

CURRICULUM VITAE

General

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Education

MSc: 1992, Erasmus University, Econometrics, thesis: *Robust estimation, time series and cointegration*, (appellation: cum laude)
PhD: 1996, Erasmus University, Econometrics, thesis: *Outlier robust unit root analysis* (appellation: cum laude), Promotor/supervisor: prof. Dr. Teun Kloek.

Positions

2008-present Programme director Risk Management, Duisenberg school of finance
2001-present Full professor of Financial markets and institutions, Vrije Universiteit Amsterdam
1998-present Tinbergen Institute Research Fellow
2008-2009 Director of Graduate Studies (finance), Tinbergen Institute
2003-2005 Standard and Poor's European Academic Council
2003-2005 Board of the Dutch Network of Quantitative Economics
2000-2001 Associate professor of Finance and Financial Sector Management (FSM), Vrije Universiteit Amsterdam
1998-2000 Researcher Financial Sector Management (FSM), Vrije Universiteit Amsterdam, supported by a grant from the Dutch Funding Organization for Scientific Research (NWO)
1996-1998 Assistant professor FSM, Vrije Universiteit Amsterdam
1992-1996 PhD Student Econometrics, Erasmus University Rotterdam
1989-1992 Student research assistant in econometrics

Honors, prizes, fellowships

2010-2015: NWO VICI grant (1.5M)
2005-2006: Netspar senior research fellow

2005, ESB Top 40 Dutch economists, rank 40.
 2005, Nomination for Faculty of Economics teaching prize
 2005, NWO AIO grant together with A.J. Menkveld for research on Liquidity and financial markets' microstructure
 2005, NWO AIO grant together with J. Aerts and J. van den Bergh on Insurance arrangements for flooding risk under climatic change.
 2004, ESB Top 40 Dutch economists, rank 29.
 2004, INQUIRE Europe collaborative research grant with Marno Verbeek (Erasmus University Rotterdam) and Arjen Siegmann (vrije Universiteit Amsterdam).
 2003, ESB Top 40 Dutch economists, rank 27.
 2003-2005, member of the Standard and Poor's European Academic Council.
 2001, M&O Business Administration Top 30 of Dutch researchers, rank 9.
 1998, INQUIRE UK collaborative research grant with Nicholas Taylor (Warwick University), Dick van Dijk (Erasmus University), and Philip Hans Franses (Erasmus University).
 1997, scholarship for 1998-2000 by N.W.O. on "Modeling long-term economic developments in relation to decision support models."
 1993, annual award of the Dutch Statistics Society (VVS) for MSc thesis "Robust estimation, time series and cointegration."

Visiting positions

Visiting honorary research fellow, University of York, May-June 1999.
 Visiting scholar, University of Oxford, Nuffield College, March-April 1999.
 Visiting scholar, University of Exeter, October 1995.

Fellowships

1999-2000, honorary visiting research fellow, dept. Economics and Related Studies, York University.
 1999-present: N.A.K.E. (Network of Economics and Quantitative Economics)
 1998-present: Tinbergen Institute Research Fellow

PhD Supervision/promotor

Arjen H. Siegmann, 1997-2002: Decision Rules in Dynamic Financial Programs
 Andre Braga Monteiro, 2002-2008: Duration models for credit rating transitions
 Konrad Banachiewicz, 2004-2009: Copulas and credit risk (together with A. van der Vaart)
 Michel van der Wel, 2004-2008: Liquidity and information: empirical microstructure (together with A.J. Menkveld)
 Sander Konijn, 2003-...: Determining the real rating matrix (together with H. Rijken)
 Oleg Sheremet, 2006-...: Flooding risk and insurance (together with R. Calcagno)
 Carmen Lee, 2006-...: Communication and risk perception of complex financial products (together with R. Kraeussl and L. Paas)
 Ting Wang, 2007-...: Liquidity and trade intensity (together with A.J. Menkveld)
 Mahmoud Botshekan, 2007-...: Downside risk and asset pricing (together with R. Kraeussl)
 Bernd Schwaab, 2007-...: State space models for credit risk (with Siem Jan Koopman)

