Curriculum Vitae Kris BOUDT

Assistant Professor of Finance
KU Leuven and VU University Amsterdam

1. Contact and general information

Address	Office: Naamsestraat 69, 3000 Leuven, Belgium
	Home: Parklaan 4, 9000 Gent, Belgium
E-mail	kris.boudt@econ.kuleuven.be
Web	www.econ.kuleuven.be/kris.boudt/public

2. Education

2006 - 2008	PhD in Applied Economics at K.U.Leuven, Belgium
	PhD supervisor: Prof. Dr. Christophe Croux.
	PhD title: "Estimation of financial risk under non-normal distributions"
	PhD committee: C. Croux, G. Dhaene, I. Gijbels, S. Laurent, O. Scaillet and P. Sercu
2006 - 2007	Doctoral Programme in Applied Economics, K.U.Leuven.
2003 - 2006	Masters degree in Economics, University of Namur (FUNDP), with highest distinction
	Erasmus stay at Maastricht University, The Netherlands (Sep 2005-Jan 2006)
	Erasmus stay at Politecnico di Milano, Italy (Sep 2003-July 2004)
2001 - 2003	Candidate degree in Commercial Engineering
	University of Namur (FUNDP), June 2003, with highest distinction
	Exchange program with University St La Salle, The Philippines
1995 - 2001	Secondary school studies: Greek and Mathematics, Sint Bernardus College, Oudenaarde

3. Employment

Feb 2014 -	Associate professor of finance at Free University of Brussels
Sep 2011 - present	Assistant professor of finance at V.U.University Amsterdam
Jan 2010 - present	Invited lecturer at University of Illinois at Chicago
Jan 2011 - present	Research partner at Finvex Group
Jan 2009 - Jan 2013	Assistant professor of finance at Lessius and KU Leuven
Oct 2007 - Dec 2008	FWO aspirant at the Faculty of Business and Economics, K.U.Leuven
Oct 2006 - Sep 2007	Research assistant at the Faculty of Business and Economics, K.U.Leuven

4. Scientific publications

Articles in scientific journals with an international referee-system:

Boudt K. and Zhang, J. (201x). Jump robust two time scale covariance estimation and realized volatility budgets. *Quantitative Finance*, forthcoming.

Boudt K., Carl P. and Peterson B. (201x). Asset allocation with Conditional Value-at-Risk Budgets. *Journal of Risk*, forthcoming.

Boudt, K., Danielsson, J. and Laurent, S. (201x) Robust forecasting of dynamic conditional correlation GARCH models. *International Journal of Forecasting*, forthcoming.

Boudt, K., Cornelissen, J. and Croux, C. (2012) Jump robust daily covariance estimation by disentangling variance and correlation components. *Computational Statistics & Data Analysis* 56, 2993-3005.

Boudt, K., Cornelissen, J. and Croux, C. (2012) The Gaussian rank correlation: robustness properties. *Statistics & Computing* 22, 471-483.

Boudt, K., Croux, C. and Laurent, S. (2011) Outlyingness weighted covariation. *Journal of Financial Econometrics* 9, 657-684.

Boudt, K., Croux, C. and Laurent, S. (2011) Robust estimation of intraweek periodicity in volatility and jump detection. *Journal of Empirical Finance* 18, 353-369.

Boudt, K., Caliskan, D. and Croux, C. (2011) Robust and explicit estimators of Weibull parameters. *Metrika* 73, 187-209.

Ardia, D., Boudt, K., Carl, P., Mullen, K. and Peterson, B. (2011) Differential Evolution (DEoptim) for non-convex portfolio optimization. *R Journal* 3, 27-34.

Boudt, K. and Croux, C. (2010) Robust M-estimation of multivariate GARCH models. *Computational Statistics & Data Analysis* 54, 2459-2469.

Boudt, K., Todorov, V. and Upadhyaya, S. (2009) Nowcasting manufacturing value added for cross-country comparison. *Statistical Journal of the IAOS: Journal of the International Association of Official Statistics* 26 (1-2), 15-20.

Peterson, B. and Boudt, K. (2008) Component VaR for a non-normal world. *Risk*, November 2008. Reprint in *Asia Risk*.

Boudt, K., Peterson, B. and Croux, C. (2008) Estimation and decomposition of downside risk for portfolios with non-normal returns. *Journal of Risk* 11, 79-103.

