendorfer), AER, 85, 1995;
11. ‘Debt constraints and equilibrium in infinite horizon economies with incomplete markets’ (with W. Zame), J Math E, 26, 1996;
12. ‘Measuring subject’s losses in experimental games’ (with D. Fudenberg), QJE, 112, 1997;
13. ‘Modeling altruism and spitefulness in experiments’, Rev. Econ. Dynamics, 1, 1998;
14. ‘Conditional universal consistency’ (with D. Fudenberg), Games and Econ. Behav., 29, 1999;
15. ‘Liquidity constrained vs. debt constrained markets’ (with T. Kehoe), Em, 69, 2001;
16. ‘The case against intellectual property’ (with M. Boldrin), AER, 92, 2002;
17. ‘Factor saving innovation’ (with M. Boldrin), JET, forthcoming;
18. ‘Information aggregation, currency swaps, and the design of derivative securities’ (with B. Chowdhry, M. Grinblatt), JPE, forthcoming;
19. ‘Does market incompleteness matter?’ (with W. Zame), Em, forthcoming.

Principal Contributions  In the early 1980s Timothy Kehoe and I worked on self-fulfilling prophecies. With others we established a series of results showing that with a finite number of traders equilibria are, at least locally, unique. On the other hand, with overlapping generations of consumers, or other frictions, there can be many equilibria representing different self-fulfilling prophecies. Later researchers have used these models to explain a vari-
ety of macroeconomic phenomena. Subsequently, we focussed on the issue of asset market imperfections. We developed a widely used model of how endogenous debt limits arise when individual borrowers can default on debt. This gives a simple explanation of idiosyncratic risk bearing and low real interest rates, and has implications for other asset market puzzles. My recent general equilibrium research has been an investigation with Michele Boldrin of growth theory, innovation and intellectual property. There is little evidence for increasing returns at the aggregate level, and we argue that there is no theoretical reason to believe that increasing returns play an important role in growth. Our theory has important implications for intellectual property, with the conclusion that existing claims for the necessity of intellectual property are greatly overstated. My other main area of research has been in dynamic games. Work in the mid-1980s with Drew Fudenberg established that a long-lived player playing against short-lived opponents could substitute reputation for commitment. Together with Eric Maskin, we established the first ‘folk theorem’ for games in which players do not directly observe each other’s decisions. Our recent research has turned to the issue of learning in games, culminating in our book on the subject. We argue that while it is naive to believe that learning theories can provide detailed descriptions of non-equilibrium behavior, they are a useful tool in understanding which equilibria are likely to emerge.

LEVINE, Ross

Born 1960, New York, NY, USA.

Current Post Curtis L. Carlson Prof. Fin., Carlson Sch. Mgmt, Univ. Minnesota, Minneapolis, MN, USA, 1999–.


Honours Selected by students as one of four best profs, Univ. Virginia, 1997; Best Paper Prize, J. Fin. Intermediation, 1999; Outstanding Paper of Year, Milken Inst. Award, 2001.


Principal Fields of Interest G0 Financial Economics: General; O0 Economic Development, Technological Change, and Growth: General; F3 International Finance.


**Principal Contributions** My work focuses on examining the linkages between the operation of financial markets and intermediaries and economic growth, capital accumulation, and productivity growth. My research examines how natural resource endowments, legal systems, regulatory and supervisory policies, international financial policies, and macroeconomic policies influence differences in the operation of financial markets, financial intermediaries, and other institutions. I have also assessed which factors are most strongly associated with economic success over the long run.

LEVINSOHN, James A. n.e.

LEVITT, Steven D. n.e.
LEWBEL, Arthur n.e.

LEWIS, Karen K. n.e.

LEWIS, Tracy R. n.e.

LEYBOURNE, Stephen J. n.e.

LI, Qi

Born 1956, Beijing, PRC.

Current Post Prof. Econ., Texas A&M Univ., College Station, TX, USA, 1999–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C2 Econometric Methods: Single Equation Models.


**Principal Contributions** My early research focused on estimation of panel data econometric models, and mechanism designs that solve the free-rider problem in public goods economics. Since 1994 I have switched my research interests to nonparametric/semiparametric methods and their applications in economics. I have worked on proposing estimation methods of various semiparametric econometric models (additive partially linear model, partially linear varying coefficient model), and constructing test statistics for model specification tests. Some of them are joint works with Y. Fan. Recently, P. Hall, J. Racine and I have studied the problem of using data-driven cross-validation methods to select smoothing parameters in a model with a mixture of discrete and continuous variables. The new results on the cross-validation methods are expected to make the nonparametric/semiparametric methods applicable to many more social science data with discrete variables, while the conventional frequency-based estimation method often cannot be applied to data with many discrete variables. J. Yang and I have also done some research in the area of applied financial econometrics.

**LICHTENBERG, Frank R.** n.e.

**LIEBOWITZ, Stan J.**

**Born** 1950, Brooklyn, NY, USA.

**Current Post** Prof. Managerial Econ., Sch. Mgmt, Univ. Texas, Dallas, Richardson, TX, USA, 1991–.


**Principal Fields of Interest** K0 Law and Economics: General; L0 Industrial Organization: General.


Principal Contributions My work has tended to be in industrial organization and law and economics. The major thrust has been on examining the workings of markets where new technology and intellectual property interact. Originally this led to work on the impacts of new technology on copyright – such as photocopying and cable retransmission. I modelled this by borrowing models of durability. After working on these topics I moved on to the economics of standards, another form of intellectual product, and this set of investigations led to my papers and books with Stephen Margolis on the concepts of lock-in and path dependence. Several papers based on my dissertation were concerned with more traditional concepts of market structure, antitrust, and competition, and this interest has arisen from time to time in the later work on standards, and in particular, with aspects of the Microsoft case. A paper on tie-in sales presented a novel critique of the subject, but has not had the impact I had hoped. My recent book examines the intellectual antecedents that helped lead to the internet meltdown, the business strategies that might work on the internet, and copyright issues for digital products.

LIN, Justin Yifu

Born 1952, Yilan, Taiwan, China.

Current Posts Prof. and Founding Dir., China Centre Econ. Res., Peking Univ., Peking, China, 1993–; Prof., Dept Econ., Hong Kong Univ. Sc. and Tech., Hong Kong, 1997–.


Principal Fields of Interest Q1 Agriculture; O1 Economic Development; P0 Economic Systems: General.


**Principal Contributions** Most of my work has related to the effects of an economy’s endowment structure on the economy’s industrial structure and the effects of a government’s development strategy on the economy’s economic institutions and performance. I have shown that the Stalinist planning system is endogenously determined by the attempt to develop capital-intensive heavy industries in a capital-scarce developing economy because such an attempt makes the firms in the priority sectors nonviable in an open, competitive market. The survival of those nonviable firms requires the government’s subsidies/protections through administrative interventions in the economy. The existence of financial suppression, trade interventions and other distortions in many developing countries is rooted in a similar attempt. The government’s interventions lead to rent seeking, soft-budget constraints, income disparities, macro instability, and failure of convergence. I argue that the government should adopt a comparative-advantage following strategy and aim to upgrade the endowment structure. As such, the economy will be competitive and firms will be guided by the market signal to upgrade their technologies and industries along with the upgrading of the economy’s endowment structure. Currently most firms in the transitional economies and many other developing countries are not viable even with normal management due to their inappropriate choices of technologies and industries under the influences of governments’ development strategies. However, the existing neo-classical economics implicitly assume that firms are viable. Therefore, transition and reform policies based on neo-classical economics often fail to achieve intended goals or even cause great difficulties to the economy. I argue that the viability issue should be formally incorporated in the economic theories that deal with economic development and transition. I have also made contributions to analysis of collective farming and technological changes in Chinese agriculture and why China failed to have an indigenous industrial revolution in spite of its technological advancement in the pre-modern ages.

**LINDBECK, Assar Carl Eugen**

**Born** 1930, Umeå, Sweden.


Degrees  MS (Social Sc.) Uppsala Univ., 1953; PhD Univ. Stockholm, 1963.


Principal Fields of Interest  E0 Macroeconomics and Monetary Economics: General; H0 Public Economics: General; P5 Comparative Economic Systems.


Principal Contributions  Development and empirical application on Swedish data of methods to analyse direct (impact) effects on aggregate demand of discretionary and automatic fiscal policies without using complete econometric model – a simplified version (with unweighted effects) being estimates of ‘full employment budget surpluses’ (1956). Early demonstration, in A Study in Monetary Analysis, of how demand functions in terms of relative prices are transformed into a Keynesian-type aggregate demand function in terms of disposable income if income is constrained by involuntary unemployment. Explanation of credit rationing as the consequence of the attitudes of lenders towards risk as there is risk associated not only with the principal of a loan but also with the interest. Demonstration that changes in initial wealth...
holdings exert a weaker influence on demand for products than do changes in income (both with the same capital value) if preferences between consumption and wealth are endogenous in the sense that the marginal evaluation of wealth relative to consumption rises by higher initial wealth holdings. Study of theories and problems of Swedish economic development and policy, in particular after World War II. Attempts to endogenize the behaviour of economic policy (‘endogenous politicians’) in the context of stabilization policy (‘political business cycles’) and distribution policy. An explanation of persistent unemployment by the insider–outsider theory of employment determination (with Dennis S. Snower). Studies of transmission mechanisms of product demand shocks to the labour market. Various studies of problems of the welfare state and analysis of alternative reform possibilities. Studies of the consequences for the labour market, including for wage formation, of contemporary trends to reorganize firms.

LO, Andrew W.

Born 1960, Hong Kong.

Current Posts Harris & Harris Group Prof., MIT, Cambridge, MA, USA, 1994–; Chief Sc. Officer, AlphaSimplex Group LLC, Cambridge, MA, USA, 1999–.


Principal Field of Interest G0 Financial Economics: General; C1 Econometric and Statistical Methods: General; C5 Econometric Modeling.


**Principal Contributions** My principal contributions lie in the fields of financial econometrics, empirical finance, and financial engineering. My early research focussed on applying statistical methods to the empirical analysis of financial markets – developing estimators for parameters of continuous-time stochastic processes, constructing tests of derivative pricing models, the Random Walk Hypothesis, and discriminant analysis using asymptotic statistical theory; quantifying the biases associated with data-snooping, overfitting and other data-intensive search algorithms; and improving methods for detecting long-range dependence in financial time series. These contributions led to the publication of the first graduate-level textbook in financial econometrics, *The Econometrics of Financial Markets*, which I co-authored with John Campbell and Craig MacKinlay. The second part of my research career revolved around various theoretical and empirical issues in financial markets – the rejection of the Random Walk Hypothesis for the stock market and related empirical regularities implying short-term predictability in stock prices; the role of trading volume in equilibrium asset-pricing models; nonparametric methods for estimating preferences, state prices, and derivatives pricing models; foundations of technical analysis using automated pattern recognition algorithms; and the microstructure of securities markets, including econometric models of transactions prices and limit-order execution times, and dynamic optimal trading algorithms for minimizing price impact. Most recently, my research has focussed on the intersection of finance and the cognitive sciences. Using a variety of approaches – mathematical and statistical models of evolution and natural selection in financial markets, experimental evidence both in the laboratory and in the field that links psychophysiological characteristics with real-time financial decisionmaking, and clinical studies of professional securities traders and gamblers, which are leading to therapies for risk-bearing behavior modification – I hope to show that there is no contradiction between market efficiency and behavioral regularities, but that they are both aspects of human cognition with deep roots in our evolutionary past.
LOCKWOOD, Benjamin


Current Post  Prof. Econ., Univ. Warwick, Coventry, UK, 1998–.


Principal Fields of Interest  D0 Microeconomics: General; H0 Public Economics: General; H7 State and Local Government; Intergovernmental Relations.


Principal Contributions  Most of my work has been focused on the analysis of government policy, especially fiscal and monetary policy, although I have also published in labour economics and on the theory of the firm. Within fiscal policy, my first principal contribution has been a ‘political economy’ theory of the costs of centralized fiscal policy, where the economic inefficiencies resulting from the political process are explicitly modelled. This is an advance on the widely made assumption that with centralization, fiscal policy is uniform, and leads to distinctive predictions about when decentralization is desirable. My second contribution is to the literature on tax competition, both theoretical, and more recently empirical, and principally concerning indirect taxes: my main finding is that the outcome of uncoordinated setting of indirect taxes (excises and VAT) is complex, and may not result in a simple ‘race to the bottom’. In fiscal policy, I have also studied the effects of progressivity of the income tax on real wage determination, both theoretically and empirically. My work on monetary policy showed how the influential positive theory of monetary policy based on time-inconsistency (due to Kydland, Prescott, Barro and Gordon) is modified in the presence of structural dynamics in unemployment or output, and the studied implications for the delegation of monetary policy. My more recent interests continue to be in the intergovernmental aspects of fiscal policy, with an emphasis on studying the performance of actual political institutions.
LOEWENSTEIN, George

Born 1955, Boston, MA, USA.

Current Post Prof. Econ. and Psychology, Carnegie-Mellon Univ., Pittsburgh, PA, USA, 1990–.


Degrees BA (mcl) Brandeis Univ., 1977; PhD Yale Univ., 1985.


Principal Fields of Interest D0 Microeconomics: General; D9 Intertemporal Choice and Growth.


Principal Contributions Contributor to field of behavioral economics, which involves the application of theory and findings from psychology to economics.

LOGAN, John R. n.e.

LOHMANN, Susanne n.e.

LONGSTAFF, Francis A. n.e.

LOOMES, Graham Christopher


Current Posts Prof. Econ. Behav. and Decision Theory, and Dir., Centre for Econ. and Behavioural Analysis of Risk and Decision (CEBARD), Univ. East Anglia, Norwich, UK, 2001–.

Past Posts Res. Officer, Lect. Econ., Dept Econ., Health Care Res. Unit, Univ. Newcastle, 1978–84; Co-Dir., Centre for Experimental Econ. (EXEC), Univ. York,


**Principal Fields of Interest** C9 Design of Experiments; D6 Welfare Economics; D8 Information and Uncertainty.


**Principal Contributions** I hope that I have added something to the understanding and modelling of preferences, particularly with respect to the ways in which psychological considerations might influence the patterns of choice and valuation in experiments and in field studies. The use of experimental methods in economics has grown considerably during the past three decades, and I hope I have participated in that process in a constructive and critical way. The work on modelling preferences, together with the experience of developing techniques for eliciting people’s choices and values, has fed into surveys undertaken on behalf of branches of government. The results of a number of those surveys have had an impact on practical public policy, especially in relation to valuing health and safety benefits. Ongoing work on the theory, methodology and application of preference elicitation will, I hope, help to influence resource allocation in ways which improve social welfare.
LOTHIAN, James Robert

Born 1945, Long Island City, NY, USA.


Honour Phi Beta Kappa, 1967.


Principal Fields of Interest F3 International Finance; E0 Macroeconomics and Monetary Economics: General; N2 Financial Markets and Institutions.


Principal Contributions The bulk of my research has been in the areas of money-macro and international finance. My earlier work dealt with issues surrounding the demand for money – its instability in the aftermath of financial innovation, its behaviour across countries, during the Great Depression, and over the course of the nineteenth century – and with the international transmission of cyclical fluctuations and inflation. The last was the subject of my co-authored NBER monograph and several related journal articles. My later work has been more heavily focused on international financial issues. Using a variety of econometric
procedures and data sets, I have presented evidence on the question of real-exchange-rate stability that has challenged, and at least in part reversed, conventional thinking on the subject. More recent research has centred on the question of international financial integration, both currently and over the broad span of history beginning with the breakdown of the Western Roman Empire.

LOTT, Jr, John Richard

Born 1958, Detroit, MI, USA.

Current Post Resident Scholar, AEI, Washington, DC, USA, 2001–.


Principal Fields of Interest K0 Law and Economics: General; L0 Industrial Organization: General; D0 Microeconomics: General.


Principal Contributions My research encompasses primarily the fields of law
and economics and public choice, and to a lesser extent industrial organization, public finance, and labor. While these fields appear diverse, a common theme runs throughout the vast majority of my papers focussing on what possible efficiency explanations exist for institutional arrangements, both in the government and the private sector. While many economists ask how to design an optimal tax or an optimal criminal penalty, I have investigated why we fail to observe those taxes or criminal penalties if they are ‘optimal’. The institutional arrangements examined include the legal system and its reliance on reputational penalties, the methods by which voters can prevent last period problems in political markets, and the public provision of education. These are all areas in which my papers provide explanations for observed institutional arrangements. I have also provided efficiency explanations for court decisions on workers’ compensation rules and firms’ pricing behavior both in terms of price discrimination and monopolistic competition. In other areas my research has tested game-theoretic models of firm behavior and the evaluation of different gun control laws. I have produced both theoretical and empirical papers on the above topics.

LOUGHRAN, Tim n.e.

LOVELL, C.A. Knox

Born 1942, Teaneck, NJ, USA.

Current Post C. Herman and Mary Virginia Terry Prof., Terry Coll. Bus., Univ. Georgia, Athens, GA, USA, 1994–.


Principal Fields of Interest O4 Economic Growth and Aggregate Productivity; D2 Production and Organizations; C5 Econometric Modeling.


LUCAS, Deborah Jean

Born 1958, Seattle, WA, USA.

Current Post Donald C. Clark House-
hold Intl Prof. Fin., Northwestern Univ.,
Evanston, IL, USA, 1996–.

Past Posts Asst Prof., John L. and Helen
Kellogg Disting. Assoc. Prof., Northwestern
Univ., 1985–92, 1992–96; Vis. Asst
Prof., MIT, 1990–91; Sr Staff Econ., US
President’s Council Econ. Advisers, 1992–
93; Chief Econ., CBO, 2000–02.

Degrees BA (Econ. and Apl. Maths),
MA, PhD Univ. Chicago, 1980, 1983,
1986.

Offices and Honours Iddo Sarnat
Award, 1987; Smith–Breeden Award,
1990; Winner, best paper in Rev. Fin. Stud.,
1991; Dir., AFA, 2003–.

Stud., 1993–95, JMCB, 1996–,
JMCB, 2000–;
Ed. Bd, J. Fin. Educ.; Advisory Bd, FRB
NY.

Principal Fields of Interest G0 Financial
Economics: General; E0 Macroeconomics
and Monetary Economics: General;
H6 National Budget, Deficit, and
Debt.

Publications Articles: 1. ‘Bank portfolio
choice with private information about
loan quality: theory and implications for
regulation’ (with R. McDonald), J Bank
Fin, 11, 1987; 2. ‘Equity issues and stock
price dynamics’ (with R. McDonald), J
Fin, 45, 1990; 3. ‘The variability of ve-
locity in cash-in-advance models’ (with
N. Kocherlakota, R. Hodrick), JPE,
releases on the pricing and timing of eq-
uity issues’ (with R. Korajczyk, R.
‘Asset pricing with undiversifiable income
risk and short sales constraints: deepen-
ing the equity premium puzzle’, JME, 38,
Dec. 1994; 6. ‘Managed competition with
prefunding – the solution for long-term
care?’, Milbank Q., No. 96; 7. ‘Eval-

JPE, 37, Oct. 1988; 9. ‘Multilateral pro-
ductivity comparisons when some outputs
are undesirable; a nonparametric ap-
proach’ (with R. Färe, S. Grosskopf, C.
‘Measuring cost efficiency in banking:
econometric and linear programming evi-
dence’ (with G. Ferrier), J Em, 46, Oct./
Nov. 1990; 11. ‘Evaluating the perform-
ance of US credit unions’ (with H. Fried,
P. Vanden Eeckaut), J Bank Fin, 17, April
1993; 12. ‘Derivation of shadow prices
for undesirable outputs: a distance func-
tion approach’ (with R. Färe, S. Grosskopf,
S. Yaisawarng), REStat, 75, May 1993;
13. ‘Chance constrained data envelopment
analysis’ (with K. Land, S. Thore), Mgmt
and Decision Econ., 14, Nov./Dec. 1993;
14. ‘A note on the Malmquist productive-
ity index’ (with E. Grifell-Tatjé), Econ.
estimation of technical and environmen-
tal efficiency: an application to Dutch
dairy farms’ (with S. Reinhard, G.
Thijssen), AJAE, 81, Feb. 1999; 16.
‘Profits and productivity’ (with E. Grifell-

Principal Contributions Much of my
work has been devoted to the theory, mea-
surement, and empirical estimation of effi-
ciency in production. The empirical esti-
mation has developed and implemented
both econometric and mathematical pro-
gramming techniques. This research has
led me into several related fields, includ-
ing an exploration of productive efficiency
as a source of productivity growth; the
link between productive efficiency and
conventional financial indicators of busi-
ness performance; environmental econom-
ics, where dual variables provide indica-
tors of marginal abatement costs; and
public economics, in which behavioral
objectives are unconventional and where
incentive regulation raises issues related
to efficiency and productivity.

**Principal Contributions** Most of my recent work with J. Heaton considers the implications of incomplete markets, borrowing constraints, transactions costs, and labor income or other non-diversifiable risk on portfolio choice and asset prices. The results of those computational models suggest that while in theory these imperfections can affect financial markets, the deviations from the standard complete markets model are only quantitatively significant if people are assumed to be highly constrained. The accompanying empirical work highlights the heterogeneity in financial market behavior – the extreme concentration of stock holdings among older and wealthier households, and the important role of private business owners as investors more broadly. These empirical findings, juxtaposed with the theoretical results, suggest that the standard models are in some sense theoretically robust, but that it is difficult to reconcile observed investor and price behavior in a realistically calibrated optimizing model. My earlier work with R. McDonald examined the dynamic implications of asymmetric information on stock prices around events such as equity issues and dividend payments, and found that it helped to explain a number of empirical regularities. My current interests include the economic and welfare effects of introducing private accounts in social security, and how to do policy analysis in non-stationary environments.

**LUCAS, Jr, Robert E.**


**Principal Contributions** Econometric studies of capital–labour substitution and variations in capacity utilisation; theory of investment and technological change at the firm and industry level; theoretical and econometric work on labour supply; business-cycle theory and capital theory, motivated by the concept of rational expectations.

**LUCE, R. Duncan**

**Born** 1925, Scranton, PA, USA.


**Degrees** BS (Aeronautical Eng.), PhD (Maths) MIT, 1945, 1950.


**Principal Fields of Interest** C0 Mathematical and Quantitative Methods: General; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.

**Publications**


**Principal Contributions** After initial work on game theory, especially n-person theory, my interests gravitated to individual choice, which forms an interface between individual psychology and economics. Initially, I contributed to both probabilistic and algebraic approaches. The monograph *Individual Choice Behavior* introduced what has come to be known as Luce’s Choice Axiom and the representation that economists call the strict utility model. A number of new issues about choice and ranking were raised and a large literature ensued. The best-known algebraic work was the related concept of a semiorder and its threshold representation. This too led to a substantial literature. Following that, much effort was focussed on the various types of ordered algebraic structures that can be represented numerically. Perhaps my best-known contributions in this area were additive conjoint measurement, with the late John Tukey, and the three-volume treatise *Foundations of Measurement* with David Krantz, Patrick Suppes, and the late Amos Tversky. Conjoint measurement was similar to, but more general than, the topo-
logical results of Gerard Debreu. *Foundations* attempted to pull together in a systematic fashion what was then known about measurement representations. During the past 15 years I have focussed on using measurement results and functional equations to gain a deeper understanding of utility theory. The key primitives are uncertain alternatives, gains and losses, and joint receipt and their properties including a distributivity interlock. The results through 1999 are summarized in the monograph *Utility of Gains and Losses*. New, improved, and more general results will continue to be published.

LUMSDAINE, Robin L. n.e.

LUNDBERG, Shelly J. n.e.

LÜTKEPOHL, Helmut

Born 1951, Volmerdingsen, Germany.

Current Post Prof. Em., Europ. Univ. Inst., Florence, Italy, 2002–.


Principal Fields of Interest C3 Econometric Methods: Multiple/Simultaneous Equation Models; C5 Econometric Modeling; E4 Money and Interest Rates.


**Principal Contributions** Most of my work is related to time-series econometrics. In particular I have worked on the consequences of aggregating time-series data. Moreover I have worked on the properties of estimated impulse responses from vector autoregressive models and I have pointed out some pitfalls in using usual inference procedures in this context. I have also contributed to the literature on unit root and cointegration testing. Specifically I have proposed and investigated tests which take into account structural shifts. My applied work has mainly focused on money demand analysis and the transmission of monetary policy.

**LYNCH, Jr, John G.** n.e.

**LYNCH, Lisa Michele**

Born 1956, Waterbury, CT, USA.

**Current Post** Acad. Dean and William L. Clayton Prof. Intl Econ. Affairs, Fletcher Sch. Law and Diplomacy, Tufts Univ., Medford, MA, USA, 1993–.


**Degrees** BA Wellesley Coll. 1978; MSc, PhD LSE, 1979, 1983.

**Honours** Grad. Student Council Teaching Award, MIT, 1988; James Paddock Teaching Award, Fletcher Sch. Law and Diplomacy, 1998; Outstanding Faculty Award, Tufts Univ., 2000.


**Principal Fields of Interest** J2 Time Allocation; Work Behavior; Employment Determination and Creation; J3 Wages, Compensation, and Labor Costs; D2 Production and Organizations.


**Principal Contributions** In general, my work in labor economics uses rigorous micro econometrics techniques and applies them to labor market issues of public policy interest. In addition, I have always had an interest in international comparisons of labor market institutions and outcomes. Initially my research focussed on analyzing the youth labor market, especially the transition from school to work. Questions I examined included whether or not young people were scarred by early spells of unemployment and how public-funded programs such as unemployment insurance and training affected the transition probability of unemployed youth into employment. I then moved on to examine the impact of human capital investments, especially employer-provided training, on the labor market experience of young workers. My work in this area documented rates of return to employer-provided training and examined variations in these returns across countries. I tried to understand why the incidence and duration of employer training varied so much across countries and how public policy might affect the ultimate amount of employer-provided training within a country given its labor market institutions. Much of my research on this topic benefitted from the development of large longitudinal databases that followed people as they transited from school to work. Most recently my work has focussed on the impact of technological change and workplace practices (especially training) on productivity firms and workers’ wages. While my career has been largely based in academia, I was fortunate to have served as Chief Economist of the US Department of Labor from 1995–97. A major function of this position was to bring an economist’s perspective on issues such as economic constraints, opportunity costs, and implementation costs into high-level social policy discussions in a way that had seldom been done.

LYON, John D. n.e.

LYONS, Richard Kent

**Born** 1961, Palo Alto, CA, USA.

**Current Post** Prof., Haas Sch. Bus., Univ. California, Berkeley, CA, USA, 1993–.


**Degrees** BS (Fin., Highest Hons) Univ.
California, Berkeley, 1982; PhD MIT, 1987.


**Principal Fields of Interest** F3 International Finance; G1 General Financial Markets.

**Publications**


**Principal Contributions** I have launched a new approach to exchange rate economics called the new micro approach. The focus of the approach is information economics, specifically, how the foreign exchange market aggregates dispersed bits of information.
MACDONALD, Ronald

Born 1955, Glasgow, Scotland, UK.

Current Post Prof. Intl Fin., Univ. Strathclyde, Glasgow, UK, 1992–.


Principal Fields of Interest F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance; E0 Macroeconomics and Monetary Economics: General.


Principal Contributions I have made a number of contributions in the area of macroeconomics, particularly with respect to the modelling of consumer expenditure and the demand for money, and in the area of financial economics, in terms of testing present value models. Most of my contributions, however, have been in the area of international finance, particularly in terms of the economics of exchange rates. For example, I have investigated the
operation of fixed exchange rate regimes, ranging from the classical gold standard through to the Bretton Woods regime, and issues of speculative attack and contagion. Perhaps my main contribution has involved demonstrating that when exchange rates are flexible they are forecastable at horizons as short as two months ahead using a standard set of fundamentals. The exchange rate forecasting methods I have proposed have been adopted by a number of leading financial institutions. I have also demonstrated that sensible measures of a country’s equilibrium exchange rate may be obtained, and shown how this may be used to obtain measures of exchange rate misalignment. These methods have been widely adopted by central banks. Other contributions in the area of international finance involve proposing a new test of international capital mobility and testing the expectations formation processes of participants in bond and foreign exchange markets.

**Principal Contributions** My early contributions were in taxation and corporate behavior. My empirical studies were the first to demonstrate that taxes affect corporate financing (articles 3, 4). With Roger Gordon I then demonstrated the magnitude of the tax effect on the choice of organizational form (articles 7, 14), and implications for income shifting and tax policy (article 8). In an early application of real options theory I demonstrated surprising effects that nonlinear tax policies have on investment decisions (article 2). I also contributed to antitrust economics, notably by demonstrating that even when the market for a durable is competitive, a firm that has locked-in customers will charge above competitive prices for its complementary aftermarket products (articles 1, 11, 17). My most influential work is in the area of Internet economics, which Hal Varian and I largely initiated in the early 1990s (articles 9, 10, 12, 19). We explained the economic implications of the technological difference between Internet and telecom networks. Our proposed ‘smart market’ to manage Internet congestion led to much research by others, and influenced the design of new Internet protocols and services. In related work I designed and tested market-based schemes for allocating Internet caching resources to improve quality of service (article 15). I also studied the implications of network architecture for the variety and quantity of digital content that will be created and delivered over networks (article 13). Recently I have contributed to the economics and computer science literatures on the design of infrastructure for electronic transactions. In one
ongoing project I contributed to the design of pragmatic on-line auction systems for complex allocation problems, such as scheduling (article 18). In another ongoing project I contributed to the design of economically-intelligent software agents for participation in electronic commerce (articles 16, 20), which contributed as well to the bundling literature.

MACKINLAY, A. Craig n.e.

MACKINNON, James Gordon

Born 1951, Charlottetown, Prince Edward Island, Canada.

Current Post Sir Edward Peacock Prof. Em., Queen’s Univ., Kingston, Ontario, Canada, 1991–.


Principal Field of Interest C1 Econometric and Statistical Methods: General.


Principal Contributions Much of my early work dealt with methods for computing economic general equilibrium mod-
MACKUEN, Michael B. n.e.

MACLEOD, William Bentley

Born 1954, Iserlohn, Germany.


Degrees BA (Maths, Distinction), MSc Queen’s Univ., 1975, 1979; PhD UBC, 1984.


Principal Fields of Interest D0 Microeconomics: General; J0 Labor and Demographic Economics: General; K0 Law and Economics: General.


**Principal Contributions** My work is mainly concerned with understanding incentive contracts in dynamic settings, and how optimal contracts are the consequence of a complex interplay between reputation effects, market competition and social norms. In article 2 it is shown that norms in price setting may lead to collusion between firms. Article 5 shows that the free-riding problem with team production can be solved in relationships as long as the gains from membership are sufficiently large. This work is extended in article 6 to provide a complete characterization of two-party incomplete contracts. A feature of these contracts is that this may entail *ex post* inefficient outcomes, which is shown in article 8 to have no satisfactory solution, and hence efficient exchange in the presence of incomplete contracts necessarily entails some form of social costs. In article 14, it is shown that sinking costs up-front, as is done with gift exchange, is a unique stable social norm that can solve the free-rider problem in anonymous markets. Article 20 uses this observation to characterize contracts when evaluations are subjective and imperfectly correlated, and formally shows how biased evaluations can lead to lower pay and performance. In article 19 it is shown that incomplete contract theory can be used to derive a unique fair division rule that can explain why individuals exhibit endowment effects, while article 10 shows that it can explain nominal rigid wages. Recent work, including articles 12, 16, and 18, shows greater transactions complexity results in
an increased use of rewards based upon subjective evaluations.

MACPHERSON, David Allan

Born 1960, Sydney, Australia.

Current Post Abba Lerner Prof. Econ., Florida State Univ., Tallahassee, FL, USA, 2000–.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J2 Time Allocation; Work Behavior; Employment Determination and Creation; J4 Particular Labor Markets.


Principal Contributions Economists since Adam Smith have argued that competitive forces should tend to equalize wages across similar workers in similar jobs. My research has been concentrated on examining factors that cause deviations from wage equalization. In particular, I have focussed on the role of trade unions, wage discrimination, and pensions.

MADHAVEN, Ananth

MAHESWAREN, Durairaj

MAHONEY, Martha R.
MAILATH, George Joseph Martin

Born 1957, Perth, Western Australia, Australia.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D7 Analysis of Collective Decision-Making; D8 Information and Uncertainty.


Principal Contributions Article 2 proves the general impossibility of public provision in settings with veto power, private information, and a large number of agents. Article 4 was one of the first papers to endogenously derive a concern for relative position. Article 5 presents a simple model of stochastic evolution, providing a criterion for selecting between strict Nash equilibria. Articles 6, 9 and 10 provide a complete description of the relationship between the extensive and the normal form of a game. Articles 12 and 14 investigate the extent to which competition can alleviate the hold-up problem. Article 13 explores a new model of reputations based on separation rather than pooling considerations. Article 15 studies repeated games with imperfect private monitoring where the monitoring is close to public.
MAKSIMOVIC, Vojislav

Born 1955, Belgrade, Yugoslavia.

Current Post Bank of Amer. Prof. Fin.,
Robert H. Smith Sch. Bus., Univ. Maryland, College Park, MD, USA, 2000–.

Past Posts Temp. Econ., IMF, 1980;
Teaching Fell., Instr., Dept Econ., Harvard Univ., 1980–83, 1983–85; Asst Prof.,
Assoc. Prof., Faculty Commerce, UBC,
Univ. Maryland, 1989; Assoc. Prof.,
Coll. Bus. and Mgmt, Univ. Maryland,
1992–99; Prof., Robert H. Smith Sch. Bus.,

Degrees BSc, MSc (Math. Econ. and Em.) LSE, 1976, 1977; PhD (Bus. Econ.)

Editorial Duties Assoc. Ed., Mgmt Sc.,

Principal Fields of Interest G3 Corporate Finance and Governance; O1 Economic Development; L0 Industrial Organization: General.


Principal Contributions My initial research focused on how firms can strategically choose their financial structure to exploit product market imperfections. I also showed that capital structures which might appear to create incentives for agency conflicts when viewed in isolation can be optimal when viewed in industry equilibrium. My more recent research has used plant-level US Census data to analyse the efficiency of conglomerate firms, firms in bankruptcy proceedings and firms engaged in takeover activity. Most recently I have analysed how legal and financial institutions affect access to external financing in different countries.
MALCOMSON, James Martin


Principal Fields of Interest D8 Information and Uncertainty; I1 Health; J3 Wages, Compensation, and Labor Costs.


Principal Contributions My early research analysed vintage effects in investment, especially the implications for obsolescence, replacement and utilisation of capital equipment, and the effects of tax policy on these. I derived rigorous theoretical models of optimal investment and replacement that did not rely on stationarity, showed how optimal policies relate to simple rules, and derived analytic results for the effects of changes in tax policy on investment and replacement. I also devised ways to estimate such models empirically without imposing stationarity, an essential step in predicting the short-run effects of tax policy changes.
My empirical research on production convinced me of the need for economists to understand better the labour side of the production process and most of my more recent research has been directed towards that. One of my main concerns has been the different ways of motivating employees when important aspects of performance are not easily specified in the employment contract: performance-related pay in dynamic settings, high wages coupled with the threat of dismissal for unsatisfactory performance (efficiency wages), tournaments, and competition for promotion. In this research (some joint with co-researchers, most notably Bentley MacLeod) I have shown that tournaments and competition for promotion can provide effective methods of motivation provided that employees are sufficiently heterogeneous in their abilities and capture many of the features of internal labour markets. Performance-related bonuses are effective even when employees are homogeneous but may result in less efficient outcomes than efficiency wages when prospective employees are plentiful, relative to jobs. These results have implications for dual economies and for cyclical behaviour of wages and employment. Other recent research has shown that the types of contracts used in many practical situations have properties that theory suggests are appropriate for protecting investments in general and specific assets and has analysed the form of contracts appropriate for the provision of health services.

MANASTER, Steven n.e.

MANKIW, Nicholas Gregory

Born 1958, Trenton, NJ, USA.
Current Post Allie S. Freed Prof. Econ., Harvard Univ., Cambridge, MA, USA, 2002–.
Principal Field of Interest E0 Macroeconomics and Monetary Economics: General.

Principal Contributions One of my continuing research interests is the theory of short-run price adjustment. This work often goes by the label ‘new Keynesian’, although it builds on the views of monetarists such as Milton Friedman as much as on the views of Keynes. Much of my work highlights the behavior of monopolistically competitive firms that must incur ‘menu costs’ to change prices. My 1985 paper on this topic examined the incentives that firms face when deciding whether to adjust prices and the divergence between the private and social benefits of price adjustment. Later papers emphasized the difficulty of explaining the inertial behavior of inflation. My 2002 paper with Reis proposed that inflation inertia could be explained by the slow dissemination of information among price setters. A second continuing research interest is the determinants of consumption. A paper in 1982 extended Hall’s rational-expectations framework to durable goods. My 1989 paper with Campbell found that predictable changes in income are associated with predictable changes in consumption and concluded that current income has a stronger influence on consumer spending than can be explained by the permanent income hypothesis. My joint work with Zeldes detected systematic differences between consumers who hold equities and those who don’t, suggesting that these differences might help resolve the equity premium puzzle. A third continuing research interest is the theory and empirics of long-run growth. My 1989 paper with Abel, Summers, and Zeckhauser derived sufficient conditions for evaluating the efficiency of capital accumulation in economies with uncertainty. My 1992 paper with Romer and Weil examined international data on living standards and concluded that these data were consistent with a Solow growth model augmented to include a role for human capital.

MANNING, Alan n.e.

MANSKI, Charles F.

Born 1948, Boston, MA, USA.
Current Post Bd Trustees Prof. Econ., Northwestern Univ., Evanston, IL, USA, 1997–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; D1 Household Behavior; I0 Health, Education, and Welfare: General.


Principal Contributions n.e.

MANTON, Kenneth Grant

Born 1947, Toronto, Canada.


Degrees BA (Sociology) Princeton

**Offices and Honours**

**Editorial Duties**

**Principal Fields of Interest**
C1 Econometric and Statistical Methods: General;
C3 Econometric Methods: Multiple/Simultaneous Equation Models; C4 Econometric and Statistical Methods: Special Topics.

**Publications**

- **Books:**
  1. *Chronic Disease Modeling* (with E. Stallard), (Charles Griffin, 1988);
  2. *Forecasting the Health of Elderly Populations* (with B.H. Singer, R.M. Suzman), (S-V, 1993);

- **Articles:**
  1. ‘Effects of unobserved and partially observed covariate processes on system failure: a review of models and estimation strategies’ (with A.I. Yashin), *Stat. Sc.*, 12, 1997;
  2. ‘Monitoring changes in the health of the US elderly population: correlates with biomedical research and clinical innovations’ (with L.S. Corder, E. Stallard), *J. Federation of Amer. Soc for Experimental Biology*, 11, 1997;
  3. ‘Health and disability differences among racial and ethnic groups’ (with E. Stallard), chap. 7 in *Racial and Ethnic Differences in the Health of Older Americans* (NRC Comm. on Pop., 1997);
  5. ‘Demographic trends among the aging female population’, *J. Amer. Medical Women’s Assoc.*, 52, 1997;
  6. ‘The effects of health changes on projections of health service needs for the US elderly population’ (with B.H. Singer), *Proceedings NAS USA*, 95, 1998;
  7. ‘Effects of medical research on health care and the economy’ (with H. Pardes, E.S. Lander, A.D. Ullian *et al.*), *Sc.*, 283, 1999;
  8. ‘Dynamic paradigms for human mortality and aging’, *J. Gerontology and Biological Sc.*, 54A, 1999;
  11. ‘Active life expectancy estimates for the US elderly population: multidimensional continuous mixture model of function and change applied to completed cohorts’ (with K.C. Land), *Demography*, 37, 2000;
  15. ‘The future of old age’, in *Brocklehurst’s Textbook of*...
Principal Contributions

My contribution to economics centers on my measurement and analysis of national long-term trends in the production of human capital at later ages in the US population. My work contravened the assumption that, whatever the financial and technological inputs, the stock of human capital declined monotonically with age. I found, in contrast, that financial and technological ingredients in the national health care delivery system (including public components such as Medicare and Medicaid) could enhance the productivity of that system — for a fixed cohort of longitudinally-followed individuals this implies that the trajectory with age of human capital loss (populations) and individual functional capacity was not necessarily always downward. This has implications for retirement and tax policies, social security, and private pension programs and for the maintenance of wealth in the face of rapidly aging populations. I extended my work into the study of market mechanisms by examining how incentives for increased productivity (improved health outcomes) could be built into Medicare projective payment reimbursement systems — reimbursement systems which are often adopted by private health insurers. To conduct these analyses, I had to formulate new mathematical and statistical models that correctly interpreted the physiological systems being modified with fiscal and capital inputs in a non-linear multivariate diffusion process. This work involved (a) design of appropriate longitudinal national data; (b) development of statistical methods to estimate parameters from non-standard time-series data; and (c) developing mathematical models using those parameter estimates for simulation and forecasting exercises — exercises that were used by federal planners and congressional staffs to plan future investments in biomedical research and in Medicare policy.

MANUELLI, Rodolfo E. n.e.

MAOZ, Zeev n.e.

MARGO, Robert Andrew

Born 1954, Detroit, MI, USA.


Principal Field of Interest N3 Labor


Principal Contributions Most of my work has related to the economic history of education, health, labor, and labor markets in American history. My first two books traced the economic history of segregated schools in the American South from the late nineteenth to the middle of the twentieth century. In my third book, I used archival data to produce new time series of nominal and real wages for different occupations and regions in the United States from 1820 to 1860. My fourth book, co-authored with J. Perlmann, studied the economic and social factors behind the shift from male to female teachers in the nineteenth-century United States. I have written articles using historical data on height and weight to study levels and changes in nutritional status in the past. Other articles have examined racial differences in wealth accumulation in the South after the American Civil War, the rental price of housing in the nineteenth century, employment and unemployment and their effects during the Great Depression, the evolution of the wage structure in the 1940s, and racial differences in home ownership and housing values in the twentieth century. One current project, with J. Atack and F. Bateman, examines the growth of manufacturing in the United States from 1850–80. Another, with W. Collins, examines racial differences in housing in the United States during the twentieth century.
MARGOLIS, Stephen Edward

**Born** 1950, New York City, NY, USA.

**Current Posts** Prof. Econ., Dept Econ., North Carolina State Univ. (NCSU), Raleigh, NC, USA, 1982--; Dept Head, NCSU, 1997--.

**Past Post** Asst Prof., Univ. Western Ontario, 1978–82.

**Degrees** BA Northwestern Univ., 1972; PhD UCLA, 1978.


**Principal Fields of Interest** K0 Law and Economics: General; L0 Industrial Organization: General; L4 Antitrust Policy.


**Principal Contributions** My most recent work is concerned with increasing returns, standards, network effects and other circumstances that lead consumers or producers to make choices that are common to large groups of people. The choice of a network, technology, or standard may be more complicated than choices of other private goods. Stan Liebowitz and I have critically examined theoretical claims that such choices are not likely to be made efficiently through decentralized decision making. We have argued that the theories that support these market failure claims are based on very restrictive implicit and explicit assumptions. Further, we argue that the empirical support for these claims is insubstantial. Our paper on the typewriter keyboard (*J Law E*, 1990) considers the best-known claim of real-world ‘lock in’ to an inferior standard. We have also offered a taxonomy of lock-in effects associated with these common-choice problems. Some of my earlier work dealt
with markets for differentiated goods and the pricing of services by medical specialists. I have also studied depreciation of the housing stock and the effect of housing depreciation on urban neighborhoods. On several different topics, my work has offered definitions of economic terms. I have argued in these cases that some of our differences in conclusions or estimates are the result of different understandings of the meanings of these terms.

MARIMON, Ramon n.e.

MARK, Nelson C.

Born 1955, Chicago, IL, USA.

Current Posts Prof. Econ., Ohio State Univ., Columbus, OH, USA and Alfred DeCrane Jr Prof. Intl Econ., Univ. Notre Dame, Notre Dame, IN, USA, 2002–.


Degrees BA Univ. California, Santa Barbara, 1978; PhD Univ. Chicago, 1983.


Principal Fields of Interest F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance; G0 Financial Economics: General.


**Principal Contributions** My work on empirical exchange rate modeling (and work with J. Chen, D.Y. Choi and D. Sul) demonstrated that exchange rates revert to their fundamental valuations in the long run and that the pricing error (the current deviation from the fundamental value) has predictive content for the future path of the exchange rate. Some of my work on aggregate asset pricing consists of econometric tests of conventional asset pricing theories, investigations of the noise-trader framework (with Y. Wu), and the effects of central bank foreign exchange intervention as the underlying cause of an asset pricing puzzle known as the forward premium anomaly. Another line of my asset pricing research, with S.G. Cecchetti and P.-s. Lam, combines the popular calibration and simulation methodology with classical statistical inference procedures to allow formal tests of the theory’s predictions on the equity premium puzzle, asset return volatility, and the long-horizon predictability of excess returns.

**MARKUSEN, Ann Roell**

**Born** 1946, Minneapolis, MN, USA.

**Current Posts** Prof. Planning and Public Pol., Dir., Project on Regional and Ind. Econ., Humphrey Inst. Public Affairs, Univ. Minnesota, Minneapolis, MN, USA, 1999–; Sr Fell., Council on Foreign Relations, New York, USA, 1995–.


**Degrees** BSFS (Hist., Govt, Econ.) Georgetown Univ., 1968; MA, PhD Michigan State Univ., 1972, 1974.


**Principal Fields of Interest** R0 Urban, Rural, and Regional Economics: General; L0 Industrial Organization: General; O1 Economic Development.


Principal Contributions My work explores the relationships among industrial structure, state behavior and regional development. My first book posits that industries’ profitability derives from disparate sources over stages of maturation with differential and dynamic consequences for host regions. I worked on a theory of spatial diffusion as a function of oligopolistic structure and tested it on steel and several high-tech industries. I have written on the role of the state, deliberative and structural, in regional development, including an extension of location theory when government is the market and when strategic concerns trump efficiency. My work on the defense sector with P. Hall, S. Campbell and S. Deitrick concludes that decades of government military investments dramatically altered American economic and political geography. In work on trade with H. Noponen and K. Driessen, I have demonstrated that some subnational regions lose absolutely with trade liberalization and that regions benefiting from trade are those already possessing strong national market standing, including federal government procurement receipts. More recently, I have developed a model for studying regions by studying firms, nesting the latter in their industrial groups. I have also pioneered qualitative methods, chiefly interviewing, as a way of researching locational and expansionary behavior. In recent debates with economic geographers and regional scientists, I have defended the need for clear, testable hypotheses and for interdisciplinary and policy-relevant analysis. In recent
work on the post-Cold War defense industry, I made the case for active transitional conversion policy, for the maintenance of competition in the defense industry, and against using arms exports as an industrial policy. I have been engaged in policy-making deliberation including serving on a Presidential Commission on offsets in the arms trade.

MARKUSEN, James Roell

**Born** 1948, Minneapolis, MN, USA.

**Current Post** Prof. Econ., Univ. Colorado, Boulder, CO, USA, 1990–.

**Past Post** Prof. Econ., Univ. Western Ontario, 1972–90.


**Principal Fields of Interest** F1 Trade; F2 International Factor Movements and International Business.

**Publications**


**Principal Contributions** I have contributed extensively to the industrial-organization approach to trade. I have been
particularly interested in endogenizing multinational firms into the theory of trade, and in linking trade with investment and factor mobility in the new-trade-theory models. My work shows how investment liberalization leads firms to pursue strategies of horizontal and/or vertical integration across markets, and the circumstances under which trade and investment are substitutes or complements. I have led in the development of applied general-equilibrium models with imperfect competition, increasing returns to scale, and endogenous location decisions.

MARRON, J.-S. n.e.

MARSDEN, Terry

Born n.e.

Current Post Head, Dept City and Regional Planning, Cardiff Univ., Cardiff, Wales, UK, 2002–.


Degrees n.e.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; Q0 Agricultural and Natural Resource Economics: General; Q2 Renewable Resources and Conservation: Environmental Management.


Principal Contributions n.e.

MARTIN, Ronald Leonard

Born 1948, Colchester, Essex, UK.

Current Post Prof. Econ. Geography, Univ. Cambridge, Cambridgeshire, UK, 2000–.

Past Posts Res. Fell., St Catharine’s Coll., Cambridge Univ., 1976–79; Lect. Econ. Geography, Reader Econ. Geogra-
Degrees  BA (Geography, 1st Class Hons), MA (Geography), PhD (Econ. Geography) Univ. Cambridge, 1972, 1975, 1977.


Principal Fields of Interest  R1 General Regional Economics; J1 Demographic Economics; G2 Financial Institutions and Services.


Principal Contributions  As an economic geographer, my main contributions to economics have been in exploring the ways in which the spatial structure and organisation of the economy influence its operation, performance and regulation. One strand has focused on regional development and restructuring, including work on the geographies of deindustrialisation, on the application of endogenous growth theory and notions of path dependence to regional development issues, on the question of long-run regional convergence, and, more recently, on the geo-
graphical foundations of the ‘new economy’. This research has involved examining the interface between economics and geography, and particularly the new ‘geographical economics’ developed by Krugman and others (see for example, my papers in *Economic Geography* and the *Cambridge Journal of Economics*). A second strand has been on the theory and empirics of regional and local labour markets, particularly their wage and employment dynamics, the spatialities of trade union organisation, and the geographies of income inequality. A third concern has been to highlight the role of finance in shaping uneven regional development. Topics covered here include the geographies of different circuits of finance, such as pension funds and venture capital, global financial flows, and the regional aspects of banking. Fourthly, a recurring emphasis in my research has been the relevance of geography to public policy: how national economic policies shape uneven regional development; how the latter in turn impacts on national economic management; and what sort of policies are most effective for promoting regional growth. This policy interest has led me to be closely involved with the evaluation of a number of key policy initiatives in the UK, including the New Deal for the Unemployed, the identification of business clusters and the analysis of regional competitiveness, as well as assessing the impacts of EMU on regional economic inequalities in the EU.

**MASKIN, Eric Stark**

**Born** 1950, New York, NY, USA.


**Principal Fields of Interest** D8 Information and Uncertainty; D7 Analysis of Collective Decision-Making; C7 Game Theory and Bargaining Theory.

Principal Contributions

Contributions to the theory of incentives, implementation theory, game theory, social choice theory, theory of contracts, auction theory.

Principal Fields of Interest

J0 Labor and Demographic Economics: General; J7 Discrimination; R0 Urban, Rural, and Regional Economics: General.

Publications


Principal Contributions

My research falls into two broad areas, the first of which is racial and ethnic relations, focussing in particular on the role that residential segregation plays in perpetuating socioeconomic disadvantage among minority group members. In the course of two decades of research, I have made fundamental contributions to the conceptualization and measurement of segregation in urban society, to the theoretical understanding of segregation’s role in concentrating poverty geographically, to substantive knowledge about the effects of neighborhood poverty on individual life chances, and to documenting continuing practices of racial discrimination in US housing markets. My second area of research is international migration, focussing in particular on the movement of workers from developing to developed nations. I began my work on this subject by studying migration between Mexico and the United States. I documented the micro-social foundations of immigration and first
introduced the concept of social capital to the study of international migration. Using a blend of quantitative and qualitative methods, I showed how interpersonal networks linking migrants and non-migrants were transformed into a source of social capital that poor Mexicans could draw upon to cross the border and gain access to US jobs.

MASSON, Paul Robert Leon

Born 1946, Montreal, Quebec, Canada.


Principal Fields of Interest F3 International Finance; C5 Econometric Modeling; H6 National Budget, Deficit, and Debt.


Principal Contributions I have long been interested in capturing interesting features of the economy by a few equations, and rigorously comparing the predictions of such models to real data. My
original and continuing interest has been on financial models, and my early work on portfolio models of the exchange rate and of government bonds helped understand their empirical limitations but also an important difference between countries that were net creditors and net debtors. With colleagues at the IMF, I built a consistent global macro model (Multimod) which proved to have a number of useful applications, some in papers cited above: on the current account implications of population aging, for studying government deficits, and German unification. Work with Atish Ghosh explored the effect of model uncertainty on policy coordination, showing that uncertainty could make coordination more desirable. Several papers with Tam Bayoumi studied the effects of fiscal federalism on monetary union, showing that fiscal stabilization seems as effective in Europe as in the US or Canada, and arguing that fiscal redistribution, which is lower in Europe, does not have to accompany monetary union. I proposed a framework for understanding the financial contagion that emerged during the crises in Mexico, Asia, and elsewhere, making the distinction between macroeconomic interdependence, response to a common (global) event, and coincidence of crises that go beyond such fundamentals and that involve purely expectational factors. Much of my recent work has involved exchange rate regime choice, and has been based on a pragmatic view that this choice will not solve underlying problems, so that one should not expect it to be a panacea. My work has shown that the hypothesis of hollowing-out of intermediate regimes has very little empirical support, and the need to coordinate and discipline fiscal policies in order to make a success of a monetary union.

**Principal Contributions** My research examines the nature, determinants and implications of organizations. Working primarily from a transaction cost perspective, I have sought to contribute especially to the debates over the nature and boundaries of the firm and the functions and limitations of contracting, developing for that purpose several original data sets. My first and most frequently cited article, on the organization of procurement in the aerospace industry (article 1), provided early support for the role of relationship-specific investments and complexity in determining the relative efficiency of internal and market exchange. In formulating the ‘make-or-buy decision’ as a cost-minimization problem, this research also illuminated for the first time the relation between the parameters of qualitative choice models and transaction costs. In subsequent research with J.W. Meehan and E.A. Snyder (article 9), I explored further the determinants of firm boundaries (introducing the concept of ‘temporal specificity’) and, extending insights from my earlier research, showed how estimation techniques for sample selection could be used to separate out the costs of transacting under different organizational arrangements and to quantify the costs of ‘mistransaction’. A related article (article 11) elaborated on the problems of evaluating the efficiency consequences of organizational form and has contributed to more consistent and rigorous analysis of the effects of business organization and strategy on firm performance. My research on contracting includes analyses of take-or-pay (minimum bill) provisions (articles 2, 5), contract duration (article 6), price adjustment provisions (article 10) and the use and design of equipment leasing (article 12). These studies have helped to demonstrate the efficiency – primarily transaction-cost economizing – purposes of a variety of common contractual arrangements. I have also applied the lessons from this research to assess possible anticompetitive motives for contracting and their implications for antitrust policy (articles 7, 12), and to analyze financial aid coordination among universities (article 13).
MASULIS, Ronald W.

Born 1948, Boston, MA, USA.


Principal Fields of Interest G3 Corporate Finance and Governance; G2 Financial Institutions and Services.


