

Rob J. Hyndman

Curriculum Vitae

November 2003

Address: Department of Econometrics & Business Statistics,
Monash University, VIC 3800, Australia.
Telephone: (03) 9905 2358
Fax: (03) 9905 5474
E-mail: Rob.Hyndman@buseco.monash.edu.au
WWW: www-personal.buseco.monash.edu.au/~hyndman/

Personal

Name: Robin John Hyndman
Date of birth: 2 May 1967
Family: Married with four children
Home address: 40 Stoda St, Heathmont 3135
Home telephone: 9729 9229
Citizenship: Australian.

Education and Qualifications

2000 A.Stat. Statistical Society of Australia.
1992 Ph.D. University of Melbourne
1988 B.Sc.(Hons) University of Melbourne

Career to date

2003– **Professor**, Department of Econometrics and Business Statistics, Monash University.
2002 **Visiting Senior Research Fellow**, Mathematical Sciences Institute, Australian National University.
2001–2003 **Associate Professor**, Department of Econometrics and Business Statistics, Monash University.
1998–2000 **Senior Lecturer**, Department of Econometrics and Business Statistics, Monash University.
1998 **Visiting Professor**, Department of Statistics, Colorado State University.
1995–98 **Lecturer/Senior Lecturer**, Department of Mathematics and Statistics, Monash University.
1993–94 **Lecturer**, Department of Statistics, University of Melbourne.
1985–92 **Statistical consultant**, Department of Statistics, University of Melbourne.

Major leadership positions

2001– **Director, Business & Economic Forecasting Unit**, Department of Econometrics and Business Statistics, Monash University.
1999– **Director of Consulting**, Department of Econometrics and Business Statistics, Monash University.

- 1996–1998 **Director, Key Centre for Statistical Science**, joint venture between Monash, Melbourne, La Trobe and RMIT universities.
- 1996–1998 **Director of Consulting**, Department of Mathematics and Statistics, Monash University.
- 1993–1995 **Secretary**, Statistical Society of Australia (Victorian branch).

Membership of Associations

- Member, Statistical Society of Australia.
- Member, American Statistical Association.
- Member, International Institute of Forecasters.

Honours and awards

- 2003 Entry in *One thousand great intellectuals*, 1st edition.
- 2002–2003 Entry in *Who's Who in Finance and Industry*, 33rd edition.
- 2001 Entry in *2000 Outstanding Intellectuals of the 21st Century*, 1st edition.
- 2001–2002 Entry in *International Directory of Distinguished Leadership*, 9th–11th editions.
- 2001 Entry in *Who's Who in Science and Engineering*, 6th edition.
- 2001 Entry in *Who's Who in the 21st Century*, 1st edition.
- 2000 Entry in *Outstanding People of the 20th Century*, 2nd edition.
- 2000 Entry in *Cambridge Dictionary of International Biography*, 28th edition.
- 2000 Entry in *Who's Who in Asia and the Pacific Nations*, 4th edition.
- 1998–2002 Entry in *Marquis Who's Who in the World*, 15th – 19th editions.
- 1998 Award for excellence in teaching, Monash Science Society
- 1997 Citation of excellence by ANBAR for Hyndman (1995)
- 1990 Finalist, Channel Ten Young Achiever Awards
- 1988 Dwights Prize in Statistics, University of Melbourne
- 1988 First Class Science Faculty Honours, University of Melbourne
- 1987 Norma McArthur Prize in Statistics, University of Melbourne
- 1987 First Class Science Faculty Honours, University of Melbourne
- 1986 Second Maurice H. Belz Prize in Statistics, University of Melbourne

Research and scholarship

- Since 1991 I have authored 54 papers, chapters or books on statistical topics. A list is given on pages 10–16.
- My current research projects include forecasting functional data, non-Gaussian time series models, state space models for exponential smoothing, hierarchical forecasting and conditional distribution estimation.

- In the past 18 months, I have been invited to give twelve outside research presentations in Australia, the Netherlands, Ireland, Portugal and New Zealand.
- I have been an invited discussant for two special issues of *International Journal of Forecasting* (2001,2004).

Editorship

- Theory and Methods Editor, *Australian and New Zealand Journal of Statistics*, 2001–.
- Associate Editor, *International Journal of Forecasting*, 2002–.
- Book Review Editor, *Australian and New Zealand Journal of Statistics*, 1996–2001.
- Co-editor, *InterStat* (the first refereed journal in Statistics to be published exclusively on the Internet). 1998–2001.

Research funds (1995–2003 only)

I have successfully obtained the following research grants:

- | | |
|-----------|---|
| 2004–2006 | ARC Discovery grant
“New approaches to analysing count time series data”
Investigators: Martin, Hyndman and Snyder. \$155,000. |
| 2002 | Monash University small grant
“Forecasting related time series with hierarchical and correlated structure”
Investigators: Hyndman and Shah. \$15,000. |
| 2001–2002 | SMURF grant (Monash University)
“Centre for Business and Economic Forecasting”
Investigators: Hyndman, Snyder, Inder, Vahid, Maharaj. \$140,000 |
| 2001 | Monash University small grant
“Nonparametric additive models for time series of counts”.
Investigator: Hyndman. \$15,000. |
| 2000 | ARC small grant (Monash University)
“Generalized additive models with autocorrelation”.
Investigator: Hyndman. \$9,027 |
| 1999 | ARC small grant (Monash University)
“Non-Gaussian regression models for time series”.
Investigator: Hyndman. \$7,523 |
| 1999 | Faculty research grant: “Intermittent demand forecasting”.
Investigator: Hyndman. \$6,940 |
| 1998 | ARC small grant (Monash University)
“Modelling time series with explanatory variables”.
Investigator: Hyndman. \$7,459 |
| 1996 | ARC small grant (Monash University)
“Kernel estimation of conditional densities”.
Investigator: Hyndman. \$8,600 |
| 1995 | ARC small grant (Monash University)
“Estimating and visualizing conditional densities”.
Investigator: Hyndman. \$3,139 |

- 1995 ARC small grant (University of Melbourne)
 "Modelling and data analysis for exponential family time series". \$8,000
 Investigators: Hyndman (50%) and Grunwald (50%)

In the last three years, I have obtained the following contract research funds.

