Alexander Herbertsson

University of Gothenburg
School of Business, Economics and Law
Centre for Finance
Department of Economics
P.O Box 640
SE 405 30 Göteborg, Sweden.

Phone: +46-(0)31-786 13 94
Fax: +46-(0)31-786 13 26
Email: `alexander.herbertsson@cff.gu.se`

Personal

Date of birth: March 5, 1977

Citizenship: Swedish

Education

Ph.D. in Economics: Quantitative Finance (2007)

***University of Gothenburg**, Göteborg, Sweden*

Thesis: Pricing Portfolio Credit Derivatives (defended September 14, 2007)

Opponent: Prof. Jean-Paul Laurent

Advisors: Prof. Holger Rootzén (CTH), Prof. Lennart Hjalmarsson

Licentiate of Engineering in Industrial Mathematics (2005)

***Chalmers University of Technology, (CTH)**, Göteborg, Sweden*

Thesis: Dynamic Dependence Modelling in Credit Risk (defended May 9, 2007)

Opponent: Prof. Dr. Rüdiger Frey

Advisors: Prof. Holger Rootzén, Coadvisor: Prof. Torgny Lindvall

M.Sc. in Engineering Physics with specialization in Applied Mathematics (2001)

***Chalmers University of Technology**, Göteborg, Sweden*

Thesis: Implied Binomial Models (performed at Handelsbanken Markets (SHB)), defended Oct 17, 2001

Advisors: Prof. Christer Borell, Tor Nordqvist (SHB), Dr. Carl-Johan Rehn (SHB)

Employment

Department of Economics/Centre for Finance, University of Gothenburg

March 2017 - present: Senior lecturer in Statistics and Quantitative finance

March 2013 - Feb. 2017: Associate senior lecturer in Statistics and Quantitative finance

Jan. 2012 - Feb. 2013 Post-doc in quantitative credit risk
Funded by Vinnova

Nov. 2008 - Dec. 2011: Post-doc in quantitative credit risk
Funded by the Jan Wallander and Tom Hedelius foundation

Department of Mathematics, Universität Leipzig, Germany

April 2008 - Oct. 2008: Post-doc in quantitative credit risk
(worked with Prof. Dr. Rüdiger Frey on non-linear filtering models in portfolio credit risk)

Department of Economics/Centre for Finance, University of Gothenburg

Oct. 2007 - March 2008: Research fellow (research and teaching)

Sept. 2004 - Sept. 2007: PhD student

Department of Mathematical Sciences, Chalmers University of Technology, Göteborg, Sweden

Sept. 2001 - June 2004: Licentiate student / Teaching assistant

Handelsbanken Investment Banking (SHB), Stockholm, Sweden

Sept. 2000 - Mars 2001: Programmer/Quantitative Analyst, Financial Engineering and Risk Management Group (implemented local volatility tree in C++ via Python and implied binomial tree in MatLab)

Ericsson Microwave Systems, Mölndal, Sweden

June 2000 - Aug. 2000: Programmer (implemented and tested telephone applications)

June 1999 - Aug. 1999: Programmer (implemented a java-interface for a SQL-database)

Research interest

Applied mathematical finance, Applied probability and statistics, Financial Engineering, Quantitative Credit Risk, Counterparty credit risk, Dependence modelling in portfolio credit risk, Central Counterparties, Systemic Risk, Financial Risk Management, Pricing and hedging portfolio credit derivatives

