Rodney Wavne STRACHAN

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http://profile.economics.ug.edu.au/strachan/

Professional Experience

University of Queensland Head of School 2015 January – present Deputy Head of School 2014 June – 2015 January

> Professor 2013 July – present

The Australian National University

Adjunct Professor 2013 July - present Professor 2012 – 2013 June Deputy Head of School 2011 – 2013 June Associate Professor 2010 - 2012

Rimini Centre for Economic Analysis, Italy, Senior Fellow 2007-present Centre for Applied Macroeconomic Analysis 2010-present University of Queensland, Australia Senior Lecturer, 2006 - 2009 University of Leicester, U.K. Senior Lecturer, 2004 - 2006Keele University, U.K. Lecturer, 2004

University of Liverpool, U.K. Lecturer, 2000 - 2003

Education

PhD (Monash University, 2000)

M.Ec. (UNE, 1996)

G.Dip. Econometrics (UNE, 1994)

BBus. (QUT, 1989)

Research Activities Publications (ABDC Ranking in parentheses):

- Chan J., Leon-Gonzalez R. and R. W. Strachan (2017) "Invariant Inference and Efficient Computation in the Static Factor Model", forthcoming in the *Journal of* the American Statistical Association Theory and Methods Section (A*).
- Eisenstat, E. and R. W. Strachan (2016) "Modelling inflation volatility" Journal of Applied Econometrics, Volume 31, Issue 5, August 2016, Pages: 805–820 (A*).
- Chan J.C.C., E. Eisenstat and R. W. Strachan (2016) "Stochastic Model Specification Search for Time-Varying Parameter VARs" Econometric Reviews, 35(8-10), 1638-1665 (A).
- Strachan, R. W. and H. K. Van Dijk (2013) "Evidence on Features of a DSGE Business Cycle model from Bayesian Model Averaging", The International (A*) Economic Review Volume 54, Number 1, 385-402.
- Jochmann, M., Koop G., R. Léon-Gonzalez and R. Strachan (2013) "Stochastic Search Variable Selection in Vector Error Correction Models with an Application

- to a Model of the UK Macroeconomy" *The Journal of Applied Econometrics* 28, 62-81. (A*)
- 6. Chan J., G. Koop, R. Léon-Gonzalez and R. Strachan (2012) "Time Varying Dimension Models" *Journal of Business and Economic Statistics* Volume 30, Issue 3, July, pages 358-367. (A*)
- 7. Koop G., R. Léon-Gonzalez and R. Strachan (2012) "Bayesian Model Averaging in the Instrumental Variable Regression Model" forthcoming in *The Journal of Econometrics* 171, 237-250. (A*)
- 8. Koop G., R. Léon-González and R. W. Strachan (2011) "Bayesian Inference in the Time Varying Cointegration Model", *The Journal of Econometrics* 165, 210-220. (A*)
- 9. Koop G., R. Léon- González and R. W. Strachan (2010a) "Dynamic probabilities of restrictions in state space models: An application to the Phillips curve" *Journal of Business and Economic Statistics* Vol. 28, No. 3: 370-379 (A*).
- 10. Koop G., R. Léon- González and R. W. Strachan (2010b) "Efficient posterior simulation for cointegrated models with priors on the cointegration space" *Econometric Reviews* Volume 29, Issue 2, 224-242 (A).
- 11. Charemza, W., R. Strachan and P.M. Żurawski (2010) "False posteriors for the long-term growth determinants" *Economics Letters* 109: 144–146 (A).
- 12. Guest Editorial (2010) Workshop on Bayesian Econometric Methods, The Review of Economic Analysis, Vol. 2, No. 2.
- 13. Jochmann, M., Koop, G. and R. W. Strachan (2010) "Bayesian Forecasting using Stochastic Search Variable Selection in a VAR Subject to Breaks" *International Journal of Forecasting* Vol. 26, Issue 2: 326-347 (A).
- 14. Gefang, D. and R. W. Strachan (2010) "Nonlinear Impacts Of International Business Cycles On The UK -- A Bayesian Smooth Transition VAR Approach" *Studies in Nonlinear Dynamics and Econometrics:* Vol 14: Issue No. 1, Article 2 (A).
- 15. Koop G., R. Léon-González and R. W. Strachan (2009) "On the Evolution of Monetary Policy" *Journal of Economic Dynamics and Control* 33, 997-1017 (A*).
- Strachan, R. W. (2009) "Comment on 'Jointness of Growth Determinants' by Gernot Doppelhofer and Melvyn Weeks". *Journal of Applied Econometrics* 24, 245-247 (A*).
- 17. Koop G., R. Léon-González and R. W. Strachan (2008) "Bayesian inference in a cointegrating panel data model" *Advances in Econometrics, Volume* 23, 433-469.
- 18. Koop, G., S. Potter and R. W. Strachan (2008) "Re-examining the consumption-wealth relationship: The role of uncertainty". *Journal of Money, Credit and Banking*, Vol. 40, No. 2–3, 341-367 (A*).
- 19. Strachan, R. (2007) "Bayesian inference in cointegrated I(2) systems: A generalisation of the triangular model". *Econometric Reviews Special Issue* 26, Issues 2-4, 439-468 (A).

