

Summary	Chris O'Donnell is a Professor of Econometrics at the University of Queensland and an Associate of Synergies Economic Consulting. He obtained his PhD from the University of Sydney. He is an Associate Editor of the <i>Journal of Productivity Analysis</i> , an Associate Editor of <i>Empirical Economics</i> , and a Distinguished Fellow of the Australian Agricultural and Resource Economics Society. His current research is focused on economic and statistical methods for measuring and explaining productivity and efficiency change; he has authored or co-authored three books on this topic. His work has been published in leading economics and econometrics journals, including the <i>American Journal of Agricultural Economics</i> , the <i>Journal of Econometrics</i> , the <i>Journal of Applied Econometrics</i> , <i>Econometric Reviews</i> and the <i>European Journal of Operational Research</i> . He has provided in-house training and/or been a consultant for organisations including the Asian Productivity Organisation (APO), the International Rice Research Institute (IRRI), the Australian Energy Regulator (AER) the New South Wales Independent Pricing and Regulatory Tribunal (IPART), the Australian Independent Hospital Pricing Authority (IHPA), the Australian Export Grains Innovation Centre (AEGIC) and the World Bank.
Academic Qualifications	1992 PhD, University of Sydney 1984 MCom, University of New South Wales 1981 BAgEc (Hons.), University of New England (UNE)
Current Position	Professor of Econometrics, University of Queensland (UQ) (since 2008)
Other Positions	Since 10/20 Associate, Synergies Economic Consulting 07/09–12/15 Director, Centre for Efficiency & Productivity Analysis, UQ 03/15–06/15 Visiting Professor, University of Connecticut 01/09–12/11 Deputy Head of School, School of Economics, UQ 08/10–01/11 Acting Head of School, School of Economics, UQ 08/08–01/09 Visiting Professor, Universidad Autonoma Barcelona (Spain) 04/06–03/08 Reader, School of Economics, UQ 01/03–03/06 Senior Lecturer, School of Economics, UQ 05/05–07/05 Visiting Professor, Universidad de Oviedo (Spain) 07/02–12/02 Director, Centre for Efficiency & Productivity Analysis, UNE 01/99–12/02 Senior Lecturer, School of Economics, UNE 01/94–12/98 Senior Lecturer, Dept. Econometrics, UNE 01/96–03/96 Visiting Professor, Dept. of Ag. Economics, Texas A&M University 05/96–07/96 Visiting Professor, Dept. of Economics, University of Guelph 02/95–10/96 Deputy Director, Grad. School of Business Administration, UNE

02/95–10/96 Director, MBA Program, UNE
01/90–12/93 Lecturer, Dept. Econometrics, UNE
02/88–12/89 Lecturer, Dept. Econometrics, University of New South Wales
08/86–01/87 Temporary Lecturer, Dept. Econometrics, University of Sydney
01/81–01/85 (A/Senior) Economist, Australian Meat and Livestock Corporation

Books

O'Donnell, C.J. and A. Peyrache (2020) *Agricultural Productivity in Asia: Measures and Perspectives 2019*. Asian Productivity Organisation: Tokyo.
O'Donnell, C.J. (2018) *Productivity and Efficiency Analysis: An Economic Approach to Measuring and Explaining Managerial Performance*. Springer: Singapore.
Coelli, T.J., Rao, D.S.P., O'Donnell, C.J. and G.E. Battese (2005) *An Introduction to Efficiency and Productivity Analysis*, 2nd Edition. Springer: New York.
O'Donnell, C.J. (1993), *Commodity Price Stabilisation*, Avebury: Aldershot.

Book Chapters

O'Donnell, C. J. (2016). Nonparametric Estimates of the Components of Productivity and Profitability Change in U.S. Agriculture. In Zhu, J. (ed.) *Data Envelopment Analysis: A Handbook of Empirical Studies and Applications* Boston, Springer.
Griffiths, W. E., Hill, R.C. and C. J. O'Donnell (2006). A Comparison of Bayesian and Sampling Theory Inferences in a Probit Model. In Holt, M. and J.-P. Chavas (eds.) *Essays in Honor of Stanley R. Johnson*: article 12. <http://www.bepress.com/sjohnson/art12>.
O'Donnell, C. J. (2002). Parametric Estimation of Technical and Allocative Efficiency in U.S. Agriculture. In Ball, V. E. and G. W. Norton (eds.) *Agricultural Productivity: Measurement and Sources of Growth* Boston, Kluwer.
Rao, D. S. P., O'Donnell, C.J. and V. E. Ball (2002). Transitive Multilateral Comparisons of Output, Input and Productivity: A Nonparametric Approach. In Ball, V. E. and G. W. Norton (eds.) *Agricultural Productivity: Measurement and Sources of Growth* Boston, Kluwer.

Journal Articles

Nguyen, H. and C. O'Donnell (2023) Estimating the cost efficiency of public service providers in the presence of demand uncertainty. *European Journal of Operational Research*, 309(3):1334–1348; this journal ranked A* by the Australian Business Deans Council (ABDC).
O'Donnell, C. J. (2022) Estimating the effects of weather and climate change on agricultural productivity. *Q Open*, 2:1-18; unranked.
Walden, J.R., Lee, M.-Y. and C.J. O'Donnell (2021) Profits, prices and productivity in a common pool fishery. *American Journal of Agricultural Economics*, 104(4):1540-1560; ranked A*.
O'Donnell, C.J. (2021) Measuring and explaining changes in productivity. *Farm Policy Journal*, (Autumn):26-40; unranked.

