

Curriculum Vitae: March 2020

- Personal Information** Name: Prof. Dr. Alexander Ludwig
Address: Chair of Public Finance and Macroeconomic Dynamics
Goethe University Frankfurt, House of Finance
Theodor-W.-Adorno-Platz 3
60629 Frankfurt am Main (Germany)
Email: mail[at]alexander-ludwig.com
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www: <https://alexander-ludwig.com/>
- Education** Dissertation, University of Mannheim, 2005
Doctoral Studies, Universitat Pompeu Fabra, Barcelona, 2004-2005
Doctoral Studies, MEA, University of Mannheim, 2001-2004
Diploma in Economics, University of Mannheim, 2001
Studies of Economics, University of Mannheim, 1997-2001
Studies of Economics, University of California at Berkeley (Ph.D. Program), 1999-2000
Studies of Business Administration, University of Mannheim, 1996-1997
Studies of Mathematics, University of Mannheim, 1995-1996
- Current Positions** **Goethe University Frankfurt**
Professor for Public Finance and Macroeconomic Dynamics, since 2020
Professor for Public Finance and Debt Management, 2014 to 2019
- Universitat Autònoma de Barcelona**
Visiting Professor, 08/2019 to 08/2020
- Other Affiliations** **Research Center LIF-SAFE, Goethe University Frankfurt**
Research Fellow (since January 2020)
- Centre for Economic Policy Research (CEPR)**
Research Fellow (since December 2019)
- Human Capital and Economic Opportunity Global Working Group (HCEO): Markets Network**
Member (since March 2017)
- University of Cologne, Center for Macroeconomic Research (CMR), Germany**
Research Affiliate (since 2014)
- Centre for European Economic Research (ZEW), Mannheim, Germany**
Research Associate (since 2012)
- Munich Center for the Economics of Aging (MEA), Munich, Germany**
Senior Fellow (since 2011)
- Netspar, Tilburg, Netherlands**
Research Fellow (since 2008)

Past Positions

SAFE, Research Area Macro Finance – Monetary Policy and Fiscal Stability
Program Director, 2015 to 12/2019

University of Cologne, Germany
Professor for Macroeconomics (W3), 2010-2014

University of Cologne, Germany
Professor for Macroeconomics (W2), 2009-2010

University of Mannheim, Germany
Head of Research Unit “Macroeconomics” and Assistant Professor, Mannheim
Research Institute for the Economics of Aging (MEA), 2005-2009

Publications in Scientific Journals

- 2020** Should Germany Have Built a New Wall? Macroeconomic Lessons from the 2015-18 Refugee Wave (with Christopher Busch, Dirk Krueger, Irina Popova and Zainab Iftikhar), forthcoming in: ***Journal of Monetary Economics***.
- 2019** Idiosyncratic Risk, Aggregate Risk, and the Welfare Effects of Social Security (with Daniel Harenberg), ***International Economic Review***, 60(2), 661-692.
- 2018** Endogenous Grids in Higher Dimensions: Delaunay Interpolation and Hybrid Methods (with Matthias Schön), ***Computational Economics***, 51(3), 463-492.
- 2017** Aging and Pension Reform: Extending the Retirement Age and Human Capital Formation (with Axel Börsch-Supan and Edgar Vogel), ***Journal of Pension Economics and Finance***, 16(1), 81-107.
- 2016** A Life-Cycle Model with Ambiguous Survival Beliefs (with Max Groneck and Alex Zimper), ***Journal of Economic Theory***, 162, 137-180.
- On the Optimal Provision of Social Insurance: Progressive Taxation versus Education Subsidies in General Equilibrium (with Dirk Krueger), ***Journal of Monetary Economics***, Volume 77, 72-98.
- 2015** Social Security in an Analytically Tractable Overlapping Generations Model with Aggregate and Idiosyncratic Risk (with Daniel Harenberg), ***International Tax and Public Finance***, 22 (4), 579-603.
- 2014** Aging in Europe: Reforms, International Diversification, and Behavioral Reactions (with Axel Börsch-Supan and Klaus Härtl), 2014, ***American Economic Review P&P***, 104(5): 224-29.
- Biased Bayesian Learning and the Risk-free Rate Puzzle (with Alex Zimper), ***Journal of Economic Dynamics and Control***, 39, 79-97, 2014.
- 2013** Optimal Progressive Labor Income Taxation and Education Subsidies When Education Decisions and Intergenerational Transfers are Endogenous (with Dirk Krueger), ***American Economic Review P&P***, 103(3), 496-501, 2013.