Articles in scientific monographs with an international referee-system:

Ardia, D. and Boudt, K. 201x. The short-run persistence of performance in funds of hedge funds. In G. Gregoriou (Ed.) Handbook on funds of funds before, during and after the crisis. Elsevier. Work in progress.

Boudt, K., Cornelissen, J., Croux, C. and Laurent, S. (2012) Intraday jump tests: Impact of periodicity and microstructure noise. In L. Bauwens, C. Hafner and S. Laurent (Eds). *Volatility Models and their applications*. Wiley, 565-584.

Boudt, K., Lahaye, J. and Laurent, S. (2009). Realized volatility and intraday periodicity. In S. Laurent (Eds.). *G@RCH 6, Estimating and Forecasting ARCH Models* (pp. 149-193). London, Timberlake Consultants.

Boudt, K., Peterson, B. and Carl, P. (2008) Hedge fund portfolio selection with modified expected shortfall. In Brebbia, C., Constantino, M. and Larran, M. (Eds.) *Computational Finance and Its Application III*, WIT Transactions on Modelling and Simulation. WIT, Southampton.

Research reports:

Boudt K., Ghys H. and Petitjean M. 2011. The dynamics of liquidity around price jumps. Second round at *Journal of Financial Markets*.

Boudt, K., Cornelissen, J. and Croux C. 2012. The sustainability of mean variance and mean tracking error efficient portfolios. Best paper award at R/Finance 2012. Submitted.

Boudt, K, De Goei, P, Thewissen, J and Van Campenhout G. 2012. Testing the profitability of predicting analysts' forecast errors: A short horizon approach. Submitted.

Ardia, D. and Boudt K. 2012. The peer performance of hedge funds. Best paper award at R/Finance 2012. Work in progress.

Boudt, K, Liu, F. and Sercu P. 2012. Equity's exposure to currencies: Beyond the loglinear model. Work in progress.

Boudt K., Paulus, E. and Rosenthal, D. 2010. Funding liquidity, market liquidity and TED spread: A two-regime model. Work in progress.

Boudt K., Danielsson, J., Koopman, S.J. and Lucas, A. 2012. Regime switching in the volatility and correlation of financial institutions. Work in progress.

Contributions to statistical software packages:

CompStrat. R package of D.Ardia and K.Boudt.
Available at `www.econ.kuleuven.be/kris.boudt/public`

G@RCH: Ox package of S. Laurent.
`www.garch.org`

PerformanceAnalytics. R package of P. Carl, B. Peterson, K. Boudt and E. Zivot.
`http://cran.r-project.org/web/packages/PerformanceAnalytics`

PortfolioAnalytics. R package of K.Boudt, P. Carl and B. Peterson.
`http://r-forge.r-project.org/R/?group_id=579`

RTAQ. R package of J. Cornelissen and K. Boudt.
`http://cran.at.r-project.org/web/packages/RTAQ/index.html`

5. Leading research positions - Received funding

2012   Source: Google Summer of Code
Title: Extend RTAQ

2011   Source: National Bank of Belgium research grant
Title: Determinants of systemic risk of financial institutions: A regime switching multivariate GARCH approach

2011   Source: ICM PhD scholarship
Title: Advanced methods for the analysis and management of information asymmetries in corporate finance
(with James Thewissen and Geert Van Campenhout)

2011   Source: Fonds voor Wetenschappelijk Onderzoek
Funding for research stay University of Illinois at Chicago

2010   Source: National Bank of Belgium research grant
Title: Accuracy of financial analysts' forecasts
(with Geert Van Campenhout)

2010   Source: IWT PhD scholarship
Title: New methods for portfolio optimization based on high- frequency data and sustainability scores
(with Jonathan Cornelissen and Christophe Croux)

2009   Source: National Bank of Belgium research grant
Title: Estimation and management of the risk allocation in financial portfolios
(with Marc Goovaerts)

6. Leading research positions - (Co)promotorship of Ph.D. theses

2012-...   Promotor of Marjan Wauters, KU Leuven.

2010-...   Promotor of James Thewissen, KU Leuven.

2009-June 2012 Copromotor of Jonathan Cornelissen, KU Leuven.

2012-...   Committee member for Charles Matthias (ULB) and Xin Zhang (VU Univ Amsterdam).

7. Scientific fellowships, awards and distinctions

2013-   Research professorship at Free University of Brussels.

