

CURRICULUM VITAE

Ian A. Crawford

Personal Details

Date of birth: 7th March 1969, (Kolkata, India)

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Education

Ph.D. Economics, University College London (1993-97)

Positions

- 09/2013 – present: Professor of Economics, University of Oxford; Professorial Fellow, Nuffield College, Oxford.
- 09/2007 – 08/2013: Reader in Economics, Department of Economics, University of Oxford; Tutorial Fellow, New College, Oxford.
- 01/2005 – 08/2007: Professor of Economics, Department of Economics, University of Surrey.
- 03/1999 – 03/2017: University of Southampton, Department of Social Statistics, External lecturer.
- 01/2005 – present: Research Fellow, Institute for Fiscal Studies, London.
- 10/2001 – 12/2004: Deputy Director, Institute for Fiscal Studies, London.
- 02/1997 – 09/2001: Program Director, Institute for Fiscal Studies, London.
- 11/1994 – 01/1997: Senior Researcher, Institute for Fiscal Studies, London.
- 09/1991 – 10/1994: Researcher, Institute for Fiscal Studies, London.

Publications

Articles:

"Social interactions and the influence of 'extremists'", *Journal of Economic Behaviour and Organisation*, 153,238-266, September 2018, (with Donna Harris)

"Gorman revisited: nonparametric conditions for exact linear aggregation", *SERIEs: Journal of the Spanish Economic Association*. 7, 203-220, (2016). (with Cherchye, L, B. De Rock and F. Vermeulen)

"Testing for Intertemporal Separability" *Journal of Mathematical Economics*, 52(C), 46–49, 2014, (with Matthew Polisson).

- "Sharp for SARP" *American Economic Journal: Microeconomics*, 2015, 7(1): 43–60, (with Richard Blundell, Martin Browning, Laurens Cherchye, Bram De Rock & Frederic Vermeulen)
- "Empirical Revealed Preference", *Annual Reviews*, 6, 503-525, 2014 (with Bram de Rock)
- "How many types are there?" *Economic Journal*, 123, (567), 77–95, March 2013, (with K. Pendakur)
- "How demanding is the revealed preference approach to demand" *American Economic Review*, 101 (2011), 2782–2795, (with T. Beatty)
- "Welfare rankings from multivariate data, a nonparametric approach", *Journal of Public Economics* 95 (2011) 247–252, (with G. Anderson and A. Leicester)
- "Habits Revealed" *Review of Economic Studies*, 77(4), 2010, pp. 1382-1402
- "Best Nonparametric Bounds on Demand Responses" *Econometrica*, 76(6), 2008, 1227–1262 (with R. Blundell and M. Browning)
- "Testing for a Reference Consumer in International Comparisons of Living Standards" *American Economic Review* 98(4), 2008, pp. 1731–32 (with J. Peter Neary)
- "Revealed Preference Methods for the Consumer Characteristics Model" *Review of Economic Studies*, vol 75, 2008, pp. 371-389 (with L. Blow and M. Browning)
- "Improving Bounds on Demand Curves" *International Economic Review*, Vol. 48, No. 4, November 2007, (with R. Blundell and M. Browning).
- "The RPI and the cost-of-living index: testing for consistency between theory and practice", *Fiscal Studies*, 25(1), 2004, pp. 79-91 (with I. Image)
- "Estimation of household demand systems with theoretically compatible Engel curve and unit value specifications", *Journal of Econometrics*, vol. 114, 2003, pp. 221-241, (with F. Laisney and I. Preston).
- "Nonparametric Engel Curves and Revealed Preference", *Econometrica*, 71(1), 2003, pp. 205-240, (with R. Blundell and M. Browning)
- "The cost of living with the RPI: Substitution bias in the UK Retail Prices Index", *Economic Journal*, 111, 2001, F311-334 (with L. Blow)
- "Alcohol Taxation and Tax Revenues", *Fiscal Studies*, Vol.20, No.3, pp.287-304 (with Z. Smith and S. Tanner).
- "Fiscal Instruments for Air Pollution Abatement", *Journal of Transport Economics and Policy*, Vol. 29, 1995, pp 33-51. (with S. Smith).
- "Regulation and redistribution in utilities", *Fiscal Studies*, 16(4), 1995, pp. 1-22, (with A. Dilnot and P. Burns).
- "Bringing it all back home: Alcohol Taxation and Cross-Border Shopping", *Fiscal Studies*, 16(2), 1995, pp. 94-114, (with S. Tanner).
- "The Cost-of-Living", *Fiscal Studies*, vol. 15(4), 1994, pp. 1-28.