InvestorWeb	2003	\$17,850
Australian Greenhouse Office	2002	\$12,320
Department of Health and Aged Care	2002	\$59,700
WorkCover NSW	2001	\$42,182
Telstra Australia	2000	\$31,000
Department of Industry, Science and Resources	2000	\$6,250
TXU Australia	2000	\$26,250
WorkCover Victoria	2000	\$19,678
		<hr/> \$215,230 <hr/>

Outside research presentations (2000–2003 only)

- *A framework for automatic forecasting using exponential smoothing methods*. 20th International Symposium on Forecasting, Lisbon, Portugal. June 2000.
- *Forecasting with non-Gaussian time series models*. 20th International Symposium on Forecasting, Lisbon, Portugal. June 2000. Invited paper.
- *Generalized additive models for financial time series*. 15th Australian Statistics Conference, Adelaide, July 2000. Invited paper.
- *Generalized additive models for Melbourne's rainfall*. Bureau of Meteorology, Melbourne. October 2000. Invited talk.
- *Modelling non-Gaussian time series*. Tinbergen Institute, Erasmus University of Rotterdam. November 2000. Invited talk.
- *Estimating and visualizing conditional densities*. Department of Economic Statistics. University of Amsterdam. November 2000. Invited talk.
- *Stability properties of exponential smoothing models*. 21st International Symposium on Forecasting, Lisbon, Portugal. June 2001.
- *Statistical issues in injury management evaluation, "Challenging the status quo"* Sydney conference, July 26 2001. Invited talk.
- *A comparison of three nonparametric local linear extrapolation methods*. 22nd International Symposium on Forecasting, Dublin, Ireland. June 2002. Invited talk.
- *A stochastic framework for forecasting using exponential smoothing*. Workshop on Structural Time Series, La Trobe University, July 2002. Invited talk.
- *A comparison of three nonparametric local linear extrapolation methods*. Australian Statistics Conference, Canberra, July 2002. Invited talk.
- *A brief future of forecasting*. Statistical Society of Australia ACT branch meeting, Canberra, August 2002. Invited talk.
- *New developments in exponential smoothing*. Mathematical Sciences Institute, Australian National University, September 2002. Invited talk.

- *A functional data approach to mortality forecasting*. Population and mortality forecasting workshop, Australian National University, February 2003. Invited talk.
- *Forecasting functional data*. 23rd International Symposium on Forecasting, Merida, Mexico. June 2003.
- *Be smooth and robust: a new approach to age-specific demographic forecasting*. Australian National University, November 2003.

Postgraduate supervision

I have supervised the following postgraduate students:

PhD students

- 1 INTELLECT (began 2003) *Signal discrimination using functional data analysis*, Ph.D., Monash University. (Joint supervisor).
- 2 ULLAH (began 2002) *Stochastic methods in population forecasting*, Ph.D., Monash University. (Sole supervisor).
- 3 DE SILVA (began 2001) *Multivariate exponential smoothing*, Ph.D., Monash University. (Main supervisor: 80%).
- 4 AKRAM (began 2001) *Stability properties of exponential smoothing state space models*, Ph.D., Monash University. (Main supervisor: 80%).
- 5 SHENSTONE (began 2001) *Forecasting intermittent demand*, Ph.D., Monash University. (Main supervisor: 80%).
- 6 PITRUN (graduated 2002) *Smoothing splines in nonparametric regression*, Ph.D., Monash University. (Associate supervisor: 50%).
- 7 BASHTANNYK (graduated 2001) *Conditional density estimation*, Ph.D., Monash University. (Sole supervisor).
- 8 ERBAS (graduated 2001) *Statistical methodological issues in the analysis of daily counts of mortality/morbidity and daily air pollution*, Ph.D., University of Melbourne. (Sole supervisor).

Masters students

- 1 O'REILLY (submitted 2003) *Nonparametric methods for financial market forecasting*, M.Com. (Hons), Monash University. (Sole supervisor).
- 2 YU (graduated 1998) *Analysis of flood frequency data*, M.Sc., Monash University. (Associate supervisor: 50%).
- 3 TEDESCO (graduated 1995) *Non-Gaussian first order autoregressive time series models*, M.Sc., University of Melbourne. (Associate supervisor: 50%).

Honours students

- 1 CUMMING (completed 2003) *An Empirical Analysis of Clustered Socio-Economic Regions in Victoria*, Honours reading project, Monash University. (Sole supervisor).
- 2 BUNKER (completed 2002) *Kernel density estimation on a bounded domain*, Honours reading project, Monash University. (Sole supervisor).
- 3 STRICKLAND (completed 2002) *Nonparametric quantile regression*, Honours reading project, Monash University. (Sole supervisor).