- Kerstens, K., O'Donnell, C.J. and I. Van de Woestyne (2019) Metatechnology Frontier and Convexity: A Restatement. *European Journal of Operational Research*, 275(2):780-792; ranked A*.
- Njuki, E., Bravo-Ureta, B. and C.J. O'Donnell (2019). Decomposing agricultural productivity growth using a random-parameters stochastic production frontier. *Empirical Economics*, 57:839-860; ranked A.
- Njuki, E., Bravo-Ureta, B. and C.J. O'Donnell (2018). A New Look at the Decomposition of Agricultural Productivity Growth Incorporating Weather Effects. *PLOS ONE* 13(2):e0192432; unranked.
- Carrington, R., O'Donnell, C. and D.S.P. Rao (2018) Australian university productivity growth and public funding revisited. *Studies in Higher Education* 43(8):1417-1438; ranked A.
- O'Donnell, C.J., Fallah-Fini, S. and K. Triantis (2017). Measuring and Analysing Productivity Change in a Metafrontier Framework. *Journal of Productivity Analysis*, 47(2):117-128; ranked A.
- Amsler, C., O'Donnell, C.J. and P. Schmidt (2017). Stochastic Metafrontiers. *Econometric Reviews* 36(6-9):1007-1020; ranked A.
- O'Donnell, C.J. (2016). Using information about technologies, markets and firm behaviour to decompose a proper productivity index. *Journal of Econometrics* 190(2):328-340; ranked A*.
- Fissel, B., Felthoven, R., Kaperski, S. and C. O'Donnell (2015) Decomposing productivity and efficiency changes in the Alaska head and gut factory trawl fleet. *Marine Policy* 62:337-346; ranked A.
- Laurenceson, J.S. and C.J. O'Donnell (2014). New Estimates and a Decomposition of Provincial Productivity Change in China. *China Economic Review* 30:86-97; ranked A.
- O'Donnell, C. J. (2014). Econometric Estimation of Distance Functions and Associated Measures of Productivity and Efficiency Change. *Journal of Productivity Analysis* 41(2):187-200; ranked A.
- O'Donnell, C. J. and K. Nguyen (2013). An Econometric Approach to Estimating Support Prices and Measures of Productivity Change in Public Hospitals. *Journal of Productivity Analysis* 40(3):323-335; ranked A.
- O'Donnell, C. J. (2012). Nonparametric Estimates of the Components of Productivity and Profitability Change in U.S. Agriculture. *American Journal of Agricultural Economics* 94(4):873-890; ranked A*.
- O'Donnell, C. J. (2012). An aggregate quantity framework for measuring and decomposing productivity change. *Journal of Productivity Analysis* 38(3):255-272; ranked A.
- Nauges, C., O'Donnell, C.J. and J. Quiggin (2011). Uncertainty and technical efficiency in Finnish agriculture: a state-contingent approach. *European Review of Agricultural Economics* 38(4):449-467; ranked A.

- O'Donnell, C. J. (2010). Measuring and Decomposing Agricultural Productivity and Profitability Change. *Australian Journal of Agricultural and Resource Economics* 54:531-564; ranked A.
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- O'Donnell, C. J., Chambers, R.G. and J. Quiggin (2010). Efficiency Analysis in the Presence of Uncertainty. *Journal of Productivity Analysis* 33(1):1-17; ranked A.
- O'Donnell, C.J. and V. Rayner (2008). Imposing Stationarity Constraints on the Parameters of ARCH and GARCH Models. *Advances in Econometrics: Bayesian Econometrics* Vol. 23:545-566; unranked.
- O'Donnell, C.J., Rao, D.S.P. and G.E. Battese (2008). Metafrontier Frameworks for the Study of Firm-Level Efficiencies and Technology Ratios. *Empirical Economics* 34:231-255; ranked A.
- O'Donnell, C.J., Griffith, G.R., Nightingale, J.J. and R.R. Piggott (2007). Testing for market power in the Australian grains and oilseeds industries. *Agribusiness* 23(3):349-376; ranked C.
- De Mateo, F., Coelli, T.J. and C.J. O'Donnell (2006). Optimal Paths and Costs of Adjustment in Dynamic DEA Models: With Application to Chilean Department Stores. *Annals of Operations Research* 145(1):211-227; ranked A.
- Schimmelpfennig, D.E., O'Donnell, C.J. and G.W. Norton (2006). Efficiency Effects of Agricultural Economics Research in the United States. *Agricultural Economics* 34(3):273-280; ranked A.
- O'Donnell, C.J. and W.E. Griffiths (2006). Estimating State-Contingent Production Frontiers. *American Journal of Agricultural Economics* 88(1):249-266; ranked A*.
- Templeton, D., Griffith, G., Piggott, R. and C. O'Donnell (2005). Changes in Woolgrower Profits from Adopting Staple-Strength-Enhancing Management Strategies. *International Journal of Sheep and Wool Science* 53(1): Article 1; unranked.
- Griffiths, W.E and C.J. O'Donnell (2005). Estimating Variable Returns to Scale Production Frontiers With Alternative Stochastic Assumptions. *Journal of Econometrics* 126:385-409; ranked A*.
- O'Donnell, C.J. and T.J. Coelli (2005). A Bayesian Approach to Imposing Curvature on Distance Functions. *Journal of Econometrics* 126(2):493-523; ranked A*.
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- Kotey, B. and C.J. O'Donnell (2002). Data Envelopment Analysis in Small and Medium Enterprises: A Study of the Australian Food, Beverages and Tobacco Manufacturing Industry. *Small Enterprise Research* 10(2):3-22; ranked C.
- Hutasuhut, M., Chang, H-S., Griffith, G., O'Donnell, C.J. and H. Doran (2002). The Demand for Beef in Indonesia: Implications for Australian Agribusiness. *Agribusiness Review* Vol. 10(Paper 4):1-10; ranked C.
- O'Donnell, C.J. and G. van der Westhuizen (2002). Regional Comparisons of Banking Performance in South Africa. *South African Journal of Economics* 70(3):485-518; ranked B.
- O'Donnell, C.J., Smith, A. and J. Madison (2002). Using Demographic Risk Factors to Explain Variations in the Incidence of Violence Against Women. *Journal of Interpersonal Violence* 17(12):1239-1262; unranked.
- O'Donnell, C.J., Rambaldi, A.N. and H.E. Doran (2001). Estimating Economic Relationships Subject to Firm- and Time-Varying Equality and Inequality Constraints. *Journal of Applied Econometrics* 16(6):709-726; ranked A*.
- Chua, C.L, Griffiths, W.E. and C.J. O'Donnell (2001). Bayesian Model Averaging in Consumer Demand Systems With Inequality Constraints. *Canadian Journal of Agricultural Economics* 49(3):269-291; ranked A.
- Griffiths, W.E., O'Donnell, C.J. and A. Tan Cruz (2000). Imposing regularity conditions on a system of cost and cost-share equations: a Bayesian approach. *Australian Journal of Agricultural and Resource Economics* 44(1):107-127; ranked A.
- O'Donnell, C.J., Shumway, C.R. and V.E. Ball (1999). Input demands and inefficiency in U.S. agriculture. *American Journal of Agricultural Economics* 81(November 1999):865-880; ranked A*.
- O'Donnell, C.J. and D.H. Connor (1996). Predicting the severity of motor vehicle accident injuries using models of ordered multiple choice. *Accident Analysis and Prevention* 28(6):739-753; ranked A*.
- O'Donnell, C.J. and A.D. Woodland (1995). Estimation of Australian wool and lamb production technologies under uncertainty: an error components approach. *American Journal of Agricultural Economics* 77 (August 1995):552-565; ranked A*.
- Roesmanto, J., O'Donnell, C.J. and K. A. Parton (1995). An error-components approach to estimating sugarcane production technology in Indonesia: a case study on East Java. *Bulletin of the Indonesian Sugar Research Institute* 142(September):16-29; unranked.
- O'Donnell, C. J. (1984). Export meat inspection cost recovery: the impact of recent changes. *Commodity Bulletin* 13(5):1-11; unranked.
- O'Donnell, C.J. (2022) How to Build Sustainable Productivity Indexes. *Centre for Efficiency and Productivity Analysis Working Papers* WP10/2022. University of Queensland.
<https://economics.uq.edu.au/files/39042/WP102022.pdf>.

