Jeroen ROMBOUTS
rombouts@essec.edu
Professor

Department: Information Systems, Data Analytics and Operations
Campus de Cergy

DIPLOMAS

DIPLOMAS

2004	Ph.D. in Econometrics (Université Catholique de Louvain Belgium)
2001	Master in Statistics (Université Catholique de Louvain Belgium)
2000	Master in Econometrics (Université Catholique de Louvain Belgium)
1999	Master in Economics (Katholieke Universiteit Leuven Belgium)

CAREER

FULL-TIME ACADEMIC APPOINTMENTS

2013 - 2014-08-31	Associate Professor (ESSEC Business School France)
2014 - Now	Professor (ESSEC Business School France)
2009 - 2012-12-31	Associate Professor (HEC Montréal Canada)
2004 - 2009-05-31	Assistant Professor (HEC Montréal Canada)

OTHER APPOINTMENTS

2017 - 2020-08-31	Head of the Informations systems, Decision Sciences and Statistics Department (ESSEC Business School France)

2014 - Now	Researcher at the Finance and Insurance Lab (Centre de recherche en économie et statistique (CREST) France)
2025 - 2026-08-31	Coordinator of the Corporate Research Projects of the Master in Data Science & Business Analytics. (ESSEC Business School France)

OTHER ACADEMIC APPOINTMENTS

2017 - 2024-08-31	Chaired professor of the Chair Accenture Strategic Business Analytics (ESSEC Business School France)
2000 - 2004-08-31	Teaching Assistant, Economics Department (Université Catholique de Louvain Belgium)
1999 - 2000-08-31	Teaching Assistant, Institute of Statistics (Université Catholique de Louvain Belgium)
2015 - 2019-08-01	Visiting Professor (Katholieke Universiteit Leuven Belgium)
2015 - 2015-10-21	Visiting Professor (University of Melbourne Australia)
2014 - 2014-10-31	Visiting Professor (CREATES, Aarhus University Denmark)
2014 - 2014-08-06	Visiting Professor (CORE Belgium)
2010 - 2011-09-15	Visiting Professor (CORE Belgium)
2010 - 2010-09-15	Visiting Professor (CREATES, Aarhus University Denmark)
2010 - 2010-03-29	Visiting Professor (University of Melbourne Australia)
2006 - 2006-06-18	Visiting Professor (Université de Pittsburgh United States of America)
2005 - 2005-04-26	Visiting Professor (University of California, San Diego United States of America)
2003 - 2003-08-01	Visiting Professor (Tilburg University, School of Economics and Management Netherlands)
2003 - 2003-01-01	Visiting Professor (Erasmus Universiteit Rotterdam Netherlands)
2025 - 2026-08-31	Academic co-director of ESSEC-CentraleSupélec Master in Data Sciences & Business Analytics (ESSEC Business School France)
2025 - 2026-08-31	Academic director ESP AI Leadership: stratégie, innovation et transformation (ESSEC Business School France)

PUBLICATIONS

JOURNAL ARTICLES

BAUWENS, L., HAFNER, C. et ROMBOUTS, J. (2007). Multivariate mixed normal conditional heteroskedasticity. *Computational Statistics and Data Analysis*, 51(7), pp. 3551-3566.

BOUEZMARNI, T. et ROMBOUTS, J. (2008). Density and hazard rate estimation for censored and ?-mixing data using gamma kernels. *Journal of Nonparametric Statistics*, 20(7), pp. 627-643.

BOUEZMARNI, T., ROMBOUTS, J. et TAAMOUTI, A. (2010). Asymptotic properties of the Bernstein density copula estimator for ?-mixing data. *Journal of Multivariate Analysis*, 101(1), pp. 1-10.

BOUEZMARNI, T. et ROMBOUTS, J. (2010). Nonparametric Density Estimation for Multivariate Bounded Data. *Journal of Statistical Planning and Inference*, 140(1), pp. 139-152.

