

# Alex Weissensteiner

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## Institutional activities

since 2020            **Vice-Rector for Studies**  
2018–2020           **Vice-Dean for Teaching**  
2015–2020           **Program Director Economics & Management**  
2016–2020           **Coordinator of the Quality Committee**

## Education

08/2017            **Abilitazione 13/D4, fascia I** (postdoctoral lecture qualification) for the discipline *Mathematical Methods for Economics, Finance and Actuarial Science*.  
04/2014            **Abilitazione 13/B4, fascia II** (postdoctoral lecture qualification) for the discipline *Economics of Financial Intermediaries and Corporate Finance*.  
06/2010            **Habilitation** (postdoctoral lecture qualification) at the Leopold Franzens University Innsbruck for the discipline *Business Studies*.  
2000–2003        **PhD in Finance** at the Leopold Franzens University Innsbruck, Austria.  
Degree with distinction (Dr. rer. soc. oec).  
1993–1998        **Master of Business and Economics** at the Leopold Franzens University Innsbruck, Austria.  
Degree with distinction (Mag. rer. soc. oec).

## Academic activities

since 2019            Full Professor in *Quantitative Finance*, **Free University of Bolzano**

2015–2018	Associate Professor in <i>Finance</i> , <b>Free University of Bolzano</b>
2013–2014	Full Professor in <i>Financial Engineering</i> , <b>Technical University of Denmark</b>
since 2012	Contract professor in <i>Portfolio Management and Financial Risk Management</i> , <b>University of Liechtenstein</b>
2009–2010	Assistant professor at the Department of Banking and Finance, <b>Leopold Franzens University Innsbruck</b>
2005–2017	Contract professor in <i>Finance for Non-profit Organizations</i> , <b>Management Center Innsbruck</b>
2002–2010	Teaching assistant in <i>Mathematical Finance</i> , <b>Free University of Bolzano</b>
1999–2006	Contract lecturer in <i>Financial Risk Management and Financial Derivatives</i> , <b>Leopold Franzens University Innsbruck</b>

## Major consulting activities

1998–2003	Nova Portfolio Management GmbH, Innsbruck, Austria: Asset (Liability) Management
2004–2006	Freelance for Project.03 AG, Bolzano, Italy: Foundation of a new private bank (now Prader Bank AG), responsible for the capital operations and the building of the treasury and finance department

## Language skills

German (mother tongue), Italian (C1), English (C1)

# 1 Research

## 1.1 Fields of research

- life-cycle asset allocation, asset-liability management, pension finance
- empirical and theoretical asset pricing, financial engineering
- financial risk management

- quantitative methods for financial institutions
- market microstructure, information economics

## 1.2 Publications

1. Branger N., Hanke M., Weissensteiner A. (2023), The information content of wheat derivatives regarding the Ukrainian war, **Journal of Futures Markets**, forthcoming
2. Bressan S., Weissensteiner A. (2023), On the time-varying relationship between coskewness and returns of banks, **Review of Financial Economics**, forthcoming
3. Hanke M., Kosolapova M., Weissensteiner A. (2023), Estimating time-varying risk aversion from option prices and realized returns, **Quantitative Finance**, 23(1),1-17
4. Rogna M., Schamel G., Weissensteiner A. (2022), Modeling the switch from hail insurance to anti-hail nets, **Australian Journal of Agricultural and Resource Economics**, 67(1), 118-136
5. Bressan S., Weissensteiner A. (2022), Option-implied skewness and the value of financial intermediaries, **Journal of Financial Services Research**
6. Hanke M., Stoeckl S., Weissensteiner A. (2022), Recovering Election Winner Probabilities from Stock Prices, **Finance Research Letters**, 45, 102122
7. Rogna M., Schamel G., Weissensteiner A. (2022), The Apple Producers' Choice between Hail Insurance and Anti-Hail Nets, **Agricultural Finance Review**, 82(1)
8. Bressan S., Weissensteiner A. (2021), The financial conglomerate discount: Insights from stock return skewness, **International Review of Financial Analysis**, 74, 101662
9. Hanke M., Kosolapova M., Weissensteiner A. (2020), Covid-19 and market expectations: Evidence from option-implied densities, **Economics Letters**, 195, 109441
10. Hanke M., Stöckl S., Weissensteiner A. (2020), Political event portfolios, **Journal of Banking & Finance**, 118, 105883

