
Jonathan Dark, Ph.D.
Senior Lecturer (Level C)
Finance
Faculty of Business and Economics
Citizenship: Australia
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Academic Background

Ph.D. University of Newcastle, Economics, 2004.

B.Ec.(Hons.) University of Newcastle, 1999.

B.Com. University of Newcastle, 1997.

WORK EXPERIENCE

Work Experience

Academic

Senior Lecturer, University of Melbourne (2008 - Present), Melbourne, Australia.

Lecturer, Monash University (2004 - 2007), Melbourne, Australia.

Associate Lecturer, University of Newcastle (2003), Newcastle, Australia.

Non-Academic

Specialist Econometric Advisor, Department of Treasury and Finance, Victoria (2019 - Present), Melbourne, Australia.

Accountant, PriceWaterhouseCoopers (1992 - 2000), Newcastle, Australia.

TEACHING

Courses Taught

Derivative Securities (3rd year and masters), Numerical Techniques in Finance, Sustainable investment, Essentials of Sustainable Investment, Financial spreadsheeting, Sustainable Commerce.

INTELLECTUAL CONTRIBUTIONS

Refereed Articles: Economics and Finance

Dark, J. (2024). An adaptive long memory conditional correlation model. *Journal of Empirical Finance*, forthcoming.

Dark, J., Gao, X., van der Heijden, T., & Nardari, F. (2022). Forecasting variance swap payoffs. *Journal of Futures Markets*, 42(12), 2135-2164.

Dark, J. (2021). The lead of oil price rises on US equity market beliefs and preferences. *Journal of Futures Markets*, 41 (11), 1861-1887.

Dark, J. (2018). Multivariate models with long memory dependence in conditional correlation and volatility. *Journal of Empirical Finance*, 48, 162-180, doi: 10.1016/j.jempfin.2018.06.011.

- Dark, J. (2015). Futures hedging with Markov switching vector error correction FIEGARCH and FIAPARCH. *Journal of Banking & Finance*, 61 (S2), S269-S285, doi: 10.1016/j.jbankfin.2015.08.017.
- Opie, W., & Dark, J. (2015). Currency overlay for global equity portfolios: Cross-hedging and base currency. *Journal of Futures Markets*, 35, 186-200, doi: 10.1002/fut.21662.
- Dark, J. (2012). Will tighter futures price limits reduce hedge effectiveness? *Journal of Banking & Finance*, 36 (10), 2717-2728, doi: 10.1016/j.jbankfin.2011.07.020.
- Brown, C., Dark, J., & Zhang, W. (2012). Dynamic currency hedging for international stock portfolios. *Review of Futures Markets*, 2012 (4), 419-455.
- Maharaj, E. A., Galagedera, D. U.A., & Dark, J. (2011). A comparison of developed and emerging equity market return volatility at different time scales. *Managerial Finance*, 37 (10), 940-952, doi: 10.1108/03074351111161592.
- Raghavan, M., Dark, J., & Maharaj, E. A. (2010). Impact of capital control measures on the Malaysian stock market: A multiresolution analysis. *International Journal of Managerial Finance*, 6 (2), 116-127, doi: 10.1108/17439131011032040.
- Dark, J., Qu, N., & Zhang, X. (2010). Influence diagnostics for multivariate GARCH processes. *Journal of Time Series Analysis*, 31 (4), 278-291, doi: 10.1111/j.1467-9892.2010.00662.x.
- Brown, C., Dark, J., & Davis, K. (2010). Exchange traded contracts for difference: Design, pricing, and effects. *Journal of Futures Markets*, 30 (12), 1108-1149, doi: 10.1002/fut.20475.
- Dark, J. G. (2010). Estimation of time varying skewness and kurtosis with an application to Value at Risk. *Studies in Nonlinear Dynamics and Econometrics*, 14 (2), 1-48, doi: 10.2202/1558-3708.1720.
- Maharaj, E. A., Moosa, I., Dark, J., & Silvapulle, P. (2008). Wavelet estimation of asymmetric hedge ratios: Does econometric sophistication boost hedging effectiveness? *International Journal of Business and Economics*, 7 (3), 213-230.
- Dark, J. (2007). Basis convergence and long memory in volatility when dynamic hedging with futures. *Journal of Financial and Quantitative Analysis*, 42 (4), 1021-1040.
- Dark, J. (2005). A Critique of Minimum Variance hedging. *Accounting Research Journal*, 18 (1), 40-49.

Refereed articles: Clinical science

- D'Souza, B., Slack, T., Wong, S. W., Lam, F., Muhlmann, M., Dark, J., Koestenbauer, J., & Newstead, G. (2017). Randomized controlled trial of probiotics after colonoscopy. *ANZ Journal of Surgery*, 87 (9), E65-E69, doi: 10.1111/ans.13225.
- Mirbagheri, N., Kumar, B., Deb, S., Poh, B. R., Dark, J. G., Leow, C. C., & Teoh, W. M. K. (2014). Lymph node status as a prognostic indicator after preoperative neoadjuvant chemoradiotherapy of rectal cancer. *Colorectal Disease*, 16 (10), O339-O346, doi: 10.1111/codi.12682.
- Mirbagheri, N., Dark, J., & Skinner, S. (2013). Factors predicting stomal wound closure infection rates. *Techniques in Coloproctology*, 17 (2), 215-220, doi: 10.1007/s10151-012-0908-4.
- Mirbagheri, N., Dark, J. G., & Watters, D. A.K. (2010). How do patients aged 85 and older fare with abdominal surgery? *Journal of the American Geriatrics Society*, 58 (1), 104-108, doi: 10.1111/j.1532-5415.2009.02612.x.