**Principal Contributions** I have studied the impacts of corporate financial decisions (including exchange offers, seasoned common stock offers, issuer tender offers, stock splits, stock dividends, American Depository Receipt issuance, mutual thrift conversions to stock charter, IPOs and commercial loan originations) on stock pricing, risk and market microstructure characteristics. More recently, I examined the speed of price reactions to news across different market structures, the securities issuance process (both seasoned equity offers and IPOs), merger financing decisions, foreign currency bid-ask spread determination, spillovers of intra-day price volatility across major international stock markets, and the relationships among price volatility and trading activity measures.

MATSUI, Akihiko n.e.

MATSUSAKA, John G.

**Born** 1964, location n.e.


**Past Posts** n.e.


**Principal Fields of Interest** H0 Public Economics: General; G3 Corporate Finance and Governance.


Principal Contributions In political economy, my work has focused on the initiatives and referendums. I have been interested in the effect of these direct democracy devices on government policy, and whether they promote or subvert democracy. My book, For the Many or the Few is an in-depth treatment of these issues. It concludes that the initiative promotes the interests of the many rather than a special interest few. I have also worked with Tom Gilligan on several projects that seek to understand the effect of legislative structure on government policy. One robust finding is that larger legislatures spend more, consistent with the ‘fiscal commons’ view of government. In corporate finance, I have been interested in corporate diversification, internal capital markets, and budgeting processes. Several of my papers suggest that corporate diversification may not be a value-destroying process as many have argued.

MATSUYAMA, Kiminori

Born 1957, Kanagawa, Japan.

Current Post Prof. Econ., Northwestern Univ., Evanston, IL, USA, 1995–.


Degrees BA (Intl Relations) Univ. Tokyo, Japan, 1980; PhD Harvard Univ., 1987.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General; O0 Economic Development, Technological Change, and Growth: General.

Principal Contributions

Although my research spans a variety of fields, including international economics, monetary and macroeconomic theory, economic growth and development, and game theory, much of my research can be characterized as an effort to make methodological innovations to dynamic modelling in the context of a concrete economic problem. My earlier work was in the area of international economics, particularly an intertemporal approach to the current account and a dynamic game analysis of the trade policy credibility. My research then shifted to the global analysis of nonlinear dynamics. Examples include, monetary models with endogenous cycles to explain the link between the level of inflation and its variability; nonlinear models of economic development with multiple steady states to address the question of how an underdeveloped economy can take off from a poverty trap; growth models, in which the economy achieves sustainable growth through alternating innovation and investment cycles, and models of endogenous business fluctuations driven by the changing composition of credit over the cycles. My recent research has emphasized the role of complementarities in generating cumulative processes, instability, symmetry-breaking, and multiple equilibria. I address a wide range of agglomeration phenomena, such as business cycles (variations across time), uneven development and regional inequalities (variations across space), income distribution (variations across households) the evolution of an international currency, the evolution of the social custom and fashion cycles. This line of research also led me to address methodological issues associated with multiple equilibria, coordination failures, and equilibrium selection. For example, a demonstration of coordination failures is often interpreted as a call for government intervention, and I take up the question of the appropriateness of such interpretation. I defend models with multiple equilibria both as a theory of endogenous diversity and as a way of demonstrating sensitive dependence of economic behaviour on the environment.

**Degrees** BA, BSChE (Chemical Eng.), PhD Rice Univ., Houston, TX, 1957, 1958, 1969; MBA Harvard Univ., 1963.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; F4 Macroeconomic Aspects of International Trade and Finance; C1 Econometric and Statistical Methods: General.


**Principal Contributions** Initial research efforts were in the area of applied econometrics. Several empirical studies involved the formulation and estimation of dynamic adjustment relationships for nominal wages and prices. The presence in these of unobservable expectational variables motivated consideration of hypotheses more plausible than the then-prevalent adaptive-expectations formula. This led to an interest in rational expectations (RE), and in particular to the development of techniques appropriate for estimation under that hypothesis as well as theoretical investigation of issues including policy ineffectiveness and price-level determinacy. Efforts during the 1980s involved a variety of topics in monetary theory and policy including the medium-of-exchange role of money in overlapping-generation models, the theoretical viability of economies in which most transactions are conducted via an accounting system of exchange, the merits of alternative monetary operating procedures, and the specification and analysis of operational rules for the conduct of monetary policy. Nonmonetary topics included the nature and status of solution multiplicities (‘bubbles’) in RE models, implications of Ricardian equivalence for the feasibility of unending sequences of government budget deficits financed by bond sales, and the evaluation of early contributions to the real business cycle literature. More recent studies have been concerned with prominent empirical anomalies involv-
ing the term structure of interest rates and uncovered interest parity in foreign exchange markets, additional policy rule analyses, issues relating to institutional arrangements for central banks, and investigation of the adaptive learnability of various solutions in linear RE models.

MCCONNELL, John Joseph

Born 1945, Warren, OH, USA.

Current Post E.T. Weiler Univ. Disting. Prof. Mgmt (Fin.), Purdue Univ., West Lafayette, IN, USA, 2000–.


Degrees BA Denison Univ., 1968; MBA (Fin.) Univ. Pittsburgh, 1969; PhD (Mgmt) Purdue Univ., 1974.


Principal Fields of Interest G1 General Financial Markets; G3 Corporate Finance and Governance; N2 Financial Markets and Institutions.

Principal Contributions

My contributions have been primarily in the area of financial economics, financial markets, and financial institutions. I have developed models for the analysis, pricing, and hedging of fixed income securities using option pricing theory with stochastic interest rates. This work includes the development of models for analyzing mortgage-backed securities, collateralized mortgage obligations, convertible bonds, and financial leases. I have also contributed to the area of corporate finance with empirical analyses of such topics as corporate capital structure, corporate investment policy, corporate mergers, share repurchase programs, and inter-corporate joint ventures. Most of this work has focussed on the link between these various types of corporate investment and financing decisions and the value of the firm with a particular emphasis on the effect of these decisions on shareholder value. Further, I have contributed to an understanding of the link between corporate governance and corporate value with studies of the role of corporate boards of directors, shareholder voting rights, competition in the takeover market. In that regard, I have also analyzed the role of share ownership among corporate managers, large-block shareholders, financial institutions, and individual investors as determinants of corporate value. I have also made contributions in the area of market microstructure, the trading and pricing of financial futures contracts, and patterns in stock returns especially the 'turn-of-the-year effect' in stock prices.

MCCONNELL, Kenneth E. (Ted)

Born 1941, Huntington, NY, USA.

Current Post Prof., Dept Agric. and Resource Econ., Univ. Maryland, College Park, MD, USA, 1983–.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics: General; Q1 Agriculture; Q2 Renewable Resources and Conservation; Environmental Management.


**Principal Contributions**

My work has two basic thrusts: (i) determining the conditions in which natural resources are efficiently provided by the market and (ii) developing the theoretical underpinnings for empirical valuation. My early research made several of the seminal contributions that established a solid theoretical basis for non-market valuation. The 1975 AJAE paper established the Gary Becker model of the allocation of time as the appropriate model for investigating demand for recreation. The paper with Nancy Bockstael in AER in 1983 developed the household production framework as a means of rigorous economic welfare analysis for goods with unobserved prices including non-market goods. Another seminal paper with Bockstael in EJ develops the implications of changes in public goods for revealed preferences. My research has mixed empirical and theoretical approaches. A paper in May 1977 Land Economics developed one of the earliest empirical models of optimal congestion. This work provided a model of how to value congestion and a means of testing for crowding. The 1983 model of soil loss in AJAE laid the groundwork for the literature that seeks to understand optimal soil use. The 1987 paper with Bruce Madariaga provided a conceptually solid argument for measuring economic values for natural resources that people enjoy vicariously but do not use *in situ*. My 1979 paper with Jon Sutinen in JEEM helped to develop an understanding of the nature of competition between commercial and recreational fishing. The recent book with Tim Haab provides an entry for empirical methods of non-market valuation.

**MCCULLOCH, Robert E. n.e.**

**MCDONALD, John Freeman**

**Born** 1943, Decatur, IL, USA.

**Current Posts** Sr Assoc. Dean and Prof. Econ. and Fin., Coll. Bus. Admin., Univ. Illinois, Chicago, IL, USA, 1999–.


**Degrees** BA Grinnell Coll., 1965; MPhil, PhD Yale Univ., 1969, 1971.


**Editorial Duties** US Ed., Urb Stud,
Principal Field of Interest  
R0 Urban, Rural, and Regional Economics: General.

Publications  


Principal Contributions  
My principal contribution is the rigorous and detailed application of microeconomic theory and econometric methods to the study of urban areas. My first book applied the Alonso–Muth–Mills model to the Chicago housing market, and the second book used the same basic theoretical approach to study the location of employment and the allocation of land to industrial and commercial use. Land is considered an input into urban production processes along with capital and labor. Capital is divided into structure capital and movable capital, and real estate is defined as the services of land and structure capital as nested within the overall production function. The third book is a text that emphasizes microeconomic theory and neoclassical growth theory as applied to urban areas. The fourth book is a study of traffic congestion and its second-pricing which shows that, if only a portion of a congested highway system can be subject to congestion tolls, the efficient second-best tolls may be very different from the first-best tolls. Traffic flow is considered the output of a production function with highway capital and traffic density as the inputs. The existence of the congestion externality means that a highway can be operating in the ‘uneconomic’ region of production in which traffic flow would increase if traffic density were reduced. The 1980 article on the interpretation of Tobit analysis is cited frequently. A decomposition is suggested that disaggregates Tobit effects into effects on the probability of being above zero and effects conditional upon being above zero. The 1987 article on urban employment subcenters initiated the empirical research on this topic, which I have
pursued with D. McMillen. Other work with McMillen explores the effects of land-use zoning on land values, and the effect of land values on zoning decisions. Recent work, as exemplified by the 1999 article on optimal leverage in real estate investment, concentrates on real estate finance. A general equilibrium model with default risk is used to show how lenders charge higher interest rates as leverage (proportion borrowed) increases.

MCFADDEN, Daniel L.

Born 1937, Raleigh, NC, USA.


Degrees BS (Physics, High Distinction), PhD (Behav. Sc.) Univ. Minnesota, 1957, 1962.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; D0 Microeconomics: General; I1 Health.


Principal Contributions My research over the span of the last 30 years has centered on empirical microeconomics and policy applications, along with their theoretical and statistical antecedents. Major applications areas have included production theory, consumer theory with applications in marketing and welfare economics, transportation, energy, and health. In the past seven years, my research has focused on topics in three areas: (1) the economic status of the elderly, particularly the dynamics of living arrangements and the interaction of housing status and health; (2) consumer demand analysis combining market and psychometric data, with application in marketing and in the measurement of consumer surplus; and (3) econometric methods for analysis of discrete panel data and data arising from consumer experiments.

MCGRATTEN, Ellen R. n.e.

MCGUIRE, Therese J. n.e.

MCGUIRE, Thomas G. n.e.
**MCKELVEY, Richard (1944–2002)**

**Born** 1944, Geneva, NY, USA.


**Principal Fields of Interest** C7 Game Theory and Bargaining Theory; C9 Design of Experiments; D7 Analysis of Collective Decision-Making.

**Publications**

**Articles:**

1. ‘Policy related voting and electoral equilibrium’, *Em*, 43, 1975;
2. ‘Intransitivities in multidimensional voting models and some implications for agenda control’, *JET*, 12, 1976;
4. ‘A multistage game representation of sophisticated voting for binary procedures’ (with R. Niemi), *JET*, 18, 1978;
5. ‘General conditions for global intransitivities in formal voting models’, *Em*, 47, 1979;
8. ‘Elections with limited information: a fulfilled expectations model using contemporaneous poll and endorsement data as information sources’ (with P.C. Ordeshook), *JET*, 36, 1985;
10. ‘Common knowledge, consensus and aggregate information’ (with R.T. Page), *Em*, 54, 1986;
12. ‘Generalized symmetry conditions at a core point’ (with N. Schofield), *Em*, 55, 1987;
13. ‘Common knowledge of an aggregate of expectations’ (with J.T. Nielsen, A. Brandenburger, J. Geanakoplos, R.T. Page), *Em*, 58, 1990;
15. ‘An experimental study of the centipede game’ (with T.R. Palfrey), *Em*, 60, 1992;
17. ‘Political competition in a model of economic growth: some theoretical results’ (with R. Boylan, J. Ledyard), *ET*, 7, 1996;
19. ‘The maximal number of regular totally mixed Nash equilibria’ (with A. McLennan), *JET*, 72, 1998;

**Principal Contributions** n.e.

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**MCMILLAN, John**

**Born** 1951, Christchurch, New Zealand.


Offices and Honours Harry Johnson Prize, 1989; Fell., Em Soc, 1997–.


Principal Fields of Interest D4 Market Structure and Pricing; D8 Information and Uncertainty; O1 Economic Development.


Principal Contributions I have written on economic theory (auctions, mechanism design, principal–agent theory, and search theory) and applied microeconomics (business practices in Japan, the restructuring of China’s state-owned enterprises, and entrepreneurship in Vietnam and in Eastern Europe). My most recent research is on the reform of planned economies, and on the design of market institutions. I was consultant to the US government on the design of the auctions of spectrum licenses, and have advised various other governments on auction design. My book Reinventing the Bazaar: A Natural History of Markets (2002) explores what markets can and cannot do and what it takes or them to work effectively.

MCMILLEN, Daniel Paul

Born 1958, LaPorte, IN, USA.

Current Post Prof. Econ., Univ. Illinois, Chicago, IL, USA, 1999–.


Editorial Duties Ed. Bd, JUE, 1993–, Growth and Change, 1999–, J. Econ. Ge-
ography, 2001–, J. Real Estate Literature, 2002–, J. Housing Econ., 2002–, Real Estate Econ., 2003–.

**Principal Fields of Interest** R0 Urban, Rural, and Regional Economics: General; C1 Econometric and Statistical Methods: General.

**Publications**

**Articles:**
1. ‘Consistent estimation of the urban land value function’, *JUE*, 27, May 1990;
2. ‘Constructing confidence intervals using the bootstrap: an application to a multi-product cost function’ (with B.K. Eakin, M. Buono), *REStat*, 72, May 1990;
3. ‘The timing and duration of development tax rate increases’, *JUE*, 28, July 1990;
5. ‘Urban land value functions with endogenous zoning’ (with J.F. McDonald), *JUE*, 29, Jan. 1991;
6. ‘A simultaneous equations model of zoning and land values’ (with J.F. McDonald), *RSUE*, 21, May 1991;
10. ‘Can blacks earn more in the suburbs? Racial differences in intra-metropolitan earnings variation’, *JUE*, 33, March 1993;
11. ‘Could zoning have increased land values in Chicago?’ (with J.F. McDonald), *JUE*, 33, March 1993;
14. ‘A nonparametric analysis of employment density in a polycentric city’ (with J.F. McDonald), *J Reg S*, 37, Nov. 1997;
15. ‘Suburban subcenters and employment density in metropolitan Chicago’ (with J.F. McDonald), *JUE*, 43, March 1998;
16. ‘Land value and parcel size: a semi-parametric analysis’ (with P. Thorsnes), *Real Estate Fin. and Econ.*, 17, Nov. 1998;
17. ‘Land use before zoning: the case of 1920s Chicago’ (with J.F. McDonald), *RSUE*, 29, July 1999;
18. ‘A flexible Fourier approach to repeat sales price indexes’, *Real Estate Econ.*, 29, Summer 2001;

**Principal Contributions** My research follows three primary topics. First, a series of papers with John McDonald analyzes the effects of zoning on land values. We demonstrate that land-use zoning is endogenous in that a parcel is likely to be zoned for the use that provides the developer with the highest land value. We also show that, in spite of highly segregated patterns of land use before zoning, the City of Chicago’s first zoning ordinance led to higher land-value growth rates for parcels that were zoned for residential use. The second primary topic of my research is identifying the locations and effects of suburban employment subcenters. These concentrations of employment mimic the traditional central business district, leading to significant increases in employment density. The third main research topic is developing new statistical approaches for urban spatial modeling. A series of papers develops the empirical implications of the monocentric city model’s prediction of selection bias in land value and population density functions. I use nonparametric econometric methods as an alternative to more structured approaches to spatial modeling.
MEESE, Richard A.

Born 1952, Gary, IN, USA.

Current Posts Prof. and Assoc. Dean, Haas Sch. Bus., Univ. California, Berkeley, CA, USA, 1982–.


Degrees BS (Maths) Univ. Michigan; PhD Univ. Wisconsin.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; F3 International Finance; G1 General Financial Markets.


Principal Contributions I am interested in the study of international asset markets. More specifically, I became interested in the foreign exchange market while working as a staff economist at the Federal Reserve Board. A career-long contribution has been to test the link between major country exchange rates and macroeconomic fundamentals using a variety of theoretical models and econometric techniques. In this work I document the tenuous connection between foreign exchange rates and macroeconomic fundamentals over prediction horizons of one year or less. Structural exchange rate models appear to work better at longer horizons, although the proportion of variation in multi-year exchange rate changes that is explainable ex post is still about 5–10%. More recently, my interest in comparing actual with fundamental asset prices has led to my work in real estate economics, where I have studied both US and French housing markets. In comparison with exchange markets, economic fundamentals do constrain the movements of housing prices over multiple-year horizons. Over shorter periods, actual and fundamental housing prices diverge frequently. In contrast to exchange markets, it is difficult to exploit the apparent profit opportunities because of the high transaction costs that characterize housing markets.

MEGGINSON, William Leon

Born 1954, Baton Rouge, LA, USA.


Past Posts Plant Chemist, Acting Environmental Chemist, Cosden Oil &

Degrees BS (Chemistry) Mississippi Coll., 1976; MBA Louisiana State Univ., 1982; PhD (Fin.) Florida State Univ., 1986.


Principal Fields of Interest G3 Corporate Finance and Governance; F3 International Finance; L3 Nonprofit Organizations and Public Enterprise.


Principal Contributions During the past decade, most of my work has examined the privatization of state-owned enterprises (SOEs), especially those executed through public share offerings. Two arti-
cles studied whether the financial and operating performance of former SOEs improves after privatization; we document economically significant improvements in sales, profitability, efficiency, capital investment spending and dividend payout, plus significant declines in leverage. Other studies documented the dramatic, positive impact of privatizations on global stock market capitalization and trading volume, and also found that the long-run return to investors in share issue privatizations (SIPs) has been significantly positive. A recent study asked whether privatizing governments were trying to maximize revenue (offering proceeds) in the design of SIP offerings, or whether they were trying to maximize a political and economic utility function. We found strong evidence that governments willingly trade off proceeds in order to favor key domestic constituencies (especially SOE employees) and to maximize support for economic reform. Finally, my co-author and I summarized the extant empirical literature on privatization in a June 2001 JEL article.

Apart from privatization, I have also published studies showing that venture capitalists create value for portfolio companies when they go public, and have also shown that the taxation of dividend income significantly impacts investor choice of dividend payment method in the UK. Finally, my co-authored study of stock exchange mergers showed that all securityholders gain significantly more from nonconglomerate stock exchange mergers than from conglomerate stock-swap mergers.

MEGHIR, Konstantinos (Costas)

Ector Dimitrios

Born 1959, Athens, Greece.


Offices and Honours Bodosakis Prize in Econ., 1996; Ragnar Frisch Prize, Em Soc, 2000; Fell., Em Soc, 2000–.


Principal Fields of Interest D1 Household Behavior; J2 Time Allocation; Work Behavior; Employment Determination and Creation; J3 Wages, Compensation, and Labor Costs.


Principal Contributions I have worked with Richard Blundell and Alan Duncan on estimating the responsiveness of female labour supply to work incentives and welfare systems showing substantial welfare costs to taxation. We evaluated in work benefits and discussed improvements in their structure. Blundell, Pierre-André Chiappori, Thierry Magnac and I developed collective labour supply models with implications on within household allocations. Blundell, Martin Browning and I developed models of life-cycle consumption and savings allowing for the influence of family composition and labour supply. These generalisations explain the apparent excess sensitivity of consumption to income. Guglielmo Weber and I have shown that preferences for non-durables can be taken to be intertemporally separable. Luigi Pistaferri and I have estimated the time-series properties of income, showing that ARCH effects are important with implications for precautionary savings and income mobility. With Browning I developed ‘conditional demand systems’ to test for separability and to estimate conditional price effects, as an intermediate step towards obtaining unconditional ones. We found that goods are non-separable from labour supply, with implications for optimal taxation. Christian Dustmann and I estimated the impact of experience and tenure using displaced workers. We showed that the returns to experience for unskilled workers are very low, while the returns for skilled workers are substantial. Gosling, Machin and I described the increase in wage inequality of the past 25 years in the UK. Steve Bond and I developed the Euler equation for investment within the context of a hierarchy of finance model. We tested for liquidity constraints and found that firms with inadequate internal cash flow face higher investment costs. My recent work includes the evaluation of education and active labour market policies in the UK and in developing countries. I also have an active interest in microeconometric methods.

MELINO, Angelo

Born 1956, Toronto, Canada.
Current Post Prof., Univ. Toronto, Toronto, Canada, 1991–.


Offices and Honours Bd Dirs, NBER, 2000–.


Principal Fields of Interest C2 Econometric Methods: Single Equation Models; E4 Money and Interest Rates; G1 General Financial Markets.


Principal Contributions My research interests include macroeconomics, econometrics, and asset pricing, although in recent years I have tended to neglect the first. My paper with Sandy Grossman and Robert Shiller (*JBES*, 1987) sparked a continuing interest in estimation of continuous-time stochastic process, but I am probably best known for my applied work with Stuart Turnbull on estimation of stochastic volatility models. Our *J Em* (1990) paper took many years to complete and I am very proud of it. It was the first to compute a large collection of moments for this model and to apply GMM methods for estimation (the published version does not include a discussion of other innovative strategies which we also investigated before settling on GMM, such as using simulated method of moments or Kalman Filter estimation). I think it is fair to say that my research has been ec-
lectic. If there is a common theme, it is a willingness to do nonlinear estimation, and an interest in taking seriously the restrictions implied by economic theory in empirical work.

MENDELSOHN, Robert

Born 1952, New York City, NY, USA.

Current Post Edwin Weyerhaeuser Davis Prof., Yale Univ., New Haven, CT, USA, 1993–.


Degrees BA Harvard Univ., 1973; PhD Yale Univ., 1978.


Principal Field of Interest Q0 Agricultural and Natural Resource Economics: General.


Principal Contributions Along with many colleagues, I have developed many models and conducted several empirical studies to improve our understanding of the complex processes surrounding the interaction between mankind and the environment. I am perhaps best known for my efforts to measure the value of the environment from nontimber products in tropical forest, to American wildlife, to the global impacts of climate change. I helped develop the hedonic travel cost method to measure the value of characteristics of recreation sites such as old-growth and clearcuts. I participated in creating the Ricardian method to measure the value of
climate to agriculture and helped build several models of resources including dynamic forests, natural resource taxation, and nonrenewable resource exploration. I helped organize a series of studies to measure the impact of climate change on the United States and the rest of the world. Although the purpose of this research was to advance natural resource economics, these studies have always been concerned with policy questions. What should be conserved, how much air pollution is desirable, and what should be done about global warming are all addressed in this research.

MENDOZA, Enrique Gabriel

Born 1963, Mexico City, Mexico.

Current Posts Prof. Econ., Univ. Maryland, College Park, MD, USA, 2002–; Faculty Res. Fell., NBER, Cambridge, MA, USA, 1997–.


Offices and Honours Tlacaelel Econ. Natl Award, Consultores Internacionales, Mexico, 1986; Treasurer, Latin Amer. and Caribbean Econ. Assoc., 2000–01.


Principal Fields of Interest F4 Macroeconomic Aspects of International Trade and Finance; F3 International Finance; E0 Macroeconomics and Monetary Economics: General.


**Principal Contributions** My work studies macroeconomic implications of international capital flows with emphasis on four research lines. The first line developed real-business-cycle models for small open economies with incomplete insurance markets. This research showed that productivity and terms of trade shocks are important for explaining observed fluctuations in domestic aggregates and the current account, and produced the puzzling result that gains of foreign asset trading are small. Further work showed that indicators of capital mobility, like saving–investment correlations, are misleading and argued that terms of trade volatility helps explain cross-country growth differentials. The second line examined policy reforms. L. Tesar and I demonstrated that global externalities of tax reforms are large and provide strong incentives for tax competition. Work with G. Milesi showed that tax reforms have negligible growth effects in a wide class of endogenous growth models. The third line was motivated by the 1990s emerging markets crises. G. Calvo and I argued in 1995 that the observed financial vulnerability, sudden reversals of capital inflows and contagion of the 1994 Mexican crisis were new phenomena inconsistent with conventional currency crises models. We have developed a framework that uses informational frictions to explain them. M. Uribe and I showed that unhedged devaluation risk (or weak government credibility) explains observed business cycle patterns of pre-crises periods of exchange rate management. The fourth line and focus of my current work deals with financial transmission. The goal is to find a common explanation for sudden reversals of capital inflows and massive collapses in economic activity (the so-called ‘sudden stops’). I have developed equilibrium business-cycle models augmented by liquidity requirements, collateral constraints and trading costs that mimic key aspects of sudden stops. A striking policy implication is that emerging economies can lower exposure to sudden stops by replacing national currencies with hard currencies.

**MESTER, Loretta Jean**

**Born** 1958, Baltimore, MD, USA.


**Past Posts** Lect., Dept Fin., Adjunct Asst Prof. Fin., Adjunct Assoc. Prof. Fin.,


Principal Fields of Interest G2 Financial Institutions and Services; G0 Financial Economics: General; G3 Corporate Finance and Governance.


Principal Contributions I have made contributions to the literature on methods for measuring the production structure of financial institutions and on the theory of the banking firm.

MEYER, Bruce Donald

Born 1959, Wakefield, RI, USA.


Principal Fields of Interest H0 Public Economics: General; I0 Health, Education, and Welfare: General; J0 Labor and Demographic Economics: General.


Principal Contributions Most of my research has examined the effects of social insurance and welfare programs through large-scale quantitative studies. This research has advanced empirical work by using new methods and new sources of high-quality data. My other main areas of research are labor market turnover, self-employment and microeconometric methodology. A common methodological problem in analyses of social insurance and welfare programs is that the variation in program parameters is determined by an individual’s work history or by characteristics of states. Unfortunately, both of these determinants likely have an influence of their own on outcomes such as employment or wages. Convincing estimates of the effects of these government programs requires variation in program incentives that is not
due to causes which might influence the dependent variables under study. My research has emphasized identification of causal policy effects through the use of a ‘natural experiment’ approach which examines outcomes before and after sharp changes in government policy or other sources of clear identifying variation that are likely to be exogenous in a particular situation.

MICELI, Thomas Joseph

Born 1959, Hartford, CT, USA.

Current Post Prof. Econ., Univ. Connecticut, Storrs, CT, USA, 1998–.


Editorial Duties Ed. Bd, J. Real Estate Fin. Econ., 1996–.

Principal Fields of Interest K1 Basic Areas of Law; K4 Legal Procedure, the Legal System, and Illegal Behavior; R5 Regional Government Analysis.


Principal Contributions My contributions to economics have primarily been in the fields of law and economics and urban economics. I have worked on a wide range of topics pertaining to the law, but I have concentrated on property law. My colleague Kathleen Segerson and I have written a book on regulatory takings that summarizes our work on the question of when compensation should be paid for losses in property value as a result of government regulations. I have also done work on topics in real estate and urban economics. Much of this work has been from
a law and economics perspective and has been done in collaboration with C.F. Sirmans. In addition to the above areas, I have done work in environmental economics and health economics.

MICHAELY, Roni n.e.

MICK, David Glen n.e.

MICKLEWRIGHT, John n.e.

MILGROM, Paul Robert

Born 1948, Detroit, MI, USA.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; L2 Firm Objectives, Organization, and Behavior.


**Principal Contributions**

Several of my papers have developed general analyses of the consequences of alternative auction rules. The ‘activity rule’ I invented was the critical innovation needed to create a practical ‘simultaneous multiple round auction’ to sell tens or hundreds of inter-related resources. My ‘ascending package auction’ is the first practical and theoretically sound system for package bidding. Another large chunk of my work concerns the theory of the firm. In principal–agent theory, I am the co-author of a series of papers that establish how an agent’s range of responsibilities affects the optimal structure of incentives, how jobs can be designed to exploit that relationship, and how principles about the proper range of responsibilities may determine the choice between using employees or independent contractors for various tasks. Similarly, I am the co-author of a series of papers that investigate the organization of manufacturing firms and how the interactions among decisions about manufacturing technology, production practices, supplier relations, and compensation and training practices explain the rapid emergence of a new manufacturing paradigm in the 1980s and 1990s. I have also investigated the internal politics of the firm and how it affects the efficient allocation of authority, the structure of promotion decisions, and the reaction of firms when their survival is threatened. These themes and others are incorporated in my co-authored textbook – the first on the internal economics of the firm. I was among the first to apply game-theoretic analyses to studies of industrial organization, historical institutions, and the microstructure of financial markets. Most recently, I revisited the foundations of economic analysis, reformulating the questions of comparative statics and offering simpler, sharper versions of the envelope theorem, the LeChatelier principle and other foundational results.

**MILLER, John Howard**

**Born** 1959, Denver, CO, USA.

**Current Posts** Prof. Econ. and Head, Dept Social Decision Sc. (SDS), Carnegie-Mellon Univ., Pittsburgh, PA, USA, 2002–; External Faculty, Santa Fe Inst., Santa Fe, NM, USA, 1989–.


**Principal Fields of Interest** D0 Microeconomics: General; C7 Game Theory and Bargaining Theory; C9 Design of Experiments.


Articles: 1. ‘Artificial adaptive agents in economic theory’ (with J.H. Holland), AER Papers and Proceedings, 81, May 1991; 2. ‘Behavior of trading automata in a computerized double auction market’ (with J. Rust, J.H. Miller, R. Palmer), in

**Principal Contributions** My research focuses on the complex adaptive behavior that emerges in social systems. The goal of this work is to understand the principles by which aggregate patterns emerge from the simple interactions of individual adaptive agents. To understand the behavior of complex adaptive systems, I have often relied on the analysis of computational models composed of interacting artificial adaptive agents. The behavior of each agent in the system is dictated by a simple learning algorithm (e.g., genetic algorithm) that allows the agent to adaptively modify its actions from a set of behaviors rich in possibilities. This paradigm allows the analysis of flexible, yet precise, models of well-defined agents in an environment that can be easily and rapidly replicated and recovered. The ability to interact directly with such open-ended models allows one to quickly generate, develop and test new hypotheses. Using artificial adaptive agent models, my colleagues and I have been able to analyze some central social phenomena. We have explored the dynamics of political platforms, learning in games, and the emergence of cooperation and communication.

To understand the fundamental dynamics of price formation in simple markets, we designed and organized an international computerized double auction tournament. This tournament allowed us to create an ‘artificial world’ of trading agents in which we explored a variety of theoretical and practical issues. Complementing the above work, I have also pursued experimental and pure mathematical approaches to many of the above issues. Using the methods outlined above, previously inaccessible, yet fundamental, questions are now becoming amenable to analysis.

**MILLER, Paul William**

**Born** 1955, Dunedoo, NSW, Australia.  
**Current Post** Prof. Econ., Univ. Western Australia, Perth, Western Australia, 1991.  
**Offices and Honours** Fell., Acad. Social Sc. in Australia, 1997.  
**Publications** Articles: 1. ‘On the determination of occupational attainment and mobility’ (with P.A. Volker), *JHR*, 20, Spring 1985; 2. ‘The wage effect of the
occupational segregation of women in Great Britain’, *EJ*, 97, Dec. 1987; 3. ‘Aust-

**Principal Contributions** I have made contributions in a number of areas of applied labour market research, including:
(i) economics of education; (ii) gender discrimination; (iii) trade unions; (iv) economics of migration; (v) economics of language; and (vi) the youth labour market.

**MILLER, Stephen Michael**

**Born** 1945, Marion, IN, USA.

**Current Posts** Prof. and Chair Econ., Univ. Nevada, Las Vegas, NV, USA, 2001–; Prof. Emeritus Econ., Univ. Connecticut, Storrs, CT, USA, 2001–.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General; G0 Financial Economics: General.


Principal Contributions My research generally falls into three major areas: the linkage and interaction of fiscal and monetary policy; structure, conduct, and performance in commercial bank production and intermediation; and applied time-series macroeconometric analysis. Significant research activity considers the effects of fiscal policy, usually the government deficit, on growth accounting, interest rate adjustment, the trade deficit, inflation, and consumption, written largely with my CBO collaborator, F.S. Russek. Another active research area considers the issues of scope, scale, and efficiency in commercial banking using commercial bank balance sheet and income statement information, written largely with a former PhD student, A.G. Noulas, and S.C. Ray. Finally, my research frequently employs applied time-series macroeconometric techniques, especially the cointegration and error-correction modeling strategy, to macroeconomic issues such as the following: estimation of the money demand function; estimating the interest rate parity condition and considering temporal causality linkages across countries; estimating the linkage and temporal causation, if any, between the fiscal deficit and interest rates; estimating the linkage and temporal causation between fiscal spending and revenue; and examining the time-series properties of the determinants of competing exchange rate models. In addition, my work with former colleague, P. Dua, on coincident and leading employment indexes in Connecticut complements my work on growth accounting and led to the continuing monthly publication of those indexes in the Connecticut Economic Digest. Finally, an early paper on location and the theory of production, written with another former PhD student, O. Jensen, provided a summary, review, and critique of that literature that was for some time a standard reference, garnering significant numbers of citations.
MIRON, Jeffrey A. n.e.

MISHKIN, Frederic S.

Born 1951, New York City, NY, USA.


Principal Field of Interest E0 Macroeconomics and Monetary Economics: General.


**Principal Contributions** My research has been motivated by the desire to better understand the sources of business-cycle fluctuations and how monetary policy affects aggregate economic activity. My early work explored the impact of changes in household balance sheets on the demand for illiquid assets, such as consumer durables and residential housing, and found that this could be a potent channel for monetary policy effects on the economy. I then used this analysis to see if this would provide a better understanding of some important business-cycle episodes, in particular the Great Depression and the 1973–75 recession. I next examined the implications of rational expectations for how monetary policy should be conducted. The resulting empirical analysis required the development of econometric techniques which could distinguish between the effects of anticipated versus unanticipated policy, enabling me to analyse such topics as the relationship of monetary policy and interest rates and the question of whether anticipated monetary policy matters to business-cycle fluctuations. Because changes in real interest rates are such an important element in understanding how monetary policy affects the economy, I began to focus on the measurement of real interest rates, both domestic and international, using rational expectations techniques and the testing of such propositions as the Fisher effect and the equality of real interest rates across countries. In order to see what guidance the term structure of interest rates might provide for monetary policy, I examined the information in the term structure about the path of future inflation and real economic activity. My most recent work has focused on the nature of financial crises in both industrialized and emerging market countries, prudential supervision, and strategies for the conduct of monetary policy, such as inflation targeting.

**MODY, Ashoka** n.e.

**MOE, Terry M.** n.e.

**MOFFITT, Robert Allen**

**Born** 1948, Houston, TX, USA.

**Current Post** Prof. Econ., Johns Hopkins Univ., Baltimore, MD, USA, 1995–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; H0 Public Economics: General; C0 Mathematical and Quantitative Methods: General.


Principal Contributions My chief contributions have been in the empirical analysis of the incentive effects of transfer programs on the labor supply and demographic behavior of individuals and families. I have also made contributions to econometric methodology through the analysis of the Tobit model, panel data with limited dependent variables, selection bias models, kinked budget constraints, repeated cross-sections, simulation methods, experimental methods and techniques for program evaluation. My recent contributions have included studies of job mobility, earnings inequality, and earnings dynamics in the US.

MONAHAN, J. Christopher n.e.

MOOKHERJEE, Dilip

Born 1956, Calcutta, India.

Current Post Prof., Dept Econ., Boston Univ., Boston, MA, USA, 1995–.


Principal Fields of Interest D0 Microeconomics: General; O0 Economic Development, Technological Change, and Growth: General; L0 Industrial Organization: General.


Principal Contributions My research in microeconomic theory falls into three broad areas: incentive and organization design, market failure with asymmetric information, and theories of learning based on limited rationality. In the former area my research has focused on the role of competition in organizations and R&D, design of auditing and enforcement mechanisms, role of social norms, mechanism design with particular attention to hierarchical delegation and corruption. In the context of market failure theory, I initially explored contract theoretic foundations of Keynesian theories of involuntary unemployment, and later studied the implications of moral hazard and adverse selection in more abstract general equilibrium settings. I have also worked on models of reinforcement learning, including experimental evidence and theoretical explorations of their long-run implications in two-person repeated games. In the context of development economics, my research explores (i) the causes and implications of poverty and inequality in a developing country context, and (ii) the political economy of governance, with respect to tax administration, decentralization of social service delivery, and land reforms.
MORA VCSIK, Andrew n.e.

MORCK, Randall Karl

Born 1956, Olds, Alberta, Canada.


Principal Fields of Interest G0 Financial Economics: General; O1 Economic Development; F2 International Factor Movements and International Business.

Principal Contributions The theme of my corporate finance work is that who controls capital matters. This work, done in the 1980s, which helped found the field of corporate governance, is empirical and statistical in nature. Shleifer, Vishny and I showed that hostile targets in the 1980s were ill-managed, but that many acquirers also had serious governance problems. We also showed that managerial ownership can be too high as well as too low. Yeung and I showed that multinational firms with proprietary technology outcompete local firms, but other multinationals generally do not. With Stangeland, I also show that widespread corporate control by a country’s old families is correlated with sharply lower economic growth. Overall, this work implies that ‘entrenched’ control over capital is a fundamental economic problem in many countries. Economic growth requires that control over capital be contestable so as to give control over capital to those with ideas that generate economic profits. My work on comparative financial systems explores how different mechanisms accomplish (or failed to accomplish) this in different settings. A series of papers with Nakamura (and sometimes Shivdasani) shows that Japan’s bank-oriented system of capital allocation leads to distortions at least as severe as those in the US. Finally, my work on financial markets (with Yeung and Yu) shows that the ‘market model’ ‘fits the data’ well in emerging markets, but poorly in developed markets. It also shows that this ‘fit’ deteriorated steadily in the US as that country developed. Stock prices in more developed economies move in response to information about individual companies, while stocks in emerging markets move en masse, perhaps due to noise trader sentiment. This suggests the market model’s ‘fit’ gauges the stock market’s efficacy as a signalling device, and therefore as a capital allocator.

MOREY, Edward Rockendorf

Born 1950, Chicago, IL, USA.

Current Post Prof., Dept Econ., Univ. Colorado, Boulder, CO, USA, 1980–.


Principal Fields of Interest D1 Household Behavior; D6 Welfare Economics; C1 Econometric and Statistical Methods: General.


Principal Contributions Most of research has involved the theory and practice of consumers’ surplus measures and environmental valuation. Applications include the valuation of recreational sites, cultural resources and health care. Techniques include travel cost models, choice experiments and contingent valuation.

MORGAN, S. Philip n.e.

MORGAN, T. Clifton n.e.

MORRIS, Stephen Edward


Current Post Prof. Econ., Yale Univ., New Haven, CT, USA, 1998–.


Degrees BA (Maths and Econ.) Cambridge Univ., 1985; PhD Yale Univ., 1991.


Principal Field of Interest C7 Game Theory and Bargaining Theory.

Publications Articles: 1. ‘Finite bubbles with short sales constraints and asymmetric information’ (with F. Allen,

Principal Contributions n.e.

MORTENSEN, Dale T.

Born 1939, Enterprise, OR, USA.

Current Post Prof. Econ., Northwestern Univ., Evanston, IL, USA, 1975–.


Principal Fields of Interest A1 General Economic; D8 Information and Uncertainty; J4 Particular Labor Markets.

Principal Contributions

An interest in dynamic phenomena in economics, not readily explained by existing theory, has marked my research from its beginning. Early work includes papers on the development of formal job search models and their implications for unemployment and wage dynamics, and papers on the theory of dynamic factor demand when adjustment costs are present. Although these were intended as contributions to the microeconomic foundations of macroeconomics, my research interests shifted to applications of the economics of imperfect information and uncertainty. A subsequent series of papers was focused on the study of job separation behaviour, testing for ability in the labour market, labour supply dynamics, and contract equilibrium in the context of models that account for imperfect information and uncertainty. My recent theoretical contributions have dealt with dynamic models of job–worker matching in a game theoretic context, the effects and design of unemployment insurance schemes, and mobility in labour markets characterised by long-term contracts. Currently, I am interested in the development of empirical models of individual-worker labour market experience over time designed for estimation and testing using panel data. A book on recent contributions of the economics of information and uncertainty to labour economic analysis is in progress.

MORTON, Andrew J. n.e.

MOSCHINI, GianCarlo

Born 1954, San Giorgio Piacentino, Italy.

Current Posts Prof. Econ. and Pioneer Chair in Sc. and Tech. Pol., Iowa State Univ., Ames, IA, USA, 2000–.


Degrees Laurea Catholic Univ. Piacenza, Italy, 1978; PhD Univ. Guelph, Canada, 1986.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics: General; D0 Microeconomics: General.


**Principal Contributions** I have made contributions in several distinct areas in agricultural economics. My work on demand systems has extended the usefulness of separability to specify and estimate parsimonious but complete demand systems, has shown how to handle the crucial curvature property, and has developed several new specifications of demand systems. I have also clarified the use of index numbers in demand models and derived a new specification for autocorrelation in demand systems. My study of duality in production analysis includes the estimation of cost functions when production is stochastic. I have also developed a novel approach to testing for separability in production, and an original approach to nonparametric testing for returns to scale. I have also made contributions to the study of decisions under risk, with emphasis on farmers’ hedging problems. My work with H. Lapan led to the first rigorous analysis of the joint use of options and futures in a competitive production and speculative framework, and provided key insights on the hedging roles of options and futures in two additional novel settings: when the timing of production decisions allows for flexibility in the choice of some inputs, and when farmers also face production risk, in addition to price and basis risk. My work in agricultural and trade policy includes early studies of Canadian supply management issues, the use of countervailing duties in agricultural markets, decoupled farm programs under distortionary taxation, and stabilizing price policies when options and futures are also available. Recently, I have also contributed to the economics of innovations, with emphasis on intellectual property rights and agricultural biotechnology.

**MOULIN, Hervé**

**Born** 1950, Paris, France.

**Current Post** G. Peterkin Prof. Econ. Theory, Rice Univ., Houston, TX, USA, 1999–.


Principal Fields of Interest D7 Analysis of Collective Decision-Making; C7 Game Theory and Bargaining Theory; D6 Welfare Economics.


Principal Contributions The subject of my research is the design of microeconomic mechanisms of resource allocation. I am especially interested by the interface between the incentives properties of these mechanisms (namely, how will rational, selfish agents ‘play’ the mechanism) and their normative properties of equity and efficiency. My early work deals with strategic analysis of voting rules both with the help of noncooperative concepts (notably dominance solvability, that I introduced and applied to multistage voting) and cooperative concepts (such as core stability: Peleg and I invented the concept of effectivity function, to analyse voting by veto). Subsequently I studied the implementation of an abstract social choice function by means of decentralized mechanisms. In the last 15 years or so, I have explored the normative interpretation of fairness in a variety of microeconomic allocation problems: choosing from a tournament of majority preferences; division of ‘free’ commodities; pricing a natural monopoly, and cooperative production of a private
good, a public good, or an excludable public good; cost sharing when outputs are heterogeneous, sharing access charges to a network, scheduling; assignment of indivisible objects or tasks; and matching. This work has contributed to redefining the field of ‘normative economics’. It borrows tools from the theory of social choice, noncooperative and cooperative game theory. It relies heavily on the axiomatic methodology, and recommends concrete methods for fair division.

MOULTON, Brent Richard

Born 1954, Burbank, CA, USA.


Principal Fields of Interest C8 Data Collection and Data Estimation Methodology; Computer Programs; C1 Econometric and Statistical Methods: General; E3 Prices, Business Fluctuations, and Cycles.

Practical Contributions

My research has focused on improving the data that economists use and the inferences that are made from the data. In several articles published between 1986 and 1990, I examined the inferential problems that sometimes arise in cross-sectional micro data when there is residual correlation within identifiable groups or classes of observations, such as geographical areas, industries, or other groups. In particular, if an economist attempts to measure the effects of a macro variable on micro units by merging data from two sources based on geographical region or some other group- ing, I showed that even a small within-group residual correlation can lead to large biases in standard errors and incorrect inferences. As a result of these findings, that entire research strategy was rendered dubious. My second major area of research was directed toward identifying and addressing problems in measuring price indices. For example, in 1993 M. Reinsdorf discovered a bias in the ‘modified Laspeyres’ formula that was used by the US Bureau of Labor Statistics for estimating the lowest-level indices of the consumer price index (CPI). In a 1993 article I presented evidence confirming his hypothesis and suggested the geometric average as a functional form to avoid the bias. Several years later the geometric average was adopted for most of the com- ponent indices in the US CPI. In other research, including work with K. Moses, I examined the quality adjustment methods used in the CPI and recommended improvements to those methods. More recently I have directed the US national in- come and product accounts and have led work to adapt the accounts to a rapidly changing economic environment.

MULLAHY, John

Born 1957, Philadelphia, PA, USA.

Current Post Prof. Pop. Health Sc., Univ. Wisconsin-Madison, Madison, WI, USA, 1997–.


Degrees BA Georgetown Univ., 1979; PhD Univ. Virginia, 1985.


Principal Fields of Interest I1 Health; C1 Econometric and Statistical Methods: General; D1 Household Behavior.


**Principal Contributions** My research is an attempt to provide methodological innovations for, and empirical insights into, microeconomic problems concerning human health.

**MULLER, Eitan**

**Born** 1948, Haifa, Israel.

**Current Post** Nathan Galston Prof. Hi-Tech Marketing, Recanati Grad. Sch. Bus. Admin., Tel Aviv Univ., Tel Aviv, Israel, 1987–.


**Principal Fields of Interest** M3 Marketing and Advertising; D6 Welfare Economics; L1 Market Structure, Firm Strategy, and Market Performance.

**Publications**


Principal Contributions n.e.

MUNGER, Michael C. n.e.

MUNNELL, Alicia H. n.e.

MURNANE, Richard J. n.e.

MURPHY, Kevin James

Born 1957, Sumner, IA, USA.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; G3 Corporate Finance and Governance; L2 Firm Objectives, Organization, and Behavior.


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Principal Contributions Most of my work has related to executive compensation and, more generally, to compensation and incentives in organizations. Broadly defined, my research objective is to understand and predict how individuals respond to organizational incentives, including incentives provided by monetary or non-monetary compensation, promotion and career-advancement opportunities, dismissal, as well as by the capital, labor, and product markets. The research agenda extends to analyzing how performance is measured and appraised, how performance standards are set, and how pay is tied to performance. The research is both empirical and theoretical, and is interdisciplinary, spanning economics, finance, accounting, and organizational behavior. In addition to my work on compensation, I have (with G. Baker and R. Gibbons) analyzed relational contracts (self-enforcing contracts in repeated games) with implications for subjective performance assessment, strategic alliances, and the theory of the firm.

MURPHY, Kevin M. n.e.

MURRELL, Peter


Current Post Prof., Univ. Maryland, College Park, MD, USA, 1988–.


Degrees BSc, MSc LSE, 1971, 1972; PhD Univ. Pennsylvania, 1977.


Principal Fields of Interest D2 Production and Organizations; F0 International Economics: General; K0 Law and Economics: General.


Principal Contributions Early work concentrated on two aspects of comparative economic systems, cross-country empirical studies of the structure and performance of capitalist economies and the theory of socialism and planning. The former led to a number of papers on the effect of interest groups in capitalist societies and to contributions to the field of public choice. The latter led to deliberation on the ways in which economists think about the relative properties of capitalism and socialism. In a reconsideration of the market socialist debate, I pointed out how the identification of the debate’s winners was more a function of the lens used to examine the debate than its content. In another, I presented an analysis of the predictive powers of neoclassical and Schumpeterian views on the performance of the East European economies. This work reached its culmination in the late 1980s and therefore provided an important input into my work on the economics of transition. In the debates on transition, I have presented views critical of the mainstream approach, views which have been variously characterized as gradualist, evolutionary, or conservative, the main features of which are to emphasize the economic costs of adjustment, the need to design policies that are able to build on any existing strengths, rather than starting simply from the assumption that the old must be destroyed, the importance of institutions, and the need to understand the existing structure of economy and society in order to reach conclusions on policy prescriptions. My latest work concentrates on delving into the facts of system change, the cultural effects on policy
implementation, the extent to which history and policy are determinants of present outcomes, and the role of the law in enterprise behavior.

MYERS, Gordon MacKenzie

Born 1958, Ottawa, Ontario, Canada.
Current Post Assoc. Prof. Econ., Simon Fraser Univ., Burnaby, BC, Canada, 1999–.
Degrees BA Queen’s Univ., 1983; MA, PhD McMaster Univ., 1985, 1990.
Principal Fields of Interest H7 State and Local Government; Intergovernmental Relations; R5 Regional Government Analysis; D0 Microeconomics: General.
Principal Contributions My early work studied federal systems of government. I was interested in population migration in a federal system. That work made the simple point that unrestricted population migration across a system of local jurisdictions can tie together the incentives of the different jurisdictions and create common interest. With J.B. Burbidge, A. Mansoorian and Y.Y. Papageorgiou, this logic has been applied to various contexts, for example, it can be shown that local jurisdictions may make voluntary transfers to other jurisdictions in a non-cooperative equilibrium. Papageorgiou and I have also applied this logic of migration creating common interest to international (restricted) immigration when border control is costly. These results have some empirical con-
tent in the observation that international transfers have been justified by policy makers as a migration control instrument (e.g., American support for Mexico during the peso crisis). Another area of interest has been capital tax competition. Recently with A.S. Kessler and C. Lulffesmann my interest has been on models where capital taxes and levels of redistribution are determined democratically. A sample result is that even when increased capital market integration (globalization) leads to a race to the bottom in redistributive policy that integration can be socially desirable under almost any theory of justice, including an infinite aversion to inequality. Burbidge, A. Sengupta and I have also studied the equilibrium formation of government utilizing models of coalition formation. A sample result is that even when the formation of a government is the unique wealth-maximizing outcome, costless transfers are possible, and there is complete information, a government may not form in equilibrium.
NALEBUFF, Barry J.

Born 1958, Newton, MA, USA.

Current Post Milton Steinbach Prof. Mgmt, Yale Univ., New Haven, CT, USA, 1995–.


Principal Fields of Interest D0 Microeconomics: General; D8 Information and Uncertainty; M2 Business Economics.


Principal Contributions My early research looks at voting and imperfect competition. My current research focuses on the applications of game theory to business strategy.

NASON, James M.

Born 1957, Dayton, OH, USA.

Current Post Assoc. Prof., Dept Econ., UBC, Vancouver, BC, Canada, 1995–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles; F4 Macroeconomic Aspects of International Trade and Finance.


Principal Contributions Much of my work has focused on business cycle analysis within the framework of dynamic, stochastic general equilibrium models. Timothy Cogley and I developed methods to test the ability of this class of models to replicate observed output, inflation, and employment dynamics. Our focus on the comparison of actual to theoretical dynamics recognized the need to condition on structural econometric models. Otherwise, the power of the test is questionable. This forced us to adapt simulation methods developed elsewhere to conduct inference on this class of models. Cogley and I also found that there are ways for these methods to be independent of the way in which the trend and cycle of aggregate data is separated. John Rogers and I have recently extended this approach to study the predictions of intertemporal small open economy models. One part of this research mapped these predictions into structural vector autoregression to produce empirical facts robust to the identified structure. In other work, Rogers and I used these facts to develop and test alternative intertemporal small open economy models. Work with Frank Diebold enlarged on the theme that in real-time out-of-sample point prediction of nominal exchange rates it is difficult to beat a random walk. We reported that nonlinear, nonparameter models offer no forecast improvement over a random walk.

NAUGHTON, Barry n.e.

NEAL, Derek A. n.e.

NEARY, James Peter

Born 1950, Drogheda, Ireland.


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Principal Fields of Interest F1 Trade; F0 International Economics: General; L0 Industrial Organization: General.


Principal Contributions My main research field is international trade theory. I have also written on consumer theory, industrial organisation and macroeconomics (including international macro theory and Irish economic policy). My early work was on adjustment mechanisms in international trade models, especially the spe-
specific-factors model. This led to work on the ‘Dutch Disease’ (with Max Corden) and related attempts to integrate real and monetary aspects of structural change, and on international capital movements. Exploring how simple models could be generalised brought me into the theory of trade policy in general equilibrium, and later to the development (with Jim Anderson) of measures of the restrictiveness of trade policy. While all this work was conducted in an equilibrium framework, I also became interested at an early stage in the neo-Keynesian or fix-price approach as a framework for short-run analysis. As well as exploring the relevance of this approach to open economies, I extended it (with Joe Stiglitz) to deal with expectations (especially rational expectations) and asset accumulation. A spin-off from this was an ongoing interest in consumer theory, which showed up in an early paper (with Kevin Roberts) on rationing and household behaviour, and more recently in work on the theoretical underpinnings of international comparisons of purchasing power and real incomes. In the past decade, I have become increasingly interested in the implications for international trade of imperfect competition, especially oligopolistic competition rather than the more fashionable monopolistic competition. I have worked (with Dermot Leahy) on strategic trade and technology policy, especially when governments have limited powers of commitment. More recently, I have developed a theory of oligopoly in general equilibrium, and explored its implications for problems of globalisation, including the effects of trade liberalisation on the relative wages of skilled and unskilled workers, and on cross-border merger waves.

NELSON, Charles Rowe

**Born** 1942, Milwaukee, WI, USA.

**Current Posts** Prof. Econ., and Van Voorhis Prof. Polit. Econ., Univ. Washington, Seattle, WA, USA, 1975–, 1993–.


**Editorial Duties** Currently Assoc. Ed., *JMCB*.

**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; E3 Prices, Business Fluctuations, and Cycles; G1 General Financial Markets.


Principal Contributions I originally became interested in time-series analysis because it seemed the natural framework in which to test theories involving expectations, and the term structure of interest rates was an obvious candidate. With the advent of rational expectations macro models, I became interested in the power of various tests for the presence of Granger-causal relationships. Early on, the treatment of trend in macro-econometric models intrigued me; in particular, the distinction between a deterministic trend and stochastic growth. Work with C. Plosser tested historical macroeconomic series for the presence of deterministic trends and concluded that they are characterised instead by stochastic growth. One implication is that models using time trends to account for growth may greatly overestimate the amplitude and duration of business cycles. I have also looked at the consequences of assuming the presence of a deterministic trend when growth is in fact stochastic (for example, a random walk with drift), spurious periodicity appears in inappropriately detrended data, and standard regression statistics, such as \( R^2 \), become misleading or meaningless. Most recently my main interests have been spurious inference in the presence of weak instruments, with R. Startz and E. Zivot, where we find that conventional standard errors are much too small; and Markovian regime-switching in state space models, with C.-J. Kim, which has led us to test the proposition that the US economy has become more stable.