- Nguyen, H. and C.J. O'Donnell (2022) Estimating the Revenue Efficiency of Public Service Providers in the Presence of Demand Constraints. *Centre for Efficiency and Productivity Analysis Working Papers* WP03/2022. University of Queensland.
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- O'Donnell, C. J. (2017) Estimating total factor productivity change when no price or value-share data are available. *Centre for Efficiency and Productivity Analysis Working Papers* WP01/2017. University of Queensland.
<http://www.uq.edu.au/economics/cepa/docs/WP/WP012017.pdf>.
- Holden , S. and C.J. O'Donnell (2015) Maize Productivity and Input Subsidies in Malawi: A State-Contingent Stochastic Production Frontier Approach *School of Economics and Business Working Paper Series* 02-2015, Norwegian University of Life Sciences.
http://www.nmbu.no/sites/default/files/pdfattachments/hh_wp_2.2015_1.pdf.
- O'Donnell, C. J. (2014) An economic approach to identifying the drivers of productivity change in the market sectors of the Australian economy. *Centre for Efficiency and Productivity Analysis Working Papers* WP02/2014. University of Queensland. <http://www.uq.edu.au/economics/cepa/docs/WP/WP022014.pdf>.
- O'Donnell, C. J. (2012) Alternative Indexes for Multiple Comparisons of Quantities and Prices. *Centre for Efficiency and Productivity Analysis Working Papers* WP05/2012. University of Queensland.
<http://www.uq.edu.au/economics/cepa/docs/WP/WP052012.pdf>.
- O'Donnell, C. J., Fallah-Fini, S. and K. Triantis (2011). Comparing Firm Performance Using Transitive Productivity Index Numbers in a Meta-Frontier Framework. *Centre for Efficiency and Productivity Analysis Working Papers* WP08/2011. University of Queensland.
<http://www.uq.edu.au/economics/cepa/docs/WP/WP082011.pdf>.
- O'Donnell, C. J. (2011). The Sources of Productivity Change in the Manufacturing Sectors of the U.S. Economy. *Centre for Efficiency and Productivity Analysis Working Papers* WP07/2011. University of Queensland.
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- Rungsuriyawiboon, S. and C. J. O'Donnell (2004). Curvature-Constrained Estimates of Technical Efficiency and Returns to Scale for U.S. Electric Utilities. *Centre for Efficiency and Productivity Analysis Working Papers* WP07/2004. University of Queensland.
<http://www.uq.edu.au/economics/cepa/docs/WP/WP072004.pdf>.

- Doran, H. E., C. J. O'Donnell and A. N. Rambaldi (2003). Imposing Observation-Varying Equality Constraints Using Generalised Restricted Least Squares. *School of Economics Discussion Papers* University of Queensland.
- O'Donnell, C. J. (1999). Estimating the Characteristics of Homogeneous Functions Using Flexible Functional Forms. *School of Economic Studies Working Papers in Econometrics and Applied Statistics* 108. University of New England.
- Doran, H. E., C. J. O'Donnell and A. N. Rambaldi (1999). Imposing Linear Observation-Varying Equality Constraints Using Matrix Decomposition. *School of Economic Studies Working Papers in Econometrics and Applied Statistics* 109.
- O'Donnell, C. J. (1996). Inefficiency, uncertainty and the structure of cost, cost-share and input-demand functions. *Department of Econometrics Working Papers in Econometrics and Applied Statistics* 89. University of New England.

