CURRICULUM VITAE

Jeroen V.K. Rombouts

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- **Address**

  ESSEC Business School, Avenue Bernard Hirsch B.P. 50105, 95021 Cergy-Pontoise Cedex, France.

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  Languages: Dutch (native), French (fluent, written and spoken), English (fluent, written and spoken), German (good notions)

- **Education**

  2000 - 2004 : PhD in Economics , UCL (Belgium)
  2000 - 2001 : Master in Statistics, UCL
  1999 - 2000 : Master in Econometrics, UCL
  1995 - 1999 : Master in Economics, KUL (4 year program)

  Erasmus project at the University of Bristol for a semester in 1999
  (KUL: Catholic University of Leuven; UCL: Catholic University of Louvain)

- **Employment History**
  - 06/2014 - : Full Professor ESSEC Business School.
  - 01/2013 - 06/2014 : Associate Professor ESSEC Business School.
  - 06/2009 - 01/2013: Associate Professor at HEC Montreal.
  - 09/2004 - 06/2009 : Assistant Professor at HEC Montreal.
  - 09/2000 - 09/2004 : Teaching Assistant, Economics Department, UCL.
  - 09/1999 - 09/2000 : Teaching Assistant, Institute of Statistics, UCL.

- **Research interests**: Finance, Econometrics, Statistics.

- **Editorial responsibilities**: Associate Editor for Journal of Business and Economic Statistics, Associate Editor for International Journal of Forecasting, Associate Editor for Computational Statistics and Data Analysis.

- **Publications**

1. Dufays, A., Rombouts, J.V.K., (2018), *Sparse Change-point HAR Models for Realized Variance*, Econometric Reviews, xxx, xx-xx.
2. Delaigle, A., Meister, A., Rombouts, J.V.K. (2016), *Fast Density Estimation in GARCH Models*, Journal of Econometrics, 192, 55-63.
3. Bauwens, L., Koop, G., Koribilis, D., Rombouts, J.V.K., (2015), *A Comparison of Forecasting Procedures for Macroeconomic Series: The Contribution of Structural Break Models*, Journal of Applied Econometrics, 40, 596-620.
4. Rombouts, J.V.K., Stentoft, L. (2015), *Option Pricing with Asymmetric Heteroskedastic Normal Mixture models*, International Journal of Forecasting, 31, 635-650.
5. Bauwens, L., Dufays, A., Rombouts, J.V.K., (2014), *Marginal Likelihood Computation for Markov Switching and Change-point GARCH Models*, Journal of Econometrics, 178, 508-522.
6. Rombouts, J.V.K., Stentoft, L. (2014), *Bayesian Option Pricing Using Mixed Normal Heteroskedasticity Models*, Computational Statistics and Data Analysis, 76, 588-605.
7. Rombouts, J.V.K., Stentoft, L., Violante, F., (2014), *The Value of Multivariate Model Sophistication: An Application to pricing Dow Jones Industrial Average options*, International Journal of Forecasting, 30, 78-98.
8. Laurent, S., Rombouts, J.V.K., Violante, F., (2013), *On Loss Functions and Ranking Forecasting Performances of Multivariate Volatility Models*, Journal of Econometrics, 173, 1-10.
9. Laurent, S., Rombouts, J.V.K., Violante, F., (2013), *On the Forecasting Accuracy of Multivariate GARCH Models*, Journal of Applied Econometrics, 27, 934-955.
10. Bouezmarni, T., Rombouts, J.V.K., Taamouti, A., (2012), *A Nonparametric Copula Based Test for Conditional Independence with Applications to Granger Causality*, Journal of Business and Economic Statistics, 30, 275-287.
11. Bauwens, L., Rombouts, J.V.K., (2012), *On Marginal Likelihood Computation in Change-Point Models*, Computational Statistics and Data Analysis, 56, 3415-3429
12. Rombouts, J.V.K., Stentoft, L. (2011), *Multivariate Option Pricing with Time Varying Volatility and Correlations*, Journal of Banking and finance, 35, 2267-2281.
13. Bauwens, L., Preminger, A., Rombouts, J.V.K., (2010), *Theory and Inference for a Markov Switching GARCH Model*, Econometrics Journal, 13, 218-244.