11. Dangl T., Weissensteiner A. (2020), Optimal portfolios under time-varying investment opportunities, parameter uncertainty and ambiguity aversion, **Journal of Financial and Quantitative Analysis**, 55(4), 1163-1198
12. Rigamonti A., Weissensteiner A. (2020), Asset allocation under predictability and parameter uncertainty using LASSO, **Computational Management Science**, 17, 179-201
13. Hanke M., Poulsen R., Weissensteiner A. (2019), Numeraire dependence in risk-neutral probabilities of event outcomes, **The Journal of Derivatives**, 26(4), 128-143
14. Branger N., Lucivjanska K., Weissensteiner A. (2019), Optimal granularity for portfolio choice, **Journal of Empirical Finance**, 50, 125-146
15. Weissensteiner A. (2019), Correlated noise: Why passive investments might improve market efficiency, **Journal of Economic Behavior & Organization**, 158, 158-172
16. Hanke M., Poulsen R., Weissensteiner A. (2019), The CHF/EUR Exchange Rate during the Swiss National Bank's Minimum Exchange Rate Policy: A Latent Likelihood Approach, **Quantitative Finance**, 19(1), 1-11 (lead article)
17. Bressan S., Weissensteiner A. (2019), The relationship between stock return skewness and bank features, **Journal of Financial Management, Markets and Institutions**, 6(2), 1-17
18. Hanke M., Poulsen R., Weissensteiner A. (2018), Event-related exchange rate forecasts combining betting quotes and risk-neutral densities from option prices, **Journal of Financial and Quantitative Analysis**, 53(6), 2663-2683
19. Bjerring T., Rasmussen K., Weissensteiner A. (2018), Portfolio selection under supply chain predictability, **Computational Management Science**, 15(2), 139-159
20. Durante F., Foscolo E., Weissensteiner A. (2017), Dependence between stock returns of Italian banks and the sovereign risk, **Econometrics**, 5(2), 23, 1-14

21. Hanke M., Penev S., Schief W., Weissensteiner A. (2017), ROM simulation with exact means, covariances, and multivariate skewness , **European Journal of Operational Research**, 263(2), 510-523
22. Bjerring T., Ross O., Weissensteiner A. (2016), Feature selection for portfolio optimization, **Annals of Operations Research**, 256(1), 21-40
23. Geyer A., Hanke M., Weissensteiner A. (2016), Inflation forecasts using a Nelson/Siegel representation of nominal and real yield curves, **The Quarterly Review of Economics and Finance**, 60, 180-188
24. Konicz A.K., Pisinger D., Weissensteiner A. (2016), Optimal retirement planning with a focus on single and multilife annuities, **Quantitative Finance**, 16(2), 275-295
25. Konicz A.K., Pisinger D., Weissensteiner A. (2015), Optimal annuity portfolio under inflation risk, **Computational Management Science**, 12(3), 461-488
26. Hanke M., Poulsen P., Weissensteiner A. (2015), Where would the EUR/CHF exchange rate be without the SNB's guarantee?, **Journal of Futures Markets**, 35(12), 1103-1116
27. Geyer A., Hanke M., Weissensteiner A. (2014), No-arbitrage ROM simulation, **Journal of Economic Dynamics and Control**, 45, 66-79
28. Marinelli C., Weissensteiner A. (2014), On the relation between forecast precision and trading profitability of financial analysts, **Journal of Financial Markets**, 20, 39-60
29. Geyer A., Hanke M., Weissensteiner A. (2014), No-arbitrage bounds for scenario generation, **European Journal of Operational Research**, 236, 657-663
30. Geyer A., Hanke M., Weissensteiner A. (2013), Scenario tree generation and multi-asset financial optimization problems, **Operations Research Letters**, 41, 494-498
31. Pedersen A.M., Poulsen R., Weissensteiner A. (2013), Financial planning strategies for young households, **Annals of Operations Research**, 205(1), 55-76