Other Publications

- O'Donnell, C. J. (2022). Productivity Change in the Market Sectors of the Australian Economy. *A Submission to the Productivity Commission Productivity Inquiry*.
https://www.pc.gov.au/_data/assets/pdf_file/0007/338056/sub040-productivity.pdf.
- O'Donnell, C. J. and K. Nguyen (2011). Review of efficiency measurement methodologies to inform hospital resource allocation decisions in NSW. *An Evidence Check Rapid Review Brokered by the Sax Institute* (<http://www.saxinstitute.org.au>) for the NSW Treasury.
- O'Donnell, C. J. (2009). Submission by the Centre for Efficiency and Productivity Analysis. *House of Representatives Standing Committee on Economics Inquiry into Raising the Level of Productivity Growth in the Australian Economy* <http://www.aph.gov.au/house/committee/economics/productivity/Subs/Sub11.pdf>.
- O'Donnell, C. J., G. R. Griffith, J. J. Nightingale and R. R. Piggott (2005). Food Processor/Retailer Market Power in Input Markets: The Australian Grains and Oilseeds Industries. *Final Report on Project UNE-79A*, RIRDC Publication No. 05/019. Rural Industries Research and Development Corporation.
- O'Donnell, C. J. and T. J. Coelli (1997). Marketing Margins for Australian Dairy Products. *Hilmer Competition Policy Review*. Appendix 1 of NSW Dairy Farmers Association Submission.
- O'Donnell, C. J. and T. J. Coelli (1997). The Measurement of Dairy Industry Supply Response Under Quota Deregulation. *Hilmer Competition Policy Review*. Appendix 2 of NSW Dairy Farmers Association Submission.
- O'Donnell, C. J. (1992). An Agricultural Policy Model for the UK. by Burton, M. P. *Australian Journal of Agricultural Economics* 36(3): 280-281.
- O'Donnell, C. J. (1991). The Effects of Partial Lamb Price Stabilisation on Lamb and Wool Prices, Production and Producer Welfare. *Dissertation submitted in partial fulfilment of the degree of Doctor of Philosophy*. University of Sydney.

**Selected
Conference
Presentations**

- O'Donnell, C. J. (1980). An Incomplete Commodity Demand System for Meat with Flexible Functional Form. *Dissertation submitted in partial fulfilment of the degree of Bachelor of Agricultural Economics (Hons.)*. University of New England.
- Njuki, E. and C.J. O'Donnell (2020) Sustainable Productivity Indexes. *Paper presented at North American Productivity Workshop*, Miami, 8-12 June.
- G. D'Inverno, G. and C.J. O'Donnell (2020) Using Metafrontier Methods to Estimate the Effects of Instruction Time on School Efficiency. *Paper presented at North American Productivity Workshop*, Miami, 8-12 June.
- O'Donnell, C.J. (2020) Estimating the Effects of Weather and Climate Change on Agricultural Productivity. *Paper presented at the 64th Annual Conference of the Australian Agricultural and Resource Economics Society*, University of Western Australia, Perth, 10-14 February.
- O'Donnell, C.J. (2019) An Economic Approach to Measuring and Explaining Managerial Performance. *Presented at the CEPA Workshop on Performance Measurement*, University of Queensland, Brisbane, 29 October.
- O'Donnell, C.J. (2019) Using Measurement Theory and Statistical Methods to Measure and Explain Productivity Change in the Manufacturing Sectors of the U.S. Economy. *Paper presented at the WEAI 94th Annual Conference*, San Francisco, 28 June - 2 July.
- O'Donnell, C.J. and T. Puolokainen (2019) Efficiency Analysis in the Presence of Demand Uncertainty. *Paper presented at EURO 2019*, University College Dublin, Dublin, Ireland, 23-26 June.
- O'Donnell, C.J. (2019) Estimating the Effects of Weather and Climate Change on Agricultural Productivity. *Paper presented at the 17th European Workshop on Efficiency and Productivity Analysis*, London, England, 10-13 June.
- O'Donnell, C.J. (2019) Measuring and Explaining Productivity Change in U.S. Manufacturing. *Paper presented at the Economic Statistics Centre of Excellence (ESCoE) Conference on Economic Measurement*, London, England, 8-10 May.
- O'Donnell, C.J. and T. Puolokainen (2018) Efficiency Analysis in the Presence of Demand Uncertainty. *Keynote paper presented at the 6th International Workshop on Efficiency in Education*, Huddersfield, England, 6-7 September.
- O'Donnell, C.J. (2018) Index Numbers Through the Looking Glass: Was the Red Queen Right? *Paper presented at the AAEA Annual Meeting*, Washington, D.C., 5-7 August.
- O'Donnell, C.J. (2018) Another Explanation of Labour Productivity Change. *Paper presented at the Billfest Conference*, Melbourne, 19-20 July.
- O'Donnell, C.J. (2018) Statistical Methods for Computing Proper Index Numbers. *Paper presented at X North American Productivity Workshop*, Miami, 12-15 June.