Books:

- "Distributional Aspects of Inflation", (2002), *IFS Commentary* No. 90 (with Z. Smith).
- "Cost-of-Living Indices and Revealed Preference", (1999), London: IFS (with L. Blow).
- "The distributional effects of taxes on private motoring", (1997) *IFS Commentary* No. 65 (with L. Blow).
- "Alcohol Taxation and the Single Market", *IFS Commentary* No. 47, (1995), (with S. Tanner).
- "UK Household Cost-of-Living Indices, 1979 to 1992", *IFS Commentary* No. 44 (1994).
- "Vat on Domestic Energy" *IFS Commentary* No. 39, (1993), (with S. Smith & S. Webb)

Book Chapters:

- "The revealed preference approach to demand" in *Quantifying consumer preferences: estimating demand systems -*

Contributions to economic analysis Daniel Slottje (ed.), Emerald Press. 2009, with L. Cherchye L, B. De Rock, F. Vermeulen F.

"Efficiency Analysis and the Lower Convex Hull Approach", in *Quantitative Approaches to Multidimensional Poverty Measurement*, Nanak Kakwani and Jacques Silber (ed.'s) Palgrave Macmillan, 2008, with G. Anderson and A. Leicester

"Value Added Tax and Excises" in *The Mirrlees Review: Dimensions of Tax Design*, S. Adam, T. Besley and R. Blundell (ed.'s), Oxford University Press, 2009, with M. Keen and S. Smith

"Household Cost-of-Living Indices: Evidence from 14 years of UK micro-data", in J. Hills (ed), *New Inequalities: The Changing Distribution of Income and Wealth in the United Kingdom* (1996), Cambridge, C.U.P.

"Tax Policy and the Environmental Costs of Road Transport", in C. Sandford (ed), *More Key Issues in Tax Reform* (1995), Fiscal Publications, (with S. Smith).

"Separating Distributional Issues from Utility Charging: the impact of domestic fuel bills, income support and fiscal alternatives", in P. Vass (Ed), *Access Rights and Affordability: The Social Agenda for the Regulation of Utilities Charging Policy*, CIPFA, London (1994) (with A. Dilnot).

Teaching

University of Oxford, 2007 – present:	Undergraduate: Introductory/Intermediate Microeconomics; Quantitative Economics/Econometrics. Graduate: Advanced Econometrics; Structural Modelling. Research supervision (completed): 8 doctoral students (5 completed), 17 MPhil theses (14 completed). Southampton University, 1999 – 2017: Graduate: Index Number Theory.
University of Surrey, 2005 – 2007:	Undergraduate: Microeconomic Theory; Theories of Political Economy; Applied Microeconomics. Graduate: Research Methods. Research supervision: 8 MSc theses
University College London, 1993-1999:	Undergraduate: Microeconomic Theory, Public Economics, Applied Econometrics. Graduate: Public Microeconomics.

Academic administration and service

University of Oxford:	Director of Undergraduate Studies; Chair: {Joint Appointments Committee, Undergraduate Studies Committee, Career Development Fellowship Committee, Examinations Committee (Finals), Examinations Committee (Prelims)}; Member: {General Purposes Committee, Graduate Admissions and Funding Panel, Management Team, Search Committee, Joint Appointments Committee, Undergraduate Joint Consultative Committee, PPE Review, PPE Standing Committee, AM Standing Committee, HE Standing Committee, Social Sciences Division Undergraduate Studies Committee, Governing Body Nuffield College, Audit Committee Nuffield College}; Course Organiser: {Introductory Economics, Quantitative Economics, Structural Modelling, UNIQ Summer School};
University of Cambridge:	External Examiner for Undergraduate Degrees in Economics.
University of Surrey:	Course Director: postgraduate taught programs.

Bristol University: External Examiner, undergraduate programs in the School of Economics, Finance and Management.
Institute for Fiscal Studies: Deputy Director.

Research Grants Awarded

Are Behavioural Models Falsifiable? (Leverhulme Trust, 2010, (£112,685), *Power and Predictive Success in Revealed Preference Tests* (ESRC, 2009, £73,100), *Measuring Preferences for Dietary and Nutritional Characteristics* (ESRC, 2007, £48,000), *Valuing Innovative Products* (ESRC, 2006, £89,500), *Relative welfare ranking from multivariate data: a nonparametric approach* (ESRC, 2004, £46,500), *Practical nonparametric methods for demand analysis*, (ESRC, 2002, £97,500), *The Centre for Microdata Methods and Practice* (Leverhulme Trust, 2001, £1,973,000, with Andrew Chesher), *Distributional aspects of price variations*, (Nuffield, £107,000), *Revealed preference bounds on substitution bias*, (ESRC, 1998, £28,000), *Substitution bias in the UK Retail Price Index*, (Bank of England, 1998, £7,500). *Estimating an hedonic price index for new cars*, (Office for National Statistics, 1997, £15,000.). *New goods and quality bias in measures of inflation*, (Leverhulme Trust, 1997, £85,000.), *Distributional effects of transport taxes*, (Nuffield Foundation, 1996, £37,500.), *UK household cost-of-living indices*, (Joseph Rowntree Foundation, 1994, £25,000.)

