

CENTRE/GROUP/NETWORK DIRECTOR'S ANNUAL REPORT 2008/09



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CENTRE/GROUP/NETWO
RK DIRECTOR'S
ANNUAL REPORT FORM
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Reporting period : 1 July 2007 to 31 March 2009

Name of Centre/Group/Network : Centre for Microdata Methods and Practice

Director's name : Andrew Chesher

Start and End Dates : 1 July 2007 to 30 June 2012

Year of Operation : 1 and 2

Total budget from ESRC : £3,162,176.35

The Director's Annual Report should be completed in accordance with the attached guidelines. It should be submitted to EST and a copy **emailed** to the relevant ESRC Case Officer by **31 March 2009**.

Introduction

The research of the Centre for Microdata Methods and Practice (cemmap) develops and applies tools designed to extract information about individual behaviour, and the influences on it, from 'microdata' (that is, data recording the actions of individuals and the outcomes they experience in their normal environment, not in a controlled experimental laboratory situation). The 'individuals' the Centre studies can be, for example, people, households or enterprises. The Centre aims to spread good practice through training, capacity building and communication with users. The Centre runs a programme of professional training courses and advanced masterclasses, trains doctoral students and aims to boost the research careers of postdoctoral researchers. The Centre for Microdata Methods and Practice is built on the foundations established through seven years' seedcorn funding from the Leverhulme Trust. In that time, cemmap has become the leading European centre for training in microdata methods and has become the hub of a network of international research activity.

Impact and highlights

Research progress

1. A long-standing puzzle in econometrics is the lack of a conventional instrumental variables (IV) method for identification and estimation in cases in which an outcome is discrete. This is in contrast to the case when an outcome is continuous. Discrete variation can be 'almost continuous' and there seems no reason to expect a sharp discontinuity. The results (cemmap Working Paper 30/08) show that the classical IV model can only achieve set or partial identification when an outcome is discrete. This is the case even when parametric restrictions are imposed. Identified sets shrink to points as an outcome becomes continuous and as instruments become strong. This explains the transition from point to set identification as one goes from continuous to discrete variation and, in the discrete setting, from exogeneity to endogeneity. Set identification is shown to be sharp. This, together with earlier results for control function methods with discrete endogenous variables, provides a rare set of results in which partial identification is a generic characteristic of very broad classes of models, many other cases in practice being quite specific to particular applications and/or rather artificial. Recent research on this topic suggests that identified sets can be unconnected, putting paid to hopes that the tools of convex analysis could be used to develop properties of identified sets. An example involving a binary endogenous variable is included in cemmap WP 30/08.

2. A major strand of research has pushed forward the study of identification of models of consumer behaviour. In particular, work has focused on the importance of revealed preference conditions, which summarise and exhaust the empirical restrictions from consumer optimisation theory. Our focus has been on providing the tightest possible predictions on consumer responses to price changes, and also the possibilities for identification of consumers' preferences over product characteristics. We showed for the first time that it is possible to produce very tight predictive bounds on consumer responses to price changes and to use these to distinguish different behavioural effects for rich and poor households of policies that work by changing relative prices (indirect tax reforms, for example). We also showed that we were able to identify consumers' preferences for product characteristics using these techniques, an idea which has broad application in the analysis of competition in markets for consumer goods. Finally, we extended our work in this area to look at international comparisons of real incomes. Such comparisons depend on the ability to identify a reference international consumer who can serve as a basis for meaningful comparisons and our work was able to develop non-parametric methods which are able to do precisely this. The resulting cemmap working papers were published this year in *Econometrica*, the *Review of Economic Studies* and the *American Economic Review* respectively.