NELSON, Richard R.

Born 1930, New York City, NY, USA.


Degrees BA Oberlin Coll., 1952; MA, PhD Yale Univ., 1954, 1956.

Offices and Honours US SSRC, Postdoctoral Fell., 1956; German Marshall Fund Fell., 1968; Mem., AAAS, 1995–.

Principal Fields of Interest A1 General Economics; L0 Industrial Organization: General; O4 Economic Growth and Aggregate Productivity.

Publications Books: 1. An Evolutionary Theory of Economic Change (with S. Winter), (HUP, 1982); 2. National Inno-


Principal Contributions I am an economist by training. My central interests have been in long-run economic change. Much of my research has been directed towards understanding technological change and how economic institutions and public policies influence the evolution of technology and how technological change in turn induces economic change more broadly. My work has been both empirical and theoretical. Along with Sidney Winter, I have pioneered in developing a formal evolutionary theory of economic change. Over the course of my career, I have been particularly attracted to working with and coordinating relatively large research teams. My National Innovation Systems project involved a team of approximately twenty scholars, and my recent study on the Sources of Industrial Leadership involved the coordination of a similar-size group. I was the director of the Institute for Social and Policy Studies and now head Columbia’s Public Policy Doctoral Consortium.

NEUMARK, David

Born 1959, Chicago, IL, USA.


Principal Fields of Interest J2 Time Allocation; Work Behavior; Employment Determination and Creation; J3 Wages, Compensation, and Labor Costs; J7 Discrimination.


Principal Contributions Carried out extensive research on the consequences of minimum wages, focussing on disemployment effects and impact on distribution of income. Developed techniques for using matched employer–employee data to construct tests for labor market discrimination. Established causal impact of marriage on men’s labor market productivity. Engaged in research testing alternative models of age–earnings profiles, and alternative interpretations of age discrimination legislation. Analyzed effects of affirmative action on qualifications and performance of workers. Developed measures of job stability and characterized changes in job stability in the US economy. Conducted first research into consequences of living wage laws for wages, employment, and incomes of low-skill workers and low-income families.

NEWBERY, David Michael Garrood


Principal Fields of Interest L0 Industrial Organization: General; D0 Microeconomics: General; H0 Public Economics: General.


Principal Contributions Early work in Tanzania and later in the World Bank confirmed my interest in public policy, starting with social cost–benefit analysis and leading on to the analysis of agricultural pricing, commodity risk and tax policy. If relative prices are risky, competitive markets are typically inefficient, and institutions such as share contracts, futures and credit markets emerge to handle risk. Such examples of incomplete markets have proved fruitful, with parallels to public goods and externalities, another research interest. The guiding principle is to measure the cost of risk, which requires understanding the equilibrium chosen given the institutions available. Only then can one properly measure the benefits of policy intervention. In 1976 I showed that imperfect energy and resource markets create problems of dynamic inconsistency in the absence of credible contracts. Since 1987, I have actively studied the transition from socialist to market economies, concentrating initially on fiscal reform in Hungary. Privatization and regulation of network utilities raise similar
questions about the appropriate boundaries of the state. Since 1989 I have been studying the restructuring of electricity, telecommunications, and gas utilities in Britain, Europe, transition economies and other developed and developing countries, looking at the desirability of unbundling, the analysis of market power, auction design for network access, and problems of regulatory commitment. As an applied economist, I am concerned to quantify policy issues, notably in transport, both for congestion and environmental externalities, and for the design of road-user charges. Similarly, I have undertaken social cost–benefit analyses of electricity liberalisation, and of local-loop unbundling in telecommunications. Wherever possible I attempt to quantify – for example, in assessing by how much one might argue the tax share should fall in Hungary during the transition, or how socially costly was the redistributional impact of Hungarian price liberalization and indirect tax reform.

NEWHEY, Whitney K. n.e.

NEWHOUSE, Joseph Paul

Born 1942, Waterloo, IA, USA.


Degrees BA, PhD Harvard Univ. 1963, 1969.


Principal Field of Interest I1 Health.


Principal Contributions Most of my research has centred on the economics of health. At a theoretical level I have tried to make sense of the medical-care sector through extensions of neoclassical theory to encompass the phenomena of the medical marketplace. These applications have included: the theory of nonprofit firms, especially hospitals; group practice; supplementary insurance; demand response to nonlinear price schedules (e.g., a deductible); the geographic distribution of physicians; and the theory of insurance. At an empirical level I have focused many of my energies on estimating demand functions for medical-care services, especially price or insurance elasticities. I spent nearly two decades designing and analysing the data from a social experiment in health-care financing. Most families were randomised to insurance plans that varied the co-insurance rate: some were randomly assigned to a health maintenance organisation. Demand was about 50 per cent higher with no cost sharing relative to a large deductible, with little change in the health of the average person. The HMO reduced use by about 25 per cent, also with little change in the health of the average person. No evidence of selection was found at this HMO. I have also contributed to the analysis of adjusting insurance payments or premiums for the expected cost of the person and have concluded that this is best done by a two (or more) part pricing scheme involving an element of fee-for-service. Additionally I have shown that standard location theory applies to how physicians locate, whereas certain government policies presume it does not. I have argued that economists concerned with potential welfare losses from medical spending should devote more attention to the steady-state increase in costs. I have, with others, calculated the external costs of smoking and alcohol consumption and have shown how instrumental variables can be used to evaluate medical technology. I have also been concerned with improving medical price index measures.

NEWMAN, Andrew F. n.e.

NG, Serena

Born year n.e., Hong Kong.

Current Post Prof., Johns Hopkins Univ., Baltimore, MD, USA, 2003–.


Editorial Duties Assoc. Ed., JBES,

Principal Fields of Interest C5 Econometric Modeling; E3 Prices, Business Fluctuations, and Cycles; F3 International Finance.


Principal Contributions My work has focussed on the development of econometric methods that improve our understanding and facilitate the use of time-series data. The research has resulted in new statistical tools that are of immediate use to practitioners. My contributions include the development of (1) criteria for selecting the lag length of truncated autoregressions, (2) unit root tests that have much improved size, and (3) criteria for determining the number of common factors in large dimensional panels. I have also conducted empirical analysis on a wide range of issues. Some are difficult to analyze because of the intrinsic characteristics of the data. Others are given a fresh look to take advantage of new advances in estimation methods. The development of numerical methods with an emphasis on practical use will continue to be the theme of my research.

NG, Victor K. n.e.
NICKELL, Stephen John

**Born** 1944, London, UK.

**Current Post** Prof. Econ., LSE, London, UK, 1998–.


**Degrees** BA (Maths) Cambridge Univ., 1965; MSc (Math. Econ. and Em.) LSE, 1970.


**Principal Fields of Interest** J0 Labor and Demographic Economics: General; J2 Time Allocation; Work Behavior; Employment Determination and Creation; J3 Wages, Compensation, and Labor Costs.

**Publications**


**Principal Contributions** (i) Formal analysis of the role of expectations about the future in the determination of investment. (ii) Theoretical and empirical analysis of employment protection. (iii) One of the first to analyse both hazard models and dynamic models using panel data. (iv) Theoretical and empirical analysis of unemployment. Helped lay the foundations for what is the generally accepted way of thinking about the subject. (v) Empirical analysis of the importance of product market competition and other external factors in determining productivity growth within companies.

NIJKAMP, Peter

**Born** 1946, location n.e.

**Current Post** Prof. Regional and Urban Econ. and Econ. Geography, Free Univ., Amsterdam, The Netherlands, 1975–.

**Past Posts** n.e.

**Degrees** BA (Em., cl) Erasmus Univ., 1970, 1972.


Editorial Duties n.e.

Principal Fields of Interest n.e.

Publications n.e.

Principal Contributions My main research interests cover plan evaluation, multicriteria analysis, regional and urban planning, transport systems analysis, mathematical modelling of spatial systems, technological innovation, and environmental and resource management. In my long research career I have focused my research in particular on quantitative methods for policy analysis, as well as on behavioural analysis of economic agents. I have a broad expertise in the area of public policy, services planning, infrastructure management and environmental protection. In all these fields I have published many books (monographs and edited volumes) and numerous articles, in both high-ranking scientific journals and popular magazines.

NITZAN, Shmuel Israel

Born 1948, Jerusalem, Israel.

Current Posts Cons., Open Univ., Tel Aviv, Israel, 1980–; Prof. Econ., Bar-Ilan Univ., Ramat Gan, Israel, 1984–.


Principal Field of Interest D7 Analysis of Collective Decision-Making.


**Principal Contributions** My principal contributions are to the following fields. **Collective decision making under uncertainty:** The work I did with J. Paroush resulted in the identification of the optimal decision rules in various uncertain dichotomous choice situations. Our basic results in this field proved to have numerous economic, political, organizational and legal applications. **Political economy:** The joint work with P. Coughlin clarified under what circumstances electoral outcomes with probabilistic voting maximize Nash’s social welfare function. More recently, G. Epstein and I have contributed to the positive analysis of public-policy determination by using a strategic game that takes into account the agenda setters (the bureaucrats), in addition to the politicians and the interest groups. This analysis clarifies under what conditions lobbying is compromise enhancing. It sheds new light on monopoly price regulation and on the determination of minimum wage and immigration quotas in different political-economic environments. **Social choice:** In this area my main contributions are the metric rationalization of scoring rules, the median-based extension of preferences over elements in an opportunity set to preferences over opportunity sets and a resolution of the Paretian-liberal paradox which is based on exchange of rights. **Public economics:** I have contributed to the analysis of voluntary provision of public goods by clarifying the effect of multi-period considerations, binary participation, cost uncertainty and price uncertainty on the severity of the free-rider problem. **Contest theory:** The main contribution is the analysis of rent-seeking games that allow public-good rents and collective (group) rent seeking. **Voting theory:** My principal contribution is the comparative analysis of the vulnerability of voting rules to strategic manipulation and to majority decisiveness (tyranny). My recent work with E. Baharad clarifies how scoring rules can ameliorate majority tyranny. It also exposes the special features of the inverse plurality rule, in particular, in implementing the majority principle.

**NORDHAUS, William D.**

Born 1941, Albuquerque, NM, USA.

**Current Post** Sterling Prof. Econ., Yale Univ., New Haven, CT, USA, 1998–.


**Offices and Honours** Fell., Em Soc, AAAS; Exec Comm., AEA, 1972–82; Sr Assoc., Brookings Panel on Econ. Activity, 1973–; Res. Assoc., NBER, 1979–.

**Editorial Duties** Assoc. Ed., *Energy*

Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; Q4 Energy; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions Major research has been in the area of macroeconomics, global warming, energy, resources, and long-term economic growth. Questions addressed include: the extent and sources of the productivity slowdown, the extent to which conventional measures of output adequately measure true changes in living standards, the drag on economic growth from depletion of natural resources, the potential threats to future economic growth from global environmental problems, and modeling the economics of global warming.

NORTH, Douglass Cecil

Born 1920, Cambridge, MA, USA.

Current Post Prof. Econ., Washington Univ., St. Louis, MO, USA, 1983–.


Degrees BA, PhD Univ. California, Berkeley, 1942, 1952.


Principal Fields of Interest N0 Economic History: General; O1 Economic Development.


Principal Contributions Discussion of the increase in transactions costs in the US (resources devoted to political and economic organisation) reflected in the growth of government and the parallel institutional and market responses. Development of a model of the growth of the American economy from 1790 to 1860; discussion of the usefulness of applying simple neoclassical theory to problems in American economic history; and development of a general model of institutional change, and its application to the economic history of the Western world. Empirical contributions have included development of the balance of payments from 1790 to 1860; the export/import price indices of the US from 1790 to 1860, and an index of the productivity of ocean shipping from 1600 to 1914. Development of a theory of institutions and institutional change.
O’HARA, Patrick N. n.e.

O’HARA, Maureen

Born 1953, Philadelphia, PA, USA.

Current Posts Robert W. Purcell Prof. Mgmt and Prof. Fin., Johnson Grad. Sch. Mgmt, Cornell Univ., Ithaca, NY, USA, 1979–.


Principal Fields of Interest G0 Financial Economics: General; G2 Financial Institutions and Services; K2 Regulation and Business Law.


Principal Contributions My research has largely investigated issues in the operation, design and behavior of securities markets. This area, known as market microstructure, investigates how the structure of markets affects the price-setting process. My research here is relevant for understanding the properties of asset prices, the stability and performance of trading systems, and the optimal regulation of exchanges and markets. My work with David Easley investigates the behavior of stock exchange specialists and dealers, with a particular focus on the
learning problem confronting price-setting and other agents in the economy. Our recent work links the information risk of a stock to its required return. My other research in microstructure has looked to understanding the link between underwriting and market making, the role of transparency and market practices such as order preferencing in affecting market behavior, and issues surrounding the legal requirement of best execution.

O’NEILL, June E. n.e.

OATES, Wallace Eugene

Born 1937, Los Angeles, CA, USA.

Current Post Prof. Econ., Univ. Maryland, College Park, MD, USA, 1979–.


Principal Fields of Interest H0 Public Economics: General; H7 State and Local Government; Intergovernmental Relations; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions

My early work in fiscal federalism attempted to provide a systematic and comprehensive view of the vertical structure of the public sector. *Fiscal Federalism* explores the basic issues of the assignment of functions to different levels of government, the use of fiscal instruments including intergovernmental grants to achieve public-sector objectives, and the empirical testing of a series of hypotheses concerning federal fiscal structure. My subsequent work in this area has examined various issues in state and local finance: theoretical and empirical studies of local government behaviour, studies of state–local tax structure, and the analysis of interjurisdictional competition. In the field of environmental economics, I have devoted much of my research effort to the design and implementation of economic incentives for protection of the environment. This work includes the theoretical analysis of externalities and more policy-oriented studies of systems of effluent fees and of marketable pollution rights for environmental management. I have lately extended this effort into open-economy environmental economies, exploring the relationships between international trade and the environment and to the structure of environmental decision-making in a federal system.

OBSTFELD, Maurice

Born 1952, New York City, USA.

Current Post Class of 1958 Prof. Econ., Univ. California, Berkeley, CA, USA, 1995–.


Principal Fields of Interest F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance; E1 General Aggregative Models.


Principal Contributions My earliest research focused on portfolio models the balance of payments and the effects of sterilization policies, including foreign exchange intervention. I soon became dissatisfied with prevalent aggregative ad hoc approaches to open-economy macroeconomic, and turned (as did several other researchers around the same time) to models of international adjustment based on individual dynamic optimization. This ‘intertemporal approach’ has become standard throughout international economics, and recently it has been applied under sluggish nominal price adjustment, as in my recent joint work with Kenneth Rogoff on the ‘new open economy macroeconomics’. The intertemporal approach also helps one to assess the degree and effects of international financial integration. Much of my work after 1985 focused on international co-movements in consumption, saving, and investment as indicators of gains from trade in various types of financial assets. That work proposed quantifying empirically the gains from asset trade, the topic of a growing literature. In the mid-1980s my work began to focus on the insight that speculative attacks on exchange rates could be self-fulfilling. Inspired by events as well as shortcomings in earlier theories, I developed this idea in the context of strategic interactions between maximizing gov-
ernments and market actors. Subsequent crises in emerging markets amply confirmed my approach. As a result, the hypothesis I first offered in a 1985 Brookings paper, that fixed exchange rates are inherently unstable under capital mobility, now is part of the conventional wisdom. The comprehensive treatise on international macroeconomics that Rogoff and I have written attempts to bring the progress of the last couple of decades together within a unified framework, one that makes plain both successes achieved and questions that still are unanswered.

Principal Fields of Interest N4 Government, War, Law, and Regulation; O1 Economic Development.


**Principal Contributions** Recently, I have been investigating the consequences of globalization: the spread of democracy and capitalism worldwide. With Bruce Russett, I have examined the 'Kantian peace' using data for the years 1885–1992. We find that democracy, economic interdependence, and joint memberships in international organizations dramatically reduce the likelihood of interstate conflict. This augurs well for the future because the number of democracies, the level of trade and foreign investment, and the effectiveness of international organizations are apt to continue to increase. To assess the effect of the spread of capitalism, I have studied the consequences of foreign direct investment for developing countries. Contrary to much previous research, recent analyses that I have done with Indra de Soysa indicate that the presence of multinational corporations increases economic growth rates in less-developed countries. Foreign investment by multinationals also has beneficial indirect effects by spurring investment from domestic sources. Frances Oneal and I reported rates of return on British investments abroad, 1870–1913, and on US multinational corporations foreign direct investments, 1950–85, to determine whether great military power confers monopolistic advantage. Contrary to socialist theories of imperialism, there is no evidence that the capitalists of the leading state are able to earn 'superprofits'. My studies of NATO burden-sharing confirm and extend Mancur Olson's theory of collective action.

**ORDOVER, Janusz A.**

**Born** 1946, Lodz, Poland.  
**Current Post** Prof. Econ., NYU, NY, USA, 1982–.  
**Degree** PhD Columbia Univ., 1973.  
**Offices and Honours** Vice-Chair, Econ. Comm., Amer. Bar Assoc., 1991–93.  
**Principal Fields of Interest** L4 Antitrust Policy; L5 Regulation and Industrial Policy; F1 Trade.  

Principal Contributions Perhaps because I was brought up on Marx, Lenin, Lange and Kalecki, I understood economics to be ‘political economy’, which I interpreted as an engine for social betterment. Consistent with this view, I have devoted most of my research to questions of public policy with the guiding goal of placing public policy on firm analytical foundations. This motivated my research on Rawlsian justice and taxation with the primary focus on the duties that one generation has towards the subsequent generations. Professor Phelps and I have shown what these duties imply for capital accumulation as well as government debt. The next phase of my research focused on the role of imperfect and costly information in the design of microeconomic policies. This work demonstrated in a variety of realistic settings (such as externalities control, tort law, products liability law, taxation, choice of organizational structure) that policy design must be very sensitive to the costs and types of information available to economic agents, including policy-makers. More recently, I have been studying ‘vertical’ relations between firms in imperfectly competitive markets. This work has led to a better understanding of such fundamental concepts as refusals to deal, foreclosure, mergers, and predation, and generated challenging prescriptions for antitrust and (de)regulatory policies.

OSTERMAN, Paul n.e.

OSTERWALD-LENUM, Michael

Born 1962, Copenhagen (Søborg), Denmark.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; H4 Publicly Provided Goods; C7 Game Theory and Bargaining Theory.


Principal Contributions My work focuses on how institutions change incentives, behavior, and outcomes within social dilemmas. My early work applied public choice and constitutional choice theory to the evolution of institutional arrangements for the governance of groundwater in southern California. In the 1970s, I explored with Roger Parks, Vincent Ostrom, and other colleagues, basic questions of the organization of governance in metropolitan areas of the United States. At that time, theorists presumed substantial economies of scale could be created by consolidating schools, police, and other human services delivered to citizens in urban areas. Fifteen years of intensive empirical research demonstrated that multiple types of services were included within the broad rubric of ‘policing’. The production and provision characteristics of the services differed. We found that metropolitan areas with polycentric organization – governance units that are large, medium, and small levels and empowered to coordinate their provision and production activities – were more efficient and equitable in their service delivery than areas served by consolidated units. Since the mid-1980s, I have explored questions related to common-pool resources with Roy Gardner, James Walker, and others. We have contributed to the theoretical understanding of how institutional rules affect the behavior of users of irrigation systems, forests, and diverse man-made as well as natural commons. Our theories are tested in experimental laboratories and in the field. Individuals facing commons dilemmas use face-to-face communication to develop and self-enforce agreements that move their joint outcomes close to optimal levels. Individuals also voluntarily sanction one another. Neither finding is predicted by noncooperative game-theoretical models of finitely repeated games. Studying how individuals develop norms and rules to regulate (or fail to regulate) the use of resources led to the study of social capital and the need to develop a coherent theory of social capital that could be subjected to empirical test.

OSTRY, Jonathan David

Born 1962, Ottawa, Canada.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General.


**Principal Contributions** My main contributions are in the area of open economy macroeconomics based on microeconomic foundations. The motivation for this has generally been to analyze issues of policy relevance to both developed and developing countries, using models with optimizing agents faced with the need to make intra- and inter-temporal choices. Specific issues include the impact of terms of trade shifts on the real exchange rate and the current account, optimal saving behavior and implications for the current account, and empirical analyses of growth issues in transition and developing countries.

**OSWALD, Andrew J.**

- **Born** 1953, Bristol, UK.
- **Current Post** Prof. Econ., Univ. Warwick, Coventry, UK, 1996–.
Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; J6 Mobility, Unemployment, and Vacancies.


Principal Contributions How to model optimizing trade unions, including the idea of Nash wage equilibria among many unions. The study and use of actual labour contracts to allow us to build better theories. Microeconometric, time-series and survey evidence for rent-sharing theories where pay is moulded by past profit-per-head. Evidence for capital constraints on new entrepreneurs; thinking of inheritances as a natural experiment in which some individuals have money showered upon them. Use of subjective well-being data. The econometric finding that unemployment is approximately the worst economic event in life as evidence for the involuntariness of unemployment. An econometric demonstration that relative pay explains job satisfaction better than absolute pay. Evidence, using happiness data, that changes in unemployment and inflation have strong effects on national well-being. The finding of a wage curve (an inverse relation between local unemployment and pay) with an elasticity of –0.1 in many countries. What lies behind my research is a belief that (i) the competitive model is the wrong way to think about the labour market, (ii) there are empirical laws of economics waiting to be discovered, (iii) international microeconomic data give us the platform to discover them, and (iv) theoretical work has to fit the facts.

OULIARIS, Sam

Born 1957, Melbourne, Victoria, Australia.

Current Post Prof., Natl Univ. Singapore, Republic of Singapore, 2003–.


Principal Fields of Interest C2 Econometric Methods: Single Equation Models; C3 Econometric Methods: Multiple/Simultaneous Equation Models; C5 Econometric Modeling.

Principal Contributions Most of my work is related to the analysis of time-series models with random non-stationary components arising from unit roots in the true data generation process. My work with P.C.B. Phillips considers the general problem of testing for co-integration in linear regression models, and derives the asymptotic distributions of standard unit root tests when they are applied to the estimated residuals of regression models involving unit root processes. My applied work with P.D. Corbae develops tests of foreign exchange market efficiency and purchasing power parity for exchange rate data that has random non-stationary components. Together with Corbae and Phillips, I have recently studied the impact of non-stationary variables in band spectral regression models. We show formally that detrending unit root processes in a deterministic fashion prior to the use of band spectral regression techniques yields flawed estimates of the spectral regression parameters.

OUM, Tae Hoon

Born 1942, Seoul, South Korea.

Current Posts UPS Foundation Prof. Mgmt and Dir., Centre Transportation Stud., Faculty Commerce and Bus. Admin., UBC, Vancouver, Canada, 1998–.


Principal Fields of Interest L9 Industry Studies: Utilities and Transportation; L8 Industry Studies: Services; F0 International Economics: General.


**Principal Contributions** I specialize in economics and strategic management issues of transportation and telecommunications industries. I have published/edited over 25 books and 150 papers in academic and business journals and have written numerous research reports for Canadian and foreign government agencies, major corporations, and the World Bank on the transportation and telecommunications policy and management issues. I have advised numerous Canadian and foreign government agencies, major telecom and airline companies in North America, Asia and Europe. I have delivered nearly 200 invited lectures, speeches and presentations.
PAARSCH, Harry John

Born 1959, Ashcroft, BC, Canada.

Current Post Prof. Econ., Dept Econ., Univ. Iowa, Iowa City, IA, USA, 2001–.


Editorial Duties Assoc. Ed., JAE, 2001–.

Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C5 Econometric Modeling; D0 Microeconomics: General.


Principal Contributions I have spent the bulk of my research career investigating economic and management issues associated with the harvest and regeneration of timber in the province of British Columbia, Canada. For example, I have studied the effects of labor stoppages on lumber production; how certain payment schemes for timber induce high-grading, the harvesting of only the highest-quality timber; what the important informational features are in competitive bidding for tree-planting services; how to use data from competitive bidding at timber sales to construct optimal selling mechanisms; and the effects of different labor contracts on worker productivity in tree-planting firms. Recently, I have begun to focus on timber-supply issues, in particular, how to implement the method of stochastic dynamic programming to calculate the volume of timber to harvest.

PAGAN, Adrian Rodney

Born 1947, Mungindi, Queensland, Australia.


**Degrees**
BEc (1st Class Hons) Queensland Univ., 1968; PhD ANU, 1972.

**Offices and Honours**

**Editorial Duties**

**Principal Fields of Interest**
C5 Econometric Modeling; C3 Econometric Methods: Multiple/Simultaneous Equation Models; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook.

**Publications**


**Principal Contributions**
Early work was concentrated upon issues of estimation and specification of single equation models, in particular the development of the Lagrange multiplier approach to the construction of diagnostic tests and the difficulties caused for inference by the presence of ‘generated regressors’ in many equations. In the late 1980s I worked on applications of non-parametric estimators to modelling a variety of phenomena, as well as the use of these estimators as ways of producing diagnostic tests for parametric models. During the 1990s, I spent more time on the issues of systems estimation and the evaluation of models from a systems perspective. Most of this work has been quantitative, focusing upon topics involving monetary policy effects, business and financial cycles.
PAKES, Ariel

Born 1949, Edmonton, Alberta, Canada.

Current Post Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1999–.


Offices and Honours Frisch Medal, 1984; Fell., Em Soc, 1988–, AAAS, 2002–.


Principal Fields of Interest L0 Industrial Organization; General; L1 Market Structure, Firm Strategy, and Market Performance; C1 Econometric and Statistical Methods; General.

the “curse” of dimensionality’ (with P. McGuire), *Em*, 69, Sept. 2001.

**Principal Contributions** My research began with econometric studies of the causes and effects of industrial research activity. In a paper winning the Frisch award, I showed how patent renewal data could be used to both obtain measures of the value of the proprietary rights created by the patent laws, and produce more accurate measures of patent stocks. This paper was based on estimating an optimal stopping model and introducing simulation estimators into econometrics. The uses and properties of simulation estimators were detailed in my joint work with David Pollard. Subsequently we developed techniques to enable the empirical analysis of market interactions. One set of papers develops demand systems which treats products as bundles of characteristics. This overcame problems of ‘too many parameters’ in traditional demand systems and enabled the prediction of demand for new products. Another paper shows how to estimate production functions when there are self-selection problems induced by exit and simultaneity problems induced by endogenous input demands. A final set of papers shows how to compute the Nash equilibria of dynamic games. The demand and production functions enable the construction of profit functions and the analysis of static price or quantity setting equilibria. The dynamics enables the analysis of investments and the development of new products (and of some forms of collusion). Originally most of the techniques were developed with an analysis of phenomena that occurred in particular industries in mind (largely the focus was on policy issues in the auto industry, and the effects of deregulation on productivity in the telecommunications equipment industry). The techniques have since been refined and are used in the business, regulatory, and consulting, as well as the research, communities. I have also recently suggested corrections for selection biases in the Consumer Price Index and the Bureau of Labor Statistics is experimenting with incorporating my technique.

**PALEPU, Krishna G.** n.e.

**PAFREY, III, Thomas Rossman**

*Born* 1953, Lafayette, IN, USA.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D7 Analysis of Collective Decision-Making; C9 Design of Experiments.


Principal Contributions My work spans economic theory, political economy, and experimental economics. Most of the work uses noncooperative game theory, with an emphasis on mechanism design theory and strategic voting. A pair of papers written in the 1980s investigates the question of why we typically see only two major parties in democratic systems where representation is determined by a simple plurality rule. The first shows in a simple model that the threat of entry causes the two main parties to diverge from the median voter position, while at the same time impeding entry of third parties. The second provides the first mathematical formalization of Duverger’s Law. A decade-long collaboration with the late R. McKelvey produced a volume of work combining experimental economics and statistical models of game theory. This collaboration was initiated with our experimental study of the centipede game, which used a reputational model with incomplete information and decision errors as a structural econometric model to fit laboratory data from centipede games. A key contribution from that collaboration is the concept of quantal response equilibrium, which generalizes Nash equilibrium by smoothing out best-response correspondences, and provides a natural bridge between classical noncooperative game theory and behavioral economics. Quantal response equilibrium also gives a general statistical foundation for nonco-
operative game theory. Parametric versions of it, particularly the Logit equilibrium, have been used to explain anomalies from experimental game data and as a structural model for estimation of fundamental economic parameters, such as risk aversion or distributions of preferences. A series of papers with S. Srivastava and, later, M. Jackson characterize implementable allocation rules in Bayesian environments. Work with J. Ledyard characterized optimal public good mechanisms, for general welfare functions and showed that in large economies, optimal mechanisms can be approximated by simple voting schemes. More recently, I have collaborated on a variety of topics in the theory of voting and elections, including the effect of campaign spending and candidate quality on electoral outcomes, and issues relating to federalism. Throughout my career I have been actively involved in experimental economics, with applications to public economics, game theory, voting, industrial organization, auctions, bargaining, and finance.

PANTULA, Sastry G.

Born 1957, Vizianagaram, Andhra Pradesh, India.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; C1 Econometric and Statistical Methods: General; C5 Econometric Modeling.


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Principal Contributions I have made several different contributions to time-series analysis. These include testing for unit roots and noninvertibility of a process. I have also worked on estimation of repeated measurement models and errors-in-variable models. Finally, I have made some contributions to identification in spatial autoregressive processes.

PARK, Joon Yong

Born 1955, Seoul, Korea.
Current Posts Prof. Econ., Seoul Natl Univ., Seoul, Korea, 1992--; Prof. Econ., Rice Univ., Houston, TX, USA, 2002–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C4 Econometric and Statistical Methods: Special Topics; C5 Econometric Modeling.


**Principal Contributions**

Most of my work has related to nonstationary time-series econometrics. In early work, I have provided the foundations of statistical theories for estimation of and inference in linear regressions with nonstationary time series. Since then I have made important extensions to the basic theories. In particular, I have developed an efficient estimation method, which in turn provided a valid inferential basis for the models with nonstationary time series. I also developed a procedure that allows the parameters in such models to evolve over time, which is essential in modeling long-run equilibrium relationships among economic variables. Recently, I have further extended the earlier theories to nonlinear and nonparametric models with nonstationary processes. I have provided the foundations of statistical theories for nonlinear regressions with nonstationary processes, and also developed semi- and nonparametric techniques to effectively deal with various other nonlinear time-series models. The methodologies I have developed along this line have been applied to many interesting, yet previously impossible to analyze, models. They include among others discrete choice models, index models, and volatility models with nonstationary processes. More recently, I have developed an inferential procedure for the models with continuous stochastic processes, estimation and specification tests for diffusion models, and statistical theories for bootstrapping general time series.

**PASHARDES, Panos**

- **Born** 1949, Cyprus.
- **Current Post** Prof. Econ., Univ. Cyprus, Nicosia, Cyprus, 1994–.
- **Offices and Honours** Dir., Econ. Res. Centre, Univ. Cyprus, 2001–.
- **Principal Field of Interest** D1 Household Behavior.

**Publications**


Principal Contributions My principal contributions to economics have been in the area of consumer behavior, in particular demand analysis and equivalence scales. In demand analysis my main contributions include the modeling and estimation of dynamic demand systems with forward-looking habit formation and durability; and the use of micro-to-macro modeling to study problems of heterogeneity and aggregation. I have also drawn attention to the bias in using the Stone index approximation in demand analysis and proposed a consumer demand system approach to estimating the size of the black economy. The sample selection bias in hedonic regressions and the role of preference heterogeneity in nonparametric and parametric tests of the rank of demand systems are also areas to which I have contributed. My work on equivalence scales draws attention to the fact that static demand analysis may give rise to misleading estimates of equivalence scales because a household may meet part of the cost of children by reducing consumption in periods when the children themselves are not in the family. In other papers I argue that in the context of nonlinear demand systems equivalence scales can be identified from cross-section data without demographic separability restrictions.

PAUL, Catherine J. Morrison

Born 1953, Champaign, IL, USA.

Current Post Prof., Dept Agric. and Resource Econ., Univ. California, Davis, CA, USA, 1995–.

Past Posts Instr., Dept Econ., NYU, 1981–82; Asst Prof. to Full Prof., Dept Econ., Tufts Univ., 1982–95.


Principal Fields of Interest O0 Economic Development, Technological Change, and Growth: General; D2 Production and Organizations; L1 Market Structure, Firm Strategy and Market Performance.


Articles: 1. ‘Short-run labor productivity in a dynamic model’ (with E.R. Berndt), J Em, 16, Aug. 1981; 2. ‘On the economic interpretation and measurement

**Principal Contributions** My work has emphasized how various factors underlying cost, supply, and demand relationships can be conceptually motivated and economically quantified within a standard production theory framework, to shed light on important and policy-relevant questions about economic performance. Typically, I focus on the costs of production, a key factor underlying and determining productivity and competitiveness, using duality theory-based production models. In this context, I have addressed many issues associated with technological and market structure, for different countries and industries. I have modeled, measured, and evaluated productivity growth, input demand and substitution, capacity utilization, input fixities and dynamic adjustment, scale (and other cost) economies, markup and markdown (imperfectly competitive) behavior, and externality impacts. I have underscored the importance of recognizing a broad range of production complexities for the construction, use, and interpretation of economic performance indicators, including input and output composition, rigidities, and quality. I have also recently explored the productive impacts of un- or mis-measured production factors associated with interdependencies across netputs, time, space, and sector,
particularly for the food system. Untangling this range of performance factors, most of which may broadly be conceptualized as movements along and shifts in cost curves from marketed and non-marketed technological and market factors is central to gaining insights about and enhancing economic welfare. My work has provided a conceptual and empirical framework for a wide variety of studies by economists focussing on modeling and measuring economic performance, and its components, determinants, and implications.

PAULY, Mark V. n.e.

PAXSON, Christina Hull

Born 1960, Pittsburgh, PA, USA.


Honours Phi Beta Kappa, 1982.


Principal Fields of Interest O1 Economic Development; J1 Demographic Economics; D1 Household Behavior.


Principal Contributions My research
PAYNE, John W.

Born 1947, Los Angeles, CA, USA. 


Principal Fields of Interest M0 Business Administration and Business Economics; Marketing; Accounting; General; M3 Marketing and Advertising; D8 Information and Uncertainty.


Principal Contributions Most of my research has been concerned with understanding how people process information when asked to make judgments and choices. My earlier work concerned risky choice behavior, with a focus on such issues as framing effects, perceived risk, and the role of aspiration levels in decision-making under risk. I have also studied how the nature of the decision task, e.g., task complexity, time pressure, response mode, and the set of alternatives under consideration impact choice processes and outcomes. It is clear that preferences are highly task contingent, and that decisions often violate standard choice theory assumptions such as regularity of preferences. For example, the probability of choosing one option (A) over another option (B) can be increased by adding a third alternative to the set. The evidence that decision behavior is highly contingent upon various task and context factors has led to a view that preferences are frequently constructed rather than reveal when people are asked to make a judgment or choice. The work on contingent decision behavior has led to a theory of strategy selection in decision-making that emphasizes the tradeoffs between decision accuracy and cognitive effort, and other factors like justification and minimizing the negative emotions that can arise when making a choice. Finally, my work has sought to extend the psychology of decision-making to various applied areas such as marketing, the valuation of natural resources, and jury decisions.

PEARCE, David William

Born 1941, Harrow, Middlesex, England.


Principal Field of Interest Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions Nearly all of my work has its foundations in an early and continuing concern for natural environments and wildlife species. I regarded cost–benefit analysis as the appropriate procedure for assessing the worth of natural environments and continue to believe that it provides a useful way of thinking. From cost–benefit it was a natural progression to environmental economics as a subject in itself. I have since pioneered the subject in the UK and Europe and nearly all of my work continues to be in this area.
PEARSON, Neil D. n.e.

PECHMANN, Cornelia (Connie) Ann Rachel

Born 1959, Binghamton, NY, USA.

Current Post Prof. Marketing, Grad. Sch. Mgmt, Univ. California, Irvine, CA, USA, 2003–.


Principal Fields of Interest M3 Marketing and Advertising; I1 Health.


Principal Contributions I conduct controlled experiments to study the effects of advertising on consumers, focussing on whether and how the federal government should regulate controversial advertising forms including comparative, reference price and cigarette advertising. My initial work on comparative advertising shows that this type can both dilute and tarnish competitors’ trademarks, due to consumer categorization and inference processes. On the other hand, comparative advertising can attract consumers’ attention, provide useful information on how brands differ on determinant attributes, and encourage brand
switching. Comparative advertising is most effective for unfamiliar low share brands, and counterproductive for high share brands. My work on cigarette advertising suggests that, contrary to prevailing beliefs, advertising and peer smoking are not independent factors that influence adolescents to smoke. Rather, through the process of ‘priming’, cigarette advertising causes adolescents to perceive peer smokers more favorably, which results in synergistic pro-smoking effects, even among those who are initially anti-smoking. Finally, I study whether it is beneficial for the government to promote or fund anti-smoking or anti-drug advertising, and/or encourage television broadcasters to embed anti-drug messages in their entertainment programs, to dissuade adolescents from initiating smoking and illicit drug use. My findings indicate that anti-smoking advertising can reduce adolescent smoking rates, as long as the messages enhance perceptions of health risk vulnerability or convey that smoking poses social rejection risks. Also, a 30-second antismoking ad can nullify the impact of a full-length movie that glamorizes smoking, if the ad is shown immediately before the movie.

PECK, Jamie Andrew

Current Post Prof. Geography and Sociology, Univ. Wisconsin-Madison, Madison, WI, USA, 2000–. 
Degrees BA (Geography, Hons), PhD (Geography) Univ. Manchester, 1983, 1988. 

Principal Fields of Interest P1 Capitalist Systems; J0 Labor and Demographic Economics: General; R0 Urban, Rural, and Regional Economics: General. 

Principal Contributions Much of my work has involved applications and developments of French regulation theory and labor market segmentation theory, often at the subnational scale of analysis. This work has been linked to a wider set of concerns with urban political economy, the regulation of the poor, and the comparative analysis of (geographically distinctive) forms of capitalism. In my book, Work-Place, I sought to clarify and develop the theoretical status of the concept of the local labor market, making the argument that a series of fundamental labor market processes – particularly those relating to the mobilization and regulation of the labor supply – are locally constituted. More recently, Workfare States represented an attempt to explore the process of welfare policy-making from a cross-national perspective, including case studies drawn from the United States, Canada, and the United Kingdom. Here, the argument was advanced that forms of work-oriented welfare reform (‘workfare’) have begun to evolve in a mutually dependent fashion with markets for low-wage or ‘contingent’ labor. This work has spawned critiques of neoliberal ‘employability’ policies in countries like the US and the UK, as well as a series of papers on the growth and restructuring of the temporary staffing industry. More or less explicit in this work is a rejection of both methodological individualism and equilibrium-based theorizing. Instead, my concern has been to uncover the complex ways in which economic development processes are inescapably embedded in institutional and social relations, at scales ranging from the local to the global. Hence the focus on processes of policy formation and reform in fields like training, welfare, and urban development. An enduring theme in this work is that geographically differences in economic or policy outcomes cannot be understood merely as deviations from a norm, but instead reflect the way in which political–economic processes are spatially constituted.

PELTZMAN, Sam

Born 1940, New York City, NY, USA.


Principal Fields of Interest L0 Industrial Organization: General; L5 Regulation and Industrial Policy; H1 Structure and Scope of Government.


Principal Contributions My principal interest has been in the relationship between economics and the legal system. In pursuit of this interest, I have done several studies on the effects of government regulation in such fields as banking, drugs, automobile safety, advertising regulation, education, etc. I have also thought about what common strands run through the diverse gamut of such regulations, so I have done some theoretical work on rational-choice models of regulation. But mainly I regard myself as an empirical researcher, rather than a theorist. In recent years, I have come to realise that regulation and other forms of government activity have much in common, so I have broadened my research to include public spending and politics.

PEROTTI, Roberto n.e.

PERRON, Pierre

Born 1959, Verdun, Canada.

Current Post Prof. Econ., Boston Univ., MA, USA, 1997–.


Degrees BA McGill Univ., 1981; MA Queen’s Univ., 1982; PhD Yale Univ., 1986.


Principal Fields of Interest

C2 Econometric Methods: Single Equation Models; C4 Econometric and Statistical Methods: Special Topics; E3 Prices, Business Fluctuations, and Cycles.

Publications


Principal Contributions

Three main topics characterize my research contributions. First, theoretical work on unit root tests with applications to macroeconomic time series. Early work issued from my PhD dissertation includes the so-called Phillips–Perron tests. More recently, I have analyzed transformed versions of these tests that have better finite sample properties when the data exhibits strong serial correlation. I have also considered issues related to the selection of the truncation lag for the so-called Dickey–Fuller unit root test, potential problems in the application of such tests with seasonally adjusted data and estimators of important nuisance parameters such as the spectral density function at the origin. Second, distribution theory in models with nonstationary time series. This work covers issues such as the computation of asymptotic distributions in
autoregressive models, the study of their adequacy as approximations in finite samples, the development of alternative asymptotic approximations (usually using an underlying continuous time process or a framework whereby key parameters are modeled as local to some boundary of interest) and the power of tests in relation to the sampling frequency of the data. Third, theoretical and empirical work related to the characterization of macroeconomic time series as stationary fluctuations with a trend function that changes infrequently. This work challenged the view that most macroeconomic time series are best modeled as processes with an autoregressive unit root. It helped foster theoretical and empirical research on the trend-cycle decomposition of aggregate time series. In particular, it forced a careful reevaluation of the standard unit root characterization and the frequency of permanent shocks. More generally, it helped renew interest on the issue of structural change in dynamic processes. This last topic remains of principal interest in my research from both theoretical and empirical perspectives.

**PERSSON, Torsten Erik**

**Born** 1954, Stockholm, Sweden.


**Offices and Honours** Res. Assoc., NBER, 1990, CEPR, 1994; Mem., Coun-


**Principal Fields of Interest** D7 Analysis of Collective Decision-Making; E0 Macroeconomics and Monetary Economics: General; F4 Macroeconomic Aspects of International Trade and Finance.


**Articles:** 1. ‘Current account dynamics and the terms of trade: Harberger–Laursen–Metzler two generations later’ (with L. Svensson), *JPE*, 93, 1985; 2. ‘Inflation, interest rates, and welfare’ (with P. Krugman, L. Svensson), *QJE*, 100, 1985; 3. ‘Deficits and intergenerational welfare in open economies’, *J Int E*, 19,

Principal Contributions My research started out in macroeconomics and international finance, asking theoretical questions about determinants and effects of exchange-rate systems and current accounts. Gradually, I became interested in the mechanisms that could produce credibility (time consistency) of monetary and fiscal policy. My work on this topic together with L. Svensson led me into the politics of economic policymaking. Since then, I have done research on a number of theoretical and empirical aspects of this topic, including the connection between income distribution and economic growth, the design of central-bank institutions, policy-making in federations, and the rationale for separation of powers. Almost all of this research has been done together with G. Tabellini, with whom I have also written a graduate text on political economics. Our most recent theoretical and empirical research program tries to uncover systematic consequences of alternative political systems – such as electoral rules and forms of government – for policy outcomes and economic performance.

PESARAN, (Mohammad) Hashem

Born 1946, Shiraz, Fars, Iran.


Degrees BSc Salford Univ., 1968; PhD Univ. Cambridge, 1972.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; E1 General Aggregative Models; O5 Economywide Country Studies.


Principal Contributions My early work focused on the problem of model selection and hypothesis testing, in particular where the hypotheses under consideration were separate or non-nested. The paper which introduced the idea of non-nested hypothesis testing into econometrics was published in RES Stat, 1974. On returning to Cambridge after a five-year absence from academia (1973–79), I started to work on the identification and solution of rational expectations (RE). My main contribution in this area appeared first in J Em (1981), and subsequently in my book The Limits to Rational Expectations. This work recognised the importance of RE but also highlighted the limitations of this hypothesis for empirical analysis. The difficulties and ambiguities surrounding the empirical evaluation of RE models are illustrated in my EJ paper (1982). While continuing my research on
developments of econometric methods in the area of non-nested hypothesis testing, I turned my attention to the problem of aggregation in econometric modelling. This work reconsiders the problem of aggregation bias and focuses on the relative forecasting performance of aggregated and disaggregated models in the context of dynamic models; thus extending Henri Theil’s pioneering work in this area. More recently I have turned my attention to the analysis of dynamic heterogeneous panel data models, possibly containing non-stationary regressors. Together with Im and Shin I have developed a panel unit root test, known as the t-bar test, which has been widely used. My main co-authored contributions in these areas are published in *Em* (1995), *JASA* (1999) and *J Em* (forthcoming). In addition, I have been working on the Iranian economy, having made contributions to the debate on the foreign exchange policy in Iran; empirical modelling of oil supplies in the North Sea (my related work in *EJ* (1990) won the 1992 RES prize); predictability of stock returns and their economic significance; econometric analysis of limited dependent-RE models and impulse response analysis in non-linear and multivariate econometric models. I am also co-developer (with Bahram Pesaran) of the econometric software package *Microfit*, published by OUP, used extensively in higher education and commerce.

**PETERSEN, Mitchell**

**Born** 1963, Cedar Rapids, IA, USA.

**Current Post** Glen E. Vasel, Assoc. Prof. Fin., Kellogg Sch. Mgmt, Northwestern Univ., Evanston, IL, USA, 1994–.


**Degrees** BA Princeton Univ., 1986; PhD MIT, 1990.


**Principal Fields of Interest** G3 Corporate Finance and Governance; G2 Financial Institutions and Services.


**Principal Contributions** I have made contributions to our understanding of how firms finance their investments and manage the associated risks.

**PHILLIPS, Peter C.B.**


**Current Posts** Sterling Prof. Econ. and Prof. Stats, Yale Univ., New Haven, CT,
USA, 1989--; Alumni Disting. Prof. Econ., Univ. Auckland, New Zealand, 1992--; Adjunct Prof. Econ., Univ. York, York, UK, 1999--.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions My early research was concerned with problems of continuous time econometric models, developing methods that allowed for identification and consistent estimation of parameters using only discrete time-series data. By the mid-1970s, my interests moved to the use of asymptotic expansions for improving inference in dynamic econometric models, establishing the validity of Edgeworth expansions and developing formulae for Edgeworth, Saddlepoint, Laplace, and large deviation approximations in contexts that are useful in applications. These methods are now helpful in justifying the use of bootstrap techniques and in achieving dimensionality reductions in Bayesian applications. Over the period 1978–84, I devoted much effort to developing an exact distribution theory for structural econometric estimators and test statistics. One development in this research that has subsequently proved fruitful is a set of operational algebra techniques, including fractional calculus and matrix extensions. By the mid-1980s, my main research occupation was the development of a theory of non-stationary time-series regression and inference. The principal tool introduced in this research was functional central limit theory and this has proved to be crucial in helping us to understand spurious regression phenomena and in developing asymptotics for many popular models in empirical macroeconometric research, such as vector autoregression and error-correction models. Research in this field is now widespread in economics and is affecting other fields such as political science and mass communications. During the 1990s my research also included work on Bayesian methods in dynamic models, including a general approach to Bayesian asymptotic theory and model determination. Empirical applications of this work are ongoing and involve automated data-determined methods of model selection in forecasting macroeconomic activity for a group of the Asia-Pacific economies. Recent research includes semiparametric estimation of long memory, nonstationary panel estimation, nonlinear nonstationary statistical methods and applied analyses of market intervention policy.

PIERCE, Brooks n.e.

PINDYCK, Robert Stephen

Born 1945, New York City, NY, USA.
Principal Fields of Interest D0 Microeconomics: General; L0 Industrial Organization: General; Q0 Agricultural and Natural Resource Economics: General.


Principal Contributions Early work focussed on the use of control-theoretic methods for the design and analysis of economic policy, and the economics of energy and natural resource markets, including the economics of resource exploration and the role of uncertainty. Related work included econometric studies of sectoral energy demands, an analysis of the world oil market and behavior of the OPEC cartel, studies of cartel pricing and cartel behavior in general, and the relationships of energy markets to the macroeconomy, including the macroeconomic effects of sudden and drastic changes in energy prices. Most recent work has dealt with the analysis of irreversible capital investment decisions under various kinds of uncertainty, analysis of financial markets and the behavior of commodity prices, implications of irreversibility and uncertainty in environmental policy design, and modeling the evolution of market structure and market power.

PISSARIDES, Christopher Antoniou

Born 1948, Nicosia, Cyprus.

Current Post Prof. Econ., LSE, London, UK, 1986–.


Principal Fields of Interest J6 Mobility, Unemployment, and Vacancies; E3 Prices, Business Fluctuations, and Cycles; O4 Economic Growth and Aggregate Productivity.


Principal Contributions The theme of my research is the interaction between the labour market and the macro economy. When I first started studying economics, I realized that the structure of the supply side and the ability of the labour market to absorb shocks was far more important for the functioning of the macro economy than the factors then emphasized by Monetarists and Keynesians. Since then, the objective of my research has been the development of tools for the study of the dynamics of the labour market and their implications for the economy as a whole. I saw that search models held much promise for the study of aggregate labour market dynamics but was dissatisfied by the assumptions that they made about wage determination and by the complexity of their techniques, which made them difficult to apply in many situations. I helped develop the concept of the matching function and applied simple bargaining theory to wage determination to arrive at a model of labour market equilibrium that could be applied to the study of the business cycle, economic growth and to a variety of other situations, such as social security and employment taxes. I estimated aggregate matching functions and applied the idea to the study of labour market policy in the OECD with encouraging results. More recently, in collaboration with Dale Mortensen, I applied the theory to the analysis of job creation and job destruction flows. Several authors have used our approach with good results. I have also
made contributions in other areas of macroeconomics and labour economics, including consumption theory, the demand for higher education, migration and the relation between macroeconomic adjustment and poverty. More recently I have studied the foundations of labour market policy and the way that it interacts with shocks to influence the macroeconomic outcomes.

PITT, Mark M. n.e.

PLATTEAU, Jean-Philippe

Born 1947, Tournai, Belgium.
Current Posts Prof., Dept Econ., Univ. Namur, Belgium, 1985–.
Offices and Honours Dudley Seers Prize, 1996; Franqui Chair, Katholieke Univ. Leuven, 1999–2000.
Principal Fields of Interest D0 Microeconomics: General; O1 Economic Development; Q0 Agricultural and Natural Resource Economics: General.

Principal Contributions Most of my work has been concerned with the understanding of the role of institutions in economic development, and the processes of institutional change, especially under the joint impact of population growth and market penetration. The influence of non-economic factors and various frontier issues at the interface between economics and sociology, are a central focus of my research projects, hence my continuous interest in other social sciences than economics and my continuous emphasis on the potential contributions of sociology to the field of economics in general, and economic development in particular. As a matter of application, my attention has mostly centered on agrarian institutions in developing countries, implying that many of my contributions have a detailed empirical basis, always grounded in original first-hand data collected on the field of several poor economies in Asia and Sub-Saharan Africa. The most important themes in my research are the following:

- the determinants of village-level collective action, and the impact of wealth inequality on its level and efficiency (with special reference to the production of local public goods and the management of local natural resources);
- common property resource management in village societies; informal risk-sharing mechanisms; rules, including inheritance customs, governing access to land and other natural resources, and their transformation under the influence of increasing land pressure; the development and functioning of land markets under the same influence; choice of contracts in artisanal fisheries; systems of marriage payments and their evolution in Africa; the role of social and moral norms in economic development; ‘elite capture problems’ in decentralized development programs.

PLOBERGER, Werner

Born 1956, Vienna, Austria.

Current Post Prof., Univ. Rochester, Rochester, NY, USA, 1997–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C5 Econometric Modeling; C2 Econometric Methods: Single Equation Models.

Publications Articles: 1. ‘Testing for structural change in dynamic models’ (with W. Krämer, R. Alt), Em, 56, 1988; 2. ‘A new test for structural stability in the linear regression model’ (with W. Krämer, K. Kontrus), J Em, 40, 1989; 3. ‘The local power of the CUSUM and CUSUM of squares tests’ (with W. Krämer), Em. Theory, 6, 1990; 4. ‘The CUSUM-test with OLS-residuals’ (with W. Krämer), Em, 60, 1992; 5. ‘Posterior odds testing for a unit root with data-based model selection’ (with P.C.B. Phillips), Em. Theory, 10, 1994; 6. ‘Optimal tests when a nuisance parameter is present only under the alternative’ (with D.W.K. Andrews), Em, 62, 1994; 7. ‘Admissibility of the likelihood-ratio test when a nuisance parameter is present only under the alternative’ (with D.W.K. Andrews), Annals of Stats, 23, 1995; 8. ‘Optimal changepoint tests for normal linear regression’ (with D.W.K. Andrews, I. Lee), J Em, 70, 1996; 9. ‘A trend-resistant test for structural change based on OLS-

**Principal Contributions** Most of my work is related to testing problems: I was interested in the problem of testing for structural change and related problems, working mainly with Walter Krämer and Don W.K. Andrews. We were able to generalize classical methods to dynamical systems and to establish optimality properties for certain test-statistics (exponential averages). Recently I am also working (in collaboration with Peter C.B. Phillips) on the problem of model determination (i.e., picking the ‘right’ order for a model). Here we propose a new criterion function and prove some optimality theorems. Together with Herman J. Bierens, my third line of work is the investigation of nonparametric specification tests. We were able to establish optimality properties and surprisingly good asymptotic power properties of some tests.

**PLOTT, Charles R.**

**Born** 1938, Frederick, OK, USA.


**Degrees** BS, MS Oklahoma State Univ., 1961, 1964; PhD Univ. Virginia, 1965.


**Principal Fields of Interest** C9 Design of Experiments; D7 Analysis of Collective Decision-Making.


Principal Contributions Early work was on theoretical aspects of social choice theory, voting, and public economics. Beginning in the 1970s I became interested in developing and applying laboratory methodologies. I conducted extensive research on the behavioral foundations of economics, public economics, and political science. In the general area of public economics, I discovered the equilibration tendencies of committees, the power of agenda, and procedural institutional features in dictating outcomes of group deliberations, the equilibration of markets with externalities, and circumstances in which the classical ‘free-riding’ phenomena can be observed. In market economics, working with Vernon Smith led to the discovery of the ‘posted price effect’ and measurement of efficiency in experimental markets, both being central to the foundations of policy-related experimental work on market institutions. Research in economics has opened new issues to laboratory investigation, e.g., information aggregation in markets, market stability, and operations of multiple markets, including general equilibrium, and international trade and finance. Largely, my research has been devoted to the development and application of laboratory methods to policy issues, including allocations of landing rights at the major airports, and resources on Space Station Freedom, markets for emissions permits, and mechanisms for pricing use of natural gas pipelines. Research has evolved into a methodology for designing and testbedding new types of decentralized processes for making decisions focussing on such diverse problems as auctioning the right to use railroad tracks, markets for electrical power in California, and design and implementation of the auction used by the FCC for sale of personal communications systems licenses. The California Institute of Technology Laboratory for Experimental Economics and Political Science, which I founded and direct, has been a major producer of laboratory technologies. It began with local area networked tools used in laboratories worldwide, and led to the development of internet technolo-
gies for conducting large experiments, internationally, including successfully utilizing people from other countries in a single market.

