

Tim Worrall

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CAREER STATEMENT *My professional ambition is to contribute to the discipline of economics by research in the area of dynamic contract theory, agency theory and limited commitment and through scholarship in the areas of finance and microeconomics.*

Education

1979-1983 University of Liverpool: PhD in Economics. *Labour Contract Theory: An Examination.*
 1978-1979 Essex University: MA in Economics.
 1975-1978 University of Liverpool: BA in Economics.

Positions Held

2008- The University of Manchester, Hallsforth Research Fellow in Political Economy.
 1996-2008 Keele University, Professor of Economics.
 1990-1996 University of Liverpool, Lecturer in Economics.
 1989-1990 Kiel, Institut für Weltwirtschaft, Research Officer, SFB 178.
 1987-1989 Universität Konstanz, Research Officer SFB 178.
 1986-1987 Reading University, Temporary Lecturer in Economics.
 1985-1986 University of Western Ontario, Assistant Professor.
 1983-1985 Cambridge University, Junior Research Officer.

Teaching

INTERESTS *My primary teaching interests are in economic theory, industrial organization, game theory, asset pricing, derivatives and risk management.*

RECENT COURSES [Managerial Economics](#) (Level II)
[Financial Instruments](#) (Level M)
[Options and Futures](#) (Level III).

UG-COURSES Corporate Finance (Level III), Econometrics (Level II), Economics of Asymmetric Information (Level III), Game Theory (Level II), Intermediate Finance (Level II), International Economics (Level II), Introductory Economics (Level I), Labour Economics (Level III), Management Science (Level II), Managerial Economics (Level II), Mathematical Economics (Level II and III), Microeconomics (Level I, II and III), Options and Futures (Level III), Quantitative Methods (Level II).

PG-COURSES Contract Theory, Corporate Finance, Game Theory, Financial Mathematics, Financial Instruments, Microeconomics, Regulatory Economics, Topics in Economic Theory.

MASTERS SUPERVISION I have supervised masters dissertations on the following topics: Calendar effects, Executive compensation, Binomial option pricing and Mergers & acquisitions.

TEXTBOOK *Elements of Finance*, with Martin Diedrich (in preparation). A comprehensive textbook of finance theory at intermediate level, based on modern no-arbitrage principles.

Administrative and Professional Activities

DEPARTMENT Head of Department, 2001-4. Member of Research Committee, 1996-. Seminar Coordinator, 1996-2000. Member of Learning and Teaching Committee, 1997-2004. Director of Finance Principal, 1997-8. Director of Management Science Principal, 1998-9. Director of Research, 2005-. Year Tutor, 2005-. Director of Postgraduate Research, 2006-.

UNIVERSITY Chair of University Plagiarism Committee, 2004. Member of Board of the Graduate School of Social Science, 2001-4. Member of Senate 2001-4. Member of Quality Assurance Committee for Complementary Studies Programme, 2004. Member of Appointments Panel for Dean of Faculty, 2004. Member of Appointments Panel for Head of Management School, 2005.

EXTERNAL EXAMINING Department of Economics, Essex University, 2006-9; Department of Economics, University of Birmingham, 2005-9; M.Sc. Economics, University College London, 2003-7; Department of Economics, University of Leicester, 2002-5; Postgraduate Certificate in Finance, Birkbeck College London, 2001-5.

CONFERENCES Program Committee Member: European Economic Association 2003 Stockholm, European Economic Association 2004 Madrid; European Economic Association 2005 Amsterdam; Royal Economic Society PhD Presentation Meetings London 2006 and 2007; Royal Economic Society 2007 Warwick; Royal Economic Society 2008 Warwick; Royal Economic Society, Surrey 2009. Organizer: Midlands Game Theory Workshop, Keele, May 2004; Workshop on Limited Commitment, Edinburgh, September 2005; Midland Game Theory Workshop, Manchester, June 2009.

JOURNAL SERVICE Associate Editor (Microeconomics), *Quantitative and Qualitative Analysis in Social Sciences*, 2006-.

Refereeing for *American Economic Review*, *Berkeley Electronic Journal of Theoretical Economics*, *Bulletin of Economic Research*, *Canadian Journal of Economics*, *Economic Inquiry*, *Economic Journal*, *Economica*, *Econometrica*, *Economics: The Open-Access, Open-Assessment E-Journal*, *Economics Letters*, *Ekonomia*, *Environmental and Resource Economics*, *European Economic Review*, *European Journal of Political Economy*, *FinanzArchiv / Public Finance Analysis*, *Games and Economic Behavior*, *International Economic Review*, *International Journal of Finance and Economics*, *International Journal of Industrial Organization*, *International Sociology*, *International Tax and Public Finance*, *Journal of Development Economics*, *Journal of Economic Behavior and Organization*, *Journal of Economic Surveys*, *Journal of the European Economic Association*, *Journal of International Economics*, *Journal of Labor Economics*, *Journal of Money, Credit and Banking*, *Journal of Political Economy*, *Journal of Transport Economics and Policy*, *Managerial and Decision Economics*, *Oxford Economic Papers*, *The Manchester School*, *Rand Journal of Economics*, *Review of Economic Studies*, *Southern Economic Journal*, *Scandinavian Journal of Economics*, *Theoretical Economics*.
Book refereeing for Addison Wesley, Cambridge University Press, Harper-Collins, MIT Press.

PEER REVIWING Economic and Social Research Council, UK. Leverhulme Trust, UK. Social Sciences and Humanities Research Council, Canada.

PROFESSIONAL MEMBERSHIP American Economic Association, American Finance Association, Canadian Economic Association, Econometric Society, European Economic Association, Royal Economic Society.

HONORARY POSITIONS Senior Fellow, Rimini Centre for Economic Analysis, 2008-. Visitor, Scottish Institute for Research in Economics, Behaviour, Incentives and Contracts Programme, 2007-. Honorary Fellow, University of Liverpool, 1996-1998 and 2001-2004.

BOOK NOTES Incentives: Motivation and the Economics of Information, D.E. Campbell, *Economic Journal*, 107(444), 1631–1632, September 1997. The Economics of Information, by D.K. Levine and S. Lippman (Eds.), *Economic Journal*, 106(436), p.773–774, May 1996. Decision Sciences: An Integrative Perspective, P.R. Kleindorfer, H.C. Kunrueher and P.J.H. Shoemaker, *Economic Journal*, 105(431), p.1067, July 1995. Implicit Contract Theory, by S. Rosen (Ed.), *Economic Journal*, 105(428), p.249, January 1995. Valuing the Environment: Economic Approaches to Environmental Evaluation, A. Coker and C. Richards (Eds.), *Economic Journal*, 103(419), p.1126, July 1993. Microeconomic Analysis: Markets & Dynamics, A. Denzau, *Economic Journal*, 103(416), p.280, January 1993.

OTHER SERVICES Member of Research Review Team, Durham Business School, 2009; Member of Institute of Financial Services, School of Finance Academic Board 2008-11; Conference of Heads of University Department of Economics (CHUDE), Steering group member, 2005-06, Secretary 2007-09; Chief Examiner for Institute of Financial Services, School of Finance Honours level Corporate Finance Modules CF1 and CF2, 2008-; External Assessor for Chair in Economics, University of Durham 2008; Advisor to Steering Group for ESRC International Benchmarking of Economics, 2007-8; External Advisor, Periodic Review, School of Social Sciences, University of Manchester, April 2007; External Assessor or Chair/Reader in Economics, University of Leicester 2006; External Assessor, Investment Management Course, LSE External Study Programme, April 2005; Talk on Black-Scholes Formulae to Mathematical Modelling Centre, Leicester, May 2002; Referee for 8th International Symposium on Intelligent Robotic Systems, 2000.

Research

AREAS *My main area of interest is in the economics of information and uncertainty and the implications for market structure and the macroeconomy. Much of my research has been in the area of contract theory and in particular dynamic agency and self-enforcing contracts with applications to labour and credit markets. My plans for research over the next five years fall into three main areas: dynamic contracting, principal-agent problems and network analysis.*

VISITS Department of Agricultural Resource Economics, University of California at Berkeley (February-April 2006). Centre for Operational Research and Economics, Louvain-la-Neuve (April 2005). Department of Agricultural Resource Economics, University of California at Berkeley (September 1999). Institute for Macroeconomics, Federal Reserve Bank of Minneapolis (April 1996). Centre for Operational Research and Economics, Louvain-la-Neuve (April 1992).