- 4 UNG (completed 2001) *Statistical prediction of wine quality*, Honours reading project, Monash University. (Sole supervisor).
- 5 LAO (completed 2001) *A review of credit scoring methods*, Honours reading project, Monash University. (Sole supervisor).
- 6 STEWART (graduated 2000) *Modelling and forecasting electricity demand*, Honours reading project, Monash University. (Sole supervisor).
- 7 GIBBONS (graduated 1999) *Predicting academic performance: a study of factors and techniques*, Honours reading project, Monash University. (Sole supervisor).
- 8 RUSHDI (graduated 1999) *Should sampling be used in census counts?*, Honours reading project, Monash University. (Sole supervisor).
- 9 DEBAKHAPOUVE (graduated 1997) *Robust regression*, Honours thesis, Monash University. (Sole supervisor).
- 10 MIDDLETON (graduated 1996) *Time series decomposition and seasonal adjustment*, Honours thesis, Monash University. (Sole supervisor).
- 11 DALTON (graduated 1994) *Kernel density estimation*, Honours thesis, University of Melbourne. (Sole supervisor).
- 12 LAI (graduated 1993) *Additive regression models*, Honours thesis, University of Melbourne. (Sole supervisor).
- 13 LING (graduated 1992) *Seasonal adjustment*, Honours thesis, University of Melbourne. (Sole supervisor).
- 14 BASHTANNYK (graduated 1992) *Dynamic regression models*, Honours thesis, University of Melbourne. (Sole supervisor).

Refereeing (2000–2003 only)

- Refereed 20 papers for scholarly journals:
 - *American Statistician* (1 paper)
 - *Biometrika* (1 paper)
 - *Computational Statistics and Data Analysis*. (2 papers)
 - *International Journal of Forecasting* (5 papers)
 - *Journal of Econometrics* (1 paper)
 - *Journal of the American Statistical Association*. (3 papers)
 - *Journal of Computational and Graphical Statistics*. (1 paper)
 - *Journal of Forecasting* (1 paper)
 - *Journal of Population Research* (1 paper)
 - *Journal of Time Series Analysis* (1 paper)
 - *Quantitative Finance* (1 paper)
 - *Statistica Neerlandica* (1 paper)
 - *Statistical Modelling* (1 paper)
 - *Statistical Papers* (2 papers)
 - *Statistics and Computing* (1 paper)
- Refereed Ph.D. thesis for University of Melbourne.

- Refereed Ph.D. thesis for Australian National University.
- Refereed monograph “Principles of Forecasting: A Handbook for Researchers and Practitioners”, edited by J. Scott Armstrong, (Kluwer Academic Publishers, 2001).
- Refereed monograph proposal “State space models”, edited by Koopman, Harvey and Shephard for Cambridge University Press.
- Refereed textbook proposal “Statistics for managers” by Levine, Berensen and Stephan (3rd edition) for Prentice-Hall.
- Refereed textbook proposal “Statistical analysis for business” for Prentice-Hall.
- Refereed 3 large grant proposals for the University of Hong Kong.
- Refereed 3 small grant proposals for Monash University.

Teaching

- In 2002, I taught a new subject on “Quantitative Business Research Methods” for the new Doctorate of Business Administration (DBA) offered by Monash University. Student evaluations of this subject were the highest ever received for MBA or DBA teaching at Monash.
- In 1998, I received the award for “Excellence in teaching” by the Monash Science Society. This is awarded by the students of the Science faculty.
- I am coauthor of the third edition of *Forecasting: methods and applications* (Wiley, 1998). This is the leading textbook in Business Forecasting and is very widely used internationally. I am also the author of an Instructor’s manual for the book and I maintain the associated web site. The website receives an average of 43 hits per day.
- I maintain the electronic “Time Series Data Library” on the world-wide web. This library includes over 800 data sets for students to use in projects. It has become well-known internationally and is accessed by students and researchers around the world. The web site receives an average of 56 hits per day.
- In 2000–2001, I developed a new forecasting Excel add-in in conjunction with Assoc. Prof. Ralph Snyder. It is designed for teaching forecasting to business students. We also sell it commercially.

Subjects taught at Monash University: 1995–2003.

- **†*Quantitative Business Research Methods** (2002–2003)
DBA core subject.
2002: 15 students; 2003: 12 students.
- **Measurement of Organizational Performance** (2001)
MBA core subject.
Taught jointly with Gerrie Roberts.
approximately 40 students.
- **Applied forecasting for business and economics** (1999–2001).
2nd year subject for Economics and Commerce students.
Taught jointly with Assoc. Prof. Ralph Snyder.
70–120 students per year.
- **Business and Economic Statistics** (1999–2001).
1st year subject for Economics and Commerce students.
Taught jointly with Assoc. Prof. Brett Inder.
600–700 students per year.
- **Special topics in Econometrics II** (1999–2000).
5th year subject for Economics and Commerce students.
5–6 students per year.
- **†*Nonparametric statistics** (1998–1999).
MSc and BSc (Hons) subject run under the auspices of the Key Centre for Statistical Science and attended by students from Monash, Melbourne, La Trobe and RMIT universities.
- **†Time series** (1996–1998).
3rd year subject for Science students.
- **†*Methods of Statistics** (1997–1998).
2nd year subject for Science students.
- **†*Computer intensive methods in Statistics** (1995–1997).
4th year subject for Science students.
- **Statistical methods** (1995–1997)
1st year subject for Science students.
- **†Forecasting** (1992–1997).
MSc and BSc (Hons) subject run under the auspices of the Key Centre for Statistical Science and attended by students from Monash, Melbourne, La Trobe and RMIT universities.

* indicates a subject I initiated and designed.
† indicates a subject I coordinated.