Publications

Peer-reviewed journal articles

1. Pricing k^{th}-to-default swaps under Default Contagion: the matrix-analytic approach
Journal of Computational Finance 12(1), 49-78, 2008 (with Holger Rootzén)
2. Pricing synthetic CDO tranches in a model with Default Contagion using the matrix-analytic approach
Journal of Credit Risk, 4(4), 3-35, 2008, ***lead paper***.
3. Modelling default contagion using Multivariate Phase-Type distributions
Review of Derivatives Research, 14(1), 1-36, 2011, ***lead paper***.
4. Pricing basket default swaps in a tractable shot-noise model
Statistics and Probability Letters, 81(8), 1196-1207, 2011 (with Jiwook Jang and Thorsten Schmidt)
5. Dynamic Hedging of Portfolio Credit Risk in a Markov Copula Model,
Journal of Optimization Theory and Applications 161 (1): 90-102, 2014
(with Tomasz R. Bielecki, Areski Cousin and Stéphane Crépey)
6. A Markov Copula Model of Portfolio Credit Risk with Stochastic Intensities and Random Recoveries,
Communications in Statistics - Theory and Methods, 43 (7): 1362-1389, 2014
(with Tomasz R. Bielecki, Areski Cousin and Stéphane Crépey)
7. Parameter estimation in credit models under incomplete information,
Communications in Statistics - Theory and Methods, 43 (7): 1409-1436, 2014 (with Rüdiger Frey)

Book chapters

8. Default contagion in large homogeneous portfolios
   Chapter 14 in *The Credit Derivatives Handbook Global Perspectives, Innovations, and Market Drivers* Gregoriou, G.N and Ali, P.U, (eds), McGraw-Hill (2008)
9. Markov chain models of portfolio credit risk
   Chapter 10 in *Oxford Handbook of Credit Derivatives*, A. Lipton and A. Rennie (eds), Oxford University Press, 2011 (with Tomasz R. Bielecki and Stéphane Crépey)
10. A bottom-up dynamic model of portfolio credit risk - Part I: Markov copula perspective
    in *Recent Advances in Financial Engineering 2012*, World Scientific (2014)
    (with Tomasz R. Bielecki, Areski Cousin and Stéphane Crépey)
11. A bottom-up dynamic model of portfolio credit risk - Part II: Common-shock interpretation, calibration and hedging issues, in *Recent Advances in Financial Engineering 2012*, World Scientific (2014)
    (with Tomasz R. Bielecki, Areski Cousin and Stéphane Crépey)

Other published papers

12. In search of a grand unifying theory, *Creditflux Newsletter*, July 2013, 20-21
    (with Tomasz R. Bielecki, Areski Cousin and Stéphane Crépey)

Working papers

13. CDS index options in Markov chain models, (2019), working paper.
14. Saddlepoint Approximations for Credit Portfolios with Stochastic Recoveries, (2022) working paper.
15. Optimal collateralization levels in OTC-trading network, (2022) working paper.

Theses

16. Implied Binomial Models, M.Sc. thesis, Chalmers University of Technology, Sweden (2001)
17. Dynamic Dependence Modelling in Credit Risk
    Licentiate thesis, Department of Mathematics, Chalmers University of Technology, Sweden (2005)
18. Pricing Portfolio Credit Derivatives
    Ph.D. thesis, Department of Economics, University of Gothenburg, Sweden (2007)

Lecture notes and teaching material

19. Lecture notes on Credit risk modelling, October 2021 (241 pages)
    developed for the course 'Credit risk modelling' in the Master of Finance programm, Univ. of Gothenburg.
20. Lecture notes on credit derivatives, October 2010 (26 pages)
    developed for the course 'Advanced Derivatives' in the Master of Economics programm, Univ. of Gothenburg.
21. Lecture notes for Static credit portfolio models, April 2018 (67 pages)
    developed for the course 'Financial risk' at Chalmers University of Technology.