- 20. Koop, G., R. Strachan, H.K. van Dijk, & M. Villani (2006) "Bayesian approaches to cointegration analysis" in *The Palgrave Handbook of Econometrics*, Vol. 1, *Econometric Theory*.
- 21. Strachan, R. and B.A. Inder (2004) "Bayesian analysis of the error correction model", *Journal of Econometrics* 123, 307-325 (A*).
- 22. Strachan, R and H. K. van Dijk (2003) "Bayesian Model Selection with an Uninformative Prior", Oxford Bulletin of Economics and Statistics 65, 863-876 (A).
- 23. Strachan, R. (2003) "Valid Bayesian estimation of the cointegrating error correction model", *Journal of Business and Economic Statistics*, 21(1), 185-195 (A*).
- 24. Strachan, R. (2000) "Bayesian Analysis of the Cointegrating Error Correction Model: With extension to general reduced rank regression models", *Ph.D. Dissertation*, Monash University.
- 25. Strachan, R., M.L. King, & S. Singh (1998) "Likelihood based estimation of the regression model with scrambled responses" *Australian and New Zealand Journal of Statistics*, 40(3), 279-290 (B).
- 26. S. Strong and Strachan, R. (1996) "Economic growth and cyclical behaviour in eleven APEC countries" *Malaysian Journal of Economic Studies*, XXXIII(1), 9-33 (C).

Under Submission:

1.

Current Work:

- 1. with Sylvia Kaufmann, Daniel Kaufmann and Gregor Baurle "Changing dynamics at the zero lower bound"
- 2. with Joshua Chan "The Zero Lower Bound: Implications for Modelling the Interest Rate".
- 3. with Kieron Meagher "Evidence on the non-linear impact of management"
- 4. with Fabrizio Carmignani, Eric Eisenstat and Rabee Tourky "Bayesian Estimation of the Continuous Piecewise Linear Model"
- 5. with Joshua Chan and Fabrizio Carmignani "What drives inflation volatility?"
- 6. with Joshua Chan and Farshid Vahid, "Model uncertainty in common cycles and common trends".
- 7. with Herman van Dijk "Evidence on the Likelihood and Importance of the Liquidity Trap in the UK, the USA and Japan".

Awards and Grants [figures in brackets indicate publications related to the funding]:

- 1. 2012-2013 ANU Research School Grant for \$9,598 Title: Using correlation to uncover structure.
- 2. 2012-2015 ARC Discovery Grant for \$300,000 Title: Estimating the continuous piecewise linear model and macroeconomic applications. With Professor Rabee Tourky (UQ) and Associate Professor Fabrizio Carmignani (UQ). [4, 7, 9, 12]

- 3. ANU Start Up Grant for \$25,000 and IT Grant for \$15,000.
- 4. 2009-2011 ARC Discovery Grant for \$240,000 Title: Computing probabilities of theories where these probabilities vary over time with applications in macroeconomics. Chief investigator: Rodney Strachan. [1, 4, 5, 7, 8]
- 5. U.Q. School Teaching Award: Teaching Excellence Highly Recommended.
- 6. 2007-2010 The Leverhulme Trust for £125,785.15 (approximately \$AUD250,000) Title: Regime-switching and Structural Breaks in Cointegrated Macroeconomic Models. Principal applicant: Gary Koop. Co-applicants: Roberto Léon-Gonzalez and Rodney Strachan. [3, 4, 5, 7, 8, 9, 12, 16, 17]
- 7. 2007 UQ New Staff Research Start-Up Fund \$12,000. Time Varying Parameter Vector Error Correction Models. [5, 7]
- 8. 2007 UQ Early Career Researcher Grant \$13,542. Dynamic Inference in Macroeconomic Models. [16, 17]
- 9. Award for being a valued referee for the *Journal of Applied Econometrics*.
- 10. 2005 Advanced Study Leave (Leicester): Early Sabbatical (after one year) granted for research success.

