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INTERETS DE RECHERCHE

Econométrie, Statistiques, Finance

FORMATION

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

EXPERIENCE PROFESSIONNELLE

Positions académiques principales

2014 - Présent	Professeur, ESSEC Business School, France
2013 - 2014	Professeur associé, ESSEC Business School, France
2009 - 2012	Professeur associé, HEC Montréal, Canada
2004 - 2009	Professeur assistant, HEC Montréal, Canada

Autres affiliations académiques

2025 - 2027	CO-Responsable du MASTER IN DATA SCIENCES AND BUSINESS ANALYTICS, ESSEC Business School, France
2025 - 2026	Directeur académique ESP AI Leadership: stratégie, innovation et transformation, ESSEC Business School, France
2017 - 2024	Professeur titulaire de la chaire Accenture Strategic Business Analytics, ESSEC Business School, France
2017 - 2020	Responsable du département Systèmes d'Information, Sciences de la Décision et Statistiques, ESSEC Business School, France
2015 - 2019	Professeur visitant, Katholieke Universiteit Leuven, Belgique
2015 - 2015	Professeur visitant, University of Melbourne, Australie
2014 - 2014	Professeur visitant, CREATES, Aarhus University, Danemark

2014 - 2014	Professeur visitant, CORE, Belgique
2014 - Présent	Chercheur au Finance and Insurance Lab, Centre de recherche en économie et statistique (CREST), France
2010 - 2011	Professeur visitant, CORE, Belgique
2010 - 2010	Professeur visitant, University of Melbourne, Australie
2010 - 2010	Professeur visitant, CREATES, Aarhus University, Danemark
2006 - 2006	Professeur visitant, Université de Pittsburgh, États-Unis
2005 - 2005	Professeur visitant, University of California, San Diego, États-Unis
2003 - 2003	Professeur visitant, Erasmus Universiteit Rotterdam, Pays-Bas
2003 - 2003	Professeur visitant, Tilburg University, School of Economics and Management, Pays-Bas
2000 - 2004	Assistant pédagogique, Département Economie, Université Catholique de Louvain, Belgique
1999 - 2000	Assistant pédagogique, Institut de statistiques, Université Catholique de Louvain, Belgique

Autres expériences professionnelles

2025 - 2026	Coordinateur des Corporate Research Projects du Master in Data Science & Business Analytics., ESSEC Business School, France

BOURSES, PRIX ET DISTINCTIONS

Bourses

2024	Risk-Shift, France

PUBLICATIONS

Articles

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.

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.

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 changepoint VAR models. *Journal of Applied Econometrics*, 36(6), pp. 703-727.

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.

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

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

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

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.

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.

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.

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.

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.

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. (2010). Asymptotic properties of the Bernstein density copula estimator for α-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.

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.

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

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.

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

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

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

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.

Chapitres d'ouvrage

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

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).

Conférences

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

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

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. (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.

Presse

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*.

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*.

AUTRES ACTIVITES DE RECHERCHE

Co-direction d'une revue

Depuis 2025	Quantitative Finance
Depuis 2023	Quantitative Finance
2018	Journal of Business and Economic Statistics
2014	Computational Statistics and Data Analysis

Membre d'un comité de lecture

Depuis 2023	Journal of Financial Econometrics
2017 - 2018	Journal of Business and Economic Statistics
2017 - 2025	Econometrics and Statistics
2014	Computational Statistics and Data Analysis
Depuis 2013	International Journal of Forecasting

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

Autres activités de recherche

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

ENSEIGNEMENT

2020 Financial Econometrics, ESSEC Business School, France

2017 Business Data Science, ESSEC Business School, France