32. Hanke M., Weissensteiner A. (2012), Optimale langfristige Asset Allocation für Privatinvestoren - Ausgewählte praxisrelevante Erkenntnisse aus der finanzwirtschaftlichen Literatur, **Journal of Banking and Financial Research**, 514-520
33. Lawrenz J., Weissensteiner A. (2012), Correlated Errors – Why a monotone relationship between forecast precision and trading profitability may not hold, **Journal of Business Finance & Accounting**, 39(5), 675-699
34. Ferstl R., Weissensteiner A. (2011), Asset-liability management under time-varying investment opportunities, **Journal of Banking & Finance**, 35(1), 182-192
35. Geyer A., Hanke M., Weissensteiner A. (2010), No-Arbitrage conditions, scenario trees, and multi-asset financial optimization, **European Journal of Operational Research**, 206(3), 609-613
36. Ferstl R., Weissensteiner A. (2010), Back testing short-term treasury management strategies based on multi-stage Stochastic Programming, **Journal of Asset Management**, 11, 94-112
37. Ferstl R., Weissensteiner A. (2010), Cash management using multi-stage Stochastic Programming, **Quantitative Finance**, 10(2), 209-219
38. Weissensteiner A. (2010), Using the Black-Derman-Toy interest rate model for portfolio optimization, **European Journal of Operational Research**, 202(1), 175-181
39. Geyer A., Hanke M., Weissensteiner A. (2009), A Stochastic Programming approach for multi-period portfolio optimization, **Computational Management Science**, 6(2), 187-208
40. Geyer A., Hanke M., Weissensteiner A. (2009), Life-cycle asset allocation and consumption using stochastic linear programming, **Journal of Computational Finance**, 12(4), 29-50
41. Weissensteiner A. (2009), A Q-learning approach to derive optimal consumption and investment strategies, **IEEE Transactions on Neural Networks**, 20(8), 1234-1243

### 1.3 Contributions to books

1. Geyer A., Hanke M., Weissensteiner A. (2012), Optimale Asset Allocation im Zeitablauf - ein Überblick über Modelle und Lösungsverfahren, in R. Frick, P. Gantenbein and P. Reichling (ed.), **Asset Management**, Haupt Verlag, 125-132
2. Hanke M., Weissensteiner A. (2017), Arbitrage-free Scenario Generation in Financial Optimization, in P. Brandimarte (ed.), **Wiley StatsRef-Statistics Reference Online**

### 1.4 Working papers

1. Dangl T., Galappi L., Weissensteiner A., Conservative holdings, aggressive trades: Learning, equilibrium flows, and risk premia
2. Ferrari D., Paterlini S., Rigamonti A., Weissensteiner A., Smoothed semicovariance estimation for portfolio selection

### 1.5 Grants

1. Affiliation with **Leopold-Franzens University**, Innsbruck, Austria:
  - (a) Oesterreichische Nationalbank: Life-cycle asset allocation using stochastic linear programming (EUR 71,000, July 2006 to May 2008)
  - (b) Tyrolean Science Fund: Life-cycle asset allocation using stochastic linear programming (EUR 15,000, March 2008 to November 2008)
  - (c) Oesterreichische Nationalbank: Life-cycle asset allocation. Comparison of different solution methods (EUR 85,000, September 2008 to February 2011)
2. Affiliation with **Free University of Bolzano**, Italy:
  - (a) Central Research Council: Strategic Information Disclosure and Persuasion - On Financial Expertise by Multiple Analysts (Disclosure, PI, EUR 46,000, February 2016 – February 2017)
  - (b) EU Erasmus+, Understanding Pensions in Europe, joint project with the University of Liechtenstein (lead partner), (UNPIE, PI, EUR 294,162, EUR 77,890 for the Free University of Bolzano, September 2016 – August 2019)