Coauthors

Tomasz R. Bielecki	Department of Applied Mathematics, Illinois Institute of Technology, Chicago, USA
Areski Cousin	Institut de Recherche en Mathématique Avancée, Université de Strasbourg, France
Stéphane Crépey	Laboratoire de Probabilités, Statistique et Modélisation, Université de Paris, Paris, France
Rüdiger Frey	Institute for Statistics and Mathematics, Vienna University of Economics and Business
Jiwook Jang	Department of Actuarial Studies, Macquarie University, Sydney, Australia
Holger Rootzén	Department of Mathematical Sciences, Chalmers University of Technology, Sweden
Thorsten Schmidt	Department of Mathematics, University of Freiburg, Germany

Research visits

March 2017 (1 week)	University of Rome Tor Vergata	With Prof. Stefano Herzel
Nov 2011 (3 weeks)	Université d'Evry, Paris	With Prof. Stéphane Crépey
Oct 2011 (1 week)	Illinois Institute of Technology	with Prof. Tomasz R. Bielecki
May 2010 (3 days)	Katholieke Universiteit Leuven	With Prof. Wim Schoutens
May 2010 (2 weeks)	EURANDOM, Eindhoven	With Prof. Wim Schoutens
Feb-March 2010 (4 weeks)	Universität Leipzig	With Prof. Dr. Rüdiger Frey
Oct 2009 (3 days)	Katholieke Universiteit Leuven	With Prof. Wim Schoutens
Oct 2009 (2 days)	European Investment Bank	With Prof. Wim Schoutens
Aug-Sept 2009 (5 weeks)	Universität Leipzig	With Prof. Dr. Rüdiger Frey
June 2009 (1 week)	Université d'Evry, Paris	With Prof. Monique Jeanblanc
May-June 2009 (5 weeks)	EURANDOM, Eindhoven	With Prof. Wim Schoutens
Mar-Apr 2009 (5 weeks)	Universität Leipzig	With Prof. Dr. Rüdiger Frey
Jan 2009 (1 week)	Université d'Evry, Paris	With Prof. Monique Jeanblanc
June 2008 (4 weeks)	Université d'Evry, Paris	With Prof. Monique Jeanblanc
Oct 2006 (1 week)	Universität Leipzig	With Prof. Dr. Rüdiger Frey
Sept 2005 (1 week)	Universität Leipzig	With Prof. Dr. Rüdiger Frey

Grants and awards

July 2021	Nasdaq Nordic Foundation Grants, Research project
July 2020	Nasdaq Nordic Foundation Grants, Research project
July 2019	Nasdaq Nordic Foundation Grants, Research project
May 2018	Jan Wallander and Tom Hedelius foundation, Research project
Dec 2010	Co-applicant of the Vinnova grant for the Gothenburg Centre for Finance
Jun 2010	Knut och Alice Wallenbergs stiftelse, travel grant
Dec 2009	ESF (European Science Foundation), AMaMeF travel grant
Nov 2008	Jan Wallander and Tom Hedelius foundation, post-doc fund, Nov 2008-Dec 2011
Oct 2008	ESF (European Science Foundation), AMaMeF travel grant
Nov 2007	Stiftelsen Paul och Marie Berghaus donationsfond, travel grant
Nov 2006	Adlerbertska Stipendiestiftelsen, research grant
Nov 2006	Stiftelsen Paul och Marie Berghaus donationsfond, travel grant
Mar 2006	Kungliga och Hvitfeldtska stiftelsen, travel grant
Nov 2005	Adlerbertska Stipendiestiftelsen, research grant
Aug 2004	Jan Wallander and Tom Hedelius foundation, Phd-funding, Sept 2004 - Sept 2007

Services

External evaluator of a research project for the Austrian Academy of Sciences, 2011

Member of the scientific committee for the conference *Climate Risk & Green Transition*, Paris, March 21-22, 2022

Member of the scientific committee for the conference *Fintechs & Covid-19, Learning from a Pandemic Crisis?*, Online event, Paris, March 25-26, 2021

Member of the scientific committee for the conference *The Rise of Fintechs: Can Networks and Platforms Disrupt traditional Financial Intermediation?*, Online event, Paris, March 16-17, 2020

Member of the scientific committee for the conference *Low Interest Rate Environment : Search for Yield, Risk Management and Transitions*, Paris, March 18-19, 2019

Member of the scientific committee for the conference *Emerging Extra-Financial Risks in Finance and Insurance*, Paris, March 26-27, 2018