Consulting

- Since 1986, I have produced 85 written reports for clients and worked with well over 200 different clients. A list of these reports is given on pages 12–15. I have worked with clients in Australia, the United States and India. Within Australia, I have worked with clients in Adelaide, Melbourne and Sydney.
- Three times I have provided expert witness in litigation cases.
- I have taught the following fee-paying short courses/workshops for people in business, industry and science. (I also jointly organized those marked with an asterisk.)
1989–1995 *Forecasting for business and industry
1993 Statistics for meteorologists

1994	*Data visualization and effective graphics
1995	*Modern methods in applied statistics
1995–1996	Survey and questionnaire design
1996	Introduction to statistical analysis
1996–1997	Forecasting using SAS/ETS software
1997	Using the internet for statistics
1998,2003	*Introduction to time series and forecasting.
2000	*Statistics for research students
2000	Understanding statistics in optometry

Other professional activities

Outreach

- In 1995, I initiated an annual workshop on Modern methods in Applied Statistics under the auspices of the Statistical Society of Australia. This has become a popular means of professional development amongst applied statisticians in Victoria. I was a guest speaker at the workshop in 1995, 1997 and 1998.

Public relations

- Spoke to Year 10 class at Ringwood Secondary College about mathematical careers in business and economics. 2000.
- Spoke to Grades 1–3 at Heathmont East Primary School about the work of a mathematician. 1999 and 2000.
- Spoke to Year 11–12 at Wesley College, Prahran, about studying Business and Economics at Monash University. 1999.

Committees

- Co-Chair, program committee, International Symposium on Forecasting, July 2004. To be held in Sydney.
- Member, organizing committee, International Symposium on Forecasting, July 2004. To be held in Sydney.
- Member of Scaling committee of Victorian Tertiary Admissions Centre, 1994–. (This committee is responsible for scaling VCE marks and the algorithm for producing a tertiary entrance rank (ENTER) for each student.)
- Member of Scientific Program Advisory Group of the Statistical Society of Australia, 2001–. (This committee advises the SSA on the scientific program at the biennial conferences.)
- Member of Monash University Admissions committee, 1995–. (I have advised the university administration on statistical issues associated with admission and ENTERs while on this committee.)
- Member of Science Faculty Board, Monash University, 2000–.
- Member of CAT-setting committee for VCE study Further Mathematics, 1997–1998.
- Central Council member, Statistical Society of Australia, 1993–1996.

List of Publications

Refereed articles or chapters

- 1 SNYDER, R.D., KOEHLER, A.B., HYNDMAN, R.J., and ORD, J.K. (2003) Exponential smoothing for inventory control: mean and variances of lead-time demand. *European Journal of Operational Research*. To appear.
- 2 HALL, P.G., AND HYNDMAN, R.J. (2003) An improved method for bandwidth selection when estimating ROC curves. *Statistics and Probability Letters*, **64**, 181–189.
- 3 RATEAU, F., LAUMONIER, B., and HYNDMAN, R.J. (2003) Normative data for the test of visual analysis skills on an Australian population. *Optometry and Vision Science*. **80**(6), 431–436.
- 4 HYNDMAN, R.J., and BILLAH, B. (2003) Unmasking the Theta method. *International J. Forecasting*, **19**, 287–290.
- 5 CAI, T., HYNDMAN, R.J., and WAND, M.P. (2002) Mixed model-based hazard estimation. *J. Computational and Graphical Statistics*, **11**(4), 784–798.
- 6 HYNDMAN, R.J., KOEHLER, A.B., SNYDER, R.D., GROSE, S. (2002) A state space framework for automatic forecasting using exponential smoothing methods. *International J. Forecasting*, **18**(3), 439–454.
- 7 HYNDMAN, R.J., and YAO, Q. (2002) Nonparametric estimation and symmetry tests for conditional density functions. *J. Nonparametric Statistics*, **14**(3), 259–278.
- 8 RACINE, J., and HYNDMAN, R.J. (2002) Using R to teach econometrics. *J. Applied Econometrics*. **17**(2), 149–174.
- 9 BASHTANNYK, D.M., and HYNDMAN, R.J. (2001) Bandwidth selection for kernel conditional density estimation. *Computat. Statist. and Data Anal.*, **36**(3), 279–298.
- 10 ERBAS, B., and HYNDMAN, R.J. (2001) Data visualization for time series in environmental epidemiology. *J. Epidemiology and Biostatistics*, **6**(6), 433–443.
- 11 HYNDMAN, R.J. (2001) “It’s time to move from ‘what’ to ‘why’—comments on the M3-competition”. *International J. Forecasting*, **17**(4), 567–570.
- 12 PREDAVEC, M., KREBS, C.J., DANELL, K., and HYNDMAN, R.J. (2001) Cycles and synchrony in the collared lemming (*Dicrostonyx groenlandicus*) in Arctic North America. *Oecologia*, **126**, 216–224.
- 13 FRACCARO, R., HYNDMAN, R.J., and VEEVERS, A. (2000) Residual diagnostic plots for model mis-specification in time series regression. *Australian and New Zealand J. Statistics*. **42** (4), 463–477.
- 14 GRUNWALD, G.K., HYNDMAN, R.J., TEDESCO, L.M., and TWEEDIE, R.L. (2000) Non-Gaussian conditional linear AR(1) models. *Australian and New Zealand J. Statistics*. **42** (4), 479–495.
- 15 HYNDMAN, R.J., and GRUNWALD, G.K. (2000) Generalized additive modelling of mixed distribution Markov models with application to Melbourne’s rainfall. *Australian and New Zealand J. Statistics*. **42** (2), 145–158.
- 16 HYNDMAN, R.J. (1999) Nonparametric additive regression models for binary time series, *Proceedings, 1999 Australasian Meeting of the Econometric Society*, 7–9 July 1999, University of Technology, Sydney.
- 17 GRUNWALD, G.K. and HYNDMAN, R.J. (1998) Smoothing non-Gaussian time series with autoregressive structure, *Computat. Statist. and Data Anal.*, **28**, 171–191.
- 18 GRUNWALD, G.K., HAMZA, K. and HYNDMAN, R.J. (1997) Some properties and generalizations of Bayesian time series models, *J. Roy. Statist. Soc. B*, **59**, 615–626.
- 19 HYNDMAN, R.J. and WAND, M.P. (1997) Non-parametric autocovariance estimation, *Aust. J. Stat.*, **39**, 313–324.
- 20 LAJBCYJIER, P., FLITMAN, A., SWAN, A. and HYNDMAN, R. (1997) The pricing and trading of options using a hybrid neural network model with historical volatility, *NeuroVeSt Journal*, **5**, 27–41.
- 21 HYNDMAN, R.J. (1996) Computing and graphing highest density regions, *Amer. Statist.*, **50**, 120–126.
- 22 HYNDMAN, R.J., BASHTANNYK, D.M. and GRUNWALD, G.K. (1996) Estimating and visualizing conditional densities, *J. Comput. Graph. Stat.*, **5** (4), 315–336.

