

Jeroen ROMBOUTS

Professeur

Department: Information Systems, Decision
Sciences and Statistics
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RESEARCH INTERESTS

Econometrics, Statistics, Finance

EDUCATION

- | | |
|------|---|
| 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 |

EMPLOYMENT

Full-time academic positions

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|----------------|--|
| 2014 - Present | Professor, ESSEC Business School, France |
| 2013 - 2014 | Associate Professor, ESSEC Business School, France |
| 2009 - 2012 | Associate Professor, HEC Montréal, Canada |
| 2004 - 2009 | Assistant Professor, HEC Montréal, Canada |

Other affiliations and appointments

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| 2017 - 2020 | Head of the Informations systems, Decision Sciences and Statistics Department, ESSEC Business School, France |
| 2017 - Present | Chaired professor of the Chair Accenture Strategic Business Analytics, ESSEC Business School, France |
| 2015 - 2019 | Visiting Professor, Katholieke Universiteit Leuven, Belgium |
| 2015 - 2015 | Visiting Professor, University of Melbourne, Australia |
| 2014 - 2014 | Visiting Professor, Aarhus University, Denmark |
| 2014 - 2014 | Visiting Professor, CORE, Belgium |
| 2014 - Present | Researcher at the Finance and Insurance Lab, Center for Research in Economics and Statistiques, France |
| 2010 - 2011 | Visiting Professor, CORE, Belgium |

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| 2010 - 2010 | Visiting Professor, Aarhus University, Denmark |
| 2010 - 2010 | Visiting Professor, University of Melbourne, Australia |
| 2006 - 2006 | Visiting Professor, Pittsburgh University, United States of America |
| 2005 - 2005 | Visiting Professor, University of California, San Diego, United States of America |
| 2003 - 2003 | Visiting Professor, Tilburg University, School of Economics and Management, Netherlands |
| 2003 - 2003 | Visiting Professor, Erasmus University Rotterdam, Netherlands |
| 2000 - 2004 | Teaching Assistant, Economics Department, Université Catholique de Louvain, Belgium |
| 1999 - 2000 | Teaching Assistant, Institute of Statistics, Université Catholique de Louvain, Belgium |

PUBLICATIONS

Journal Articles

- WILMS, I., ROMBOUTS, J. and 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. and SONG, Y. (2021). Sparse changepoint VAR models. *Journal of Applied Econometrics*, 36(6), pp. 703-727.
- ROMBOUTS, J., VIOLANTE, F. and 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. and ROMBOUTS, J. (2020). Relevant parameter changes in structural break models. *Journal of Econometrics*, 217(1), pp. 46-78.
- ROMBOUTS, J., VIOLANTE, F. and STENTOFT, L. (2020). Pricing Individual Stock Options Using both Stock and Market Index Information. *Journal of Banking and Finance*, 111.
- ROMBOUTS, J., STENTOFT, L. and VIOLANTE, F. (2020). Variance swap payoffs, risk premia and extreme market conditions. *Econometrics and Statistics*, 13, pp. 106-124.
- DUFAYS, A. and ROMBOUTS, J. (2019). Sparse Change-point HAR Models for Realized Variance. *Econometric Reviews*, 38.
- DELAIGLE, A., MEISTER, A. and ROMBOUTS, J. (2016). Root-T Consistent Density Estimation in GARCH Models. *Journal of Econometrics*, 192(1), pp. 55-63.
- ROMBOUTS, J. and STANTOFT, L. (2015). Option Pricing with Asymmetric Heteroskedastic Normal Mixture Models. *International Journal of Forecasting*, 31(3), pp. 635-650.
- BAUWENS, L., KOOP, G., KOROBILIS, D. and ROMBOUTS, J. (2015). The Contribution of Structural Break Models to Forecasting Macroeconomic Series. *Journal of Applied Econometrics*, 30(4), pp. 596-620.
- ROMBOUTS, J. and STENTOFT, L. (2014). Bayesian Option Pricing Using Mixed Normal Heteroskedasticity Models. *Computational Statistics and Data Analysis*, 76, pp. 588-605.
- BAUWENS, L., DUFAYS, A. and ROMBOUTS, J. (2014). Marginal Likelihood for Markov-switching and Change-Point GARCH Models. *Journal of Econometrics*, 178(3), pp. 508-522.