14. Bouezmarni, T., Rombouts, J.V.K., (2010), *Nonparametric Density Estimation for Multivariate Bounded Data*, Journal of Statistical Planning and Inference, 140, 139-152.

15. Bouezmarni, T., Rombouts, J.V.K., Taamouti, A., (2010), *Asymptotic Properties of the Bernstein Density Copula for Dependent Data*, Journal of Multivariate Analysis, 101, 1-10.

16. Bouezmarni, T., Rombouts, J.V.K., (2010), *Nonparametric Density Estimation for Positive Time Series*, Computational Statistics and Data Analysis, 54, 245-261.

17. Bouaddi, M., Rombouts, J.V.K., (2009), *Mixed Exponential Power Asymmetric Conditional Heteroskedasticity*, Studies in Nonlinear Dynamics and Econometrics, 13, 1-30.

18. Verbeek, M., Rombouts, J.V.K., (2009), *Evaluating portfolio Value-at-Risk using semi-parametric GARCH models*, Quantitative Finance, 9, 737-745.

19. Bouezmarni, T., Rombouts, J.V.K., (2009), *Semiparametric Multivariate Density Estimation for Positive Data Using Copulas*, Computational Statistics and Data Analysis, 53, 2040-2054.

20. Bouezmarni, T., Rombouts, J.V.K., (2008), *Nonparametric Density and Hazard Function Estimation for Censored Positive Time Series*, Journal of Nonparametric Statistics, 7, 627-643.

21. Bauwens, L., Rombouts, J.V.K., (2007), *Bayesian Inference for the Mixed Conditional Heteroskedasticity Model*, Econometrics Journal, 10, 408-425.

22. Bauwens, L., Hafner, C.M., Rombouts, J.V.K., (2007), *Mixed Normal Multivariate Conditional Heteroskedasticity*, Computational Statistics and Data Analysis, 51, 3551-3566.

23. Bauwens, L., Rombouts, J.V.K., (2007), *Bayesian Clustering of Many GARCH Models*, Econometric Reviews, 26, 365-386.

24. Hafner, C.M., Rombouts, J.V.K., (2007), *Semiparametric Multivariate Volatility Models*, Econometric Theory, 23, 251-280.

25. Hafner, C.M., Rombouts, J.V.K., (2007), *Estimation of Temporally Aggregated Multivariate GARCH Models*, Journal of Statistical Computation and Simulation, 77, 629-650.

26. Bauwens, L., Laurent, S., Rombouts, J.V.K., (2006), *Multivariate GARCH Models: A Survey*, Journal of Applied Econometrics, 21, 79-109.

27. Mouchart, M., Rombouts, J.V.K., (2005), *Clustered Panel data models: An Efficient Approach for Nowcasting from Poor Data*, International Journal of Forecasting, 21, 577-594.

28. Bauwens, L., Rombouts, J.V.K., (2004), *Econometrics*, Handbook of Computational Statistics, Springer-Verlag, Berlin.

- **Working papers**

  1. Rombouts, J.V.K, Violante, F., Stentoft, L., (2018), *Modelling Variance Risk Premia via Variance Swap Payoffs.* (submitted)
  2. Dufays, A., Rombouts, J.V.K., (2018), *Sparse Change-Point Time Series Models* (submitted).
  3. Rombouts, J.V.K, Violante, F., Stentoft, L., (2018), *Dynamics of Variance Risk Premia, Investors? Sentiment and Return Predictability.* (submitted)
  4. Wilms, I., Rombouts, J.V.K., Croux, C., (2018), *Lasso-based forecast combinations for forecasting realized variances* (submitted).