Member of the scientific committee for the conference *Retail Finance and Insurance : The Impact of Fintech*, Paris, March 27-28, 2017

Member of the scientific committee for the conference *New Challenges facing the investment managment industry*, Paris, March 21-22, 2016

Member of the scientific committee for the conference *Big Data in Finance and Insurance* , Paris, March 20-21, 2014

Member of the scientific committee for the conference *Liquidity Risk*, Paris, March 25-26, 2013

Member of the scientific committee for the conference *Systemic Risk*, Paris, March 22-23, 2012

Member of the scientific committee for the conference *Long Term Risks*, Paris, March 10-11, 2011

Member of the scientific committee for the conference *Risk Dependencies*, Paris, March 25-26, 2010

Chairman at the credit derivative-session in the *APS 2011 conference* , Stockholm, July 6-8, 2011

Chairman at the contagion-session in the conference *Risk Dependencies*, Paris, March 25-26, 2010

Chairman at the Finance and econometrics-session in the *IMS 73rd Annual Meeting*, August 9-13, 2010

Discussant on two papers in the conference *Financial Risks*, Paris, March 27-28, 2008

Discussant on a paper in the conference *National PhD Workshop in Finance*, Stockholm, Oct 22-23, 2012

Member of the teaching committee at the Department of Economics, University of Gothenburg,

Bachelier Finance Society World Congress 2010, Conference Reviewing (2 reviews)

Journal Reviewing **(27 reviews for 14 journals)**

Mathematical Finance (5 reviews)

Finance and Stochastics (2 reviews)

SIAM Journal on Financial Mathematics (2 reviews)

Quantitative Finance (3 reviews)

International Journal of Theoretical and Applied Finance (2 reviews)

Statistics & Probability Letters (2 reviews)

Communications in Statistics - Theory and Methods

Review of Derivatives Research (3 reviews)

Journal of Banking and Finance

Journal of Computational Finance

Journal of Credit Risk (2 reviews)