- O'Donnell, C.J. (2017) Efficiency Analysis in the Presence of Demand Uncertainty. *Paper presented at the CEPA International Workshop on Performance Analysis: Theory and Practice*, Brisbane, 2-3 November..
- O'Donnell, C.J. (2017) Climatic Effects and Agricultural Productivity Analysis. *Keynote paper presented at the IAAE Inter-Conference Symposium on Agricultural Productivity, Climate Change and Sustainable Resource Management*, University of Talca, Chile, 17-20 October.
- O'Donnell, C.J. (2017) An Historical Overview of the Evolution of Productivity Analysis. *Paper presented at the PreConference on Sustainability, Productivity and Public Policies: Synergies to Improve Agricultural Economic Development*, University of Talca, Chile, 16 October.
- O'Donnell, C.J. (2017). Measuring Total Factor Productivity Change When No Price or Value-Share Data are Available. *Keynote paper presented at the Data Envelopment Analysis International Conference*, Hefei, China, 9 July.
- O'Donnell, C.J. (2017). Productivity Analysis in the Presence Uncertainty. *Keynote paper presented at the 15th European Workshop on Efficiency and Productivity Analysis*, London, 12-15 June.
- O'Donnell, C.J. and T. Puolokainen (2017). Efficiency Analysis in the Presence of Demand Uncertainty. *Keynote paper presented at the 6th Workshop on Efficiency and Productivity Analysis*, Porto, Portugal, 9 June.
- O'Donnell, C.J. (2016). Another explanation of labour productivity change. *Keynote paper presented at the Taipei Productivity and Efficiency Workshop*, Taipei, Taiwan, 12 July.
- O'Donnell, C.J. (2016). Linear programming, least squares and maximum likelihood estimators of total factor productivity change. *Invited paper presented at the Asia-Pacific Productivity Conference*, Tianjin, China, 7-10 July.
- O'Donnell, C.J. (2016). Another explanation of labour productivity change. *Invited paper presented at the 3rd Conference of the Society for Economic Measurement*, Thessalonikki, Greece, 6 July.
- Holden, S.T. and C.J. O'Donnell (2016). Productivity analysis in the presence of uncertainty: A state-contingent stochastic production frontier approach. *Paper presented at the 3rd Conference of the International Association for Applied Econometrics*, Milan, Italy, 22-25 June.
- O'Donnell, C.J. (2016). Another explanation of labour productivity change. *Paper presented at the IX North American Productivity Workshop*, Quebec City, Canada, 15-18 June.
- O'Donnell, C.J. (2016). Linear programming estimators of total factor productivity change. *Paper presented at the Efficiency and Productivity Workshop*, Auckland, New Zealand, 15 March.
- O'Donnell, C.J. (2015). An economic analysis of productivity change in the OECD. *Paper presented at the CEPA/SoE-AIBE Joint Workshop on Advances in Economic Measurement*, Brisbane, QLD, 1-2 October.

- Holden, S.T. and C.J. O'Donnell (2015). Maize productivity and input subsidies in Malawi: A state-contingent stochastic production frontier approach. *Paper presented at the XIV European Workshop on Efficiency and Productivity Analysis*, Helsinki, Finland, 15-18 June.
- Kerstens, K., C. O'Donnell and I. Van de Woestyne (2015). Frontier Metatechnologies and Convexity: A Restatement. *Paper presented at the XIV European Workshop on Efficiency and Productivity Analysis*, Helsinki, Finland, 15-18 June.
- Fissel, B., C. O'Donnell, R. Felthoven and S. Kaperski (2014) Evaluating Changes in Total Factor Productivity in the Amendment 80 Catcher-Processor Fishery. *Paper presented at the Asia-Pacific Productivity Conference*, Brisbane, QLD, 8-11 July.
- O'Donnell, C.J. (2014). Technologies, markets and behaviour: Some implications for estimating efficiency and productivity change. *58th Annual Conference of the Australian Agricultural and Resource Economics Society*, Port Macquarie, NSW, 5-7 February.
- O'Donnell, C.J. (2013). An economic approach to identifying the drivers of productivity change in the market sectors of the Australian economy. *Paper presented at the IARIW-UNSW Conference on Productivity Measurement, Drivers and Trends*, Sydney, NSW, 26-28 November.
- O'Donnell, C. and A. Lashitew (2013) A Cost Frontier Approach to Analysing Productivity Change in Ethiopian Manufacturing. *Paper presented at the XIII European Workshop on Efficiency and Productivity Analysis*, Helsinki, Finland, 17-20 June.
- O'Donnell, C.J. (2013). Econometric Estimates of Productivity and Efficiency Change in the Australian Northern Prawn Fishery. In A. Mamula and J. Walden (eds.) *Proceedings of the National Marine Fisheries Service Workshop*. U.S. Department of Commerce National Oceanic and Atmospheric Administration.
- O'Donnell, C. J. (2012). Spurious Levels of Inefficiency in Australian Agriculture. *North American Productivity Workshop VII*, Houston TX, 6-9 June.
- Nauges, C. and C.J. O'Donnell (2011). Using stochastic frontier analysis to inform utilities regulation, with an application to the water and sanitation sector in Brazil. *XII European Workshop on Efficiency and Productivity Analysis*, Verona ITA, 21-24 June.
- O'Donnell, C. J. (2011). The Drivers of Productivity Change in the Market Sectors of the Australian Economy: 1995-2008. *55th Annual Conference of the Australian Agricultural and Resource Economics Society*, Melbourne VIC, 8-11 February.
- O'Donnell, C. J. (2010). DEA Methodology for Measuring and Decomposing Profitability, Productivity and Efficiency Change. *International DEA Symposium - Pushing the Envelope!*, University of Queensland, Australia, 27-29 September.

