Deniz ERDEMLIOGLU

Ph.D. in Economics

Associate Professor, Finance

Academic Director

d.erdemlioglu@ieseg.fr

EDUCATION

2013 Ph.D. in Economics, KU Leuven, Belgium

2013 Ph.D. in Finance, Louvain School of Management, University of Namur, Belgium

2008 M.A. in Economics, The State University of New York at Binghamton, USA

2008 M.A. in Economics and Finance, Bogazici University, Turkey

RESEARCH INTERESTS

Financial Econometrics, Volatility Modeling, Financial Contagion, Tail Risk Measurement, High-Frequency Data Analysis

PROFESSIONAL EXPERIENCE

ACADEMIC:

2011 - 2011 Visiting Scholar, Federal Reserve Bank of St. Louis, Saint Louis, Missouri, USA

2010 - 2010 Visiting Researcher, University of Maastricht, Maastricht, Netherlands

2009 - 2013 Researcher, Louvain School of Management, Namur, Belgium

COURSES TAUGHT

- Introduction to portfolio analysis, Msc in investment banking and capital markets
- Data analytics and visualization for finance, Grande ecole (bachelor cycle)
- Machine learning, Msc in investment banking and capital markets
- Time series econometrics, Post graduate program
- International finance, Grande ecole (master cycle)
- Econometrics for risk and asset managers

- Money and capital markets, Grande ecole (bachelor cycle)
- Finance fundamentals, Grande ecole (bachelor cycle)
- Asset and risk management, Grande ecole (bachelor cycle)
- Firm valuation with bloomberg analytics
- Financial markets, Grande ecole (bachelor cycle)
- Advanced fixed income analysis, Grande ecole (master cycle)

INTELLECTUAL CONTRIBUTIONS

Papers in refereed journals

Published

Bajatovic D., Erdemlioglu D., Gradojevic N., (2024), Drilling Deeper: Non-Linear, Non-Parametric Natural Gas Price and Volatility Forecasting, *Energy Journal*, 45(4), pp. 81-105

Erdemlioglu D., Yang X., (2022), News Arrival, Time-Varying Jump Intensity, and Realized Volatility: Conditional Testing Approach, *Journal of Financial Econometrics*, nbac015(2022), pp. 1-38

Erdemlioglu D., Gradojevic N., (2021), Heterogeneous investment horizons, risk regimes and realized jumps, *International Journal of Finance and Economics*, 26(1), pp. 617-643

Erdemlioglu D., Petitjean M., Vargas N., (2021), Market Instability and Technical Trading at High Frequency: Evidence from NASDAQ Stocks, *Economic Modelling*, 102(September), pp. 1-14

Gradojevic N., Erdemlioglu D., Gencay R., (2020), A new wavelet-based ultra-high-frequency analysis of triangular currency arbitrage, *Economic Modelling*, 85(2020), pp. 57-73

Erdemlioglu D., Joliet R., (2019), Long-term asset allocation, risk tolerance and market sentiment, *Journal of International Financial Markets, Institutions and Money*, 62(September), pp. 1-19

Nasini S., Erdemlioglu D., (2019), Multiple channels of financial contagion: an empirical analysis of stock price dynamics, *Finance*, 40(1), pp. 87-134

Dungey M., Erdemlioglu D., Matei M., Yang X., (2018), Testing for mutually exciting jumps and financial flights in high frequency data, *Journal of Econometrics*, 202(1), pp. 18-44

Gradojevic N., Erdemlioglu D., Gencay R., (2017), Informativeness of trade size in foreign exchange markets, *Economics Letters*, 150, pp. 27-33

Erdemlioglu D., Laurent S., Neely C., (2015), Which continuous-time model is most appropriate for exchange rates?, *Journal of Banking & Finance*, 61(2), pp. 256–268

Dewachter H., Erdemlioglu D., Gnabo J., Lecourt C., (2014), The intra-day impact of communication on eurodollar , *Journal of International Money and Finance*, 43(4), pp. 131-154

Forthcoming

Erdemlioglu D., Ahrens M., McMahon M., Neely C. J., Yang X., (2024), Mind Your Language: Market Responses to Central Bank Speeches, *Journal of Econometrics*, --(in press), pp. forthcoming