POLACHEK, Solomon William

Born 1945, Washington, DC, USA.

Current Post Disting. Prof. Econ., SUNY, Binghamton, NY, USA, 1996–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; F1 Trade; C2 Econometric Methods: General; F1 Trade; C2 Econometric Methods: Single Equation Models.


Principal Contributions Why economic well-being differs by demographic group is my prime research focus. My initial explorations concentrated on gender. I showed how life-cycle human capital models explain male–female wage differences. My first finding demonstrated that the male–female wage gap was far smaller for single than for married men and women. From this result, I was able to establish that lifetime work is a crucial component in determining human capital investments and wages. This conclusion meant that policies encouraging greater female labor force participation would achieve gender equality more efficiently than such policies as comparable worth. Introducing human capital heterogeneity enabled me to explain gender-based occupational segregation. Further, by embedding search, job choice, and geographic location into the life-cycle human capital framework, I gained insight into the analysis of geographic and job mobility, including how search over the life cycle can explain migration periodicity (how long one remains in a job or geographic location before seeking another). I extensively tested these models econometrically using cross-sectional and panel data. A byproduct of this empirical work led to an econometric technique to estimate incomplete buyer and seller information regarding wages and prices. Another strand of my research integrates political science and economics to show how international trade fosters cooperative political relations between countries. I found that if bilateral political conflict diminishes economic trade (or if bilateral conflict leads to a more unfavorable terms-of-trade), then conflict becomes more costly the greater the gains-from-trade. This proposition illustrates how nations with sizeable trade gains exhibit the least conflict. Extensive empirical research merging large international data sets showed that trading partners with the most trade engage in the least conflict. Further, higher trade levels explain the lower conflict that democracies display towards each other. I am now
applying this conflict-trade model to industrial relations.

POLINSKY, A. Mitchell

Born 1948, St. Louis, MO, USA.


Principal Field of Interest K0 Law and Economics: General.


Principal Contributions My early work was concerned with issues of urban economics, including local public sector economics and housing demand analysis. After attending Yale Law School, 1975–
Within this area, my principal interest is the economics of enforcement, broadly defined. For example, I am concerned with whether antitrust laws should be enforced by private individuals using the treble damage remedy or by public regulators using fines and imprisonment as threats. Similar questions arise in the control of pollution, product quality and tax evasion, other substantive areas of interest to me. Much of my research in this area is summarised in a non-technical way in my textbook, An Introduction to Law and Economics. I am at present (2002) at work on a scholarly treatise on this subject with Professor Steven Shavell of Harvard, provisionally titled The Economic Theory of Public Enforcement of Law.

POLLAK, Robert A.

Born 1938, New York City, NY, USA.


Degrees BA Amherst Coll., 1960, PhD MIT, 1964.


Principal Fields of Interest D1 Household Behavior; J1 Demographic Economics; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions

(1) Allocation within the family. I have developed a ‘transaction cost’ approach to the analysis of families and households and an analysis of ‘tied transfers’. In collaboration with Jere Behrman and the late Paul Taubman, I have developed a preference model of the determinants of human capital accumulation that provides an alternative to Becker’s ‘investment model’. In collaboration with Shelly Lundberg I have developed the ‘separate spheres’ and other bargaining models of distribution within marriage. (2) Demography. In a series of four papers, I have proposed and analysed the ‘birth matrix-mating rule’ (BMNR) model, a new model of equilibrium population age structure and growth. The BMNR model resolves what demographers call ‘the two-sex problem’ by allowing fertility rates to depend on the age–sex composition of the population. (3) Consumer demand analysis. My work on consumer demand analysis, in collaboration with Terence J. Wales, has centered on bridging the gap between the pure theory of consumer behavior and its empirical implementation. This work focusses on four issues: the assumptions made about the functional form of the utility function (i.e., the structure of preferences), the treatment of demographic variables (e.g., family size), the treatment of dynamics (e.g., taste change and the endogenous formation of preferences), and the specification of the stochastic structure of the demand system. (4) The cost-of-living index. My work on the cost-of-living index extends the underlying theory and deals with such special topics as the construction of indexes for subsets of goods, the treatment of household production, the treatment of quality differences and quality change, and the construction of indexes that measure the impact of price changes on the welfare of a group or population of households. The underlying theme of this work is that, when suitably elaborated, the theory of the cost-of-living index provides principled answers to many of the practical problems that arise in constructing indexes of consumer prices.

PORTER, Michael E. n.e.

PORTNEY, Paul Rogers

Born 1945, Chicago, IL, USA.


Principal Fields of Interest  Q2 Renewable Resources and Conservation; Environmental Management; K2 Regulation and Business Law.


Principal Contributions  My principal contributions to economics have been in the areas of applied welfare economics and environmental economics. My technical research has focussed on the benefits of environmental regulatory programs. For instance, in work conducted during the 1980s (with John Mullahy), I explored the effects of ambient air pollution on acute and chronic illness, with an eye toward determining how significant might be the health benefits of pollution control. With Winston Harrington, I developed a theoretical measure of these health benefits. Later, in work done with Maureen Cropper and Sema Aydede, I published a series of papers looking at individuals’ stated preferences for hypothetical government programs that could save lives either immediately or in the future. Based on the responses, it was possible to estimate implicit discount rates for life saving; these discount rates were found to be non-constant exponentially. Much of my work has involved taking the results of technical analyses and making these findings accessible to non-economists. This is true of virtually all of the books I have written or edited, and true also of a number of journal articles. For instance, in a paper published in 1994 (article 9), I attempted to explain the so-called contingent valuation method to those not familiar with this technique for estimating benefits. That same article ex-
explained why it was important both to economists and also to those interested in environmental policy in the United States.

POSTLEWAITE, Andrew William

Born 1943, Harvey, IL, USA.

Current Posts Kamen Prof. Econ. and Prof. Fin., Univ. Pennsylvania, Philadelphia, PA, USA, 2002–.


Principal Fields of Interest A1 General Economics; H0 Public Economics: General.


**Principal Contributions** My work has concentrated on strategic behaviour in economic models, primarily general equilibrium models. The work has focused on the theoretical limits of organizational design and performance, where organizations are modelled as games in strategic form and performance is taken to be the game-theoretic solution (Nash, Dominant, Bayesian Nash) to these games, and on applications of those models to social norms and status.

**POTERBA, James Michael**

**Born** 1958, New York, NY, USA.  
**Principal Fields of Interest** H2 Taxation, Subsidies, and Revenue; H7 State and Local Government; Intergovernmental Relations; G2 Financial Institutions and Services.  


Principal Contributions My research has focussed on a range of topics in applied public finance and financial economics. My earliest work considered the incidence of tax subsidies to owner-occupied housing in the United States. It applied models of capital accumulation in the presence of rational expectations to estimate the impact of tax policy changes on the prices of owner-occupied houses. A related research program explored the link between dividend taxation, corporate payout policy, and corporate investment. Both UK and US data suggest that dividend taxes affect both payout and investment, in contrast to some models of dividend tax incidence. This research program on taxes and asset prices led to a separate set of studies on asset-price dynamics, and in particular to a paper suggesting that stock prices exhibit a mean-reverting component. More recent work has focussed on how tax incentives for personal saving affect individual wealth accumulation, and on the links between stock price fluctuations and consumer spending. Current research interests include the operation of annuity markets, with particular attention to the role of adverse selection in determining prices, the impact of taxation on the incentives for investment in mutual funds, and more generally the effect of taxes on portfolio choices.

POWELL, James L. n.e.

PRELEC, Drazen

Born 1955, Zagreb, Croatia.


Principal Fields of Interest

D9 Inter-temporal Choice and Growth; D8 Information and Uncertainty; M3 Marketing and Advertising.

Publications


Principal Contributions

My contributions fall in the domain of behavioral economics. The papers on melioration proposed that consumers track the average values of different purchase opportunities and then adjust choices in favor of commodities offering a rate of return greater than the one prevailing across all commodities. Under this conception, it is no longer true that consumers maximize their personal welfare. The papers on time preference include the first axiomatic derivation of the general hyperbolic discount function (QJE, 1992) and a general treatment of preferences over consumption sequences, emphasizing the desire for improvement. The 1998 Econometrica paper provides the first axiomatic derivation of the probability weighting function that generically satisfies the Allais Paradoxes.

PRESCOTT, Edward C.

Born 1940, Glens Falls, NY, USA.

Current Posts

Regents’ Prof., Univ. Minnesota, Minneapolis, MN, USA, 1980–; Econ. Adviser, FRB, Minneapolis, MN, USA, 1980–.

Past Posts


Degrees


Offices and Honours


Editorial Duties


Principal Fields of Interest

E0 Macroeconomics and Monetary Economics: General; D5 General Equilibrium and Disequilibrium; O1 Economic Development.

Publications


**Principal Contributions** My most important contribution is probably article 8, above, jointly authored with Finn E. Kydland. There we establish that the equilibrium stochastic growth model accounts remarkably well for business-cycle fluctuations. Indeed, given the nature and magnitude of the technological change shocks and given people’s willingness and ability to substitute intertemporally, there would be a puzzle if industrial market economies did not display the business-cycle phenomena. A second contribution was the finding that optimal dynamic taxation plans are time inconsistent. This leads one to the conclusion that the role of the economist is to evaluate policy rules with respect to their operating characteristics, rather than evaluating alternative policy actions. This research was also joint with Kydland. Methodologically, I have contributed to competitive theory under uncertainty. In article 1, above, the competitive equilibrium is a stationary stochastic process. In article 2, the competitive equilibrium is an invariant distribution of market types with each market being subject to a stationary Markov process. Both papers were written jointly with Robert E. Lucas, Jr, who deserves principal credit for formulating the problems and recognising their value in substantive economic analysis. I, however, led in their use in quantitative analyses in articles 9, 10, and 12–16. The concept of recursive competitive equilibrium is developed in article 6. Another contribution, article 9, was the extension of Arrow–Debreu equilibrium to large private-information economies. The extension entailed the introduction of lotteries which ensure that all gains from trade are realised. This work is joint with Robert M. Townsend. The important finding to date in macroeconomics is that given productivity, theory accounts well for economic growth, international income differences, depressions and prosperity, and economic development. In article 14 a theory of how a monopoly rights policy can affect productivity is developed, though much more work is needed on the problem of how policy affects a country’s productivity.

**PRESTON, Samuel H. n.e.**

**PRITCHETT, Lant**

Born 1959, Salt Lake City, UT, USA.

**Current Post** Lect. Public Pol., Kennedy Sch. Govt., Harvard Univ., Cambridge, MA, USA, 2000–.

Degrees  BS Brigham Young Univ., 1983; PhD MIT, 1988.


Principal Fields of Interest  O1 Economic Development; I0 Health, Education, and Welfare: General; J1 Demographic Economics.


Principal Contributions  I have made three contributions within development economics. First, in the field of economic growth I have emphasized the importance of understanding both the divergence in incomes due to very different long-run growth rates and the importance of understanding the volatility of growth rates over the medium term – with medium booms and busts dominating long-run tendencies (with W. Easterly and L. Summers). Second, within the field of human development I have emphasized two points: the importance of household demand in understanding fertility and health seeking behavior (with D. Filmer and J. Hammer) and the importance of understanding the efficacy of publicly provided services in the context of a coherent positive model of government behavior as a supplier (with D. Filmer). Third, together with J. Gelbach and with S. Sumarto and A. Suryahadi I have worked to understand the positive political economy of the targeting of transfer programs.
PSACHAROPOULOS, George

**Born** 1937, Athens, Greece.

**Current Post** Vis. Prof. Econ., Athens Univ., Athens, Greece, 1998–.


**Offices and Honours** Ford Foundation Fell., 1964–68; Outstanding Scholar Award, 1982.


**Principal Fields of Interest** D0 Microeconomics: General; O1 Economic Development; I2 Education.


**Principal Contributions** Early work was focused on the returns of education in different country settings leading to the documentation of certain patterns such as the diminishing profitability of investment in education by increasing level of education and per capita income. In the mid-1970s, my interest shifted to the role of education as a determinant of earnings and income distribution. I have also stud-
ied related topics such as the elasticity of substitution between different types of educated labour, the screening hypothesis, and labour market segmentation. The empirical emphasis of my work has been in Third World labour markets. My recent work concentrates on the development of analytical tools and the derivation of empirical signals that may guide policy-makers in developing countries to make investment decisions in education conducive to economic growth and social equity.

PUTTERMAN, Louis

Born 1952, New York City, NY, USA.
Current Post Prof. Econ., Brown Univ., Providence, RI, USA, 1987–.

Principal Fields of Interest D2 Production and Organizations; L2 Firm Objectives, Organization, and Behavior; P3 Socialist Institutions and Their Transitions.


Principal Contributions My research treats (a) problems of work incentives in teams, and the literatures on profit-shar-
ing, employee ownership, and labor-managed firms; (b) how firms are organized in market economies; (c) various aspects of the economics of development, especially rural development; (d) the comparison of socialist and capitalist economies, especially microeconomic aspects and issues of property rights; and (e) causes of and ways of modifying economic inequality. Much of my early work focussed on the organization of agriculture in Tanzania and China, and on the reasons why capital suppliers rather than labor suppliers are firms’ main risk-bearers and decision-makers. I helped to analyze the incentive problems of collective agriculture, synthesize the literature on worker-managed firms, and point out shortcomings in common explanations of conventional ownership and pay arrangements. Since 1993, my work on China’s economy has focussed on industrial enterprises, their productivity, employment, and wages. In 1993, I also began a new research program on the role of preferences and values in supporting economic institutions. This led me to argue for a model of preference formation based on the co-evolution of genes and culture. Since the late 1990s, I have been pursuing these interests by means of economics experiments. Another research program begun in the mid-1990s investigates how very long-run historical processes have helped to determine differences in recent economic growth among today’s developing countries. I argue for going beyond the dichotomy between the ‘traditional’ and the ‘modern’ to recognize the evolution of forms of economic organization in a continuum of steps from the primitive to the modern. I find evidence that countries with more advanced agrarian states and countries later settled by the latter have achieved faster modern economic growth than those in which intensive agriculture and the state were lacking or were late developments.
QUAH, Danny

Born 1958, Penang, Malaysia.


Principal Fields of Interest O0 Economic Development, Technological Change, and Growth: General; C1 Econometric and Statistical Methods: General; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions My early research, in business cycles and time-series econometrics, focused on permanent and transitory dynamics. This work provided specific economic interpretations and motivations to disentangling different kinds of dynamics in economic time series. That research evolved into empirical and theoretical work on growth and con-
vergence and income inequality, or distribution dynamics more generally. The strong characterizations there are twofold: first, across countries, rich and poor groupings dynamically emerge, polarizing the cross-section distribution; second, aggregate, nationwide income growth swamps changes in inequality. I now also work, with a macroeconomic focus, on theoretical, legal, and historical dimensions of technology, knowledge and intellectual property, and the weightless economy – with special focus on geography and income distribution.

QUIGGIN, John Charles

Born 1956, Adelaide, Australia.

Current Posts Australian Res. Council Professiorial Fell., Univ. Queensland, Brisbane, Australia, 2003–; Adjunct Prof., ANU, Canberra, Australia, 2003–.


Principal Fields of Interest D8 Information and Uncertainty; O4 Economic Growth and Aggregate Productivity; Q0 Agricultural and Natural Resource Economics: General.


social security fund’ (with S. Grant), AER, 92, Sept. 2002; 16. ‘Public investment and the risk premium for equity’ (with S. Grant), Ec, 70, Feb. 2003.

Principal Contributions My contributions relate mainly to the economics of risk and uncertainty. The rank-dependent utility model, which I developed in the early 1980s under the name ‘anticipated utility theory’, is now the most popular alternative to the expected-utility model of choice under uncertainty. I extended early work on this topic to include analysis of concepts of increasing risk and increasing uncertainty. More recently, in collaboration with R.G. Chambers, I have developed the Arrow–Debreu state-contingent model of production under uncertainty, using modern methods of convex analysis and duality theory. Applications have included nonpoint pollution, moral hazard, agricultural insurance and price stabilisation. Analogies between choice under uncertainty and production under uncertainty have been exploited to yield new measures of risk aversion. I have also worked with S. Grant on the equity premium puzzle and its policy implications. Applications have included an analysis of social security reform, a critique of the case of privatisation and analysis of the discount rate for public investments. Another important field has been the development (with S. Dowrick) of techniques for multilateral comparisons of income and consumption. This work has been applied to estimation of income convergence and the closely related issue of globalisation. I have also worked extensively in the field of environmental economics, with particular emphasis on the concept of common property, and have been actively involved in debate over Australian public policy.

QUIGLEY, John M.

Born 1942, New York, NY, USA.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; H3 Fiscal Policies and Behavior of Economic Agents; H2 Taxation, Subsidies, and Revenue.


Principal Contributions

I am an applied public finance economist with interests in urban housing and labor markets and the economic implications of spatial relationships. My original work (with J.F. Kain) analyzed the role of racial segregation in urban housing markets and its larger welfare implications. Later work analyzed low-wage labor markets in cities and the interaction between residential location and employment. I have analyzed the link between residential choice, local taxation, and expenditure policies, and, more recently, homelessness policies. I am currently analyzing the links between housing and financial markets and exploring policies to permit households to hedge the risks of homeownership.
RABIN, Matthew J. n.e.

RADNER, Roy

Born 1927, Chicago, IL, USA.


Degrees PhB, BS (Maths), MS (Maths), PhD (Math. Stats) Univ. Chicago, 1945, 1950, 1951, 1956.


Principal Fields of Interest L2 Firm Objectives, Organization, and Behavior; D8 Information and Uncertainty; D9 Inter-temporal Choice and Growth.


**Principal Contributions** Contributions to the theory of decision-making in decentralised organisations and the theory of teams (developed with J. Marschak); game-theoretic analyses of incentives for efficient decision-making in long-lasting organisations; bounded rationality and information processing; and existence and optimality of market equilibria under uncertainty including equilibria with private information, equilibrium of plans, prices and price-expectations, and rational expectations equilibrium. Characterisation of optimal investment strategies: optimal capital accumulation under certainty (turnpike theory) and uncertainty; and optimal strategies for inspection and maintenance of stochastically failing equipment. Empirical studies of demand and supply in higher education. Cost-allocation and transfer pricing: theoretical and experimental studies of bargaining with incomplete information. survival, selection, and the managerial theory of the firm.

**RAJAN, Raghuram**

*Born* 1963, Bhopal, India.

**Current Post** Joseph Gidwitz Prof. Fin., Grad. Sch. Bus., Univ. Chicago, Chicago, IL, USA, 1997–.


**Principal Fields of Interest** G0 Financial Economics: General; O0 Economic Development, Technological Change, and Growth: General.


**Principal Contributions** My work spans a number of topics including the study of financial institutions, the workings of the modern corporation, and the causes and consequences of the development of the financial sector across countries.

**RAMEY, Garey**

**Born** 1958, Bakersfield, CA, USA.  
**Current Post** Prof. Econ., Univ. California, San Diego, CA, USA, 2000–.  
**Principal Fields of Interest** E3 Prices, Business Fluctuations, and Cycles; L1 Market Structure, Firm Strategy, and Market Performance; C7 Game Theory and Bargaining Theory.  

**RAMEY, Valerie**

**Born** 1959, Canal Zone, Panama.  
**Current Post** Prof. Econ., Univ. California, San Diego, La Jolla, CA, USA, 1998–.  
**Degrees** BA (Econ. and Spanish), Univ. Arizona, 1981; PhD Stanford Univ., 1987.  
**Offices and Honours** Faculty Res. Fell., Res. Assoc., NBER, 1989–97, 1997–.  
**Principal Fields of Interest** E2 Consumption, Saving, Production, Employment, and Investment; E3 Prices, Business Fluctuations, and Cycles.  
**Publications Articles:** 1. ‘The effects of market organization on conspiracies in restraint of trade’ (with R.M. Isaac, A. Williams), *JEBO*, 5, 1984; 2. ‘Inventories as factors of production and economic fluctuations’, *AER*, 79, June 1989; 3. ‘Nonconvex costs and the behavior of in-

**Principal Contributions**

Introduced several new approaches to studying inventory fluctuations; tested various theories of monetary shocks and transmission mechanism; conducted detailed studies of output fluctuations at the plant level; developed and tested new links between trade and wage inequality; showed a strong negative relationship between growth and volatility; studied capital allocation across industries.

**RAMSEYER, John Mark**

**Born** 1954, Chicago, IL, USA.

**Current Post** Mitsubishi Prof. Japanese Legal Stud., Harvard Univ., Cambridge, MA, USA, 1998–.


**Principal Field of Interest** K0 Law and Economics: General.

**Publications**


**Principal Contributions** n.e.

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**RANSOM, Michael R.**


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**Principal Contributions** n.e.
Principal Contributions

My principal research contributions are in three main areas. First is labor supply decision-making within the family. Some of my early publications developed and estimated empirical models of how husbands and wives jointly make labor supply decisions, including whether to work and how many hours to work. A second area of my research deals with monopsony in the labor market. A third topic I have studied is the market for college and university professors. I have also made contributions to the study of air pollution and health, and to behavioral economics.

Principal Contributions

I am best known for my book on game theory, which aimed to present the subject with an emphasis on asymmetric information, sequential moves, and applications, while minimizing the use of mathematics. Which of the ideas in my articles is as important remains to be seen. My work began in...
industrial organization, but I have shifted the emphasis to law and economics.

RAVALLION, Martin

Born 1952, Sydney, Australia.


Degrees BSc Univ. Sydney, 1974; MSc, PhD LSE, 1978, 1981.


Principal Fields of Interest I3 Welfare and Poverty; H3 Fiscal Policies and Behavior of Economic Agents; O1 Economic Development.


Principal Contributions The bulk of my research has concerned poverty and policies for fighting it. I have given emphasis to developing sound and policy-relevant empirical knowledge about poverty – knowledge that is also informed by, and provides feedback to, relevant social and economic theories. Specific topics on which I have tried to contribute include welfare and poverty measurement (using both objective and subjective methods), the interrelationship between risk and poverty, household income and wealth...
dynamics, transitions into and out of poverty, poverty traps, informal safety nets, famines and crises, the economic geography of poverty, the performance of rural factor markets, the interlinkage between human resource development and poverty reduction, measuring and understanding the diverse impacts of economic growth on poverty and inequality, the design and evaluation of anti-poverty programs, the political economy of redistributive policies and assessing the welfare impacts of economy-wide policy reforms. I have worked in many countries, though Argentina, Bangladesh, China, India, Indonesia and Russia have been prominent. I have also been deeply involved in promoting high-quality analytic work on poverty and inequality by others, including managing research on this topic at the World Bank and continual training/dissemination efforts within and outside the Bank. I have strived to ensure fruitful (two-way) interaction between research and public action, and I am lucky to have had opportunities to see my research feed directly into practice.

RAVIKUMAR, B., n.e.

RAVIV, Artur n.e.

RAWSKI, Thomas George

Born 1943, Ithaca, NY, USA.


Principal Fields of Interest P2 Socialistist Systems and Transitional Economies; O0 Economic Development, Technological Change, and Growth: General; O5 Economywide Country Studies.


Principal Contributions I have focused my research on studies of China’s economic development and modern history that are rooted in economic theory and informed by detailed scrutiny of quantitative information and careful study of Chinese economic policies and institutions.

RAZIN, Assaf

Born 1941, Kibbutz Shamir, Israel.

Current Posts Mario Henrique Simonsen Prof. Public Econ., Tel Aviv Univ., Israel, 1990–; Friedman Prof. Intl Econ., Cornell Univ., Ithaca, NY, USA, 2001–.


Offices and Honours Dir., Pinchas Sapir Center Devlp., Tel Aviv Univ., 1974–76; Dir., Econ. Planning Authority (Council Econ. Advisors) and Chief Econ. Advisor, Min. Fin., Govt Israel, 1979; (Position nk), Inst. Intl Econ. Stud., Univ.


**Principal Fields of Interest** J1 Demographic Economics; F1 Trade; H1 Structure and Scope of Government.


**Principal Contributions** Early contributor to the endogenous growth literature, population growth literature, and the area of international trade under uncertainty, fiscal policy in the world economy and international taxation.

REARDON, Thomas A.

**Born** 1954, Covina, CA, USA.

**Current Post** Prof., Dept Agric. Econ., Michigan State Univ., East Lansing, MI, USA, 1992–.


**Principal Fields of Interest** Q0 Agricultural and Natural Resource Economics: General; 00 Economic Development, Technological Change, and Growth: General; L1 Market Structure, Firm Strategy, and Market Performance.
Publications


Principal Contributions My contributions to economics have been in applied international development economics. (1) In 2002 I brought to the attention of development economists and practitioners the extremely rapid and recent rise of supermarkets in developing regions, with fundamental implications for small farms and firms and changes in agrifood markets. The work focusses on the rapid diffusion over Latin America (on which my work has mainly focussed), Asia, Eastern/Central Europe, and parts of Africa of supermarkets, and the consolidation and multinationalization of the supermarket
sector starting in the early 1990s and developing in earnest in the mid-1990s. This represents a fundamental ‘sea change’ in international development. This work is having major impacts on development assistance strategies. (2) Starting in 1999 I have contributed to development economics by an emphasis on the links among agroindustrialization, globalization, and international development. A major focus of this has been on changes in the organization and institutions of agrifood supply chains, including the transformation of the retail sector, and the rise of private quality and safety standards imposed by firms in the downstream sectors of the agrifood system. (3) From 1988 to the present my work has analyzed and documented and derived the implications for development economics and practitioners of the rapid rise of rural nonfarm employment in developing regions, focussing on Africa and Latin America. Among the implications explored are the effects of this employment and rural nonfarm income diversification in general on food security and disaster coping, income distribution, agricultural technology change, and rural asset distribution. (4) From the early 1990s I analyzed links between poverty (‘investment poverty’) and the environment, inspiring a series of field projects and debates in Latin America and other regions. In the 1980s I contributed to the understanding of imports of non-traditional cereals (rice and wheat) into the Sahel.

REBELO, Sergio Tavares

Born 1959, Viseu, Portugal.

Current Post Tokai Bank Disting. Prof. Intl Fin., Northwestern Univ., Evanston, IL, USA, 1997–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General.


**Principal Contributions** My work has focussed on three areas: business cycles, economy growth and currency crises. In the area of business cycles I have studied the properties of different neoclassical models, as well as the role played by labor hoarding and capital utilization. In the growth area I studied the conditions for sustainable growth and examined, both theoretically and empirically, the impact of economic policy on the long-run growth rate of the economy. In the currency crises area I have focussed my attention on the role of government guarantees in creating prospective deficits that can be the root cause of currency collapses. Currently I am studying the dynamics of inflation in the aftermath of large devaluations and their implications for the government’s intertemporal budget constraint.

**REICHELSTEIN, Stefan**

**Born** 1957, Bonn, Germany.


**Degrees** Pre-diploma Univ. Bonn, 1978; Master (Managerial Econ. and Decision Sc.), PhD (Managerial Econ. and Decision Sc.) Northwestern Univ., 1980, 1984.


**Principal Fields of Interest** D8 Information and Uncertainty; L2 Firm Objectives, Organization, and Behavior; M4 Accounting.


Principal Contributions My research has focussed primarily on the economics of organization, in particular issues related to decentralization, managerial incentives and performance measurement. My earlier work was concerned with the foundations of management control systems, in particular the communication requirements of alternative incentive mechanisms. This line of research led to one of the first explorations of the role of responsibility centers (e.g., cost or profit centers) and hierarchical control systems within firms. I have also worked on the theory of incomplete contracts and applied this framework to the study of transfer pricing mechanisms in multidivisional firms. In recent years, my research has focussed on dynamic incentive problems and the role of accounting information in providing useful managerial performance measures. Some of the incentive mechanisms identified in my theoretical work have subsequently been implemented by select firms and government organizations.

REINHART, Carmen Maria

Born 1955, Havana, Cuba.


Principal Fields of Interest F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance; E0 Macroeconomics and Monetary Economics: General.

Publications Articles: 1. ‘Capital inflows and real exchange rate appreciation in Latin America: the role of external factors’ (with G. Calvo, L. Leiderman), IMF Staff Papers, 40, March 1993; 2. ‘Targeting the real exchange rate: theory and evidence’ (with G. Calvo, C. Végh), JDE, 47, 1995; 3. ‘Nominal interest rates, consumption booms, and lack of credibility: a quantitative examination’ (with C. Végh), JDE, 46, 1995; 4. ‘Capital flows...

**Principal Contributions** My work has focussed on issues in open economy macroeconomics with emphasis on developing countries. The work on capital flows with Calvo and Leiderman assessed whether capital flows to emerging markets were primarily driven by external factors, such as international interest rates, or by domestic pull factors, such as market-oriented reforms. We find that that external factors play a critical role in explaining the rise and fall of capital flows to emerging markets. We studied what the appropriate policy response to surges in capital flows could be. In my papers with Reinhart and Smith, we consider policies that adjust reserve requirements, taxes on capital flows, or monetary policy (open market operations and sterilized or unsterilized intervention) in response to the capital flow cycle. The capital flow boom and bust cycles also fueled my interest in currency and banking crises. Several papers with Kaminsky examined the macroeconomic and financial antecedents and aftermath of crises as well as the possible channels of financial contagion. We studied the links between currency and banking crises and financial liberalization and concluded that banking crises often follow financial liberalization and that a weak banking sector is a key factor in explaining modern currency crises. More recently, my work has studied exchange rate policies. In my work with Calvo, we find broad cross-country evidence of ‘fear of floating’ – that is, countries that claim they allow their exchange rate to fluctuate freely do not. In my recent work with Rogoff, we reassess the post-World War II history of exchange rate arrangements only to conclude that the ‘official classification’ of exchange rate policies, as reported by the IMF, is very far removed from actual country practices – even for many industrial countries during much of the Bretton Woods era.
RENY, Philip J. n.e.

RENY, Patrick

Born 1957, Tunis, Tunisia.


Offices and Honours Fell., Em Soc, 1998; Council Mem., Europ. Econ. Assoc., 2000–.


Principal Fields of Interest L0 Industrial Organization: General; D0 Microeconomics: General; K0 Law and Economics: General.


Principal Contributions I have worked on the economics of incentives and on industrial organization, with applications...
to regulation, contract and organization theory, and to competition policy. In the first field my papers with B. Salanié stress that overlapping short-term contracts can suffice to get the full value of long-term commitment. I have also studied the impact of ex post uncertainty on contract design with B. Caillaud and R. Guesnerie. With P. Aghion and M. Dewatripont, I have studied the role of partial contracts in situations where, even ex post, some actions are not verifiable by third parties. We have also analyzed how internal agency problems affect the behavior of firms and the nature of their strategic interaction. In the field of industrial organization I have highlighted possible anti-competitive effects of vertical restraints (excessive limitation on intrabrand competition, collusion, competition-dampening and foreclosure) in joint works with J. Tirole, J. Stiglitz, B. Jullien, W. Comanor and T. Vergé. More recently, with Laffont and Tirole, I have studied the interplay of interconnection agreements and competition in the telecommunications and Internet industry. A paper with O. Compte and F. Jenny stresses that symmetry in production capacities facilitates tacit collusion, which has implications for merger control.

RICHARDSON, Matthew Philip


Current Post Prof. Fin., Stern Sch. Bus., NYU, New York City, NY, USA, 1995–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; G1 Financial Economics: General; G1 General Financial Markets.


**Principal Contributions** My primary research is in the area of financial economics with occasional forays into pure econometric theory. The research covers a wide array of topics in finance; for example, I have published papers in the area of financial econometrics, asset pricing theory and empirical work, market efficiency, international finance, fixed income, derivatives, and market microstructure. Some of my earlier work was focussed on understanding the econometrics of asset return distributions and predictability. In particular, a number of these papers derived and implemented new test methodologies. For example, some of this work showed that previous conclusions in the literature regarding asset return serial dependence properties were vastly overstated, and, in fact, were consistent with random walk behavior of stock prices. Another branch of my work looks at how asset pricing models imply a series of inequality restrictions, develops tests of these restrictions, and then implements them, generating new empirical results in the literature. Other areas of research have focussed on the question of whether financial markets respond efficiently to information. Much of this work shows how the existing literature is too ‘quick’ to provide behavioral explanations of so-called financial anomalies when standard rational frameworks suffice. Examples of my work include investigations of the intraday behavior of stock prices; the relation between spot and futures return indices; international co-movements in markets across time zones; short horizon autocorrelations of returns; and the relation between FCOJ futures prices and weather. In somewhat more contradictory and recent work, I have begun to explore the conditions under which asset prices can drift away from fundamentals, focussing in particular on the importance of short sales restrictions. In one paper, the recent internet ‘bubble’ is considered as an example.

**RICHINS, Marsha L.**

**Born** 1950, Chicago, IL, USA.

**Current Post** Prof. Marketing, Univ. Missouri, St. Louis, MO, USA, 1992–.


**Degrees** BA (Psychology) California State Univ., 1974; MA (Psychology), PhD (Bus.), MBA Univ. Texas, 1976, 1979, 1980.


Principal Field of Interest: Household Behavior.


Principal Contributions: Research and contributions have focused primarily on the motivations for consumption in affluent societies. It is well known that, when possible, consumers desire and purchase more goods than are needed to sustain a healthful and comfortable life. The consequences of this consumption are uneven distribution of material resources across population segments, higher prices for desired goods, and faster depletion of natural resources. The primary contribution has been to more fully explicate the construct of materialism as it relates to consumption and to develop a measurement instrument to assess materialism at the individual level. Related contributions include examining the psychological correlates of materialism. This has involved investigating consumption motivations, the benefits consumers desire from consumption, and consumers’ consumption dreams. In addition, affective and emotional correlates of consumption have been identified. Theoretical work has also focused on the ways in which the cultural environment, including advertising and other media, serve to perpetuate materialistic tendencies within a culture. Earlier research and contributions have been in the area of consumer product satisfaction, including identification of factors that encourage and inhibit consumers from seeking redress in the marketplace when they have an unsatisfactory marketplace exchange.

RIDDER, Geert n.e.

RIETVELD, Piet


Current Post: Prof. Transport Econ., Faculty Econ., Vrije Univ., Amsterdam, The Netherlands, 1990–.

Degrees MSc Erasmus Univ., 1995; PhD Vrije Univ., 1980.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; R4 Transportation Systems; O1 Economic Development.


Principal Contributions I have contributed to various fields in regional and transport economics. Early work addressed multicriteria analysis. Special contributions related to the treatment of ordinal information by means of order statistic approaches and the use of multilevel programming in hierarchical decision mak-
ing. Another line of research concerns regional development problems in developing countries. Here I contributed by addressing the links between farm and off-farm employment of rural households, and the role of infrastructure. In my analysis of regional inequality I have contributed to the treatment of multidimensional inequality, where welfare depends on bundles of goods rather than on only one good. In addition I have studied decomposition issues in inequality leading to empirical estimates of the regional component in total inequality for a variety of welfare components. Infrastructure and regional development has been studied from a theoretical and empirical perspective. Case studies have been carried out for the economic effects of orbital motorways and transport corridors. Special attention has been paid to generative versus distributive effects of transport infrastructure improvements. Barrier effects of borders have been another field of research. In addition to conceptual work, various empirical studies have been carried out on the impact of borders on the intensity of spatial interaction. Borders lead to substantial reductions of spatial interaction (transport flows, telecommunication) and in addition to economic factors such as trade blocs, various institutional and historical factors also play a large role here. The economics of transport nodes has been studied by considering the interactions between actors operating on lines and in nodes, as well as customers. Also quality of transport nodes has been studied from this perspective. Spatial search behavior has been analyzed for choice of location of jobs and residences. A novel contribution has been the introduction of two-worker households in this context.

RINDFUSS, Ronald R.

Born 1946, Buffalo, NY, USA.

Current Post Robert Paul Ziff Disting. Prof., Dept Sociology, Univ. North Carolina, Chapel Hill, NC, USA, 2000–.


**Principal Fields of Interest** D1 Household Behavior; J0 Labor and Demographic Economics: General.


Principal Contributions n.e.

RIORDAN, Michael Henry

Born 1951, Teaneck, NJ, USA.

Current Post Laurans A. and Arlene Mendelson Prof. Econ. and Bus., Columbia Univ., New York, NY, USA, 2000–.


Principal Field of Interest L0 Industrial Organization: General.


**Principal Contributions** Many of my works applied mechanism design theory to problems of procurement and regulation, including journal articles with D. Sappington on second-sourcing and franchise-bidding. I studied the theory of price as a signal of quality in articles with R. Kihlstrom and K. Bagwell. I developed a model of dynamic competition with imperfect information featuring what has since become known as ‘signal jamming’. Vertical integration has been a recurrent topic of my research. I wrote an article with Oliver Williamson formalizing ideas from transaction-cost economics on the trade-off between internal and market organization of procurement. I interpreted vertical integration as contracting for inputs rather than outputs, arguing that vertical integration changed the information structure of procurement. I developed with S. Salop a policy framework for evaluating vertical mergers, and, most recently, developed a model of the competitive effects of vertical integration by a dominant firm. I developed with L. Cabral a dynamic model of duopoly with learning curves, leading to a theory of rational predatory pricing. Finally, I developed with P. Bolton and J. Brodley a legal framework for evaluating claims of predatory pricing in light of modern economic theory.

**RITTER, Jay R.**

**Born** 1954, Milwaukee, WI, USA.

**Current Post** Cordell Prof. Fin., Univ. Florida, Gainesville, FL, USA, 1996–.


**Degrees** AB, AM, PhD Univ. Chicago, 1976, 1976, 1981.


**Principal Fields of Interest** G0 Financial Economics: General; G3 Corporate Finance and Governance; G2 Financial Institutions and Services.


**Principal Contributions** Most of my work has focused on equity issuance, especially initial public offerings (IPOs) of common stock. I have also published papers dealing with seasonal patterns in stock returns and long-term return measurement, as well as several other topics. My work on IPOs has focused on documenting and explaining three empirical patterns: short-run underpricing, long-run underperformance, and cycles in the returns and volume of IPOs. This has led to related work on the role of the investment banking industry. My early work used a reputation-theoretic paradigm, but my later work emphasizes unresolved agency problems and behavioral finance.

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**RIVERA-BATIZ, Luis Antonio**

**Born** 1949, Ponce, Puerto Rico, USA.


**Degrees** MA, PhD Univ. Chicago, 1976, 1992.


**Principal Fields of Interest** O0 Economic Development, Technological Change, and Growth: General; F1 Trade; F3 International Finance.


**Principal Contributions** Most of my work is related to international economics. The paper with F.L. Rivera-Batiz showed that direct foreign investment would have positive welfare effects in the presence of industry linkages related to specialization due to increasing returns to scale. The two papers with P.M. Romer developed the theory of international trade in the presence of endogenous growth. The paper on integration and economic growth showed that integration could have positive income and growth effects that work by expanding the range of available manufacturing inputs and by exploiting the externalities from R&D. The paper on international trade with endogenous technological change showed that the relation between tariffs and the growth rate is not monotonic and examined the growth effects of property rights. More recently work on currency boards with A. Sy and M.-A. Oliva produced the first formal model of the operation and exit of a currency board regime. The empirical paper on foreign direct investment (FDI) presents evidence suggesting that FDI has positive growth effects on developing countries while other types of capital flows might not have positive effects.

**ROB, Rafael**

**Born** 1950, Jerusalem, Israel.

**Current Post** Prof. Econ., Univ. Pennsylvania, Philadelphia, PA, USA, 1984–.


**Degrees** BA Hebrew Univ., Jerusalem, 1976; PhD UCLA, 1981.

**Offices and Honours** Fell., Em Soc, 1995.


**Principal Fields of Interest** D8 Information and Uncertainty; L1 Market Structure, Firm Strategy, and Market Performance; C7 Game Theory and Bargaining Theory.


**Principal Contributions** I have made diverse contributions to the economics of uncertainty and its applications. In an early paper I showed the conditions under which an identical product sells at different prices, violating ‘the law of one price’. More recently, I have extended this line of research to repeated purchase and have shown how firms accumulate a clientele base and how that relates to pricing, reputation building and R&D expenditures. In another line of research, I have shown how uncertainty and private information about pollution-related losses generate market failure, which is especially severe in economies with many individuals and which cannot be remedied by ‘Coasian-type bargaining’. In a third line of research, I have shown how the expansion of industrial capacity is driven by uncertainty about market size and that the rate of capacity expansion is inefficiently low due to ‘informational externalities’. In other papers, I considered the inefficiency of labor movements in economies with sectoral shocks and where workers pay switching costs when changing occupations. I have also contributed to evolutionary game theory, analyzing the dynamic of games where players gradually adjust their behavior as they learn from experience about the effectiveness of different strategies. The thrust of this line of research is to show that when this learning process is ‘noisy’ a particular equilibrium is selected although the underlying game has multiple equilibria. Most recently, I have done work on technology adoption and applied it to the question of why per capita incomes are so diverse across nations of the world.

**ROBERTS, Donald John**

Born 1945, Winnipeg, Manitoba, Canada.


**Degrees** BA (Hons) Univ. Manitoba, 1967; PhD Univ. Minnesota, 1972.


**Principal Fields of Interest**
- L2 Firm Objectives, Organization, and Behavior;
- L1 Market Structure, Firm Strategy, and Market Performance;
- C7 Game Theory and Bargaining Theory.

**Publications**


**Articles:**
1. ‘Existence of Lindahl equilibrium with a measure space of consumers’, *JET*, 6, Aug. 1973;
2. ‘The incentives for price-taking behavior in large exchange economies’ (with A. Postlewaite), *Em*, 44, Jan. 1976;
4. ‘Incentives in planning procedures for the provision of public goods’, *RESstud*, 46, April 1979;
5. ‘Limit pricing and entry under incomplete information: an equilibrium analysis’ (with P. Milgrom), *Em*, 50, March 1982;
7. ‘Rational cooperation in the finitely repeated prisoners’ dilemma’ (with D. Kreps, P. Milgrom, R. Wilson), *JET*, 27, Aug. 1982;
8. ‘Relying on the information of interested parties’ (with P. Milgrom), *RandJE*, 17, Spring 1986;
10. ‘An equilibrium model with involuntary unemployment at flexible, competitive prices and wages’, *AER*, 77, Dec. 1987;
12. ‘Bargaining costs, influence costs and the organization of economic activity’ (with P. Milgrom), in J. Alt, K. Shepsle (eds), *Perspectives on Positive Political Economy* (CUP, 1990);
13. ‘The economics of modern manufacturing: technology, strategy and organization’ (with P. Milgrom), *AER*, 80, June 1990;
14. ‘Rationalizability, learning and equilibrium in games with strategic complementarities’ (with P. Milgrom), *Em*, 58, Nov. 1990;
16. ‘Organizational prospects, influence costs and ownership changes’ (with M. Meyer, P. Milgrom), *JEMS*, 1, Spring 1992;
17. ‘Complementarities and systems: understanding Japanese economic organization’ (with P. Milgrom), *Estudios Economicos*, 9, Jan.–June 1994;
18. ‘The LeChatelier principle’ (with P. Milgrom), *AER*, 86, March 1995;
19. ‘The boundaries of the firm revisited’ (with B. Holmström), *JEP*, 12, Fall 1998.

**Principal Contributions**
My work has largely been concerned with strategic behavior in markets and firms and with the implications for the design of economic institutions. In this work I have used game theory and information economics extensively and I have contributed to the development of these areas. My contributions (often with co-authors) have included: examining strategic behavior in the presence of public goods; analyzing imperfectly competitive behavior in partial and general equilibrium, including showing the consistency of Keynesian unemployment with full rationality and strong notions of equilibrium; introducing the methods of games of incomplete information to study industrial organization; examining the nature and effects of rent-seeking inside firms; introducing Topkis’s lattice-programming methods into economics to do comparative statics analysis
and using these methods to build rich, multi-dimensional models of organizations and economic systems; exploring the properties of games with strategic complementarities; and raising issues around the economic analysis of the boundaries of the firm. I have also carried out field-based work on the organizational design of large multinational firms (leading to a number of teaching cases and practitioner-oriented articles) and am currently involved in developing theory around this topic.

ROBINS, James M. n.e.

ROBINS, Philip K. n.e.

ROBINSON, Peter Michael


Degrees BSc (Stats) Univ. Coll., London Univ., 1968; MSc (Stats) LSE, 1969; PhD (Stats) ANU, 1973.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C3 Econometric Methods: Multiple/Simultaneous Equation Models; C4 Econometric and Statistical Methods: Special Topics.


Principal Contributions In the 1970s, proposed flexible and computationally feasible estimates of continuous-time econometric models, based on discrete data. In 1977, proved asymptotic theory for maximum-likelihood estimates of continuous-time models based on irregularly-spaced data, and established methods and theory for nonlinear moving-average time-series models. In 1982, motivated by the computational intractability of maximum-likelihood estimates of limited dependent variable models with error autocorrelation, established consistency of estimates which ignore the autocorrelation. In 1983, show-
ed that standard kernel nonparametric estimates of densities and other functions have the same asymptotic distributional properties under mixing dependence as under independence. A 1987 paper on adapting for heteroskedasticity of unknown form justified use of nearest-neighbour estimates, and under mild conditions. A 1988 paper on the partly linear model proposed and justified the use of higher-order kernels in semiparametric problems in which bias reduction is needed to produce root-\(n\)-consistency. In 1991, justified general data-dependent bandwidths in semiparametric problems, and also showed the consistency of cross-validated spectral bandwidths. Higher-order asymptotic work included a bound for the stochastic difference between statistics, with application to statistical performance of iterative schemes, and Berry-Esseen bounds. For long-memory time series, showed effects of cross-sectional averaging of autoregressions in 1978, and the unusual properties of kernel density estimates in 1988, and worked intensively on the topic in the 1990s; proposed in 1991 a GARCH-type model for long memory; proved consistency and asymptotic normality of various semiparametric estimates of long memory and derived optimal bandwidths; proposed tests for unit root and other nonstationarity against fractional alternatives. Other research has been on various topics in time series, asymptotic theory, sample survey and latent variables.

**ROBSON, Arthur John**

**Born** 1948, Wellington, New Zealand.

**Current Post** Prof. Econ., Univ. Western Ontario, London, Ontario, Canada, 1984–.


**Degrees** BSc (Maths, Hons) Victoria Univ., New Zealand, 1968; PhD MIT, 1974.


**Principal Fields of Interest** A1 General Economics; C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty.


**Principal Contributions** I have made previous research contributions to congestion and pollution as part of urban economics, to issues involving the exploitation of depletable natural resources and to industrial organization. My consuming current interest, however, is the biological underpinnings of modern economic behaviour. With this rationale implicit, I considered the evolution of attitudes to risk with a concern for status, with it explicit, I considered these as the outcome of a polygynous mating system. I drew the quite distinct implications of aggregate and idiosyncratic risk for attitudes to risk, in economics, and for the maintenance of sexual reproduction, in biology. I also provided a basic biological rationale for the existence of von Neumann–Morgenstern utility functions, in the first place. A recent project involves reversing the order of biology and economics. This project considers how the economics of hunting and gathering might have driven the evolution of human biological characteristics. So far, data from modern hunter-gatherers and theoretical models have been used to show that human intelligence and longevity would evolve simultaneously. I maintain a strong current interest in game theory. Under this heading, I examined the technical questions of the existence of Nash equilibrium or subgame-perfect equilibrium in games with infinite action sets. Also as a matter of pure game theory, I have attempted to provide an interpretation of mixed strategy equilibrium that remains true to the spirit of that offered by von Neumann and Morgenstern. I have done some work on evolutionary game theory, where evolution is a metaphor for simple form of learning. Finally, I have applied game theory to consider the evolution of human characteristics; in particular, to an alternative model of the evolution of intelligence. This involves the so-called ‘Red Queen’ effect, where it is relative rather than absolute intelligence that matters.

**ROCHET, Jean-Charles**

*Born* 1957, Bordeaux, France.


Principal Fields of Interest D0 Microeconomics: General; G2 Financial Institutions and Services; H0 Public Economics: General.

Publications


Principal Contributions Most of my work is dedicated to the consequences of unobservable heterogeneity of economic agents (adverse selection) on the pricing policies of producers, the contracts offered by employers or lenders and the tax schedules chosen by governments. One recurring theme is the lack of robustness of established theory when multidimensional heterogeneity is introduced or when the single crossing assumption is abandoned. I have also worked on the justifications and design of solvency regulations for financial intermediaries. More recently, I have started a long-term research programme with Jean Tirole on the economics of payment card networks and two-sided industries like media, Internet portals, software and intermediaries.

RODRIK, Dani

Born 1957, Istanbul, Turkey.


Offices and Honours World Bank McNamara Fellowship, 1987–88;


**Principal Fields of Interest** F0 International Economics: General; O0 Economic Development, Technological Change, and Growth: General.

**Publications**


**Principal Contributions** I have published widely in the areas of international economics, economic development, and political economy. What constitutes good economic policy and why some governments are better than others in adopting it are the central questions on which my research focuses.

**ROE, Mark J.**

**Born** 1951, New York, NY, USA.

**Current Post** Berg Prof. Corp. Law, Harvard Law Sch., Cambridge, MA, USA, 2001–.


**Principal Field of Interest** G3 Corporate Finance and Governance.

**Publications**


**Principal Contributions** n.e.

ROGERS, John

**Born** 1961, Buffalo, NY, USA.

**Current Post** Sr Econ., FRB, Washington, DC, USA, 1994—.


**Degrees** BA Univ. Delaware, 1983; PhD Univ. Virginia, 1989.

**Editorial Duties** Assoc. Ed., J Int E, 1999—.

**Principal Fields of Interest** E3 Prices, Business Fluctuations, and Cycles; F3 International Finance; F4 Macroeconomic Aspects of International Trade and Finance.

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Principal Contributions

ROGERS, Richard G. n.e.

ROGERSON, Richard D. n.e.

ROGOFF, Kenneth S.

Born 1953, Rochester, NY, USA.


Degrees BA/MA Yale Univ., 1975; PhD MIT, 1980.


Principal Fields of Interest F3 International Finance; E0 Macroeconomics and Monetary Economics: General.


Principal Contributions My early empirical work with Richard Meese showed the stunning empirical failure of structural models of exchange rate determina-
tion. Fifteen years of subsequent research has shown that our key result – that no model of exchange rate determination can systematically out-perform a random walk model at one- to twelve-month horizons – still holds. Much of my subsequent work has dealt with issues relating to political economy and macroeconomics. My work on equilibrium political budget cycles provided the first fully-specified model of election year tax cuts and spending bulges. My paper on ‘The optimal degree of commitment’ (article 4) showed that by creating an independent central bank and appointing a ‘conservative’ central banker to head it, society could mitigate the effects of the problem of time inconsistency in monetary policy. A central point of the paper is that there is a tradeoff between credibility and commitment. My research on political economy also includes extensive work with Jeremy Bulow on the developing country debt problem. Together with Maurice Obstfeld, I have written an advanced graduate text in international finance that is the first attempt to present a unified treatment of the field, using a relatively small number of models to explain a broad range of phenomena. Our ‘Redux’ paper (article 9) gives microfoundations to the classic Mundell–Fleming–Dornbusch open-economy macroeconomics framework. This paper, and our text, have given rise to the rapidly growing field of ‘New Open Economy Macroeconomics’. Finally, my paper with Maurice Obstfeld (article 10) shows that many of the major empirical puzzles in international finance – including the Feldstein–Horioka puzzle, the international consumption correlations puzzle, the equity home bias puzzle, the home bias in trade puzzle, the PPP puzzle and the exchange rate disconnect puzzle – can all potentially be explained, quantitatively and qualitatively, in frameworks that explicitly incorporate trade frictions.

ROLAND, Gérard

Born 1954, Jemappes, Belgium.

Current Post Full Prof., Dept Econ., Univ. California, Berkeley, CA, USA, 2001–.


Principal Fields of Interest P5 Comparative Economic Systems; D7 Analysis of Collective Decision-Making; H7 State and Local Government; Intergovernmental Relations.


Principal Contributions In the beginning of my career, I tried to understand how the Soviet economic system could function, albeit inefficiently, and produce coordinated outcomes despite the absence of markets and of coherent plans. After the collapse of the communist regimes, my research switched to the economics of transition and to the modelling of large-scale institutional reforms of the transition period, with special emphasis on microeconomic reforms as privatization and restructuring. My research has covered many aspects of transition but my main emphasis has been on the political economy of reforms. My research on the transition process, and that of others, has contributed to a change of focus in our understanding of the capitalist system with a stronger emphasis on contracts and on the general political, legal and social environment of contracting. In parallel, I extended my work in political economy beyond the transition process, with a particular real world interest in the future of political institutions in the EU. First, I have started to study informal models of questions of secession, integration and co-existence of regions within federal institutions. Here, my joint work with Patrick Bolton has emphasized the political incentives not to integrate or to secede in democracies and the various conditions under which these incentives operate. The second direction has been to apply game-theoretic tools to the analysis of democratic constitutions and of comparative politics. The latter work, joint with Torsten Persson and Guido Tabellini, has emphasized the conditions under which separation of powers improves accountability of elected policy-makers and the trade-offs involved between a presidential regime with such separation of powers and a parliamentary regime where legislative cohesion is stronger. I have also started to do empirical work on the European Par-
liament by gathering all roll call vote data in the European Parliament in a joint project with Abdul Noury from Univ. Libre de Bruxelles and Simon Hix from LSE.

ROMANO, Roberta

Born 1952, Brooklyn, NY, USA.

Current Post Allen Duffy/Class of 1960 Prof. Law, Yale Law Sch., Yale Univ., New Haven, CT, USA, 1991–.


Degrees BA (Hist. and English) Univ. Rochester, 1973; AM (Hist.) Univ. Chicago, 1975; JD Yale Univ., 1980.


Principal Fields of Interest K2 Regulation and Business Law; G3 Corporate Finance and Governance.