- O'Donnell, C. J. and D. S. P. Rao (2009). Estimating Probability Density Functions for Exact Index Numbers. *International Conference on Frontiers of Interface Between Statistics and Sciences*, Hyderabad, India, 30 December 2009 to 2 January 2010.
- O'Donnell, C. J. (2009). Using DEA to Compute and Decompose a Hicks-Moorsteen Index of Productivity Change in World Agriculture. *XI European Workshop on Efficiency and Productivity Analysis*, Pisa, Italy, 23-26 June.
- O'Donnell, C. J. and D. S. P. Rao (2008). Estimating Probability Density Functions for Exact Index Numbers. *9th World Meeting for Bayesian Analysis*, Hamilton Island, Australia, 21-24 July.
- O'Donnell, C. J. (2007). Estimating the Characteristics of Polluting Technologies. *51st Annual Conference of the Australian Agricultural and Resource Economics Society*, Queenstown, New Zealand, 13-16 February.
- O'Donnell, C. J. (2006). Some Econometric Options for Dealing With Unknown Functional Form. *50th Annual Conference of the Australian Agricultural and Resource Economics Society*, Sydney, Australia, 8-10 February.
- Doran, H. E., C. J. O'Donnell and A. N. Rambaldi (2006). Theoretical and Empirical Properties of Generalised Restricted Least Squares. *Australasian Meeting of the Econometric Society*, Alice Springs, Australia, 4-7 July.
- O'Donnell, C. J. and W. E. Griffiths (2005). Estimating State-contingent Production Frontiers. *Australian Conference of Economists*, Melbourne, Australia, 26-28 September.
- Villano, R. A., C. J. O'Donnell and G. E. Battese (2004). An Investigation of Production Risk, Risk Preferences and Technical Efficiency: Evidence from Rainfed Lowland Rice Farms in the Philippines. *Asia-Pacific Productivity Conference*, Brisbane, Australia, 14-16 July.
- Allan-Greer, B., D. S. P. Rao and C. J. O'Donnell (2004). Constructing Divisia Indexes from Retail Scanner Data using Wavelet Methods. *SSHRC International Conference on Index Number Theory and the Measurement of Prices and Productivity*, Vancouver, Canada, 30 June - 3 July.
- Hajargasht, G., C. J. O'Donnell and D. S. P. Rao (2003). Semiparametric Estimation of Stochastic Frontiers: A Bayesian Penalized Approach. *Australasian Meeting of the Econometric Society*, Sydney, Australia, 9-11 July.
- Dent, S. K., R. R. Piggott, C. J. O'Donnell and G. R. Griffith (2003). Does Excluding Cross-commodity Interactions Matter? Beef and Lamb in Australia. *47th Annual Conference of the Australian Agricultural and Resource Economics Society*, Fremantle, Australia, 12-14 February.
- Allan-Greer, B., D. S. P. Rao and C. J. O'Donnell (2003). Using Wavelet Methods to Construct Divisia Price Index Numbers Based on Retail Scanner Data. *Economic Measurement Group Workshop*, Sydney, Australia, 11-12 December.
- Ling, L., C. O'Donnell and K. Parton (2000). The Cost Structure and Efficiency of Australian Public Hospitals. *Annual Conference of Economists*, Surfers Paradise, Australia, 3-6 July.

- Hutasuhut, M., C. O'Donnell, C. Chang, G. Griffith and H. Doran (2000). The Demand for Meats in Indonesia: A Censored Regression Approach. *44th Annual Conference of the Australian Agricultural and Resource Economics Society*, Sydney, Australia, 23-25 January.
- Cuesta, R. A., C. J. O'Donnell and T. J. Coelli (2000). Imposing Curvature Conditions on a Production Frontier: With Application to Indian Dairy Processing Plants. *North American Productivity Workshop*, Schenectady, NY, 15-17 June.
- Macaulay, T. G., K. M. Owen and C. J. O'Donnell (1999). Issues in Modelling the Australian Dairy Industry: Joint Products, Market Power and Deregulation. *43rd Annual Conference of the Australian Agricultural and Resource Economics Society*, Christchurch, New Zealand, 20-22 January.
- O'Donnell, C. J. (1995). Selecting the set of regressors in models of ordered multiple choice. *Joint Statistical Meetings*, Lake Buena Vista, FL, 13-17 August.
- O'Donnell, C. J. (1988). Assessing the impact of lamb price stabilisation on producer welfare. *32nd Annual Conference of the Australian Agricultural Economics Society*, Latrobe University, Melbourne, Australia, 8-11 February.
- O'Donnell, C. J. (1987). Assessing the producer welfare impact of stabilising lamb prices. *Economics Postgraduate Research Conference*, University of Western Australia, Perth, Australia, 1-3 November.
- O'Donnell, C. J. and A. C. Parsons (1985). Australian Meat and Livestock Corporation sole trading powers. *29th Annual Conference of the Australian Agricultural Economics Society*, Armidale, Australia.

**Selected
Seminar
Presentations**

- University of Wollongong, 13 May, 2021
- AARES Webinar Program, 18 November, 2020
- TUM School of Management, Munich, Germany, 19 June, 2019
- Technical University Munich, Campus Weihenstephan, Germany, 17 June, 2019
- James Cook University, Townsville, 30 April, 2019
- James Cook University, Townsville, 1 May, 2019
- Carleton University, Ottawa, Canada, 4 June, 2018
- University of Guelph, Guelph, Canada, 31 May, 2018
- Ministerio de Agricultura Santiago, Chile, 23 October, 2017
- Xi'an Jiaotong-Liverpool University Suzhou, China, 5 July, 2017
- School of Business and Economics, Loughborough University, 21 June, 2017
- Aust. Bureau of Agricultural and Resource Econ. & Sciences, Canberra, 9 May, 2017
- IESEG, Lille, France, 27 September, 2016
- John Dillon Memorial Lecture. UNE Business School, 11 September, 2015

**Selected
Training
Courses
Delivered**

- A System Approach to Efficiency and Productivity Measurement: Multi-Level Network Production Models* (with Peyrache) UQ, 21-22 November, 2022.
- Productivity and Efficiency Analysis Using R*, Chinese Academy of Agricultural Sciences, Beijing, China, 16-17 January 2020.
- Productivity and Efficiency Analysis Using R*, UQ, 3-4 May 2019.
- Managerial Performance Analysis Using R*, UQ, 10-12 July 2018.
- Productivity and Efficiency Analysis*, New Zealand Productivity Research Centre, University of Waikato, 24-26 February, 2016.
- Applied Productivity and Efficiency Analysis*, Synergies Economic Consulting, Brisbane, 24 February, 3 March and 10 March, 2015.
- Applied Productivity and Efficiency Analysis*, Victorian Department. of Education and Early Childhood Development, 28-30 April, 2014
- Introduction to Productivity and Efficiency Analysis*, UQ, 7 July, 2014.
- Applied Productivity and Efficiency Analysis*, Australian Competition and Consumer Commission, 12-14 November, 2012.
- Applied Productivity and Efficiency Analysis*, AARES Pre-Conference, 8 February, 2011.
- Efficiency and Productivity Analysis*, Commonwealth Department of Health and Ageing, 15-17 December, 2010.
- Advanced Methods in Efficiency and Productivity Analysis*, UQ, 27-29 September, 2010.
- Efficiency and Productivity Analysis*, Australian Defence Force Academy, Canberra, 2-4 May, 2010.
- Introduction to Bayesian Econometrics*, Universitat Autònoma De Barcelona, Barcelona, Spain, 13-15 January, 2009.
- Productivity and Efficiency Analysis*, UQBS, 23-25 November, 2005.

