



Professor Tim Coelli

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Qualifications

B.App.Ec.with First Class Honours and University Medal, University of New England, Armidale

Dip.Comp.Sc., University of New England, Armidale

PhD, University of New England, Armidale

Key Skills and Experience

Tim Coelli is an Associate of Economic Insights and former Professor of Economics at the University of Queensland. Tim is one of Australia's leading academics in the productivity and efficiency analysis field. He has authored five books on the subject and has over 40 related articles in leading academic journals. He has authored widely used computer programs calculating total factor productivity, stochastic frontier analysis and data envelopment analysis. He is a former Director of the Centre of Efficiency and Productivity Analysis at the University of Queensland.

Tim has undertaken numerous productivity and efficiency analysis consulting projects in areas as diverse as electricity distribution, water supply, telecommunications, defence, national parks, health and aged care, tertiary education and agriculture. His clients include the Australian Energy Regulator, the ACCC, Electricité de France, the World Bank, Telstra, NSW Treasury, Water Supply Association of Australia and the Royal Australian Navy.

Tim has presented many training courses on productivity and efficiency analysis and refereed articles in other 70 leading academic journals. He has held visiting positions at universities in Belgium, Spain and the UK.

Published Books

Coelli, T.J. and D. Lawrence (eds.) (2006), *Performance Measurement and Regulation of Network Utilities*, Edward Elgar Publishing, Cheltenham,

Coelli, T.J., Prasada Rao, D.S., O'Donnell, C.J. and Battese, G.E. (2005), *An Introduction to Efficiency and Productivity Analysis*, 2nd Edition, Springer, New York, 366 pp.

Coelli, T.J., Estache, A., Perelman, S. and Trujillo, L. (2003), *A Primer on Efficiency Measurement for Utilities and Transport Regulators*, World Bank Publications, 129 pp.

Coelli, T.J., Prasada Rao, D.S., and Battese, G.E. (1998), *An Introduction to Efficiency and Productivity Analysis*, Kluwer Academic Publishers, Boston, 271 pp.

Coelli, T.J. and Griffiths, W.E. (1989), *Computer and Exercise Solutions Manual to Accompany: The Theory and Practice of Econometrics*, 2nd Edition, Wiley, New York, 447 pp.

Recent Published Journal Articles

- See, K.F. and T.J. Coelli (2014), "Total factor productivity analysis of a single vertically integrated electricity utility in Malaysia using a Törnqvist index method", *Utilities Policy*, to appear.
- See, K.F. and T.J. Coelli (2013), "Estimating and Decomposing Productivity Growth of the Electricity Generation Industry in Malaysia: A Stochastic Frontier Analysis", *Energy Policy*, 62, 207-214.
- Coelli, T.J., A. Gautier, S. Perelman and R. Saplacan-Pop (2013), "Estimating the cost of improving quality in electric distribution: A parametric distance function approach", *Energy Policy*, 53, 287-297.
- Eckermann, S. and T.J. Coelli (2012), "Including quality attributes in efficiency measures consistent with net benefit: creating incentives for evidence based medicine in practice", *Social Science and Medicine*, 76, 159-168.
- Arocena, P., D. Saal and T.J. Coelli (2012), "Vertical and Horizontal Scope Economies in the Regulated US Electric Power Industry", *Journal of Industrial Economics*, 60, 434-467.
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- Nghiem, H.S., T.J. Coelli and D.S.P. Rao (2012), "Assessing Welfare Effects of Microfinance in Vietnam: Empirical Results from a Quasi-Experimental Survey", *Journal of Development Studies*, 48, 619-632.
- Nghiem, H.S., T.J. Coelli and S. Barber (2011), "Sources of Productivity Growth in Health Services: A Case Study of Queensland Public Hospitals", *Economic Analysis and Policy*, 41, 37-48.
- Hoang, V.N. and T.J. Coelli (2011) "Measurement of agricultural total factor productivity growth incorporating environmental factors: A nutrients balance approach" *Journal of Environmental Economics and Management*, 62, 462-474.
- Carrington, R., T.J. Coelli and D.S.P. Rao (2011), "Australian Private Health Insurance Productivity Growth: Is There Scope to Limit Premium Increases?", *Economic Record*, 87, 125-139
- Coelli, T.J., Lefèbvre, M. and Pestieau, P. (2010), "On the Convergence of Social Protection Performance in the European Union", *CESifo Economic Studies*, 56, 300-322.
- Peyrache, A. and T.J. Coelli (2009), "Testing procedures for detection of linear dependencies in efficiency models", *European Journal of Operations Research*, 198, 647–654.
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- Hajargasht, G., T.J. Coelli and D.S.P. Rao (2008), "A Dual Measure of Economies of Scope", *Economics Letters*, 100, 185-188.
- Coelli, T.J., L. Lauwers and G. van Huylenbroeck (2007), "Environmental efficiency measures and the materials balance condition", *Journal of Productivity Analysis*, 28, 3-12.
- Nghiem, H.S., T.J. Coelli and D.S.P. Rao (2006), "The Efficiency of Microfinance in Vietnam: Evidence from NGO Schemes in the North and the Central Regions", *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 2, 71-78.
- de Mateo, F., T.J. Coelli 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, 211–227.
- Carrington, R., T.J. Coelli and D.S.P. Rao (2005), “The Performance of Australian Universities: Conceptual Issues and Preliminary Results”, *Australian Economic Papers*, 24, 145-163.
- O'Donnell, C.J. and Coelli, T.J. (2005), "A Bayesian approach to imposing curvature on distance functions", *Journal of Econometrics*, 126, 493-523.
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- Coelli, T.J. and Fleming, E. (2004), "Diversification Economies and Specialisation Efficiencies in a Mixed Food and Coffee Smallholder Farming System in Papua New Guinea" *Agricultural Economics*, 31, 229-239.
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- Coelli, T.J., S. Rahman and C. Thirtle (2003), "A Stochastic Frontier Approach to Total Factor Productivity Measurement in Bangladesh Crop Agriculture, 1961 - 1992", *Journal of International Development*, 15, 321-333.
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- Carrington, R., T.J. Coelli and E. Groom (2002), "International benchmarking for monopoly price regulation: The case of Australian gas distribution", *Journal of Regulatory Economics*, 21, 191-216.
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- Frame, W.S. and Coelli, T.J. (2001), "U.S. Financial Services Consolidation: The Case of Corporate Credit Unions", *The Review of Industrial Organisation*, 18, 229-242.
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- Tran, S., Coelli, T.J. and Fleming, E. (1993), "Technical Efficiency in the Rubber Industry of Vietnam", *Agricultural Economics*, 9, 183-201.

Recent Chapters in Books

- Coelli, T.J. and O. Sanders (2013), "The technical efficiency of wine grape growers in the Murray-Darling Basin in Australia", in Giraud- Héraud, E., and M. C. Pichery (Eds), *Wine Economics: Quantitative Empirical Studies and Applications*, Palgrave Macmillan.