General Public Goods:

Scientific Program Committee 44th Australian Conference of Economists (ACE 2015), QUT Gardens Point Brisbane, Australia.

Scientific Program Committee 8th International Conference on Computational and Financial Econometrics (CFE 2014), University of Pisa, Italy.

Organiser for Introduction to Bayesian Time Series Econometrics (5-6 July) by Joshua Chan, and Bayesian Analysis of DSGE Models (7-8 July) by Professor Frank Schorfheide, Research School of Economics, ANU.

Series Editor: Advances in Econometrics (2013 - present).

Programme Committee for SETA (*The International Symposium on Econometric Theory and Applications*), Melbourne, April 2011.

Organiser for *Workshop on Bayesian Econometric Methods* in Rimini held within the *Rimini Conference on Economics and Finance*, Italy and Canada, 2008, 2009, 2010, 2011, 2012, 2013 and 2014.

• Sole Organiser for *Workshop on Bayesian Econometric Methods* in Rimini, Italy July 1-2 2009. Invited speaker: Russell Davidson; Christian Robert; Tony Lancaster; and Gael Martin.

Guest Editorial: Workshop on Bayesian Econometric Methods, The Review of Economic Analysis, Vol. 2, No. 2, 2010.

Local Organising Committee and Program Committee for *Australasian Meeting of the Econometric Society* July 2007 (ESAM07).

Teaching Experience

I have had extensive teaching experience at both the undergraduate and postgraduate level across a wide range of topics in econometrics. I have taught actuarial statistics, mathematical statistics, micro-econometrics, macro-econometrics, financial

econometrics, time series econometrics, state space modelling, introductory statistics and econometrics, econometric theory and specialised topics in Bayesian econometrics.

Below I list courses I have taught more recently.

At ANU:

- Macro and Financial Econometrics: This course surveys the econometric theory
 and practice in modern applied research on macroeconomic and financial issues.
 Discussion during class will focus on issues of simultaneously modelling the
 dynamic behaviour of several economic time series. Topics include: ARMA
 models, VAR models, SVAR models, Simultaneous equation models,
 cointegration, long-run equilibria and error correction models; and volatility
 models.
- Advanced Econometric Theory: This is an advanced course on econometric theory. It provides students with grounding in the theory that underpins many standard econometric methods so that students can draw connections between various methods presented and learn to derive simple theoretical results from first principles. This course will build upon first courses in mathematical statistics to develop the link from the statistical theory to important models and methods in econometrics. Topics include: review of the Gauss-Markov assumptions and their implications, MLE, GMM, Asymptotic theory applied to econometric models, Bayesian inference, state space modelling.

At UQ:

- Statistical Theory for Economists: This course is designed to introduce students to the mathematical statistics theory behind many of the techniques that they would have been exposed to in an introductory course in applied statistics. This will provide sufficient background for subsequent courses in econometric theory.
- *Financial Econometrics:* This course offers advanced students in finance and economics an understanding of the econometric tools that apply to financial data for purposes such as forecasting.
- *Elements of Econometrics:* For students with basic economic statistics background. Hypothesis testing, linear regression, general linear model, serial correlation, multicollinearity, heteroscedasticity, dummy variables, limited dependent variables & simple dynamic models.
- Applied Econometrics: The course has a strong focus on applied empirical analysis using econometric techniques. It covers some cross-sectional modeling techniques & introduces time series estimation.
- Applied Econometrics for Microeconomics: This course offered advanced students in Economics, Commerce and Business an understanding of the econometric tools that apply to microeconomic data. Lectures introduce cross-sectional and panel models, limited dependent variable models and the techniques required to estimate/predict with the model. Core content includes the analysis of individual-level data on the economic behavior of individuals or firms using regression methods for cross section and panel data and limited dependent variable models. Skills and Perspective provided by applications in the area of production economics, labour economics, consumer choice, marketing, health and education.
- Advanced Econometric Theory: This is an advanced course in econometric theory which builds upon ECON3310. Material in the following topics will be included:

Asymptotic theory, seemingly unrelated regression equations, panel data models, simultaneous equations, instrumental variables and GMM estimators.