Principal Contributions My work uses quantitative methods and economic analysis to address issues of corporate governance and the production of corporate law. My research has focussed on state competition for corporate charters, shareholder litigation, institutional investor activism in corporate governance, the political economy of takeover regulation, and regulation of financial instruments and securities markets.

ROMER, Christina Duckworth

Born 1958, Alton, IL, USA.

Current Post Class of 1957 Prof. Econ., Univ. California, Berkeley, CA, USA, 1997–.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; N1 Macroeconomics and Monetary Economics; Growth and
Fluctuations; E3 Prices, Business Fluctuations, and Cycles.


Principal Contributions My research contributions center on three topics: changes in business cycles over the 20th century, the causes of the Great Depression, and the effects of monetary policy. First, on changes in business cycles, I have shown that the data typically used for comparisons of cycles over time are not consistent. Traditional estimates of such macroeconomic indicators as the unemployment rate and industrial production for the prewar period tend to accentuate the size of short-run fluctuations. This excess volatility stems from the fact that these series were created using limited data which over-represent volatile components. I demonstrated the importance of these inconsistencies by showing that when the prewar methods are used to construct postwar estimates, these estimates are systematically more volatile than the official data. Second, on the causes of the Great Depression, I have shown that the Great Crash of the stock market in 1929 lowered consumer spending substantially by creating income uncertainty. This finding helps to explain why the US economy plummeted even before the banking panics and the related collapse of the money supply. I have also shown that monetary expansion played a crucial role in ending the Depression in the US. Third, on the effects of monetary policy, my co-author, David Romer, and I have used narrative analysis of the records of the Federal Reserve to identify times when monetary policymakers decided to reduce aggregate demand because the current level of inflation was felt to be unacceptable. We found that such decisions have been followed by large, systematic declines in real output. We have also shown that monetary policy actions affect interest rates in part because they reveal important Federal Reserve private information about future inflation.

ROMER, David Hibbard

Born 1958, Northampton, MA, USA. Current Post Herman Royer Prof. Polit. Econ., Univ. California, Berkeley, CA, USA, 2000–.


Principal Field of Interest E0 Macroeconomics and Monetary Economics: General.


Principal Contributions Much of my work falls into three areas. First, early in my career, I worked on new Keynesian economics, focusing on the question of whether small barriers to nominal adjustment at the microeconomic level can generate a large amount of nominal rigidity at the aggregate level. Second, I have done a large amount of work with Christina Romer on the effects of monetary policy. Our emphasis has been especially on combining evidence from narrative sources with statistical analysis to disentangle the channels of causation between monetary policy and the economy. Third, I have investigated the sources of the large differences in average incomes across countries.

ROMER, Paul Michael

Born 1955, Denver, CO, USA.


Degrees BS (Maths), PhD Univ. Chicago, 1977, 1983.

Offices and Honours One of Time Magazine’s 25 most influential people; Fell., Em Soc, 1996, AAAS, 2000.

Principal Fields of Interest O3 Technological Change; O4 Economic Growth and Aggregate Productivity; E1 General Aggregative Models.


**Principal Contributions**

When I started graduate school in the late 1970s, growth theory was a dead field in economics. The existing theory of growth recognized that technological change was the driving force behind economic growth, but it offered no insight into the economic forces that drove technological change. The fundamental challenge was to reconcile the concept of diminishing returns, which is critical to our understanding of markets, with historical evidence and theoretical intuitions, both of which suggested that knowledge is associated with increasing returns. My PhD thesis marked the beginning of a resurgence of interest in the underlying theory of growth that has culminated in a body of work known as the ‘new growth theory’. The starting point for this theory is the observation that knowledge or ideas are critical inputs into economic activity. New ideas drive growth in advanced economies. Inflows of existing ideas can spur rapid growth in poor countries. These ideas are the recipes or formulas that tell us how to make productive use of raw materials. The theory recognizes that ideas differ from conventional inputs like land or labor in two critical ways. First, the set of all possible ideas or recipes is virtually infinite. In the future, we shall not have more mass per person, but we shall know how to rearrange what we have in ways that are more valuable. We shall enjoy unlimited growth in the value of output per person, not in kilograms of output per person. Second, each specific idea or recipe has the property that everyone in the world can use it at the same time. This is where increasing returns enters the theory in a critical way. Together, these differences mean that societies must craft special institutional arrangements to take advantage of the economic power of ideas.

**ROSE, Andrew K.** n.e.

**ROSEN, Harvey S.**

Born 1949, Chicago, IL, USA.


**Offices and Honours** Phi Beta Kappa, 1969; NSF Grad. Fell., 1970–73; Allyn Young Teaching Prize, Harvard Univ., 1974; Fell., Em Soc, 1986–.


**Principal Fields of Interest** H0 Public Economics: General; J0 Labor and Demographic Economics: General.


Principal Contributions Most of my work has used the tools of economic theory and econometrics to analyze problems that are of relevance to public policy. Many of my articles have dealt with taxation, where I have looked at the impact of the tax system on labor supply, homeownership, and other household decisions. I have also explored the operation of labor markets, the spending and taxing behavior of state and local governments, the formation and evolution of entrepreneurial enterprises, and health insurance. From time to time I have written on methodological issues, but always with an eye toward developing tools that can be used for applied work.
Editorial Duties


Principal Fields of Interest

O1 Economic Development; J1 Demographic Economics; I2 Education.

Publications


Principal Contributions

My work has principally been concerned with obtaining a better understanding of household decision-making in a variety of economic settings, with particular attention to the formation of human capital. My initial work examined the empirical and theoretical foundations of rural employment and wage determination, which forms the underpinnings of most macro development models. Data on labor supply behavior and rural wages in developing countries, evidently not used by development theorists, were exploited to test various pervasive assumptions in the development literature. Much of my work has also been concerned with family investments in hu-
man capital, with particular focus on the role of household formation, the effects of program interventions, and economic growth. I have also investigated how family structure and formation as well as agricultural investment behavior is shaped by risk considerations in rural areas characterized by incomplete markets. I have also returned to the study of rural labor markets in low-income countries with attention to how consumption and wages are linked and how occupation and wage distributions as well as work effort reflect information asymmetries and contractual incentives. Recently I have been interested as well in the relationship between household behavior, government programs and natural resources; the effects of growth on household structure and networks, and political economy.

ROSENZWEIG, Michael R. n.e.

ROSSI, Peter E. n.e.

ROTEMBERG, Julio Jacobo

Born 1953, Buenos Aires, Argentina.


Principal Fields of Interest E3 Prices, Business Fluctuations, and Cycles; E4 Money and Interest Rates; L1 Market Structure, Firm Strategy, and Market Performance.


Principal Contributions n.e.

ROTH, Alvin E.

Born 1951, New York City, NY, USA.

Current Post Gund Prof. Econ. and Bus. Admin., Harvard Univ., Cambridge, MA, USA, 1998–.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; C9 Design of Experiments; D4 Market Structure and Pricing.


Principal Contributions Much of my work can be seen as part of the effort to develop game theory as a part of applied economics. To this end, I have spent a good deal of time thinking about how experiments can enlarge the portfolio of tools economists use to test theories, and to generally study strategic interactions in ways unavailable in field data. And I have devoted substantial effort to field studies which trace over time the evolution of rules and procedures as they are put under stress by the ways they are strategically ‘gamed’ by market participants. Both of these empirical streams of work have led me in my theoretical work to look for robust ways to think about stability, and about learning and adaptation in strategic environments. Lately I have also had a good deal of opportunity to think about how game theory, experimental economics, and theoretical computation can be brought to bear on the problems of designing markets and allocation mechanisms (see my essay ‘The economist as engineer’ in the July 2002 issue of Econometrica). The big American market for new physicians now uses a clearinghouse algorithm of my design to match over 20,000 physicians a year with their first jobs.

ROTHSCHILD, Michael

Born 1942, Chicago, IL, USA.


Degrees BA (Anthropology) Reed Coll., 1963; MA (Intl Relations) Yale Univ., 1965; PhD MIT, 1969.


Principal Fields of Interest D0 Microeconomics: General; D8 Information and Uncertainty; I2 Education.


Articles: 1. ‘Increasing risk: I. A definition’ (with J.E. Stiglitz), JET, 2, Sept. 1970; 2. ‘Searching for the lowest price when the distribution of prices is unknown’, JPE,

Principal Contributions Devising tools, concepts and models for studying markets with uncertainty and imperfect information.

ROTNITZKY, Andrea n.e.

ROUBINI, Nouriel n.e.

ROUSSEEUW, Peter J. n.e.

RUBIN, Donald Bruce

Born 1943, Washington, DC, USA.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C8 Data Collection and Data Estimation Methodology; Computer Programs; C9 Design of Experiments.


Principal Contributions In the 1970s, I introduced a framework, with accompanying basic terminology and results, for missing data problems (article 2), including inventing multiple imputation for missing data (summarized in books 1, 2 and 3). Also in the 1970s, I created a general formulation for causal inference in both randomized and observational studies, from either frequentist or Bayesian inferential perspectives, based on potential outcomes (‘Rubin’s Causal Model’ – articles 1 and 4). With Dempster and Laird, I introduced the EM Algorithm (article 3) and with others, continued to develop its extensions (ECM, PX-EM) in the next decades. In a paper that has been widely cited, I defined and motivated the Bayesian Bootstrap (article 6). Paralleling my work in causal inference, I introduced basic matching methods for observational studies, including Mahalanobis metric matching in the 1970s (articles 5 and 9), and ellipsoidal/affinely invariant extensions in the 1990s (with Thomas, article 12). With Rosenbaum, I proposed propensity score methods and general sensitivity analyses in observational data in the 1980s (articles 7 and 8). Also in the 1980s, I proposed posterior predictive checks, as a generalization of Fisher’s randomization test, for testing with irregular likelihoods.
and in other complex situations (article 10). More recently, I proposed sampling/ importance resampling to simplify simulation-based inference (article 11), and with Gelman, proposed multiple-chain methods for assessing convergence of MCMC simulations (article 13). With Angrist and Imbens, I described methods for dealing with noncompliance to treatment assignment, thereby bridging statistical and econometric instrumental variables (IV) approaches to causality (article 14). With Imbens and Frangakis, I implemented conceptual and Bayesian computational extensions of the IV framework and techniques (articles 15 and 16). Throughout, my work has attempted to bridge frequentist and Bayesian methods, with a focus on the latter (book 4, with Gelman, Carlin and Stern).

RUBINSTEIN, Ariel

Born 1951, Jerusalem, Israel.

Current Posts Prof. Econ., Tel Aviv Univ., Tel Aviv, Israel, 1990–; Lect. in Rank of Prof., Princeton Univ., Princeton, NJ, USA, 1991–.


Degrees BSc (Maths, Econ. Stats), MA, MSc (Maths), PhD Hebrew Univ., 1974, 1975, 1976, 1979.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D0 Microeconomics: General.


Articles: 1. ‘Equilibrium in supergames with the overtaking criterion’, JET, 21, 1979; 2. ‘An optimal policy for offenses that may have been committed by accident’, in S. Brams, A. Schotter, G. Schwodiauer (eds), Applied Game Theory (Physica-Verlag, 1979); 3. ‘Perfect equilibrium in a bargaining model’, Em, 50, 1982; 4. ‘The single profile analogies to multi profile theorems: mathematical logic’s approach’, IER, 25, 1984; 5. ‘Equilibrium in a market with sequential bargaining’ (with A. Wolinsky), Em, 53, 1985; 6. ‘Finite automata play the repeated prisoner’s dilemma’, JET, 39, 1986; 7. ‘Similarity and decision-making under risk’, JET, 46, 1988; 8. ‘The electronic mail
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**Principal Contributions** Most of my work was done in the foundations of game theory and its applications to economics. The main subfields in which I was working are: (1) The model of infinite horizon repeated games. The main results achieved simultaneously with Aumann and Shapley are the so-called ‘perfect-folk theorems’ with the limit of the means and the over-taking criterion. (2) The alternating offers bargaining model which provided a non-cooperative foundation to Nash bargaining solution. (3) (With A. Wolinsky) Pairwise matching bargaining market models and the examination of the foundations of the competitive equilibrium notion. (4) The model of repeated games with finite automate in which bounded rationality considerations were embedded explicitly into the model. (5) Questions of interpretations of game theory. (6) Modeling bounded rationality in decision making and game theory. (7) (With M. Piccione). Decision making with imperfect recall. (8) Economics and language: viewing phenomena from the natural language from an economic perspective. (9) Experimental economics and its methodology.

**RUDEBUSCH, Glenn D.**

**Born** 1959, Milwaukee, WI, USA.

**Current Post** Vice Pres., FRB, San Francisco, CA, USA, 2002–.


**Principal Fields of Interest** C0 Mathematical and Quantitative Methods: General; E0 Macroeconomics and Monetary Economics: General.


**Principal Contributions** I have researched a wide variety of topics in empirical macroeconomics. These are some notable results and findings: (1) The duration stabilization of postwar business cycles. (2) The lack of predictive information in the leading index in real time. (3) The lack of duration dependence in postwar US business expansions. (4) The plausibility of traditional smooth trend/cycle macroeconomic decompositions. (5) The implausibility of measures of monetary policy shocks in a VAR. (6) The modeling of inflation targeting as a monetary policy rule. (7) The weak empirical relevancy of the Lucas Critique in many situations. (8) The implausibility of historical estimates of partial adjustment monetary policy rules. (9) A characterization of the nature of optimal monetary policy rules under model and data uncertainty.

**RUHM, Christopher J.**

- **Born** 1955, San Francisco, CA, USA.
- **Current Post** Jefferson-Pilot Excellence Prof. Econ., Univ. North Carolina, Greensboro, NC, USA, 1991–.
- **Editorial Duties** Assoc. Ed., *Europ ER*, 2003–.
- **Principal Fields of Interest** I1 Health; J0 Labor and Demographic Economics: General.
Principal Contributions

Much of my early research examined the consequences of job change and labor displacements. A series of papers illustrated the substantial variance in wage changes following job mobility, the contrast between the persistence of wage losses following job displacements and the relatively short-lasting increases in unemployment, and the extent to which advance notice mitigates adjustment problems. A second line of my inquiry demonstrated that the transition process into retirement is considerably more complex than is often thought, by stressing the importance of gradual withdrawal from the labor force which often includes periods of employment in bridge jobs, partial retirement, and reverse retirement. This research also shows that pensions delay retirement in some situations (while promoting it in others), and provides information on secular changes in the retirement process. Much of my recent work examines issues at the intersection between health and labor economics. Using cross-country data, I have provided evidence that entitlements to parental leave following the birth of a child increase female employment and improve child health. However, rights to lengthy job absences may have negative effects on women’s wages. I have also investigated how macroeconomic conditions are related to health. This research indicates that health improves when the economy temporarily deteriorates, and provides several mechanisms for these effects, including reductions in vehicle fatalities, heavy drinking, smoking, obesity and physical inactivity. Some of these changes are related to declining incomes and others to decreases in the time costs of investing in health. I have also conducted research examining the effects of high school employment on future economic attainment, intergenerational transmission of economic inequality, consequences of workplace drug abuse policies and the effects of alternative medical reimbursement systems on hospital transfer policies.

RUNKLE, David E. n.e.

RUPPERT, D. n.e.

RUSH, Mark n.e.

RUSSETT, Bruce Martin

Born 1935, North Adams, MA, USA.
Current Post Dean Acheson Prof. Intl Relations, Yale Univ., New Haven, CT, USA, 1985–.


Principal Fields of Interest F1 Trade; H4 Publicly Provided Goods; C8 Data Collection and Data Estimation Methodology; Computer Programs.


Principal Contributions Most of my work has involved theory and statistical analysis at the nexus of economics and political science, especially as they affect conditions of peace and war. My early work involved the effect of international ties of trade and finance in promoting peaceful relations between countries. I returned to this topic in the 1990s, addressing the inter-relationship of four elements of international relations: democratic political systems, trade, international organizations, and the reduction of violent conflict, with J. Oneal and other co-authors. This work required the
creation of a very large historical database on the characteristics of countries and their interactions, and the solution of difficult methodological problems. We established strong evidence of a positive feedback system among these elements, which we call a ‘Kantian’ peace system, embodied in its highest form in the European Union. My other work included analysis of the political influences on military expenditures; the effect of military spending and international tensions on reducing savings and investment; the social and economic development of less-developed countries; the impact of economic interests on US foreign policy; the effect of alliances on spending for collective goods such as military deterrence; and the creation and empirical testing of models to predict success or failure of acts of deterrence. Most recently I have been engaged in a large-scale statistical study of the comparative political economy of health conditions across the world, especially of the long-term mortality and disability deriving indirectly from the effects of civil war.
SAARI, Donald Gene

Born 1940, Ironwood, MI, USA.

Current Posts Disting. Prof. Econ. and Maths, and Dir., Center for Decision Analysis, and Prof. (courtesy) Logic and Philo. Sc., Univ. California, Irvine, CA, USA, 2000–.


Principal Fields of Interest D7 Analysis of Collective Decision-Making; C7 Game Theory and Bargaining Theory.


Principal Contributions My recent contributions involve voting and social choice. For instance, in my Cambridge University Press book, I show that Arrow’s and Sen’s theorems admit benign interpretations, rather than impossibility assertions; the problem is caused because their procedures are prohibited from using crucial, available information about the voters. This interpretation introduces simple ways to sidestep these problems and it adds to the strength of Arrow’s and Sen’s insights because the basic cause is central to many other economic issues. Beyond the inherent interest in ‘voting procedures’, they provide simple proto-
types for other aggregation methods from economics and the social sciences; a recently completed project (reported in my Math. Society book and recent _ET_ and _JET_ papers) was to identify all possible paradoxes that could ever occur with any standard voting methods and with any number of alternatives and voters, to find a way to create all possible illustrating profiles, and to explain all of these problems. In game theory, Sieberg and I discovered that power indices allow wide classes of unexpected outcomes while admitting strong relationships; earlier work (1997) resolved the problem about the dimensions of issue space which permit stable (core) outcomes. What attracted me to economics was the price mechanism; here I extended (1992) the Sonnenschein–Mantel–Debreu theorem from their setting of the set of all alternatives to all possible subsets, and (one paper with C. Simon) showed it is impossible to construct price mechanisms which always work; the informational demands are infinite. By using dynamical systems, some of my work has shown why it is so easy and likely for price mechanisms to be chaotic with unexpected behavior and why even simple economic and decision procedures can be so complex.

SACHS, Jeffrey David

Born 1954, Detroit, MI, USA.


Principal Fields of Interest
O0 Economic Development, Technological Change, and Growth: General; Q0 Agricultural and Natural Resource Economics: General; I0 Health, Education, and Welfare: General.

Publications


Principal Contributions
Development Bank in May 1997. In February 1997, I prepared a proposal for 'A New Partnership for Growth in Africa', which has contributed to the reformulation of US foreign assistance policies with regard to Africa.

SADOULET, Elisabeth

Born 1945, Lyon, France.

Current Post Prof., Dept Agric. and Resource Econ., Univ. California, Berkeley, CA, USA, 1985–.


Honour Outstanding Dissertation Award, Switzerland, 1983.


Principal Fields of Interest 01 Economic Development; I0 Health, Education, and Welfare: General; F1 Trade.


Principal Contributions Most of my work has been directed at understanding
the causes of underdevelopment, poverty, and environmental degradation, and at analyzing policies and programs that can help remedy these situations. To do this, I have used theoretical and empirical tools, as well as extensive field visits and case studies. My work has covered Africa, Latin America, and some of East Asia. I have worked with most of the international development agencies, particularly the World Bank, the FAO, the International Fund for Agricultural Development, the UNDP, the Inter American Development Bank, and the ILO.

SAIKKONEN, Pentti Juhani

Born 1952, Lahti, Finland.
Current Post Prof. Stats, Univ. Helsinki, Helsinki, Finland, 1998–.
Principal Fields of Interest C3 Econometric Methods: Multiple/Simultaneous Equation Models; C1 Econometric and Statistical Methods: General.

Principal Contributions

My work has been related to time-series econometrics. In the late 1980s, R. Luukkonen, T. Teräsvirta and I developed Lagrange multiplier type tests for testing linearity in time-series models. We also studied the power of these tests against various nonlinear alternatives. In this context I derived general theoretical results about asymptotic relative efficiency of classical likelihood based tests under misspecification. In the 1990s I did research on unit roots and cointegration which had become important areas of time-series econometrics. Luukkonen and I developed tests for a moving average unit root which provided a way to test the null hypothesis of cointegration with a known cointegrating vector. I also worked on various estimation and testing problems in cointegrated systems. My early work in this area included finding a way to measure estimation efficiency and developing asymptotically efficient estimators of cointegrating vectors. I was also interested in extending cointegrated systems to allow for structural restrictions on cointegrating vectors. This led me to develop estimation and testing theory in cointegrated systems first with linear and then with nonlinear parameter restrictions and nonlinear deterministic time trends. In the late 1990s, Luukkonen, H. Lütkepohl and I used some alternative detrending methods previously used for univariate unit root tests and derived tests for the cointegrating rank in the context of vector autoregressive models. We also studied the asymptotic local power of these tests and some related tests. Part of this work allowed the order of the autoregression to be infinite. The latest work on this topic focused on processes with a structural level shift and it was started by first developing similar univariate tests for an autoregressive unit root.

SAINT-PAUL, Gilles Jacques Bruno

Born 1963, Saint-Étienne, France.

Current Post Prof., Inst. d’Économie Ind. (IDEI), Univ. Sc. Sociales, Toulouse, France, 2000–.


Degrees BSc (Eng.) École Polytech., 1985; MSc (Maths) Univ. Paris IX, 1986; PhD MIT, 1990.


Principal Fields of Interest E2 Consumption, Saving, Production, Employment, and Investment; J6 Mobility, Unemployment, and Vacancies; O1 Economic Development.


**Principal Contributions** Analysis of the effect of labour market regulations on unemployment in dynamic general equilibrium, in particular in the case of employment protection legislation. Theoretical determinants of the effects of financial development on real development and economic growth. Macroeconomic properties of two-tier labour markets, with an analysis of the role of employment protection legislation and of the consequences for the returns of skill acquisition. Analysis of the interaction between aggregate fluctuations and economic growth. Effects of budget deficits and intergenerational transfers on long-run economic growth in an endogenous growth framework. Empirical analysis of labour market flows in the French and Spanish labour markets. Historical study of French post-war economic reconstruction in the light of recent macroeconomic theory. Empirical and theoretical analysis of the political economy of labour market institutions: employment protection, wage compression, active labour market policy, minimum wages, unemployment benefits. Political economy of redistributive transfers, and consequences for the dynamics of output and income distribution. Analysing the effect of technical progress on employment dynamics and income distribution, in particular the effect of informational networks and new information technologies on worker assignment and the clustering of the labour market by skill levels. More recently, I have studied the evolutionary foundations of price stickiness in macroeconomics, the role of complexity in optimal policy design, and the role of intellectual property rights in the determination of economic growth and the distribution of income.

**SALA-I-MARTIN, Xavier**

**Born** 1963, Barcelona, Spain.

**Current Post** Prof. Econ., Columbia Univ., New York, NY, USA, 1995–.


**Degrees** MA, PhD Harvard Univ., 1987, 1990.

**Honours** King Juan Carlos I of Spain Prize for best social sc. under 40, 1998; Kenneth Arrow Prize for best Paper in Health Econ. publ. in 1999, 2000; Banco Herrero Prize for best Spanish econ. under age of 40, 2002.

**Principal Fields of Interest** N1 Macroeconomics and Monetary Economics;
Growth and Fluctuations; O0 Economic Development, Technological Change, and Growth: General; I0 Health, Education, and Welfare: General.

**Publications**

**Books:**

**Articles:**

**Principal Contributions**

SALONER, Garth

**Born** 1955, Johannesburg, South Africa.


**Offices and Honours** Res. Assoc., NBER, 1991–.


**Principal Fields of Interest** L1 Market Structure, Firm Strategy, and Market Performance; M1 Business Administration.

**Publications**

**Books:** 1. *Strategic Management* (with A. Shepard, J. Podolny),


Principal Contributions

Joseph Farrell and I made a number of the earliest contributions to the literature on network effects, showing how consumer preferences for compatibility and standardization could affect market structure and competition. Julio Rotemberg and I have explored the relationship between strategic firm interactions and the behavior of prices, markups, and inventories over the business cycle. In a more recent line of work we have explored the relationship between organizational incentives and business strategy, vision, and leadership. Most recently I have explored the implications of economics to strategic management (in a book with Andrea Shepard and Joel Podolny) and to Electronic Commerce (in a book with Michael Spence).

SALOP, Steven C.

Born 1946, Reading, PA, USA.

Current Post Prof. Econ., Georgetown Univ. Law Center, Washington, DC, USA, 1981–.


**Principal Fields of Interest** D0 Microeconomics: General; L0 Industrial Organization: General; D8 Information and Uncertainty.

**Publications**


**Principal Contributions**

My thesis and early articles examined the role of imperfect information in various types of markets. The resulting need to better understand how imperfectly competitive equilibria led into monopolistic competition theory and then to industrial organization, deregulation and antitrust. More recently I have been applying industrial organisation models to a variety of antitrust issues, particularly exclusionary conduct. As a general matter, I have tried to formulate rigorous economic theories of antitrust liability and formulate efficiency and market power rationales for business conduct.

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**SAMUELSON, Larry W.** n.e.

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**SANDLER, Todd**

**Born** 1946, Mt Kisco, NY, USA.

**Current Post** Robert R. and Katheryn A. Dockson Prof. Intl Relations and Econ., Sch. Intl Relations, Univ. Southern California, Los Angeles, CA, USA, 2000–.


**Offices and Honours** NATO Fell., 1977–78, 1998–2000; Vis. Fell., Univ. Ab-


Principal Fields of Interest D0 Microeconomics: General; D7 Analysis of Collective Decision Making; H0 Public Economics: General.


Principal Contributions Most of my work is related to market failures, e.g., externalities, public goods, and the commons. My 1986 book with Richard Cornes synthesized the theory of public goods, externalities, and club goods. This book presented a private provision of public goods model that has grown to dominate the analysis in the study of public economics. This model was first presented in a series of papers that we wrote from 1980 to 1985. My 1992 book, Collective Action, synthesized many strains of thought on collective action. In particular, it showed when Mancur Olson’s axioms of collective action held and when they did not hold. The book also contained many applications. In 1997, my book Global Challenges examined a wide range of challenges from global warming to antibiotic-resistant microbes. This book demonstrated the useful application of game
theory to these global contingencies. From 1982 on, I have worked with a number of economists (e.g., Walter Enders, John Tschirhart) to apply theoretical and empirical tools of economics to the study of transnational terrorism. Since 11 September 2002, there has been tremendous interest in this body of work. I continue to publish on the topic. Keith Hartley and I have promoted *defence economics* as a subfield of economics. We have done so through our writings and editing activities. Our defence economics book (CUP) and our co-edited Handbook (N-H) are the two standard references in the field. I have written extensively since 1972 on the economics of alliances. In 2001, I published *Economic Concepts for the Social Sciences*, which evaluated economists’ many contributions over the last 100 years. I have also made many contributions to environmental economics and economic development.

SANTOS, Manuel S. n.e.

SAPPINGTON, David E.M. n.e.

SARGENT, Thomas J. n.e.

SAUNDERS, Antony n.e.

SCHARFSTEIN, David S. n.e.

SCHEINKMAN, José Alexandre

Born 1948, Rio de Janeiro, Brazil.


Principal Fields of Interest D0 Microeconomics: General; G1 General Financial Markets.


Principal Contributions Some of my work involved developing new mathematical or statistical tools for the study of economics such as articles 5, 12, 14 and 16 above. In other cases, I started with a precise economic question and developed a mathematical model that was capable of shedding light on the question (for example, articles 6, 7, 8, 9, 12, 13, 15, 19, 20). I also established empirical regularities that had not been previously recognized (articles 9, 10, 11, 17).
Principal Contributions

My research concerns the theory of preferences and choice. My work has focussed on investigating the nature of preferences and, in particular, the assumption that preferences are well defined and coherent. The conclusion of this work is that preferences are generally constructed – not revealed – at the time a choice or judgment is required. One key implication of this view (and the evidence for such a viewpoint) is that preferences are highly contingent upon a variety of factors characterizing decision problems (e.g., information format, framing of outcomes as gains or losses). My two main areas of application of the idea of constructed preferences have been in environmental valuation, and in law and economics. In the environmental domain, I have studied the method of contingent valuation, which uses stated preferences to value public goods such as pristine wilderness and the viability of endangered species. My best-known work in this area (with John Payne) showed that the considerations that people use when constructing their willingness to pay for an improvement in an environmental good are often normatively indefensible.
Further work (variously with Daniel Kahneman, John Payne and William Desvousges) has shown that people’s evaluations of environmental goods are best viewed as affective responses, which are imperfectly mapped into actions such as monetary amounts. My work on law and economics concerns how juries make decisions about punitive damages. This work (with Kahneman, Cass Sunstein, Payne, and Reid Hastie) has focussed on the idea that jurors’ evaluations, in the form of a dollar amount of punitive damages, are best viewed as expressions of outrage at a defendant’s behavior, rather than as calculated judgments about social deterrence. The difficulty of translating these reasonably well-behaved moral judgments onto a monetary scale is identified as the key cause of unpredictable jury awards.

SCHMALENSEE, Richard Lee

Born 1944, Belleville, IL, USA.

Current Posts John C Head III Dean, Prof. Econ. and Mgmt, Sloan Sch., MIT, Cambridge, MA, USA, 1998–; Prof., Dept Econ., MIT, 1986–.


Principal Fields of Interest L0 Industrial Organization: General; D0 Microeconomics: General; Q2 Renewable Resources and Conservation: Environmental Management.


Principal Contributions I began my career as a microeconomist working on a wide range of topics, from macroeconomic modeling to cost/benefit analysis. During the 1970s, my work came to center on industrial organization and related policy domains. Much of my research in this broad area has stressed the use of theory to illuminate market reality and the importance of nonprice competition in modern markets. On the Bush Council of Economic Advisers, I worked on and learned about a wide range of policy issues. Since returning to MIT in 1991, I have been more engaged in antitrust, regulatory, and environmental policy. In the last of these areas, I have studied the economics of climate change policy and the use of tradable emission permits to control acid rain in the US. Antitrust engagements have led to work on policy toward dynamic industries and payment systems. In recent years, my administrative duties have taken a substantial share of what had been research time. I remain a variety-seeker who enjoys using economics to understand the world.

SCHMEIDLER, David

Born 1939, Krakow, Poland.

Current Posts Prof. Econ. and Stats, Tel Aviv Univ., Israel, 1978–; Prof. Econ., Ohio State Univ., Columbus, OH, USA, 1987–.


Offices and Honours Chairman, Dept Stats, Tel Aviv Univ., 1983–85; Fell., Em Soc, 1990.


Principal Fields of Interest D8 Information and Uncertainty; C0 Mathematical and Quantitative Methods: General.


Principal Contributions My research interests in recent years have dealt mainly with the informational aspects of decisions under uncertainty. My other research interests have included and include cooperative and non-cooperative games and topics in microeconomics, including general equilibrium implementation and equity. My academic position has been divided between mathematics and economics.
SCHMIDT, Klaus M.

Born 1961, Koblenz, Germany.

Current Post Prof. Econ., Univ. Munich, Munich, Germany, 1995–.


Principal Fields of Interest D0 Microeconomics: General; C7 Game Theory and Bargaining Theory; D8 Information and Uncertainty.


Principal Contributions n.e.

SCHMIDT, Peter

Born 1947, Port Washington, WI, USA.


Principal Field of Interest C5 Econometric Modeling.


Principal Contributions My earliest work was on a fairly wide variety of then-standard econometric topics, with some emphasis on autocorrelation, distributed lag models, and forecasting. Some of this work was related to the preparation of my 1976 text. In the late 1970s I became interested in models for qualitative and limited dependent variables, a topic that I pursued for some ten years or so. At about the same time I started working on frontier production functions and the measurement of productive efficiency, and I have continued my interest in this topic to the present day. This work has received a mixed reaction from economists, who have trouble believing in inefficiency as an economic concept, but has clearly been my most heavily cited and empirically influential contribution. I also started a long-term collaboration with Ann Witte on problems in criminology and the economics of crime, which led to two books. In the 1980s I became interested in panel data, and I have continued to work on this topic since then, with some focus on its relationship to the efficiency measurement problem. Since the late 1980s I have also been involved in the widespread econometric research agenda on unit roots and cointegration, and most recently on models for long-memory time series. Finally, I have recently written papers on some specialized aspects of generalized method of moments estimation, and the application of GMM to panel data models.

SCHOLZ, John Karl

Born 1959, Lincoln, NE, USA.


Principal Fields of Interest H0 Public
Economics: General; H2 Taxation, Subsidies, and Revenue.


Principal Contributions My work focusses on taxation and wealth accumulation and public policy targeted at low-wage labor markets. In work with W. Gale and E. Engen we have raised questions of whether tax incentives for saving, such as individual retirement accounts and 401(k)s, are an effective mechanism for increasing household saving in the United States. I have done considerable work on the distributional, compliance, and labor market effects of the earned income tax credit, a tax provision targeted at low-income working families in the United States.

SCHOTMAN, Peter C. n.e.

SCHULTZ, Paul Harvey

Born 1956, Hancock, MI, USA.

Current Post John and Maude Clarke Prof. Fin., Notre Dame Univ., Notre Dame, IN, USA, 1998–.


Principal Fields of Interest G0 Financial Economics: General; G1 General Financial Markets; G3 Corporate Finance and Governance.

Feb. 1999; 8. ‘Do the individuals closest to Internet firms believe they are overvalued?’ (with M. Zaman), J Fin E, 59, March

Principal Contributions My work has examined the organization and operation of securities markets, and has explored
topics in corporate finance. My work with W. Christie documenting the quotation practices of NASDAQ market makers led
to a reorganization of the NASDAQ market. My paper with Mir Zaman on Internet IPOs provides evidence that the people
closest to Internet firms did not believe the Internet sector was overpriced in 1999–2000. My paper on the long-run performance of IPOs provides an efficient
markets explanation for the poor long-run performance of firms that issue equity.

SCHULTZ, T. Paul

Born 1940, Ames, IA, USA.

Current Post Malcolm K. Brachman
Prof. Econ. and Demography, Yale Univ., New Haven, CT, USA, 1977–.


Degrees BA Swarthmore Coll., 1961; PhD MIT, 1966.

Offices and Honours Mem., Res. Advisory Panels, NIH, 1968–78, NAS Study Group on Pop., 1969–71, Steering Group,
Advisory Comm., US Census Bureau on Pop. Stats, 1980–86; Working Group on Causes and Consequences of Demo-
for Arab Countries, Iran and Turkey, 1993–2001; Mem., Divs Comm. Behav. and Social Sc. and Educ., NRC, 1996–;


Principal Fields of Interest J1 Demographic Economics; J4 Particular Labor Markets.


**Principal Contributions** Applying microeconomic theories of individual and family behavior to empirically account for a wider range of economic and demographic choices and outcomes. Adapting these theories to describe conditions relevant for fertility and women’s behavior in low- and high-income countries raises questions of what life-cycle events are exogenous constraints on fertility, in the sense of being uncorrelated with the errors in family demand equations. Conditions of the family that at first appear to be determinants of fertility – such as age-at-marriage, migration, investments in the human capital of children, child mortality – are reconsidered as being endogenous. When they are treated as jointly and simultaneously determined in the life-cycle context, empirical estimates of the response of fertility are shown to change substantially with respect to female and male wage rates, relative prices, non-employment income, and community services. Standard regression estimates of household production functions for health and fertility appear biased, because individual endowments of healthiness and fecundity influence behavior and cannot be observed and controlled, thereby distorting estimates of technical effectiveness of behaviors, such as the use of health care on health outcomes or birth control on fertility. Simultaneous equations and instrumental variable methods are informative when forcing variables can be specified and observed. Panel data permit closer examination of behavioral dynamics. Family formation and intra-family allocation of resources require proceeding beyond the unified model of family-coordinated behavior, to models of bargaining and cooperative sharing-rules that identify how gender and intergenerational differences in well-being arise in families. Families coordinate and finance human capital investments in children, and society subsidizes these investments. Cooperative models of the family clarify both the determinants and consequences of such home-production of child nutrition, health, and schooling, contributing to a new consensus on how to measure personal empowerment which affects child development outcomes.

SCHWAB, Robert M. n.e.

SCHWARTZ, Alan n.e.

SCHWARTZ, Eduardo S. n.e.
SCHWERT, G. William (Bill)

Born 1950, Durham, NC, USA.


Principal Fields of Interest G1 General Financial Markets; G3 Corporate Finance and Governance; C2 Econometric Methods: Single Equation Models.


Principal Contributions I have worked in several areas, including: the relations among interest, inflation rates, and asset returns; the volatility on asset returns; the effects of government regulation on business; the market for corporate control; and the use of time-series techniques. C. Nelson and I showed how nominal interest rates vary with changes in expected inflation and with expected real interest rates. E. Fama and I showed that expected stock returns varied negatively with nominal in-
terest rates and expected inflation. I have also studied the behavior of stock market volatility. K. French, R. Stambaugh, and I found that volatility is highly persistent, and that there is a strong asymmetric effect of returns on volatility – it rises sharply following crashes. I found that it is hard to explain time-varying volatility with macroeconomic factors or leverage. A. Pagan and I studied time-varying volatility using GARCH, regime-switching, and non-parametric models. Several of my papers have studied statistical problems caused by ‘unit roots’. In particular, I have studied the behavior of data processes that have a slowly moving ‘permanent’ component and a volatile ‘transitory’ component. Many common macroeconomic time series exhibit such behavior. I have also studied the market for corporate control and for initial public offerings (IPOs). R. Comment and I find that takeover defenses increased the bargaining power of target firms, increasing the gains to target firm shareholders, but having minimal effect on the number of successful takeovers. I find that ‘hostility’ in takeover contests is mostly a manifestation of bargaining strategy, rather than agency costs imposed by entrenched target managers. M. Lowry and I find that the pronounced cycles in the IPO market reflect the price discovery process that occurs during the marketing phase of the IPO, which is correlated across similar deals that occur at the same time.

SCOTCHMER, Suzanne Andersen

Born 1950, Seattle, WA, USA.

Current Post Prof. Econ. and Public Pol., Univ. California, Berkeley, CA, USA, 1986–.


Principal Fields of Interest D0 Microeconomics: General; K0 Law and Economics: General; L0 Industrial Organization: General.


Principal Contributions My contributions have been mainly in three subjects: club theory, intellectual property and incentives for R&D, and evolutionary game theory. In club theory, my co-authors and I have succeeded in integrating group formation into general equilibrium theory. The main problem we solved was that of ensuring consistent choices of club membership. Prices for memberships must be such that whenever one agent wants to join a group of a certain type, there are other agents who want to fill the other memberships. In intellectual property, my contributions have been twofold: in the design of patent law when innovation is cumulative, especially as to ‘breadth’ of protection, and in the study of optimal mechanisms for supporting R&D, recognizing that intellectual property is a single example of such mechanisms. In evolutionary game theory, my co-author and I have studied the attitudes toward risk that would arise from evolutionary forces, and whether the preferences over strategies that evolve can be understood as rational behavior.

SCOTT, Allen John

Born 1938, Liverpool, UK.

Current Post Prof., UCLA, CA, USA, 1980–.


Degrees BA (Geography) Oxford Univ., 1961; PhD (Geography) Northwestern Univ., 1965.


Principal Fields of Interest Z0 Other Special Topics: General (Economic Geography); Z0 Other Special Topics: General (Location Theory); R0 Urban, Rural, and Regional Economics: General.


**Principal Contributions** My contributions include: quantitative models of spatial systems; studies of urban land value and land use; applications of neo-Ricardian economics to problems in economic geography; the interrelations between industrial organization and location; theoretical and empirical research on the logic and dynamics of agglomeration; work on the intellectual history of economic geography.

**SCOTT, Linda M.** n.e.

**SEGAL, Uzi**

Born 1954, Jerusalem, Israel.

**Current Post** Prof. Econ., Boston Coll., Chestnut Hill, MA, USA, 2000–.


**Principal Fields of Interest** D8 Information and Uncertainty; D7 Analysis of Collective Decision-Making.


**Principal Contributions** Analysis of preference relations over lotteries without the reduction of compound lotteries axioms, with applications to the Ellsberg
paradox and to the existence of Nash equilibrium; axiomatizations of some non-expected utility models; analysis of social welfare functions without expected utility.

SEGERSON, Kathleen n.e.

SEGERSTROM, Paul Stephen

Born 1957, Winchester, MA, USA.
Principal Fields of Interest F1 Trade; O4 Economic Growth and Aggregate Productivity.

Principal Contributions My research has focused on incorporating Joseph Schumpeter’s insights into mainstream economic theory. I have developed economic models where firms invest in R&D (research and development) in each industry with the goal of developing high-quality products. When they are successful, innovative firms earn monopoly profits from selling these new products until they are driven out of business by further innovation. Thus, the identity of industry leaders changes over time and behind the steady economic growth at the aggregate level, there is a ‘process of creative destruction’ occurring at the industry level. Because technological change is ultimately determined by the R&D choices of profit-maximizing firms and technological change is the engine driving economic growth, countries can influence how fast their economies grow by changing the R&D incentives firms face. My research shows that countries can promote economic growth not only by subsidizing R&D activities, but also by lowering common international trade barriers, by reducing trade protection for dying industries and by enforcing more strongly intellectual property rights.

SEGUIN, Paul J. n.e.

SEIFORD, Lawrence M. n.e.
SELDEN, Thomas M. n.e.

SELTEN, Reinhard

Born 1930, Breslau, then Germany, now Poland.

Current Post Head, Laboratorium für experimentelle Wirtschaftsforschung, Univ. Bonn, Germany, 1996–.


Degrees Master (Maths) Johann-Wolfgang-Goethe-Univ., 1957.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; C9 Design of Experiments; D5 General Equilibrium and Disequilibrium.


Principal Contributions I was awarded the Nobel Prize for Economics in 1994 for two publications from the years 1965 and 1975. With these papers I achieved a decisive breakthrough in game theory: the introduction of the concepts of sub-game perfect and perfect equilibria reduced the set of Nash equilibria drastically by excluding threats that are not credible. Thus, more precise and sensible predictions can be made for many games, e.g., markets. My work contributed greatly to the applicability of game theory to large parts of economic theory. Today, most of the leading scientific journals are dominated by game-theoretic articles. Additionally, game theory has found applications in all of the social sciences and even in biol-
As well as being a founder of the game-theoretic method, I have also contributed some of the most important applications of game theory to economic questions, especially in the theory of oligopolies. I have, for example, shown that strict cartel laws can be surprisingly positive for the economy. But I have also contributed a number of applications to other disciplines. I have (co-) written papers on linguistics, criminology, and botany. I call myself a ‘methodic dualist’. Next to my work on normative theory, in which subjects are presumed completely rational, I always also was – and recently have been even more – concerned with research on descriptive theories with which the observed boundedly rational behavior of subjects is explained. Thirty years ago, I was the first to introduce experimental economics in Germany. I ran experiments in which subjects made economic decisions in a controlled environment. The goal of these – and of the various other experiments I ran later – was to construct positive theories with which the subjects’ boundedly rational behavior could be better described and predicted than with traditional theory. Quite a number of such descriptive theories have evolved in the years in which my team and I have been doing experimental work at the Laboratorium für experimentelle Wirtschaftsforschung.

**SEN, Amartya Kumar**

*Born* 1933, Santiniketan, Bengal, India.

*Current Post* Master, Trinity Coll., Cambridge Univ., Cambridge, UK, 1998–.


**Degrees** BA Calcutta Univ., 1953; BA, PhD Univ. Cambridge, 1955, 1959.


**Principal Fields of Interest** D6 Welfare Economics; O4 Economic Growth and Aggregate Productivity; O1 Economic Development.


**Principal Contributions** Works in welfare economics and social choice theory, particularly in expanding their informational bases, incorporating considerations of liberty and rights, and exploring problems of collective rationality. Contributions to methods and techniques of economic measurement, particularly of real national income, poverty, inequality and
unemployment. Exploration of the analytic foundations of rational choice and of the behavioural bases of economic theory. Contributions to the choice of technology in developing countries, and to methods of shadow pricing and cost–benefit analysis. Developing a theory of the causation of famines, focusing on entitlement relations and general economic interdependence rather than just on food supply, and application to particular famines in Asia and Africa.

SEN, Arunava n.e.

SERLETIS, Apostolos

Born 1954, Karia Elasonos, Greece.

Current Post Prof. Econ., Univ. Calgary, Canada, 1991–.


Principal Fields of Interest C1 Econometric and Statistical Methods: General; E4 Money and Interest Rates; G2 Financial Institutions and Services.


Principal Contributions My research has mostly been concerned with the identification of a theoretical structure that
links neoclassical microeconomic theory with the final monetary aggregates that are employed by central banks around the world. I have been investigating the gains that can be achieved by a rigorous use of microeconomic- and aggregation-theoretic foundations in the construction of monetary aggregates, and provided convincing evidence that simple-sum monetary aggregates and log-linear money demand functions, currently used by central banks, are inappropriate for monetary policy purposes. In investigating the role of monetary aggregates in monetary policy, I have looked at the question of whether monetary aggregates are good high-frequency indicators of changes in the stance of monetary policy. I have investigated this issue in the context of monetary vector autoregressions, explicitly taking into account central bank operating procedures and making comparisons among traditional simple-sum monetary aggregates and microeconomic- and aggregation-theoretic monetary aggregates. I have also been concerned with a long-run question about the role of money in monetary policy. Building on recent developments in the field of applied econometrics (such as integration theory, cointegration theory, and error correction modelling), I have tested the long-run neutrality and superneutrality propositions taking into account the time-series properties of the variables. I have provided conclusive evidence consistent with the quantity-theoretic proposition that money is neutral in the long run. I have also been interested in chaotic dynamics. My most recent work in this area provides statistically significant evidence against low-dimensional chaos in economic and financial time series. Of course, the failure to detect low-dimensional chaos does not preclude the possibility of high-dimensional chaos. The presence, however, of dynamic noise makes it difficult to distinguish between (noisy) high-dimensional chaos and pure randomness, rendering this an area for potentially productive future research.

SERVAES, Henri

Born 1966, Reet, Belgium.


Principal Fields of Interest G3 Corporate Finance and Governance; L2 Firm Objectives, Organization, and Behavior; G2 Financial Institutions and Services.


Principal Contributions My work has focussed on corporate governance. My initial research analyzed the determinants of value gains in takeovers. In later work, I documented that overinvestment by takeover targets is limited to a small subset of companies. I have also done research on the relationship between firm value and share ownership by corporate insiders (with J. McConnell). In particular, we find that firm value first increases and then decreases as the fraction of shares owned by insiders increases. Subsequently we documented that this effect is stronger for firms with low growth opportunities. More recently, I have focussed on the impact of industrial diversification on firm value. I have provided evidence that diversified firms are valued at a discount relative to focussed firms active in the same industries, and that this result holds over different time periods and across several countries (with K. Lins). I have also developed and tested a model of the inefficient transfer of resources across divisions of conglomerates (with R. Rajan and L. Zingales), aimed at explaining the discount. Finally, I have done research on financial intermediation, initially on the role of investment banks in acquisitions (with Marc Zenner), and later on decision making of mutual funds, in particular on the factors that lead fund families to open new funds (with A. Khorana).

SEXTON, Richard John

Born 1955, Mora, MN, USA.


Past Posts Dept Chair, Dept Agric. and Resource Econ., Univ. California, Davis, 1994–98.


Principal Fields of Interest Q1 Agriculture; L1 Market Structure, Firm Strategy, and Market Performance.


**Principal Contributions** My research has focused primarily on the analysis of agricultural markets, with special emphasis on fruit, vegetable, and nut industries. A particular focus has been the role that imperfect competition plays in agricultural markets. Although these markets are sometimes offered as textbook examples of competitive markets, the reality is quite different. Agricultural markets often exhibit high levels of concentration at multiple points in the market chain, from the farm gate to the consumer. These markets also often exhibit institutions and organizations of producer power, such as marketing cooperatives, bargaining associations, marketing boards, and state trading organizations. These forces interact to influence market behaviour in ways that may not be well captured by a basic competitive markets model. My basic research thrust has been to apply tools of industrial organization to analyse relevant issues in agricultural markets. My earliest work involved conceptual modelling of the behaviour of agricultural cooperatives and the effect of cooperatives on market performance. Because cooperatives generally have a procompetitive effect on market performance, incumbent firms with market power have incentives to deter the formation of such organizations. This insight led Robert Innes and I to develop a theory of generic entry deterrence, which showed how an incumbent seller could use price discrimination to ‘divide and conquer’ customers, thereby preventing them from forming procompetitive coalitions. These ideas were subsequently applied to analysis of exclusive contracts. Other work involved application of the
methods of the new empirical industrial organization to conduct tests for oligopoly and oligopsony power in agricultural markets. Most recently, I have worked on the implications of imperfect competition in agricultural markets for optimal application of industry policy instruments such as investments in research and commodity promotion and the distribution of benefits from such policies among producers, consumers and marketing firms.

SHANKEN, Jay n.e.

SHAPIRO, Carl

Born 1955, Austin, TX, USA.


Principal Fields of Interest n.e.


Principal Contributions

Extensive experience working with private parties and government agencies on matters involving antitrust, regulation, intellectual property, measurement of damages, and general business litigation. Additional information and references available upon request.

SHARPE, Steven A. n.e.

SHA VELL, Steven

Born 1946, Washington, DC, USA.

Current Post Prof., Harvard Law Sch., Harvard Univ., Cambridge, MA, USA, 1982–.


Principal Fields of Interest D0 Microeconomics: General; D6 Welfare Economics; D8 Information and Uncertainty.


Principal Contributions Economic analysis of basic areas of law: tort (accident) law; property law; contract law; and criminal law. Also, economic analysis of litigation, public law enforcement, and welfare economics and morality. Work on tort law is brought together in my first book; that on welfare economics and morality as it relates to law is developed in my second book (with L. Kaplow); and all of the work is presented in my third book (Foundations of Economic Analysis of Law).
SHAW, Kathryn  n.e.

SHEPHARD, Neil

Born 1964, Plymouth, UK.


**Degrees** BA (Hons) Univ. York, 1986; MSc, PhD LSE, 1987, 1990.


**Principal Fields of Interest** C1 Econometric and Statistical Methods: General; C3 Econometric Methods: Multiple/Simultaneous Equation Models; G1 General Financial Markets.

**Publications**


**Principal Contributions** My recent work is concerned with the development of econometric techniques. Most of this has been in two areas: (i) the use of simulation to estimate and test economic models, (ii) the development of time-series models to estimate and predict volatility in financial markets. Of particular interest has been the development of methods for the analysis of stochastic volatility models.
SHILLER, Robert James

Born 1946, Detroit, MI, USA.

Current Post Stanley B. Resor Prof. Econ., Cowles Foundation, Yale Univ., New Haven, CT, USA, 1982–.


Principal Fields of Interest G1 General Financial Markets; E0 Macroeconomics and Monetary Economics: General; R1 General Regional Economics.


Principal Contributions My work has largely centered on the use of speculative markets: how people in fact have used
these markets, how the mass behavior of people with regard to these markets relates to observed aggregate phenomena, and how markets may be extended and expanded to work better to handle the basic risk problems that people face. My early work was spent on trying to understand the apparently random patterns of financial (such as stock market) price movements. The theory of efficient markets offers a simple explanation of the randomness observed in these prices: if the price incorporates all information, then in a sense the changes in the price must be essentially random, since price changes must relate to new information, which by its very essence must be unpredictable. The theory does not tell us, however, what the new information is about. It could be information about fundamentals such as profits and central bank policy, or it could be information about mass psychology or herd behavior. At the time I was working in this area, virtually all scholarly articles in finance presumed that there was no possible role for mass psychology. I argued, in a series of articles, that there is substantial evidence that both fundamentals and mass psychology play important roles. I argued this from many perspectives; the one that received the most attention was that there is statistical evidence of ‘excess volatility’. Much of my more recent work has been on methods for extending and developing risk management, so that risks that people face can be shared better. I have studied a number of possible new risk management institutions: livelihood insurance, home equity insurance, macro markets, income-linked loans, inequality insurance, intergenerational social security, international agreements for risk control, and indexed units of account.

SHIN, Hyun-Song n.e.

SHLEIFER, Andrei n.e.

SHOGREN, Jason Fredrick

Born 1958, Cloquet, MN, USA.


SHOGREN


Principal Fields of Interest C9 Design of Experiments; D0 Microeconomics: General; Q0 Agricultural and Natural Resource Economics: General.


Principal Contributions My research examines the behavioural underpinnings of private choice and public policy, especially for environmental and natural resource policy. The main themes of my work have been in risky decisions, environmental conflict, Coasean cooperation, non-market valuation, mechanism design, and prosperity. The main principle guiding my thinking is the theory of endogenous risk – how and why people expend private resources to increase the odds that good things happen and bad things do not, and how this affects collective public policy. Together with my colleagues, I have helped establish the use of experimental economic methods to elicit values for new products and non-market goods, including a comparison of willingness to pay and willingness to accept measures of value and the creation of the random nth-price auction. My research has worked to demonstrate why economic behaviour matters more for environmental policy than many people think, e.g., climate change, endangered species protection, invasive species, air quality, non-point pollution, and food safety. Our work also shows how accounting for economics can make good policy better by developing integrated models of economic and ecological systems for United States agricultur-
ture, Yellowstone National Park and invasive species in the Great Lakes.

SICHEL, Daniel Eric

Born 1961, Princeton, NJ, USA

Current Post Sr Econ., Fed. Reserve Bd, Washington, DC, USA, 1996–.


Honours Truman Scholar, 1981; Phi Beta Kappa, 1983.

Principal Fields of Interest O4 Economic Growth and Aggregate Productivity; E0 Macroeconomics and Monetary Economics: General; O3 Technological Change.


Principal Contributions n.e.

SICHERMAN, Nachum

Born 1954, Jaffo, Israel.


SICKLES, Robin C.

Born 1949, Pittsburgh, PA, USA.

Current Post Prof., Dept Econ., Rice Univ., Houston, TX, USA, 1987–; Res. Fell., C.V. Starr Center for Appl. Econ., NYU, New York, NY, USA, 1989–.


Principal Fields of Interest C0 Mathematical and Quantitative Methods: General; J0 Labor and Demographic Econom-
ics: General; L0 Industrial Organization: General.