Communications in refereed conferences

International

Erdemlioglu D., (2022), *News-Driven Systemic Tail Risk at High Frequency* OCC Symposium on Systemic Risk and Stress Testing in Banking, Online, USA

Erdemlioglu D., (2021), *Estimating Financial Networks by Realized Interdependencies: A Restricted Autoregressive Approach* Workshop on Dimensionality Reduction and Inference in High-Dimensional Time Series, Online, Netherlands

Erdemlioglu D., (2021), *News-Driven Systemic Tail Risk at High Frequency* 13th Annual SoFiE Conference, Online, University of California, San Diego's Rady School of Management, USA

Erdemlioglu D., (2021), *News-Driven Systemic Tail Risk at High Frequency* 2021 FMA Annual Meeting, Online, USA

Erdemlioglu D., (2021), *News-Driven Systemic Tail Risk at High Frequency* NBER-NSF Time Series Conference, Rice University, Online, USA

Nasini S., Erdemlioglu D., Massimiliano M., (2020), *Financial network discovery from restricted vector autoregression: new model and application* Computational and Methodological Statistics, London (online conference), United Kingdom

Erdemlioglu D., (2019), *News arrival, stochastic jump dynamics, and realized volatility* Conference on Financial and Economic Integration, Brussels, Belgium

Erdemlioglu D., (2019), *Testing for intensity jumps conditional on information arrivals* The NBER-NSF Time Series Conference, Hong Kong, Hong Kong

Erdemlioglu D., Dungey M., Yang X., (2019), *Testing for intensity jumps conditional on information arrivals* ETH Zurich Quantitative Finance Workshop, Zurich, Switzerland

Erdemlioglu D., Dungey M., Yang X., (2019), *Testing for intensity jumps conditional on information arrivals* Quantitative Finance and Financial Econometrics Conference, Marseille, France

Erdemlioglu D., Dungey M., Yang X., (2018), *Testing for intensity jumps conditional on information arrivals* 10th French Econometrics Conference, Paris, France

Nasini S., Erdemlioglu D., (2018), *Stock prices dynamics through multidimensional linkages* Mathematical and Statistical Methods for Actuarial Sciences and Finance, Madrid, Spain

Dungey M., Erdemlioglu D., Matei M., Yang X., (2017), *Testing for mutually exciting jumps and financial flights in high-frequency data* Econometric Society European Meeting, Lisbon, Portugal

Erdemlioglu D., (2017), *A multidimensional network model for asset price dynamics with endogenous shocks* Heidelberg Financial Econometrics Conference, Heidelberg, Germany

Erdemlioglu D., Gillet R., Renault T., (2017), *Market reaction to news and investor attention in real time* 10th Annual Society of Financial Econometrics (SoFiE) Conference, New York, USA

Erdemlioglu D., Gradojevic N., (2017), *Heterogeneous investment horizons, jump risk and market fear* 3rd Workshop on Financial Markets and Nonlinear Dynamics, Paris, France

Erdemlioglu D., Van der Wel M., (2017), *Expectations or surprises: what really moves the U.S. Treasury market?* 15th Paris Finance December Meeting, Paris, France

Dungey M., Erdemlioglu D., Matei M., Yang X., (2016), *Financial flights, stock market linkages and jump excitation* 14th Paris December Finance Meeting, Paris, France

Dungey M., Erdemlioglu D., Matei M., Yang X., (2016), *Financial Flights, stock market linkages and jump excitation* 9th Annual SoFiE Financial Econometrics Conference, Hong Kong, China

Erdemlioglu D., (2016), *Heterogeneous investment horizons, jump risk and market fear* RCEA Macro-Money-Finance Workshop, Rimini, Italy

Erdemlioglu D., Gradojevic N., (2016), *Heterogeneous investment horizons, jump risk and market fear* International Association of Applied Econometrics (IAAE) Annual Conference, Milan, Italy

Dungey M., Erdemlioglu D., Matei M., Yang X., (2015), *Financial flights, stock market linkages and jump excitation* 16th Oxmetrics Financial Econometrics Conference, Aix-en-Provence, France

Erdemlioglu D., (2015), *Heterogeneous investment horizons, jump risk and market fear* European Financial Management Association Meeting, Amsterdam, Netherlands

Erdemlioglu D., (2014), *Heterogeneous investment horizons, jump risk and market fear* Econometric Society European Meeting, Toulouse, France