Xin Zhang, 2009-...: Time series econometrics

PhD Committees

Patrick Groenendijk, Erasmus University Rotterdam, 1999
Dick van Dijk, Erasmus University Rotterdam, 1999
Stefan van Aelst, University of Antwerp, 2000
Arjan Berkelaar, Erasmus University Rotterdam, 2002
Sylvia Caserta, Erasmus University Rotterdam, 2002
Jan Wille, VU University Amsterdam, 2003
Reza Anglinkusomo, VU University Amsterdam, 2005
Simon Polbennikov, Tilburg University, 2005
Mark Jan Boes, Tilburg University, 2006
Jan Frederik Slijkerman, Erasmus University Rotterdam, 2007
Fabien Couderc, Universite de Geneve, 2008
Martijn van der Voort, Erasmus University Rotterdam, 2008
Tibor Zavadil, VU University Amsterdam, 2009
Robert Lamb, Imperial College London, 2009.
Dion Bongaerts, UvA, 2010.
Vincent Leijdekker, UvA, 2010.

English publications in journals

Sheremet, Oleg, and Andre Lucas (2009): "Global Loss Diversification in the Insurance Sector," *Insurance: Mathematics and Economics*, **44**(3), 415-425.

Koopman, Siem Jan, Roman Kraeussl, Andre Lucas, and Andre Monteiro (2009): "Credit Cycles and Macro Fundamentals," *Journal of Empirical Finance*, **16**, 42-54.

Banachewicz, Konrad, and Andre Lucas (2008): "Quantile Forecasting for Credit Risk Management using Possibly Mis-specified Hidden Markov Models," *Journal of Forecasting*, **27**, 566-586.

Koopman, S.J., A. Lucas (2008): "A Non-Gaussian Panel Time Series Model for Estimating and Decomposing Default Risk," *Journal of Business and Economic Statistics*, **26**(4), 510-525.

Peeters, Bas, Cees L. Dert, and André Lucas (2008): "Hedging large portfolios of options in discrete time," *Applied Mathematical Finance*, **15**(3-4), 251-275.

Banachewicz, K., and A. van der Vaart, and A. Lucas (2008): "Modeling portfolio defaults using Hidden Markov Models with covariates," *Econometrics Journal*, **11**, 155-171.

Koopman, Siem Jan, Andre Lucas, Marius Ooms, Kees van Montfort, Victor van der Geest (2008): "Decomposing and estimating the effects on recidivism by a non-Gaussian dynamic factor model," *Statistica Neerlandica*, **62**(1), 104-130.

Siegmann, Arjen H., and André Lucas (2008), "The Effect of Shortfall as a Risk Measure for Portfolios with Hedge Funds," *Journal of Business, Finance and Accounting*, **35**(1-2), 200-226.

Koopman, S.J., A. Lucas, and A. Monteiro (2008): "The multi-state latent factor intensity model for credit rating transitions," *Journal of Econometrics*, **142**, 399-424.

Menkveld, A.J., S.J. Koopman, and A. Lucas (2007): "Round-the-Clock Price Discovery for Cross-Listed Stocks: U.S.-Dutch Evidence," *Journal of Business and Economic Statistics*, **25**(2), 213-225.