BOUEZMARNI, T. et ROMBOUTS, J. (2010). Nonparametric Density Estimation for Positive Time Series. *Computational Statistics and Data Analysis*, 54(2), pp. 245-261.

BAUWENS, L., PREMINGER, A. et ROMBOUTS, J. (2010). Theory and Inference for a Markov Switching GARCH Model. *Econometrics Journal*, 13(2), pp. 218-244.

ROMBOUTS, J. et STENTOFT, L. (2011). Multivariate Option Pricing with Time Varying Volatility and Correlations. *Journal of Banking & Finance*, 35(9), pp. 2267-2281.

BOUEZMARNI, T., ROMBOUTS, J. et TAAMOUTI, A. (2012). Nonparametric Copula-Based Test for Conditional Independence with Applications to Granger Causality. *Journal of Business and Economic Statistics*, 30(2), pp. 275-287.

BAUWENS, L. et ROMBOUTS, J. (2012). On Marginal Likelihood Computation in Change-Point Models. *Computational Statistics and Data Analysis*, 56(11), pp. 3415-3429.

ROMBOUTS, J., VIOLANTE, F. et STENTOFT, L. (2020). Dynamics of variance risk premia: A new model for disentangling the price of risk. *Journal of Econometrics*, 217(2), pp. 312-334.

DUFAYS, A. et ROMBOUTS, J. (2020). Relevant parameter changes in structural break models. *Journal of Econometrics*, 217(1), pp. 46-78.

ROMBOUTS, J., VIOLANTE, F. et STENTOFT, L. (2020). Pricing Individual Stock Options Using both Stock and Market Index Information. *Journal of Banking & Finance*, 111.

ROMBOUTS, J., STENTOFT, L. et VIOLANTE, F. (2020). Variance swap payoffs, risk premia and extreme market conditions. *Econometrics and Statistics*, 13, pp. 106-124.

LAURENT, S., ROMBOUTS, J. et VIOLANTE, F. (2012). On the forecasting accuracy of multivariate GARCH models. *Journal of Applied Econometrics*, 27(6), pp. 934-955.

WILMS, I., ROMBOUTS, J. et CROUX, C. (2021). Multivariate volatility forecasts for stock market indices. *International Journal of Forecasting*, 37(2), pp. 484-499.

DUFAYS, A., LI, Z., ROMBOUTS, J. et SONG, Y. (2021). Sparse change?point VAR models. *Journal of Applied Econometrics*, 36(6), pp. 703-727.

DUFAYS, A., JACOBS, K., LIU, Y. et ROMBOUTS, J. (2024). Fast Filtering with Large Option Panels: Implications for Asset Pricing. *Journal of Financial and Quantitative Analysis*, 59(7), pp. 3416-3447.

ROMBOUTS, J., TERNES, M. et WILMS, I. (2025). Cross-temporal forecast reconciliation at digital platforms with machine learning. *International Journal of Forecasting*, 41(1), pp. 321-344.

HU, Y.J., ROMBOUTS, J. et WILMS, I. (2025). Fast Forecasting of Unstable Data Streams for On-Demand Service Platforms. *Information Systems Research*, 36(1), pp. 552-571.

MOUCHART, M. et ROMBOUTS, J. (2005). Clustered Panel data models: An Efficient Approach for Nowcasting from Poor Data. *International Journal of Forecasting*, 21, pp. 577-594.

LAURENT, S., BAUWENS, L. et ROMBOUTS, J. (2006). Multivariate GARCH Models: A Survey. *Journal of Applied Econometrics*, 21(1), pp. 79-109.

BAUWENS, L. et ROMBOUTS, J. (2007). Bayesian Clustering of Many GARCH Models. *Econometric Reviews*, 26(2), pp. 365-386.

BAUWENS, L. et ROMBOUTS, J. (2007). Bayesian Inference for the Mixed Conditional Heteroskedasticity Model. *Econometrics Journal*, 10(2), pp. 408-425.

