André Portela Santos

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Appointments

2022–present	Assistant Professor, CUNEF Universidad.
2020–2022	Turing Fellow, The Alan Turing Institute, UK.
2020–2022	Assistant Professor, University of Edinburgh Business School, UK.
2019–2020	Senior research fellow, UC3M-Santander Big Data Institute, Universidad Carlos III de Madrid, Spain.
2013–2019	Associate Professor (with tenure), Universidade Federal de Santa Catarina, Brazil.
2011–2013	Assistant Professor, Universidade Federal de Santa Catarina, Brazil.

ANECA Acreditations

- Accredited Associate Professor (Profesor Titular)
- Two six-year research periods (sexenios)

Education

2010	Ph.D. in Business Economics and Quantitative Methods, Universidad Carlos III de Madrid, Spain. Awarded *Summa Cum Laude* by unanimity.
2008	M.Sc. in Business and Quantitative Methods, Universidad Carlos III de Madrid, Spain.
2005	M.Sc. in Economics, Universidade Federal de Santa Catarina, Brazil.
2002	BA in Economics, Universidade Federal de Santa Catarina, Brazil.

Working papers and working in progress

- Forecasting the Yield Curve: The Role of Additional and Time-Varying Decay Parameters, Conditional Heteroscedasticity, and Macro-Economic Factors. **R&R Journal of Time Series Analysis**. With J. Caldeira, W. Cordeiro, and E. Ruiz.
  https://dx.doi.org/10.2139/ssrn.4527284
- Volatility Transmission in Global Energy Markets: a Bayesian Nonparametric Approach. With M. Zaharieva and A. Virbickaité.
- Let the machines speak: A comparison of variable selection methods for portfolio choice problems. with G. Moura and H. Torrent.

Publications

[27] Machine Learning and Fund Characteristics Help to Select Mutual Funds with Positive Alpha. **Journal of Financial Economics**, 150(3). With V. DeMiguel, J. Gil-Bazo and J. Nogales. https://doi.org/10.1016/j.jfineco.2023.103737

[26] Semiparametric Portfolios: Improving Portfolio Performance by Exploiting Non-Linearities in Firm Characteristics. **Economic Modelling**, 122, 2023. With J. Caldeira and H. Torrent. https://doi.org/10.1016/j.econmod.2023.106239

[25] Markowitz Meets Technical Analysis: Building Optimal Portfolios by Exploiting Information in Trend-Following Signals. **Finance Research Letters**, 49, 2022, with H. Torrent. https://doi.org/10.1016/j.frl.2022.103063

[24] Novel hybrid model based on echo state neural network applied to the predic-tion of stock price return volatility. **Expert Systems with Applications**, 184, 2021. With L. Coelho, V. Mariani, and G. Ribeiro. https://doi.org/10.1016/j.eswa.2021.115490

[23] Comparing high dimensional conditional covariance matrices: Implications for portfolio selection. Forthcoming, **Journal of Banking and Finance**. With G. V. Moura and E. Ruiz. https://doi.org/10.1016/j.jbankfin.2020.105882

[22] Covariance prediction in large portfolio allocation. **Econometrics**, 7(2), 2019. With C. Trucíos, M. Zevallos, L. Hotta. www.mdpi.com/2225-1146/7/2/19

[21] Lotka's law for the Brazilian scientific output published in journals. **Journal of Information Science**, 45(5), With S. da Sivla, T. Imasato, D. Borestein, M. Perlin, and R. Matsushita. https://doi.org/10.1177/0165551518801813

[20] Disentangling the role of variance and covariance information in portfolio selection problems. **Quantitative Finance**, 19(1), 2019. https://doi.org/10.1080/14697688.2018.1465197

[19] Yield curve forecast combinations based on bond portfolio performance. **Journal of Forecasting**, 31(1), 2018. With G. V. Moura, J. F. Caldeira. http://dx.doi.org/10.1002/for.2476

[18] Combining multivariate volatility forecasts: an economic-based approach. **Journal of Financial Econometrics**, 15(2), 2017. With G. V. Moura, J. F. Caldeira, and F. J. Nogales. http://doi.org/10.1093/jjfinec/nbw010

[17] Can we predict the financial markets based on Google's search queries? **Journal of Forecasting**, 36(4), 2017. With M. Perlin, J. F. Caldeira, and M. Pontuschka. http://doi/10.1002/for.2446/full

[16] Predicting the yield curve using forecast combinations. **Computational Statistics & Data Analysis**, 100, 2016. With G. V. Moura and J. F. Caldeira. http://dx.doi.org/10.1016/j.csda.2014.05.008

[15] The Brazilian scientific output published in journals: A study based on a large CV database. **Journal of Informetrics**, 11(1). 2016. With M. Perlin, S. da Silva, T. Imasato, and D. Borestein. http://dx.doi.org/10.1016/j.joi.2016.10.008

[14] Bond portfolio optimization using dynamic factor models. **Journal of Empirical Finance**, 37, 2016. With G. V. Moura and J. F. Caldeira. http://dx.doi.org/10.1016/j.jempfin.2016.03.004

[13] Hedging against embarrassment. **Journal of Economic Behavior and Organization**, 116, 2015. With M. Goulart, N. Costa Jr., and E. Andrade. http://dx.doi.org/10.1016/j.jebo.2015.04.014

[12] Measuring risk in fixed income portfolios using yield curve models. **Computational Economics**. 46(1), 2015. With G. V. Moura and J. F. Caldeira. https://doi.org/10.1007/s10614-014-9438-7

[11] Corporate profitability analysis: a novel application of paraconsistent logic. **Applied Mathematical Sciences**, 26(8), 2014. With N. da Costa Jr and R. Dill. http://dx.doi.org/10.12988/ams.2014.4113