Administrative Roles Current and past roles at UQ:

Head of School 2015 -

Deputy Head of School 2014 – 2015

RHD Coordinator 2014

Member: Bachelor of Economics Review Committee.

Member: Visitor and Search Committee.

Seminar Co-ordinator.

UQ AEA Interview committee 2008, 2009.

Frequently on interview committees.

Previous (ANU):

Research Director/Deputy Head of School (Research)

Member College of Business and Economics Research Committee: 2012.

Member College of Business and Economics Education Committee: 2010; 2011; 2012.

Member RSE Appointments Committee.

Graduate Convenor: Graduate Certificates, Diplomas and Masters.

Director for the "Model Uncertainty and Macro-Econometrics" Research

Programme in CAMA (Centre for Applied Macroeconomic Analysis) 2010-present.

ANU AEA Interview committee 2011.

Interview committees January to March 2011.

Previous (Leicester):

Director of Postgraduate Taught Programmes (MSc Economics; MSc Business

Analysis and Finance; MSc Financial Economics; Diploma in Economics)

Chair: Postgraduate Learning and Teaching Committee

Chair: Postgraduate Student Staff Committee

Postgraduate Dissertation Coordinator

MSc Admissions

Various interview committees

Press Officer

Previous (Liverpool):

Deputy Director of MSc Finance.

MSc Admissions Officer.

Erasmus programme coordinator for France, Spain and Italy inter alia.

Division IT Representative.

Division Seminar Organiser.

Division Library Representative.

Various duties: Consulting on previously taught subjects with technical content

(Mathematics and Info. Tech. For Business).

Committee Membership:

Rodney Strachan

Erasmus/Socrates Committee;

MSc Finance Committee:

Information Technology and Library Committee;

Department Board of Studies - Secretary

Research Committee:

Student-Staff Consultative Committee;

WebCT Development Committee;

Working Party to Examine the Restructure of the Economics Degrees;

Committee for Subject Review: Student Support and Guidance;

Committee for Subject Review: Curriculum design, content and organisation.

Refereeing:

Advances in Econometrics

Australian Economic Papers

Australian Journal of Agricultural and Resource Economics

Computational Statistics and Data Analysis

Computational Statistics

Econometric Reviews

Econometric Theory

Empirical Economics

Economic Record

Economic Studies in Inequality

International Journal of Forecasting

Journal of Applied Econometrics

Journal of Banking and Finance

Journal of Econometrics

Journal of Economic Surveys

Macroeconomic Dynamics

Oxford Bulletin of Economics and Statistics

Review of Economics and Statistics

Statistica Neerlandica

Studies in Nonlinear Dynamics and Econometrics

The Australian and New Zealand Journal of Statistics

The Institute for Fiscal Studies

The Journal of Empirical Finance

The Journal of Financial Econometrics

The Manchester School

Membership of Institutions and Societies:

The Rimini Centre for Economic Analysis (RCEA, http://www.rcfea.org);

Centre for Applied Macroeconomic Analysis (CAMA, http://cama.anu.edu.au);

Econometric Society;

Economic Society of Australia

International Society for Bayesian Analysis;

Institute of Mathematical Statistics.

Conference Presentations/Posters/Invitations:

Recent (post 2008)