- **Work in progress**

  1. Rombouts, J.V.K, Stentoft, L., (2017), *Affine Finite Mixture Models for Option Pricing.*
  2. Bouezmarni, T, Rombouts, J.V.K, (2017), *Semiparametric Copula models for time series.*

- **Teaching experience**

  1. Big Data Analytics, ESSEC, 2018
  2. Executive Education on Big Data Analytics, ESSEC, 2016, 2017
  3. Quantitative Methods - Data Analytics (MBA), ESSEC, 2016, 2017
  4. Statistics introduction for finance (Master level), ESSEC, 2014, 2015, 2016
  5. Econometrics (PhD level), ESSEC, 2013, 2014, 2015, 2016
  6. Introduction to Econometrics (master level), ESSEC, 2014, 2015, 2016, 2017
  7. Financial Econometrics (master level), ESSEC, 2017
  8. Business Statistics (master level), ESSEC, 2013, 2014, 2015, 2016
  9. Bayesian Econometrics (master-PhD level), CORE, 2011
  10. Theory of Capital Markets (master level), HEC Montreal, 2010
  11. Time Series Econometrics (master level), HEC Montreal, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011
  12. Introduction to Econometrics, HEC Montreal, 2004, 2007, 2008, 2011
  13. Undergraduate microeconomics, HEC Montreal, 2005, 2006, 2007
  14. Introduction to Econometrics, Catholic University of Louvain, 2002, 2003

- **Visits**

1. Catholic University of Louvain, Invited professor, July and August, 2016, 2017
2. University of Melbourne, department of mathematics, from October 15 to October 21, 2015
3. Catholic University of Louvain, Invited professor, from July 6 to August 10, 2015
4. CREATES, Aarhus University, from October 27 to October 31, 2014
5. CORE, Belgium, Invited professor, July 7, 2014 to August 6, 2014
6. CORE, Belgium, Sabbatical from September 15, 2010 to September 15, 2011
7. CREATES, Aarhus University, from August 15 to September 15, 2010
8. University of Melbourne, department of mathematics, from March 20 to March 29, 2010
9. Regular visits to CORE as a CORE Research Associate
10. University of Pittsburg, department of economics, from May 18 to June 18, 2006
11. University of California, San Diego (department of mathematics) from April 21 to April 26, 2005
12. Regular visits to Erasmus University, Rotterdam, 2003, 2004
13. Tilburg University, May-August, 2003

- **Consulting**

1. Multinational financial information company: Econometric modelling
2. Multinational payment systems company: Predictive modelling
3. Multinational financial information company: Econometric modelling III
4. Multinational financial information company: Econometric modelling II
5. Multinational financial information company: Econometric modelling I
6. Implementation-backtesting of a trading rule II
7. Implementation-backtesting of a trading rule I
8. External consultant for an international commodity company
9. North American Bank: Selection of hedge fund managers II
10. North American Bank: Selection of hedge fund managers I
11. European Commission/Eurostat via a consultancy company: Updating and evaluating models for nowcasting R&D variables II
12. European Commission/Eurostat via a consultancy company: Updating and evaluating models for nowcasting R&D variables

13. US pipeline company: Development of a Bayesian model for financial products
14. European Commission/Eurostat via a consultancy company: Development of a model for nowcasting R&D variables

- **Refereeing**: Annals of Applied Statistics, Computational Statistics and Data Analysis, Comptes rendus - Mathematics journal, Econometric Theory, Econometrics Journal, Econometric Reviews, International Journal of Forecasting, Journal of Applied Econometrics, Journal of Applied Statistics, Journal of Nonparametric Statistics, Journal of Econometrics, Journal of Empirical Finance, Journal of Financial Econometrics, Journal of Business and Economic Statistics, Journal of Multivariate Analysis, Journal of Risk, Journal of the Royal Statistical Society (Series B), Studies in Nonlinear Dynamics and Econometrics, Quantitative Finance, Communications in Statistics: Theory and Methods, Journal of International Money and Finance.

- **Memberships**: Elected member of the International Statistical Institute (ISI), Econometric Society, CIRANO, Society for Financial Econometrics (SoFie).

