Marco Reale
PUBLICATIONS

1. **Refereed Journal Articles:**

   1.1 Price, C.J., M. Reale and B.L. Robertson, **A cover partitioning method for bound constrained global optimization**. *Optimization Methods and Software*, forthcoming.

   1.2 Rea, W., M. Reale and J. Brown (2011), **Long memory in temperature reconstruction**. *Climatic Change*, **107**, 247–265.

   1.3 Robertson, B.L., C.J. Price and M. Reale (2011), **A Hooke and Jeeves - CARTopt hybrid method for nonsmooth optimization**. *Advanced Modeling and Optimization*, **13**, 381–401.

   1.4 Lee, D.S., M. Zahari, G. Russell, B. Darlow, C. Scarrott and M. Reale (2011), **An exploratory investigation of some statistical summaries of oximeter oxygen saturation data from preterm babies**. *ISRN Pediatrics*, **2011**, article ID 296418.

   1.5 MacDonald, A., C.J. Scarrott, D. Lee, B. Darlow, M. Reale and G. Russell (2011), **A Flexible Extreme Value Mixture Model**. *Computational Statistics and Data Analysis*, **55**, 2137–2157.

   1.6 Zhao, X., C.J. Scarrott, L. Oxley and M. Reale (2011), **GARCH dependence in extreme value models with Bayesian inference**. *Mathematics and Computers in Simulation*, **81**, 1430–1440.

   1.7 Rea, W., M. Reale, J. Brown and L. Oxley (2011), **Are long memory time series H-selfsimilar? An empirical study**. *Mathematics and Computers in Simulation*, **81**, 1441–1453.

   1.8 Rea, W.S., M. Reale, C. Cappelli and J.A. Brown (2010). **Identification of changes in mean with regression trees: an application to market research**. *Econometric Reviews*, **29**, 754–777.

   1.9 Zhao, X., C. Scarrott, L. Oxley and M. Reale (2010). **Extreme modelling for forecasting market crisis impacts**. *Applied Financial Economics*, **20**, 63–72.

   1.10 Lindstrom, H., M. Reale and M. Grekin (2009). **Using non-destructive testing to assess modulus of elasticity of Pinus sylvestris trees**. *Scandinavian Journal of Forest Research*, **24**, 247–257.

1.11 Oxley, L., M. Reale and G. Tunnicliffe Wilson (2009). **Constructing structural VAR models with conditional independence graphs**. *Mathematics and Computers in Simulation*, **79**, 2910–2916.

1.12 Price, C.J., B.L. Robertson and M. Reale (2009). **A hybryd Hooke and Jeeves-Direct method for non-smooth optimization**. *Advanced Modeling and Optimization*, **11**, 43–61.

1.13 Tunnicliffe Wilson, G. and M. Reale (2008). **The sampling properties of conditional independence graphs for I(1) structural VAR models**. *Journal of Time Series Analysis*, **29**, 802–810.

1.14 Cappelli, C., R.N. Penny, W.S. Rea and M. Reale (2008). **Detecting multiple mean breaks at unknown points with regression trees**. *Mathematics and Computers in Simulation*, **78**, 351–356.

1.15 Price, C.J., M. Reale and B.L. Robertson (2008). **A direct search method for smooth and nonsmooth unconstrained optimization**. *ANZIAM Journal*, **48**, C927-C948.

1.16 Edlund, J., H. Lindstrom, F. Nilsson and M. Reale (2006). **Modulus of elasticity of Norway spruce saw logs vs. structural lumber grade**. *Holz als Roh- und Werkstoff*, **64**, 273–279.

1.17 Lindstrom, R. Evans and M. Reale (2005). **Implications of selecting tree clones with high modulus of elasticity**. *New Zealand Journal of Forestry Science*, **35**, 50–71.

1.18 Penny, R.N. and M. Reale (2004). **Using graphical modelling in official statistics**. *Quaderni di Statistica*, **6**, 31–48.

1.19 Reale, M. and G. Tunnicliffe Wilson (2002). **The sampling properties of conditional independence graphs for structural vector autoregressions**. *Biometrika*, **89**, 457–61.

1.20 Reale, M. and G. Tunnicliffe Wilson (2001). **Graphical modelling identification of vector autoregression: an application to the lending channel in Italy**. *Statistical Methods and Applications*, **10**, 49–65.

1.21 Tunnicliffe Wilson, G., M. Reale and A.S. Morton (2001). **Developments in multivariate time series modelling**. *Estadistica*, **53**, 353–95.

2. **Chapters in Books:**

2.1 Reale, M. (2006). **Time series analysis**. In *Encyclopedia of Measurement and Statistics*, ed. Salkind, N.J., Thousand Oaks, Sage, 1005–1009.