Other publications

- McClean H. and Dark, J. (2023). Prediction intervals for model combinations of direct and iterated forecasts with an application to consumption forecasting, *forthcoming, Victoria's Economic Bulletin*
- McCorkell, J. and Dark, J. (2022), An application of the Flexible Fourier Form to the Australian housing market, *Victoria's Economic Bulletin*, 6(1), June 2022, 1-13.
- Brugler, J. and Dark, J. (2020), The Impact of COVID-19 on Australia's Housing Market, *Pursuit*, May.

Presentations (2015-2022)

International

2023. *An adaptive long memory conditional correlation model*. International Association for Applied Econometrics (IAAE) Conference, Oslo, Norway.

2019. *The relation between oil prices and equity market beliefs and preferences*. International Association for Applied Econometrics (IAAE) Conference, Nicosia, Cyprus.

2018. *Multivariate models with long memory in volatility and conditional correlation*. Econometric Society Australasian Meeting (ESAM), Auckland, New Zealand.

2016. *A multivariate dynamic conditional correlation model with long memory dependence and asymmetries*. New Zealand Finance Colloquium, Queenstown, New Zealand.

National

2023. *Prediction intervals for model combinations of direct and iterated forecasts with an application to consumption forecasting*, WEAI, Melbourne.

2020. *The underdamped oscillation MIDAS model*. Australia New Zealand Econometrics Study Group (ANZESG) Conference, Monash University.

2019. *The underdamped oscillation MIDAS model*. Time Series and Forecasting Conference, Sydney.

2018. *The state dependent relation between crude oil prices and S&P500 options*. Australasian Finance & Banking Conference, Sydney, Australia.

2015. *A multivariate dynamic conditional correlation model with long memory dependence and asymmetries*. Invited presentation at Newcastle Business School, Newcastle.

Grants

2010: Dark, J. The Joint Dynamics of crude Oil and Natural gas Futures with an Application to value at Risk, PRI-Australian Centre for Financial Studies.

Working Papers

Dark, J and Harris, D. The Underdamped oscillation MIDAS model, reject and re-submit, *The Journal of Applied Econometrics*

Dark, J., Perkins-Kirkpatrick, S., and Neme, J. Climate Value at Risk

SERVICE

Service to the Institution

Faculty Assignments

Mentoring Activities:

2018 – 2023: Peer Review of Teaching

Program Director:

2016 – 2023: Honours Coordinator - Finance

2011 – 2012: Joint Director Master of Commerce

Member:

2008 – 2009: Staff Equity and Diversity Committee (SEDC)

Thesis Assignments

External Thesis Examiner:

2022: Queensland University of Technology

2020: Queensland University of Technology
2016: Queensland University of Technology
2015: Macquarie University
2013: University of New South Wales

Service to the Profession

Reviewer - Grant Proposal Related to Expertise

2015, 2017, 2018, 2022, 2023: Australian Research Council (ARC).

Officer: Organization / Association

2012 – 2013: FIRN (Financial Research Network).

Other Professional Service Activities

2019 - 2023: Department of Treasury and Finance, Victoria. Industry Collaboration

2019 - 2023: JANA. Industry Collaboration

Reviewer: Ad Hoc Reviewer for a Journal

2023: Journal of Banking and Finance, Journal of Asian Economics, Journal of AIMS Mathematics

2022: Journal of Banking and Finance, American Journal of Agricultural Economics, Journal of Futures Markets, Managerial Finance.

2021: Management Science, Journal of Futures Markets, Managerial Finance

2020: Journal of Time Series Analysis, Managerial Finance, Mathematics and Computers in Simulation

2019: Studies in Nonlinear Dynamics & Econometrics, Journal of Empirical Finance, Journal of Financial Econometrics, American Journal of Agricultural Economics, Empirical Economics.

2018: Empirical Economics, Journal of Futures Markets,

2017: Empirical Economics, Journal of Futures Markets, American Journal of Agricultural Economics, Journal of Banking and Finance

2016: Journal of Banking and Finance, Australian Journal of Management.

2015: Journal of Economic Dynamics and Control.

2014: Australian Journal of Management, American Journal of Agricultural Economics.

Reviewer: Conference Paper

2023: FIRN discussant

2011 – 2016: Financial Management Association (FMA) Asian Conference.

2010: Financial Management Association (FMA) Asian Conference.

Honors, Awards, and Scholarships

Research

2012: Certificate for Research Excellence, Faculty of Business & Economics, University of Melbourne.