- 23 HYNDMAN, R.J. and FAN, Y. (1996) Sample quantiles in statistical packages, *Amer. Statist.*, **50**, 361–365.
- 24 AXFORD, R., GRUNWALD, G. and HYNDMAN, R. (1995) “The use of information technology in the conduct of research”, Invited chapter in *Health informatics: an overview*, (ed. Hovenga, Kidd, Cesnik).
- 25 HYNDMAN, R.J. (1995) Highest density forecast regions for non-linear and non-normal time series models, *J. Forecasting*, **14**, 431–441.
- 26 HYNDMAN, R.J. (1994) Approximations and boundary conditions for continuous time threshold autoregressive processes, *J. App. Probability*, **31**, 1103–1109.
- 27 HYNDMAN, R.J. (1993) Yule–Walker estimates for continuous-time autoregressive models, *J. Time Series Anal.*, **14**, 281–296.
- 28 BROCKWELL, P.J. and HYNDMAN, R.J. (1992) On continuous time threshold autoregression, *Int. J. Forecasting*, **8**, 157–173.
- 29 BROCKWELL, P.J., HYNDMAN, R.J. and GRUNWALD, G.K. (1991) Continuous time threshold autoregressive models, *Statistica Sinica*, **1**, 401–410.
- 7 HYNDMAN, R.J., KOEHLER, A.B., ORD, J.K., and SNYDER, R.D. (2001) Prediction intervals for exponential smoothing state space models.
- 8 ERBAS, B., and HYNDMAN, R.J. (2001) “Statistical methodological issues in studies of air pollution and respiratory disease”. Proceedings of 16th International Workshop on Statistical Modelling, Odense, Denmark. July, 2001.
- 9 ERBAS, B., and HYNDMAN, R.J. (2000) Seasonal adjustment methods for the analysis of respiratory disease in environmental epidemiology.
- 10 ERBAS, B., and HYNDMAN, R.J. (2000) The effect of air pollution & climate on hospital admissions for chronic obstructive airways disease: a non-parametric alternative.
- 11 GRUNWALD, G.K., HYNDMAN, R.J., and TEDESCO, L.M. (1996) A unified view of linear AR(1) models, Working paper, Department of Statistics, University of Melbourne.
- 12 HYNDMAN, R.J. (1995) The problem with Sturges’ rule for constructing histograms.

Unpublished research papers

- 1 SMITH, L., HYNDMAN, R.J., and WOOD, S.N. (2003) Spline interpolation for demographic variables: the monotonicity problem.
- 2 HALL, P.G., HYNDMAN, R.J., and FAN, Y. (2003) Nonparametric confidence intervals for receiver operating characteristic curves.
- 3 HYNDMAN, R.J., AKRAM, MD., and ARCHIBALD, B. (2003) The admissible parameter space for exponential smoothing models.
- 4 BILLAH, B., HYNDMAN, R.J., and KOEHLER, A. (2003) Empirical information criteria for time series forecasting model selection.
- 5 SHENSTONE, L., and HYNDMAN, R.J. (2003) Stochastic models underlying Croston’s method for intermittent demand forecasting.
- 6 HYNDMAN, R.J., KING, M.L., PITRUN, I. AND BILLAH, B. (2002) Local linear forecasts using cubic smoothing splines.

Monographs

- 1 MAKRIDAKIS, S., WHEELWRIGHT, S.C., and HYNDMAN, R.J. (1998) *Forecasting: methods and applications*, 3rd ed., John Wiley & Sons: New York.
- 2 MAKRIDAKIS, S., WHEELWRIGHT, S.C., and HYNDMAN, R.J. (1998) *Forecasting: methods and applications: instructor’s manual*, 3rd ed., John Wiley & Sons: New York.
- 3 BROCKWELL, P.J., DAVIS, R.A. and HYNDMAN, R.J. (1991) *ITSM: an interactive time series modelling package for the PC*, Springer-Verlag: New York.
- 4 BROCKWELL, P.J., DAVIS, R.A., and HYNDMAN, R.J. (1994) *ITSM for Windows: a users guide to time series modelling and forecasting*, Springer-Verlag: New York.

Other statistical publications

- 1 HYNDMAN, R.J. (2001) Entries for the “Informed Student Guide to the Management Sciences”, ed. Robert Flood, Thomson Learning.