Erdemlioglu D., Gradojevic N., (2014), *Heterogeneous investment horizons and realized jump risk in financial markets* 8th International Conference on Computational and Financial Econometrics, Pisa, Italy

Laurent S., Erdemlioglu D., Neely C. J., (2014), *Which continuous-time model is most appropriate for exchange rates?* Econometric Society Australasian Meeting, Hobart, Australia

Laurent S., Erdemlioglu D., Neely C. J., (2013), *Which continuous-time model is most appropriate for exchange rates?* 3rd Humboldt-Copenhagen Conference on Financial Econometrics, Berlin, Germany

Erdemlioglu D., (2012), *Intra-day impact of communication on euro-dollar volatility and jumps* CESAM Seminar, Université Catholique de Louvain, Louvain-la-Neuve, Belgium

Erdemlioglu D., (2012), *Intra-day periodicity and intra-day Lévy-type jump detection* 11th Oxmetrics Financial Econometrics Conference, Washington DC, USA

Erdemlioglu D., (2012), *Which continuous-time model is most appropriate for exchange rates?* Annual Conference, Bogazici University, Istanbul, Turkey

Erdemlioglu D., (2011), *Intra-day impact of communication on euro-dollar volatility and jumps* 10th Applied Econometrics Conference for Finance, Paris, France

Erdemlioglu D., (2011), *Intra-day periodicity and intra-day Lévy-type jump detection* 5th International Conference on Computational and Financial Econometrics, London, United Kingdom

Erdemlioglu D., (2010), *FX announcements, jumps and volatility in financial markets: a high-frequency analysis* 4th International Conference on Computational and Financial Econometrics, London, United Kingdom

Erdemlioglu D., (2010), *Macro factors in UK excess bond returns: principal components and factor model approach* 3rd RGS Doctoral Conference in Economics, Bochum, Germany

Erdemlioglu D., (2010), *Macro factors in UK excess bond returns: principal components and factor model approach* Spring Conference of Young Economists, Luxembourg City, Luxembourg

Other conference and seminar presentations

International

Erdemlioglu D., (2021), *Estimating Financial Networks by Realized Interdependencies: A Restricted Autoregressive Approach* 7th RCEA Time Series Workshop, Online, Italy

Erdemlioglu D., (2021), *News-Driven Systemic Tail Risk at High Frequency* AFSE Annual Congress 2021, Online, France

Erdemlioglu D., (2016), *Financial flights, stock market linkages and jump excitation* Koc University, Department of Economics, Istanbul, Turkey

Erdemlioglu D., (2015), *Financial flights, stock market linkages and jump excitation* The Federal Reserve Bank, St. Louis, USA

Erdemlioglu D., (2011), *Intra-day impact of communication on euro-dollar volatility and jumps* 3L Finance Workshop, Brussels, Belgium

Erdemlioglu D., (2011), *Intra-day periodicity and intra-day Lévy-type jump detection* 10th Oxmetrics Financial Econometrics Conference, Maastricht, Netherlands

National

Erdemlioglu D., (2010), *FX announcements, jumps and volatility in financial markets: a high-frequency analysis* Doctoral Workshop in Finance, Namur, Belgium

Chapters in books

Published

Erdemlioglu D., Laurent S., Neely C., (2013), Econometric modeling of exchange rate volatility and jumps, in: A. R. Bell, C. Brooks, M. Prokopczuk(Eds.), *Handbook of Research Methods and Applications in Empirical Finance, 9780857936080, Edward Elgar Publishing, Cheltenham, chapter 16, pp. 373–427*

Case studies

Mazza P., Erdemlioglu D., (2024), *Delving into Mutual Funds and ETFs: Description and Performance Analysis*, *The Case Centre*, case study 124-0010-1, teaching note 124-0010-8, teaching note supplement 124-0010-8B, case

Erdemlioglu D., Mazza P., (2024), *Gamifying market finance using real-time data and trading simulations*, *The Case Centre*, case study 124-0052-1, teaching note 124-0052-8

Erdemlioglu D., Mazza P., (2024), *The good, the bad and the ugly in financial data visualization*, *The Case Centre*, case study 124-0065-1, teaching note 124-0065-8

Mazza P., Erdemlioglu D., (2024), *Analyzing and Visualizing the Net Present Value of Competing Projects*, *The Case Centre*, case study 124-0066-1, teaching note 124-0066-8, teaching note supplement 124-0066-4, case