Academic impact

The Centre has established itself as a national and international hub for research and dissemination of best practice in relation to microdata. Its academic impact over the period covered in this report can be judged from our output of 12 refereed journal articles and 58 working papers added to the cemmap series. It can also be seen in the 4 invited addresses, 39 conference papers and 99 seminar papers given by Centre staff and in the 48 academic seminars/conferences hosted and the 5 masterclasses and 19 conferences/workshops organised. Amongst the highlights were the following:

1. Auctions: theory and empirics

This conference (joint with ELSE) presented recent theoretical and empirical research on auctions. The conference brought leading international researchers to the UK and presented an opportunity for UK-based academics interested in auctions, as well as practitioners involved in auction design, to hear the latest developments in the field. The speakers were John Asker (Stern, NYU), Susan Athey (Harvard), Ali Hortaçsu (Chicago), Philippe Jehiel (CERAS/ UCL), Paul Klemperer (Oxford) and Robert Porter (Northwestern).

2. Firm heterogeneity: implications for growth, trade and labour market flows

This masterclass was given by Dale Mortensen (Northwestern) and concerned the analysis of the large differences that researchers have observed in firm productivity. Current research suggests that these differences are important for understanding the evolution of firm size, the contribution of reallocation to growth, the observed patterns of international trade, and the magnitude and dynamics of worker and job flows. The masterclass was based on recent research on Danish matched employer–employee data.

Economic and societal impact (capacity building)

The Centre's research addresses methodological questions, which are of direct use to academics using survey and other data to gain understanding of economic and social behaviour and to specialist non-academic users engaged in policy formulation and evaluation and in business. During the period covered by this report, cemmap provided 16 training courses, and alongside academic users we welcomed 38 public sector attendees, 15 private sector attendees and 67 international attendees. Here are two examples of particular interest to non-academics:

1. Policy evaluation methods

This training course was particularly popular with government users and was run three times over the period, such was demand. It addressed key questions including how one could evaluate whether a government labour market programme such as the New Deal, or a subsidy to education such as the Education Maintenance Allowance, is actually working. The course, taught by Dr Barbara Sianesi (IFS), dealt with the tools that have been developed to estimate the causal impact on one or more outcomes of interest of any generic 'intervention' in the presence of selection decisions by agents – from government programmes, policies or reforms, to the returns to education, the impact of unionism on wages or the effect of migration on the labour market. The course involved instruction on implementation in 'hands-on' practical sessions in the computer lab.

2. Microsimulation

This course, also very popular with government economists and policy analysts, looked at the main techniques of microsimulation, using examples from the government's own report, *Adding It Up*, to illustrate methods and possible developments. The course was designed to show participants how to tackle applied issues such as the likely employment effects of the new tax credit policies, or how road user charges might alter patterns of transport use, or whether a change in the provision of pensions affects the decision to retire.

Progress against objectives

Research

IV models for binary outcomes

The discrete outcome case in which the outcome is binary is of special interest to many people involved in applied microeconometrics – and in the binary case there is no natural ordering of outcomes, so we might expect distinctive identification problems to arise. We are exploring these issues in this research. One problem of particular interest is to determine the status of procedures that impose a linear probability model structure and then use classical IV methods to produce estimators supposedly robust to endogeneity. Current research studies the power of a monotone index restriction in this context. The model set identifies the coefficients in an index of explanatory variables. This set can be obtained without reference to the functional form of the threshold function. [This contributes to our research strand *Identification*.]

Endogeneity in count data models

This work is considering the status of commonly used Generalised Method of Moments approaches to identification and inference in models for count data that admit endogeneity. We ask: ‘under what point-identifying structural restrictions do these procedures produce informative results; and, in the context of models in which only set identification can be achieved, what is the interpretation of the results of these procedures?’. One route to achieving point identification is to impose index restrictions that require all the impact of explanatory variables on an outcome to pass through a single scalar function of the explanatory variables. This work has been published in the *Journal of Econometrics*. [This contributes to our research strands *Estimation and inference* and *Identification*.]

Statistical inference for partially identified parameters

When the parameters of an econometric model are only partially identified, the usual methods for assessing the statistical significance of economic quantities are generally inapplicable. Assessing the statistical precision of estimates for economic quantities of interest in such models has been a recent aim of the econometrics literature, but is generally difficult to implement in practice. Our work on this topic was published in the *Journal of Econometrics* in 2008, and provides an inferential method that applies to a general class of econometric models appearing in this literature and which is easily implemented in practice. [This contributes to our research strand *Estimation and inference*.]