Applied Mathematics and Computation

Journal of Futures Markets, Economics eJournal

Conference and Seminar Presentations

June 2021	10th General AMaMeF Conference 2021	Online	
June 2021	SIAM Conference on Financial Mathematics and Engineering 2021	Online	
Sept 2019	VCMF 2019, Vienna Congress on Mathematical Finance	Vienna	Austria
Sept 2019	KWC-CFF Conference	Arild	Sweden
June 2019	9th General AMaMeF Conference	Paris	France
Dec 2018	Statistics seminar - Örebro University	Örebro	Sweden
Sep 2018	KWC-CFF Conference	Varberg	Sweden
July 2018	10th World Congress of the Bachelier Finance Society	Dublin	Ireland
Sep 2017	KWC-CFF Conference	Mölle	Sweden
June 2017	8th General AMaMeF Conference	Amsterdam	Holland
Mar 2017	Finance seminar, University of Rome Tor Vergata,	Rome	Italy
July 2016	9th World Congress of the Bachelier Finance Society	New York	USA
Oct 2014	CFF-conference, Centre for Finance, University of Gothenburg	Göteborg	Sweden
Dec 2012	Department of Mathematical Sciences, University of Gothenburg	Göteborg	Sweden
May 2012	CFF-conference, Centre for Finance, University of Gothenburg	Göteborg	Sweden
Nov 2011	Mathematical Finance Seminar, Université d´Evry	Paris	France
Nov 2011	Séminaire Bachelier, Institut Henri Poincaré	Paris	France
Oct 2011	Applied Mathematics Colloquia, Illinois Institute of Technology	Chicago	USA
Sep 2011	Markov & semi-Markov Processes & Related Fields	Thessaloniki	Greece
July 2011	The 2011 INFORMS Applied Probability Society Conference	Stockholm	Sweden
May 2011	Vinnova Workshop on Basel III	Göteborg	Sweden
Aug 2010	73rd Annual Meeting of the Institute of Mathematical Statistics	Göteborg	Sweden
Jun 2010	6th World Congress of the Bachelier Finance Society	Toronto	Canada
May 2010	Multivariate Risk Modelling Seminar, EURANDOM	Eindhoven	Holland
Apr 2010	Fifth conference on Advanced Mathematical Methods in Finance	Bled	Slovenia
Mar 2010	3rd Financial Risks International Forum, Risk Dependencies	Paris	France
May 2009	Multivariate Risk Modelling Seminar, EURANDOM	Eindhoven	Holland
Jan 2009	Mathematical Finance Seminar, Université d´Evry	Paris	France
Dec 2008	Professional Update 2008, University of Gothenburg	Göteborg	Sweden
Nov 2008	Financial derivatives and stochastic analysis, CTH	Göteborg	Sweden
Jul 2008	5th World Congress of the Bachelier Finance Society	London	England
Jun 2008	International Workshop: Credit Risk, Université d´Evry	Paris	France
Jun 2008	Séminaire Bachelier, Institut Henri Poincaré.	Paris	France
Jun 2008	Mathematical Finance Seminar, Université d´Evry (June 12)	Paris	France
Jun 2008	Mathematical Finance Seminar, Université d´Evry (June 5)	Paris	France
Apr 2008	Workshop on Non-linear PDEs and Financial Mathematics	Halmstad	Sweden
Mar 2008	New Developments in Structured Products and Credit Derivatives	Paris	France
Feb 2008	Finance, Stochastics and Insurance	Bonn	Germany
Nov 2007	Mathematical Finance Seminar, Royal Institute of Technology	Stockholm	Sweden
Nov 2007	Credit Derivatives for treasuries	Göteborg	Sweden
Sept 2007	Defense of PhD-thesis, University of Gothenburg	Göteborg	Sweden
Mar 2007	Credit Derivatives for treasuries	Göteborg	Sweden
Nov 2006	CFF/NEK seminar, University of Gothenburg	Göteborg	Sweden
May 2005	Defense of Licentiate thesis, CTH	Göteborg	Sweden
Nov 2004	Popular presentation, CTH/GU	Göteborg	Sweden
Oct 2004	NTM-autumn meeting	Stenungsund	Sweden
Dec 2003	PhD-Workshop in Mathematical Finance	Lund	Sweden
Oct 2001	Defense of M.Sc. thesis, CTH	Göteborg	Sweden
Mar 2001	Handelsbanken Investment Banking	Stockholm	Sweden
Oct 2000	Handelsbanken Investment Banking	Stockholm	Sweden