- **Seminars and Conferences**

  1. July 2018: Financial Econometrics Conference, Rabat, Morocco.
  2. June 2018: CFE conference, Hong Kong.
  3. April 2018: Financial Econometrics Conference, Toronto, Canada.
  4. December 2017: Paris December Finance Meeting, Paris, France.
  5. December 2017: CFE conference, London, UK.
  6. September 2017: Industry 4.0 conference, Munich, Germany.
  7. September 2017: Oxmetrics Conference, Paris, France.
  8. July 2017: IoT conference, London, UK.
  9. June 2017: CFE conference, Hong Kong.
  10. June 2017: Mathematical Finance-Econometrics Conference, Lausanne, Swiss.
  11. May 2017: Financial Econometrics Conference, Toulouse, France.
  12. April 2017: Amundi Finance Conference, Paris, France.
  13. March 2017: Econometrics Seminar, Orleans University, France.
  14. February 2017: Econometrics Seminar, Laval University, Canada.
  15. December 2016: CFE conference, Sevilla, Spain.
  16. September 2016: Financial Econometrics Conference, Paris, France.
  17. May 2016: Financial Econometrics Conference, Toulouse, France.
  18. May 2016: Philosophy Seminar, Paris, France.
  19. April 2016: Econometrics Seminar, Oslo, Norvegia.
  20. December 2015: CFE conference, London, UK.
  21. December 2015: Systemic Risk Conference, Singapore, UK.
  22. November 2015: Econometrics Seminar, St-Gallen, Swiss.
  23. November 2015: INRIA Introduction to time series, Rocquencourt, France.

24. June 2015: International Symposium on Forecasting, UC-Riverside, USA.
25. May 2015: Developments in Econometrics and Forecasting, Marseille, France.
26. May 2015: Econometrics Seminar, Durham Business School, UK.
27. December 2014: CFE conference, Pisa, Italy.
28. August 2014: Computational Statistics Conference, Geneva, Swiss.
29. June 2014: Nonparametric Statistics Conference, Cadiz, Spain.
30. May 2014: AFFI Conference, Aix, France.
31. March 2014: Econometric Institute Seminar, Rotterdam, The Netherlands.
32. December 2013: CFE conference, London, UK.
33. June 2013: International Symposium on Forecasting, Seoul, South-Korea.
34. May 2013: AFFI Conference, Lyon, France.
35. April 2013: CIREQ time series conference, Montreal, Canada.
36. December 2012: CFE conference, Oviedo, Spain.
37. June 2012: Time series workshop NUS, Singapore.
38. June 2012: Empirical finance symposium, ESSEC-SMU, Singapore.
39. May 2012: IFM2 workshop in Mathematical Finance, Montreal, Canada.
40. April 2012: ESSEC econometrics seminar, Paris, France.
41. December 2011: CFE conference, London, UK.
42. June 2011: Time series conference, Louvain la neuve, Belgium.
43. May 2011: Carlos 3 Econometrics Seminar, Madrid, Spain.
44. May 2011: Humboldt Econometrics Seminar, Berlin, Germany.
45. April 2011: Einaudi Institute Seminar, Rome, Italy.
46. February 2011: CREST Seminar, Paris, France.
47. February 2011: Empirical Finance Workshop, Montreal, Canada.
48. December 2010: ECARES Econometrics Seminar, Brussels, Belgium.
49. November 2010: European Seminar on Bayesian Econometrics, Rotterdam, The Netherlands.
50. September 2010: CREATES Seminar, Aarhus, Danemark.
51. June 2010: International Symposium on Forecasting, San Diego, United States.
52. May 2010: Canadian Economic Association, Quebec, Canada.
53. May 2010: Time Series Conference, Montreal, Canada.
54. May 2010: IFM2 workshop in Mathematical Finance, Montreal, Canada.
55. March 2010: Statistics Seminar, University of Melbourne, Australia.
56. March 2010: Statistics Seminar, University of New South Wales, Australia.
57. January 2010: Mathematisches Forschunginstitut, Oberwolfach, Germany.
58. October 2009: CIRPEE conference, Saint-Michel-des-Saints, Canada.
59. September 2009: Econometrics Study Group Conference, Ottawa, Canada.
60. June 2009: Econometrics Seminar, Greqam, Marseille, France.
61. May 2009: Econometrics Seminar, Maastricht University, The Netherlands.
62. May 2009: Statistics Seminar, UCL, Belgium.
63. May 2009: Econometrics Seminar, KUL, Belgium.
64. April 2009: Financial Econometrics Conference, Montreal, Canada.
65. March 2009: Economics Seminar, Federal Reserve Bank, Kansas, United States.
66. March 2009: Economics Seminar, Pittsburgh University, United States.
67. October 2008: Economics Seminar, Boston University, United States.