- 1. 8th International Conference on Computational and Financial Econometrics, 6-8 December 2014 University of Pisa, Italy.
- 2. 8th Bayesian Econometrics Workshop (Organiser and presenter) in Rimini, Italy June 9-10 2014 (Delivered special presentation this is a talk coupled with a Keynote).
- 3. Workshop on Empirical Methods in Macroeconomic Policy Analysis (EMMPA 2014) Bucharest, Romania, 12-13 May 2014.
- 4. 7th International Conference on Computational and Financial Econometrics, 14-16 December 2013 University of London.
- 5. International Society for Bayesian Analysis World Meeting, ISBA 14 18 July, 2014, Cancun, Mexico
- 6. 7th Bayesian Econometrics Workshop (Organiser and presenter) in Rimini, Italy June 25-26 2013.
- 7. Workshop on Empirical Methods in Macroeconomic Policy Analysis (EMMPA 2013) Bucharest, Romania, 16-17 May 2013 (Keynote speaker).
- 8. The 18th Australasian Macroeconomics Workshop 4-5 April 2013, CAMA ANU.
- 9. Frontiers in Macroeconometrics 1-3 March 2013, Hitotsubashi University, Tokyo (Invited speaker).
- 10. Multivariate Time Series Modelling and Forecasting Workshop, February 18-19, at Monash University, Melbourne.
- 11. International Workshop on Bayesian Model Selection in Shanghai, China at the Academy of Applied Statistical Science (AASS) at East China Normal University (ECNU) 14-18 January 2013 (Invited speaker).
- 12. ISBA Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications (IWCBTA), Banaras Hindu University, Varanasi, India. Jan. 6-10, 2013.
- 13. 6th Bayesian Econometrics Workshop (Organiser and presenter) in Toronto August 16-18 2012.
- 14. 6th CSDA International Conference on Computational and Financial Econometrics: 1-3 December 2012 at Conference Centre, Oviedo, Spain.
- 15. International Society for Bayesian Analysis, Kyoto, Japan 25-29 July 2012.
- 16. Quantitative Macroeconomics Workshop, Reserve Bank of Australia, Sydney 15-16 December 2011.
- 17. Australian Conference of Economists (ACE11), Canberra, 11 13 July 2011.
- 18. Econometric Society Australasian Meeting, University of Adelaide, July 2011 (invited speaker).
- 19. 5th Bayesian Econometrics Workshop (Organiser but not attending) in Rimini, Italy May 31 June 1 2011.
- 20. 16th Australasian Macroeconomic Workshop, Hobart, 28 29 April 2011.
- 21. Western Economic Association International 9th Biennial Pacific Rim Conference, Brisbane, 26 29 April 2011.
- 22. 7th International Symposium on Econometric Theory and Applications (SETA 2011), Melbourne, 14–16 April, 2011 (Program Committee).
- 23. European Seminar on Bayesian Econometrics (ESOBE), Rotterdam, 5 6 November 2010.
- 24. Australian Conference of Economists (ACE10), Sydney, 27 29 September 2010.
- 25. Rimini Conference in Economics and Finance (Organising Committee), Rimini, Italy June 10-13 2010.

26. Workshop on Bayesian Econometric Methods (Organiser) in Rimini, Italy July 1-2 2009.

Earlier

A Course in Bayesian Econometrics, UQ, 14-16 July 2008 (Organiser).

9th International Society for Bayesian Analysis World Meeting, 21-25 July 2008.

Bayesian Workshop, RCEA, 3-4 June, 2008 (Organiser).

6th Annual Advances in Econometrics Conference, Louisiana State University, November 2-4, 2007.

Econometric Society Australasian Meeting, UQ, July 2007 (Local Organising Committee).

Sveriges Riksbank Sweden, "Bayesian Econometric Methodology", September 8-9, 2006 (Invited speaker).

Econometric Society European Meeting, Vienna 2006.

RBNZ-CAMA Conference, "Macroeconometrics and Model Uncertainty", June 27, 2006 (Invited speaker).

CRiSM, University of Warwick, Bayesian Inference in Complex Stochastic Systems, May 28-30, 2006.

Unit Roots and Cointegration Testing, Conference Portugal 29th September – 1st October, 2005.

Money Macro and Finance Conference Rethymno, Crete 1st-3rd September, 2005 (Invited speaker).

Econometric Society World Congress, UCL, 19th–24th August 2005.

Econometric Society Australasian Meeting, UNSW, July 2003.

Royal Economic Society Annual Conference, Warwick, April 2003.

EC² Meeting, University of Bologna, December, 2002 (Invited speaker).

Econometric Society Australasian Meeting, OUT, Brisbane, July 2002.