Methods for factor models

Factor models are very commonplace in economics. For example, one of the most commonly used models of individual wage dynamics characterises log wages as the sum of an individual fixed effect, a permanent component modelled as a random walk and a transitory component usually modelled as a MA process. Our work helps to calculate the maximal number of factors that can be identified. We have also studied the identification and the semi-parametric estimation of noisy linear factor models with independent factors. Some of this work is now forthcoming in the *Journal of Econometrics*. [This contributes to our research strand *Estimation and inference*.]

Computational methods for hedonic models

These models have been in use for more than 90 years to study markets for differentiated products. However, the theoretical underpinnings of these models have never been well understood because of perceived computational complexity. Cemmap Working Paper 23/07 changed this by showing how to compute equilibrium in these models using very simple computational tools. This advance allows us to produce tight estimates on the welfare benefits of, for example, new products, changes in the environmental quality of residential neighbourhoods or changes in workplace safety. This work is now forthcoming in the journal

Economic Theory. [This contributes to our research strands *Computation* and *Models of feedback effects in economic systems.*]

Equilibrium search models of the labour market

This work has looked at three related issues. The first is the decomposition of the returns to experience into human capital accumulation and ‘job ladder effects’ (search frictions give firms market power and it takes time and effort to climb the job ladder). The second strand is the evaluation of the feedback effects of in-work benefits reforms that favour employment and which therefore affect the wage distribution and hence employment. The third is an ambitious attempt at constructing an equilibrium search model where the relative slackness of available positions allows employers to select their employees according to quality. We aim to study the effect of this sorting mechanism on individual wage dynamics. [This contributes to our research strand *Models of feedback effects in economic systems.*]

House prices and inflation

How do house price changes affect the cost of living? The main measure of inflation in the UK does not directly incorporate house price changes. Instead, it uses mortgage interest to capture the cost of owning a home. This is a useful method from many perspectives. However, from a consumer welfare perspective, while mortgage interest does capture the cost of a particular service, it does not capture the cost of housing services. The shadow price of housing captures the welfare cost to a household of changes in housing prices. In this work, published as cemap Working Paper 03/09, we created a new measure of inflation using RPI data and the shadow price of housing and investigated how replacing mortgage interest with the shadow price of housing affects measures of the cost of living. We studied the differences and analysed the implications for measuring the welfare of homeowners. [This contributes to our research strand *Measurement of economic variables.*]

Measuring inequality in permanent income

We have used short panels to estimate models of individual earnings which are then used to calculate a measure of permanent income (mean earnings over the life cycle). This allows us to look at the effects of business-cycle fluctuations on permanent income inequality. A second application has compared permanent income inequality across the UK, Canada, the US, Germany and France. Work in this area was published this year in the *Review of Economic Studies*. [This contributes to our research strand *Measurement of economic variables.*]

Knowledge transfer and capacity building

Conferences

Auctions: theory and empirics (joint with ELSE)	12/03/2008
Unobserved factor models	20/11/2008

Workshops

Inference in partially identified models with applications	27/03/2008
Continuous-time financial econometrics	28/05/2008
Novel measurement methods for understanding economic behaviour	03/07/2008
Recent advances in high-frequency financial econometrics	15/11/2008
Nutrition, economics and health: recent research and public policy issues	21/01/2009
Experimental analysis of procedural rationality in games and decisions (joint with ELSE)	04/03/2009

Training courses

Introductory microeconomics	10/10/2007 and 15/10/2008
Policy evaluation methods	05/12/2007, 23/04/2008 and 03/12/2008
Discrete choice modelling	09/01/2008 and 14/01/2009
Microsimulation	24/01/2008 and 22/01/2009
Econometric estimation of frontier functions and economic efficiency	28/02/2008 and 26/02/2009
Panel/longitudinal data analysis	06/03/2008, 06/11/2008 and 12/03/2009
Time series evaluation	03/04/2008
Panel time series	14/05/2008