- (c) Central Research Council: Re-insurance of Hail Risks in South Tyrol (Hail-Risk, PI, EUR 199,900, May 2017 – May 2020)
- (d) EU Erasmus+, Understanding Saving in Europe, joint project with the University of Liechtenstein (lead partner), (USAVE, PI, EUR 289,281, EUR 63,630 for the Free University of Bolzano, September 2019 – August 2022)
- (e) Province Special project: Design of a sustainable care security for South Tyrol’s future (CARE, PI, October 2021-December 2022, EUR 63,295)
- (f) EU Erasmus+, Investment Management Game, joint project with the University of Liechtenstein (lead partner), (IMAG, PI, EUR 400,000, EUR 113,000 for the Free University of Bolzano, September 2022 – August 2025)

## 1.6 Invited Talks and Seminars

- 04.-07.11.2007 **INFOMS Annual Meeting**, invited speaker, Seattle, USA, “Life-cycle Asset Allocation Using Stochastic Linear Programming”
- 08.03.2011 **Research Seminar Ca’ Foscari** University of Venice, Italy, “Correlated Errors - Why a Monotone Relationship Between Forecast Precision and Trading Profitability May Not Hold”
- 01.-03.08.2012 Annual Conference of the **German Classification Society**, semiplenary talk, Hildesheim, Germany, “No-arbitrage Bounds for Generating Financial Scenarios”
- 22.05.2013 Brown-Bag Seminar, **Vienna Graduate School of Finance (VGSF)**, Vienna, Austria, “On the Relation between Forecast Precision and Trading Profitability of Financial Analysts”
- 14.01.2014 **Copenhagen Finance IT Region (CFIR)**, Copenhagen, Denmark, “On the Relation between Forecast Precision and Trading Profitability of Financial Analysts”
- 18.06.2015 2nd **IMA Conference on Mathematics in Finance**, Manchester, UK, plenary talk
- 19.08.2015 **WU Gutmann Center Symposium: Retirement and Asset Management**, Vienna, A
- 19.06.2018 **Finance Research Seminar TUM**, Technical University Munich, Germany

- 21.08.2018 **VAFX Vienna Symposium on Foreign Exchange Markets**,  
VGSF, Vienna, Austria
- 20.08.2019 **VAFX Vienna Symposium on Foreign Exchange Markets**,  
VGSF, Vienna, Austria
- 08.03.2022 **Finance Research Seminar**, University of Liechtenstein, Vaduz,  
Liechtenstein
- 23.08.2022 **VAFX Vienna Symposium on Foreign Exchange Markets**,  
VGSF, Vienna, Austria

## **1.7 Talks (selected)**

- 06.-08.09.2006 Operations Research 2006, Karlsruhe, Germany, “Life-cycle  
Asset Allocation Using Stochastic Linear Programming”
- 10.-12.05.2007 Euro Working Group on Financial Modeling, Rotterdam,  
Netherlands, “Life-cycle Asset Allocation Using Stochastic Linear Pro-  
gramming”
- 26.-27.07.2007 Computational Methods in Finance Conference, Waterloo,  
Canada, “Life-cycle Asset Allocation Using Stochastic Linear Program-  
ming”
- 26.-28.08.2007 International Conference on Stochastic Programming, Vi-  
enna, Austria, “Cash Management Using Multi-Stage Stochastic Pro-  
gramming”
- 04.-06.06.2008 Numerical Methods for Finance, Dublin, Ireland, “Life-cycle  
Asset Allocation Using Stochastic Linear Programming”
- 02.-05.09.2008 Workshop on Numerical Linear and Nonlinear Stochastic Pro-  
gramming, Edinburgh, Scotland, “ALM Models, Stochastic Program-  
ming, and the Absence of Arbitrage”
- 10.-11.10.2008 DGF 15th Annual Meeting of the German Finance Associa-  
tion, Münster, Germany, “Life-cycle Asset Allocation Using Stochastic  
Linear Programming”
- 01.-03.05.2009 6th International Conference on Computational Management  
Science, Geneva, Switzerland, “ALM Models, Stochastic Programming,  
and the Absence of Arbitrage”