EC² Meeting, CORE Louvain-la-Neuve, Belgium. December 2001 (Poster)

Advances in Bayesian Econometrics, Marseilles, June 2001 (Invited speaker)

North American Summer Meeting of the Econometrics Society, Washington, 2001

Econometric Society European Meeting, Spain 1999

Econometric Society Australasian Meeting, Sydney 1999

EC² Meeting, Stockholm 1998 (Poster)

Econometric Society Australasian Meeting, Canberra 1998

PhD Conference in Economics and Business, Canberra 1998

Econometric Society Australasian Meeting, Melbourne 1997

Recent Seminars:

2014

April Australian National University.

2013

December University of Strathclyde.

December University of East Anglia.

September University of New South Wales.

May Institute for Statistics and Mathematics, Vienna University of

Economics and Business.

May University of Sydney. April University of Melbourne.

2012

December University of Strathclyde.
December Swiss National Bank.
October University of Queensland

2011

April Australian National University.

2010

May The Center for Operations Research and Econometrics, Université

catholique de Louvain.

February University of California - Irvine.

2009

October Australian National University. July Humboldt-Universität zu Berlin.

Institutions at which I have previously presented:

The National Graduate Institute for Policy Research (Tokyo), The Reserve Bank of Australia, Central Bank of Austria, University of Strathclyde, University of Iowa (Department of Statistics and Actuarial Science), University of Iowa (Department of Economics), The University of Chicago Graduate School of Business, University of California Irvine, University of Leicester, University of Birmingham, University of Reading, Tinbergen Institute, Vrije Universiteit Amsterdam; University of Melbourne; University of Queensland; Australian National University; University of Leeds; Riksbank Sweden; Leuven University; University of Manchester UK; Erasmus University Rotterdam; Cambridge University UK; Glasgow University UK; Keele University UK; CORE Louvain-la-Neuve, Belgium; Humboldt University Berlin; Liverpool University UK; European University Institute Florence; Monash University Australia; The Australian National University Australia; The University of New England Australia; Queensland University of Technology Australia.

Visiting Positions:

2010 April-June Center for Operations Research and Econometrics,

Université catholique de Louvain.

2010 January-March University of California, Irvine. 2009 July University of Strathclyde, Glasgow.

2009 July Center for Applied Statistics and Economics, Humbolt-

Universität zu Berlin.

2008 November/December National Graduate Institute for Policy Research, Tokyo.

2007 December University of Strathclyde, Glasgow.

Rodney Strachan

2006 August Econometrics Institute, Erasmus University Rotterdam.

2005 October Australian National University. 2005 October University of Queensland.

2002 August Monash University.

1999 September Tinbergen Institute, Erasmus University Rotterdam.

PhD Supervision:

Kelly Trinh (UQ, current)

Jiayu Wang (UQ, current)

Luis Uzeda Garcia (ANU, current)

Varang Wiriyawit (ANU, completed 2014)

Paul Bell (University of Queensland, completed 2010)

Deborah Gefang (University of Lanchaster, completed 2008)

Fuyu Angela Wang (University of East Anglia, completed 2008)

Gustav Penna Gorski (Banco Cooperativo Sicredi, completed 2006)

Simeon Coleman (Nottingham Trent University, completed 2006)

Masters (M) and Honours (Class HI or HII) Supervision:

Thanh Thao Vy Nguyen (M), Ben Jackman (HI), Chris Mar (HI), Keaton Jenner (HII), Dao Anh Tuan (M), Luis Henrique Uzeda Garcia (M), Michael Turner (M), Farhana Chowdhury (M), Yingmei Zheng (M), Daria Svetchnikova (HI), John Bagnall (HI), Samantha Myers (HI), Carlos Gan (HI), Danielle Rodgers (HI), Lee Mindee (HI), Leong Lin Jing (HII), Linh Huynh Tu (HI), Mr Cameron Horsburgh (HII).

PhD Examiner:

Rebeca Muñoz Torres 2006 (Leicester)

– Inflation targeting in emerging economies: An empirical assessment.

Aston De Silva 2007 (Monash University)

– Vector innovations structural time series framework.

Rong Zhang 2011 (Monash University)

– Bayesian analysis of non-linear multivariate econometric models.

Yuelin Liu 2014 (UNSW)

 Three Essays on In.ation and Unemployment Fluctuations in the United States.

Jamie Hall 2014 (UNSW)

- Particle filter methods for nonlinear macroeconomic models.