[10] Monetary policy surprises and jumps in interest rates: Evidence from Brazil. **Journal of Economic Studies**, 42(5), 2014. With R. Meurer and D. Turatti. http://dx.doi.org/10.1108/JES-07-2014-0113

[9] Dynamic factor multivariate GARCH model. **Computational Statistics & Data Analysis**, 76, 2014. With G. V. Moura.
http://dx.doi.org/10.1016/j.csda.2012.09.010

[8] Forecasting period charter rates of VLCC tankers through neural networks: A comparison of alternative approaches. **Maritime Economics & Logistics**, 16(1), 2014. With L. N. Junkes and F. Pires Jr. https://doi.org/10.1057/mel.2013.20

[7] Psychophysiological correlates of the disposition effect. **PLOS One**, 8(1), 2013. With M. Goulart, N. Costa Jr., S. da Silva.
https://doi.org/10.1371/journal.pone.0054542

[6] Comparing univariate and multivariate models to forecast portfolio value-at-risk. **Journal of Financial Econometrics**, 11(2), 2013. With E. Ruiz and F.J. Nogales.
http://doi.org/10.1093/jjfinec/nbs015

[5] Optimal portfolios with minimum capital requirements. **Journal of Banking and Finance**, 36(7), 2012. With E. Ruiz, F.J. Nogales and D. Van Dijk.
http://dx.doi.org/10.1016/j.jbankfin.2012.03.001

[4] The market reaction to changes in the Brazilian official interest rate. **Applied Economics Letters**, 19(4), 2012. With A. Buchholz, N. Costa Jr., R. Meurer and C. Cupertino.
https://doi.org/10.1080/13504851.2011.629975

[3] A RBF neural network with GARCH errors: Application to electricity price forecasting. **Electric Power Systems Research**, 81(1), 2011. With L. S. Coelho.
http://dx.doi.org/10.1016/j.epsr.2010.07.015

[2] The performance of socially responsible mutual funds: The role of fees and management companies. **Journal of Business Ethics**, 94(2), 2010. With J. Gil-Bazo and P. Ruiz-Verdú. https://doi.org/10.1007/s10551-009-0260-4
(Awarded Honorable Mention for the 2008 Moskowitz Prize for Socially Responsible Investing)

[1] Computational intelligence approaches and linear models in case studies of forecasting exchange rates. **Expert Systems with Applications**, 33(4), 2007. With L.S. Coelho and N. Costa Jr.
http://dx.doi.org/10.1016/j.eswa.2006.07.008

Citations and H-index

- Citations (as of December 2023)
  - Google Scholar: 1528
  - Scopus: 558
- H-index (as of December 2023)
  - Google Scholar: 20
  - Scopus: 11

Referee for

Journal of Business & Economic Statistics, Management Science, Journal of Financial Econometrics, Journal of Banking & Finance, Journal of Applied Econometrics, Quantitative Finance, Journal of the Royal

Statistical Society, Computational Statistics & Data Analysis, Computational Economics, International Journal of Forecasting, Empirical Economics, Journal of Forecasting, Finance Research Letters, Econometrics and Statistics, Quarterly Journal of Economics, Journal of Business Ethics.

Conference presentations

INFORMS Annual Meeting (2021), Computational and Financial Econometrics Conference (2015, 2016, 2023), Conference on Advances in Applied Macro-Finance and Forecasting (2014), European Economic Association (2013), European Meeting of the Econometric Society (2012, 2013, 2019), European Financial Management Association (2008), Spanish Finance Association (2008), FinEML: Financial Econometrics and Machine Learning (2023), International Workshop in Financial Econometrics (2017, 2023), SoFiE Conference (2023)

Research projects: Principal investigator

[2] Project: Portfolio Selection in the Era of Big Data (2022-2027).
Funded by: Comunidad Autonoma de Madrid - Convocatoria Talento (EUR 298,000)

[1] Project: Modelling and forecasting financial returns and macroeconomic variables in data-rich environments: new methods and applications (2023-2026).
Funded by: Agencia Estatal de Investigación (EUR 19,000)

Research projects: Member of the research team

[4] Project: Predicción de series temporales no estacionarias de grandes dimensiones (2020-2023).
Funded by: Agencia Nacional de Investigación (EUR 30.008)
PI: Esther Ruiz

[3] Project: Nuevas estrategias en regresión penalizada con aplicaciones en salud, demografía y economía (2020-2023)
Funded by: Agencia Nacional de Investigación (EUR 92.807)
PI: Rosa Lillo and María Durban

[2] Project: La incertidumbre en la predicción macroeconómica y financiera: bootstrap y modelos multivariantes (2010-2013).
Funded by: Ministerio de Ciencia e Innovación (EUR 96.800)
PI: Esther Ruiz

[1] Project: Tecnicas estadisticas para datos de gran complejidad en empresa y finanzas (2009-2011)
Funded by: Ministerio de Ciencia e Innovación (EUR 61.710)
PI: Juan Romo

Graduate courses taught

- Data Analytics for Banking (Master),
- Advanced Data Modelling (Master).
- Predictive Analytics and Modelling of Data (Master).
- Business and Finance III: Risk Management in non-Banking Entities (Master).

- Introductory Course in Statistics and Econometrics (Master).
- Advanced Financial Statistics (Master).
- Time Series Econometrics (Master and PhD).
- Introduction to Programming (Master and PhD).

Undergraduate courses taught

- Data Analysis.
- Statistics.
- Mathematical Economics.
- Introductory Econometrics.
- Financial Economics.
- Capital Markets.
- Introductory Economic Theory.