HAFNER, C. et ROMBOUTS, J. (2007). Estimation of Temporally Aggregated Multivariate GARCH Models. *Journal of Statistical Computation and Simulation*, 77(8), pp. 629-650.

HAFNER, C. et ROMBOUTS, J. (2007). Semiparametric Multivariate Volatility Models. *Econometric Theory*, 23(2), pp. 251-280.

VERBEEK, M. et ROMBOUTS, J. (2009). Evaluating portfolio Value-at-Risk using semi-parametric GARCH models. *Quantitative Finance*, 9(6), pp. 737-745.

BOUADDI, M. et ROMBOUTS, J. (2009). Mixed Exponential Power Asymmetric Conditional Heteroskedasticity. *Studies in Nonlinear Dynamics and Econometrics*, 13(3), pp. 1-30.

BOUEZMARNI, T. et ROMBOUTS, J. (2009). Semiparametric Multivariate Density Estimation for Positive Data Using Copulas. *Computational Statistics and Data Analysis*, 53(6), pp. 2040-2054.

BAUWENS, L., DUFAYS, A. et ROMBOUTS, J. (2014). Marginal Likelihood for Markov-switching

and Change-Point GARCH Models. *Journal of Econometrics*, 178(3), pp. 508-522.

LAURENT, G., ROMBOUTS, J. et VIOLANTE, F. (2013). On Loss Functions and Ranking Forecasting Performances of Multivariate Volatility Models. *Journal of Econometrics*, 173(1), pp. 1-10.

ROMBOUTS, J. et STANTOFT, L. (2015). Option Pricing with Asymmetric Heteroskedastic Normal Mixture Models. *International Journal of Forecasting*, 31(3), pp. 635-650.

DELAIGLE, A., MEISTER, A. et ROMBOUTS, J. (2016). Root-T Consistent Density Estimation in GARCH Models. *Journal of Econometrics*, 192(1), pp. 55-63.

DUFAYS, A. et ROMBOUTS, J. (2019). Sparse Change-point HAR Models for Realized Variance. *Econometric Reviews*, 38.

BAUWENS, L., KOOP, G., KOROBILIS, D. et ROMBOUTS, J. (2015). The Contribution of Structural Break Models to Forecasting Macroeconomic Series. *Journal of Applied Econometrics*, 30(4), pp. 596-620.

ROMBOUTS, J., STENTOFT, L. et VIOLANTE, F. (2014). The Value of Multivariate Model Sophistication: An Application to Pricing Dow Jones Industrial Average Options. *International Journal of Forecasting*, 30(1), pp. 78-98.

ROMBOUTS, J. et STENTOFT, L. (2014). Bayesian Option Pricing Using Mixed Normal Heteroskedasticity Models. *Computational Statistics and Data Analysis*, 76, pp. 588-605.

GUEST EDITOR OF A JOURNAL SPECIAL ISSUE

ROMBOUTS, J., SCAILLET, O., VEREDAS, D. et ZAKOIAN, J.M. (2020). Nonlinear financial econometrics JoE special issue introduction. *Journal of Econometrics*, 27(2).

PRESENTATIONS AT AN ACADEMIC OR PROFESSIONAL CONFERENCE

DUFAYS, A., JACOBS, D. et ROMBOUTS, J. (2022). Factor Dynamics, Risk Premia, and Higher Moments in Multi-Factor Option Pricing Models. Dans: 2022 International Conference on Computational and Financial Econometrics. London.

ROMBOUTS, J. et WILMS, I. (2024). Monitoring Machine Learning Forecasts for Platform Data Streams. Dans: 6th Institute for Mathematical Statistics – Asia-Pacific Rim Meeting (IMS-APRM 2024). Melbourne.

ROMBOUTS, J., DUFAYS, A. et JACOBS, K. (2024). A Framework for Real-Time Modeling and Forecasting of Large Unbalanced Option Implied Volatility Surfaces. Dans: 2024 Financial Econometrics Meets Machine Learning (FinEML) Conference. Lugano.