Publications


Principal Contributions

The principal focus of my work has been in the area of applied econometrics and micro-econometrics with extensive applications in parametric and semi/nonparametric panel data methods, productivity and empirical industrial organization, and labor and health economics. My interest in modeling productive enterprises encompasses health production and the many subtle static and dynamic feedbacks among socioeconomic factors and measures of morbidity and mortality. I have a long-standing research program evaluating productivity and efficiency in the presence of regulatory distortions in the domestic and international airline industry. I have made contributions to the literature in the modeling of stochastic frontier production processes and in the identification and estimation of static and dynamic
productive efficiencies. This work relates to my interest in assessing the supply-side benefits of domestic and international deregulatory initiatives.

SIEGFRIED, John J.

Born 1945, Allentown, PA, USA.

Current Post Prof. Econ., Vanderbilt Univ., Nashville, TN, USA, 1981–.


Principal Fields of Interest L0 Industrial Organization: General; A2 Teaching of Economics; I2 Education.


Principal Contributions

Early research was on economics of education – empirical studies of returns to an economics PhD, and financial rewards to publishing and teaching. I returned to this line of research in the 1990s, co-authoring a book on the economics of higher education (my section on how colleges and universities react to rising costs), and writing on the diffusion of innovations in higher education, vertical integration by colleges and universities, competition in college textbook retailing, and optimal college class sizes. For 25 years I have conducted empirical studies in industrial organization, beginning with an exploration of how firm size and market structure affect corporate political power to a recent series of studies examining the role of market power in the accumulation of the world’s greatest fortunes. Between these I estimated: ‘Harberger triangles’ caused by monopoly, the determinants of antitrust activity, a production function for basketball, demands for minor-league baseball and coffee, the cost of suboptimal manufacturing capacity, the incidence of monopoly pricing, the effect of market and firm characteristics on corporate philanthropy, and college football broadcast cartels. I surveyed the literatures on how market structure affects costs, and on market entry and exit. On the historical front, I have analyzed the first Sherman Act case and traced the intellectual development of the dominant firm price leadership model. My research on teaching college economics includes studies of self-paced instruction, learning by teaching, gender differences in learning, methodology for evaluating experimental teaching methods, effects of calculus training on learning economics, and the effect of class size on pedagogical methods. I conducted several studies of the university economics curriculum, from the organization of the introductory course to the structure and philosophy of the undergraduate major, and, most recently, the PhD production process. This interest led to two surveys of the economics education literature.

SIMONSON, Itamar n.e.

SIMS, Christopher Albert

Born 1942, Washington, DC, USA.
Degrees BA (Maths), PhD Harvard Univ., 1963, 1968.
Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles; C1 Econometric and Statistical Methods: General.

**Principal Contributions** I have aimed at making econometric analysis of data more practically useful by freeing it from conventional assumptions, known to be untrue, whose effects must be allowed for by judgemental adjustment of results. Usually I have proceeded in the spirit of clarifying, modifying, and formalising the methods used by the best people actually analysing data. In early papers I wrote on the roles of the assumptions that time is discrete and that an exact finite dimensional ‘true’ model exists in distributed lag models. My work on the relation of exogeneity to Granger-caused priority was motivated by the observation that regression models with right-hand-side variables taken as exogenous were pervasive in econometrics, and that economists regularly justified the choice of right-hand-side variable by vague appeals to notions of causal priority. It turned out that the notion of causal priority required was Granger’s. I have worked at building a multiple time-series methodology as useful as conventional simultaneous equations modeling for macroeconomics, yet with a formal probability model which can be taken seriously. While the components of the methodology are not new, the style – elaborate modeling of the predictive structure of the data preceding a cautious and sometimes informal application of a priori knowledge to interpret the results – is different from much previous econometric work. The methodology is increasingly being applied for forecasting and policy analysis, has provided ‘stylised facts’ as grist for the mill of ‘pure theory’ and has increasingly been integrated with formal structural interpretation. Recently I have written on the importance of recognizing the role of the intertemporal government budget constraint in determining ‘aggregate demand’ – the fiscal theory of the price level. I have also argued that Shannon’s notion of channel capacity may provide a useful model for inertia in economic behavior.

**SINGLETON, Kenneth J.** n.e.

**SINN, Hans Werner** n.e.

**SIRMANS, Clemon Fielding**

**Born** 1949, Douglas, GA, USA.


**Past Posts** Asst Prof., Dept Fin., Univ.
Illinois, 1975–78; Assoc. Prof., Prof., Dept.
Real Estate, Univ. Georgia, 1978–82,
1982–83; Prof. and Louisiana Chair of
Real Estate, Dept Fin., Louisiana State
Univ. (LSU), 1983–91; Dir., Real Estate
91.

**Degrees**

BS Valdosta State Univ., 1971;
MA, PhD (Real Estate and Urban Devlp.)

**Offices and Honours**

List of Excellent Instrs, Univ. Illinois, 1976, 1977; Excel-
lence in Teaching Award, Univ. Georgia,
1979, 1981; Omicron Delta Kappa Instr.
of Year, Univ. Georgia, 1981; Instr. of Year,
Fell., Homer Hoyt Inst., 1986–; Urban
Land Inst., 1995–; Outstanding Teaching
Award, Coll. Bus. Admin., LSU, 1987,
1988; Finalist, Sch. Bus. Prof. of Year,
Univ. Connecticut, 1994; Ackerman
Vis. Prof., Swedish Sch. Econ. and Bus.
Hong Kong, 2001, 2002, Univ. Hong
Prof., Natl Univ. Singapore, 2001, 2002;
George F. Bloom Award, AREUEA, 2002.

**Editorial Duties**

Ed., *Research in Real Estate*, 1981–87,
*Real Estate Econ.*, 1983–
87, *J. Real Estate Fin. and Econ.*, 1988–,
*J. Real Estate Literature*, 1990–2000,
*Topics in Real Estate Fin. and Econ.*
monograph series, Kluwer Acad. 1990–;
Special Issue Ed., *J. Housing Res.*, 1994;

**Principal Fields of Interest**

R3 Production Analysis and Firm Location; K1
Basic Areas of Law; G3 Corporate Fi-
nance and Governance.

**Publications**

*Articles*: 1. ‘Area, time, centrality and the value of urban land’
(with P. Colwell), *Land Econ.*, 54, Nov.
1978; 2. ‘The price adjustment mechanism for rental housing in the US’
(with A. Eubank), *JIE*, 93, Feb. 1979; 3. ‘Assumption financing and selling price of
single-family homes’ (with S. Sirmans, S.
Smith), *JFQA*, 18, Sept. 1983; 4. ‘An
analysis of gains to acquiring firm’s share-
holders: the special case of REITs’
(with P. Allen), *J Fin E*, 18, March 1987;
5. ‘Choosing between fixed and adjustable
rate mortgages’ (with J. Shilling, U.
Dhillon), *JMCB*, 19, May 1987; 6. ‘The
price adjustment process for rental office
space’ (with J. Shilling, J. Corgel), *JUE*,
22, July 1987; 7. ‘Hedonic prices and con-
tractual contingencies’ (with J. Shilling,
G. Turnbull, J. Benjamin), *JUE*, 32, July
1992; 8. ‘Residential property tax capital-
ization: discount rate evidence from
California’ (with Q. Do), *NTJ*, 47, June
1994; 9. ‘Differentiated contracts, hetero-
genous borrowers, and the mortgage
choice decision’ (with J. Sa-Aadu), *JMCB*,
27, May 1995; 10. ‘An economic theory
of adverse possession’ (with T. Miceli),
*Intl Rev. Law and Econ.*, 15, June 1995;
11. ‘Estimating capital asset price indexes’
(with R.C. Hill, J.R. Knight), *REStat*, 78,
May 1997; 12. ‘Spatio-temporal modeling
of residential sales data’ (with A. Gelfand,
J. Knight, S. Ghosh), *JBE*, 16, July 1998;
13. ‘A test of the signaling value of IPO
underpricing with REIT IPO–SEO pairs’
(with C. Ghosh, R. Nag), *J. Real Estate
Fin. and Econ.*, 20, March 2000; 14. ‘Partition
of real estate, or, breaking up is
(not) hard to do’ (with T. Miceli), *J. Legal
spatial-temporal forecasting with an ap-
plication to real estate prices’
(with K.
Pace, R. Barry, O. Gilley), *Intl J. Fore-
casting*, 16, 2000; 16. ‘Property rights by
squatting: land ownership risk and adverse
possession statutes’ (with M. Baker, T.
Miceli, G. Turnbull), *Land Econ.*, 77, Aug.
2001; 17. ‘The information content of
method of payment in mergers: evidence
from real estate investment trusts’
(with R. Campbell, C. Ghosh), *Real Estate
Econ.*, 29, Fall 2001; 18. ‘Optimal title
search’ (with M. Baker, T. Miceli, G.
SKINNER, Jonathan

Born 1955, Boston, MA, USA.

Current Post John French Prof. Econ., Dartmouth Coll., Hanover, NH, USA, 1995–.


Degrees BA Univ. Rochester, 1977; PhD UCLA, 1983.

Honour Paul A. Samuelson Award of Excellence, TIAA-CREF, 1996.


Principal Fields of Interest H0 Public Economics: General; I0 Health, Education, and Welfare: General; E2 Consumption, Saving, Production, Employment, and Investment.


**Principal Contributions**

n.e.

**SLADE, Margaret E.** n.e.

**SLEMROD, Joel**

**Born** 1951, Newark, NJ, USA.


**Principal Fields of Interest** H2 Taxation, Subsidies, and Revenue; H3 Fiscal Policies and Behavior of Economic Agents.

**Publications** Books:
1. *Taxation in the Global Economy* (ed. with A. Razin), (UCP/NBER, 1990);


**Principal Contributions** My early work concerned aspects of capital income taxation. My dissertation was a computable general equilibrium model of capital income taxation with endogenous portfolio choice. Early empirical work concerned capital gains taxation, including the lock-in effect and the extent of the inflation tax. Much work since then has been motivated by the observation that the standard models of how taxes affect behavior did not adequately capture the wide range of possible responses, such as the retiming of transactions, renaming of transactions or financial structure, avoidance facilitated by professional tax advice, and outright evasion. Another line of study concerns international aspects of taxation. Linking this to my interest in taxpayer avoidance, I have empirically studied the extent of income shifting across jurisdictions, and developed a model of the joint decision of investment location and income shifting, tested using data on US companies’ investment in Puerto Rico, a preferred tax location. Empirical studies include estimating the compliance cost of taxation, investigating how tax evasion responds to policy changes and to what extent the recent surge of reported income of the affluent has been a reaction to lowered marginal tax rates. Theoretical modeling has focussed on extending normative models to account for the range of taxpayer response, including optimal income tax structure in the presence of avoidance and avoidance control, and the optimal size of a tax enforcement agency. I have argued that the standard model of optimal taxation must be replaced by a model of optimal ‘tax systems’, which embraces the administrative and enforcement aspects of taxation. I
have developed a more general model of behavioral responses to taxation that allows simultaneously for real, avoidance, and evasion responses. Considering the optimal enforcement response has led to the development of the idea of an ‘optimal’ elasticity of taxable income.

SLOAN, Richard Geoffrey

Born 1964, Liverpool, United Kingdom.


Honours Notable Contrib. to Accounting Literature Award, AAA, 2001.


Principal Fields of Interest G1 General Financial Markets; J3 Wages, Compensation, and Labor Costs; M4 Accounting.


Principal Contributions Use of accounting information in contracting and
investor decision-making. Efficiency of capital markets with respect to accounting information.

SLOVIC, Paul

Born 1938, Chicago, IL, USA.


Principal Fields of Interest D0 Microeconomics; General; D8 Information and Uncertainty.


Principal Contributions One of the main themes in my work is the view that people’s preferences are often constructed
in the process of elicitation. This idea is derived from studies demonstrating that normatively equivalent methods of elicitation (e.g., choice and pricing) give rise to systematically different responses. These ‘preference reversals’ violate the principle of procedure invariance that is fundamental to all theories of rational choice. They also raise difficult questions about the nature of human values. If different elicitation procedures produce different orderings of options, how can preferences be defined and in what sense do they exist? Research I have conducted with many colleagues describes the development of the idea of preference construction and the numerous information processing strategies and heuristics that have been found to contribute to it: anchoring and adjustment, relying on one prominent attribute, eliminating common elements, problem restructuring, stimulus-response compatibility and, most recently, reliance on affect-laden feelings or emotions. As a result of these mechanisms, decision making is now understood to be a highly contingent form of information processing, sensitive to task complexity, time pressure, response mode, framing, reference points and numerous other contextual factors. The study of constructed preferences has aimed not only to understand decision making but to improve it. For example, some studies have pointed out its implications for judgments and decisions designed to save lives or improve the environment. Others have applied the concept to issues of informed consent. Economists have been interested in its implications for investment decisions and consumer behavior and, more fundamentally, in its challenges to economic theory. In sum, this basic idea appears to be forging a new conception of preference, one that requires a serious restructuring of normative theories and approaches to improving decision making.

SLOVIN, Myron B. n.e.

SMALL, Kenneth A.

Born 1945, Sodus, NY, USA.

Current Posts Prof. Econ., Univ. California, Irvine, CA, USA, 1986–.


Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; L9 Industry Studies: Utilities and Transportation; Q2 Renewable Resources and Conservation: Environmental Management.


Articles: 1. ‘Optimal peak-load pricing, investment, and service levels on ur-

Principal Contributions In transportation economics: analysis of congestion and policies toward it, especially pricing policies; time-of-day choice by travelers and implications of reliability of travel time; travel demand analysis, including empirical measurement of value of time, of time-of-day choices by commuters, and of effects of reliability; costs and pricing of heavy vehicles on highways. In urban economics: effects of energy prices on urban form; polycentric employment patterns and their consequences; analysis of shrinking cities and metropolitan areas. In discrete-choice econometrics: welfare implications of discrete-choice models; alternate estimation techniques for nested logit models; specification tests; development of a generalized extreme value model for analyzing ordered choices. In environmental economics: estimation of social costs of air pollution; cost–benefit analysis of alternative fuels for motor vehicles. Notable policy applications: advice to the Canadian Royal Commission on National Passenger Transportation, the Directorate for Transport and the Directorate for Economic and Financial Affairs of the European Union, and the World Bank; National Research Council commissions studying congestion pricing, federal highway cost allocation study, and congestion management and air quality improvement programs.

SMITH, Adrian n.e.


Born 1954, location n.e.


Degrees BS Univ. Minnesota, 1977; PhD MIT, 1981.


Principal Fields of Interest n.e.


Principal Contributions n.e.

SMITH, Jr, Clifford Weldon

Born 1947, Atlanta, GA, USA.


**Degrees** BA Emory Univ., 1969; PhD Univ. North Carolina, 1975.


**Principal Fields of Interest** G2 Financial Institutions and Services; G3 Corporate Finance and Governance; L2 Firm Objectives, Organization, and Behavior.


Principal Contributions My research generally has focused on corporate policy choices such as corporate capital structure, executive compensation policy, corporate risk-management policy, corporate dividend policy and the economics of organizations. I have been especially interested in applying this analysis to studying the insurance industry. The most basic issue in corporate finance is to understand those factors important in optionally structuring the contracts that comprise the liability side of the firm’s balance sheet. Yet, there has been little empirical analysis of the cross-sectional structure of corporate leverage, maturity, priority, dividends, hedging and compensation policies. Although much effort had been devoted to developing the theory, empirical support for the models was largely anecdotal. With M.J. Barclay and R.L. Watts, I have examined whether there exist robust empirical relations among corporate policy decisions and particular firm characteristics. We also find associations among the corporate policies themselves. Our evidence suggests that contracting theories are more important than either signaling or tax theories in explaining cross-sectional variation in observed financial, dividend, and compensation policies. With J.A. Brickley and J.L. Zimmerman I have worked on the economics of organizations. We focus on how the assignment of decision rights, the reward and control systems are jointly structured to help achieve the organization’s objectives. D. Mayers and I have been interested in using the insurance industry as a laboratory for testing hypotheses from corporate finance and the economics of organizations. We have examined data on executive compensation, the composition of the board of directors, the use of independent agents versus exclusive agents for the distribution of insurance, the impact of guaranty funds on the industry, and the changes in ownership structure of firms in the insurance industry.

Principal Contributions Most of my work has involved the use of econometric methods and various types of economic theory to provide quantitative answers to applied questions. This has involved work in a large number of areas of micro- and macro-economics and international relations. For instance, in the area of defence economics, the main questions have been what determines the level of military expenditure, what effects do changes in military expenditure have on the economy, and how does the arms trade operate? The model of the arms trade developed with Paul Levine has become widely used in the literature. Much of the applied work has involved panel data where both the number of units (countries, firms, football teams) and the number of time-periods are large. The work with Pesaran has developed methods for dealing with various issues that arise in such panels.

**SMITH, V. Kerry**

**Born** 1945, Jersey City, NJ, USA.


**Degrees** BA, PhD Rutgers Univ., 1966, 1970.


**Principal Fields of Interest** Q0 Agricultural and Natural Resource Economics: General; C1 Econometric and Statistical Methods: General; Q2 Renewable Resources and Conservation: Environmental Management.


**Principal Contributions** Early work investigated the small sample properties of simultaneous equation estimators using Monte Carlo experiments with economically relevant models. Initial research in resource and environmental economic developed three areas: (1) treatment of changes in relative prices in benefit–cost analyses involving unique natural environments; (2) modelling the demand for and supply of wilderness recreation with alternative levels of congestion; and (3) estimating the role of substitute facilities in modelling the demand for and valuation of outdoor recreational facilities. Later, research efforts considered the evaluation of the adequacy of natural resources including the measurement of natural resource scarcity and evaluation, in general, and the treatment of natural resources in economic models. In the process of evaluating the role of natural resources in economic models, conducted with R.J. Kopp, an evaluation of the authenticity of neoclassical model descriptions of factor input substitution and nonneutral technical change. In the last
ten years, research has focused on the use of revealed and stated preference methods to recover measures of the economic value of environmental resources, including environmental risks. Most recent theoretical research with H. Sieg, H.S. Banzhaf, R. Walsh considers use of locational equilibrium models in developing consistent estimates of general equilibrium welfare measures. This work is part of a larger effort to integrate non-market valuation of environmental resources with general equilibrium models. Additional research considers the role of health, risk aversion and age in valuing reductions in mortality risk, application of structural meta analysis to benefit transfer, and integration of economic and ecological models in estimating value of water quality improvements.

SMITH, Vernon Lomax

Born 1927, Wichita, KS, USA.

Current Post Prof Econ. and Law, George Mason Univ., Arlington, VA, USA, 2001–.


Principal Fields of Interest D0 Microeconomics: General; D4 Market Structure and Pricing; C9 Design of Experiments.


Principal Contributions My research in 1955–65, centred on the integration of investment, capital and production theory. This work was extended to deal with problems of production, investment and pricing decisions over time, and with tax and depreciation policies. The economics of uncertainty, particularly corporate financial theory, occupied the period 1966–72, leading to the unpopular result that the M–M theorem fails when corporate bonds are subject to default risk. My research in natural resource economics (1966–77) emphasised the bionomic and geonomic stockflow and property right failure characteristics of production from natural resources. This work provides an explanation of the agricultural revolution which coincides suspiciously with the late Pleistocene extinction of the favourite animals hunted by humankind. This was the critical period in the creation of modern humankind in the sense that agriculture appears to have forced the development of much more sophisticated property right systems, and their derived exchange systems, than had characterised humankind as a nomadic hunter-gatherer. My first experimental market was conducted in the spring of 1956, leading to article 2 in 1962. The experimental study of market performance under alternative institutions of contract has continued to excite my research interest down to the present time. The importance of this work is in providing a methodology that makes it possible for us, as economists, to demonstrate what it is that we think we know about market allocation. Unfortunately, a great deal of what we think we know, and what we teach, is either not true or not demonstrated. This should be disturbing only to the insufferably arrogant since humans as a species distinct from other animals have been around for over one million years; exchange and property rights systems of the kind made possible by the agricultural revolution date from 10–15,000 years ago; and we began the serious study of economics only in the last 200 years.

SNYDER, Edward A. n.e.

SNYDER, Jr, James M. n.e.

SOBEL, Joel Kenneth

Born 1954, Detroit, MI, USA.

Current Post Prof. Econ., Univ. California, San Diego, La Jolla, CA, USA, 1978–.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D0 Microeconomics: General.

Publications Articles: 1. ‘Distortion of utilities and the bargaining problem’, Em, 49, 1981; 2. ‘Strategic information trans-

Principal Contributions
Research on effects of family and community origins on economic status, labor markets over the business cycle, determinants of earnings, incentive effects of unemployment insurance, and labor force data issues.

SOWELL, Fallaw B. n.e.

SPADY, Richard Henry

Born 1952, Scranton, PA, USA.


Principal Field of Interest C1 Econometric and Statistical Methods: General.


Principal Contributions My early work was primarily in applications of econometrics to problems of industrial organization motivated by public policy issues in regulated industries. This developed into an interest in developing and evaluating new econometric methods that would provide a better fit between the assumptions and hypotheses of economic
theory and the data that are available to evaluate them. Some of this later work is devoted to developing efficient semiparametric estimators (as in the paper with Roger Klein on the binary response model), while other work is about assessing the efficacy of inferential methods and diagnostic techniques in such semiparametric contexts. Most recently, I have been working on semiparametric factor analysis as a method for addressing problems in empirical political science (concerning the relation between attitudes and voting behavior) and financial economics (asset pricing).

SPIER, Kathryn Elizabeth

Born 1963, Port Washington, NY, USA.


Degrees BA Yale Univ., 1985; PhD MIT, 1989.


Principal Fields of Interest K0 Law and Economics: General; L2 Firm Objectives, Organization, and Behavior.


Principal Contributions A theme that runs throughout my research is that economic agents (individuals, firms and other organizations) frequently resolve their disputes in the shadow of the legal system. Should their negotiations break down, laws, legal institutions and any private contracts that exist between them could
be instrumental in resolving the disagreement. In one strand of research, I have shown that negotiations before trial tend to be ‘inefficient’ when parties are asymmetrically informed about the outcome at trial. Some cases necessarily go to trial and many others settle on the courthouse steps after lengthy (and costly) delay. My research has also explored how laws and public policies (such as fee shifting statutes and scheduling of damage awards) and private contracts can improve upon pretrial bargaining outcomes. Another strand of research explores the design of private contracts, paying special attention to the fact that private contracts shape the outcome of negotiations, and may be chosen strategically for this purpose. Debt contracts, revenue-sharing contracts, most-favored-nation clauses, damage measures for breach of contract, and settlement contracts have all been analyzed.

SPILLER, Pablo T.

Born 1951, Montevideo, Uruguay.


Principal Fields of Interest L0 Industrial Organization: General; L4 Antitrust Policy; L5 Regulation and Industrial Policy.


Principal Contributions My work is centered on the analysis of regulation, its
origins, its process and its effects. While my early work focussed mostly on the effects, my recent work has tended to focus more on the origins and process. In undertaking this research I have placed emphasis on combining empirical and theoretical work. I have worked on three main industries: airlines, energy and telecommunications. Since the late 1980s I have been working on the determinants of regulatory commitment from a positive political perspective. Part of that project has involved understanding the role of the courts in the regulatory process. This required looking at the courts from a very different angle than previously done. In particular, while prior legal and political science analyses of judicial decisions were either normative or based on sociological analyses, I started analyzing judicial decision from a positive perspective. In this approach I consider courts as strategic political players with well-defined preferences immersed in a standard division of powers political game. Among other topics, I have applied this approach to the analysis of Supreme Court–labor relations, to the Court’s famous reversal following the threat of Roosevelt’s Court Packing Plan during the New Deal, to its choice of doctrines, to its review of agency decision making, and to the nature of State Supreme Court decision making. Another part of this major research project has been a comparative analysis of the ways different countries have attempted to solve basic commitment problems in the utility areas. This has led me to analyze the role of political institutions in a comparative perspective, emphasizing the roles of constitutional rules, electoral systems, and norms of bureaucratic and judicial decision making. This comparative research has also motivated me to look more closely at the way the judiciary is organized and its implications for policy outcomes.

SQUIRE, Lyn n.e.

STAFFORD, Frank Peter

Born 1940, Chicago, IL, USA.


Principal Fields of Interest D1 Household Behavior; J0 Labor and Demographic Economics: General; J2 Time Allocation; Work Behavior; Employment Determination and Creation.


Articles: 1. ‘The propensity of consume separate types of income: a generalized permanent income hypothesis’ (with R. Holbrook), Em, 39, Jan. 1971; 2. ‘Social returns to quantity and quality of schooling’ (with G. Johnson), JHR, 8, Spring

**Principal Contributions** The research concerns the application of microeconomic theories of household behavior and markets as the source of predictions to be tested with advanced designs applied to collection of US micro-data. In particular the primary data source is longer-term panels – such as the Consumer Debt and Wealth Panel (1967–70), the American Time Use Panel (1975–82), and the Panel Study of Income Dynamics (PSID), 1968–2003. The theories range from intertemporal human capital and consumption models, to general equilibrium models of wage structures as applied to gender and skill-based wage differences, to simple partial equilibrium models of responses to assets returns, prices and signaling. The main emphasis is on designing and implementing data collections which can be used to reject the maintained hypotheses. The empirical results from the data analysis, in turn, illuminate new directions for further theoretical and empirical development. We have learned the importance of time use data as a source of information on human investment in young children, and, for children age 0–12 as of 1997, have a national time diary panel, 1997–2003, as a major supplement to the PSID. The data from this complex panel are available on-line at http://www.isr.umich.edu/src/psid/ in a feature known as the PSID Data Center, a relational data archive linking individuals in families over the period 1968–2003.
STAHL, Dale O.

Born 1947, PA, USA.

Current Post Malcolm Forsman Centennial Prof., Dept Econ., Univ. Texas, Austin, TX, USA, 1988–.


Degrees BS (Electrical Eng.), MS (Electrical Eng.) MIT, 1968, 1969; PhD Univ. California, Berkeley, 1981.

Editorial Duties Assoc. Ed., JEBO, 2001–.

Principal Fields of Interest C7 Game Theory and Bargaining Theory; C9 Design of Experiments; L0 Industrial Organization: General.


Principal Contributions I have published on a wide range of topics including benefit–cost analysis methods, temporary equilibrium theory, information and arbitrage in futures markets, the stability of quantity and price adjustment processes, strategic merchant price setting, consumer search and firm advertising strategies, political effects on tariff strategies, game theory and bargaining theory, bounded rationality and learning theories, and electronic commerce. My recent experimental testing of rule learning has been funded by the NSF. Through the Center for Research in Electronic Commerce, my research on allocating Internet infrastructure resources has been funded by the NSF and the telecommunications industry.

STAIGER, Douglas O. n.e.

STAIGER, Robert W. n.e.
STAMBAUGH, Robert n.e.

STARMER, Christopher Vaughan

Born 1961, Birmingham, UK.

Current Posts Prof. Econ. and Dir., Centre Decision Res. and Experimental Econ. (CeDEx), Univ. Nottingham, Nottingham, UK, 2000–.


Principal Fields of Interest D8 Information and Uncertainty; C9 Design of Experiments; B4 Economic Methodology.


Principal Contributions My main research interests are in individual and strategic decision making, experimental economics and the methodology of economics. Since the mid-1980s I have contributed to the theory of choice under risk through an ongoing programme aimed at developing testing alternatives to expected utility theory. I have also done some experimental work investigating the role of salience in equilibrium selection in coordination games. I have contributed to ex-
per experimental methodology through testing standard experimental mechanisms (e.g., the random lottery incentive system) and via the development of new experimental techniques. More recently, I have contributed to the methodology of economics, in particular the methodology of experimental economics.

STARTZ, Richard

Born 1952, White Plains, NY, USA.

Current Post Castor Prof. Econ., Univ. Washington, Seattle, WA, USA, 1999–.


Degrees AB Yale Univ., 1974; PhD MIT, 1978.

Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; C1 Econometric and Statistical Methods: General; J7 Discrimination.


Principal Contributions I have worked on foundations of Keynesian macroeconomics, principally the role of monopolistic competition; on a range of macro-
econometric issues; on the use of the instrumental variable estimator with weak instruments; and on the economics of race.

STAVINS, Robert Norman

Born 1948, Chicago, IL, USA.


Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; Q3 Nonrenewable Resources and Conservation; Q4 Energy.

Publications Books: 1. Economics of the Environment: Selected Readings (W.W. Norton, 4th edn 2000); 2. Public Policies for Environmental Protection (ed. with P.R. Portney), (Resources for the Fu-

Principal Contributions My research has focused on diverse areas of environmental economics and policy, including examinations of: policy instrument choice under uncertainty; competitiveness effects of regulation; design and implementation of market-based policy instruments; diffusion of pollution-control technologies; and depletion of forested wetlands. My research has included analyses of: technology innovation; environmental benefit valuation; political economy of policy instrument choice; and econometric estimation of carbon sequestration costs. My research has appeared in leading scholarly and popular periodicals, and several books. I directed Project 88, a bi-partisan effort co-chaired by former Senator Timothy Wirth and the late Senator John Heinz, to develop innovative approaches to environmental and resource problems. I continue to work closely with public officials on matters of national and international environmental policy. I have been a consultant to the National Academy of Sciences, several US Administrations, members of Congress, environmental advocacy groups, the World Bank, the United Nations, the US Agency for International Development, state and national governments, and private foundations and firms. Prior to moving to Harvard, I was a staff economist at the Environmental Defense Fund; and before that, I managed irrigation development in the Middle East, and
spent four years working in agricultural extension in West Africa as a Peace Corps volunteer.

**STAYMAN, Douglas M. n.e.**

**STEIN, Jeremy C.**

**Born** 1960, Chicago, IL, USA.

**Current Post** Prof. Econ., Harvard Univ., Cambridge, MA, USA, 2000–.


**Degrees** AB (scl) Princeton Univ., 1983; PhD MIT, 1986.


**Principal Fields of Interest** G0 Financial Economics: General; E5 Monetary Policy, Central Banking, and the Supply of Money.


Principal Contributions

STERN, Nicholas Herbert


to evaluate those policies. Examples range from the social cost–benefit analysis of a smallholder tea scheme in Kenya to the pure theory of optimum investment and growth policies and the theory of optimum income taxation. Careful policy formation involves understanding the way in which individuals behave and how they interact with markets. Thus development economics requires the study of village economies, and in 1974–75 Christopher Bliss and I studied the economy of the village Palanpur in West Uttar Pradesh in India; our results were published in book 4. Similarly, use of the criminal statistics in discussion of crime and policy should be based on an understanding of how individuals, society and institutions interact to generate the figures, and my book on British crime statistics with Roy Carr-Hill was directed to this end. More recently my research has concentrated on empirical work on public finance in both developing countries (particularly India, Pakistan and Mexico) at the Development Economics Research Centre of the University of Warwick, and the UK at the Taxation, Incentives and Distribution of Income Programme directed together with Professors Atkinson and King at LSE. Since 1994 I have been studying the problems of the transition from the command to the market economy in Eastern Europe and the former Soviet Union in my capacity as Chief Economist of the EBRD.

STEWART, Mark B. n.e.

STIGLITZ, Joseph Eugene

Born 1943, Gary, IN, USA. 
Current Post Prof. Columbia Univ., New York, NY, USA, 2001–.


Principal Fields of Interest D8 Information and Uncertainty; O0 Economic Development, Technological Change, and Growth: General; H0 Public Economics: General.


Principal Contributions One of the major themes of my work has been the economic consequences of incomplete information and uncertainty. I helped develop the concepts of adverse selection and moral hazard and showed that they required major modifications of standard results in economics, including both the welfare properties and characterization of market equilibrium. I also used them to help us understand labor markets, credit markets, corporate finance, and agricultural markets. These studies provide some of the microeconomic foundations of ‘New Keynesian’ macroeconomics, particularly emphasizing the existence of equilibrium unemployment and the role of the financial system in fluctuations. A separate strand of my research has been in public finance, including the theory of taxation, the theory of public expenditures, and, most recently, the role of the state. I have also done research in several other areas, including the distribution of income and wealth, growth and capital theory, natural resources, development and trade, the theory of market structure, welfare economics, and comparative economic systems, including socialist and East Asian economies.

STIMSON, James A.

Born 1943, Marion, IA, USA.


Principal Fields of Interest H0 Public Economics: General; H3 Fiscal Policies and Behavior of Economic Agents; C0 Mathematical and Quantitative Methods: General.


Principal Contributions My work does not self-consciously contribute to economics. In political science I am known for the ‘issue evolution’ theory (with E. Carmines), which models the transformation of party structures as a response to change in the issue agenda of politics. I have developed the concept and measure of ‘policy mood’, the net left–right preference of the American electorate over time. With M. MacKuen and R. Erikson I have developed a macro-level model of American politics (with mutually endogenous connections to economic policy and economic outcomes). In one component of that larger work of possible interest to economists, the ‘Peasants or Bankers’ analysis demonstrates that rational expectations assumptions hold for presidential approval in the United States.

STOCK, James H.

Born 1956, Munich, Germany.


Editorial Duties Chair, Ed. Bd, RESStat; Past Assoc. Ed., Em, Em. Theory, JEDC, J. Forecasting.

Principal Field of Interest E3 Prices, Business Fluctuations, and Cycles.
Publications


Principal Contributions n.e.

STOKEY, Nancy L. n.e.

STOLL, Hans R.

Born 1939, Regensburg, Germany.


Principal Fields of Interest G0 Financial Economics: General; G1 General Financial Markets; G2 Financial Institutions and Services.


**Principal Contributions** Developing and testing the put–call parity relation for option prices, assessing the impact of institutional trading on market prices, modeling and testing the behavior of securities markets dealers, analyzing program trading and the ‘triple witching hour’, inferring the sources and the components of the bid–ask spread, comparing the functioning of dealer and auction markets.

**STORPER, Michael C.**

**Born** 1954, New York, NY, USA.


**Principal Fields of Interest*** R1 General Regional Economics; F0 International Economics: General; O3 Technological Change.


Principal Contributions My research in economic geography focusses on the long-term tension between the geographical concentration of economic activity and the forces that lead it to spread out. This is shaped by technological change, reorganization of firms and industries, political and institutional developments, and fiscal and tax policies. This applies to growth and decline of cities and regional economies, and processes of international integration, trade and development. My first book, with R. Walker, updates the theory of agglomeration taking into account advances in theories of industry and firm organization. Agglomerations or clusters are sources of positive externalities, not only because they minimize transactions costs, but because of the envelope of organizational possibilities (product variety) which depends on geographical concentration. My empirical research concerns the geographical concentration and spread of the entertainment industry, of high-technology industries, and most recently of the effect of the Internet on geographical concentration. I have analyzed immaterial transactions such as information. In my books The Regional World and Worlds of Production, the notion that industrial systems are tied together through untraded interdependencies as well as inter-firm (trade) transactions, is explored in detail. Some articles also investigate the geography of knowledge and technological spillovers and how this underlies geographical patterns of technological innovation. Most recently, I have turned my attention to the economic geography of globalization, showing that even in increasing globalization, and new technologies such as the Internet, geographical concentration continues to matter. I have shown that face-to-face contact remains a key form of coordination in the contemporary economy, allowing transacting partners to overcome certain moral hazards and create incentives. Investigation of the ways that increasing trade affects the location of industries, shows that some of the changes in patterns of economic development are different from what standard theories of globalization predict. I also compare the effects of market integration on European economic geography with that of North America.

STRAUSS, John


Principal Fields of Interest
O1 Economic Development; I1 Health.

Publications


Principal Contributions Empirical microeconomics of economic development, particularly the study of human resource investments and their economic impacts using household production models.

STULZ, René

Born 1952, Le Locle, Switzerland.

Current Posts Everett D. Reese Chair Banking and Monetary Econ., Prof. Fin., Ohio State Univ., Columbus, OH, USA, 1996–. 1985–; Dir., Dice Center for Res. Fin. Econ., Ohio State Univ., Columbus, OH, USA, 1995–.


Principal Fields of Interest  G3 Corporate Finance and Governance; G1 General Financial Markets; F3 International Finance.


**Principal Contributions** In chronological order: (1) advances in international asset pricing, including treatment of barriers to international investment, generalized asset pricing model with departures from purchasing power parity, and general equilibrium model of exchange rate determination and asset pricing; (2) option pricing formulas for options on the maximum of two risky assets, secured debt, and derivatives with default risks; (3) established foundations for corporate risk management; (4) showed how managerial ownership and firm value are related in a theoretical model where ownership concentration can be used to prevent hostile takeovers; (5) capital structure model showing how capital structure can be used to control managerial discretion; (6) established empirically on a large sample the existence of a diversification discount; (7) established empirically that foreign investors did not destabilize equity markets in emerging market crises; (8) showed that contagion effects of emerging market crises is limited; and (9) the impact of crises on banks is limited to banks with exposure.

**SUBRAHMANYAM, Avanidhar**

**Born** 1962, Chennai, India.

**Current Post** Prof. Fin., UCLA, Los Angeles, CA, USA, 1994–.


**Principal Fields of Interest** G1 General Financial Markets; G0 Financial Economics: General; G3 Corporate Finance and Governance.


**Principal Contributions** My theoretical work on market microstructure has
brought risk aversion into models of trading, explored dynamic competition between privately informed traders, and analyzed the dynamics of information acquisition. My empirical work has explored the notion of time-series variation in aggregate market liquidity using a comprehensive data set of more than 1200 stocks over more than 2800 trading days, and has also examined the role of volume in the cross-section of expected stock returns. My research in behavioral finance has shown that it is possible to build rigorous economic models that embody assumptions on investor behavior derived from psychology.

SUGDEN, Robert

Born 1949, Morley, West Yorkshire, UK.

Current Post Prof. Econ., Univ. East Anglia, Norwich, UK, 2003–.


Offices and Honours Fell., BA, 1996–.

Principal Fields of Interest D8 Information and Uncertainty; C9 Design of Experiments; D7 Analysis of Collective Decision-Making.


Principal Contributions My early work was on welfare economics and cost–benefit analysis. I then became in-
interested in social choice theory. Following a contractarian approach, influenced by James Buchanan, I developed a critique of the then conventional way of formulating ideas about liberty and rights within social choice theory, and proposed an alternative 'game form' approach which dispensed with the concept of 'social preference'; and I showed that observed voluntary contributions to public goods and charities cannot be explained by a theory in which individuals maximize altruistic utility functions, and offered an alternative theory in which individuals are motivated by principles of fairness. With Peter Jones, I was one of the first theorists to investigate measures of opportunity – an issue on which I have continued to work. Thinking about social contract theory, I began to see the importance of the problem of multiple equilibria, and of spontaneous conventions as the solution to this problem. I explored these issues in The Economics of Rights, Co-operation and Welfare – a very early attempt to apply the methods of evolutionary biology to economics. A major theme in that book was the role of salience, as conceptualized by Thomas Schelling. In more recent work, I have proposed a formal theory of focal points, and a more general theory of 'team thinking' in which groups of individuals reason as if acting as components of a single agent. Another broad theme in my work has developed in collaboration with Graham Loomes and Chris Starmer. Loomes and I proposed a new theory of choice under uncertainty, 'regret theory', in which preferences need not be transitive. Later work has been concerned with developing this and other behavioural theories of choice, and using experiments to test these theories.

SULLIVAN, Mary W. n.e.

SUMMERS, Lawrence H. n.e.

SUMMERS, Robert

Born 1922, Gary, IN, USA.
Current Post Prof. Econ. Emeritus, Univ. Pennsylvania, Philadelphia, PA, USA, 1960–.
Degrees BS (Maths) Univ. Chicago. 1943; PhD Stanford Univ., 1956.
Principal Fields of Interest C8 Data Collection and Data Estimation Methodology; Computer Programs; C5 Econometric Modeling; O1 Economic Development.


Principal Contributions My early interest in applied econometrics led to two applications of Monte Carlo methods: first, an empirical dissertation investigation of the lifetime distribution of income in the United States and second, a distribution-sampling examination of the small-sample properties of various simultaneous-equation estimators. Then I worked on a number of empirical micro-economic topics – research and development, capacity utilization, the trade-off between risk and return, probabilistic transitivity of preferences, and baseball production functions() – before beginning a 30-year preoccupation with output and price comparisons of most of the countries of the world. The System of National Accounts (SNA) provides for most countries current- and constant-price time-series estimates of GDP and its components. These data make possible intertemporal comparisons for individual countries, but do not provide a basis for comparisons across countries. Beginning in the late 1960s, the United Nations International Comparison Project (UNICP) conducted benchmark pricing studies covering many different countries that yielded a new data base. I was one of the three principal investigators of the UNICP, primarily developing a methodology for making valid output and price comparisons across countries. The most tangible product of the early UNICP now is the widely used Penn World Table, currently in its seventh update/revision, a compendium of country time series covering not only the various national accounts time series denominated in a common currency but also estimates of a number of other macro variables such as capital stocks. I have been working with the ICP data to explain why exchange rates differ from purchasing power parities and to revise a variety of misconceptions that flow from sole reliance on the SNA (e.g., investment rates relative to GDP do indeed rise with GDP). Recently, I have been concerned with estimating the world distribution of material well-being taking account of both intercountry and intracountry inequality, public as well
as private consumption, and country demographics.

**SUNSTEIN, Cass Robert**

**Born** 1954, Salem, MA, USA.

**Current Post** Karl N. Llewellyn Disting. Service Prof., Univ. Chicago, IL, USA, 1993–.


**Principal Fields of Interest** K0 Law and Economics: General; D0 Microeconomics: General; Q0 Agricultural and Natural Resource Economics: General.


**Principal Contributions** I have contributed to the theory of regulation, to the understanding of cost–benefit analysis in law, to the theory of preference formation, and to the emerging field of behavioral law and economics. Much of my work deals with the endogeneity of preferences – to the possibility that preferences are shaped by social processes, including law. I have also explored the implications, for law, of bounded rationality, in part by showing how people, in law, use heuristics that lead to predictable errors, and also how their values confound some of the predictions of standard economics. Some of my work in behavioral economics deals with the effects of social interactions and in particular with conformity and cascade effects.

**SUSHKA, Marie E. n.e.**

**SUZUMURA, Kotaro**

**Born** 1944, Tokoname City, Aichi Prefecture, Japan.

**Current Post** Prof. Public Econ., Inst. Econ. Res., Hitotsubashi Univ., Kunitachi, Tokyo, Japan, 1984–.


**Offices and Honours** Nikkei Prize in Econ., 1984, 1988; Fell., Em Soc, 1990–;


Principal Fields of Interest D6 Welfare Economics; D7 Analysis of Collective Decision-Making; D0 Microeconomics: General.


Principal Contributions My work is mostly related to welfare economics and social choice theory. Even my other work in theoretical industrial organization, industrial policy, competition policy and development policy is derived from my work in welfare economics and social choice theory, which are focused on four crucial issues. The first is the characterization of rational choice as purposive action. It was Robbins who first crystallized this notion, which Samuelson elaborated into revealed preference theory. Capitalizing on the work by Samuelson, Houthakker, Arrow, Richter, Hansson, and Sen, I have contributed to the axiomatic characterizations of rational choice as purposive action. The second is the logical conflict between equity and efficiency. Generalizing an early work by Kolm, Foley, and Varian, which may be traced back to Hicks and
Tinbergen, I have contributed to building a bridge between the theory of fairness and the theory of social choice, thereby enriching both theories and clarifying their logical relationships. The third is the welfare effect of competition. Contrary to the classical belief in competition as an efficient mechanism for allocating resources, I have proved what came to be known as excess entry theorem – that the free-entry number of firms in the Cournot market is socially excessive vis-à-vis the first-best number of firms as well as the second-best number of firms. This and related work motivated me to dig deeper into the relationship between welfare and competition. The fourth is the intrinsic, rather than instrumental, value of opportunities for choice and procedures for choice. The inquiry along this line leads us beyond consequentialism, which has remained almost unchallenged in the literature. I have obtained an axiomatic characterization of consequentialism and non-consequentialism, and some clarifications of the effects of going beyond consequentialism on such standard results as Arrow’s impossibility theorem.

SVENSSON, Lars Erik Oskar

Born 1947, Örnsköldsvik, Sweden.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; F4 Macroeconomic Aspects of International Trade and Finance; E4 Money and Interest Rates.

Publications Book: 1. Inflation Targets (ed. with L. Leiderman), (Tel Aviv Univ., CEPR, 1995).


**Principal Contributions** I have contributed to theoretical and, to some extent, empirical research in several areas of economics, including monetary policy, monetary and exchange rate economics, international macroeconomics, international finance, international trade and intertemporal general equilibrium theory. Most recently, research on monetary policy rules (inflation targeting); previously on extracting information for monetary policy purposes from financial markets; the operation and credibility of fixed exchange rate regimes (exchange rate target zones); discretion and commitment in monetary and fiscal policy; exchange rate determination; asset prices in monetary economics (cash-in-advance economies); international trade in assets; intertemporal trade and current-account determination (the intertemporal approach to current-account determination); international trade and factor mobility, and intertemporal resource allocation (intertemporal allocation under endogenous price uncertainty).
TABELLINI, Guido

Born 1956, Turin, Italy.


Principal Fields of Interests E0 Macroeconomics and Monetary Economics: General; F0 International Economics: General; H0 Public Economics: General.


Principal Contributions My research has focussed on the theory and practice of economic policy. Throughout my research, policymakers are viewed as optimizing decisionmakers, who respond to incentives and constraints. The goal of the theory is to formulate positive hypotheses about the behavior of policymakers that in principle can be tested against empirical evidence, and to provide normative suggestions for institutional reform. In my first contributions, I studied the credibility of monetary policy and of trade policy. In trade policy, lack of cred-
ABILITY results in excessive protection. In monetary policy it leads to excessive inflation. In both cases, lack of credibility is a consequence of a flexible and sequential decisionmaking process. With regard to monetary policy, I have asked how to gain credibility, through reputational effects or by appropriate institution design. Particular attention has been devoted to the design of the optimal targeting rules for an independent central bank. Later on, my attention shifted to the analysis of political institutions, and in particular of their effects on fiscal policy choices in an intertemporal context. Two questions in particular have directed my research. What features of political institutions lead to the accumulation of large public debt? What lends credibility to the promise to repay public debt or social security obligations? This research has also touched issues concerning public debt management policies. A third related line of research focussed on the link between economic growth and redistributive policies. Larger inequality can lead to slower growth, if it enhances political incentives to tax and redistribute. More recently, I have been studying federative structures and in particular the design of redistributive policies within a federation. Regional risk sharing or redistribution can distort the incentives of local policymakers, and this in turn leads to positive implications for policy choices and normative suggestions for institution design.

TAMURA, Robert

Born 1959, Oak Ridge, TN, USA.

Current Post Assoc. Prof. Econ., John E. Walker Dept Econ., Clemson Univ., Clemson, SC, USA, 1996–.


Principal Fields of Interest O0 Economic Development, Technological Change, and Growth: General; D9 Intertemporal Choice and Growth; J1 Demographic Economics.


Principal Contributions I investigate the determinants of long-run economic growth. I focus on human capital accumulation and its induced endogenous technological change. Much of this research is centered on parental choice of the quality and quantity of children. I examine the determinants of the demographic transition and industrial revolution. I also investigate the diffusion of economic growth.
TANNER, Martin Abba

Born 1957, Highland Park, IL, USA.

Current Post Prof., Dept Stats, Northwestern Univ., Evanston, IL, USA, 1994–.


Offices and Honours Fell., RSS, 1983, ASA, 1994; Mortimer Spiegelman Award, 1993; Continuing Educ. Excellence Award, ASA, 1996;


Principal Fields of Interest C1 Econometric and Statistical Methods: General; C4 Econometric and Statistical Methods: Special Topics.


**Principal Contributions** My research interests include Markov chain Monte Carlo methods for Bayesian and frequentist inference, nonparametric estimation of the hazard function for right-censored and interval-censored data, applications of multiple imputation to censored regression data, and models and measures of interrater agreement/disagreement. My recent work considers the use of Bayesian inference in mixtures-of-experts and hierarchical mixtures-of-experts neural network architectures with applications to speech recognition, breast cancer diagnosis, financial exchange rate data, and global meteorological information.

TAUCHEN, George n.e.

TAYLOR, J. Edward

**Born** 1957, Redlands, CA, USA.

**Current Post** Prof. Agric. and Resource Econ., Univ. California, Davis, CA, USA, 1987–.


**Degrees** BS Univ. California, Riverside, 1979; MS (Agric. and Resource Econ.), PhD (Agric. and Resource Econ.) Univ. California, Berkeley, 1982, 1984.


**Editorial Duties** Co-Ed., *Rural Migration News* on-line q., 1998–.

**Principal Fields of Interest** O1 Economic Development; J0 Labor and Demographic Economics: General; Q2 Renewable Resources and Conservation: Environmental Management.


**Principal Contributions** My research involves extending household and general-equilibrium modelling to address critical development economics questions related to population, migration and labour markets; poverty and income inequality; technology adoption; and the environment. I have developed analytical tools and field-work methods to test for and estimate direct and indirect micro influences of migration, market integration, and policy changes on production, incomes, and environmental variables in imperfect-market environments. My early work was among the first to empirically test propositions of the new economics of labour migration. Later studies, using agricultural-household models and field data from Mexico, Turkey and Peru, challenged assertions that agricultural modernization jeopardizes *in-situ* conservation of crop genetic resources and offered new explanations for partial adoption of seed varieties in ‘cradle’ areas of crop diversity. The book *Village Economies: The Design, Estimation and Use of Villagewide Economic Models* expands the micro focus of household models, presenting and implementing a methodology to examine how market linkages transmit the impacts of policy and market changes through local economies in ways missed by both agricultural household and aggregate computable general equilibrium models. I have used these ‘micro economywide’ methods to explore the influences of policy reforms on small economies and the impacts of tourism in sensitive ecological areas, including the Galapagos Islands. I have contributed to the literature on market integration and globalization by adding an intra-national perspective to the traditional trade focus on nations and nation groups.

**TAYLOR, Mark Peter**


822 TAYLOR

Prof. Fin. and Investment, Univ. Dundee,
1987–88; Morgan Grenfell Prof. Fin. Mar-
90; Vis. Prof. Intl Fin., Leonard N. Stern
Grad. Sch. Bus., NYU, 1990; Sr Econ.,
Cons. Econ., IMF, Washington, DC, 1990–
94, 2000–02; Cons. Econ., World Bank,
1994–2000; Prof. Fin. Econ., Univ. Liver-
pool, 1994–97; Fell. Econ., Univ. Coll.,
Oxford and Dept Econ., Oxford Univ.,
1997–99; Sr Econ. Pol. Adviser on Trade
and Ind., British Labour Party Shadow
Cabinet, House of Commons, UK, 1994–
97.

Degrees BA (PPE), MA St. John’s
Coll., Univ. Oxford, 1980, 1984; MSc,
PhD Birkbeck Coll., Univ. London, 1982,
1984; MA (English Literature) Univ. Liv-

Offices and Honours Casberd Exhibi-
tioner, Univ. Oxford, 1978–80; Fell.,
Royal Soc. for Encouragement of Arts,
Manufactures and Commerce, 1995–;
Council Mem., RES, 2002–.

Editorial Duties Managing Ed., Intl
J. Fin. Econ., 1994–., Apl. Fin. Econ.,
1995–.

Principal Fields of Interest F3 Inter-
national Finance; G0 Financial Econom-
ics: General; E0 Macroeconomics and
Monetary Economics: General.

Publications Books: 1. The Balance of
Payments: New Perspectives on Open
Economy Macroeconomics (Edward Elgar,
1990); 2. Money and Financial Markets
(Blackwell, 1991); 3. Applied Econometric
Techniques (with S. Hall, K. Cuthbertson,
(Simon & Schuster, Univ.
Michigan Press, 1992); 4. Policy Issues in
the Operation of Currency Unions (with
P. Masson), (CUP, 1993); 5. Modern Perspec-
tives on the Gold Standard (with T.
Bayoumi, B. Eichengreen), (CUP, 1996);
6. New Developments in Exchange Rate
Economics, Vols I, II (with L. Sarno),
(Edward Elgar, 2002); 7. The Economics
of Exchange Rates (with L. Sarno), (CUP,
2002).

Articles: 1. ‘Long-run purchasing power
parity in the 1920s’ (with P. McMahon),
Europ ER, 32, 1988; 2. ‘Covered interest
arbitrage and market turbulence’, EJ, 99,
1989; 3. ‘The hyperinflation model of
money demand revisited’, JMCB, 23,
1991; 4. ‘The use of technical analysis in
the foreign exchange market’ (with H.
Allen), JIMF, 11, 1992; 5. ‘Modelling the
yield curve’, EJ, 102, 1992; 6. ‘Modelling
the demand for UK broad money,
1871–1913’, RES, 75, 1993; 7. ‘The
economics of exchange rates’, JEL, 33,
1995; 8. ‘Real exchange rate behavior:
the recent float from the perspective of
the past two centuries’ (with J. Lothian),
JPE, 104, 1996; 9. ‘The term structure of
forward exchange premiums and the fore-
castability of spot exchange rates: cor-
recting the errors’ (with R. Clarida),
RES, 79, 1997; 10. ‘The behavior of
real exchange rates during the post Bretton
Woods period’, J Int E, 46, 1998; 11. ‘Of-
ficial intervention in the foreign exchange
market: is it effective and, if so, how does
it work?’ (with L. Sarno), JEL, 39, 2001;
12. ‘Nonlinear mean reversion in real ex-
change rates: towards a solution to the
purchasing power parity puzzles’, IER, 42,
2001; 13. ‘Why is it so difficult to beat
the random walk forecast of exchange
rates?’ (with L. Kilian), J Int E, forth-
coming 2003.

Principal Contributions A central re-
search theme has been the analysis of for-
eign exchange markets, including econo-
metric work on market efficiency and
modelling risk premia and the long-run
behaviour of real and nominal exchange
rates. This programme, together with a
research project directed for the Bank of
England on the use of chartist or tech-
nical analysis, contributed to the view that,
while exchange rates are guided by eco-
nomic fundamentals in the long run, their short-run behaviour is influenced by the interaction of heterogeneous market agents whose behaviour – such as herd behaviour and noise trading – may be outside of the traditional paradigms. Drawing on practical experience as a foreign exchange dealer, I pioneered the use of high-frequency, high-quality data to analyse riskless international arbitrage opportunities such as covered interest rate parity. Numerous contributions to the issue of long-run real exchange rate equilibrium, including non-linear econometric studies of real and nominal exchange rates. Also other contributions to research on financial markets more generally, including analyses of financial market volatility and share price behaviour, risk and efficiency in commodities markets and the determinants of the term structure of interest rates. Numerous contributions in applied macroeconomics, including work on aggregate consumption, investment and asset demand. Various contributions in international monetary policy, including analyses of international capital mobility, currency unions and the European Monetary System. At the IMF I was also involved in applied policy work on the reform of Central and East European economies, including negotiating IMF programmes with the authorities and contributing research on the sequencing of reforms and potential growth paths.

