

CURRICULUM VITAE

MURRAY DONALD SMITH

PERSONAL DETAILS

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Academic Qualifications

Bachelor of Economics with First Class Honours, Monash University, Australia (1978-1983).
Doctor of Philosophy, Monash University, Australia (1983-1987).

PROFESSIONAL EXPERIENCE

Present Appointments:

Senior Research Fellow
Health Economics Research Unit
Institute of Applied Health Sciences
University of Aberdeen
Aberdeen, Scotland, UK
February 2007 – Present

Previous Appointments:

Associate Professor
Econometrics and Business Statistics
University of Sydney
February, 1988 – February 2008
(Tenured in January, 1989; Promoted to Senior Lecturer in January, 1994; Promoted to Associate Professor in January, 2003.)

Lecturer

Department of Econometrics
University of New South Wales
(February, 1986 - January, 1988)

RESEARCH GRANTS

- Visiting Leverhulme Trust Commonwealth research fellow at the University of East Anglia, UK, 1993 (9750UK)
- Visiting Fellow to the Dept of Econometrics and Actuarial Science at the University of Amsterdam, The Netherlands, 1993 (1800K)
- Australian Research Council Small Grant, 1997 (\$10640) and 1998 (\$10000), joint with R. Bartels
- Visiting Alexander von Humboldt research fellow at the University of Munich, Germany, 1998-9 (DM40116)
- Australian Research Council Small Grant, 1999 (\$6000)
- Australian Research Council Small Grant, 2000 (\$10000)
- Visiting Alexander von Humboldt Research Fellow at the University of Dortmund, Germany, 2001 (DM3900)
- UK Medical Research Council, NPRI Phase 2, 2008-2010 (£243,926)

ADMINISTRATION

University of Aberdeen

Health Economics Research Unit:

- Staff Appraiser 2007-9
- Staff Line Manager 2008-9
- Theme Leader “Microeconomic Methods” 2008-9

PUBLICATIONS AND RESEARCH

Academic Book (refereed)

1. *Mathematical Statistics with Mathematica*, Springer-Verlag, New York, pp481+xiii, 2002 (with C. Rose; imprint: Springer Texts in Statistics). ISBN: 0-387-95234-9

Academic Journal Articles (refereed)

2. “Infant mortality and child nutrition in Bangladesh”, *Health Economics*, 17, 1015-1035, 2008 (with D. Dancer and A. Rammohan).
3. “Stochastic frontier models with dependent error components”, *The Econometrics Journal*, 11, 172-192, 2008.
4. “Invariance theorems for Fisher Information”, *Communications in Statistics - Theory and Methods*, 36, 2213-2222, 2007.
5. “Computational order statistics”, *The Mathematica Journal*, 9, 790-802, 2005 (with C. Rose). ISSN: 1047-5974.
6. “Using copulas to model switching regimes with an application to child labour”, *Economic Record*, 81, S47-S57, 2005. ISSN: 0013-0249.
7. “On dependency in double-hurdle models”, *Statistical Papers*, 44, 581-595, 2003. ISSN: 0932-5026.
8. “Modelling sample selection using Archimedean copulas”, *The Econometrics Journal*, 6, 99-123, 2003. Print ISSN: 1368-4221, Online ISSN: 1368-423X.
9. “Symbolic maximum likelihood estimation with *Mathematica*”, *Journal of the Royal Statistical Society, Series D (The Statistician)*, 49, 229-240, 2000 (with C. Rose). ISSN: 0039-0526.

10. "Fisher's Information on the correlation coefficient in bivariate logistic models", *The Australian and New Zealand Journal of Statistics*, 41, 315-330, 1999 (with P. Moffatt). ISSN: 1369-1473.
11. "Random number generation for discrete variables", *Mathematica in Education and Research*, 6, 22-26, 1997 (with C. Rose). ISSN: 1065-2965
12. "Comparing approximations to the expectation of a ratio of quadratic forms in normal variables", *Econometric Reviews*, 15, 81-95, 1996. ISSN: 0747-4938
13. "Some consequences of model misspecification for t testing in a structural equation", *Journal of Statistical Planning and Inference*, 50, 251-271, 1996 (with C. L. Skeels). ISSN: 0378-3758
14. "The multivariate normal distribution", *The Mathematica Journal*, 6, 32-37, 1996 (with C. Rose). ISSN: 1047-5974
15. "Mean square error comparisons for estimators of the variance of the structural disturbances in simultaneous equations models", *Journal of Quantitative Economics*, 11, 47-58, 1995. ISSN: 0971-1554
16. "Exact densities for variance estimators of the structural disturbances in simultaneous equations models", *Journal of Econometrics*, 60, 157-180, 1994. ISSN: 0304-4076
17. "Expectations of ratios of quadratic forms in normal variables: evaluating some top-order invariant polynomials", *The Australian Journal of Statistics*, 35, 271-282, 1993. ISSN: 0004-9581
18. "Comparing the exact distribution of the t statistic to Student's distribution when its constituent normal and chi-squared variables are dependent", *Communications in Statistics - Theory and Methods*, 21, 3589-3600, 1992. ISSN: 0361-0926
19. "On the expectation of a ratio of quadratic forms in normal variables", *The Journal of Multivariate Analysis*, 31, 244-257, 1989. ISSN: 0047-259X
20. "Convergent series expressions for inverse moments of quadratic forms in normal variables", *The Australian Journal of Statistics*, 30, 235-246, 1988. ISSN: 0004-9581
21. "Joint one-sided tests of linear regression coefficients", *Journal of Econometrics*, 32, 367-383, 1986 (with M. L. King). ISSN: 0304-4076
22. "Estimates of the generalized Working model", *Economics Letters*, 16, 171-175, 1984 (with K. W. Clements). ISSN: 0165-1765

Chapters in Books (refereed)

23. "On specifying double-hurdle models", Chp 25 in *Handbook of Applied Econometrics and Statistical Inference*, by A. Ullah, A. Wan, and A. Chaturvedi (eds.), Marcel-Dekker, 535-552, 2002. ISBN: 0-8247-0652-8
24. "Random[Title]: Manipulating probability density functions", Chp 16 in *Computational Economics and Finance: Modeling and Analysis with Mathematica*, by H. R. Varian (ed.), Springer-Verlag/TELOS, 416-468, 1996 (with C. Rose). ISBN: 0-387-94518-0

Computer Software

25. "mathStatistica". (A commercial statistical software package that is an add-on to *Mathematica*. Version 1, March 2002; Version 1.2, April 2003. With C. Rose)
26. "Solutions Manual". (An electronic manual of worked solutions to the exercises posed in *Mathematical Statistics with Mathematica*. Version 1, 2002. With C. Rose)