Lucas, André, and Pieter Klaassen (2006): "Discrete versus continuous state switching

- models for portfolio credit risk," *Journal of Banking and Finance*, **30**(1), 23-35.
- Temel, T., and A. Lucas (2005): "Technical efficiency of Georgian farms after independence," *International Journal of Applied Econometrics and Quantitative Studies*, **2**(1).
- Koopman, S.J., A. Lucas, and P. Klaassen (2005): "Empirical Credit Cycles and Capital Buffer Formation," *Journal of Banking and Finance*, **29**, 3159-3179.
- Koopman, Siem Jan, and André Lucas (2005): "Business and Default Cycles for Credit Risk," *Journal of Applied Econometrics*, **20**, 311-323.
- Genton, M.G., and A. Lucas (2005): "Discussion of 'Breakdown for groups'," *Annals of Statistics*, **33**, 988-993.
- Siegmann, A.H., and A. Lucas (2005): "Discrete-Time Financial Planning Models under Loss-Averse Preferences," *Operations Research*, **53**(3), 403-414.
- Abadir, K.M., and A. Lucas (2004): "A comparison of minimum MSE and maximum power for the nearly-integrated non-Gaussian model," *Journal of Econometrics*, **119**(1), 45-71.
- Franses, P.H., D. van Dijk, and A. Lucas (2004): "Short patches of outliers, ARCH and volatility modeling," *Applied Financial Economics*, **14**(4), 221-232.
- Genton, M.G., and A. Lucas (2003): "Comprehensive Definitions of Breakdown-Points for Independent and Dependent Observations," *JRSS-B*, **65**(1), 81-94.
- Lucas, A., Klaassen, P., Spreij, P., Straetmans (2003): "Tail Behavior of Credit Loss Distributions for General Latent Factor Models," *Applied Mathematical Finance*, **10**(4), 337-357.
- Boswijk, H.P., and A. Lucas (2002): "Semi-nonparametric cointegration testing," *Journal of Econometrics*, **108**(2), 253-280.
- Lucas, A., van Dijk, R., Kloek, T. (2002): "Stock Selection, Style Rotation, and Risk," *Journal of Empirical Finance*, **9**(1), 1-34.
- Lucas, A. (2001): "Evaluating the Basle guidelines for backtesting banks' internal risk management models," *Journal Money, Credit and Banking*, **33**(3), 826-846.
- Lucas, A., P. Klaassen, P. Spreij, and S. Straetmans (2001): "An analytic approach to credit risk of large corporate bond and loan portfolios," *Journal of Banking and Finance*, **25**(9), 1635-1664.
- [Erratum to "An analytic approach to credit risk of large corporate bond and loan portfolios," *Journal of Banking and Finance* **26**, no. 1, pp 201-202.]
- Lucas, A. (2000): "A note on optimal estimation from a risk management perspective under possibly mis-specified tail behavior," *Journal of Business and Economic Statistics*, **18**(1), 31-39.
- Taylor, N., D. van Dijk, P.H. Franses, and A. Lucas (2000): "SETS, arbitrage activity and stock price dynamics," *Journal of Banking and Finance*, **24**(8), 1289-1306.
- Abadir, K.M., and A. Lucas (2000): "Quantiles for t-statistics based on M-estimators of unit roots," *Economics Letters*, **67**(2), 131-137.
- van Dijk, D., P.H. Franses, and A. Lucas (1999): "Testing for ARCH in the Presence of Additive Outliers," *Journal of Applied Econometrics*, **14**, 539-562.
- Franses, P.H., T. Kloek, and A. Lucas (1999): "Outlier robust analysis of long-run marketing effects for weekly scanning data," *Journal of Econometrics*, **89**(1-2), 293-315.
- van Dijk, D., P.H. Franses, and A. Lucas (1999): "Testing for smooth transition nonlinearity in the presence of outliers," *Journal of Business and Economic Statistics*, **17**(2), 217-235.

- Lucas, A. (1998): "Inference on cointegrating ranks using LR and LM tests based on pseudo-likelihoods," *Econometric Reviews* **17**(2), 185-214.
- Franses, P.H., and A. Lucas (1998): "Outlier detection in cointegration analysis," *Journal of Business and Economic Statistics*, **16**(4), 459-468.
- Lucas, A., and P. Klaassen (1998): "Extreme returns, downside risk, and optimal asset allocation," *Journal of Portfolio Management*, **25**(1), fall, 71-79.
- Lucas, A. (1997): "Cointegration testing using pseudo likelihood ratio tests," *Econometric Theory* **13**, 149-169.
- Lucas, A. (1997): "Robustness of the Student t based M-estimator," *Communications in Statistics; Theory and Methods* **26** (5), 1165-1182.
- Lucas, A. (1997): "Asymptotic robustness of least median of squares for autoregressions with additive outliers," *Communications in Statistics; Theory and Methods*, **26**(10), 2363-2380.
- Groenendijk, P.A., A. Lucas, and C.G. de Vries (1995): "A note on the relationship between GARCH and symmetric stable processes," *Journal of Empirical Finance* **2**, 253-264.
- Hoek, H., A. Lucas, and H.K. van Dijk (1995): "Classical and Bayesian aspects of robust unit root inference," *Journal of Econometrics* **69**, 27-59.
- Lucas, A. (1995): "An outlier robust unit root test with an application to the extended Nelson-Plosser data," *Journal of Econometrics* **66**, 153-174.
- Lucas, A. (1995): "Unit root tests based on M estimators," *Econometric Theory* **11**, 331-346.
- Lucas, A. (1994): "A comment on an application of the bootstrap method to Bühlmann's classical credibility model," *Tinbergen Institute Research Bulletin* **6**, 13-16.
- Heij, C., T. Kloek, and A. Lucas (1992): "Positivity conditions for stochastic state space modelling of time series," *Econometric Reviews* **11**(3), 379-396.

English publications in books

- Lucas, A. , Klaassen, P. , Spreij, P. , Straetmans (2002): "Extreme Tails for Linear Portfolio Credit Risk Models," Risk Measurement and systemic risk. Proceedings of the Third Joint Central Bank Research Conference, October, Basle: Bank of International Settlements, pp. 271-283.
- Lucas, A., Klaassen, P. (2001): "Fat tails and the effect on optimal asset allocations." in: *Banking Strategies and Challenges in the New Europe*, E.P.M. Gardener and P.J. Versluijs (eds.), Basingstoke: Palgrave, pp. 272-288.
- Boswijk, H.P., A. Lucas, and N. Taylor (2000): "A comparison of parametric, semi-nonparametric, adaptive, and nonparametric cointegration tests," in: *Advances in Econometrics: Applying Kernel and Nonparametric Estimation to Economic Topics*, Th.B. Fomby and R.C. Hill (eds.), Volume 14, Stamford : JAI Press, pp. 25-47.
- Siegmann, A.H., en A. Lucas (1999): "Continuous-time dynamic programming for ALM with risk averse loss functions," Proceedings of the XXXth International ASTIN Colloquium and 9th International AFIR Colloquium, Tokyo, pp. 183-193.
- Lucas, A. (1999): "Testing backtesting. Merging elements of the pre-commitment approach with the Basle guidelines for backtesting internal risk management models," in: *Internal Modelling and CAD II*, C. Gardner (ed.), London: Risk Book Publications, 13-26.
- Franses, P.H., and A. Lucas (1996): "Outlier robust cointegration analysis of Dutch interest rates," *American Statistical Association, 1996 Proceedings of the Business and*

Dutch publications in journals

- Bogaerts, Bas, Alex Halsema, André Lucas, Erik de Wit (2004): "Visualisaties van financiële risico's: voorstellen voor een kwantitatieve risico-indicator getoetst," *Maandblad voor Accountancy en Bedrijfseconomie (MAB)*, juli/augustus, 367-374.
- Lucas A. and H.A. Rijken, 2003, "De beperkte dynamiek van kredietratings: gewenst of ongewenst?" submitted for publication.
- Lucas, A., and H.A. Rijken (2003): "De dynamiek van kredietwaardigheidsbeoordelingen," *Fiducie*, **11**(2), 16-23.
- Siegmann, A.H., A. Lucas, and J.B. Molenkamp, "Pensioenfondsen: Omgaan met onvermijdbare risico's", *Economisch Statistische Berichten*, 1 februari 2002, **87**, nr. 4345, p. 88-89.
- Lucas, A. (1999): "Nut, Gebruik, en Beperkingen van Value-at-Risk voor Risicomanagement," *Economisch en Sociaal Tijdschrift*, **53**(3), 369-410.
- Lucas, A. (1999): "Value-at-Risk en risicomanagement in de banksector," *FSR Forum*, **1**(4), 27-30.