**TEECE, David John**

**Born** 1948, Blenheim, New Zealand.


**Honours** Clarendon Lectures, Oxford Univ., 1998; Hon. Dr, St Petersburg State Univ., 2002; Viipuri Prize in Strategic (Tech.) Mgmt, 2002.

**Editorial Duties** Co-Ed., *Ind. and Corp. Change* (OUP), 1991--.

**Principal Fields of Interest** L0 Industrial Organization: General; O3 Technological Change; L4 Antitrust Policy.


**Principal Contributions** My early work focused on questions of internal organization, firm boundaries, and in particular lateral scope (diversification) appealing to explanations based on imperfect markets for know-how. Subsequent work has looked at the basis of the competitive advantage of firms. I was early to show systematic statistically significant relationships between organizational structure and performance (profits in one case, R&D activity in another). I was early to use transaction cost economics and related ideas to extend the Coase–Williamson paradigm on firm boundaries to diversification issues. Subsequent work on corporate strategy has shown how the asset structure of firms, and the ownership of complementary assets, in particular, affect the allocation of the returns to innovation in the economic system. In addition to introducing the notion of complementary assets into economics and strategy, I also introduced the concept of the appropriability regime. Rents from innovation get steered to one firm or another not only according to assets owned and controlled, but also according to appropriability conditions, defined to include not just intellectual property, but also the nature of the knowledge itself, and in particular the ease or otherwise with which it can be replicated. More recent work has extended these themes to focus on the entrepreneurial functions of firms: how they orchestrate the assets needed to shape markets and market outcomes. My work on the ‘dynamic capabilities of the firm’ has endeavored to provide some intellectual foundations to the concept of ‘competence and capability’. In bringing together strategy research and economics in this fashion, I have endeavored to create a new and more robust theory of the firm that can guide economic and managerial thinking alike. I have also focused on a number of critical areas in law and economics, and intellectual property damages.

**TERÄSVIRTA, Timo Lauri**

**Born** 1941, Helsinki, Finland.


**Degrees** MPolSc (Stats), LicPolSc (Em.), DPolSc (Em.) Univ. Helsinki, 1964, 1968, 1970.


Principal Fields of Interest C5 Econometric Modeling; C2 Econometric Methods: Single Equation Models.


Principal Contributions My early research focused on economic forecasting, in particular on updating forecasts after new information becomes available, and the analysis of economic time series in general. A large part of my more recent
research deals with nonlinear econometric models and modelling. This includes developing coherent model-building strategies for certain well-defined families of nonlinear models, applications of such models to macroeconomic and financial time series, and forecasting with nonlinear models. Recently, I have also become interested in models that are used for characterising and forecasting volatility and have done some work in that area.

TESAR, Linda L. n.e.

THAKOR, Anjan V.

Born 1951, Broach, India.


Principal Fields of Interest G3 Corporate Finance and Governance; G2 Financial Institutions and Services; D8 Information and Uncertainty.


Principal Contributions

My principal contributions are in information economics, corporate finance and financial intermediation. In information economics, my research has contributed to principal-agent theory, signaling, contract design and reputation. In corporate finance, my publications have contributed to an improved understanding of dividend policy, stock repurchases, capital structure, capital budgetting, and security design. In financial intermediation, my research has contributed to issues such as why financial intermediaries exist, how they should be regulated, why they ration credit, and how their contractual relationships with borrowers should be structured.

THALER, Richard H. n.e.

THISSE, Jacques-François

Born 1946, Liège, Belgium.

Current Posts

Prof. Econ., Univ. Catholique Louvain, Louvain-la-Neuve, Belgium, 1996–; Prof. Econ., ENPC, Paris, France, 2001–.

Past Posts


Degrees

BS (Maths), BS (Econ.), PhD Univ. Liège, 1968, 1972, 1975.

Offices and Honours


Editorial Duties


Principal Fields of Interest

D4 Market Structure and Pricing; D6 Welfare Economics; R1 General Regional Economics.

Publications


Principal Contributions Most of my work is related to location theory and its applications to various economic fields in which the heterogeneity of agents matters. This includes industrial organisation, urban economics, local public finance, voting, and labour economics. I have developed with J. Gabszewicz the oligopolistic model of vertical product differentiation and established that the corresponding market structure typically involves a small number of firms, even though entry costs are arbitrarily low. With C. d’Aspremont and Gabszewicz, I have shown that the principle of minimum differentiation attributed to Hotelling is invalid; it must be replaced by the principle of differentiation, which states that firms that compete in prices always have an incentive to sell differentiated products to relax competition. However, maximum differentiation is not required. I have written (with P. Hansen) one of the first papers in political economy by comparing voting and planning procedures for locating a public facility. My first book, co-authored with S. Anderson and A. de Palma, shows how the various models of product differentiation may be integrated within the framework of discrete choice theory, and provides theoretical foundations for the different modelling strategies used in this domain. Since then, I have worked in the economics of agglomeration. With M. Fujita, I have written another book that provides an integrated overview of the field as well as new models of agglomeration and of regional growth. In this book and in several papers, I show, in partial and general equilibrium models, how product differentiation and low transport costs are likely to trigger the clustering of economic activities at different spatial scales (cities and regional imbalance). Unexpectedly, such agglomerations are often efficient. I have also made contributions to the theory of the firm, as well as to game theory using discrete choice theory to capture the idea of bounded rationality.

THOMAS, Duncan

Current Post Prof. Econ., UCLA, Los Angeles, CA, USA, 1994–.
degrees BSc (1st Class Hons) Bristol Univ., 1981; PhD Princeton Univ., 1986.
Principal Fields of Interest  10 Health, Education, and Welfare: General; J1 Demographic Economics; D1 Household Behavior.


Principal Contributions  My research has sought to provide insights into household and family behavior in low-income settings with a focus on investments in the next generation. One line of inquiry has delved inside the black box of the household and contrasted different models of household behavior and asked, for example, whether resources in the hands of women have a different effect on child and family well-being relative to resources in the hands of a man. The evidence suggests that women tend to invest more in human capital, particularly that of their children. Human capital has taken center stage in much of my work. I have used survey data to evaluate public programs such as Head Start in the United States as well as public health interventions, investments in infrastructure and price policies in developing countries. These studies have examined both the short- and longer-term effects of these programs on nutrition, health, education and labor market outcomes of the population. Research has demonstrated there is a strong positive correlation between health and socio-eco-
nomic status. I have attempted to disentangle the causal effect of health on labor outcomes from the effect of income on health. This has involved econometric modeling with survey data as well as conducting an ongoing randomized nutrition intervention in Indonesia in an effort to pin down causal pathways. In recent years, several dramatic financial shocks have reverberated around the world. Using data from the Indonesia Family Life Survey which I collected with Elizabeth Frankenberg and others, we have documented the multiplicity of ways that households and families responded to the financial crisis in the late 1990s in order to mitigate its deleterious effects. I have invested substantially in both the evaluation and improvement of the quality of public use longitudinal socioeconomic and health survey data that are collected in developing countries.

THOMPSON, Craig J.

Born 1962, Knoxville, TN, USA.


Principal Fields of Interest M1 Business Administration; M3 Marketing and Advertising.


**Principal Contributions** My research analyzes the ways in which individuals use the cultural meanings associated with products, services, and brands to pursue their identity goals, to forge rewarding social affiliations, and to negotiate sociocultural contradictions, particularly those manifest in gender roles. I have reconceptualized consumer culture as a complex ideological circuit formed by individuals’ creative acts of self-definition through consumption and reciprocally, the market monitoring activities and technologies by which marketers adapt their ideological appeals to a heterogeneous and dynamic marketplace.

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**THOMSON, William**

**Born** 1949, France.

**Current Post** Prof., Dept Econ., Univ. Rochester, Rochester, NY, USA, 1985–.


Offices and Honours  German Bernacer


Principal Fields of Interest  C7 Game Theory and Bargaining Theory; D6 Welfare Economics.


Principal Contributions  Most of my work deals with the axiomatic derivation of choice rules, both in game theory and in the theory of resource allocation. Properties of rules are formulated, such as strategy-proofness or other notions of implementability, consistency, monotonicity; and the search is for rules satisfying the maximal number of these properties together. The goal is to trace the boundary between combinations of properties that are compatible and combinations that are not, and when compatible, to give as complete as possible a description of the rule, or the class of rules, satisfying them all.

THRALL, Robert M. n.e.

THRIFT, Nigel John

Born 1949, Bath, Somerset, UK.
Past Posts  Res. Officer, Martin Centre

Degrees BA (Geography, Hons) Univ. Wales, 1971; PhD (Geography), DSc (Geography) Bristol Univ., 1979, 1992.


Principal Fields of Interest B5 Current Heterodox Approaches; F3 International Finance; N9 Regional and Urban History.


Principal Contributions Most of my work has related to four fields. One has been general economic methodology. Here I have been concerned to demonstrate the importance of so-called ‘cultural economy’, in which the economy is seen as an amalgam of different networks whose mundane mechanics are as important as their extraordinary outcomes. Another field has been international finance. Here I have been concerned to demonstrate how financial markets rely on tightly knitted social networks, able to transport privileged information around the world. Most of my work has been concerned with ethnography of various financial markets within the City of London, but, more re-
cently, I have become interested in the role of the media as a determinant of bubbles. A third field has been managerial knowledge. Here I have been interested in the rise of the new economy as a function of the rise of what I call the cultural circuit of capitalism, business schools, managerial consultants, managerial gurus and the media. Finally, I am interested, as an economic geographer, in the urban and regional consequences of all of the above, in particular, I have considered the means by which urban and regional policy could become a serious determinant of economic advantage.

TIAN, Guoqiang

**Born** 1956, Gong An County, Hubei, China.

**Current Posts** Prof. Econ., Lewis Faculty Fell., Texas A&M Univ., College Station, TX, USA, 1995–, 1996–; Res. Fell., Private Enterprise Res. Center, Texas A&M Univ., 1995–; Special-Term Prof., Tsinghua Univ., Beijing, China, 2002–.


**Principal Fields of Interest** D7 Analysis of Collective Decision-Making; D5 General Equilibrium and Disequilibrium; P2 Socialist Systems and Transitional Economies.


**Principal Contributions** Most of my research has been in the areas of economic mechanism design theory, general equilibrium theory, and economics of transitions. I have provided various well-behaved mechanisms that implement some well-known social choice rules. I have also fully characterized Bayesian implementation in certain types of economic environments. I gave some characterization results on the existence of equilibria of economic games by weakening conditions imposed in the existing literature. I studied the non-neoclassical individuals’ choice problem by providing necessary and sufficient conditions for the existence of maximal elements of a function, weak or strict preferences. I also generalized some key mathematical theorems that are closely related to mathematical economics, such as the Knaster-Kuratowski-Mazurkiewicz lemma, the maximum theorem, fixed points theorems, and minimax inequalities, by relaxing continuity, convexity, and/or compactness conditions. I studied the issue of smooth transition to a free market economy. I have developed a theoretical model that determines the optimal ownership arrangement in an imperfect market and government institutional environment, especially in transitional economies. In addition, I have made contributions in monetary economics, international trade, dynamic economics, and econometrics.

**TICKELL, Adam Thomas**


**Current Post** Prof. Econ. Geography, Univ. Bristol, Bristol, England, 2000–.


**Degrees** BA (Geography, 1st Class), PhD (Geography) Univ. Manchester, 1987, 1992.


**Principal Fields of Interest** N2 Financial Markets and Institutions; G2 Financial Markets and Institutions.
cial Institutions and Services; P1 Capitalist Systems.


**Principal Contributions** My research has explored the transformations in the political economy of the contemporary state and the spatial manifestations of these. There have been three major strands to my work. First, I have focused on the politics of financial regulation, both in response to shocks to national systems and at the international scale. This is currently developing a concern with the cultural specificities and influences on the politics of supervision. Second, I have explored the governance of the space economy, primarily in the United Kingdom and am currently, for example, developing research on the ways that devolution is being pursued as a means for economic modernisation in England. Third, I am interested in the larger-scale changes to the macro-political environment, such as the emergence of an apparent hegemonic power of neoliberal thinking.

**TIMME, Stephen G. n.e.**

**TIMMERMANN, Allan G.**

**Born** 1964, Skovlund, Denmark.

**Current Post** Prof. Econ., Univ. California, San Diego, CA, USA, 2001–


Principal Fields of Interest G1 General Financial Markets; C1 Econometric and Statistical Methods: General; C2 Econometric Methods: Single Equation Models.


Principal Contributions A large part of my research agenda develops methods to understand asset prices and investor behaviour under incomplete information. Many of my papers are concerned with explicitly modelling how investors form expectations of future payoffs when the parameters of the dividend process, as well as its functional form, are unknown. Taking off from the standard assumption of rational expectations, these papers consider the effect on asset prices of introducing adaptive or Bayesian learning. More recently I have been working on solving asset prices in the presence of structural breaks or regime switches in the dividend process. I have also conducted research on the predictability of stock returns. My work with Hashem Pesaran considers whether stock returns are predictable even after accounting for model specification uncertainty and possible shifts in the underlying forecasting equation. This work also develops econometric methods for sign predictability. In work with Ryan Sullivan and Halbert White, I consider the effect of ‘data min-
ing’ on assessing statistical significance of returns. Finally, in work with Gabriel Perez-Quiros, I have tested the predictions of recent imperfect capital market theories with regard to cyclical asymmetries in the stock returns of small and large firms.

TIROLE, Jean n.e.

TITMAN, Sheridan Dean

Born 1954, Denver, CO, USA.

Current Post McCallister Prof. Fin. Services, Univ. Texas, Austin, TX, USA, 1997–.


Offices and Honours Bd Dirs, AFA, Western Fin. Assoc., FMA, APFA.


Principal Fields of Interest G0 Financial Economics: General; G3 Corporate Finance and Governance.


**Principal Contributions** My major research contributions include the following: I was the first to develop and test models of capital structure that integrate issues relating to product markets and labor markets into the firm’s capital structure choice; I was among the first to describe how insights from the option pricing literature can be used to value real investments; and I have made a number of contributions that relate to the evaluation of managed portfolios and portfolio strategies.

**TODA, Hiro Y.** n.e.

**TOPEL, Robert H.** n.e.

**TOWNSEND, Robert Morris**

*Born* 1948, Cambridge, MA, USA.  
*Current Post* Charles E. Merriam Disting. Service Prof. Econ., Univ. Chicago, Chicago, IL, USA, 1998–.  


**Principal Fields of Interest** G0 Financial Economics: General; O0 Economic Development, Technological Change, and Growth: General.


**Principal Contributions** My contributions in theory include work on incentives and the invention with Milton Harris of what is now known as the revelation principle, work on financial contracts and the emergence of debt finance as in costly state verification, work on risk contingencies in optimal multiperiod contracts and dominance over the permanent income consumption model, and work on computational methods for models with private information with C. Phelan and others. Other general equilibrium contributions include with Edward C. Prescott a way to decentralize economies with private information so that standard existence and welfare theorems apply. I invented the ‘turnpike’ model of money with spatially separated agents and have worked on financial structure and economic growth. Work on rational expectations with heterogeneous beliefs is captured in forecasting the forecasts of others. Econometrics contributions include the study of risk and insurance in developing countries. My ‘village India’ work was awarded the Frisch Medal in 1998. Recent efforts include the design and implementation of large but specialized socio-economic surveys to allow an assessment of the efficiency of financial systems.

**TRAJTENBERG, Manuel** n.e.

**TREFLER, Daniel** n.e.

**TREJO, Stephen Jay**

*Born* 1959, Long Beach, CA, USA.

*Current Post* Assoc. Prof. Econ., Univ. Texas, Austin, TX, USA, 1999–.


*Principal Fields of Interest* J0 Labor and Demographic Economics: General; J3 Wages, Compensation, and Labor Costs; J7 Discrimination.


**Principal Contributions**

I am a labor economist, and my research has examined the response of labor market participants to the incentives created by market opportunities, government policies, and the institutional environment. Specific research topics include the economic effects of overtime pay regulation; the impact of labor unions on compensation, employment, and work schedules; immigrant labor market outcomes and welfare recipiency; and the relative economic status of Mexican Americans. My work on overtime pay regulation shows that statutory overtime premia are at least partly undone by compensating adjustments in straight-time hourly wages, but these wage adjustments may not be large enough to neutralize entirely the impact of overtime laws on hours of work. My research on US-born Mexican Americans shows that they earn relatively low wages primarily because they possess less human capital (particularly education) than other workers, not because they receive smaller labor market rewards for their skills. Thus, the fundamental economic problem confronting Mexican Americans is insufficient schooling. I also find that intergenerational progress for Mexican Americans stalls after the second generation, with only modest improvement in educational attainment and no wage growth observed between the second and third generations (i.e., between the US-born children and grandchildren of Mexican immigrants).

**TRIVEDI, Pravin K.** n.e.

**TSAW, Ruey S.** n.e.

**TSIDDON, Daniel** n.e.

**TURNBULL, Stuart M.** n.e.

**TURNOVSKY, Stephen John**

Born 1941, Wellington, New Zealand.

**Current Post** Prof. Econ., Castor Prof. Econ., Univ. Washington, Seattle, WA, USA, 1988–, 1993–.


**Principal Fields of Interest** E1 General Aggregative Models; E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook; F4 Macroeconomic Aspects of International Trade and Finance.

**Publications**


**Principal Contributions** I have worked extensively in macroeconomic theory, particularly in the formulation and analysis of consistently specified dynamic systems. Much of the emphasis of my earlier work in this area was on inflation, inflationary expectations, and their interaction with other macroeconomic variables. In the past I have worked extensively with linear rational expectations models, focusing both on methodological issues and on policy questions. Since around 1980 almost all of my macroeconomic analysis has employed models based on the intertemporal optimization of representative agents. My earlier work along these lines was deterministic and led to stationary equilibria in which real quantities are constant or grow...
at constant rates. My more recent work has focused on growth models, both endogenous growth models, in which the steady-state growth rate is responsive to instruments of macroeconomic policies, and ‘non-scale’ models, where this is generally not the case. I have developed both deterministic and stochastic models, the latter employing the methods of continuous-time stochastic calculus. Recently, I have increasingly employed numerical simulation methods. My interests in macroeconomics cover both domestic and international aspects. With respect to the latter, my work has centred around the dynamic behaviour of exchange rates, as well as the analysis of economies subject to stochastic disturbances of various kinds. My more recent international models are based on intertemporal optimization and include models of deterministic and stochastic endogenous growth. I have a continuing interest in issues pertaining to macroeconomic stabilization policy. This extends from traditional dynamic optimal feedback policy to more current interests in optimal exchange market intervention, and more generally, optimal stabilization of stochastic growing economies. In the past I have also worked extensively on problems of price stabilization. The last work I did in this area analysed the effectiveness of futures markets as a means of stabilizing the spot price.

TUROK, Ivan Nicholas

Born 1956, Cape Town, South Africa.  
Degrees BSc (Geography) Univ. Bristol, 1979; MSc (Town Planning) Univ. Wales, 1981; PhD Reading Univ., 1987.  
Principal Fields of Interest R0 Urban, Rural, and Regional Economics: General; J6 Mobility, Unemployment, and Vacancies; O0 Economic Development, Technological Change, and Growth: General.  

**Principal Contributions** Most of my work has related to urban and regional development and policy. I have assessed the contribution of new firms, small firms and inward investment to regional economic development. I have also examined the role of property and labour in urban regeneration. More recently I have explored the nature of local labour market adjustment to urban economic decline and restructuring, including the effects on unemployment, migration and commuting. I have also worked on the determinants of urban competitiveness, including agglomeration economies and industrial clusters.
UDELL, Gregory F.

Born 1946, Evanston, IL, USA.

Current Post Bank One Chair Banking and Fin., Kelley Sch. Bus., Indiana Univ., Bloomington, IN, USA, 1998–.


Principal Fields of Interest G2 Financial Institutions and Services; E5 Monetary Policy, Central Banking, and the Supply of Money.

Principal Contributions

My primary research focus is on credit availability and the functioning of financial markets. A number of my research papers explore the distinction between public and private financial markets and the extent to which this is driven by borrower informational opacity. This strand of my research also examines how the contract structure that we observe in private markets can be used to minimize credit rationing and other contracting costs associated with the informational wedge between borrowers and lenders. Specifically, my theoretical and empirical research suggests that contract terms such as collateral, forward commitments, maturity and covenants are not used with indifference in the financial markets. Moreover, the use of some of these terms varies significantly based on borrower size. My work was also one of the first to empirically identify the nature of relationship lending, and its importance to smaller businesses. A second strand of my research examines how financial intermediaries such as commercial banks and insurance companies might be uniquely organized to deliver credit to informationally opaque borrowers. An implication of my work in this area is that a financial institution’s organizational structure (e.g., size and ownership) may be fundamentally linked to the type of products offered by the institution. My work also suggests that factors affecting organizational structure, such as the global consolidation of the financial services industry, may have a significant impact on credit availability, particularly to bank-dependent borrowers. A third strand of my research examines how central bank policymaking may affect bank behaviour in the credit markets. This work explores how changes in monetary policy and prudential supervision affect the behaviour of financial intermediaries in the private debt markets, particularly the commercial bank loan and private placement markets.

UHLIG, Harald

Born 1961, Bonn, Germany.

Current Post Prof., Sch. Bus. Admin. and Econ., Humboldt Univ., Berlin, Germany, 2000–.


Offices and Honours Alfred P. Sloan Doctoral Dissertation Fellowship, Alfred P. Sloan Foundation, 1989–90; Dissertation Support Award, NBER, 1989–90; Participant, RESstud Tour of 7 recent PhDs
in econ. to present their paper in London, Barcelona and Tel Aviv, 1990.


**Principal Fields of Interest** E0 Macroeconomics and Monetary Economics; General; G1 General Financial Markets; C0 Mathematical and Quantitative Methods: General.


**Principal Contributions** My research concerns the quantitative features of macroeconomic, dynamic processes. I am particularly interested in the role of financial markets and monetary policy for these issues. I have investigated several theoretical macroeconomic models, focussing in particular on aspects of policy in growth or business cycle models, see, e.g., my papers with Yanagawa (1996), Scott (1999) or Ljungqvist (2000). I have contributed to the econometric analysis of macroeconomic time series, in particular from a Bayesian perspective, see, e.g., my paper with Sims (1991), or my paper on Bayesian vector autoregressions with stochastic volatility (1997). I have contributed by investigating numerical solution methods, see my paper with Taylor (1990), or my ‘toolkit’ chapter (1999). I have branched out into foundations of decision-making theory, investigating in particular rules of thumb, see, e.g., my paper with Lettau (1999). Finally, I have been interested in issues of European monetary
policy, and have written about it not only for a scientific audience, see my paper with Beetsma (1999), but also for the educated public, see the Monitoring the European Central Bank reports 1 and 3, 1998 and 2001.
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VAN DEN BERG, Gerard J. n.e.

VAN DER PLOEG, Frederick n.e.

VAN DOORSLAER, Eddy K.A.

Born 1958, Willebroek, Belgium.

Current Post Prof. Health Econ., Erasmus Univ., Rotterdam, The Netherlands, 1997–.


Principal Fields of Interest I1 Health; D3 Distribution; D1 Household Behavior.


850  VAN HUYCK


Principal Contributions My economic research in the health field has included: theoretical and empirical work on the demand for and production of health; methodological and empirical work on economic evaluation in health care; conceptual, methodological and empirical work on the definition and measurement of equity and distributive justice in health care; conceptual and empirical work on the measurement of health, and health care systems and reforms thereof. Much of my empirical work has been comparative in nature and based on international collaboration in the EU and OECD area. Recently I have also started working on health issues in the developing world.

VAN HUYCK, John B. n.e.

VAN OURS, Jan C. n.e.

VAN REENEN, John

Born 1965, Carlisle, UK.


Offices and Honours Joshua King Prize, 1988; Prize in Automation, 1989.


Principal Fields of Interest J3 Wages, Compensation, and Labor Costs; L1 Market Structure, Firm Strategy, and Market Performance; O3 Technological Change.


Principal Contributions My work has focused on the relationship between technological change and the labour market, an area that was a preoccupation of the classical economists but was neglected until recent years. In my early work I showed how technological innovations have large positive impacts on the profitability, employment and market valuations of firms and how, when labour is strong, these rents from innovation are shared with employees. More recently, I have examined how the benefits of technology are spread unevenly between different individuals. In particular, the prevalence of skilled biased technical change across industries, nations and time periods tends to reduce the demand for people with less human capital and has created pressures to greater inequality. The unskilled have also tended to suffer from the growth of organizational changes associated with decentralization of decision making and delayering of hierarchies. I have applied and developed panel data techniques for microeconomic information, especially when using direct measures of innovation (R&D, patents, etc.). Union rent sharing is often believed to stunt the incentive to invest in innovation. I have been able to find no systematic evidence that trade unions have retarded R&D in the UK. I have also worked extensively on policy issues. Several of my papers examine how countries and firms could stimulate greater productivity and innovation. In particular, I have analysed the design and impact of the tax system on research and development, showing that well-designed R&D tax credits can stimulate more R&D and productivity growth. In other papers I have evaluated major UK labour market policies, such as wage subsidies for the young unemployed (the ‘New Deal’). My research areas are currently in examining the industrial structure of high-tech industries, in particular pharmaceuticals and computer networks.

VAN ZOMEREN, Bert C. n.e.

VARIAN, Hal R.

Born 1947, Wooster, OH, USA.


Degrees BS MIT, 1969; MA (Maths),


Principal Fields of Interest A1 General Economics; L0 Industrial Organization: General; H0 Public Economics: General.


Principal Contributions My first work investigated axiomatic notions of distributive justice and their consequences. This work was followed by a brief excursion into disequilibrium macroeconomics. My work in industrial organization has to do with various aspects of price discrimination, while my work in public finance has been primarily concerned with public goods and externalities. I have also done some work in financial economics about the effect of differences of opinion on asset prices. The largest component of my work has to do with nonparametric approaches to econometric analysis. These techniques, based on the ideas of revealed preference theory, allow an econometrician to test data for consistency with optimizing models without making any assumptions about functional form. If the data are consistent with the optimizing model, one can go on to test various restrictions, forecast behavior, or do cost–benefit calculations. Currently I am working on the economics of information technology. This area brings together a number of my interests in industrial organization, public finance, economic theory and computation. I am concerned with how information and infrastructure should be priced and managed, and the implications of economic and business models for information industries.

VÉGH, Carlos A. n.e.

VENABLES, Anthony James

Born 1953, Newport, UK.


Degrees BA Cambridge, 1974; BPhil,


**Principal Fields of Interest** F0 International Economics: General; F1 Trade; L0 Industrial Organization: General.

**Publications**


**Principal Contributions** Contributions to the theory of international trade, foreign direct investment and trade policy in imperfectly competitive markets. Analysis of the effects of economic integration. Analysis of agglomeration forces and the location of economic activity.

VERMAELEN, Theo Jozef

**Born** 1953, Aarschot, Belgium.

**Current Post** Schroders Prof. Fin., INSEAD, Fontainebleau, France, 1987–.


**Degrees** Commercial Engineer, Catholic Univ. Leuven, 1975; MBA, PhD (Fin.) Univ. Chicago, 1976, 1980.


Principal Fields of Interest
G0 Financial Economics: General; G3 Corporate Finance and Governance.

Publications

Principal Contributions
My research has focused on better understanding the short-term and long-term consequences of various corporate financial decisions such as share repurchases, mergers and IPOs.

VERRECCHIA, Robert E.

VICKERS, John Stuart


Principal Fields of Interest
E5 Monetary Policy, Central Banking, and the Supply of Money; L0 Industrial Organization: General; L4 Antitrust Policy.

Publications

Articles: 1. ‘Delegation and the theory of the firm’, EJ, 95, 1985; 2. ‘Perfect equilibrium in a model of a race’ (with C.

**Principal Contributions** My work has mostly concerned competition, regulation and privatization. With Christopher Harris I developed models of dynamic rivalry and used them to explore relationships between competition, innovation and growth. George Yarrow and I provided a critical evaluation of the UK privatization programme as it unfolded in the 1980s. We focused on the utility industries and stressed the importance of competition and regulation. Mark Armstrong and I examined subsequent regulatory reform in the UK (with Simon Cowan) and developed theoretical models of regulation. For example, we analysed price discrimination by regulated firms and the question of access price regulation. We have also analysed competitive price discrimination using the concept of competition to supply utility. In 1998 I became chief economist at the Bank of England and a member of the Monetary Policy Committee that sets UK interest rates. Then, in 2000, I became head of the Office of Fair Trading, which has responsibilities for competition and consumer law in the UK. This has given me a direct practical perspective on the economics of monetary policy and competition policy.

**VILLANUEVA, Delano** n.e.

**VISCUSI, W. Kip**

**Born** 1949, Trenton, NJ, USA.


Principal Fields of Interest D8 Information and Uncertainty; L5 Regulation and Industrial Policy; K0 Law and Economics: General.


Principal Contributions My research has focused on developing analysis of health and safety risks as a field of economic inquiry. My work on market forces included estimates of the value of a statistical life based on wage–risk tradeoffs in the labour market, product market, and housing market, which are in the range of $3–8 million. This research has also documented the reasonable rates of discount people employ in valuing fatality risks, the role of quantity adjustments in the value of life, the effect of health status on the marginal utility of income, and the role of individual wealth in affecting attitudes toward risk. My research with Joni Hersch found substantial heterogeneity in
risk-taking behaviour. Cigarette smokers have low values of health risks, and those who use seatbelts have higher values of health risks. Inadequacies in risk perception may impede efficient outcomes. My research on safety caps documented the ‘lulling effect’, whereby people are lulled into a false sense of security by the presence of these safety devices. An opposite problem is that of alarmist responses to divergent risk estimates when experts disagree about the risk. Much of my recent work has focused on the public’s perception of smoking risks and product risks arising from corporate decisions. Risk communication efforts that provide new and accurate information in a convincing manner can serve a constructive role. Government intervention ideally could ameliorate these market failures, but the initial wave of regulation was often ineffective. My research with James T. Hamilton showed that basing hazardous waste clean-up decisions on efficiency criteria promoted equity as well as efficiency. Regulatory interventions have often embodied forms of irrationality exhibited by people more generally, such as alarmist reactions to ambiguous risks. US jury behaviour exhibits similar anomalies as well as a general inability to foster risk–cost balancing.

VISHNY, Robert W. n.e.

VISWANATHAN, S. n.e.

VIVES, Xavier

Born 1955, Barcelona, Spain.

Current Posts Prof. Econ. and Fin., and the Portuguese Council Chaired Prof. Europ. Stud., INSEAD, Fontainebleau, France, 2001–.


Principal Fields of Interest L0 Industrial Organization: General; D8 Information and Uncertainty; G0 Financial Economics: General.


Principal Contributions Work has concentrated in oligopoly theory and industrial organization, information economics, and financial economics. An early theme of research was the study of the determinants of price in oligopoly and the characterization of Cournot and Bertrand competition. In this framework, a positive and normative analysis of information sharing among firms was developed. The understanding of strategic competition was advanced with analysis of entry deterrence, spatial price policies, and the choice of technological flexibility under uncertainty. Two main contributions are the provision of a foundation for partial equilibrium analysis (consumer surplus and downward-sloping demand) based on small income effects and the pioneer application of the theory of supermodular games to economics and to oligopoly theory and industrial organization in particular. Recent work studies the properties of market mechanisms as aggregators of the dispersed information of agents in the economy both from static and dynamic perspectives. In a static setting it is shown that large Cournot markets do not need to aggregate information. In a dynamic setting a slow learning result is obtained when learning is from others and optimal learning is characterized by taking into account the information externalities present. Learning models are applied to understand the effect of the microstructure of financial markets (finding along the way a closed-form solution for a dynamic rational expectations trading model in which risk averse traders have a long horizon and receive private signals), strategic behavior, and the horizons of traders on the role of prices as transmitters of information. Finally, industrial organization tools and the theory of financial intermediation are used to study competition and regulation in banking as well as financial crises.
VON HAGEN, Jürgen

Born 1955, Iserlohn, North-Rhine Westfalia, Germany.

Current Posts Prof. Econ. and Dir., Center of Europ. Integration Stud., Univ. Bonn, Bonn, Germany, 1996–.


Principal Fields of Interest E6 Macroeconomic Aspects of Public Finance, Macroeconomic Policy, and General Outlook; E5 Monetary Policy, Central Banking, and the Supply of Money; F4 Macroeconomic Aspects of International Trade and Finance.


**Principal Contributions** My principal contributions are in the analysis of the role of policy regimes and institutions in shaping economic policies and outcomes, using methods of game theory and empirical research. My empirical work on Germany’s role in the European Monetary System has stimulated a reassessment of the distribution of powers in European exchange rate policies. My work on the political economy of monetary arrangements and monetary unions has stimulated the debate on and the design of monetary union in Europe. My work on the budget process has contributed to the emergence of a new literature on the comparative analysis of fiscal institutions as well as to the public debate over fiscal arrangements in the European Monetary Union.
WAGSTAFF, Robert Adam Stephen

Born 1959, Northampton, UK.


Editorial Duties Assoc. Ed., JHE, 1989–.

Principal Fields of Interest I1 Health; D3 Distribution; D1 Household Behavior.


Principal Contributions My research in the health field has included: theoreti-
eral and empirical work on the demand for and production of health; empirical work on costs and efficiency in health care provision; conceptual, methodological and empirical work on equity and distributive justice in health care; conceptual and empirical work on the measurement of health; welfare economics and its application in health and illicit drugs markets; and health care systems and reforms thereof. Much of my empirical work has been comparative in nature and based on international collaboration. Outside health, my work has been mostly on taxation and income redistribution, and on the application of latent variable methods in labour economics. Recently I have been focusing on health issues in the developing world, and on linking research to policymaking and development assistance. Much of this has involved working with and writing for non-economists.

WAITE, Linda

Born 1947, Ann Arbor, MI, USA.


Principal Fields of Interest 11 Health; 12 Education; 13 Welfare and Poverty.


**Principal Contributions** n.e.

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WAKKER, Peter P. n.e.

WALDMAN, Michael

**Born** 1955, Paterson, NJ, USA.

**Current Post** Charles H. Dyson Prof. Mgmt and Prof. Econ., Johnson Grad. Sch. Mgmt, Cornell Univ., Ithaca, NY, USA, 1997–.


**Degrees** BS MIT, 1977; PhD Univ. Pennsylvania, 1982.


**Principal Fields of Interest** D0 Microeconomics: General; L0 Industrial Organization: General; M5 Personnel Economics.

**Publications**


**Principal Contributions** In my research I try to bring innovative perspectives to well-known research questions. As a result, my research contributions span a variety of topics. One topic in which I have made several contributions is personnel economics. A paper from my dissertation was the first to explore the signaling role of promotions, while I later employed the same approach in analyzing up-or-out contracts. Another paper from my dissertation explored the phenomenon of high-ability workers being assigned to higher levels of job ladders. Recently, Bob Gibbons and I showed that combining job assignment, human-capital acquisition, and learning explains several empirical findings concerning wage and promotion dynamics. A second topic in which I have made several contributions is durable-goods theory. I was the first to explore planned obsolescence from the perspective of time inconsistency and new product introductions. I was also the first to clearly identify the links between durable-goods production and product-line pricing. A recent paper co-authored with Justin Johnson explores new-car leasing as a response to adverse selection in the secondhand market. Other contributions include the following. A paper co-authored with Ian Novos was the first to formally analyze optimal copyright protection. John Haltiwanger and I wrote some of the early papers exploring models characterized by both sophisticated and naive agents. A paper co-authored with Neil Bruce was the first to show transfers in kind can be efficient because they avoid the Samaritan’s dilemma. A paper co-authored with Seonghwan Oh was the first to empirically document the role of expectational shocks in macroeconomic fluctuations. A solo-authored paper was one of the first to explore the role natural selection can play in ‘irrational’ behavior. Recently, Dennis Carlton and I explored the role tying can play in preserving and extending market power.

**WALKER, James M.**

**Born** 1950, Greenville, AL, USA.


**Degrees** BS (Maths), MSc Auburn Univ., 1973, 1975; PhD Texas A&M Univ., 1978.

**Honours** Student Choice Award, Student Alumni Council, Indiana Univ., 1990; Faculty Colloquium on Excellence in Teaching Award, Indiana Univ., 1993; Best Article Award (with V. Smith), for ‘Monetary rewards and decision costs in experimental economics’, *EI*, 1993.

**Editorial Duties** Ed. Bd, *Experimental Econ.*, 2000–.
Principal Fields of Interest

D0 Microeconomics: General; C9 Design of Experiments.

Publications


Principal Contributions

My research falls broadly into the area of applied microeconomics, with an emphasis on applying experimental methods to the role of institutions in affecting individual and market behavior. This research is oriented toward two distinct areas: (1) market institutions, and (2) collective action arenas. My interest in market institutions focuses on how markets aggregate information, disseminate that information, and increase welfare through exchange among individuals. My interest in collective action problems has followed two paths. With colleagues, I have conducted an extended investigation on resource allocation processes related to the voluntary contribution mechanism for the provision of public goods. In 1987, I began an extensive research agenda into the investigation of individual and group behavior in economic environments classified as ‘common-pool’ resources. This collaborative research is oriented toward a systematic investigation into the theoretical and institutional foundations of common-pool environments coupled with empirical analyses employing field and experi-
mental data. A principle focus of this research is the role of self-governing institutions as mechanisms for facilitating efficient resource use.

WALKER, James R. n.e.

WALKLING, Ralph

Born 1949, Baltimore, MD, USA.

Current Post Dean’s Res. Prof. Fin., Fisher Coll. Bus., Ohio State Univ., Columbus, OH, USA, 2000–.


Principal Fields of Interest G3 Corporate Finance and Governance; G2 Financial Institutions and Services.


**Principal Contributions** My work is in the area of financial economics, particularly the areas of corporate governance, mergers and acquisitions and agency theory. My work with Mike Long in the *Rand Journal of Economics* is one of the first empirical tests of agency theory, demonstrating the degree to which managerial resistance in acquisitions is related to executive, rather than shareholder utility. Related research examines the impact of poison pills, the determinants of acquisition success and other strategic issues related to acquisitions. Separate lines of inquiry include: ex-dividend day returns, futures prices, trading volume and the dispersion of analyst forecasts, methodological issues and commission costs.

**WALSH, Carl Eugene**

**Born** 1949, Los Angeles, CA, USA.

**Current Posts** Prof. Econ. Univ. California, Santa Cruz, CA, USA, 1987--; Vis. Scholar, FRB, San Francisco, CA, USA, 1987--.


**Degrees** BA, PhD Univ. California, Berkeley, 1971, 1976.


**Principal Field of Interest** E5 Monetary Policy, Central Banking, and the Supply of Money.


**Principal Contributions** My work focuses on central banking policies, particularly on the structure of delegation implicit in the design of central banks. By adopting a principal–agent approach, I have demonstrated how the incentive structure of the central bank must be structured to ensure optimal policy outcomes in a discretionary environment.

**WANG, Jiang**

**Born** 1959, Zhenjiang, China.


**Degrees** BS (Physics) Nanjing Univ., 1981; PhD (Physics), PhD (Fin.) Univ. Pennsylvania, 1985, 1990.

**Offices and Honours** Werner Heutsch Memorial Prize, Univ. Pennsylvania, 1982; Trefftz Award, Western Fin. Assoc., 1990; Battymarch Fellowship, 1995; Leo Melamed Prize, Univ. Chicago, 1997.


**Principal Fields of Interest** G0 Financial Economics: General; G1 General Financial Markets.


**Principal Contributions** My work focuses on the behavior of financial markets. I have studied how transactions among investors with different trading motives determine asset prices. My recent work analyzes the behavior of trading volume in financial markets and its relation with the underlying risk structure of assets and their prices. I have also made contributions to the pricing of financial derivatives and fixed-income securities.
WANG, Ping

Born 1957, Taipei, Taiwan, ROC.

Current Posts Chair and Prof. Econ., Vanderbilt Univ., Nashville, TN, USA, 2002–.


Principal Fields of Interest D9 Inter-temporal Choice and Growth; E0 Macroeconomics and Monetary Economics: General; I0 Health, Education, and Welfare: General.

WARNER, Jerold B. n.e.

WASSERMAN, Larry n.e.

WATKINS, Susan Cotts n.e.

WATSON, Mark W. n.e.

WATTS, Michael Wayne

Born 1950, Medicine Lodge, KS, USA.

Current Posts Prof. Econ. and Dir., Center Econ. Educ., Courtesy Appointment Prof. Sch. Educ., Purdue Univ., West Lafayette, IN, USA, 1981–.

Past Posts Asst Prof. Econ. and Dir., Center Econ. Educ., Indiana Univ.–Purdue Univ., Indianapolis, 1978–81.


Principal Fields of Interest A2 Teaching of Economics; J0 Labor and Demographic Economics: General; Z1 Cultural Economics.


Principal Contributions Quantitative studies of effective teaching in economics from elementary through graduate levels, including early applications of qualitative response and panel data models in the general framework of educational production functions. Special emphasis on instructor effects and the relative importance of instructor vs. student characteristics. Survey articles on what economics is taught in undergraduate and pre-university economics, and teaching methods in those classes. Articles on the evaluation of university economics teaching, including student and instructor self-evaluations. Essays and survey articles promoting the use of diverse and active-learning teaching methods in economics. Using classic literature and drama in economics, especially undergraduate teaching; and studies of how economists have
used literature and drama and how literary critics have treated economic ideas and issues. Designing and conducting training programs on reforming the content and teaching of economics at undergraduate and secondary levels in Central and Eastern Europe and the former Soviet Union, and documenting that work in a co-edited volume and journal articles. Developing instructional materials on teaching economics at the secondary and undergraduate levels. Member of national committees to develop and write scope and sequence guidelines, and later voluntary national standards, for economics in elementary and secondary US schools. Studies of what economics is taught in other social studies disciplines. Promoting the development of international economic education associations, and cooperation across those groups. Monographs for the general public on the US economy and market economies, one published by the US government in over 40 languages, another in a leading electronic encyclopedia. Studies of Tudor economic thought.

WATTS, Ross Leslie

Born 1942, Hamilton, NSW, Australia.


Principal Fields of Interest M4 Accounting; G0 Financial Economics: General; L2 Firm Objectives, Organization, and Behavior.


WEBER, Guglielmo

**Born** 1958, Florence, Italy.

**Current Post** Prof. Em., Univ. Padua, Italy, 1994–.


WEBB, Steven B. n.e.


Honour RES Prize for best EJ article, 1988–89 (with O.P. Attanasio).


Principal Fields of Interest D1 Household Behavior; E2 Consumption, Saving, Production, Employment, and Investment; G1 General Financial Markets.


Principal Contributions n.e.

WEBER, Martin n.e.

WEIL, David N. n.e.

WEIL, Philippe n.e.

WEILER, J.H.H. n.e.

WEINGAST, Barry Robert

Born 1952, Los Angeles, CA, USA.


Principal Fields of Interest  D7 Analysis of Collective Decision-Making; K0 Law and Economics: Economics.


Military Intervention in Civil Wars (Columbia Univ. Press, 1999).

**Principal Contributions** My work focuses on the interaction of politics and economics, including the political foundations for markets and, generally, the application of rational choice methods for studying political phenomenon. First, my earliest work studied the politics of regulatory policymaking in the United States, showing the decisive role of Congress in shaping policy decisions by major regulatory agencies. Second, a major strand of research applies the new economics of organizations to study how political institutions help create credible commitments, including the institutions supporting cooperation in legislatures (‘The industrial organization of Congress’), constitutions, democracy (‘Political foundations of democracy and the rule of law’), and federalism. This work emphasizes how institutions provide the basis for cooperation in the absence of external or third party enforcement mechanisms. For example, ‘Constitutions and commitment’ (with D. North) shows how political institutions create government commitment to honor property rights and markets, and thus the foundations for economic growth. A third strand (mostly in collaboration with McNollgast) studies the political economy of legal issues, including statutory interpretation, administration law, and constitutional issues. This work shows how Congress uses structure and process to influence bureaucratic policy choices. Fourth, a series of papers (many with K. Shepsle) focus on understanding how structure and process of Congress affected congressional choice, including common pool problems in budgetting and issues of the sources of the power of congressional committees. Fifth, several papers study the political foundations of federalism, including the notion of ‘market-preserving federalism’ that helps explain how some federal systems promote economic growth. This work also reveals the implicit political assumptions in the type of federalism studied by economists. Most recent work focuses on the construction of self-enforcing democracy and its failure, with applications to twentieth-century Spain, nineteenth-century United States, seventeenth-century England, and modern Chile.

WEISBACH, Michael S. n.e.

WEISBROD, Burton A.

**Born** 1931, Chicago, IL, USA.

**Current Post** John Evans Prof. Econ. and Faculty Fell., Inst. Policy Res., Northwestern Univ., Evanston, IL, USA, 1990–.


**Degrees** BA (Mgmt) Univ. Illinois, 1951; MA, PhD Northwestern Univ., 1952, 1958.

WEISBROD 877


Principal Fields of Interest L3 Nonprofit Organizations and Public Enterprise; I0 Health, Education, and Welfare; General; D6 Welfare Economics.


**Principal Contributions** Applied welfare economics, with particular reference to the ability of governmental and private nonprofit organizations to overcome private market failures, has been the overarching focus of my research. Major areas studied include: the military draft, the economics of education, the supply of volunteer labor, public interest law, the economics of health — including benefit–cost analyses of the polio vaccine and other new drugs — and the role and behavior of mixed industries, such as nursing homes, broadcasting, hospitals and jails, in which multiple institutional forms, including public, private, and nonprofit organizations, coexist. Throughout, I have sought to identify the efficiency and equity consequences of these alternative organizational forms. In recent years my research on economic behavior in mixed industries has focussed on differential provision of public goods, their financing in nonprofit organizations, comparative managerial incentives, and problems of measuring ‘performance’. The justification for public and private subsidies to nonprofits, and relatedly, the evidence that nonprofits perform differently from, and ‘better’ than, other forms of organizations, continue to be high on my research agenda because of the relevance for public policy.

**WEISS, Lawrence Alan**

**Born** 1957, Montreal Canada.

**Current Post** Vis. Prof., Sloan Sch., MIT, Cambridge, MA, USA, 2000–; Prof., Univ. Lausanne, Lausanne, Switzerland, 2002–.


**Principal Fields of Interest** G3 Corporate Finance and Governance; G0 Financial Economics: General; K0 Law and Economics.


**Principal Contributions** Costs of bankruptcy, priority of claims in bankruptcy.

**WEITZMAN, Martin L.**

**Born** 1942, New York City, NY, USA.

**Current Post** Prof. Econ., Harvard Univ., Cambridge, MA, USA, 1989–.

Degrees BA (Maths and Physics) Swarthmore Coll., PA, 1963; MS (Stats and OR) Stanford Univ., 1964; PhD MIT, 1967.


Principal Field of Interest Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions Environmental economics, including green accounting, alternative market-like mechanisms of regulation and control, biodiversity, long-term discounting.

WELCH, Finis R.

Born 1938, Olney, TX, USA.

Current Posts Prof. Econ., Texas A&M Univ., College Station, TX, USA, 1991–; Pres., Welch Consulting., College Station, TX, USA, 1976–; Chairman, Unicon Res. Corp., Santa Monica, CA, USA, 1980–; Chairman, Stata Corp., College Station, TX, USA, 1990–.


Degrees BS Univ. Houston, 1961; PhD Univ. Chicago, 1965.


Principal Field of Interest J4 Particular Labor Markets.


**Principal Contributions** My work concentrates on determinants of labour earnings and is intensely empirical. Early work on returns to schooling was followed by a prolonged series on group differences in earnings. Several compare blacks and whites and one contrasts Hispanics and Anglos. Much of the work is descriptive, characterising patterns and the evolution of group differences through time. The behavioural work, in the context of competitive markets, concentrates on determinants of major swings in earnings patterns. Income differences by age, schooling level, and race are examined for responses to changes in labour force composition and protective legislation. Analysis of effects of cohort size on age-learning profiles traces early results and future implications for the baby boom cohorts. Effects of rising education levels are contrasted with growth in labour productivity and cyclical swings in tracing changes in patterns of income differences by schooling. I have also worked on implications of modern and discriminatory legislation, together with its enforcement apparatus, and the comparison of evolving patterns of income and employment differences between those protected and those not protected by the legislation. For the last several years my work has concentrated on documenting, and searching for explanations of the extraordinary growth in earnings inequality that has been experienced in the US since the early 1970s.

**WELCH, Ivo (Icio Alexander)**

*Born* 1963, Schweinfurt, Germany.

**Current Post** Prof. Fin. and Econ., Yale Univ., New Haven, CT, USA, 2000–.

**Past Posts** Asst Prof., Assoc. Prof., Prof., UCLA, 1989–2000; Res. Assoc., NBER, 2000–.


**Principal Fields of Interest** G0 Financial Economics: General; D0 Microeconomics: General; L0 Industrial Organization: General.


Principal Contributions I have been interested in a wide range of phenomena, both theoretically and empirically. The common thread is that they are all built on micro foundations and applied in nature. My research has introduced ‘informational cascades’, a theory of rational herding, that is based on discrete choices. Cascades can cause idiosyncratic and fragile conformity, and have been widely applied, even beyond economics. A second focus of my interest has been corporate financing activity.

WENDT, Alexander n.e.

WERNERFELT, Birger

Born 1951, Copenhagen, Denmark.

Current Posts J.C. Penney Prof. and Chair of PhD Program, Sloan Sch. Mgmt, MIT, Cambridge, MA, USA, 1989–


Principal Fields of Interest L0 Industrial Organization: General; D0 Microeconomics: General; M2 Business Economics.

Principal Contributions

Most of my work has been concerned with the scope of the firm. My piece on the ‘resource-based view’ of the firm provides a general, but still quite operational, way of thinking about which markets a firm should compete in, and how it should compete in each of them. Cynthia Montgomery and I provided empirical evidence for several implications of the ‘resource-based view’, while David Sappington and I looked more narrowly at umbrella branding. For the past 15 years, I have been pushing the view that the employment relationship (the firm) is an implicit contract in which the employee has agreed to follow orders without renegotiating pay at each turn. The central argument is that this economizes on adjustment costs, mainly in the form of inefficiencies associated with bargaining. If adjustments are less frequent, or can be specified ex ante, explicit contracts can be used (J Bus, 1997). The theory is independent of assets and thus needs to be reconciled with the fact that bosses own most physical assets used by employees. To this end I have argued that the player controlling how an asset is used should also be the residual claimant – since he or she otherwise will abuse it (JEMS, 2002).

Principal Fields of Interest

E3 Prices, Business Fluctuations, and Cycles; E2
Consumption, Saving, Production, Employment, and Investment; C1 Econometric and Statistical Methods: General.


Principal Contributions: My work to date falls in two broad classes: (1) empirical macroeconomics, defined broadly to include monetary, financial and international economics, and (2) theoretical and applied time-series econometrics. First, in empirical work, I aim to develop a model that formalizes a simple idea or rationalizes a robust empirical regularity; evaluate correspondence between data and model; and consider in detail alternative interpretations of results. Results include: (a) Established as a robust fact that the variability of production tends to exceed that of sales at both two-digit and national levels, in the US and in other countries. (b) Used co-movements of inventories and output to decompose fluctuations in output into demand and cost-driven components. The two components are of roughly equal importance in the US. (c) Concluded that US stock price volatility cannot be explained by small sample bias due to unit roots, and that only a small part of the movement in stock prices is well explained by movements in discount factors as conventionally modeled or in dividends. (d) In Japan, a small estimated elasticity of investment with respect to the tax-adjusted cost of capital arguably results because changes in the cost of capital are strongly mean reverting; changes that are perceived to be permanent might well encourage large changes in investment. Second, my theoretical econometric research has been stimulated by issues raised in my empirical work. Results in-
clude techniques for: (a) Inference in regression models when (i) the disturbances depart in unknown ways from textbook conditions, or (ii) the data have unit roots but also have strong drift. Both are common occurrences in time-series work. (b) Inference about the moments of out-of-sample predictions and prediction errors, taking into account possible dependence of predictions on estimated regression parameters. (c) Instrumental variables estimation of time-series models using many instruments.

WHALEY, Robert E. n.e.

WHEATON, William C. n.e.

WHEELER, David Russell

Born 1946, Ronceverte, WV, USA.


Principal Fields of Interest J1 Demographic Economics; O0 Economic Development, Technological Change, and Growth: General; Q2 Renewable Resources and Conservation; Environmental Management.


Principal Contributions My work has focussed on empirical studies that help clarify the relationships linking technical change, economic growth, demographic change, and environmental quality. My early publications helped establish the value of econometric modeling as a tool for demographic forecasting. My first book incorporated human resource variables into a simultaneous model of growth and demographic change, and used the econometric results to produce long-run demographic forecasts for several developing countries. The predicted population growth rates were much lower than standard (non-econometric) UN forecasts, but subsequent comparisons have shown the econometric approach to be significantly more accurate. In subsequent work with A. Mody, I studied the determinants of multinational investment, automation and the evolution of comparative advantage. The results suggested that macro- and micro-level scale economies were as important as relative factor costs, institutional differences and political risks in determining outcomes. Most recently, I have worked with a team of researchers at the World Bank to investigate the relationships linking trade, industry structure, regulation and environmental quality in developing countries. This work has yielded a number of insights, including the relative unimportance of international ‘pollution haven’ effects; the significant impact of ‘informal regulation’ (i.e., community pressure) on polluters in developing countries where formal regulation is weak or absent; the importance of firm and plant characteristics in determining environmental performance, regardless of regulatory strictness; and the power of public environmental information as a complement to formal regulation. These insights have been incorporated into several experiments with environmental regulatory reform, undertaken in collaborative projects by the World Bank and developing-country environmental agencies. The results of these experiments are summarized in my most recent book.

WHINSTON, Michael Dennis

Born 1959, New York City, NY, USA.


Principal Fields of Interest D0 Microeconomics: General; L0 Industrial Organization: General; L4 Antitrust Policy.


Articles: 1. ‘Common marketing agency

**Principal Contributions** My work has contributed to understanding in the fields of industrial organization, antitrust (particularly vertical practices, such as tying and exclusive dealing), contract theory, and game theory. In addition, I am co-author of *Microeconomic Theory*, one of the leading graduate textbooks on microeconomic theory.

**WHITE, Alan** n.e.

**WHITE, Halbert L.** n.e.

**WHITED, Toni M.** n.e.

**WHITEMAN, Charles Hamilton**

*Born* 1954, Atlantic, IA, USA.

*Current Post* Pioneer Hi-Bred Prof. Fin. Econ., Univ. Iowa, Iowa City, IA, USA, 1995–.


*Degrees* BA (Hons) Univ. Kansas, 1975; PhD Univ. Minnesota, 1981.