**Research
Student
Supervision**

- Hoye, K. (PhD, ongoing; jointly supervised with Peyrache) Efficiency Analysis of Electricity Networks.
- Tong, Y. (PhD, ongoing; jointly supervised with Mangan) Developing an Integrated Model to Measure the Impact of Economic Policy Changes in Rural Queensland.
- Nor, K.N.M. (PhD, ongoing; jointly supervised with Fatah) Technical Efficiency Analysis of Mango Farmers: A Stochastic Metafrontier Approach.
- Grewer, U. (PhD, ongoing; jointly supervised with QAAFI and CSIRO staff) Economics of Farming Systems under Climate Change in Eastern and Southern Africa.
- Nguyen, H.N. (PhD, successfully completed 2022; jointly supervised with Zelenyuk) Demand Uncertainty and Efficiency in the Provision of Public Services.

- Carter, L. (B.Ec. Honours, successfully completed 2020) Decomposing Productivity Growth Into Explanatory Factors.
- Han, Y. (M.App.Emet., successfully completed 2019) Re-estimation of European Agricultural productivity With Geometric Young TFP Index.
- Bui, H.L. (M.Agribusiness, successfully completed 2019) Productivity in Australian Agribusiness.
- Puolokainen, T. (PhD, U of Tartu, successfully completed 2018, jointly supervised with Reiljan and Friedrich) Public Agencies' Performance Benchmarking in the Case of Demand Uncertainty with an Application to Estonian, Finnish and Swedish Fire and Rescue Services.
- Yin, Z. (B.Ec. Honours, successfully completed 2017, jointly supervised with Peyrache) Estimating scale efficiency using a parametric stochastic production frontier model.
- Nguyen, T.H. (PhD, successfully completed 2017, jointly supervised with Laurenceson/Rao) Vietnam State-owned Enterprise (SOE) Reform: A productivity and efficiency perspective.
- Pool, D. (B.Ec. Honours, successfully completed 2015, jointly supervised with Rao) A parametric approach to analysing labour productivity growth.
- Downham, R. (B.Ec. Honours, successfully completed 2015, jointly supervised with Peyrache) Hicks neutrality in nonparametric frontier estimation.
- Gregg, D. (PhD, U of Central Queensland, successfully completed 2015, jointly supervised with Rolfe) The Meeting Place: Estimating the economic value of ground cover and sustainable production practices to broad acre grazing enterprises.
- Carrington, R. (PhD, successfully completed 2014, jointly supervised with Rao) Performance Assessment and Price Regulation of Selected Services: A Study of the Australian Private Health Insurance and Higher Education Sectors
- Ahmad, S. (PhD, successfully completed 2014, jointly supervised with Lovell; recipient of the 2014 Dean's Award for Outstanding Research Higher Degree Theses) Econometric Estimation of the Components of Total Factor Productivity Change.
- Parslow, E. (B.Ec. Honours, successfully completed 2013) A Bayesian Approach to Decomposing Proper Productivity Indexes: With Application to the Swedish Economy.
- Soriano, F. (PhD, withdrawn 2012, jointly supervised with Rao) Productivity measurement using micro and macro level data: Aggregation issues and properties of parametric and non-parametric methods.
- Allan-Greer, B. (PhD, withdrawn 2012, jointly supervised with Rao) Constructing Divisia Indexes from Retail Scanner Data Using Wavelet Methods
- Willett, M. (B.Ec. Honours, successfully completed 2011) Measuring and Decomposing TFP Change in East Asia

- Hieu Phan Sy (PhD, successfully completed 2011, jointly supervised with Harrison and Lamb) A spatial equilibrium analysis of policies to promote the wood-processing industry in Northern Vietnam
- Hoang, V. (PhD, successfully completed 2010, jointly supervised with Rao, Alaudin and Coelli) Measuring and decomposing economic, environmental and ecological efficiency and productivity change in agricultural production
- Shankar, S. (PhD, successfully completed 2010, jointly supervised with Quiggin) Estimating State-Contingent Technologies
- Etchells, J. (B.Ec. Honours, successfully completed 2009) An Analysis of Quality and Consumption of Fruits and Vegetables
- Jiminez, E. (PhD, successfully completed 2007, jointly supervised with Brown and Leeves) Migration, remittances and social protection in Fiji, Tonga and Samoa
- Knott, R. (B.Ec. Honours, successfully completed 2007) A comparison of Bayesian and sampling theory inferences in a multivariate probit model for alcohol, tobacco and marijuana participations
- Randhawa, K. (B.Ec. Honours, successfully completed 2007) Computing measures of reliability for Productivity Index Numbers
- Morey, K. (B.Ec. Honours, successfully completed 2007) Bayesian estimation of volatility: an application to international coffee prices
- Keddie, A. (B.Ec Hons, successfully completed 2006) Investment Under Uncertainty in the Mining Industry: The State-Contingent Approach
- Hajargasht, G. (PhD; successfully completed 2006; jointly supervised with Rao) Non- and Semi-Parametric Stochastic Frontiers: A Penalized Spline Approach
- Adam, L. (PhD; successfully completed 2006; jointly supervised with Tisdell and Jackson) The economic role of formal and informal inter-firm networks in the development of small and medium industrial enterprises: a study of symbiosis in the Indonesian garment industry
- Rayner, V. (B.Ec Hons, successfully completed 2004) A Bayesian analysis of ARCH and GARCH models
- Mateo, F. (PhD; successfully completed 2004; jointly supervised with Battese) Data Envelopment Analysis and the Selection of Optimal Adjustment Paths.
- Villano, R. (PhD; successfully completed 2004; jointly supervised with Battese and Fleming) Measuring Technical Efficiency Under Risk With Application to Rainfed Rice Production in the Philippines
- Newton, L. (PhD; successfully completed 2004; jointly supervised with Griffiths) Bayesian Prediction: Alternative Models for Forecasting Shire-Level Wheat Yields
- Chua, C. (PhD; successfully completed 2003; jointly supervised with Griffiths) Bayesian Model Averaging of Alternative Production Functions and Consumer Demand Systems.