Dutch publications in books

- Lucas, A. (2002) "Omgaan met milieurisico's gezien vanuit de financiële economie en kansrekening," in *Perspectieven op Milieurisico's*, B. Wissink en J. Bouma (eds.), WRR Working Document W128.
- [Dealing with environmental risks: lessons from probability theory and financial economics.]
- Lucas, A. (2001): *Wat willen we eigenlijk? Over preferenties, risico's en financiële markten*, Inaugurale rede, Amsterdam: VU drukkerij.
- Klaassen, P., Lucas, A., Spreij, P., Straetmans, S. (1999), "On the distribution of Credit Losses of Corporate Bond and Loan Portfolios," in: *Financiering en Belegging 1999* (deel 22), Rotterdam: Erasmus Universiteit, 172-188.
- Lucas, A. (1997): "Onherroepelijke schuldigverklaringen wegens moord en doodslag; een verkennende tijdreeksanalyse," (Irreversible convictions for murder and manslaughter; a preliminary time-series analysis) in *Kritisch & Constructief. 40 Jaar Grensverkenningen in de Econometrie. Liber Amicorum voor prof. dr. T. Kloek*, H.K. van Dijk, R. Harkema, P. Kooiman, and P.C. Schotman (eds.), Erasmus University Rotterdam, pp. 209-223.

Abstract publication

- Kloek, T., A. Lucas, and R. van Dijk (1996): "Outperforming the market using bilinearities in fundamentals and macroeconomic variables," *Journal of Finance*, **51**(3), 1054-1055.

Ongoing Research

- Creal, Drew, Siem Jan Koopman, and Andre Lucas (2010): "A Dynamic Multivariate Heavy-Tailed Model for Time-Varying Volatilities and Correlations," Tinbergen Institute Discussion Paper TI Discussion Paper 10-032/2.
- Koopman, Siem Jan, Andre Lucas, and Bernd Schwaab (2010): "Macro, industry and frailty effects in defaults: the 2008 credit crisis in perspective," Tinbergen Institute Discussion Paper TI Discussion Paper 10-004/2.

- Konijn, Sander J.J., Roman Kraeussl, and Andre Lucas (2009): "Blockholder Dispersion and Firm Value," TI Discussion Paper 09-113/2.
- Lee, Carmen, Roman Kraeussl, Andre Lucas, and Leonard J. Paas (2008): "A Dynamic Model of Investor Decision-Making: How Adaptation to Losses Affects Future Selling Decisions," TI Discussion Paper 08-112/2.
- Creal, Drew, Siem Jan Koopman, and Andre Lucas (2008): "A General Framework for Observation Driven Time-Varying Parameter Models," TI Discussion paper 08-108/4.
- Kraeussl, Roman, Andre Lucas, David R. Rijsbergen, Pieter Jelle van der Sluis, and Evert B. Vrugt (2008): "Washington Meets Wall Street: A Closer Examination of the Presidential Cycle Puzzle," TI 2008-101/2.
- Koopman, Siem Jan, Andre Lucas, and Bernd Schwaab (2008): "Forecasting Cross-Sections of Frailty-Correlated Default," Tinbergen Institute Discussion Paper 08-029/4.
- Kraeussl, Roman, André Lucas, and Arjen Siegmann (2008): "Preference uncertainty," in progress.
- Botshekan, Mahmoud and André Lucas (2008): "Good beta or bad markets?" in progress.
- Kraeussl, Roman, and André Lucas (2008): "Explaining the good governance discount in equity prices," in progress.
- Siegmann, Arjen H., André Lucas, and Marno Verbeek (2008): "Put exposures in Hedge Fund returns: stability and explanations," in progress.
- Sheremet, Oleg, Riccardo Calcagno, and André Lucas (2008): "Insurance of catastrophic risks with uncertain government intervention," in progress.
- Banachewicz, Konrad, Siem Jan Koopman, and André Lucas (2008): "Stochastically varying copulas," in progress.
- Monteiro, Andre, Georgi V. Smirnov, and Andre Lucas (2006) "Nonparametric Estimation for Non-Homogeneous Semi-Markov Processes: An Application to Credit Risk," Tinbergen Institute Discussion paper TI06-024/2.