- A Parsimonious Model of Subjective Life Expectancy (with Alex Zimper), *Theory and Decision*, 75(4), 519-541, 2013.
- A Decision-theoretic Model of Asset-price Underreaction and Overreaction to Dividend News (with Alex Zimper), *Annals of Finance*, 9, 625-665, 2013.
- 2012** Demographic Change, Human Capital and Welfare (with Thomas Schelkle and Edgar Vogel), *Review of Economic Dynamics*, 15(1), 94-107, 2012.
- 2010** Sharing Demographic Risk: Who is Afraid of the Baby Bust? (with Michael Reiter), *American Economic Journal: Economic Policy*, 2(4), 83-118, 2010.
- Mortality, Fertility, Education and Capital Accumulation in a Simple OLG Economy (with Edgar Vogel), *Journal of Population Economics*, 23(2), 703-735, 2010.
- 2009** On Attitude Polarization under Bayesian Learning with Non-additive Beliefs (with Alexander Zimper), *Journal of Risk and Uncertainty*, 39, 181–212, 2009.
- Living Standards in an Aging Germany: The Benefits of Reforms and the Costs of Resistance (with Axel Börsch-Supan), *Journal of Economics and Statistics*, 229(2+3), 163-179, 2009.
- Aging, Asset Markets, and Asset Returns: A View from Europe to Asia (with Axel Börsch-Supan), *Asian Economic Policy Review*, 4(1), 69-92, 2009.
- 2007** On the Consequences of Demographic Change for Rates of Return to Capital, and the Distribution of Wealth and Welfare (with Dirk Krüger), *Journal of Monetary Economics*, 54(1), 49-87, 2007.
- The Gauss-Seidel-Quasi-Newton Method: A Hybrid Algorithm for Solving Dynamic Economic Models, *Journal of Economic Dynamics and Control*, 31, 1610–1632, 2007.
- 2006** Investment Behavior under Ambiguity: The Case of Pessimistic Decision Makers (with A. Zimper), *Mathematical Social Sciences*, 52, 111-130, 2006.
- Aging, Pension Reform, and Capital Flows: A Multi-Country Simulation Model (with A. Börsch-Supan and J. Winter), *Economica*, 73, 625-658, 2006.
- Rational Expectations and Ambiguity: A Comment on Abel (2002) (with A. Zimper), *Economics Bulletin*, Vol. 4 no. 2, 1-15, 2006.
- 2004** The Relationship between Stock Prices, House Prices and Consumption in OECD Countries (with T. Sloek), *Topics in Macroeconomics*, 4(1), Article 4, 2004, <http://www.bepress.com/bejm/topics/vol4/iss1/art4>.
- Sind die Probleme der Bevölkerungsalterung durch eine höhere Geburtenrate lösbar? (with B. Berkel, A. Börsch-Supan and J. Winter), *Perspektiven der Wirtschaftspolitik*, 5(1), 71-90, 2004.
- 2003** Pension Reform, Capital Markets, and the Rate of Return (with A. Börsch-Supan, F. Heiss and J. Winter), *German Economic Review*, 4(2), 151-181, 2003.

Policy Papers

- 2016** Das Deutsche Rentensystem: Thesen zur derzeitigen Diskussion um „Umkehr“-Reformen in: SAFE White Paper No. 40
- Demographischer Wandel: Kapitalrenditen, Löhne und Verteilungswirkungen In: Fugger, C., Hannappel, S., Hrsg. (2016): Demographischer Wandel - Fakten, Prognosen, Herausforderungen und Chancen, Sammelband zur Ringvorlesung im Wintersemester 2014/2015 an der Universität zu Köln

Monographs

- 2005** The Macroeconomics of Demographic Change - Essays on Economic Modelling, Dissertation, University of Mannheim, <http://bibserv7.bib.uni-mannheim.de/madoc/volltexte/2005/1093/>.
- 2003** Demographie und Kapitalmärkte: Die Auswirkungen der Bevölkerungsalterung auf Aktien-, Renten- und Immobilienvermögen (with A. Börsch-Supan and M. Sommer), Deutsches Institut für Altersvorsorge, DIA, 2003.
- 2002** Rentenreform im globalen Kontext, Peter Lang, Frankfurt, 2002

Other Publications

- 2013** Asset Market Meltdown in Sicht?, in: Michael Freytag (ed.), Verbrauchervielfalt: Chancen des demografischen Wandels für Konsum und Finanzen, 290 - 301, 2013.
- 2011** Old Europe is Aging: Reforms and Reform Backlashes (mit Axel Börsch-Supan), in: J. Shoven (ed.), Demography and the Economy. University of Chicago Press, 169 - 204, 2011.
- 2007** Demographic Change, Relative Factor Prices, International Capital Flows, and Their Differential Effects on the Welfare of Generations (with Dirk Krüger and Axel Börsch-Supan), NBER Working Paper 13185, 2007, forthcoming in: Brown, J., J. Liebmann and D. A. Wise (eds.): Social Security Policy in a Changing Environment, University of Chicago Press
- 2005** Demography, savings, and global capital markets (with A. Börsch-Supan and J. Winter), in: M. Heise and V. Wieland (eds.): Capital markets in the long term: Demography, economic development, and funded pension systems, Frankfurt, Center for Financial Studies, pp. 107-126, 2005.
- 2003** Ageing, the German rate of return and global capital markets (with A. Börsch-Supan and J. Winter), Demography Special, Deutsche Bank Research, December 4, 2003. German version available as: Alterung, deutsche Renditeentwicklung und globale Kapitalmärkte, Demografie Spezial Nr. 273, Deutsche Bank Research, June 16, 2003.
- 2002** Aging and international capital flows (with A. Börsch-Supan and J. Winter), in: A. Auerbach and H. Hermann (eds.): Aging, Financial Markets and Monetary Policy, Heidelberg: Springer, pp. 56-83, 2002.
- 1998** Case study: Vorsicht Falle: Investitionen in den neuen Bundesländern (with D. Guilini), in: A. Börsch-Supan and R. Schnabel: „Volkswirtschaft in fünfzehn Fällen“, Gabler Verlag, Wiesbaden, 1998.

Professional Activities

- