



Christine Greenhalgh - Research c.v. 2001 – 2011

Professor Christine Greenhalgh MA (Oxon.), BSc, & MSc (London), PhD (Princeton), is an Emeritus Fellow of St. Peter's College, having previously been Fellow and Tutor in Economics from 1979-2009; she is also Emeritus Professor of Applied Economics, Department of Economics, University of Oxford. She served as the Director of Undergraduate Studies in Economics during most of 2008 and 2009 and she has been the Economics Research Director of the Oxford Intellectual Property Research Centre since 1995 (website www.oiprc.ox.ac.uk). During sabbatical leave from April to June 2007 she was a Visiting Scholar at the Stanford Institute for Economic Policy Research and in October 2007 visited the University of Melbourne Institute for Applied Economic and Social Research, where she is a Research Associate of the Intellectual Property Research Institute of Australia. During February to April 2011 she is a Departmental Guest of the Industrial Relations Section of Princeton University. This short c.v. records her research activities since 2001.

Dr Greenhalgh undertakes research in the field of the economics of innovation, intellectual property (IP) and technological change. For several years she was involved in documenting the extent of patents and trademarks held by large UK production firms and estimating the value of this intellectual property. Another study focused on trademarks with an emphasis on service sector firms, which have been neglected in the existing literature despite their major importance in economic output and employment. Full documentation of that project 'The Measurement and Valuation of Intangible Assets in the Service Sector' (joint with Dr Mark Rogers) is available from www.ESRCSocietyToday.ac.uk. Her recent research (also joint with Dr Rogers) has focused on the intellectual property held by small and medium-sized enterprises. New datasets have again been constructed to document the extent of use of IP by SME and micro firms and an on-line survey has been conducted to generate information about the enforcement of IP rights by these smaller firms.

Prof. Greenhalgh maintains a special interest in the employment and skills consequences of technological change, following earlier published work on labour markets. She also has earlier published articles on the impact of intellectual property and innovation on the international trade competitiveness of British firms. She has investigated the relative impact of changes in technology and in foreign trade on jobs in Britain, finding new technology to be much the bigger cause of employment restructuring. She has conducted research on systems of vocational training in this changing environment. Her research has been funded at various times by the ESRC, the Leverhulme Trust, the UK Patent Office, and the Strategic Advisory Board for Intellectual Property Policy (SABIP).

Book Authorship:

Her recent book is titled *Innovation, Intellectual Property and Economic Growth*, jointly authored with Dr Mark Rogers, see <http://press.princeton.edu/titles/9221.html>. This is an advanced undergraduate/graduate text published by Princeton University Press in spring 2010. The first half of the book covers the microeconomics of invention, innovation and diffusion, including the role of intellectual property, and its impact on the market value of firms and on productivity. The second half covers the macroeconomic theory of technology and growth, evidence of the impact of innovation on the external trade and growth performance of countries, the impact of innovation on technology and jobs, and domestic and international policy for innovation and intellectual property. Outline lecture slides have been developed by the authors and can be downloaded from the above webpage for development by lecturers.

A. Articles in Refereed Journals since 2001:

1. 'Jobs for the skilled: How technology, trade and domestic demand changed the structure of UK employment', (with M Gregory and B Zissimos) *Oxford Economic Papers* Vol. 53 No.1, Jan. 2001.
2. 'Technological activity and employment in a panel of UK firms', (joint author with D. Bosworth and M. Longland). *Scottish Journal of Political Economy*, Vol. 48 No.3, August 2001.
3. 'Structural change and the emergence of the new service economy' (joint author with Mary Gregory) *Oxford Bulletin of Economics and Statistics* Vol. 63, 2001, Special Issue: The Labour Market Consequences of Technical and Structural Change.
4. 'Intellectual property in UK firms: Creating intangible assets and distributing the benefits via wages and jobs' (joint author with Mark Longland) *Oxford Bulletin of Economics and Statistics* Vol. 63, 2001, Special Issue: The Labour Market Consequences of Technical and Structural Change.
The above paper has been republished in *Intellectual Property Rights: Critical Concepts in Law*, Volume I, edited by David Vaver, London: Routledge, 2006
5. 'Does an employer training levy work? – The incidence of and returns to adult vocational training in Britain and France' (sole author) *Fiscal Studies*, June 2002.
6. 'Why does market capitalism fail to deliver a sustainable environment and greater equality of incomes?' (sole author) *Cambridge Journal of Economics*, Volume 29 No. 6, Special Issue on Economics for the Future, November 2005.
7. 'Running to stand still? – The value of R&D, patents and trade marks in innovating manufacturing firms' (joint author with M Longland) *International Journal of the Economics of Business*, Vol. 12 (3) November 2005.
8. 'The value of innovation: The interaction of competition, R&D and IP' *Research Policy*, Vol. 35 May 2006, (jointly authored with M Rogers).
9. 'The value of intellectual property to firms and society' in *Oxford Review of Economic Policy* issue on Intellectual Property, Winter 2007, (joint paper with Mark Rogers).
10. 'Intellectual property enforcement in smaller UK firms – findings from a survey in 2009-10' in *The WIPO Journal* Vol. 2 no. 1, 2010 (joint paper with R Pitkethly and M Rogers).

B. Book Chapters since 2001:

11. 'Intellectual Property, Competition and the Value of UK Firms' (with M Rogers), in C Peeters and B Van Pottelsberghe (eds.) *Economic and Management Perspectives on Intellectual Property Rights*, Palgrave, 2006.
12. 'Market Value of UK Intellectual Property: Manufacturing, Utility and Financial Services Firms', (with M Rogers), in D Bosworth and E Webster (eds.) *The Management of Intellectual Property*, Edward Elgar 2006.
13. 'Use of Intellectual Property by the UK Financial Services Sector' (with M Rogers), in D Bosworth and E Webster (eds.) *The Management of Intellectual Property*, Edward Elgar 2006.
14. 'Intellectual property activity by service sector and manufacturing firms in the UK, 1996-2000' (with M Rogers), in H Scarbrough (ed.) *The Evolution of Business Knowledge*, Oxford University Press 2008.
15. 'The social benefits and costs of trademarks and brands' (sole author) in *New Law of Reputation and Brands in the Asia Pacific Region*, edited by Andrew Kenyon, Megan Richardson and Ng-Loy Wee Loon, forthcoming Cambridge U.P. 2011

C. Electronic Publications and Government Reports since 2001:

16. 'The economics of intellectual property: a review to identify themes for future research' (with P Dixon), Oxford Intellectual Property Research Centre, www.oiprc.ox.ac.uk Working Paper No. 05/02 November 2002. Paper commissioned by the Intellectual Property Advisory Committee of the UK Patent Office and published on their website at www.intellectual-property.gov.uk/ipac/pdf/iprep.pdf
17. 'Trade Marks and Performance in UK Firms: Evidence of Schumpeterian Competition through Innovation' (with M. Rogers), available from Oxford Economics Department Working Papers No. 300 January 2007, www.economics.ox.ac.uk/Research/workpapers.asp
18. "An analysis of the characteristics of small and medium enterprises that use intellectual property" (with M Rogers and C Helmers) for UK Intellectual Property Office, September 2007.

19. "An analysis of the association between the use of intellectual property by UK SMEs and subsequent performance" (with M Rogers and C Helmers) for UK Intellectual Property Office, September 2007.
20. *Intellectual Property Enforcement in Smaller UK Firms* (with J Phillips, R Pitkethly, M Rogers and J Tomalin) for SABIP and UK Intellectual Property Office, October 2010.
21. *Trademark Incentives* (with M Rogers, P Schautschick and V Sena) for the UK Intellectual Property Office, March 2011.
22. *Competition, Innovation and IP*, (with M Rogers), for the UK Intellectual Property Office, March 2011.
- Items 18, 19 and 20 are available at <http://www.ipo.gov.uk/pro-ipresearch.htm>; also 21 will be available on this site in May 2011.

D. Editorial Work:

Prof. Greenhalgh is the lead editor for Edward Elgar of a series of books with the theme *New Horizons in Intellectual Property*. The series has published seven titles to date:

The International Political Economy of Intellectual Property Rights by Meir Perez Pugatch, 2004.

Software Patents: Economic Impacts and Policy Implications by Knut Blind, Jakob Edler and Michael Friedewald, 2005.

The Management of Intellectual Property edited by Derek Bosworth and Elizabeth Webster, 2006.

The Intellectual Property Debate: Perspectives from Law, Economics and Political Economy edited by Meir Perez Pugatch, 2006.

Intellectual Property and TRIPS Compliance in China: Chinese and European Perspectives edited by Paul Torremans, Hailing Shan and Johan Erauw, 2007.

Intellectual Property Rights, Innovation and Software Technologies by Elad Harison, 2008.

Imitation to Innovation in China by Yahong Li, 2010.

E. Academic Conference Papers - presentations for international audiences since 2001:

Singapore, 2011: 2nd Asia Pacific Innovation Conference.

Geneva, 2011: Economics Seminar at World Intellectual Property Office.

Hobart, Tasmania, 2007: 36th Australian Conference of Economists.

Stanford, US 2007: Stanford Institute for Economic Policy Research, Seminar Series: Social Science and Technology.

Nice, France, 2006: 11th Congress of the International Joseph A Schumpeter Society.

Melbourne, Australia 2005: Invited seminar at the Intellectual Property Research Institute of Australia, University of Melbourne.

Paris, France 2005: Applied Econometric Association meeting on *Innovation and Intellectual Property*.

Marseille, France 2004: European Conference of the Econometric Community (EC²) on *Econometrics of Industrial Organisation*.

Melbourne, Australia 2004: Invited speaker for public seminar to IP academics and practitioners at the Intellectual Property Research Institute of Australia, University of Melbourne.

Siena, Italy, 2003: Invited speaker for the inaugural meeting of the MIUR group on Economics and Law of IP, 'Il governo della proprieta intellettuale'.

Montreal, Canada, 2002: 14th International Input-Output Conference.

Florida, USA, 2002: 9th Congress of the International Joseph A Schumpeter Society

F. Research impact Outside Academia:

Research interface with the UK Treasury:

- 2006 Member of the Critical Friends Network for the Gowers Review of Intellectual Property.
- 2004 Gave a Treasury Seminar in May to present findings of research with M. Rogers on market structure and the returns to R&D, contributing to the ongoing debate on whether more or less competition fosters higher innovation.
- 2000 to 2004: At No.11 Downing Street, Dr Greenhalgh participated in the quarterly 'Keynes Group' Seminar on Macroeconomic Policy, for the Chancellor, Chief Economic Policy Adviser, and

Treasury representatives, chaired by Ed Balls, then a civil servant.

- 2001 Gave a Treasury Seminar in January to present results of a study of the French employer training levy system.

Research interface with the UK Department of Trade and Industry (DTI):

- 2003 Member of the Academic Panel for the Department of Trade and Industry Innovation Review. The Academic Panel assisted in the formulation of the two publications: Department of Trade and Industry (2003) *Innovation Report - Competing in the Global Economy: The Innovation Challenge* and an accompanying DTI Economics Paper No.7 of the same title, both published by HMSO, December.
- 2003 Speaker at an Institute for Public Policy Research Seminar for the DTI on 'Innovation, UK Manufacturing and the Regions'.
- 2001 Discussant on a DTI commissioned research project on DTI Industrial Support Policies.

Research interface with The UK Patent Office (now titled the UK Intellectual Property Office):

- 2011 Member of the Trade Marks and Design Rights Research Expert Advisory Group for UK Intellectual Property Office. Prof. Greenhalgh's recent research has fed into the Hargreaves Review of Intellectual Property Rights due to report in April 2011.
- 2010-11 Acted with an economics research team to build new databases for future government research and performed initial analysis (see above items 21, 22).
- 2009-10 Acted with a multi-disciplinary team of researchers, coordinated by the London Intellectual Property Institute, to produce a report for SABIP on the issues and difficulties surrounding enforcement of IP rights by smaller UK firms. This report reflects an electronic survey of a sample of firms drawn from our own databases (see above item 20).
- 2007 Assisted Prof. Mark Rogers in developing and analysing a new database to document the use and value of intellectual property in SME and micro firms. See above the two reports arising from this study (see above items 18, 19).
- 2002 Commissioned to write a survey paper for the Intellectual Property Advisory Committee of the UK Patent Office. This review was published on their website and it has been widely accessed in the UK and the US. See: *'The economics of intellectual property: a review to identify themes for future research'* by P Dixon and C Greenhalgh, Oxford Intellectual Property Research Centre.
- 2001 Awarded a research grant from the UK Patent Office for research into *'The Extent and Value of Intellectual Property in UK Firms'*. Under this award an earlier database was extended to include more recent years and produced some novel Intellectual Property Scoreboards. The following two papers were published on the website of the UK Patent Office: *'Trends and Distribution of Intellectual Property: UK and European patents and UK trade and service marks 1986-2000'*, (by C Greenhalgh, M Longland and D Bosworth), September 2003, and *'Intellectual Property Scoreboards for the UK in 2000'* (by C Greenhalgh and M Longland), January 2003.

Research impact in the US:

- 2007 Wrote a Policy Brief for publication and distribution by the Stanford Institute for Economic Policy Research, titled: *Innovation and Intellectual Property – Issues for Debate*. (Download from www.siepr.stanford.edu.) This was distributed to all participants and speakers, including the policy advisors of four major Presidential candidates, at an SIEPR Policy Forum titled *Innovation Policy for the Next Presidency* held in June 2007.

Updated April 2011.