ROMBOUTS, J., CROUX, C. et WILMS, I. (2019). Multivariate lasso-based Forecast Combinations for stock market Volatility. Dans: 2019 3rd International Conference on Econometrics and Statistics.

ROMBOUTS, J. (2013). The Value of Multivariate Model Sophistication: An Application to Pricing Dow Jones Industrial Average Options. Dans: 30th International Conference of the French Finance Association.

ROMBOUTS, J., HU, Y.J. et WILMS, I. (2022). Fast Forecasting of Unstable Data Streams for Digital Platforms. Dans: 2022 Workshop on Information Technologies and Systems. Copenhagen.

ROMBOUTS, J. (2024). Modeling Higher Moments and Risk Premiums for S&P 500 Returns. Dans: 2024 Quantitative Finance and Financial Econometrics. Marseille.

ROMBOUTS, J. (2013). Fast Density Estimation in Graph Models. Dans: CIREQ Econometrics Conference: Time Series and Financial Econometrics.

ROMBOUTS, J. et STENTOFT, L. (2013). Mixtures Models, Jumps and Option Pricing. Dans: 33rd International Symposium on Forecasting.

ROMBOUTS, J. (2018). Relevant Parameter Changes in Structural Break Models. Dans: 2018 Econometric Theory and Time Series Analysis (ETTSA) Workshop.

PRESS ARTICLE, VIDEO OR OTHER POPULAR MEDIA

KÜBLER, R. et ROMBOUTS, J. (2023). Tuning In - What AI and User Generated Content Can Tell Us About Consumers. *ESSEC Knowledge*.

HUBER, T. et ROMBOUTS, J. (2023). AI as Perceived by ESSEC Students: A Response to Contemporary Issues. *ESSEC Knowledge*.

ROMBOUTS, J. et AMICHIA, R. (2021). Why Are AI Use Cases Not Going Live? MLOPS Bring an Answer. *ESSEC Knowledge*.

ROMBOUTS, J. (2021). The Experience Game-Changer. *ESSEC Knowledge*.

ROMBOUTS, J., AMICHIA, R., MARTEAU, C. et PAN, W. (2025). Bridging the Gap: Equipping Business Graduates with the Skills and Mindset for Tech Success. *ESSEC Knowledge*.

BOOK CHAPTERS

BAUWENS, L. et ROMBOUTS, J. (2004). Econometrics. Dans: *Handbook of Computational Statistics*. 1st ed. Springer, pp. 951-980.

RESEARCH ACTIVITIES

Senior or Associate Editor

2014 - 2014:	Associate editor - Computational Statistics and Data Analysis
2018 - 2018:	Associate editor - Journal of Business and Economic Statistics
2023 - Now:	Associate Editor - Quantitative Finance
2025 - Now:	Associate Editor- Quantitative Finance

Editorial Board Membership

2014 - 2014:	Editorial board membership - Computational Statistics and Data Analysis
2017 - 2025:	Associate Editor - Econometrics and Statistics
2013 - Now:	Associate Editor - International Journal of Forecasting
2017 - 2018:	Editorial board membership - Journal of Business and Economic Statistics
2023 - Now:	Associate Editor - Journal of Financial Econometrics

Reviewer for a journal

- Reviewer for Annals of Applied Statistics
- Communications in Statistics: Theory and Methods
- Comptes rendus Mathématique
- Computational Statistics and Data Analysis
- Econometric Reviews
- Econometric Theory
- Econometrics Journal
- International Journal of Forecasting
- Journal of Applied Econometrics
- Journal of Applied Statistics
- Journal of Business and Economic Statistics
- Journal of Econometrics
- Journal of Empirical Finance
- Journal of Financial Econometrics
- Journal of International Money and Finance
- Journal of Multivariate Analysis
- Journal of Nonparametric Statistics
- Journal of Risk
- Quantitative Finance
- Studies in Nonlinear Dynamics and Econometrics

Other editorial activity

1975 - Now:	Reviewer for Journal of the Royal Statistical Society (Series B)