Teaching

At the Department of Economics/Centre for Finance, University of Gothenburg

Nov 2021	Credit risk modelling (main lecturer and developer of the course)
Apr 2021	Applied probability (main lecturer and developer of the course)
Nov 2020	Credit risk modelling (main lecturer and developer of the course)
Apr 2020	Applied probability (main lecturer and developer of the course)
Nov 2019	Credit risk modelling (main lecturer and developer of the course)
Apr-May 2019	Applied probability and statistics (main lecturer and developer of the course)
Nov 2018	Credit risk modelling (main lecturer and developer of the course)
Sep-Oct 2018	Mathematics (developer and teacher of the matlab-sessions and assignments)
Apr-May 2018	Applied probability and statistics (main lecturer and developer of the course)
Sep-Oct 2017	Mathematics (developer and teacher of the matlab-sessions and assignments)
Apr-May 2017	Applied probability and statistics (main lecturer and developer of the course)
Dec 2016	Credit risk modelling (main lecturer and developer of the course)
Sept 2016	Mathematics (developer and teacher of the matlab-sessions and assignments)
Mar-Apr 2016	Applied probability and statistics (main lecturer and developer of the course)
Dec 2015	Credit risk modelling (main lecturer and developer of the course)
Mar-Apr 2015	Applied probability and statistics (main lecturer and developer of the course)
Dec 2014	Credit risk modelling (main lecturer and developer of the course)
Sep 2014	Quantitative finance (main lecturer and developer of half of the course)
Mar-Apr 2014	Applied probability and statistics (main lecturer and developer of the course)
Dec 2013	Credit risk modelling (main lecturer and developer of the course)
Sep 2013	Quantitative finance (main lecturer and developer of half of the course)
Mar-Apr 2013	Applied probability and statistics (main lecturer and developer of the course)
Dec 2012	Credit risk modelling (main lecturer and developer of the course)
Nov 2012	Applied probability and statistics (main lecturer and developer of the course)
Dec 2011	Credit risk modelling (main lecturer and developer of the course)
Oct 2011	Advanced Derivatives (lecturing and developing the credit derivatives part)
Feb 2011	Advanced Derivatives (lecturing and developing the credit derivatives part)
Dec 2010	Credit risk modelling (main lecturer and developer of the course)
Oct 2010	Advanced Derivatives, (lecturing and developing the credit derivatives part)
Nov-Dec 2009	Credit risk modelling (main lecturer and developer of the course)
Oct 2009	Advanced Derivatives (lecturing and developing the credit derivatives part)
Nov-Dec 2008	Credit risk modelling (main lecturer and developer of the course)
Oct 2008	Advanced Derivatives (lecturing and developing the credit derivatives part)
Mar 2008	Advanced Derivatives (lecturing and developing the credit derivatives part)
Feb - Mar 2006	Stochastic Calculus, for Ph.D-students (assistant)

Teaching at the Department of Mathematical Sciences, Chalmers University of Tech.

In the period 2009-2018:

Apr-May 2018	Financial Risk (lecturing and developing the credit risk part)
Apr-May 2017	Financial Risk (lecturing and developing the credit risk part)
Nov-Dec 2015	Financial Risk (lecturing and developing the credit risk part)
Nov-Dec 2014	Financial Risk (lecturing and developing the credit risk part)
Nov-Dec 2013	Financial Risk (lecturing and developing the credit risk part)
Nov-Dec 2012	Financial Risk (lecturing and developing the credit risk part)
Dec 2011	Financial Risk (lecturing and developing the credit risk part)
Dec 2010	Financial Risk (lecturing and developing the credit risk part)
Dec 2009	Financial Risk (lecturing and developing the credit risk part)
Feb-Mar 2009	Financial Risk (lecturing and developing the credit risk part)

Teaching at the Department of Mathematical Sciences, Chalmers University of Tech.

In the period 2001-2003:

Nov 2003	Introduction Analysis, for civil engineers (assistant)
Sept - Oct 2003	Analysis A, for electro engineers (assistant)
Mar - May 2003	Applied Mathematics, for chemistry engineers (assistant)
Jan - Mar 2003	Analysis C, for electro engineers (assistant)
Oct - Dec 2002	Analysis B, for electro engineers (assistant)
Sept - Oct 2002	Analysis A, for electro engineers (assistant)
Jan - Mar 2002	Mathematical Software, for mechanical engineers (assistant)
Oct - Dec 2001	Analysis and Linear Algebra B, for chemistry engineers (assistant)
Sept - Oct 2001	Analysis and Linear Algebra A, for chemistry engineers (assistant)

Other teaching

March 2017	mini-course on *Static credit portfolio models*, Department of Economics and Finance, University of Rome Tor Vergata, Rome, Italy.

Supervision **(36 theses)**

M.Sc-Thesis at the Department of Economics, University of Gothenburg (GU)