Masterclasses

Firm heterogeneity: implications for growth, trade and labour market flows, Dale Mortensen (Northwestern)	25/10/07
Recent empirical analysis of auction markets and bidding, Robert Porter (Northwestern)	13/03/08
The econometrics of high-frequency financial data, Yacine Aït-Sahalia (Princeton)	29/05/08
Structural non-equilibrium models of strategic thinking: theory, measurement and applications (joint with ELSE), Vincent P. Crawford (University of California)	05/03/09
Planning under ambiguity, Charles Manski (Northwestern)	19/03/09

Investment-specific indicators

The Centre's progress towards its key performance indicators was strong in terms of both research outputs and capacity building.

The Centre published 12 refereed journal articles, including papers in the top general journals and field journals such as *Econometrica*, the *Review of Economic Studies*, the *American Economic Review* and the *Journal of Econometrics*. The Centre also produced 58 working papers in the cemmap series (by staff and international associates), including 18 working papers by Centre staff. Staff made 4 invited addresses at international conferences and gave 39 other conference papers (including 23 presentations outside the UK) and 99 seminar papers to academic audiences.

In terms of capacity building, we also hosted 48 academic seminars/conferences and 5 masterclasses and organised and ran 19 academic workshops. We welcomed 999 academic attendees including 235 international attendees at these various events. We also ran 16 training courses for policy/business users for which, along with UK-based academics, we numbered 38 public sector attendees, 15 private sector attendees and 67 international attendees. Centre researchers give expert advice where requested; for example, Lars Nesheim is an academic panellist advising the Competition Commission. We currently have 5 PhD students under supervision and 1 postdoctoral researcher in place. Our website traffic exceeded expectations, with approximately 3,500 visitors to the website per month.

A full listing of these indicators is provided at Annex 1 alongside the targets.

ESRC general indicators for reporting to government

<i>Name of investment:</i>	
<i>Indicator</i>	<i>Number</i>
Indicator A: Number of activities and events involving the general public	0
Indicator B: Number of projects attracting co-funding	5
Indicator C: Number of public policy/business orientated seminars and workshops	19
Indicator D: <i>(i) How many non-academic users have worked within the investment on a formal basis to complete a specific programme of work?</i> <i>(ii) How many researchers have the investment placed in user organisations on a formal basis to complete a specific programme of work?</i> <i>NB – placements funded through ESRC placement schemes should not be included.</i>	(i) Number of non-academic users hosted: 0 (ii) Number of researchers placed in user organisations: 0
Indicator E: Number of non-academic users on the investment's Advisory Committee	(i) Total number of Advisory Committee members: 8 (ii) Total number of non-academic user members: 1 <i>Including:</i> Number of private sector members: 0 Number of public sector members: 1 Number of third sector members: 7

Indicator A: Activities and events involving the general public

For each activity/event please complete the table below:

Title:	Date:	Format: [type of event (e.g. lecture/broadcast ...)]	Number of participants:
N/A	N/A	N/A	N/A

Indicator B: Number of projects attracting co-funding

For each project please complete the table below:

Name of project:	Amount of external funding:	Name of co-funding body/bodies:

RTN Microdata Methods and Practice	€ 740,000	European Union
Econometric Study Group	£18,463	ESRC
Demand for durables	£75,221	ESRC
Training courses, travel and subsistence	£105,094	ESRC
Conference income	£15,000	

Indicator C: Public policy/business orientated seminars and workshops

For each event please complete the table below:

Title:	Date:	Target audience: <i>[private sector/public sector/practitioners/third sector]</i>	Number of participants:
Introductory microeconometrics	10–12 Oct 2007	Public, private and third sectors	20
Policy evaluation methods	5–7 Dec 2007	Public, private and third sectors	22
Discrete choice modelling	9–11 Jan 2008	Public, private and third sectors	23
Microsimulation	24–25 Jan 2008	Public, private and third sectors	22
Econometric estimation of frontier functions and economic efficiency	28–29 Feb 2008	Public, private and third sectors	21

