

Claus Munk (latest update: January 2019)

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Born 22 July 1969. Danish National.
Married to Lene Munk Larsen.
Father of Mathias (1994) and Lukas (2004).
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Textbooks

- Fixed Income Modelling. 576 pages. *Oxford University Press*, June 2011.
- Financial Asset Pricing Theory. 585 pages. *Oxford University Press*, April 2013.

Journal articles

22. Predictors and Portfolios over the Life Cycle. *Journal of Banking and Finance*, 100: 1-27 (2019). With Holger Kraft and Farina Weiss.
21. Housing Habits and Their Implications for Life-Cycle Consumption and Investment. *Review of Finance*, 22(5): 1737-1762 (2018). With Holger Kraft and Sebastian Wagner.
20. Consumption Habits and Humps. *Economic Theory*, 64(2): 305-330 (2017). With Holger Kraft, Frank Seifried, and Sebastian Wagner.
19. Options in Compensation: Promises and Pitfalls. *Journal of Accounting Research* 52(3): 703-732 (2014). With Christian Riis Flor and Hans Frimor.
18. Portfolio Management with Stochastic Interest Rates and Inflation Ambiguity. *Annals of Finance* 10(3): 419-455 (2014). With Alexey Rubtsov.
17. Asset Allocation over the Life-Cycle: How Much Do Taxes Matter? *Journal of Economic Dynamics and Control* 37(11): 2217-2240 (2013). With Marcel Fischer and Holger Kraft.
16. Solving Constrained Consumption-Investment Problems by Simulation of Artificial Market Strategies, *Management Science* 59(2), 485-503 (2013). With Björn Bick and Holger Kraft.
Winner of the *Outstanding paper award* at the 2009 meeting of the German Finance Association.
15. Robust Portfolio Choice with Ambiguity and Learning about Return Predictability, *Journal of Banking and Finance* 37(5), 1397-1411 (2013). With Nicole Branger and Linda Sandris Larsen.
14. Equilibrium in Securities Markets with Heterogeneous Investors and Unspanned Income Risk, *Journal of Economic Theory* 147(3), 1035-1063 (2012). With Peter Ove Christensen and Kasper Larsen.
13. The Costs of Suboptimal Dynamic Asset Allocation: General Results and Applications to Interest Rate Risk, Stock Volatility Risk, and Growth/Value Tilts, *Journal of Economic Dynamics and Control* 36(2), 266-293 (2012). With Linda Sandris Larsen.
12. Optimal Consumption, Housing, and Investments over the Life-Cycle, *Management Science* 57(6), 1025-1041 (2011). With Holger Kraft.
11. Dynamic Asset Allocation with Stochastic Income and Interest Rates, *Journal of Financial Economics* 96(3), 433-462 (2010). With Carsten Sørensen.
10. Portfolio and Consumption Choice with Stochastic Investment Opportunities and Habit Formation in Preferences, *Journal of Economic Dynamics and Control* 32(11), pp. 3560-3589 (2008).
9. Bond Durations: Corporates vs. Treasuries, *Journal of Banking and Finance* 31(12), pp. 3720-3741 (2007). With Holger Kraft.
8. Optimal Consumption and Investment Strategies with Stochastic Interest Rates, *Journal of Banking and Finance* 28(8), pp. 1987-2013 (2004). With Carsten Sørensen.
7. Dynamic Asset Allocation under Mean-Reverting Returns, Stochastic Interest Rates and Inflation Uncertainty: Are Popular Recommendations Consistent with Rational Behavior? *International Review of Economics and Finance* 13(2), pp. 141-166 (2004). With Carsten Sørensen and Tina Nygaard Vinther.
6. Optimal Consumption and Investment Strategies with a Perishable and an Indivisible Durable Consumption Good, *Journal of Economic Dynamics and Control* 28(2), pp. 209-253 (2003). With Anders Damgaard and Brian Fuglsbjerg.

5. The Markov Chain Approximation Approach for Numerical Solution of Stochastic Control Problems: Experiences from Merton's Problem, *Applied Mathematics and Computation* 136(1), pp. 47-77 (2003).
4. Price Bounds on Bond Options, Swaptions, Caps, and Floors Assuming Only Non-negative Interest Rates, *International Review of Economics and Finance* 11(4), pp. 333-345 (2002).
3. Optimal Consumption/Investment Policies with Undiversifiable Income Risk and Liquidity Constraints, *Journal of Economic Dynamics and Control* 24(9), pp. 1315-1343 (2000).
2. Stochastic Duration and Fast Coupon Bond Option Pricing in Multi-Factor Models, *Review of Derivatives Research* 3(2), pp. 157-181 (1999).
1. The Valuation of Contingent Claims under Portfolio Constraints: Reservation Buying and Selling Prices, *European Finance Review / Review of Finance* 3(3), pp. 347-388 (1999).

Other publications

- (IN DANISH) Nye samfundsforudsætninger: Baggrund, niveau og konsekvenser for pensionsprognoser, *Finans/invest*, No. 6, pp. 6-14 (2018). With Jesper Rangvid.
- Optimal Real Consumption and Investment Strategies in Dynamic Stochastic Economies. In *Stochastic Economic Dynamics*, eds. B.S. Jensen and T. Palokangas, CBS Press (2007). With Carsten Sørensen.
- (IN DANISH) Asset pricing modeller, Chapter 2 in *Udviklingslinier i finansiering* edited by Michael Christensen, Jurist-og Økonomforbundets Forlag (2005). Translated title: Asset pricing models.
- (IN DANISH) Værdiansættelse af optioner i aflønningskontrakter, *Finans/Invest*, No. 4, pp. 20-30 (2003). With Christian Riis Flor. Translated title: The Valuation of Executive Stock Options.
- (IN DANISH) Skal investorer med lang investeringshorisont have større aktieandel?, *Finans/invest*, No. 7, pp. 10-17 (2001). With Carsten Sørensen. Translated title: Should Investors with Long Investment Horizon Have a Higher Stock Weight?

Current working papers

- How do Interest-only Mortgages Affect Consumption and Saving over the Life Cycle? (2018). With Linda Sandris Larsen, Rikke Sejer Nielsen, and Jesper Rangvid.
- Hedging Recessions (2018). With Nicole Branger and Linda Sandris Larsen.
- A Mean-Variance Benchmark for Household Portfolios over the Life Cycle (2018).
- Solving Life Cycle Problems with Biometric Risk by Artificial Insurance Markets (2018). With Christoph Hambel and Holger Kraft.

Lecture notes

- Financial Markets and Investments (2018)
- Recursive utility in financial economics (2018)
- (IN DANISH) Indledende obligations- og rentestrukturanalyse (2012). 130 pages. Translated title: Introduction to the Analysis of Bonds and the Term Structure of Interest Rates. With Christian Riis Flor and Linda Sandris Larsen.

Positions and education

2012-	Professor, Dept. of Finance, Copenhagen Business School, Denmark
2009-2012	Professor, Dept. of Economics & Dept. of Mathematics, Aarhus University, Denmark
2004-2008	Professor, Dept. of Business and Economics, University of Southern Denmark
1999-2004	Associate professor, Dept. of Accounting and Finance, University of Southern Denmark
1996-1999	Assistant professor, Dept. of Management, University of Southern Denmark
1997	PhD in economics, Odense University, Denmark. Thesis: Optimal Consumption/Portfolio Policies and Contingent Claims Pricing and Hedging in Incomplete Markets
1993	MSc in Mathematical Economics (cand.scient.oecon.), Odense University, Denmark

Selected paper presentations and talks

Conferences, symposia, workshops (* by co-author)

- Midwest Finance Association meeting 2019
- Asset Allocation Workshop, Bolzano, 2017
- SGF conference, Zurich, 2017
- Netspar International Pension Workshop 2013, 2016 (key note speaker)
- CEPR European Conference on Household Finance, Paris, 2016*
- PerCent conference, Copenhagen: 2016, 2018*
- WU Gutmann Center Symposium on Retirement and Asset Management, Vienna, 2015*
- Stochastic Models and Control, workshop, Kaiserslautern, 2015
- Arne Ryde Workshop in Financial Economics, Lund, Sweden, 2014, 2015
- Asset pricing workshop, University of York, England, 2014
- 11th Workshop on Pension, Insurance and Saving, Paris, 2013
- European Finance Association Meetings: 1997, 1998, 1999, 2001*, 2003*, 2006, 2006*, 2008, 2010
- Bachelier Finance Society World Congress: 2000, 2010, 2010*
- World Finance Conference 2013*, 2014*, 2017
- University of Minnesota Accounting Theory Conference 2011*
- Workshop on Dynamic Asset Allocation, Aarhus, Denmark, 2009.
- Symposium in honour of Michael Brennan and Eduardo Schwartz, Copenhagen Business School, 2008
- Advances in Portfolio Decision Making, University of Notre Dame, 2007
- Eastern Finance Association 2009, 2009*
- 10th Symposium on Finance, Banking, and Insurance, University of Karlsruhe, 2005
- 6th Columbia-JAFEE International Conference, Tokyo 2003
- EFMA (European Financial Management Association) Meetings: 1998, 2001*, 2002*, 2012*
- Discussant at numerous occasions, e.g. AFA2019, several European Finance Association meetings.