68. September 2008: Econometrics Study Group Conference, Montreal, Canada.
69. September 2008: Econometrics Seminar, CORE, Belgium.
70. July 2008: 7th World Congress in Probability and Statistics, Singapore.
71. July 2008: Far Eastern Meeting of The Econometric Society, Singapore.
72. May 2008: Econometrics Seminar, Lille, France.
73. May 2008: Econometrics Seminar, Center, Tilburg, The Netherlands.
74. October 2007: CIRPEE conference, Becancour, Canada.
75. September 2007: Montreal Dagenais Seminar, University of Montreal, Canada.
76. September 2007: Econometrics Study Group Conference , Montreal, Canada.
77. July 2007: Australasian Meeting of the Econometric Society, Brisbane, Australia.
78. June 2007: Society for Computational Economics, Montreal, Canada.
79. November 2006: Econometrics Seminar, University of Toronto, Canada.
80. October 2006: Canadian Econometrics Study Group Conference , Niagara Falls, Canada.
81. September 2006: CIRPEE conference, Val-Morin, Canada.
82. July 2006: Far Eastern Meeting of The Econometric Society, Beijing, China.
83. June 2006: North American Summer Meeting of The Econometric Society, Minneapolis, USA.
84. May 2006: Financial Econometrics Conference, Cireq, Montreal, Canada.
85. May 2006: Canadian economics association, Montreal, Canada.
86. October 2005: 3rd International Association for Statistical Computing (IASC) world conference on Computational Statistics and Data Analysis, Limassol, Cyprus.
87. October 2005: workshop seminar, Universté Catholique de Louvain, Belgium.
88. June 2005: 8th International Conference Of The Society For Computational Economics Computing In Economics and Finance, Washington, USA.
89. May 2005: Canadian Economics Association Annual Meeting 2005, Hanmilton, Canada.
90. May 2005: Sociĕté canadienne de science conomique 2005, Charlevoix, Canada.
91. April 2005: Statistics seminar, UCSD, San Diego, USA.
92. March 2004: Econometrics seminar, Erasmus University, Rotterdam, The Netherlands.
93. March 2004: Economics seminar, ECARE (ULB), Belgium.
94. February 2004: Economics seminar, Bilkent University, Ankara, Turkey.
95. Frebruary 2004: Economics seminar, HEC, Montreal, Canada.
96. January 2004: Econometrics and Statistics seminar, Free University of Amsterdam, The Netherlands.
97. January 2004: 2004 Econometric Society North American Winter Meeting, San Diego, USA.
98. December 2003: Econometrics and Statistics seminar, Tilburg University, The Netherlands.
99. September 2003: Econometric Time Series Analysis - Methods and Applications, Johannes Kepler University, Linz, Austria.
100. September 2003: OxMetrics User Conference, London, UK.

101. May 2003: CORE Econometrics seminar, UCL, Belgium.
102. July 2003: Ecomod 2003, International Conference on Policy Modeling, Istanbul, Turkey.
103. June 2003: 2003 Econometric Society North American Summer Meeting, Evanston, USA.
104. November 2002: Eurostat Meeting of the Working Party on S&T and Innovation Statistics, Luxembourg, Luxembourg.
105. July 2002: The 2002 Econometric Study Group annual conference, Bristol, UK.
106. June 2002: 8th International Conference Of The Society For Computational Economics Computing In Economics and Finance, Aix-en-Provence, France.
107. June 2002: York's annual meeting in Econometrics, York, UK.
108. May 2002: Workshop Statistical Modelling and Inference for Complex Data Structures (Poster), Institut de Statistique, UCL, Belgium.
109. May 2002: CORE Econometrics seminar, UCL, Belgium.
110. January 2002: Econometrics seminar, department of economics, KUL, Belgium.
111. October 2001: Séminaire des jeunes chercheurs, Institut de statistique, UCL, Belgium.