2012   R/Finance 2012 paper award.

2007-2008 FWO aspirant fellowship (Belgian National Science Foundation).

8. Stays for study purposes outside the university as a visiting professor

Oct 2011-April 2012   National Bank of Belgium.

May-July 2010, 2011   Department of finance, University of Illinois at Chicago.

August - Sep 2009   Department of finance, University of Illinois at Chicago.

August 2008, 2009, 2010, 2012 Research and statistics branch, UNIDO (Vienna).

9. Scientific contributions and organizational responsibilities at scientific events

"Regime switching in the volatility and correlation of financial institutions." National Bank of Belgium 11th conference on Endogenous Financial Risk on October 11-12, 2012.

"Equities exposure to currencies: Beyond the loglinear model." Netherlands Econometric Study Group meeting on June 8-9 2012.

"The peer performance of hedge funds." Presentation at R/Finance 2012, Chicago, IL, May 4-5 2012.

"Equities exposure to currencies: Beyond the loglinear model." Presentation at International Workshop on Nonlinear and asymmetric models in applied economics, Paris, April 12 2012.

"Robust two time scale covariance estimation and realized volatility budgets." Presentation at Annual meeting of the American Finance Association, Chicago, January 5-8 2012.

"Jump robust daily covariance estimation by disentangling variance and correlation components." Presentation at International workshop on Computational and Financial Econometrics, London, December 2011. Organizer of the session on "Robust methods for financial applications."

"The dynamics of liquidity around price jumps." Presentation at R/Finance 2011: Applied Finance with R, Chicago, IL. April 29-30, 2011.

"The dynamics of liquidity around price jumps." Seminar presention at CORE. April 6, 2011.

Discussion of "Systematic risk under extremely adverse market conditions" by van Oordt and Zhou. Workshop Extreme dependence in financial markets, Rotterdam. March 18, 2011.

"Robust two time scale covariance estimation and realized volatility budgets." Presentation at XII Workshop on Quantitative Finance, Padova. January 28-29, 2011.

"Robust two time scale covariance estimation and realized volatility budgets." Presentation at International Workshop on Computational and Financial Econometrics. London. December 10-12, 2010. Organizer of the session on "Robust methods in econometrics".

"Robust two time scale covariance estimation and realized volatility budgets." Presentation at 8th OxMetrics Users Conference. Centre for econometric analysis, Cass business school. London, UK. September 17-18, 2010.

"Portfolio optimization with CVaR budgets." Presentation at R/Finance 2010: Applied Finance with R, Chicago, IL. April 17-18, 2010.

"Portfolio optimization with CVaR budgets." Presentation at XI Workshop on Quantitative Finance, Palermo. January 28-29, 2010.

"Outlyingness weighted quadratic covariation." Seminar presentation at CREST. November 27, 2009.

"Budgeting portfolio CVaR." Seminar presentation at Maastricht University. November 19, 2009.

"Robust estimation of intraweek periodicity in volatility and jump detection." Presentation at International Workshop on Computational and Financial Econometrics. Limassol, Cyprus. October 28-31, 2009.

"Robust estimation of intraweek periodicity in volatility and jump detection." Poster Presentation at the Society for Financial Econometrics European Conference. Geneva, Switzerland. June 10-12, 2009.

"Portfolio optimization with risk budgets." Leuven-Louvain workshop on finance. Presentation at Brussels, Belgium. June 5, 2009.

"Outlyingness weighted quadratic covariation." Seminar presentation at Lille 3, France. April 14, 2009.

"Robust estimation of intraweek periodicity in volatility and jump detection." Presentation at Humbold-Copenhagen conference on recent development in financial econometrics. Berlin, Germany. March 20-21, 2009.

"Outlyingness weighted quadratic covariation." Presentation at Int. workshop on flexible modeling and smoothing. Leuven, Belgium. November 12-14, 2008.

"Outlyingness weighted quadratic covariation." Seminar presentation at Université Catholique de Louvain. October 31, 2008.

"Outlyingness weighted quadratic covariation." Presentation at 6th OxMetrics Users Conference. Centre for econometric analysis, Cass business school. London, UK. September 17-18, 2008.

"Outlyingness weighted quadratic covariation." Presentation at International conference on Financial Econometrics and Vast Data. Oxford-Man Institute of Quantitative Finance, Oxford, UK. September 15-16, 2008.