Universities

- City University of Hong Kong 2019, Zürich 2013, Goethe Frankfurt 2004, 2010, Helsinki 2005, 2010, 2013, 2016, Aarhus 2006, Kaiserslautern 2005, Tilburg 2005, Mainz 2001 .

Mainly for practitioners

- Danish Actuarial Association (2018), Danish Centralbank (2018), Danish Society for Financial Analysts (2006), Nordea Markets (2004), the Central Bank of Norway (2003), Japanese Government Pension Investment Fund (2003).

Grants and awards

- Financial support from the Danish Research Council for Social Sciences for the organization of the Symposium on Stochastic Dynamic Models in Finance and Economics, 2008.
- Leader of the research project "Dynamic Portfolio Management" funded by the Danish Social Science Research Council, 2004-2008.
- Member of the Danish Centre for Accounting and Finance (D-CAF) funded by the Danish Social Science Research Council, Nykredit, and The Institute of State Authorized Public Accountants in Denmark.
- Financial support from INQUIRE Europe for research project "Dynamic Asset Allocation with Stochastic Income and Interest Rates" carried out with Carsten Sørensen, Copenhagen Business School.

Editorial work

- **Associate editor**, Journal of Economic Dynamics and Control, 2010-
- Member of the **editorial board**, Business Research, 2008-
- **Referee** for journals:
 - Annals of Finance
 - Applied Mathematics and Computation
 - Applied Mathematics and Optimization
 - Appl. Stoch. Models in Business and Industry
 - ASTIN Bulletin
 - Econometrica**
 - Economics Bulletin
 - European Economic Review
 - European Journal of Operational Research
 - Int'l Journal of Theoretical and Applied Finance
 - Int'l Review of Economics and Finance
 - Journal of Applied Probability
 - Journal of Banking and Finance
 - Journal of Economic Behavior & Organization
 - Journal of Economic Dynamics and Control
 - Journal of Economic Theory**
 - Journal of Finance**
 - Journal of Financial Economics**
 - Journal of Futures Markets
 - Journal of Macroeconomics
 - Journal of Mathematical Economics
 - Macroeconomic Dynamics
 - Management Science**
 - Mathematical Finance
 - Mathematics and Financial Economics
 - Quantitative Finance
 - Review of Finance
 - Review of Financial Economics
 - Scandinavian Actuarial Journal
 - Stochastic Analysis and Applications
 - Studies in Nonlinear Dynamics & Econometrics
- **Reviewer** of text book proposals for McGraw-Hill and Cambridge University Press.
- **Reviewer** of grant application for Deutsche Forschungsgemeinschaft