- ARIMA processes
 - Box-Jenkins modelling
 - Kalman filter
- 2 HYNDMAN, R.J. (2000) Book review of "Nonparametric econometrics" by A. Pagan and A. Ullah, (Cambridge University Press, 1999), *Economic Record*, To appear.
 - 3 HYNDMAN, R.J. (1999) Book review of "Chance encounters: a first course in data analysis and inference" by C.J. Wild and G.A.F. Seber. (Wiley, 2000), *Australian and New Zealand Journal of Statistics*, **41**(4) 494–495.
 - 4 HYNDMAN, R.J. (1999) Book review of "Statistically speaking: a dictionary of quotations" compiled and arranged by Gaither and Cavazos-Gaither (Institute of Physics, 1996), *Australian and New Zealand Journal of Statistics*, **41**(3), 380–382.
 - 5 HYNDMAN, R.J. (1999) Book review of "A primer of Mathematical Writing" by Steven G. Krantz (AMS, 1997) and "Handbook of Writing for the Mathematical Sciences" by Nicholas J. Higham (SIAM, 2nd ed., 1998), *Australian and New Zealand Journal of Statistics*, **41**(2), 252–253.
 - 6 HYNDMAN, R.J. (1998) Book review of "Leading personalities in Statistical Science" edited by Kotz and Johnson (Wiley, 1998), *Australian and New Zealand Journal of Statistics*, **40**(3), 382–383.
 - 7 HYNDMAN, R.J. (1998) Book review of "Smoothing methods in Statistics" by Simonoff (Springer, 1996), *Australian and New Zealand Journal of Statistics*, **40**(2), 251–252.
 - 8 HYNDMAN, R.J. (1996) Book review of "Kernel smoothing" by Wand and Jones (Wiley, 1995), *J. Applied Statistics*, **23**, 677–678.
 - 9 HYNDMAN, R.J. (1992) *Continuous-time threshold autoregressive modelling*. Ph.D. thesis, The University of Melbourne.
 - 10 HYNDMAN, R.J. (1987) Calculating the odds, In *Faces of gambling*, Proceedings of the second national conference of the National Association for Gambling Studies (1986), ed. Michael Walker. pp.139–152.
- ### Statistical consulting reports
- 1 HYNDMAN, R.J. (2003) *Statistical forecasting of weekly e-TAG failures*, Report for Transurban.
 - 2 HYNDMAN, R.J., and AKRAM, MD. (2003) *Price optimization: elasticity modelling*, Report for Optimal Decisions Group.
 - 3 HYNDMAN, R.J. (2003) *Uncertainty in the Dynamic Underkeel Clearance System*, Report for the Victorian Channels Authority.
 - 4 HYNDMAN, R.J., and SHENSTONE, L. (2003) *Analysis of the RTS allocations formula*, Report for the Monash Research Graduate School.
 - 5 HYNDMAN, R.J., and AKRAM, MD. (2003) *Evaluation of an investment risk profiler*, Report for InvestorWeb Limited.
 - 6 HYNDMAN, R.J., and SHENSTONE, L. (2002) *Statistical analysis of postgraduate completion rates: 1992 cohort*, Report for Monash Research Graduate School.
 - 7 FORBES, C.S., GORDON-BROWN, L., and HYNDMAN, R.J. (2002) *Expert review of emissions projections methodology*, Report for Australian Greenhouse Office.
 - 8 HYNDMAN, R.J., GORDON-BROWN, L., AKRAM, MD., and BROWN, P. (2002) *Review of current arrangements for producing PBS forward estimates*, Report for Department of Health and Ageing.
 - 9 HYNDMAN, R.J., and SHENSTONE, L. (2001) *Statistical analysis of postgraduate completions*, Report for Monash Research Graduate School.
 - 10 HYNDMAN, R.J., and ABYEWARDENE, K. (2001) *Evaluation of injury management pilots*, Report for WorkCover NSW.
 - 11 FORBES, C.S., and HYNDMAN, R.J. (2001) *Nonparametric measures of association for questionnaire data*, Report for GAPbusters Pty Ltd.
 - 12 HYNDMAN, R.J., FORBES, C.S., and DE SILVA, A. (2001) *Reducing the "Learning Improves Networking Communities" questionnaire*, Report for Faculty of Education, Monash University.
 - 13 AKRAM, M., FRY, T.R.L., and HYNDMAN, R.J. (2001) *An evaluation of the InvestorWeb*