2.2 Reale, M. and E. Rossi (1998). **Il ruolo delle banche e della loro gestione di liquiditá nella trasmissione della politica monetaria**. In *I Mercati Monetari e Finanziari in Italia fra Internazionalizzazione e Controllo*, ed. Rossi, E., Milan, Giuffré, 265–300.

2.3 Reale, M. and M. Tirelli (1998). **Un modello econometrico mensile del mercato finanziario italiano**. In *I Mercati Monetari e Finanziari in Italia fra Internazionalizzazione e Controllo*, ed. Rossi, E., Milan, Giuffré, 89–264.

2.4 Giovannini, E., M. Reale and M. Tirelli (1994). **ERM crisis and financial market instability: some evidence from a monthly econometric model**. In *In Quest of the Philosophers' Stone, Nonlinearity and Volatility in Financial Markets*, ed. Chiandotto, B. and Gallo, G.M., Rome, Societá Italiana di Statistica, 163–186.

2.5 Pandimiglio, A., M. Reale and M. Tirelli (1993). **Consumi Intertemporali, vincoli di liquiditá e neutralitá ricardiana: una verifica per l'Italia**. In *Debito Pubblico, Credito e Sviluppo*, ed. Arcelli, M., Milan, Giuffré, 43–62.

3. **Refereed Proceedings:**

3.1 Rea, W., L. Oxley, M. Reale and J. Brown (2011). **The empirical properties of some popular estimators of long memory processes**. In Chan, F., Marinova, D. and Anderssen, R.S. (eds) *19th International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1393–1400.

3.2 Hodge, M., J.A. Brown, and M. Reale (2009). **Improving the calculation of fix-rate bias in automated telemetry systems**. In J.G. Booth (ed.) *Proceedings of the 24th International Workshop on Statistical Modelling*, 168–173.

3.3 Oxley, L., M. Reale and G. Tunnicliffe Wilson (2009). **Graphical models for structural VARMA representations**. In Anderssen, R.S., Braddock, R.D. and Newham, L.T.H. (eds) *18th World IMACS Congress and MODSIM 2009 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1175–1180.

3.4 Rea, W., L. Oxley and M. Reale (2009). **A new procedure for discriminating between long memory and shifting means alternatives**. In Anderssen, R.S., Braddock, R.D. and Newham, L.T.H. (eds) *18th World IMACS*

Congress and MODSIM 2009 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, 1188–1194.

3.5 Robertson, B.L., C.J. Price and M. Reale (2009). **Nonsmooth optimization using classification and regression trees**. In Anderssen, R.S., Braddock, R.D. and Newham, L.T.H. (eds) *18th World IMACS Congress and MODSIM 2009 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1195–1201.

3.6 Zhao, X., L. Oxley, C. Scarrott and M. Reale (2009). **Extreme value GARCH modelling with Bayesian inference**. In Anderssen, R.S., Braddock, R.D. and Newham, L.T.H. (eds) *18th World IMACS Congress and MODSIM 2009 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1391–1397.

3.7 Zheng, G.Y., R.N. Penny, M. Reale and E. Chacko (2008). **An empirical study of break point detection for seasonal change in an external migration series**. In *Proceedings of the 2008 Econometric Society Australasian Meeting*, on CD.

3.8 Mendes, E.F., L. Oxley, and M. Reale (2007). **Some new approaches to forecasting the price of electricity: a study of californian market**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1117–1123.

3.9 Oxley, L., M. Reale and G. Tunnicliffe Wilson (2007). **Constructing stuctural VAR models with conditional independence graphs**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1388–1392.

3.10 Meurk, C.S., J.A. Brown and M. Reale (2007). **Graphical modeling of ecological time series data**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1393–1398.

3.11 Rea, A., M. Reale and C. Scarrott (2007). **Graphical models of multivariate volatility**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 1399–1402.

3.12 Zhao, X., Q. Hou, D. Lee, M. Reale, C. Scarrott, G. Russell, A. MacDonald and M. Zahari (2007). **A comparison between alternative volatility estimations**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 2027–2033.

3.13 Rea, W., M. Reale and J. Brown 2007). **Long memory or structural breaks in temperature and proxy time series**. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 3010–3016.

3.14 Mendes, E.F., L. Oxley and M. Reale (2007). **Some new approaches to forecasting the price of electricity**. In *Proceedings of the 2007 Econometric Society Australasian Meeting*, on CD.

3.15 Brown, J., W. Rea and M. Reale (2007). **Modeling Long Memory Time Series: the Shihua Cave Speleotherms**. In J. del Castillo, A. Espinal and P. Puig (eds), *Proceedings of the International Workshop on Statistical Modelling*, Barcelona, IDESCAT, 130–135.