"Analysis of high-frequency financial time series." Presentation at Computational Finance and Financial Engineering R/Rmetrics User and Developer Workshop 2008. Lake Thune, Switzerland. June 29-July 3, 2008.

"Outlyingness weighted quadratic covariation." International Workshop on Presentation at Computational and Financial Econometrics. Neuchâtel, Switzerland. June 19-21, 2008.

"Outlyingness weighted quadratic covariation." Poster Presentation at The Society for Financial Econometrics Inaugural Conference. New York, USA. June 4-6, 2008.

"Outlyingness weighted quadratic covariation." Seminar presentation at Université Libre de Bruxelles. April 17, 2007.

"Robust M-estimation of Multivariate GARCH models." EC2 conference on recent developments in theoretical and empirical analysis of time series. Presentation at Faro, Portugal. December 14-15, 2007.

"Computational issues in robust estimation of GARCH models." Presentation at BIRS international workshop on robust statistics and R. Banf, Canada. October 20-November 2, 2007.

"Multivariate GARCH models." Presentation at Computational Finance and Financial Engineering R/Rmetrics User and Developer Workshop 2008. Lake Thune, Switzerland. July 8-12, 2007.

"Robust M-estimation of Multivariate GARCH models." Presentation at International Workshop on Computational and Financial Econometrics. Genève, Switzerland. April 20-22, 2007.

"Robust estimation of a general bivariate GARCH volatility model." Poster Presentation at Workshop on multivariate time series analysis. Louvain-La-Neuve, Belgium. May 10, 2007.

10. Contributions to the social and scientific image of the faculty and the university

I have used my expertise on robust statistics and time series analysis to assist the Statistics and Research Section of UNIDO in the revison of the nowcasting methods used in their Yearbook of Industrial Statistics published by Edward Elgar as well as their data distribution via DVDs.

As a research partner at Finvex, I have used my expertise on financial risk modeling to assist Euronext and Rabobank International to develop risk efficient investment solutions. I have participated as an expert speaker in a IPE webinar for 250 pension fund managers on April 24, 2012 (`http://www.ipe.com/webcasts/`). I have also a video presentation with Jon Danielsson on equity risk (`http://www.finvex.com/eng/video.php`). I have given numerous presentations to fund managers about the importance of forecasting and managing portfolio risk.

I have collaborated in the development of several open source R packages for financial econometric analysis that are extensively used by academics and practitioners.

11. Teaching experience

2012 - present	Special topics in econometrics, VU University Amsterdam
2012 - present	Business statistics (undergraduate), VU University Amsterdam
2009 - present	Research methodology for financial management (graduate), Lessius
2009 - present	Special topics on "Finance: theory and practice" (graduate) (behavioral finance, corporate finance and risk management), Lessius
Summer 2010, 2011	Fixed income securities (corporate MBA), University of Illinois at Chicago
2008 - present	Master thesis supervision in business statistics, financial econometrics, financial management and international finance
2009 - 2010	Business statistics (undergraduate), K.U.Leuven
2007 - 2008	Teaching assistant for "business statistics" and "Time Series Analysis" at 3rd bachelor applied economic studies, K.U.Leuven
2006 - 2007	Teaching assistant for "business statistics" at 3rd bachelor applied economic studies and "Applied Econometrics" at Master in Economics, K.U.Leuven

12. Skills and personal interests

Languages	Dutch: mother tongue
	English and French: very good
	German and Italian: good notions
Computer Skills	Econometric & Statistical packages: EViews, Ox, R, SAS
	Mathematical Typesetting with LaTeX
	Microsoft Office
Personal interests	Sports, travelling

13. References

Prof. Dr. Robert S. Chirinko

2333 University Hall	Phone:	+1-312 355 1262
601 South Morgan (MC 168), Chicago, IL.	Fax:	+1-312 413 7948
US	Email:	chirinko@uic.edu

Prof. Dr. Christophe Croux

Naamsestraat 69	Phone:	+32-16 32 69 58
3000 Leuven	Fax:	+32-16 32 67 32
Belgium	Email:	christophe.croux@econ.kuleuven.be

Prof. Dr. Sébastien Laurent

P.O. Box 616	Phone:	+31-43 388 38 26
6200 MD Maastricht	Fax:	+31-43 388 48 74
The Netherlands	Email:	s.laurent@maastrichtuniversity.nl

Gent, November 9, 2012

Kris Boudt