- ROMBOUTS, J., STENTOFT, L. and 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.
- LAURENT, G., ROMBOUTS, J. and VIOLANTE, F. (2013). On Loss Functions and Ranking Forecasting Performances of Multivariate Volatility Models. *Journal of Econometrics*, 173(1), pp. 1-10.
- BOUEZMARNI, T., ROMBOUTS, J. and TAAMOUTI, A. (2012). A 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. and ROMBOUTS, J. (2012). On Marginal Likelihood Computation in Change-Point Models. *Computational Statistics and Data Analysis*, 56(11), pp. 3415-3429.
- LAURENT, S., ROMBOUTS, J. and VIOLANTE, F. (2012). On the Forecasting Accuracy of Multivariate GARCH Models, Journal of Applied Econometrics. *Journal of Applied Econometrics*, 27(6), pp. 934-955.
- ROMBOUTS, J. and STENTOFT, L. (2011). Multivariate Option Pricing with Time Varying Volatility and Correlations. *Journal of Banking and Finance*, 35(9), pp. 2267-2281.
- BOUEZMARNI, T., ROMBOUTS, J. and TAAMOUTI, A. (2010). Asymptotic Properties of the Bernstein Density Copula for Dependent Data. *Journal of Multivariate Analysis*, 101(1), pp. 1-10.
- BOUEZMARNI, T. and ROMBOUTS, J. (2010). Nonparametric Density Estimation for Multivariate Bounded Data. *Journal of Statistical Planning and Inference*, 140(1), pp. 139-152.
- BOUEZMARNI, T. and ROMBOUTS, J. (2010). Nonparametric Density Estimation for Positive Time Series. *Computational Statistics and Data Analysis*, 54(2), pp. 245-261.
- BAUWENS, L., PREMINGER, A. and ROMBOUTS, J. (2010). Theory and Inference for a Markov Switching GARCH Model. *Econometrics Journal*, 13(2), pp. 218-244.
- VERBEEK, M. and ROMBOUTS, J. (2009). Evaluating portfolio Value-at-Risk using semi-parametric GARCH models. *Quantitative Finance*, 9(6), pp. 737-745.
- BOUADDI, M. and ROMBOUTS, J. (2009). Mixed Exponential Power Asymmetric Conditional Heteroskedasticity. *Studies in Nonlinear Dynamics and Econometrics*, 13(3), pp. 1-30.
- BOUEZMARNI, T. and ROMBOUTS, J. (2009). Semiparametric Multivariate Density Estimation for Positive Data Using Copulas. *Computational Statistics and Data Analysis*, 53(6), pp. 2040-2054.
- BOUEZMARNI, T. and ROMBOUTS, J. (2008). Nonparametric Density and Hazard Function Estimation for Censored Positive Time Series. *Journal of Nonparametric Statistics*, 20(7), pp. 627-643.
- BAUWENS, L. and ROMBOUTS, J. (2007). Bayesian Clustering of Many GARCH Models. *Econometric Reviews*, 26(2), pp. 365-386.
- BAUWENS, L. and ROMBOUTS, J. (2007). Bayesian Inference for the Mixed Conditional Heteroskedasticity Model. *Econometrics Journal*, 10(2), pp. 408-425.
- HAFNER, C. and ROMBOUTS, J. (2007). Estimation of Temporally Aggregated Multivariate GARCH Models. *Journal of Statistical Computation and Simulation*, 77(8), pp. 629-650.
- BAUWENS, L., HAFNER, C. and ROMBOUTS, J. (2007). Mixed Normal Multivariate Conditional Heteroskedasticity. *Computational Statistics and Data Analysis*, 51(7), pp. 3551-3566.

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

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

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

Book chapters

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

Guest editor of a journal special issue

ROMBOUTS, J., SCAILLET, O., VEREDAS, D. and ZAKOIAN, J.M. (2019). Nonlinear financial econometrics - JOE Special Issue. *Journal of Econometrics*.

Conferences

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

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

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

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

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

Press

ROMBOUTS, J. and 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*.

OTHER RESEARCH ACTIVITIES

Associate Editor

2018 Journal of Business and Economic Statistics

2014 Computational Statistics and Data Analysis

Editorial Board Membership

2017 - 2019 Econometrics and Statistics

2017 - 2018 Journal of Business and Economic Statistics

2014 Computational Statistics and Data Analysis

2013 - 2019 International Journal of Forecasting

Ad-hoc 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 research activities

Since 1975 Reviewer for Journal of the Royal Statistical Society (Series B)