3.16 Rea, W., M. Reale, C. Cappelli and J. Brown (2006). **Identification of level shifts in stationary processes**. In J. Hinde, J. Einbeck and J. Newell (eds) *Proceedings of the 21st International Workshop on Statistical Modelling*, Galway, Corrib and Data Printers Ltd, 438–441.

3.17 Cappelli, C., R.N. Penny and M. Reale (2005). **Detecting multiple mean breaks at unknown points with Atheoretical Regression Trees**. In In Zerger, A. and Argent, R.M. (eds) *MODSIM 2005 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand*, 974–978.

3.18 Cappelli C. and M. Reale (2005). **Dating Multiple Structural Breaks occurring at unknown dates via Atheoretical Regression Trees**. In *Proceedings of S.Co. 2005: Modelli Complessi e Metodi Computazionali Intensivi per la Stima e la Previsione*, Bressanone, 479–484.

3.19 Cappelli, C. and M. Reale (2005). **Detecting multiple structural breaks in the mean via atheoretical regression trees**. In A.R. Francis, K.M. Matawie, A. Oshlack and G.K. Smyth (eds) *Statistical Solutions to Modern Problems: Proceedings of the 20th International Workshop on Statistical Modelling*, Sydney, University of Western Sydney, 131–134.

3.20 Oxley, L., M. Reale and G. Tunnicliffe Wilson (2004). **Finding directed**

acyclic graphs for vector autoregressions. In J. Antoch (ed.) *Proceeding in Computational Statistics 2004*, Heidelberg, Physica-Verlag, 1621–1628.

3.21 Cappelli, C. and M. Reale (2004). **Using trees to investigate structural breaks**. In *Atti della XLII Riunione Scientifica della Societá Italiana di Statistica*, Padua, CLEUP, 139–142.

3.22 Reale, M. (2003). **How to make a causal diagram for sparse vector autoregression**. In G. Verbeke *et al.* (eds) *18th International Workshop on Statistical Modelling*, Leuven, Katholieke Universiteit Leuven, 379–383.

3.23 Penny, R. and M. Reale (2003). **Preliminary estimation of QGDP: a causal inference approach**. In *Proceedings of the 2003 Econometric Society Australasian Meeting*, on CD.

3.24 Oxley, L. and M. Reale (2002). **A Causal diagram for an interest rate transmission mechanism in New Zealand**. In *Proceedings of the Econometric Society Australasian Meeting*, on CD.

3.25 Reale, M. and G. Tunnicliffe Wilson (2000). **Identification of vector AR and ARMA models with recursive structural errors using conditional independence graphs**. In V. Nuñez-Anton and E. Ferreira (eds) *Statistical Modelling: Proceedings of the 15th International Workshop on Statistical Modelling*, Bilbao, The University of the Basque Country, 248–253.

4. **Unrefereed Proceedings:**

4.1 Brown, J.A., R.N. Penny and M. Reale (2006). Making statistics real: Working with Statistics New Zealand. In A. Rossman and B. Chance (eds) *Proceedings of 7th International Conference on Teaching Statistics*, Salvador, IASE, 3 pp.

5. **Unpublished Working Papers:**

5.1 Rea, W.S, C.J. Price, L. Oxley and M. Reale (2008). A New Procedure to Test for H Self-Similarity. *University of Canterbury Economics Department Research Report* **16/2008**.

5.2 Zheng, G.Y., R.N. Penny, M. Reale and E. Chacko (2008). An empirical study of break point detection for seasonal change in an external migration series, *Statistics New Zealand Research Report* **July 2008**.

5.3 Rea, W.S., L. Oxley, M. Reale and J.A. Brown (2008). The empirical properties of some popular estimators of long memory processes. *University of Canterbury Economics Department Research Report* **13/2008**.

5.4 Mendes, E.F., L. Oxley and M. Reale (2008). Some new approaches to forecasting the price of electricity: a study of californian market. *University of Canterbury Economics Department Research Report* **05/2008**.

5.5 Rea, W.S., L. Oxley, M. Reale and E.F. Mendes (2008). Long memory or shifting means? A new approach and application to realised volatility. *University of Canterbury Economics Department Research Report* **04/2008**.

5.6 Cappelli, C. and M. Reale (2005). Detecting changes in mean levels with atheoretical regression trees. *University of Canterbury Mathematics and Statistics Department Research Report* **2005/2**.

5.7 Reale, M. (1994). Un modello econometrico per l'analisi del comportamento delle aziende di credito. *Quaderni di Ricerca OCSM* **46**.

6. **Reviews:**

6.1 Reale, M. (2005). Review of "Observational Studies" by P.R. Rosenbaum. *Statistical Methods in Medical Research*, **14**, 525.

6.2 Reale, M. (2002). Review of "Practical Time Series" by G. Janacek. *Journal of the Royal Statistical Society Series D*, **51**, 580.