- Limited Investment Risk Analyser*, Report for InvestorWeb Limited.
- 14 HYNDMAN, R.J. (2001) *Analysis of visual training data*, Report for John Palassis.
 - 15 HYNDMAN, R.J. and DE SILVA, A. (2001) *Student perception of education effectiveness in Swaziland*, Report for Monash Research Graduate School.
 - 16 HYNDMAN, R.J. (2001) *Analysis of GCE and JC data for Swaziland students: 1997–2000*, Report for Monash Research Graduate School.
 - 17 HYNDMAN, R.J. and ABYEWARDENE, K. (2001) *Comments on the Injury Management Pilot Cost/Benefit Analysis*, Report for WorkCover NSW.
 - 18 HYNDMAN, R.J. (2001) *Comments on the evaluation of injury management pilot programs*, Report for WorkCover NSW.
 - 19 HYNDMAN, R.J. (2001) *Catholic Church Life Survey 2001: sampling design*, Report for Australian Catholic Bishops Conference.
 - 20 GROSE, S. and HYNDMAN, R.J. (2000) *Forecasting monthly electricity demand*, Report for TXU Australia Pty Ltd.
 - 21 HYNDMAN, R.J. (2000) *Analysis of normative data from the recognition subtest in paediatric optometry*, Report for Howard, Croucher and Associates.
 - 22 HYNDMAN, R.J., and FRY, T.R.L. (2000) *Brand and reputation model for key metrics*, Report for Telstra Australia.
 - 23 STRACHAN, R., and HYNDMAN, R.J. (2000) *Forecasting total telecommunications market in Australia: retain revenue forecasts on a product cluster basis*, Report for Telstra Australia.
 - 24 ABYEWARDENE, K., and HYNDMAN, R.J. (2000) *Forecasting total telecommunications market in Australia: Telstra's market share*, Report for Telstra Australia.
 - 25 HYNDMAN, R.J. (1999) *Review of personal loan application decision model*, Report for National Australia Bank.
 - 26 HYNDMAN, R.J. (1999) *Analysis of electrode readings on an 18-pier bridge*, Report for Centre for Advanced Materials Technology.
 - 27 HYNDMAN, R.J. (1998) *Unit cost analysis for disability services*, Monash University Statistical Consulting Service.
 - 28 HYNDMAN, R.J. (1998) *C Code for exponential forecasting*, Data Analysis and Statistical Services.
 - 29 HYNDMAN, R.J. (1998) *Comments on the application by the MCC for certification of an enterprise agreement*, SPICE Consulting.
 - 30 HYNDMAN, R.J. (1997) *Review of CQU report on Work Related Expense audit*, Data Analysis and Statistical Services.
 - 31 HYNDMAN, R.J. (1997) *Comments on alleged anomalies in the Work Related Expenses audit program*, Data Analysis and Statistical Services.
 - 32 HYNDMAN, R.J. (1997) *Formulae for use in analyzing Life Survey data*, Data Analysis and Statistical Services.
 - 33 MCCLOUD, P.I., HYNDMAN, R.J., and ARACHIGE, D. (1997) *Immunogenicity and clinical tolerability of FLUVAX inactivated influenza vaccine (split virion) on adults*, Monash University Statistical Consulting Service.
 - 34 MCCLOUD, P.I., HYNDMAN, R.J., and ARACHIGE, D. (1997) *Immunogenicity and clinical tolerability of FLUVAX inactivated influenza vaccine (split virion) on elderly adults*, Monash University Statistical Consulting Service.
 - 35 ARACHIGE, D., and HYNDMAN, R.J. (1997) *A double blind, placebo controlled study, comparing the efficacy of a garlic-inulin supplement in the treatment of patients with mild to moderate hypercholesterolaemia*, Monash University Statistical Consulting Service.
 - 36 HYNDMAN, R.J. (1996) *Work done for Olympic Amusements Pty Ltd*, Data Analysis and Statistical Services.
 - 37 HYNDMAN, R.J. and ARACHIGE, D. (1996) *Risk factors for melanoma*, Monash University Statistical Consulting Service.
 - 38 HYNDMAN, R.J. and ARACHIGE, D. (1996) *Tax agent program for individual tax payers: review of claims on work-related expenses*, Monash University Statistical Consulting Service.

- 39 HYNDMAN, R.J. and NGUYEN, T. (1996) *The effect of bird mix on growers*, Monash University Statistical Consulting Service.
- 40 HYNDMAN, R.J., L. THOMAS, and MCCLOUD, P.I. (1996) *Interim report for microbiological diagnostic unit*, Department of Microbiology, University of Melbourne, Monash University Statistical Consulting Service.
- 41 HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: blood-pack needle protector*, Monash University Statistical Consulting Service.
- 42 HYNDMAN, I.T. and HYNDMAN, R.J. (1995) *Palliative Care Case Finding Survey*, SPICE Management Consulting Services.
- 43 HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: AV fistula needle protector in apheresis units of BTS*, Monash University Statistical Consulting Service.
- 44 HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: AV fistula needle protector in haemodialysis units*, Monash University Statistical Consulting Service.
- 45 HYNDMAN, R.J. (1994) *Statistical Modelling of Sale Values of ORIX Vehicles*, Data Analysis and Statistical Services.
- 46 HYNDMAN, R.J. (1993) *Report No. 326, Some Notes on the Implementation of Airline Passenger Traffic Forecasting*, Statistical Consulting Centre, University of Melbourne.
- 47 HYNDMAN, R.J. (1993) *Report No. 323, A Time Series Modelling Approach to Forecasting Airline Passenger Traffic*, Statistical Consulting Centre, University of Melbourne.
- 48 HYNDMAN, R.J. (1992) *Report No. 308, Evaluation of a Random Breath Testing Initiative in Victoria: 1990*, Statistical Consulting Centre, University of Melbourne.
- 49 HYNDMAN, R.J. (1992) *Report No. 292, Comments on Linear Regression and the Variance Ratio*, Statistical Consulting Centre, University of Melbourne.
- 50 HYNDMAN, R.J. (1992) *Report No. 282, Monthly Reporting of Electricity Sales and Revenue and End-of-Year Projections*, Statistical Consulting Centre, University of Melbourne.
- 51 HYNDMAN, R.J. (1992) *Report No. 281, Assessing the Classroom Performance of NESB Teachers*, Statistical Consulting Centre, University of Melbourne.
- 52 HYNDMAN, R.J. (1991) *The MEPCA Statistical System*, Report for Mid Eastern Palliative Care Association.
- 53 HYNDMAN, R.J. (1991) *Report No. 277, Comments on the Systat-Statsoft Debate*, Statistical Consulting Centre, University of Melbourne.
- 54 HYNDMAN, R.J. (1990) *Report No. 227, Forecasting Passenger Motor Vehicle Sales in Australia*, Statistical Consulting Centre, University of Melbourne.
- 55 HYNDMAN, R.J. (1990) *Report No. 224, Passenger Motor Vehicle Sales in Australia*, Statistical Consulting Centre, University of Melbourne.
- 56 HYNDMAN, R.J. (1990) *Report No. 209, FOREX II*, Statistical Consulting Centre, University of Melbourne.
- 57 HYNDMAN, R.J. (1990) *Report No. 206, A Time Series Analysis of Monthly and Yearly Gold Price Data*, Statistical Consulting Centre, University of Melbourne.
- 58 HYNDMAN, R.J. (1990) *Data Collection*, Report for Mid Eastern Palliative Care Association.
- 59 HYNDMAN, R.J. (1989) *Statistical Reporting*, Report for Mid Eastern Palliative Care Association.
- 60 HYNDMAN, R.J. (1989) *Report No. 195, Further Notes on the Statistical Analysis of Gold Prices*, Statistical Consulting Centre, University of Melbourne.
- 61 HYNDMAN, R.J. (1989) *Report No. 192, Further Descriptive Statistics of Gold Prices*, Statistical Consulting Centre, University of Melbourne.
- 62 HYNDMAN, R.J. (1989) *Report No. 189, A Time Series Analysis of Gold Prices*, Statistical Consulting Centre, University of Melbourne.
- 63 DICKINSON, T. and HYNDMAN, R. (1989) *Report No. 188, Modelling Taxation Accounts II*, Statistical Consulting Centre, University of Melbourne.

