Jeroen ROMBOUTS
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Professeur

Département: Systèmes d'Information, Data Analytics et Opérations
Campus de Cergy

DIPLÔMES

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2004	Ph.D. en Econométrie (Université Catholique de Louvain Belgique)
2001	Master en Statistiques (Université Catholique de Louvain Belgique)
2000	Master en Econométrie (Université Catholique de Louvain Belgique)
1999	Master en Economie (Katholieke Universiteit Leuven Belgique)

CARRIÈRE

POSITIONS ACADÉMIQUES PRINCIPALES

2013 - 2014-08-31	Professeur associé (ESSEC Business School France)
2014 - Présent	Professeur (ESSEC Business School France)
2009 - 2012-12-31	Professeur associé (HEC Montréal Canada)
2004 - 2009-05-31	Professeur assistant (HEC Montréal Canada)

AUTRES POSITIONS

2017 - 2020-08-31	Responsable du département Systèmes d’Information, Sciences de la Décision et Statistiques (ESSEC Business School France)

2014 - Présent	Chercheur au Finance and Insurance Lab (Centre de recherche en économie et statistique (CREST) France)
2025 - 2026-08-31	Coordinateur des Corporate Research Projects du Master in Data Science & Business Analytics. (ESSEC Business School France)

AUTRES POSITIONS ACADÉMIQUES

2017 - 2024-08-31	Professeur titulaire de la chaire Accenture Strategic Business Analytics (ESSEC Business School France)
2000 - 2004-08-31	Assistant pédagogique, Département Economie (Université Catholique de Louvain Belgique)
1999 - 2000-08-31	Assistant pédagogique, Institut de statistiques (Université Catholique de Louvain Belgique)
2015 - 2019-08-01	Professeur visitant (Katholieke Universiteit Leuven Belgique)
2015 - 2015-10-21	Professeur visitant (University of Melbourne Australie)
2014 - 2014-10-31	Professeur visitant (CREATES, Aarhus University Danemark)
2014 - 2014-08-06	Professeur visitant (CORE Belgique)
2010 - 2011-09-15	Professeur visitant (CORE Belgique)
2010 - 2010-09-15	Professeur visitant (CREATES, Aarhus University Danemark)
2010 - 2010-03-29	Professeur visitant (University of Melbourne Australie)
2006 - 2006-06-18	Professeur visitant (Université de Pittsburgh États-Unis)
2005 - 2005-04-26	Professeur visitant (University of California, San Diego États-Unis)
2003 - 2003-08-01	Professeur visitant (Tilburg University, School of Economics and Management Pays-Bas)
2003 - 2003-01-01	Professeur visitant (Erasmus Universiteit Rotterdam Pays-Bas)
2025 - 2026-08-31	CO-Responsable DU MASTER IN DATA SCIENCES AND BUSINESS ANALYTICS (ESSEC Business School France)
2025 - 2026-08-31	Directeur académique ESP AI Leadership: stratégie, innovation et transformation (ESSEC Business School France)

PUBLICATIONS

CHAPITRES

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

COMMUNICATIONS DANS UNE CONFÉRENCE

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.

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

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.

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.

ARTICLES

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.

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.

ROMBOUTS, J. et 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. 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.

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., 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.

ARTICLES OU VIDÉOS DE VULGARISATION

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*.

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

EDITEUR INVITÉ D'UN NUMÉRO SPÉCIAL

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

ACTIVITÉS DE RECHERCHE

Co-direction d'une revue - Co-rédacteur en chef

2014 - 2014:	Co-Rédacteur en chef - Computational Statistics and Data Analysis
2018 - 2018:	Co-Rédacteur en chef - Journal of Business and Economic Statistics
2023 - Présent:	Associate Editor - Quantitative Finance
2025 - Présent:	Associate Editor- Quantitative Finance

Membre d'un comité de lecture

2014 - 2014:	Membre du comité de lecture - Computational Statistics and Data Analysis
2017 - 2025:	Associate Editor - Econometrics and Statistics
2013 - Présent:	Associate Editor - International Journal of Forecasting
2017 - 2018:	Membre du comité de lecture - Journal of Business and Economic Statistics
2023 - Présent:	Associate Editor - Journal of Financial Econometrics

Reviewer pour un journal

- Relecteur pour 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

Autre activité éditoriale

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