Panel/longitudinal data analysis	6–7 Mar 2008	Public, private and third sectors	24
Recent empirical analysis of auction markets and bidding, Robert Porter (Northwestern)	13–14 Mar 2008	Public, private and third sectors	42
Time series evaluation	3–4 Apr 2008	Public, private and third sectors	13
Policy evaluation methods	23–25 Apr 2008	Public, private and third sectors	22
Panel time series	14–16 May 2008	Public, private and third sectors	25
Introductory microeconometrics	15–17 Oct 2008	Public, private and third sectors	21
Panel/longitudinal data analysis	6–7 Nov 2008	Public, private and third sectors	22
Policy evaluation methods	3–5 Dec 2008	Public, private and third sectors	26
Discrete choice modelling	14–16 Jan 2009	Public, private and third sectors	20
Nutrition, economics and health: recent research and public policy issues	21 Jan 2009	Public, private and third sectors	62
Microsimulation	22–23 Jan 2009	Public, private and third sectors	23
Econometric estimation of frontier functions and economic efficiency	26–27 Feb 2009	Public, private and third sectors	23

Panel/longitudinal data analysis	12–13 Mar 2009	Public, private and third sectors	23
Planning under ambiguity, Charles Manski (Northwestern)	19 Mar 2009	Public, private and third sectors	49

Indicator D: Number of (i) non-academic users hosted and (ii) number of researchers placed in user organisations *NB – Placements funded through ESRC placement schemes should not be included.*

For each placement please complete the table below:

Name:	Hosted: <i>[Where from?]</i>	Placed: <i>[Where to?]</i>	Dates/duration:	Purpose:
N/A	N/A	N/A	N/A	N/A

Annex 1: Key Performance Indicators

KPI targets (figures are annual unless otherwise stated)	Statement on achievement
<p><i>Scientific outputs</i></p> <p><i>Refereed journal articles</i> 4 refereed journal articles</p> <p><i>Working papers produced</i> 20 working papers in the cemap series (by staff and international associates) 10 working papers by Centre staff</p> <p><i>Conference participation</i> 2 invited addresses 8 conference papers 40 seminar papers (academic audiences)</p> <p><i>Conferences hosted</i> 12 academic seminars/conferences hosted 3 masterclasses organised 3 conferences/workshops organised</p>	<p><i>Refereed journal articles</i> 12 refereed journal articles</p> <p><i>Working papers produced</i> 58 working papers in the cemap series (by staff and international associates) 18 working papers by Centre staff</p> <p><i>Conference participation</i> 4 invited addresses 39 conference papers 99 seminar papers (academic audiences)</p> <p><i>Conferences hosted</i> 48 academic seminars/conferences hosted 5 masterclasses organised 19 conferences/workshops organised</p>
<p><i>International and interdisciplinary collaboration</i></p> <p><i>Presentations to conferences</i> 15 presentations outside UK</p> <p><i>Other international activities</i> 35 international visitors 40 international attendees at hosted events</p> <p>The Centre will coordinate the EU RTN network on microdata methods and practice; 6 main partners and 7 associate partners</p> <p><i>Interdisciplinary activities</i> We aim to organise an interdisciplinary event</p>	<p><i>Presentations to conferences</i> 23 presentations outside UK</p> <p><i>Other international activities</i> 105 international visitors 302 international attendees at hosted events</p> <p>The Centre coordinated the EU RTN network on microdata methods and practice; 6 main partners and 7 associate partners; the final conference is organised for the end of March 2009</p> <p><i>Interdisciplinary activities</i> Nutrition, Economics and Health: Recent Research and Public Policy Issues; this workshop brought together public health and nutrition specialists, academics and civil servants</p>
<p><i>Engagement with non-academic stakeholders</i></p> <p><i>Training for policy/business users</i> 7 training courses organised 70 public sector attendees 10 private sector attendees 40 international attendees</p> <p><i>Website</i> 2,000 visitors to website per month Expansion of 'resources' section to include 20 entries</p>	<p><i>Training for policy/business users</i> 16 training courses organised 38 public sector attendees 15 private sector attendees 67 international attendees</p> <p><i>Website</i> 3,500 visitors to website per month Expansion of 'resources' section to include 21 entries</p>