- RESEARCH TALKS Society for Economic Dynamics, Istanbul, July 2009; Canadian Economic Association, Toronto, May 2009; Workshop of the Regional Studies Research Network on Geographical Localisation, Intersectoral Reallocation of Labour and Unemployment Differentials, Rimini, May 2009; Warwick University, November 2008; Society for Economic Dynamics, Massachusetts Institute of Technology, July 2008; Canadian Macroeconomic Study Group, Ottawa, November 2007; University of Durham, November 2007; Workshop on Risk Sharing, Gremaq, Toulouse, September 2007; Bristol University, May 2007; Sheffield University, May, 2007; Econometric Society European Meetings, Vienna, August 2006; European Economic Association, Vienna, August 2006; Canadian Economic Association, Montreal, May 2006; Royal Economic Society, Nottingham, April 2006; University of California at Berkeley, March 2006; Manchester University, February 2006; Workshop on Limited Commitment, Edinburgh University, November 2005; Society for Economic Dynamics, Budapest, June 2005; European Economic Association, Madrid, August 2004; Queen's University Belfast, May 2004; Birmingham University, May 2004; Durham University, November 2003; Econometric Society European Meetings, Stockholm, August 2003; Game Theory Workshop, University of Nottingham, April 2003; University of Newcastle, April 2003; Birkbeck College London, March 2002; University of Surrey, February 2002; Econometric Society European Meetings, Lausanne, August 2001; South Bank University, May 2000; Nottingham University, May 2000; Birmingham University, November 1999; European Congress of the Econometric Society, Santiago de Compostela, Spain, 1999; Department of Agricultural Resource Economics, University of California at Berkeley, April 1999; Durham University, 1997; University of Liverpool, June 1996; University of Loughborough, May 1996; Institute for Empirical Macroeconomics at the Federal Reserve Bank of Minneapolis, Minnesota, April 1996; 7th World Congress of the Econometric Society, Tokyo, 1995; University of Manchester, 1995; Summer Research Workshop on New Macroeconomics, July 1994; University of Sheffield, 1994; University of Keele, 1994; University of Aberystwyth, 1993; University of Exeter, 1993; University of Salford, 1993; Royal Economic Society, York, April 1993; 1st Summer School in Economic Theory at La Sorbonne, Paris, April 1993; Centre for Operations Research and Economics at the University of Louvain-la-Neuve, Belgium, April 1993; 6th World Congress of the Econometric Society in Barcelona, August 1990; European Congress of the Econometric Society, Budapest, August 1986; European Congress of the Econometric Society, Madrid, August 1984.
- DOCTORAL SUPERVISION Michael King: Platform Competition, Expected December 2009. Svetlana Andrianova (University of Leicester): Essays on Collusion, Corruption and Reforms, 2001 (passed without revisions). Alex Dickson (The University of Strathclyde): On Strategic Marshallian Analysis: Shapley and Shubik meet Marshall and Cournot, 2005 (awarded with commendation). Ioannis Lazopoulos (University of Surrey): Debt Contracts and Bank Runs, 2006 (passed without revisions and awarded with commendation).
- PH.D. EXAMINING Jonathan Rougier, University of Durham, 1996; Shirley Jin-Shien Ho, University of Warwick, 1997; Anna Maria C. Menichini, University of York, 2000; Cavelle Dawn Creightney, University of Warwick, 2001; Saksit Thananittayaudom, University of Nottingham, 2005; Sinan Lu, University of Nottingham, 2007; Honggang Qiu, University of York, 2007.