- 01.-05.08.2009 AAA American Accounting Association 2009 Annual Meeting, New York, USA, “Correlated Errors”
- 28.-29.01.2010 XI Workshop on Quantitative Finance, Palermo, Italy, “ALM under Time-varying Investment Opportunities”
- 28.-30.07.2010 7th International Conference on Computational Management Science, Vienna, Austria, “Time-varying Inflation Risk”
- 31.-02.09.2011 OR2011, Zürich, Switzerland, “No-arbitrage Bounds for Generating Financial Scenarios”
- 18.-20.04.2012 9th International Conference on Computational Management Science, London, UK, “No-arbitrage Bounds for Generating Financial Scenarios” (session organizer)
- 08.-12.07.2013 XIII International Conference on Stochastic Programming, Bergamo, Italy (main proponent of the mini-symposium “Scenario Generation for Financial Optimization”)
- 08.-12.09.2013 Accounting and Audit Convergence 2013, Cluj Napoca, Romania, “On the Relation between Forecast Precision and Trading Profitability of Financial Analysts”
- 27.-28.09.2013 20th Annual Meeting of the German Finance Association (DGF), Wuppertal, Germany, “On the Relation between Forecast Precision and Trading Profitability of Financial Analysts”
- 09.-11.04.2014 International Conference on Applied Mathematical Optimization and Modelling, Warwick, UK, “No-Arbitrage ROM Simulation” (session organizer)
- 29.-31.05.2014 11th International Conference on Computational Management Science, Lisbon, Portugal, “No-Arbitrage ROM Simulation” (session organizer)
- 04.-06.12.2014 Euro Working Group for Commodities and Financial Modeling, Milan, Italy “Analyzing the Swiss National Bank’s euro exchange rate policy: A latent likelihood approach”
- 01.-04.09.2015 International Conference of Operations Research, Vienna, Austria, “Analyzing the Swiss National Bank’s euro exchange rate policy: A latent likelihood approach” (session organizer)

- 08.-10.06.2016 International Conference on Applied Mathematical Optimization and Modelling, Brno, Czech Republic, “Correlated noise” (member of program committee)
- 31.03.2017 Annual Conference of the Swiss Society for Financial Market Research, Zurich, Switzerland, “Correlated noise: Why passive investments might improve market efficiency”
- 30.-01.06.2017 CMS Conference on Computational Management Science, Bergamo, Italy, “Correlated noise: Why passive investments might improve market efficiency” (member of scientific committee)
- 13.09.2017 ADEIMF Convegno Estivo, Roma, Italy, “Correlated noise: Why passive investments might improve market efficiency”
- 14.-16.09.2017 AMASES Annual Meeting, Cagliari, Italy, “Long-term asset allocation under parameter uncertainty: Optimal portfolios with model and parameter uncertainty”
- 22.-25.09.2017 INFORMS Annual Meeting, Houston, USA (invited session organized by Victor DeMiguel) “Long-term asset allocation under parameter uncertainty: Optimal portfolios with model and parameter uncertainty”
- 23.-24.04.2018 Frontiers of Factor Investing, Lancaster University, UK, “Long-term asset allocation under parameter uncertainty: Optimal portfolios with model and parameter uncertainty”
- 29.-31.05.2018 CMS Conference on Computational Management Science, Trondheim, Norway, “Long-term asset allocation under parameter uncertainty: Optimal portfolios with model and parameter uncertainty”
- 27.-30.06.2018 European Financial Management Association, 2018 Annual Meetings, Milan, Italy, “Long-term asset allocation under parameter uncertainty: Optimal portfolios with model and parameter uncertainty”
- 13.-15.09.2018 AMASES Annual Meeting, Naples, Italy, “Numeraire dependence in risk-neutral probabilities of event outcomes”
- 18.-20.12.2021 15th International Conference Computational and Financial Econometrics, London, England, “Ambiguity, learning, and equilibrium portfolio flows”