Other professional activities

- **Program director (line coordinator)** of Finance and Investments concentration in the MSc program in Economics and Business Administration, Copenhagen Business School, 2014-
- Member of AFA/AEA **recruiting committee**, Dept of Finance at Copenhagen Business School (since 2014), Dept of Economics at Aarhus University (2011, 2012).
- Member of the **program committee** for the European Finance Association Meetings 2002, 2003, 2009, 2012, and since 2015; the European Financial Management Association Meeting 2010; and the Conference of the Swiss Society for Financial Market Research 2011, 2012, and since 2014.
- Member of the **board** of the Danish Doctoral School in Finance (2003-2010) and the Danish Center for Accounting and Finance (2008-2011).
- Member of Assistant, Associate, and Full Professorship **evaluation committees** at Aarhus University, the University of Copenhagen, the Copenhagen Business School, the Aarhus School of Business, and the University of Southern Denmark.
- Member of **PhD committees** at Tilburg University, Copenhagen Business School, Aarhus University, University of Copenhagen, Aarhus School of Business, Lund University, University of Southern Denmark.
- **Organizer/co-organizer** of
 - *Workshop on Dynamic Asset Allocation* (Aarhus, Denmark, 2009).
Speakers included Anthony Lynch, Allan Timmermann, and Ralph Koijen.
 - *Symposium on Stochastic Dynamic Models in Finance and Economics* (Odense, Denmark, 2008).
Speakers included Robert C. Merton, Bernt Øksendal, and Vicky Henderson.
 - *Nykredit Symposium on Housing, Mortgage and Portfolio Choice* (Copenhagen, 2007).
Speakers included Eduardo Schwartz, Nancy Wallace, Frank de Jong, and Ralph Koijen.
 - *Symposium on Asset Allocation and Pension Management* (Copenhagen, 2004).
Speakers included Michael Brennan and Raman Uppal.

Supervision of PhD students

At Aarhus University:

- **Martin Schultz-Nielsen:** Optimal corporate investments and capital structure, completed March 2014, now McKinsey and Company, Copenhagen, Denmark

At the University of Southern Denmark:

- **Martin Skovgaard Hansen:** Life and Pension Insurance – Dynamics and Control, completed Nov 2002, now CTO in Proveo (asset management), Denmark
- **Kasper Larsen:** Mathematical finance, completed Sep 2004, now Associate professor at Rutgers University (math)
- **Simon Lysbjerg Hansen:** Asset pricing, consumption/portfolio problems, completed Oct 2006, now in Danske Bank, Copenhagen
- **Linda Sandris Larsen:** Asset allocation, completed July 2009, now Associate professor at Copenhagen Business School

Teaching experience

PhD

Fall 2016- 2018:	Advanced Asset Pricing , Copenhagen Business School (44 hours)
Spring 2009-2012:	Advanced Financial Economics , Aarhus University (44 hours + projects)
Fall 2005-2018:	Theoretical Asset Pricing , Graduate School of Finance, Helsinki, Finland (20 hours)
August 2010-2012:	Dynamic Asset Allocation , Aarhus Univ. and Danish Doctoral School of Finance (20 h)
Fall 2002-2008:	Asset Pricing Theory , Danish Doctoral School of Finance (24-60 hours)
May 2004:	Dynamic Asset Allocation , Graduate School of Economics, Bonn, Germany (15 hours)
August 2003:	Dynamic Asset Pricing, Optimal Investments, and Derivatives Center for Financial Studies, Frankfurt, Germany (15 hours)
Spring 2000-2003:	Continuous-time Finance , Danish Doctoral School of Finance (12-18 hours)

Graduate/MSc

Fall 2014-2018:	Investments , Copenhagen Business School (33 hours of lectures)
Fall 2012-2014:	Capital Market Theory , Copenhagen Business School (30-33 hours of lectures)
Fall 2012, 2013:	Financial Markets and Instruments , Copenhagen Business School (30-33 hours of lectures, in 2012 also 3x18 hours of exercises)
Spring 2012:	Advanced Derivatives , Aarhus University (12 hours)
Fall 2010, 2011:	Intermediate Finance Theory , Aarhus University (48 hours + projects)
Fall 2009:	Dynamic Asset Allocation , Aarhus University (48 hours + projects)
Spring 2008:	Investments , University of Southern Denmark (22 hours + projects)
Fall 2007:	Derivatives and Risk Management , Univ. of Southern Denmark (45 hours + projects)
Fall 2005, Spring 2008:	Asset Pricing , University of Southern Denmark (22-45 hours + projects)
Spring 2002-2005:	Asset Allocation and Derivatives , Univ. of Southern Denmark (45 hours + projects)
Spring 1997-2001:	Advanced Finance 2 , University of Southern Denmark (60 hours + projects; in Danish)
Fall 1999, 2000:	Advanced Finance 1 , University of Southern Denmark (60 hours + projects; in Danish)

Undergraduate/BSc

Spring 2006, 2007:	Business Economics 3 , University of Southern Denmark (15-33 hours; in Danish)
Fall 1996-1998:	Finance and Investments , University of Southern Denmark (60 hours; in Danish)