Permanent working papers

- Lucas, A., and P. Klaassen (2002): "Dynamic credit risk modeling", External research report, 69p.
- Lucas, A., J.B. Molenkamp, and A.H. Siegmann: "De Pensioen- en Verzekeringskamer komt van rechts: Buffervorming en beleggingsbeleid bij Nederlandse pensioenfondsen," VU Research Memorandum RM 2002-2.
- Berkelaar, A., H. Hoek, and A. Lucas (2000): "Arbitrage and Sampling Uncertainty in Financial Stochastic Programming Models," Discussion paper TI-2000-0??/?, Tinbergen Institute Amsterdam.
- Groenendijk, P.A., A. Lucas, and C.G. de Vries (1998): "A hybrid joint volatility ratio test for disentangling dependence and non-normality in financial time series," VU Research Memorandum 1998-47.
- Lucas, A., and C.L. Dert (1998): "On the inefficiency of portfolio insurance and caveats to the mean/downside risk framework," VU Research Memorandum 1998-57.
- Lucas, A.(1997): "Strategic and tactical asset allocation and the effect of long-run equilibrium relations," VU Research Memorandum 1997-42.
- Franses, P.H., and A. Lucas (1996): "Measuring the impact of promotion on weekly market shares," RIBES Research Memorandum R 9617/M, Erasmus University Rotterdam.
- Lucas, A., R. van Dijk, and T. Kloek (1994): "Outlier robust GMM estimation of leverage

determinants,” Tinbergen Institute Discussion Paper 94-132.

Administrative experience

Member of the M.Sc. Finance program committee (2004 – ...)
Program coordinator for Financial Research Program (2001 – ...)
Chair of the BSc Honours programme committee (2006 – 2008)
Coordinator TI Finance (2006 – 2008)
Decision committee NWO Open Competition Grants (2006)
Member program committee TI MPhil Finance Track (2005 – 2008)
Member of the Faculty’s MSc committee (2004 – 2008)
Member of the daily board of the department of Finance and Financial Sector Management (1998 – 2006)
Chairman of the PhD student (AIO) recruiting committee (2001 – 2006)
Member working group VU MPhil Business (2004 – 2006)
Initiator of the Quantitative Finance Honours Track (2004 – 2005)
Member of the Teaching Program (Opleidingscommissie) Econometrics (2000-2004)
Member of the Faculty’s library committee (1998-2004)
Member of the Masters development and implementation committee (2002)
Member of the Scouting committee for joint teaching programs in sciences and economics (2002)
Member of the BSc in Econometrics implementation committee (2002)
Member of the BaMa-outline committee (2001)
Secretary of the department of Financial Sector Management (1996-1998)
Member of various committees in the Faculty of Economics (Vrije Universiteit: appointment committees)
Organization of seminar series in Finance and Financial Sector Management (1998)

Editorial Boards

2000 - : *Journal of Asset Management*
2001 – 2006: *Statistica Neerlandica*

Research interests

Risk management; Credit risk; Time series econometrics; (Outlier) robustness; Interaction between econometrics and financial decision making.