15.-16.09.2022 Frontiers in Factor Investing, Lancaster, United Kingdom, “Ambiguity, learning, and equilibrium portfolio flows”

31.03.2023 SGF Conference 2023, Zürich, Switzerland, “Ambiguity, learning, and equilibrium portfolio flows”

28.-29.09.2023 29th Annual Meeting of the German Finance Association, Lancaster, United Kingdom“, Ambiguity, learning, and equilibrium portfolio flows”

## **1.8 Editorial work / scientific membership**

- Since 2017: Guest editor and member of the editorial board of the Journal *Risks* - Editor: Mogens Steffensen.
- member of AMASES - Associazione per la Matematica Applicata alle Scienze Economiche e Sociali
- member of ADEIMF - Associazione dei Docenti di Economia degli Intermediari e dei Mercati Finanziari e Finanza d’Impresa

## **1.9 Member of scientific committees**

- XIII International Conference on Stochastic Programming, 2013, Bergamo, Italy
- International Conference on Applied Mathematical Optimization and Modelling, 2014, Warwick, United Kingdom
- 11th International Conference on Computational Management Science, 2014, Lisbon, Portugal
- 12th International Conference on Computational Management Science, 2015, Prague, Czech Republic
- Conference on Applied Mathematical Optimization and Modelling, 2016, Brno, Czech Republic
- Conference on Computational Management Science, 2017, Bergamo, Italy

## 1.10 Phd student supervision/referee

- PhD referee Claus Madson (Technical University of Denmark, 2013)
- PhD supervisor: Agnieszka Koniecz (Technical University of Denmark, 2011-2014)
- PhD supervisor: Thomas Trier Bjerring (Technical University of Denmark, 2014-2017)
- PhD supervisor: Andrea Rigamonti (Free University of Bolzano, start 2016-2020)
- PhD supervisor: Maria Kosalapova (Free University of Bolzano, start 2018)
- PhD supervisor: Alex Laimer (Free University of Bolzano, start 2021)
- PhD Referee 2017 and 2018 for the course “Mathematical Methods of Economics, Finance and Actuarial Sciences”, University of Bergamo, Italy

## 1.11 Refereeing

Algorithmic Finance, Annals of Operations Research, Applied Economics, Applied Economics Letters, Computational Management Science, Computers & Operations Research, Decisions in Economics and Finance, De Gruyter, Economics Letters, Emerging Markets Finance and Trade, European Journal of Finance, European Journal of Operational Research, Finance Research Letters, IEEE Transactions on Neural Networks, International Journal of Banking, Accounting and Finance, International Review of Economics and Finance, International Journal of Finance and Economics, Journal of Asset Management, Journal of Banking & Finance, Journal of Economic Behavior and Organisation, Journal of Financial Management, Markets and Institutions, Journal of Futures Markets, Journal of International Money and Finance, Kredit und Kapital, Oesterreichische Nationalbank Jubilaefonds, Operations Research, Operations Research Perspectives, Plos One, Quantitative Finance, SERIEs - Journal of the Spanish Economic Association, Risks, The Quarterly Review of Economics and Finance.