*Offices and Honours* Professional Excellence in Training of Econ. Award by PhD students in Econ., Univ. Iowa, 1990–97; HON Inds Excellence in Teach-
ing Award, Univ. Iowa, 1991; Faculty Scholar Award, Univ. Iowa, 1994–97; Chair, Dept Econ., Univ. Iowa, 1997–2000.

**Editorial Duties**

**Principal Fields of Interest**
E3 Prices, Business Fluctuations, and Cycles; C5 Econometric Modeling; G1 General Financial Markets.

**Publications**


**Principal Contributions**
My work has been in macroeconometrics, and involves the connection between data and dynamic theory. My *User’s Guide* (book 1) provided a unified, ‘frequency domain’ framework for solving and analyzing linear rational expectations models in which it is possible to make explicit connection between the decision rules of agents or policymakers and estimable models. ‘Policy design’ (article 4) and related papers developed the idea of spectral utility and provided procedures for solving dynamic policy games involving expectations and differential equations. Difficulties with fitting models of this sort (the restrictions they embody are too stringent for real data) led me to consider whether ‘probabilistic’ imposition of such restric-
tions might be carried out via Bayesian methods. ‘Temporal stability’ and ‘Reconsidering’ (articles 5 and 6) helped establish the Bayesian unit root literature, casting doubt on then existing results; while ‘Integration’ (article 7) helped establish poor performance of classical unit root tests even under ideal conditions. Methods developed for analyzing and predicting time series using a Bayesian approach developed during this effort were utilized beginning in 1990 by the University of Iowa Institute for Economic Research to produce forecasts of economic conditions and state tax revenues used by state officials in forming policy. ‘Supplanting the “Minnesota” prior’ (article 10) began development of methods for using dynamic theory as a source of prior information in time-series model estimation, while ‘A Bayesian approach’ (article 17) provided a framework for fully Bayesian analysis of dynamic models and their use in practical applications such as forecasting. My recent work involves developing new procedures for predicting macroeconomic time series using large numbers of predicting variables, the development of numerical Bayesian procedures for pricing commodity options, and development of new devices for assessing the empirical validity of models used in macroeconomics and finance.

WHITTINGTON, Dale

Born 1950, Austin, TX, USA.


Offices and Honours Raymond Vernon Award (with D. MacRae) for best article in Vol. 5, JPAM, 1986; Nile Advisory Group, World Bank, 1997–; Res. Advisor, Econ. and Environment Program for Southeast Asia (EEPSEA), 1998–.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics; General; D1 Household Behavior; R0 Urban, Rural, and Regional Economics: General.


Articles: 1. ‘The ambiguities of cost–benefit analysis: an evaluation of regulatory impact analyses under Executive Order 12291’ (with W.N. Grubb, M.

**Principal Contributions** I have worked in four main areas in applied economics. The first is water and sanitation policy in developing countries. Here my contributions focus on water pricing and tariff design, and a better understanding of household demand for improved services. The second is the economics of water management and policy in the Nile Basin. My third area of work is the application of the contingent valuation method in developing countries. In over twenty published studies, I have demonstrated the feasibility of administering contingent valuation surveys to very poor, often illiterate respondents. Fourth, with Duncan MacRae I have discussed the importance of ‘standing’ in the practice of cost–benefit analysis.

WILCOX, David W. n.e.
WILCOXEN, Peter Jensen

Born 1959, Los Angeles, CA, USA.


Principal Fields of Interest Q0 Agricultural and Natural Resource Economics: General; O4 Economic Growth and Aggregate Productivity; H0 Public Economics: General.


Principal Contributions The fundamental theme of my work has been measuring the effect of environmental and tax policy on capital formation and economic growth. About a third of my work has been devoted to quantifying the effects of actual regulations, such as the US Clean Air Act, after they have been in operation. Another third has examined the likely effects of proposed policies, such as a shift in the US tax system toward a consumption tax basis or a national or international agreement intended to control cli-
mate change. The remaining third of my work has been on improvements in the methodology of econometric general equilibrium modeling.

WILDASIN, David Earl

Born 1950, Willimantic, CT, USA.


Degrees BA Univ. Virginia, 1972; PhD Univ. Iowa, 1976.


Principal Fields of Interest H0 Public Economics: General; R0 Urban, Rural, and Regional Economics: General; F0 International Economics: General.


**Principal Contributions** Much of my research has dealt with issues in ‘open economy public economics’ (e.g., in specific applications, ‘state and local public finance’, ‘international public economics’, etc.) and fiscal federalism. This research examines fundamental public economics questions: what are the efficiency and distributional consequences of public policies, and why do governments choose the policies that they do? My early work in this field analyzes efficient local taxation, capitalization and revelation of preferences for local public goods, and the incentive and distributional effects of intergovernmental transfers. More recently, I have worked (alone and with several co-authors) on tax competition and tax exporting and its implications for income redistribution; the implications of factor market integration for redistribution, risk-sharing, and related policy issues such as EU enlargement; investment in human capital; and fiscal decentralization in LDCs. Currently, I am studying the taxation of multi-state/national corporations, optimal taxation in the international context, labor market institutions, fiscal discipline and bailouts in federations, and the fiscal adjustment process of sub-national governments. Political economy and institutional issues are intertwined with this research. I have also studied the effects of public policies on investment, savings, fertility, growth, urban form, and the environment, as well as the theory of optimal taxation, benefit–cost analysis, and the political economy of public pensions. My applied work on such topics as fiscal policies in LDCs, state government tax policy, economic integration and public pensions in Europe, and the marginal cost of public funds motivates and is motivated by my theoretical research on federalism, optimal taxation, and urban, regional, and international economics. When time permits, I like to read, rediscover and hopefully (re)popularize ideas in classic works like those of R.M. Haig, E. Heckscher, and others.

**WILLIAMSON, Jeffrey Gale**

**Born** 1935, New Haven, CT, USA.

**Current Post** Laird Bell Prof., Harvard Univ., Cambridge, MA, USA, 1984—


Principal Fields of Interest  N0 Economic History: General; O1 Economic Development.


Principal Contributions  Empirical application of independent systems to problems in Japanese, American, European and third world 19th and 20th century economic development. In particular, the application of dynamic and static general equilibrium models to industrial revolutions in history, assessing the role of world price shocks, demographic forces and unbalanced technological progress. Modeling the accumulation process in history. Extensions to contemporary LDCs. Examination of both ‘saving-driven’ and ‘investment-driven’ models. Part of a larger research project exploring the long-term wealth portfolio changes among assets in land, government debt, foreign capital, human capital and conventional capital. The impact of international migration,
capital flows and commodity trade on global factor price convergence since 1492. Why and when the convergence stopped. Why and when it resumed. Worldwide focus, assessing open economy forces on the OECD club, the European periphery, Latin America, Asia, and the Mediterranean Basin, mostly over the past two centuries. Understanding the causes and the consequences of mass migrations under various world environmental conditions from the Irish famine to modern Africa. The evolution of world living standards since 1820. Collection and analysis of purchasing power parity adjusted real wages for comparable work and comparable workers. Includes both Western and Eastern Europe, the Mediterranean Basin, Latin America, North America and Australasia, and Asia. Offers evidence on relative factor and commodity prices to assess competing growth and globalization hypotheses that GDP aggregates cannot. A new economic history of the economic performance around the periphery since 1820. Topics including de-industrialization, the terms of trade debate, inequality, South–South mass migrations, the Lucas paradox, elastic labor supplies and other issues.

WILLIAMSON, Oliver Eaton

Born 1932, Superior, WI, USA.


Editorial Duties Co-Ed., JLEO.

Principal Fields of Interest A1 General Economics; M1 Business Administration; L0 Industrial Organization: General.


Principal Contributions I became an economist with interdisciplinary interests because, in the convoluted course of events, that was the natural thing to do. Being a PhD student at Carnegie-Mellon in the early 1960s was an exciting experi-
The study of economic organisation – within and between markets and hierarchies, to include both standard and non-standard forms of contracting – became an obsession thereafter. The four key academic figures in my research on problems of economic organisation were Kenneth Arrow, Alfred D. Chandler, Jr, Ronald Coase and Herbert Simon. Although I had only two (Arrow and Simon) in the classroom, I regard Chandler and Coase as my teachers nonetheless. From Arrow I learned about the importance of information and not to shoe-horn difficult problems into orthodox boxes. Chandler taught me that organisational innovation was an important and neglected phenomenon that had pervasive ramifications for understanding American industry. Coase taught me that transaction costs were central to the study of economic organisation and that such studies should be performed in a comparative institutional manner. And Simon taught me that behavioural assumptions were important and not to be intimidated by disciplinary boundaries. It has given me satisfaction to have been a participant in helping to shape the ‘new institutional economics’ during the past 20 years and to see research contributions reflected in public policy reforms – especially in the area of antitrust. Not only do the revised ‘merger guidelines’ reflect the importance of economies as an antitrust defence, but the concept of the firm as a governance structure (rather than as a production function) has taken a secure hold. Increasingly, much of the relevant action is perceived to reside in the mechanisms of governance. That is what transaction cost economics is all about.

WILLIS, Kenneth George


Current Posts Prof. Environmental Econ. and Dir., Centre for Res. in Environmental Appraisal and Mgmt, Dept Architecture and Planning, Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK, 1994–.


Degrees BSc London Univ., 1966; PhD Newcastle Univ., 1970.

Principal Fields of Interest Q2 Renewable Resources and Conservation; Environmental Management; Q3 Nonrenewable Resources and Conservation; D6 Welfare Economics.


**Principal Contributions** Early work investigated the influence of the structure of space and occupational structures on migration; and the effect of government regulation on housing markets. However, most of my work has related to welfare and environmental economic and their applications. This has identified the costs and benefits of various town-planning policies such as green belts, factory development in rural areas, the efficacy of regulation by tax or environmental and land-use controls, and how decisions are made in land-use planning. Research has also demonstrated the importance for allocative efficiency of incorporating external costs and benefits into other environmental regulatory policies with regard to biodiversity and regulation of water abstraction. I have also made contributions to the development of travel-cost, hedonic pricing, contingent valuation, and choice experiment methods in environmental valuation.

**WILSON, John Douglas (Jay)**

**Born** 1952, Bronxville, NY, USA.

**Current Post** Prof. Econ., Dept Econ., Michigan State Univ., East Lansing, MI, USA, 1998–.


**Degrees** AB Brown Univ., 1975; PhD MIT, 1979.

**Honour** Phi Beta Kappa, 1975.


**Principal Fields of Interest** F1 Trade; F2 International Factor Movements and International Business; H0 Public Economics: General.


**Principal Contributions** My early contributions were in the area of optimal income taxation, including the implications of migration for the optimal income tax, and also how a government should deviate from aggregate production efficiency when designing its employment policy. I also investigated other second-best issues, including how the use of commodity taxation alters optimal public good supplies from their first-best levels, and optimal road investment in the presence of unpriced road congestion. My early interests in international and interjurisdictional factor mobility led to a series of contributions on tax competition among independent governments. I developed a theory showing how competition for mobile capital leads to inefficiently low taxes and public good levels. I later extended this theory to encompass multiple tax instruments, mobile labor, and goods trade. Another paper investigated some unique incentive effects created by multijurisdictional corporate income taxation under formula apportionment. My work in the area of international trade has included models of endogenous tariff formation, and also an extension of Tiebout’s theory of efficient local public goods provision to include goods trade. Several of my papers have investigated the design and effects of various tax and expenditure policies in the presence of technological uncertainty or asymmetric information.

**WILSON, Paul W.**

**WILSON, Robert Butler**

**Born** 1937, Geneva, NB, USA.


**Principal Fields of Interest** A1 Gen-
eral Economics; C6 Mathematical Methods and Programming; C7 Game Theory and Bargaining Theory.


Principal Contributions I think it is possible to reconstruct economic theory from a foundation in game theory, and indeed many contributors are advancing the task. The methodology has improved (though much remains) and it enables inclusion of realistic features: strategic behaviour, informational disparities, timing and dynamics. Capturing the effects of incentives on efficiency is primary, both in trading processes (bargaining, auctions, bid–ask markets, etc.) and in contracting and the organisation of firms. Pricing strategy is also a candidate, especially discriminatory practices and public-utility pricing where self-selection is important, but also competitive battles (price wars, entry and exit). The fine structure of markets is poorly modelled, in my view, and the theory barely conveys the richness of practice; this would be fine if theory captured the main features but actually it misses essentials. The challenge is more often the right formulation than the analysis. A genuine welfare economics awaits a better understanding of product and factor (especially labour) markets. The reliance of game theory on assumed common knowledge and perfect ‘rationality’ is an analytical strength and a practical deficiency. The robustness of this approach depends mainly on showing that simple strategies suffice for the important economic institutions. Practical studies of management, and especially investment and pricing, are my best source of theoretical topics; I continue to be amazed at the estrangement of so much economic theory, and many economists, from current practice in the field they study. I intend to return to social choice theory and political science with the tools of game theory. I see social science as modern philosophy with a realistic bent, and think it can make a difference by explicating classical conundrums; e.g., an analysis of a bargaining game sheds more light than any axiomatisation. I retain an interest in risk-sharing, public enterprises, and even markets, that achieve co-operatively efficient outcomes with economies of numbers, scale, or information; public utility investments and pricing need considerable work. My early interest in computational topics waned as micro-seconds became cheaper. Working with doctoral students is a great pleasure.

WINER, Russ S. n.e.

WINSTON, Clifford

Born 1952, Flushing, NY, USA.


Degrees AB, PhD Univ. California, Berkeley, 1974, 1979; MSc LSE, 1975.

Principal Fields of Interest L9 Industry Studies: Utilities and Transportation; L5 Regulation and Industrial Policy; R4 Transportation Systems.


Principal Contributions My research has focussed on the economics of transportation, leading to a broader concentration in regulatory and infrastructure policy analysis. Early work was concerned with freight transportation demand and cost modeling and the inefficiencies of freight transportation regulation and the benefits from deregulation. I complemented this work with analyses of the airline industry and studies of the effects of deregulation of this industry. My recent work in this area has characterized the airline industry’s evolution as it continues to adjust to deregulation. I have summarized the effects of deregulation of the transportation and other major industries (article 9). I have also characterized the long-run adjustment of industries to deregulation and drawn implications for industries beginning the transition to deregulation (article 10). I have recently extended my work in transportation deregulation by analyzing the benefits from privatizing urban transportation (article 11). I have also contributed to the analysis of public investment in transportation infrastructure by quantifying the benefits from efficient pricing of and investment in highways and airports. My recent work in this area has investigated the apparent resistance to efficient road pricing and possible ways to overcome it. I have synthesized my contributions in this area (article 8). Finally, I have analyzed market conditions and policy issues facing the automobile industry. I have extended and applied dynamic discrete choice models to analyze...
the demand for automobiles and developed and estimated multiproduct cost functions to characterize automobile production technology. These models have been used to understand the effects of trade policies on the automobile industry, consumer preferences for automobile safety features, the effects of automobile safety regulation, and the recent growth in automobile leasing.

WISE, David A. n.e.

WOLFE, Barbara L.

Born 1943, Philadelphia, PA, USA.


Principal Fields of Interest I0 Health, Education, and Welfare: General; I1 Health; I3 Welfare and Poverty.


Articles: 1. ‘Disability transfers and the work decision of older men’ (with P. de Jong, R. Haveman), QJE, Aug. 1991; 2.
Principal Contributions

Most of my research looks at incentive issues in the areas of health, education and welfare. Much of this research has focussed on vulnerable populations such as those in poor families. Contributions include an approach to incorporating health needs in a new poverty measure, understanding the impact of welfare reform on maintaining health care coverage, developing an approach to value nonmarket returns to schooling as well as cataloguing both nonmarket and social returns to schooling; contributing to the debate on which school resources matter for which children in order to better target school resources; improving our understanding of the incentive effects of disability-based transfers in terms of labor market response and application for disability-related transfers; and contributing to the understanding of what individual, family and neighborhood factors are important in determining the success of young adults. These outcomes include high school graduation, years of schooling, teen non-marital pregnancy and inactivity as a young adult. Using panel data, and working with Robert Haveman, I have explored determinants influencing these outcomes including socio-economic status while a young child, a school-aged child and an adolescent. Particular contributions include learning that resources are best measured over the entire childhood rather than at one age; that a limited set of neighborhood factors may play a role in influencing outcomes, and that economic incentives in terms of expected differences in outcomes seem important in the decisions young persons make.

WOLFF, Edward Nathan

Born 1946, Long Branch, NJ, USA.


**Principal Fields of Interest** D3 Distribution; I3 Welfare and Poverty; O4 Economic Growth and Aggregate Productivity.


**Principal Contributions** I have been working on household wealth inequality since 1970. I developed a long-term time series for the US and documented a tremendous increase of wealth inequality since the late 1970s, making the US the most unequal industrialized country in this dimension. The same trend is evident with or without the inclusion of social security and pension wealth (the principal results are summarized in my 1995 book, *Top Heavy*). Simulation analysis also documents the overwhelming importance of intergenerational transfers relative to current savings in household wealth accumulation. In more recent work I have examined some of the distributional effects of the changeover from the traditional defined benefit pension system in the US to the new defined contribution system. The results show that from 1983 to 1998 the median household was made worse off in terms of both pension wealth and total wealth as a result of this transformation. Work with William Baumol helped develop the ideas of productivity convergence, the catch-up phenomenon, and conditional convergence (controlling for other effects such as educational attainment), factors which are now widely used in
cross-country productivity comparisons (see our 1989 book, Productivity and American Leadership: The Long View).

We also found that the shift in employment to services created a substantial drag on secular productivity growth. I was also one of the first economists to translate Marxian concepts such as the rate of surplus value and the organic composition into empirical constructs. My 1979 AER article empirically investigated Marx’s law of the falling rate of profit for the US and found that declines in the rate of profit were principally dependent on whether wages increased faster than overall productivity. Recent work has also looked at skill change in the American labor force, documenting that educational attainment is fast outstripping the demand for workplace skills.

WOLINSKY, Asher n.e.

WOLPIN, Kenneth I. n.e.

WOOD, Adrian n.e.

WOODFORD, Michael

Born 1955, Chicopee, MA, USA.


Degrees AB Univ. Chicago, 1977; JD Yale Law School, 1980; PhD MIT, 1983.


Principal Fields of Interest E5 Monetary Policy, Central Banking, and the Supply of Money; E3 Prices, Business Fluctuations, and Cycles; D9 Intertemporal Choice and Growth.


Principal Contributions Early work concentrated on the theory of endogenous
fluctuations, with particular attention to the possibility of ‘sunspot equilibria’. Main contributions to that theory included analysis of the conditions under which ‘local’ sunspot equilibria exist in a range of models; demonstration that a variety of relatively special features of early examples of sunspot equilibria (such as ‘backward-bending’ supply curves, or agents with lifetimes short relative to the length of the equilibrium cycles) were not necessary; and demonstration that simple adaptive learning rules could result in convergence to a sunspot equilibrium. More recent work (much of it with Julio Rotemberg) has focussed on the role of pricing and supply decisions in the generation of aggregate fluctuations, with particular emphasis upon the role of cyclical variations in the relation between prices and supply costs. Finally, a continuing concern has been the analysis of interest-rate rules as an alternative to monetary targetting. Early work showed that, contrary to a common view, interest-rate rules need not imply indeterminacy of the equilibrium price level, even in the extreme case of a pure interest-rate peg. Analysis of the mechanisms involved in price-level determination under such regimes has emphasized the fiscal effects of price-level and interest-rate changes. Recent work continues the analysis of interest-rate rules, considering the proper use of alternative indicator variables in successful stabilization, and analyzing the welfare properties of alternative rules on choice-theoretic grounds.

WOOLDRIDGE, Jeffrey M. n.e.

WRIGHT, Randall Douglas

Born 1956, Winnipeg, Manitoba, Canada.

Current Post Prof., Univ. Pennsylvania, Philadelphia, PA, USA, 1990–.


Degrees BA Univ. Manitoba, 1979; PhD Univ. Minnesota, 1986.


Principal Fields of Interest E1 General Aggregative Models; E4 Money and Interest Rates; E5 Monetary Policy, Central Banking, and the Supply of Money.


Principal Contributions Principal contributions to economics include the use of models that explicitly incorporate frictions, in order to analyze phenomena that are not easy to understand using conventional economic theory. The main example is in monetary economics, where search-theoretic models that explicitly incorporate trading frictions are used to capture the medium of exchange role of money and to study implications for monetary theory and policy. New methods in search and bargaining theory have been developed and a new paradigm for monetary theory (sometimes called the search or matching framework) has been established. Related work involves the study of search theory per se, and also applies the models to the labor market and marriage markets. In the labor market, in particular, the role of unemployment insurance has been analyzed. Another contribution is to integrate household production into general equilibrium macroeconomic models and explore the implications, both theoretically and quantitatively. It has been shown that incorporating household production has important implications for the way we think about many macro phenomena, including business cycles, development, the labor market and fiscal policy.

Wrigley, Neil

Born 1948, Denton, Lancashire, UK.
Current Post Prof. Econ. Geography, Univ. Southampton, Southampton, UK, 1991–.

Degrees BA (Geography) Univ. Wales, 1970; PhD (Geography) Univ. Cambridge, 1976; DSc (Geography) Univ. Bristol, 1990.


**Principal Fields of Interest** R0 Urban, Rural, and Regional Economics: General; L2 Firm Objectives, Organization, and Behavior; L8 Industry Studies: Services.

**Publications**

**Books:**
1. *Categorical Data Analysis* (Longman, 1985, Blackburn Press, 2002);
2. *Retailing, Consumption and Capital* (with M.S. Lowe), (Addison Wesley Longman, 1996);

**Articles:**
2. ‘Paired comparison experiments and logit models’, *Environment and Planning A*, 12, Jan. 1980;
3. ‘Categorical data, repeated measurement research designs and regional industrial surveys’, *Regional Stud.*, 14, Aug. 1980;
5. ‘Stochastic panel data models of urban shopping behaviour – Parts 1–4’ (with R. Dunn), *Environment and Planning A*, 16–17, 1984–85;
8. ‘Is the “golden age” of British grocery retailing at a watershed?’, *Environment and Planning A*, 23, Nov. 1991;
10. ‘After the store wars: towards a new era of competition in UK food retailing?’, *J. Retailing and Consumer Services*, 1, March 1994;
11. ‘The spatial configuration of the firm and the management of sunk costs’ (with G.L. Clark), *Econ. Geography*, 73, July 1997;
15. ‘The globalization of retail capital’, in G.L. Clark, M. Feldman, M.S. Gertler (eds), *Oxford Handbook of Economic Geography* (OUP, 2001);

**Principal Contributions** I am an economic geographer contributing to the cross-disciplinary development of economic geography/geographical economics via co-editorship (with economists Richard Arnott and Diego Puga) of the *Journal of Economic Geography* (OUP). My contributions have been in two main fields. During the 1970s/1980s my work centred on quantitative social science and spatial statistics – particularly in the fields of categorical data analysis, discrete choice modelling and longitudinal/panel data analysis, with an applied focus on urban and regional issues. I also made contributions on the modifiable areal unit problem, surface modelling and census data analysis. From the late 1980s on-
wards, my focus shifted to economic geography – in particular issues relating to the firm, corporate finance, corporate strategy and the economic landscape. The specific reference for my work has been the corporate restructuring, regulation and globalization of the retail industry, and I have written extensively on financial re-engineering, consolidation and regulation in the US food retail industry during the post-LBO period, changing conditions of competition and regulation in UK and continental European retail, issues of retail development and finance, and the globalization of retail capital.

**WYPLOSZ, Charles André**

**Born** 1947, Vichy, France.


**Principal Fields of Interest** E5 Monetary Policy, Central Banking, and the Supply of Money; F3 International Finance.


**Principal Contributions** I have followed two main interests: understanding international financial flows and their impact on the macroeconomy, and macroeconomic policy. My earlier work has been on the theory of exchange rate determination. I have looked at the joint dynamics of the exchange and interest rates, at the role of capital controls which has triggered my interest in exchange rate crises. Through theoretical and empirical work, I have argued that capital controls are an effective tool to allow monetary authorities to deal with the onset of speculative pressure, that crises are often self-fulfilling, the outcome of a market failure that justifies second-best restraints on capital mobility. Much of my interest in policy has been directed towards Europe’s exchange rate arrangements. I have produced several empirical analyses of the EMS and have contributed to the discussions about the desirability and structure of the European Monetary Union. I have also studied the international monetary system, focusing more recently on regional exchange rate arrangements and the role of international financial institutions.
YELLEN, Janet Louise

Born 1946, Brooklyn, NY, USA.

Current Posts Prof. Bus. and Prof. Econ., Univ. California, Berkeley, CA, USA, 1980–, 1999–.


Principal Fields of Interest E0 Macroeconomics and Monetary Economics: General; E3 Prices, Business Fluctuations, and Cycles; J6 Mobility, Unemployment, and Vacancies.


Principal Contributions Much of my work, joint with George Akerlof, concerns the causes of unemployment and the mechanisms responsible for business cycle fluctuations. Our joint work develops efficiency wage explanations for unemployment in which wages are set above
market-clearing levels due to equity and fairness considerations. We have also explored the consequence of efficiency wages, coupled with monopolistic competition in product markets, for business cycle fluctuations. We find that deviations from fully maximizing wage and price setting behavior is ‘near-rational’: the use of rules-of-thumb or inertial behavior in wage and price setting results in losses to individuals and firms that are ‘small’ but produces fluctuations in output and employment that are large. Near-rational wage and price setting thus constitutes a microeconomic underpinning for new Keynesian economics. In other work, also joint with G. Akerlof, I have explored patterns of quits and job satisfaction, analyzed the economic prospects for East Germany after Unification, and developed a new explanation for the rise in out-of-wedlock childbearing in the United States. A recent book, with A. Blinder, analyzes the roles that monetary and fiscal policy played in accounting for the success of the United States during the long expansion of the 1990s.

YOUNG, Alwyn

YOUNG, Hobart Peyton

Born 1945, Evanston, IL, USA.


Principal Fields of Interest C7 Game Theory and Bargaining Theory; D6 Welfare Economics; D7 Analysis of Collective Decision-Making.


**Principal Contributions** My early work focussed on formal models of representation and voting. When I began to think about these issues in the 1970s, voting theory was dominated mainly by impossibility results. I set out to develop a more positive theory that would put axiomatic foundations under the rules frequently used in practice. These include scoring rules, among which Borda’s rule and plurality voting are the best known. I also showed that another procedure (due essentially to Condorcet) maximizes the likelihood that a group decision will be correct when individual judgments may be in error (as in a jury trial for example).

Another line of my research was concerned with principles for dividing representation fairly among constituencies. My 1982 book *Fair Representation*, with Michel Balinski, treats the history, politics, and formal analysis of this problem for both federal and proportional representation systems of government. The representation problem led me to think more generally about the principles that are invoked by public agencies when they must allocate scarce resources among competing groups of claimants. In my 1994 book, *Equity: In Theory and Practice*, I outline a conceptual framework for studying principles of justice as revealed by group choices, and show how it can be applied to a variety of concrete distributive problems. For the last decade I have been concerned with learning and evolution in economic systems. In particular, I show how simple adaptive learning rules by individuals can aggregate into complex forms of equilibrium (and disequilibrium) behavior at the societal level. This framework can be used to study how specific kinds of economic institutions evolve over different time scales, and to analyze the relationship between the welfare properties of institutions and their durability under persistent random shocks.
Z

ZANG, I. n.e.

ZAX, Jeffrey S.

Born 1954, Gulfport, MS, USA.

Current Post Prof. Econ., Univ. Colorado, Boulder, CO, USA, 1996–.


Principal Fields of Interest J0 Labor and Demographic Economics: General; R0 Urban, Rural, and Regional Economics: General; H0 Public Economics: General.


Principal Contributions I have refined the spatial mismatch theory, describing the effects of residential segregation on black employment outcomes, and demonstrated that important negative effects occur. I have clarified the predictions of Tiebout theory regarding the consequences of fragmentation and centralization in local government hierarchies, and confirmed these predictions empirically. I have demonstrated that the effects of IQ on earnings have been substantially overstated, and that earnings also respond significantly to characteristics under the individual’s control, such as motivation and
academic performance. I have discussed the incidence and size of subsidies to non-wage compensation. I have demonstrated that laws governing unionization have substantial causal effects on unionization rates. I have demonstrated that local public sector unions have important effects on employment levels and non-wage compensation, as well as on wages.

ZECKHAUSER, Richard Jay

Born 1940, Philadelphia, PA, USA.


Degrees BA, PhD Harvard Univ., 1962, 1969.


Principal Fields of Interest DO Microeconomics: General; D8 Information and Uncertainty; C7 Game Theory and Bargaining Theory.


Principal Contributions The primary challenge facing our society is how to allocate resources in accordance with the preferences of the citizenry. Unfortunately, centralised decision-making is hopelessly distorted by a political process that encourages individuals to misrepresent their preferences and inevitably favours certain groups over others. Thus, my conceptual work has tried to discover possibilities for decentralised allocation procedures, particularly when uncertainty and asymmetric information are problems. This work has naturally focused on incentives for honest revelation. Welcome results are (1) that paying the expected externality effectively decentralises multi-stage externality and group decision problems under uncertainty, and (2) that a point-voting-type mechanism for public goods can elicit honest preferences and lead to an efficient bundle. Similarly I have shown that groups employing Bayesian decision methods cannot preserve Pareto optimality; that a fundamental nonconvexity arises if externality leads to shutdown; and that voting mechanisms must be inefficient if intensities of preference matter. Other work has dealt with agency theory, insurance, and populations with heterogeneous risk. I have also been involved in a variety of policy investigations, exploring ways to promote the health of human beings, to help labour markets and financial markets operate more efficiently, and to foster informed and appropriate choices by individuals and government agencies. Cross-fertilisation between these policy investigations and my conceptual work has been of great value. In considering such topics as risk analysis (life valuation, calibration of probabilities) and the redesign of regulatory processes, I have found uncertainty and decentralisation to be salient issues, and a major theme of my current work on human resources and health is the importance of heterogeneity (possibly unobservable) in the population.

ZEGER, Scott L. n.e.

ZEIRA, Joseph

Born 1950, Jerusalem, Israel.
Current Post Assoc. Prof., Hebrew Univ., Jerusalem, Israel, 1998–.


Editorial Duties Ed. Bd, JEG, 1998–.

Principal Fields of Interest E1 General Aggregative Models; D3 Distribution; D8 Information and Uncertainty.


**Principal Contributions**
Most of my contributions are in the area of macroeconomic theory. One important contribution is in connecting the issue of income distribution to mainstream macroeconomics. This has been done in my 1993 *RES* Stud paper with Oded Galor, ‘Income distribution and macroeconomics’. This paper, together with others written around that time, has helped in making income distribution not only an important topic in itself, but an important macroeconomic variable. We have shown that the distribution of wealth is relevant to the aggregate performance of the economy not only in the short run, but in the long run as well. Since the paper began to circulate in the late 1980s, it has become very popular and it is widely cited. A second contribution is in the area of missing information and Bayesian learning in macroeconomics. In a number of papers I have studied a situation in which there is missing information on the scale of the market, which can be explored only by expansion through investment. These papers show that such missing information, and the process of gradual learning that it generates, can yield very interesting results. Such an environment can lead to gradual investment, even if adjustment costs are not convex, as shown in my 1987 *JPE* paper ‘Investment as a process of search’. A more recent paper, ‘Informational cycles’ (*RES* Stud, 1994) has shown that such learning can add to our understanding of the dynamics of business cycles. The 1999 *JME* paper ‘Informational overshooting, booms and crashes’, shows that such learning can also rationalize the large booms and crashes, which are often experienced in stock markets.

**ZELDES, Stephen P.**

**Born** 1956, New Haven, CT, USA.


**Principal Fields of Interest** E1 General Aggregative Models; D9 Intertemporal Choice and Growth; H5 National Government Expenditures and Related Policies.

**Publications** Books: 1. *Would a Privatized Social Security System Really Pay a*


Principal Contributions My research focusses on issues of intertemporal choice – deriving and testing models of how households, firms, and governments make decisions that involve tradeoffs between the present and the future. Frequently, I have investigated macroeconomic phenomena using microeconomic theories and data. In my work on households, I have focussed on intertemporal saving and spending decisions and their effects on the macroeconomy. Key questions that guide this work are: what are the determinants of saving? How does uncertainty at the household level affect consumer spending and saving? Do credit markets operate in such a way that households can borrow to smooth out fluctuations in income? What factors influence the distribution of wealth in the US? How do households make portfolio decisions? What is the relationship between consumer spending and the stock market? Can we use the answers to these questions to help price financial assets? My work on firms investigates a parallel intertemporal issue: do firms use inventories to smooth production in the face of variations in sales? My research on government analyzes issues related to the government’s choices about the budget deficit and the social security program. The questions I address include: is it feasible for the government to roll over its debt perpetually? What are the effects of budget deficits on consumer spending? What would be the effects of a major reform of the social security program?

ZERVOS, Sara n.e.

ZHAO, Lue Ping n.e.

ZIN, Stanley E. n.e.
ZINGALES, Luigi

Born 1963 Padua, Italy.


Principal Fields of Interest G3 Corporate Finance and Governance; D2 Production and Organizations; N2 Financial Markets and Institutions.


Principal Contributions My work spans three related areas: international corporate governance, financial development (causes and effects), and the theory of the firm. In the first area my contribution is to have estimated the value of control in different countries and to have explored, both theoretically and empirically, the implications of these different values on a firm decision to go public. More recently, Dyck and I have made further progress, trying to uncover the reasons why the value of control differs greatly across countries. We find that public opinion pressure and the monitoring provided by the tax au-
authorities are the two most important determinants of these differences. On the effects of financial development, Rajan and I have provided evidence of the mechanism through which financial development affects growth by showing that industries depending on external finance grow faster in financially developed countries. Rajan and I have also advanced a theory of why there exists political resistance to financial development and have provided historical evidence in support of this theory. Our forthcoming book expands on this theme, providing a new theory of why some countries develop and others do not, based on the initial distribution of asset ownership. On the theory of the firm, Rajan and I have further developed the property rights theory of Grossman, Hart, and Moore, introducing the concept of access. Access is the ability to use and work with a critical resource and can be thought of as a firm internal organization. By regulating access an entrepreneur can provide better incentives for firm-specific investments. The sum over time of these specific investments is, in our theory, what differentiates an organization from the arm’s-length market. In two separate contributions I have also explained the important relation existing between the theory of the firm, corporate governance, capital structure theory, and the theory of valuation.

ZIVOT, Eric W. n.e.

ZUPAN, Mark A.

Born 1959, Rochester, NY, USA.


Principal Fields of Interest K0 Law and Economics: General; L0 Industrial Organization: General.


Principal Contributions Researching the extent to which pecuniary versus nonpecuniary, ideological interests play a role in explaining legislative decision-making. Exploring the efficacy of franchise bidding as a mechanism to promote efficiency in cases of natural monopoly. Explaining the reasons for political ticket-splitting. Investigating policy instrument choice. Analyzing the determinants of legislative voting behavior (constituent interests as well as the personal ideological preferences of legislators). Developing measures of the ideological preferences of US presidents.
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# Appendix 1  Index of principal fields of interest

Every respondent was asked to select three principal fields of interest from the American Economic Association’s classification scheme of fields in economics, included in every issue of the *Journal of Economic Literature* and in all 22 volumes of the AEA Index of Economic Articles. This index refers to the first of these three principal fields of interest.

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<td>Simon Fraser Univ.</td>
<td>Queen’s Univ., Canada, 1983</td>
<td>McMaster Univ., 1990</td>
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<td>Nalebuff, B.J.</td>
<td>Yale Univ.</td>
<td>MIT, 1980</td>
<td>Oxford Univ., 1982</td>
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<td>Nickell, S.J.</td>
<td>LSE</td>
<td>Erasmus Univ., 1970</td>
<td>Erasmus Univ., 1972</td>
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<td>Nijkamp, P.</td>
<td>Free Univ., Amsterdam</td>
<td>Hebrew Univ., 1971</td>
<td>Hebrew Univ., 1976</td>
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<td>North, D.C.</td>
<td>Washington Univ.</td>
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O'Hara, M. Cornell Univ. 
Oates, W.E. Univ. Maryland 
Obstfeld, M. Univ. California, Berkeley 
Oneal, J.R. Univ. Alabama 
Ordover, J.A. NYU 
Osterwald-Lenum, M. Stats Denmark 
Ostrom, E. Indiana Univ. 
Ostry, J.D. IMF 
Oswald, A.J. Univ. Warwick 
Ouliaris, S. Natl Univ. Singapore 
Oum, T.H. UBC 
Paarsch, H.J. Univ. Iowa 
Pagan, A.R. ANU 
Pakes, A. Harvard Univ. 
Pantula, S.G. North Carolina State Univ. 
Park, J.Y. Seoul Natl Univ. 
Pashardes, P. Univ. Cyprus 
Paul, C.J.M. Univ. California, Davis 
Pearce, D.W. Univ. Coll. London 
Pechmann, C.A.R. Univ. California, Irvine 
Peck, J.A. Univ. Wisconsin-Madison 
Peltzman, S. Univ. Chicago 
Perron, P. Boston Univ. 
Persson, T.E. Stockholm Univ. 
Pesaran, H. Univ. Cambridge 
Petersen, M. Northwestern Univ. 
Phillips, P.C.B. Yale Univ. 
Pindyck, R.S. MIT 
Pissarides, C.A. LSE 
Platteau, J.-P. Univ. Namur 

Univ. Illinois, 1975 
Stanford Univ., 1959 
Univ. Pennsylvania, 1973 
US Military Acad., 1968 
n.e. 
Univ. Copenhagen, 1988 
UCLA, 1954 
Queen's Univ., Canada, 1981 
Univ. Stirling, 1975 
Univ. Melbourne, 1979 
Sung Kyun Univ., 1967 

Queensland Univ., 1968 
Hebrew Univ. Jerusalem, 1971 
Univ. Michigan, 1975 
Seoul Natl Univ., 1978 
Univ. Athens, 1973 
UBC, 1976 
Swarthmore Coll., 1982 
Univ. California, Irvine, 1969 
Univ. Oxford, 1963 
Bucknell Univ., 1981 
Univ. Manchester, 1983 
City Coll., New York, 1960 
McGill Univ., 1981 
Stockholm Univ., 1977 
Salford Univ., 1968 
Princeton Univ., 1986 
Auckland Univ., 1969 
MIT, 1966 
Univ. Essex, 1970 
Univ. Namur, 1969 

Stanford Univ., 1979 
MIT, 1979 
Stanford Univ., 1979 
Columbia Univ., 1973 
n.e. 
UCLA, 1965 
Univ. Chicago, 1988 
Yale Univ., 1987 
UBC, 1979 

ANU, 1972 
Harvard Univ., 1979 
California Inst. Tech., 1981 
Iowa State Univ., 1982 
Yale Univ., 1987 
Univ. London, 1979 
UBC, 1982 
Columbia Univ., 1987 
Univ. California, Irvine, 1973 
n.e. 
Vanderbilt Univ., 1988 
Univ. Manchester, 1988 
Univ. Chicago, 1965 
Yale Univ., 1986 
Univ. Cambridge, 1972 
MIT, 1990 
Univ. London, 1974 
MIT, 1971 
LSE, 1974 
Univ. Namur, 1977
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<th>Affiliation</th>
<th>First degree</th>
<th>Doctorate (most recent)</th>
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<tr>
<td>Radner, R.</td>
<td>NYU</td>
<td>Univ. Chicago, 1945</td>
<td>Univ. Chicago, 1956</td>
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<td>Rawski, T.G.</td>
<td>Univ. Pittsburgh</td>
<td>Cornell Univ., 1965</td>
<td>Harvard Univ., 1972</td>
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<td>Razin, A.</td>
<td>Tel Aviv Univ.</td>
<td>Hebrew Univ., 1965</td>
<td>Univ. Chicago, 1969</td>
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<td>Sandler, T.</td>
<td>Univ. Southern California</td>
<td>SUNY, 1968</td>
<td>SUNY, 1971</td>
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<td>Selten, R.</td>
<td>Univ. Bonn</td>
<td>Johann-Wolfgang-Goethe-Univ., 1957</td>
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<tr>
<td>Sexton, R.J.</td>
<td>Univ. California, Davis</td>
<td>St. Cloud State Univ., 1977</td>
<td>Univ. Minnesota, 1984</td>
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<td>Summers, R.</td>
<td>Univ. Pennsylvania</td>
<td>Univ. Chicago, 1943</td>
<td>Stanford Univ., 1956</td>
</tr>
<tr>
<td>Tanner, M.A.</td>
<td>Northwestern Univ.</td>
<td>Univ. California, Riversid, 1979</td>
<td>Univ. California, Berkeley, 1984</td>
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<td>Turok, I.N.</td>
<td>Univ. Glasgow</td>
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Udell, G.F. Indiana Univ.
Uhlig, H. Humboldt Univ.
Van Doorslaer, E.K.A. Erasmus Univ.
Van Reenen, J. Univ. Coll. London
Varian, H.R. Univ. California, Berkeley
Venables, A.J. LSE
Vermaleen, T.J. INSEAD
Vickers, J.S. OFT, London
Visscher, W.K. Harvard Law Sch.
Vives, X. INSEAD
Von Hagen, J.

Wagstaff, R.A.S. World Bank
Waite, L. Univ. Chicago
Waldman, M. Cornell Univ.
Walker, J.M. Indiana Univ.
Walkling, R. Ohio State Univ.
Walsh, C.E. Univ. California, Santa Cruz
Wang, J. MIT
Wang, P. Vanderbilt Univ.
Watts, M.W. Purdue Univ.
Watts, R.L. Univ. Rochester
Weber, G. Univ. Padua
Weingast, B.R. Stanford Univ.
Weisbrod, B.A. Northwestern Univ.
Weiss, L.A. MIT
Weitzman, M.L. Harvard Univ.
Welch, F.R. Texas A&M Univ.
Welch, I. Yale Univ.
Wernerfelt, B. MIT
West, K.D. Univ. Wisconsin, Madison
Wheeler, D.R. World Bank
Whinston, M.D. Northwestern Univ.

DePaauw Univ., 1968
Technische Univ. Berlin, 1985
Univ. Antwerp, 1980
Univ. Cambridge, 1988
MIT, 1969
Cambridge Univ., 1974
Catholic Univ. Leuven, 1975
Oxford Univ., 1979
Harvard Univ., 1971
Univ. Autònoma Barcelona, 1978
Univ. Bonn, 1981

Univ. Wales, 1980
Michigan State Univ., 1969
MIT, 1977
Auburn Univ., 1973
Towson State Univ., 1975
Univ. California, Berkeley, 1971
Nanjing Univ., 1981
Natl Chao Tung Univ., 1979
Louisiana State Univ., 1972
Univ. Newcastle, Australia, 1966
Siena Univ., 1982
Univ. California, Santa Cruz, 1973
Univ. Illinois, 1951
McGill Univ., 1976
Swarthmore Coll., 1963
Univ. Houston, 1961
Columbia Univ., 1985
Univ. Copenhagen, 1974
Wesleyan Univ., 1973
Princeton Univ., 1968
Pennsylvania Univ., 1980

Indiana Univ., 1983
Univ. Minnesota, 1990
Univ. Maastricht, 1987
Univ. California, Berkeley, 1973
Oxford Univ., 1984
Univ. Chicago, 1980
Oxford Univ., 1985
Harvard Univ., 1976
Univ. California, Berkeley, 1983
Univ. Bonn, 1985

Univ. York, UK, 1985
Univ. Michigan, 1976
Univ. Pennsylvania, 1982
Texas A&M Univ., 1978
Univ. Maryland, 1980
Univ. California, Berkeley, 1976
Univ. Pennsylvania, 1990
Univ. Rochester, 1987
Louisiana State Univ., 1978
Univ. Chicago, 1971
LSE, 1988
California Inst. Tech., 1978
Northwestern Univ., 1958
Harvard Univ., 1989
MIT, 1967
Univ. Chicago, 1965
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MIT, 1983
MIT, 1974
MIT, 1984
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<th>Affiliation</th>
<th>First degree</th>
<th>Doctorate (most recent)</th>
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<tr>
<td>Wilson, R.B.</td>
<td>Stanford Univ.</td>
<td>Harvard Univ., 1959</td>
<td>Harvard Univ., 1963</td>
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Appendix 5  Names without an entry

Of the 1168 most frequently cited economists in the years 1990–2000 presented in this volume there are 425 names against which there is no entry. The following list of those 425 names includes both a small handful of economists who declined our invitation to participate in this project and those who failed to return their form even after a second and third contact. In the latter case it is impossible to tell how many of these received a form but refused to fill it in because of some studious opposition to any ‘Who’s Who’, whatever its purpose, and how many never received the form because they were on leave or had recently changed their place of employment. The list also includes a number of individuals whose work appears in economic journals but who declined to respond, as they do not regard themselves as economists. In any case, here is the full list of names against which there is no entry.

Abreu, D.
Albert, J.H.
Allenby, G.M.
Anand, S.
Anderson, E.W.
Andrews, D.W.K.
Anselin, L.
Arnauld, E.J.
Austen-Smith, D.
Azzam, A.M.
Babcock, B.A.
Backus, D.K.
Bagwell, K.W.
Baker, R.M.
Balke, N.S.
Ball, L.M.
Barber, B.M.
Barbera, S.
Barclay, M.J.
Basu, S.
Baxter, M.
Belk, R.W.
Bencivenga, V.R.
Bentolila, S.
Bernheim, B.D.
Berry, S.T.
Bhagat, S.
Bhagwati, J.
Bikchandani, S.
Birch, S.
Black, B.S.
Bockstael, N.E.
Boldrini, M.
Bolton, P.
Boot, A.W.A.

Bound, J.
Boycko, M.
Bradley, M.D.
Brandenburger, A.M.
Bremer, S.A.
Brennan, M.J.
Breslow, N.E.
Bresnahan, T.F.
Brickley, J.A.
Bronars, S.G.
Browning, M.
Bumpass, L.L.
Calabresi, S.G.
Caldwell, J.C.
Caldwell, P.
Calomiris, C.W.
Canova, F.
Carroll, R.J.
Carter, C.A.
Carter, R.B.
Cason, T.N.
Chaloupka IV, F.J.
Chambers, R.
Chan, L.K.-C.
Chari, V.V.
Chib, S.
Chichilnisky, G.
Chou, R.Y.
Christie, W.G.
Clayton, D.G.
Collier, P.
Cook, R.D.
Cooper, R.W.
Corcoran, M.
Cox, T.L.

Creel, M.D.
Cremer, H.
Cummings, R.G.
Davis, S.J.
deAngelo, L.
Dechow, P.M.
Deininger, K.
DeLong, J.B.
Deneckere, R.J.
Denis, D.J.
Dewatripoint, M.
Diamond, D.W.
DiNardo, J.
Dinopoulos, E.
Dixon, W.J.
Donaldson, D.
Duffie, D.
Dufour, J.-M.
Dumas, B.
Easterly, W.
Eichenbaum, M.
Eisenberg, T.
Elhauge, E.R.
Ellickson, R.C.
Erev, I.
Erikson, R.S.
Esksickle, J.W.N.
Eubank, R.L.
Evans, W.N.
Fan, J.
Farber, H.S.
Feenstra, R.C.
Fehr, E.
Feldman, M.P.
Fernandez, R.
Fershtman, C.
Foster, A.D.
Foster, F.D.
French, K.R.
Frey, W.H.
Gafni, A.
Gali, J.
Garrett, G.
Geanakoplos, J.
Gelfand, A.E.
George, E.I.
Geronimus, A.T.
Gertler, M.
Gertner, R.H.
Gilchrist, S.
Goldman, N.
Goldscheider, F.K.
Gorton, G.
Gottschalk, P.
Greenwood, J.
Gregory, A.W.
Grilli, V.
Grinblatt, M.
Gruber, J.H.
Guilkey, D.K.
Gul, F.
Güth, W.
Haas, P.M.
Hafer, R.W.
Hakko, C.S.
Hall, P.
Hancock, D.
Hanemann, W.M.
Hansen, G.D.
Hardle, W.
Harrington, Jr, J.E.
Harris, L.E.
Harrison, A.E.
Harrison, G.W.
Harvey, C.R.
Hasbrouck, J.S.
Hayashi, F.
Hayes, D.J.
Hayward, M.D.
He, H.
Heaton, J.
Heston, S.L.
Hirschman, E.C.
Hoch, S.J.
Hoffman, E.
Hoffman, S.D.
Holthausen, R.W.
Holz-Eakin, D.
Honóré, B.E.
Hopenhayn, H.A.
Hsieh, D.A.
Humphrey, D.B.
Hunter, W.C.
Hurt, M.D.
Huth, P.K.
Inanaccone, L.R.
Ichniowski, C.
Imbens, G.W.
Inman, J.J.
Ito, T.
James, C.
Jegadeesh, N.
John, K.
Jones, C.I.
Joulaian, D.
Jovanovic, B.
Joyce, T.
Juhn, C.
Kaminsky, G.L.
Kamninen, B.J.
Kaplan, S.N.
Karim, M.R.
Kashyap, A.K.
Kass, R.E.
Katz, J.N.
Kealy, M.J.
Keane, M.P.
Kehoe, P.J.
Kimball, M.S.
King, R.G.
Kirchsteiger, G.
Kiyotaki, N.
Klepper, S.I.
Knetter, M.M.
Kocherlakota, N.-R.
Kohn, R.
Koop, G.
Kose, J.
Kothari, S.P.
Kremer, M.R.
Kremers, J.
Kroner, K.F.
Krugman, P.R.
Kwiatkowski, D.
La Porta, R.
Lai, K.S.
Lakonishok, J.
Lal, R.
LaLonde, R.J.
Lamoureux, C.G.
Larcker, D.F.
Le Breton, M.
Leahy, J.V.
LeBaron, B.D.
Lee, C.M.C.
Lehrer, E.
Leiderman, L.
Lemieux, T.
Levinsohn, J.A.
Levitt, S.D.
Lewbel, A.
Lewis, K.K.
Lewis, T.R.
Leybourne, S.J.
Lichtenberg, F.R.
Logan, J.R.
Lohmann, S.
Longstaff, F.A.
Loomis, J.B.
Loretan, M.
Loughran, T.
Lumsdaine, R.L.
Lundberg, S.J.
Lynch, Jr, J.G.
Lyon, J.D.
MacDuffie, J.P.
Machin, S.
MacKinnon, A.C.
MacKuen, M.B.
Madhaven, A.
Maheswaran, D.
Mahoney, M.R.
Manaster, S.
Manning, A.
Mansi, J.
Maoz, Z.
Marimon, R.
Marron, J.-S.
Matsu, A.
Mauro, P.
Mayers, D.
McAdams, R.H.
McAfee, R.P.
McCabe, K.A.
McCulloch, R.E.
McGratten, E.R.
McGuire, T.J.
McGuire, T.G.
Mendelson, H.
Michael, R.
Mick, D.G.
Micklewright, J.
Miron, J.A.
Mody, A.
Moe, T.M.
Monahan, J.C.
Moore, J.H.
Moravesik, A.
Morgan, R.P.
Morgan, T.C.
Morton, A.J.
Munger, M.C.
0100000

APPENDIX 5

Munnell, A.H.
Murnane, R.J.
Murphy, K.M.
Naughton, B.
Neal, D.A.
Newey, W.K.
Newman, A.F.
Ng, V.K.
O’Farrell, P.N.
O’Neill, J.E.
Olejnik, E.
Oliver, R.L.
Osterman, P.
Pagano, M.
Palepu, K.G.
Pauly, M.V.
Pearson, N.D.
Perotti, R.
Pierce, B.
Pitt, M.M.
Porter, M.E.
Powell, J.L.
Preston, S.H.
Rabin, M.J.
Ratneshwar, S.
Ravikumar, B.
Raviv, A.
Ready, M.J.
Reny, P.J.
Ridder, G.
Robins, J.M.
Robins, P.K.
Rogers, R.G.
Rogerson, R.D.
Rose, A.K.
Rosenthal, R.W.
Rosenthal, S.S.
Rosenzweig, M.R.
Rossi, P.E.
Rotnitzky, A.
Roubini, N.
Rousseeuw, P.J.
Runke, D.E.
Ruppert, D.
Rush, M.
Rustichini, A.
Samuelson, L.W.
Santos, M.S.
Sappington, D.E.M.
Sargent, T.J.
Saunders, A.
Scharfstein, D.S.
Schotman, P.C.
Schwab, R.M.
Schwartz, A.
Schwartz, E.S.
Scott, L.M.
Segerson, K.
Seguin, P.J.
Seiford, L.M.
Selden, T.M.
Sen, A.
Shanken, J.
Sharpe, S.A.
Shaw, K.
Shin, H.-S.
Shleifer, A.
Simonson, I.
Singleton, K.J.
Sinn, H.W.
Siverson, R.M.
Sjoquist, D.L.
Skaperdas, S.
Slade, M.E.
Slovin, M.B.
Smith, A.
Smith, G.W.
Snyder, E.A.
Snyder, Jr. J.M.
Sowell, F.B.
Squire, L.
Staiger, D.O.
Staiger, R.W.
Stambaugh, R.F.
Stayman, D.M.
Stewart, M.B.
Stokey, N.L.
Sullivan, M.W.
Summers, L.H.
Sushka, M.E.
Tauchen, G.
Tesar, L.L.
Thaler, R.H.
Thrall, R.M.
Timme, S.G.
Tirole, J.
Toda, H.Y.
Topel, R.H.
Trajtenberg, M.
Trellick, D.
Trivedi, P.K.
Tsay, R.S.
Tsiddon, D.
Turnbull, S.M.
Tybout, J.R.
van den Berg, G.J.
van der Ploeg, F.
Van Huyck, J.B.
van Ours, J.C.
van Zomeren, B.C.
Végé, C.A.
Verrecchia, R.E.
Villanueva, D.
Vishny, R.W.
Viswanathan, S.
Vogelsang, T.J.
Wadhwani, S.
Wagner, J.
Wakker, P.P.
Walker, J.R.
Warner, J.B.
Wasserman, L.
Watkins, S.C.
Watson, M.W.
Webb, S.B.
Weber, M.
Weil, D.N.
Weil, P.
Weiler, J.H.H.
Weisbach, M.S.
Wendt, A.
Whaley, R.E.
Wheaton, W.C.
Whitfield, A.
White, H.L.
Whited, T.M.
Wilcox, D.W.
Wilson, P.W.
Winer, R.S.
Wise, D.A.
Wolinsky, A.
Wolpin, K.I.
Wood, A.
Wooldridge, J.M.
Wright, G.
Young, A.
Zang, I.
Zeger, S.L.
Zervos, S.
Zhao, L.P.
Zin, S.E.
Zivot, E.W.