36. Model for Central Counterparty Risk with Stochastic Default Intensities, (2021)
35. Enhanced Risk-Adjusted Returns Through Momentum Adaptations - Analysis on Momentum Strategies in the Nordic Stock Market, (2021)
34. Optimal financial resources for Central Counterparties, (2019)
33. Peer-to-Peer Lending from a CDO Perspective, (2018)
32. Contingent Convertible Bonds and the Optimal Default Barrier, (2018)
31. Transition Matrices Conditional on Macroeconomic Cycles: A Portfolio Stress-Test Application, (2018)
30. Counterparty Credit Risk Efficieny of Central Clearing, (2017)
29. Pricing contingent convertible bonds: A implementation with the hybrid equity-credit model, (2017)
28. Central Counterparties - A Numerical Implementation of the Default Waterfall, (2016) *(winner of the **Ekman Scholarship** for best thesis in international business and trade 2016)*
27. CVA for IR-Swaps under Wrong Way Risk - A numerical evaluation, (2016)
26. Pricing Credit Default Index Swaptions, (2015)
    *(winner of the **Malmsten award** for best thesis in Finance 2015 at the University of Gothenburg)*
25. Modeling CVA for interest rate swaps in a CIR-framework, (2013)
24. Modelling and Pricing Contingent Convertibles, (2012)
23. The impact of the financial crisis on the pricing and hedging of interest rate derivatives, (2012)
22. Valuation of Interest Rate Swaps in the presence of Counterparty Credit Risk, (2011)
21. Counterparty credit risk in energy-commodity forwards, (2011)
20. Performance and Sensitivity Analysis of the VaR-Based Portfolio Insurance Strategy, (2011)
    *(winner of the **Malmsten award** for best thesis in Finance 2011 at the University of Gothenburg)*

19. Credit Default Swaps: New regulations and conversion problematics, (2010)
18. Pricing of Credit Derivatives with the Hull-White Two-Factor Model, (2006)
17. Option Pricing Under Stochastic Volatility, (2005)
16. Credit Derivatives. An overview and the Basics of Pricing, (2005)

M.Sc-Thesis at the Department of Mathematical Sciences, Chalmers and GU

15. Cash-flow CDO pricing with amortization, (2012)
14. Modelling Dependent Defaults in Static Credit Portfolios, (2011)

B.Sc-Thesis at the Department of Economics, University of Gothenburg

13. Predicting hotel cancellations using machine learning, (2022) - bachelor thesis in statistics
12. Deep Learning and the Heston Model: Calibration & Hedging, (2020) - bachelor thesis in statistics
11. Election Forecasting in a Multiparty System, (2018) - bachelor thesis in statistics
10. Variable selection techniques for the Cox proportional hazardsmodel: A comparative study, (2017) - bachelor thesis in statistics
9. A study of the Basel III CVA formula, (2017)
8. Models for Credit Risk in Static Portfolios, (2015)
7. A study on the relation between VIX, S&P500 & the CDX-index, (2014)
6. The Relationship between Corporate Social Responsibility and Financial Performance, (2014)
5. Value-at-Risk and Expected Shortfall - Managing risk for an equity portfolio, (2014)
4. Reducing Portfolio Risk Using Volatility - A risk-return examination of the addition of VIX and VIX futures contracts to an equity portfolio, (2013)
3. Pricing Contingent Convertibles in an intensity based model, (2013)
2. Exchange rates and stock markets - A cointegrated vector autoregressive approach to model the dynamics of the U.S exchange rate and the Swedish stock market, (2013)
1. Do Acquisition Announcements Have an Effect on the Acquiring Firm's CDS Spread?, (2011)

Pedagogical courses

Teaching and Learning in Higher Education 3: Applied Analysis, (5 hp)

Autumn 2015, University of Gothenburg

Teaching and Learning in Higher Education 2: Subject Field Pedagogy (5 hp)

Spring 2015, University of Gothenburg

Teaching and Learning in Higher Education 1: Basic Course (5 hp)

Spring 2014, University of Gothenburg

Supervision in Postgraduate Programmes (5 hp)

Autumn 2013, University of Gothenburg

Pedagogy for PhD students in Mathematical Sciences (1.5 hp)

Autumn 2001, University of Gothenburg and Chalmers university of Technology

Computer skills

Matlab	very experienced
C++/C, Java, Ada,	experienced
R, Python, Sybase SQL	working knowledge

Last updated: February, 2022.