- 64 HYNDMAN, R.J. and JARRETT, R.G. (1989) *Report No. 182, Survey of Professional and Staff Development Needs*, Statistical Consulting Centre, University of Melbourne.
 - 65 SHARPE, K. and HYNDMAN, R.J. (1989) *Report No. 180, Evaluation of NIR Machines for Measuring the Protein Content of Wheat — 88–89 Field Trials*, Statistical Consulting Centre, University of Melbourne.
 - 66 HYNDMAN, R.J. (1989) *Report No. 167, FOREX: A Computer Program for Modelling Financial Market Behaviour*, Statistical Consulting Centre, University of Melbourne.
 - 67 HYNDMAN, R.J. and JARRETT, R.G. (1989) *Report No. 155, Modelling Financial Market Behaviour*, Statistical Consulting Centre, University of Melbourne.
 - 68 JARRETT, R.G. and HYNDMAN, R.J. (1989) *Report No. 154, Maternal Temperament and Coping Scale*, Statistical Consulting Centre, University of Melbourne.
 - 69 JARRETT, R.G. and HYNDMAN, R.J. (1989) *Report No. 148, Personnel Industry Survey*, Statistical Consulting Centre, University of Melbourne.
 - 70 HYNDMAN, R.J. (1988) *Local Call Holding Times*, Report for Telecom Australia.
 - 71 HYNDMAN, R.J. (1988) *A Statistical Analysis of Conversation Times for Local Calls*, Report for Telecom Australia.
 - 72 HYNDMAN, R.J. and SHARPE, K. (1987) *Report No. 101, Draw Poker X*, Statistical Consulting Centre, University of Melbourne.
 - 73 HYNDMAN, R.J. and SHARPE, K. (1987) *Report No. 100, Draw Poker IX*, Statistical Consulting Centre, University of Melbourne.
 - 74 HYNDMAN, R.J. and BROWN, T.C. (1987) *Report No. 83, Comments on Draw Poker VII*, Statistical Consulting Centre, University of Melbourne.
 - 75 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 69, Five Ways*, Statistical Consulting Centre, University of Melbourne.
 - 76 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 68, Super–8–Ways (with a joker)*, Statistical Consulting Centre, University of Melbourne.
 - 77 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 61, Keno II*, Statistical Consulting Centre, University of Melbourne.
 - 78 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 59, Super–8–Ways*, Statistical Consulting Centre, University of Melbourne.
 - 79 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 58, Coin Toss II*, Statistical Consulting Centre, University of Melbourne.
 - 80 HYNDMAN, R.J. (1986) *Report No. 52, Comments on Draw Poker VII*, Statistical Consulting Centre, University of Melbourne.
 - 81 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 51, 20/22 Keno*, Statistical Consulting Centre, University of Melbourne.
 - 82 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 50, Coin Toss*, Statistical Consulting Centre, University of Melbourne.
 - 83 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 49, Classical Blackjack*, Statistical Consulting Centre, University of Melbourne.
 - 84 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 46, Fruit Poker*, Statistical Consulting Centre, University of Melbourne.
 - 85 BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 44, Stud Poker*, Statistical Consulting Centre, University of Melbourne.
- Non-statistical books**
- 1 HYNDMAN, R.J. (2003) *Bible teaching on managing your money*, Printland publishers. Translated into various Indian languages..
 - 2 HYNDMAN, R.J. (2002) *The Way of Life*, Bethel Publications.
 - 3 HYNDMAN, R.J. (2000) *The Christadelphians: introducing a Bible-based community*, Printland publishers. (Previous edition, Bethel publications, 1991). Translated into more than a dozen languages.
 - 4 HYNDMAN, R.J. (2000) *The Story of the Bible*, Bethel Publications. (previous edition, 1998).
 - 5 HYNDMAN, R.J. (1998) *Learn to read the Bible effectively*, Bethel Publications. (previous editions, 1989, 1992, 1996). Also available in Hungarian..

- 6 HYNDMAN, R.J. (ed) (1997) *Taking control: a guide for youth*, Melbourne Christadelphian Sunday Schools. (Spanish version published by Los Angeles Christadelphians.).
- 7 HYNDMAN, R.J. (1991) *The Times: a chronology of the Bible*, 2nd ed., Bethel Publications. (1st edition, 1989).