<p>Capacity building</p> <p><i>Training</i> 3 masterclasses organised 3 conferences/workshops organised 250 academic attendees 40 international attendees</p> <p><i>Students and postdoctoral researchers</i> 4 PhD students supervised 1 postdoctoral researcher in place</p> <p><i>Resources</i> Expansion of 'resources' section of website to include 20 entries</p>	<p><i>Training</i> 5 masterclasses organised 19 conferences/workshops organised 999 academic attendees 235 international attendees 64 public or private sector attendees</p> <p><i>Students and postdoctoral researchers</i> 5 PhD students supervised 1 postdoctoral researcher in place</p> <p><i>Resources</i> Expansion of 'resources' section of website to include 21 entries</p>
<p>Co-funding and organisational effectiveness</p> <p><i>Additional research funds sought</i> £118,000: EU RTN network £60,000: ESRC Demand for durables £40,000: Microdata training courses, travel and subsistence support £15,000: Conference income £10,000: ESRC Econometric Study Group</p> <p><i>Staff turnover</i> We hope to have minimal staff turnover</p> <p><i>Advisory Committee</i> The Committee will meet once during this period</p> <p><i>Financial management</i> Quarterly monitoring against cash limit</p>	<p><i>Additional research funds secured</i> €740,000: EU RTN network £75,221: ESRC Demand for durables £105,094: Microdata training courses, travel and subsistence support £15,000: Conference income £18,463: ESRC Econometric Study Group</p> <p><i>Staff turnover</i> Very little change in staffing</p> <p><i>Advisory Committee</i> The Committee has not met but a meeting will take place on 22 May 2009</p> <p><i>Financial management</i> Quarterly monitoring against cash limit</p>

Training Courses:

10-12 Oct 2007: Introductory Microeconometrics
Tutor: Alan Duncan

05-07 Dec 2007: Policy Evaluation Methods
Tutor: Lars Nesheim

09-11 Jan 2008: Discrete Choice Modelling
Tutor: William Greene

24-25 Jan 2008: Microsimulation
Tutor: Alan Duncan

28-29 Feb 2008: Econometric Estimation of Frontier Functions and Economic Efficiency
Tutor: William Greene

06-07 Mar 2008: Panel / Longitudinal Data Analysis
Tutor: Frank Windmeijer

03-04 Apr 2008: Time Series
Tutor: Walter Beckert

23-25 Apr 2008: Policy Evaluation Methods
Tutor: Barbara Sianesi

14-16 May 2008: Panel Time Series
Tutor: Professor Ron P. Smith

15-17 Oct 2008: Introductory Microeconometrics
Tutor: Alan Duncan

06-07 Nov 2008: Panel / Longitudinal Data Analysis
Tutor: Frank Windmeijer

03-05 Dec 2008: Policy Evaluation Methods
Tutor: Barbara Sianesi

14-16 Jan 2009: Discrete Choice Modelling
Tutor: William Greene

22-23 Jan 2009: Microsimulation
Tutor: Alan Duncan

26-27 Feb 2009: Econometric Estimation of Frontier Functions and Economic Efficiency
Tutor: William Greene

12-13 Mar 2009: Panel / Longitudinal Data Analysis
Tutor: Frank Windmeijer

02-03 Apr 2009: Dynamic Econometric Models
Tutor: Walter Beckert

22-24 Apr 2009: Policy Evaluation Methods
Tutor: Barbara Sianesi

29 Apr 2009-01 May 2009: Panel Time Series
Tutor: Ron Smith

Workshops and Conferences

11-12 Sep 2007: IFS / UCL workshop: income dynamics and consumption inequality

07 Dec 2007: ESRC Econometric Study Group/Granger Centre for Time Series Econometrics
Joint Seminar (organised by Sokbae 'Simon' Lee and Oliver Linton and Robert Taylor and
Stefan de Wachter)