Other

Member: Consumer Prices Advisory Committee, Office for National Statistics, since 2011. Associate Editor, *Oxford Economics Papers* 2011-13; Editor, *Fiscal Studies* 1999-2003. External member of academic/senior academic appointments committees: {University of St. Andrews, Queen Mary University of London, University College Dublin}. External Doctoral Examiner: {London School of Economics, University College London, Birkbeck College University of London, Cambridge University, University of Surrey, University of Kent, Copenhagen University, K.U Leuven, UL Brussels}.

Current Research (Submitted)

“Nonparametric Analysis of Hyperbolic Discounting”, with M. Browning and L. Blow. (Revise and resubmit *Review of Economic Studies*). This paper describes the necessary and sufficient revealed preference conditions for quasi-hyperbolic discounting given standard observables from consumption panels. It shows how these conditions can be used to identify the main features of these preferences.

Current Research (in preparation)

“Hedonic Models and New Product Characteristics”, with J. P. Neary. We study the quality adjustment of price inflation estimates using hedonic models when the set of product attributes is changing and hence when the standard fixed-base-in-characteristics-space “hedonic” methods cannot be applied. We show how to allow for the effects of new characteristics and illustrate the bias which can be present when these effects are ignored.

“Nonparametric Analysis of Reference Dependence”, with V. Crawford and L. Blow. We derive nonparametric necessary and sufficient conditions, in the revealed-preference tradition, for the existence of reference-dependent preferences. When the theory’s notion of “sensitivity” is variable or reference points are unobservable, it has few or no nonparametrically refutable implications. But when sensitivity is constant and reference points are observable or modelable, the theory allows a parsimonious nonparametric rationalization of the labour supply of Farber’s (2005, 2008) and V. Crawford and Meng’s (2011) cabdrivers.

“Prices versus Preferences: Taste Change and Revealed Preference” With A. Adams. R. Blundell. A systematic approach for incorporating taste variation into a revealed preference framework for heterogeneous consumers is developed. This enables the recovery of the minimal variation in tastes required to rationalise observed choices. It is used to examine the extent to which changes in tobacco consumption are driven by price changes or by taste changes, and whether the significance of these two channels varies across socioeconomic groups. A censored quantile approach accounts for unobserved heterogeneity. Statistically significant educational differences in the marginal willingness to pay for tobacco are recovered with more highly educated cohorts experiencing a greater shift in their tastes.

“Modelling Consumer Panel Data under shape restrictions using Random Fields”. This paper investigates the estimation of nonparametric demand surfaces subject to the theoretical restrictions implied by integrability conditions. The method uses a generalisation of multi-dimensional stochastic processes. It allows for complete preference heterogeneity across individual decision makers, precisely matches observed choices and provides measures of forecast uncertainty when considering demands at previously-unobserved budgets.

“A Little Model for Big Data: theory consistent dimension-reduction for ‘scanner data’”, with M. Polisson & K. Pendakur. We illustrate a feasible, theory consistent approach to very high-dimensional consumer panel data in which products are differentiated at the barcode level. Our approach combines revealed-preference methods, multistage-budgeting and traditional parametric demand system estimation. In particular, we show how it is possible to avoid the use of standard mixed-logit type models of discrete choice at the lower stage.

"An entropy-based approach to the APC problem", with M. Browning & M. Knoef. This paper considers the use of entropic methods in the context of the age-period-cohort model. We present two substantive applications (US female mortality data and UK female labour force participation) and compare the approach to some of the alternatives in the literature.

"Demand analysis with partially observed prices". Joint with Matt Polisson. Prices are often only recorded when an agent transacts. This partial observability of prices leads to a number of identification problems. We show that theory-consistent demand analysis remains feasible in the presence of partially observed prices, and hence partially observed implied budget sets, even if we are agnostic about the nature of the missing prices. Our revealed preference approach is empirically meaningful and easy to implement. We illustrate using simple examples.

“Homo *Æqualis*: an experimental study of cross-society variation in altruism”, with A. Barr & C. Wallace. Data from three bargaining games—the Dictator Game, the Ultimatum Game, and the Third-Party Punishment Game—played in 14 remote societies are presented. The societies range from Amazonian to the Arctic, African hunter-gatherers and Polynesia. Behaviour within the games varies markedly across societies. The paper investigates the diversity of preferences revealed by this behaviour. We show that a simple three-parameter model of other-regarding preferences can successfully rationalise the vast majority of the behaviours we see across these very different societies. We look at the heterogeneity of these revealed preferences and present some evidence that differences in preferences are more to do with where you live than differences in purely personal characteristics.

Oxford, February 2018