, Mazza P., Erdemlioglu D., (2024), *Evaluating Stock Performance: A CAPM and Beta Analysis for Investment Decisions using MS Excel*, *The Case Centre*, case study 124-0081-1, teaching note 124-0081-8, teaching note supplement 124-0081-8B, case

Mazza P., Erdemlioglu D., (2023), *Visualizing Financial Statements of Corporations: A Time Series Approach using WRDS Data*, *The Case Centre*, case study 123-0031-1 , teaching note 123-0031-8, case centre

Mazza P., Erdemlioglu D., (2023), *Data Visualization for Financial Ratios Using WRDS, MS Excel and Tableau: A Cross-sectional Comparison*, *The Case Centre*, case study 123-0032-1, teaching note 123-0032-8

Erdemlioglu D., Mazza P., (2023), *An Introduction to Technical Analysis using MS Excel and WRDS data*, *The Case Centre*, case study 123-0043-1, teaching note 123-0043-8, teaching note supplement 123-0043-8B

Erdemlioglu D., Mazza P., (2023), *History or memory? Volatility analytics and visualization using R*, *The Case Centre*, case study 123-0081-1 , teaching note 123-0081-8

Erdemlioglu D., Mazza P., (2023), *Visualizing Financial Time Series using MS Excel: An Introduction*, *The Case Centre*, case study 123-0105-1, teaching note 123-0105-8, teaching note supplement 123-0105-8B

Erdemlioglu D., Mazza P., (2023), *Chasing the tails: Extreme risk measurement and visualization using R*, *The Case Centre*, case study 123-0106-1, teaching note 123-0106-8

Mazza P., Erdemlioglu D., (2023), *Testing the market timing ability of insiders using simulations: A basic finance application using MS Excel*, *The Case Centre*, case study 123-0111-1, teaching note 123-0111-8, teaching note supplement 123-0111-8B

Mazza P., Erdemlioglu D., (2023), *Technical Analysis and Bootstrap using MS Excel*, *The Case Centre*, case study 123-0115-1, teaching note 123-0115-8, teaching note supplement 123-0115-8B

Erdemlioglu D., Mazza P., (2022), *Data visualization for portfolio diversification and efficient frontier – Microsoft Excel and Tableau tools*, *The Case Centre*, case study 122-0142-1 , teaching note 122-0142-8

Working papers

Erdemlioglu D., Laurent S., Neely C., (2015), *Which continuous-time model is most appropriate for exchange rates?*, Federal Reserve Bank of St. Louis - Working Paper 2013-024D

Grants

2017 IESEG Research Excellence Grant, IAE Lille LEM (France)

GRANTS AND HONORS

Award

2009 Inter-university Attraction Pole (PAI) Doctoral Fellowship, University of Namur, Belgium

2008 National Scholars Honor Society Membership Award, The State University of New York at Binghamton, USA

2008 International Student Academic Award, The State University of New York at Binghamton, USA

2006 Fulbright Prize, The State University of New York at Binghamton, USA

2006 University Tuition Scholarship for Masters Program, The State University of New York at Binghamton, USA

2006 Pre-academic Training Program Fellowship, Boston University, USA

2000 University Full Tuition Scholarship for Bachelors Program, Kadir Has University, Turkey

Honor

2005 High Honor Graduate - 1st ranked - Department of Economics, Kadir Has University, Turkey

2005 High Honor Graduate - 2nd ranked - Faculty of Economics and Management, Kadir Has University, Turkey

PROFESSIONAL MEMBERSHIPS

2016 The Society for Financial Econometrics (SoFiE), International Association for Applied Econometrics (IAAE)

2014 American Economic Association, American Finance Association, European Economic Association, European Finance Association, Econometric Society, Euro Area Business Cycle Network, National Scholars Honor Society, Fulbright Association

EDITORIAL ACTIVITY

Reviewer in an academic journal

Journal of Banking and Finance

Journal of Empirical Finance

Journal of Financial Econometrics

Journal of International Money and Finance

International Journal of Forecasting

Economic Modelling

Journal of Forecasting

RESEARCH ACTIVITIES

Supervision of Ph.D. Thesis:

2022 Director, Predictive Modeling and Big Data Analytics for Risk Management, IÉSEG School of Management