- RESEARCH GRANTS** Royal Economic Society, November 2006 - April 2007: An evaluation of the performance of UK research in economics (24k). Economic and Social Research Council, 2004-6: Self-enforcing and dynamic relational contracts (155k, with Jonathan Thomas) - Evaluation: "Outstanding". Department for International Development, 2001-3: The effects of macro-financial liberalisation policies on micro-household savings and credit behaviour in developing countries (125k, one of four co-applicants). Leverhulme Trust Fellowship, 1998-9: Quasi-credit in less developed countries (15k). Keele Research Incentive Scheme, 1999: Quasi-credit and LDCs (5k).
- JOINT WORK** Spiros Bougheas (Nottingham University), Martin Diedrich (Imperial College London), Ethan Ligon (University of California at Berkeley), Pierre M. Picard (University of Luxembourg and CORE, Université Catholique de Louvain), Jonathan P. Thomas (Edinburgh University), Nicholas Vasilakos (Birmingham University).
- CITATIONS** The ISI Web of Knowledge shows 166 citations for the published articles listed below. Of these 71 citations are in blue ribbon (discipline's top eight) journals. The most cited article is "Income Fluctuation and Asymmetric Information", *Journal of Economic Theory*, 1990 which has 62 citations of which 36 are in blue ribbon journals.
- BOOK CHAPTERS** Brian Hillier and Tim Worrall (October, 1995): "Asymmetric Information, Investment Finance and Real Business Cycles" in *The New Macroeconomics: Imperfect Markets and Policy Effectiveness*, H. Dixon and N. Rankin (eds.), Cambridge University Press, pp.245–272.
Tim Worrall (June, 1989): "Labour Contract Theory", in *The Economics of Missing Markets, Information and Games*, F.H. Hahn (ed.), Oxford University Press, pp.336–359.
- BOOK REVIEWS** Organisations with Incomplete Information: Essays in Economic Analysis: A Tribute to Roy Radner, edited by M. Majumdar, *Economic Journal*, 111(472) F550–552, June 2001. The Economics of Contracts: A Primer, B. Salanie, *Economica*, 65(260), 617–618, November 1998.
- WORK IN PROGRESS** *Verification, Falsification and Financial Contracting* with Spiros Bougheas (Nottingham University). *Profit-Padding by Firms* with Spiros Bougheas (Nottingham University). *Efficient Buyer-Seller Networks* with Martin Diedrich (Imperial College London). *Dynamic Relational Contracts with Consumption Constraints: The Additive Case* with Jonathan P. Thomas (Edinburgh University). *Self-enforcing Migration Policies* with Pierre M. Picard (University of Luxembourg and CORE, Université Catholique de Louvain).
- WORKING PAPERS** Jonathan P. Thomas and Tim Worrall: "Dynamic Relational Contracts with Consumption Constraints", Keele Economics Research Papers 2007/16, December 2007.
Nicholas Vasilakos, Gauthier Lanot and Tim Worrall "Evaluating the Performance of UK Research in Economics", Keele Economics Research Papers 2007/10, August 2007.
Pierre Picard and Tim Worrall: "Currency Areas and Inter-regional Assistance", Keele Economics Research Papers 2007/01, January 2007.
Spiros Bougheas and Tim Worrall: "Cost Padding and Procurement", Keele Economics Working Paper 2001/07, November 2001.
Tim Worrall: "Time Inconsistency and Inter-generational Risk-Sharing", Keele Economics Working Paper 2000/17, February 2000.

- PUBLISHED ARTICLES
- Jonathan P. Thomas and Tim Worrall (November, 2007): “Limited Commitment Models of the Labour Market”, *Scottish Journal of Political Economy*, **54**(5) pp.750–773.
[doi:10.1111/j.1467-9485.2007.00440.x]
- Jonathan P. Thomas and Tim Worrall (February, 2007): “Unemployment Insurance under Moral Hazard and Limited Commitment: Public versus Private Provision”, *Journal of Public Economic Theory*, **9**(1) pp.151–181.
[doi:10.1111/j.1467-9779.2007.00302.x]
- Jonathan P. Thomas and Tim Worrall (August, 2002): “Gift-giving, Quasi-credit and Reciprocity”, *Rationality and Society*, **14**(3) pp.307–351.
[doi:10.1177/1043463102014003003]
- Ethan Ligon, Jonathan P. Thomas and Tim Worrall (January 2002): “Informal Insurance and Limited Commitment: Theory and Evidence from Village Economies”, *Review of Economic Studies*, **69**(1), pp.209–244.
[doi:10.1111/1467-937X.00204]
- Ethan Ligon, Jonathan P. Thomas and Tim Worrall (April, 2000): “Mutual Insurance, Individual Savings and Limited Commitment”, *Review of Economic Dynamics*, **3**(2), pp.216–246.
[doi:10.1006/redy.1999.0081]
- Brian Hillier and Tim Worrall (March, 1994): “The Welfare Implications of Costly Monitoring in Credit Markets”, *Economic Journal*, **104**(423), p.350–362.
[doi:10.2307/2234755]
- Jonathan P. Thomas and Tim Worrall (January, 1994): “Foreign Direct Investment and the Risk of Expropriation”, *Review of Economic Studies*, **60**(1), pp.81–108.
[doi:10.2307/2297878]
- Jonathan P. Thomas and Tim Worrall (August, 1990): “Income Fluctuation and Asymmetric Information: An Example of a Repeated Principal-Agent Model”, *Journal of Economic Theory*, **51**(2), p.367–390.
[doi:10.1016/0022-0531(90)90023-D]
- Tim Worrall (July, 1990): “Debt with Potential Repudiation”, *European Economic Review* **34**(5), pp.1099–1109.
[doi:10.1016/0014-2921(90)90025-T]
- Jonathan P. Thomas and Tim Worrall (October, 1988): “Self-Enforcing Wage Contracts”, *Review of Economic Studies*, **55**(4), pp.541–554.
[doi:10.2307/2297404]