11 Jan 2008: Time series workshop (organised by Raffaella Giacomini and Nour Meddahi)

28 Feb 2008: Durbin Seminar: Testability and methods of moments in nonparametric and
semiparametric models

12 Mar 2008: Auctions: theory and empirics (a cemmap / ELSE conference)

27-28 Mar 2008: Inference in partially identified models with applications (Elie Tamer and
Adam Rosen)

28 May 2008: Continuous-time financial econometrics (a cemmap workshop)

03 Jul 2008: Novel measurement methods for understanding economic behaviour

10-12 Jul 2008: ESRC Econometric Study Group: Annual Conference 2008

15 Nov 2008: Recent advances in high frequency financial econometrics

20-21 Nov 2008: Unobserved Factor Models (organised by Oliver Linton)

21 Jan 2009: Nutrition, Economics and Health: Recent Research and Public Policy Issues

04 Mar 2009: Cemmap / ELSE Workshop: Experimental Analysis of Procedural Rationality
in Games and Decisions

04-06 May 2009: Workshop on the Econometrics of Demand (organised by Stefan Hoderlein
and Lars Nesheim)

08-09 May 2009: Identification and Decisions (organised by Francesca Molinari and Elie
Tamer)

Masterclasses

25 - 26 Oct 2007: Firm heterogeneity - implications for growth, trade and labour market flows
Tutor: Dale Mortensen

13 - 14 Mar 2008: Recent empirical analysis of auction markets and bidding
Tutor: Robert Porter

29 - 30 May 2008: The econometrics of high-frequency financial data
Tutor: Yacine Ait-Sahalia

05 - 06 Mar 2009: Structural nonequilibrium models of strategic thinking: theory, measurement, and applications (a cemmap / ELSE master class)
Tutor: Vincent P. Crawford

19 - 20 Mar 2009: Planning under ambiguity
Tutor: Charles Manski

Measuring the price responsiveness of gasoline demand
Richard Blundell, Joel Horowitz and Matthias Parey
CWP11/09: 07 May 2009

L1-Penalized quantile regression in high-dimensional sparse models
Alexandre Belloni and Victor Chernozhukov
CWP10/09: 07 May 2009

Inference on counterfactual distributions
Victor Chernozhukov, Ivan Fernandez-Val and Blaise Melly
CWP09/09: 07 May 2009

Identification of structural dynamic discrete choice models
Le-Yu Chen
CWP08/09: 07 May 2009

Principal components and the long run
Xiaohong Chen, Lars Peter Hansen and Jose A. Scheinkman
CWP07/09: 07 May 2009

Efficient estimation of copula-based semiparametric Markov models
Xiaohong Chen, Wei Biao Wu and Yanping Yi
CWP06/09: 03 Mar 2009

Identification and estimation of marginal effects in nonlinear panel models
Victor Chernozhukov, Ivan Fernandez-Val, Jinyong Hahn and Whitney Newey
CWP05/09: 02 Mar 2009

Dynamic housing expenditures and household welfare
Laura Blow and Lars Nesheim
CWP04/09: 25 Jan 2009

A retail price index including the shadow price of owner occupied housing
Laura Blow and Lars Nesheim
CWP03/09: 24 Jan 2009

Trends in quality-adjusted skill premia in the United States, 1960-2000
Pedro Carneiro and Sokbae 'Simon' Lee
CWP02/09: 23 Jan 2009

Estimating distributions of potential outcomes using local instrumental variables with an application to changes in college enrollment and wage inequality
Pedro Carneiro and Sokbae 'Simon' Lee
CWP01/09: 22 Jan 2009