- Hill, D. (PhD; successfully completed 2002; jointly supervised with Piggott and Griffith) Measuring the Economic Impact of Wool-Staple-Strength-Enhancing Technologies on Economic Welfare.
- Christian, A. (B.Ag.Ec; successfully completed 2001; jointly supervised with Winters) Estimating the Potato Production Technology in Peru
- Ling., L. (PhD; successfully completed 2001; jointly supervised with Parton) The Cost Structure and Efficiency of Australian Public Hospitals.
- Veng, H. (M.Ec.; successfully completed 2000; jointly supervised with Griffith) The Demand for Vegetables in Australia
- Tan Cruz, A. (PhD; successfully completed 2000; jointly supervised with Griffiths) Estimating Production Technologies with Inequality Constraints
- Hutasuhut, M. (PhD; successfully completed 2000; jointly supervised with Chang, Griffith and Doran) The Demand for Meats in Indonesia: A Censored Regression Approach
- Kannapiran, C. (PhD; successfully completed 2000; jointly supervised with Fleming) An Analysis of Economic Efficiency and the Macroeconomic Impacts of Export Fluctuations and Price Policy in the Tree Crop Industries in Papua New Guinea
- Ali, A. (PhD; successfully completed 2000; jointly supervised with Simmons) The Basmati Rice Economy of Pakistan: The Impact of Government Intervention on Production and Trade.
- Chapman, K. (B.Com.(Hons); successfully completed 1999) Imposing Regularity Conditions on a Demand System for U.S. Meat
- Morrow, S. (B.Ag.Ec.(Hons); successfully completed 1999; awarded the Australian Agricultural and Resource Economics Society Undergraduate Prize in Agricultural and Resource Economics; jointly supervised with Piggott) Marketing Margin Behaviour in the Presence of Cross-Commodity Relationships: The Case of Australian Beef and Lamb
- Sik, B. (M.Ec.; successfully completed 1998) A Supply Response Analysis of Rice Production in Cambodia
- Roesmanto, J. (M.Ec.; successfully completed 1994; jointly supervised with Parton) An Error Components Approach to Estimating Sugar Production Technology in Indonesia: A Case Study on East Java
- Watson, A. (B.Ag.Ec.(Hons); successfully completed 1993; jointly supervised with Morrison) A Comparison of Beef Consumption in Australia, Japan and the United States
- Espiritu, A. (M.Ec.; successfully completed 1993) The Impact of Government Intervention in the Philippine Rice Industry
- Connor, D. (Grad.Dip.Emet; successfully completed 1993) The Severity of Road Accident Injuries: An Application of the Ordered Logit Model
- Ellahi, M. (PhD; successfully completed 1992) Allocation of Labour Supply Between Farm and Non-farms Jobs in the Rural Economy of Pakistan's Punjab

Siregar, H. (M.Ec.; successfully completed 1991; jointly supervised with Thomas)
 Production Technology in the Indonesian Dryland Crop Industry: A Multi-Input Multi-Output Framework

Selected Research Grants

2017	Productivity Change in Agriculture: A Comparative Analysis; Asian Productivity Organisation; USD47,500; Chief Investigators O'Donnell, Peyrache.
2008–2010	State-contingent analysis of productivity, efficiency and innovation; ARC Discovery; \$437,599; Chief Investigators (in order) O'Donnell, Quiggin, Chambers.
2008	Estimating the Characteristics of Stochastic Production Technologies; Generalitat de Catalonia (Spain); 14,775 Euro.
2003–2005	The importance of price and perceived quality to the demand for fresh fruits and vegetables; ARC (Linkage); \$135,270.
2001–2004	Food retailer/processor market power in input markets; Rural Industries R&D Corp.; \$109,648.
1998–2000	Using Bayesian methodology for including inequality information in the estimation of economic relationships; ARC Large; \$132,500; Chief Investigators (in order) Griffiths, O'Donnell.

Editorial Service

Since 01/19	Associate Editor, <i>Journal of Productivity Analysis</i>
Since 10/12	Associate Editor, <i>Empirical Economics</i>
01/13–12/18	Co-Editor, <i>Journal of Productivity Analysis</i>
05/09–12/12	Associate Editor, <i>Journal of Productivity Analysis</i>
08/02–01/09	Associate Editor, <i>Journal of Agricultural and Food Industrial Organisation</i>
07/01–12/04	Co-Editor, <i>Australian Journal of Agricultural and Resource Economics</i>
12/93–12/96	Member of Editorial Board, <i>Review of Marketing and Agricultural Economics</i>

Other Professional Service

06/11–12/12	Member of Department of Health and Ageing (DoHA) Aged Care Benchmarking Reference Group (ACBRG)
03/08–06/11	Member of Australian Bureau of Statistics (ABS) Productivity Measurement Reference Group (PMRG)
02/08–02/09	President, Australian Agricultural and Resource Economics Society
07/05–07/09	Member of Australasian Standing Committee of the Econometric Society
07/01–12/04	Executive Member of Federal Council, Aust. Ag. and Resource Econ Society
07/94–06/97	Member of Australasian Standing Committee of the Econometric Society

03/87–10/88 Deputy Chair, Orange Agricultural College Council.

Awards and Fellowships

- 2014 Distinguished Fellow, Australian Agricultural and Resource Economics Society.
- 2011 Outstanding ERAE Journal Article Award for Nauges, O'Donnell and Quiggin (ERAE, 38: 449-467).
- 2010 European Association of Agricultural Economists Quality of Research Discovery Award for O'Donnell, Chambers and Quiggin (JPA, 33: 1-17).