Instrumental variable models for discrete outcomes
Andrew Chesher
CWP30/08: 27 Nov 2008

Large-sample inference on spatial dependence
Peter Robinson
CWP29/08: 24 Oct 2008

The median is the message: Wilson and Hilferty's reanalysis of C.S. Peirce's experiments on the law of errors
Roger Koenker
CWP28/08: 23 Oct 2008

Copula-based nonlinear quantile autoregression
Xiaohong Chen, Roger Koenker and Zhijie Xiao
CWP27/08: 23 Oct 2008

Alternative approaches to evaluation in empirical microeconomics
Richard Blundell and Monica Costa Dias
CWP26/08: 14 Oct 2008

Identification and estimation of marginal effects in nonlinear panel models
Victor Chernozhukov, Ivan Fernandez-Val, Jinyong Hahn and Whitney Newey
CWP25/08: 23 Sep 2008
Recent developments in the econometrics of program evaluation
Guido Imbens and Jeffrey Wooldridge
CWP24/08: 15 Aug 2008

Does a pint a day affect your child's pay? The effect of prenatal alcohol exposure on adult outcomes
Peter Nilsson
CWP22/08: 12 Aug 2008

Testing for stochastic monotonicity
Sokbae 'Simon' Lee, Oliver Linton and Yoon-Jae Whang
CWP21/08: 31 Jul 2008

Estimating derivatives in nonseparable models with limited dependent variables
Joseph Altonji, Hidehiko Ichimura and Taisuke Otsu
CWP20/08: 09 Jul 2008

GEL methods for non-smooth moment indicators
Paulo Parente and Richard J Smith
CWP19/08: 08 Jul 2008

Household willingness to pay for organic products
Rachel Griffith and Lars Nesheim
CWP18/08: 07 Jul 2008

Improving point and interval estimates of monotone functions by rearrangement
Victor Chernozhukov, Ivan Fernandez-Val and Alfred Galichon
CWP17/08: 06 Jul 2008

Identification with imperfect instruments
Aviv Nevo and Adam Rosen
CWP16/08: 27 Jun 2008

Sharp identification regions in games
Arie Beresteanu, Ilya Molchanov and Francesca Molinari
CWP15/08: 18 Jun 2008

Generating functions and short recursions, with applications to the moments
of quadratic forms in noncentral normal vectors
Grant Hillier, Raymond Kan and Xiaolu Wang
CWP14/08: 11 Jun 2008

Nonparametric identification of dynamic models with unobserved state
variables
Yingyao Hu and Matthew Shum
CWP13/08: 28 May 2008
Estimation of nonparametric conditional moment models with possibly
nonsmooth moments
Xiaohong Chen and Demian Pouzo
CWP12/08: 25 Apr 2008

More on confidence intervals for partially identified parameters
Jörg Stoye
CWP11/08: 23 Apr 2008

Adaptive partial policy innovation: coping with ambiguity through
diversification
Charles Manski
CWP10/08: 22 Apr 2008

Efficient estimation of semiparametric conditional moment models with
possibly nonsmooth residuals
Xiaohong Chen and Demian Pouzo
CWP09/08: 11 May 2008

Bootstrap tests of stochastic dominance with asymptotic similarity on the
boundary
Oliver Linton, Kyungchul Song and Yoon-Jae Whang
CWP08/08: 10 Mar 2008

Computationally efficient recursions for top-order invariant polynomials with
applications
Grant Hillier, Raymond Kan and Xiaolu Wang
CWP07/08: 20 Feb 2008

Identifying the returns to lying when the truth is unobserved
Yingyao Hu and Arthur Lewbel
CWP06/08: 11 Feb 2008

Dynamic policy analysis
Jaap Abbring and James Heckman
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Consistent noisy independent component analysis
Stéphane Bonhomme and Jean-Marc Robin
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Generalized nonparametric deconvolution with an application to earnings dynamics

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Assessing the equalizing force of mobility using short panels: France 1990-2000

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Identification of nonadditive structural functions Chesher, Andrew

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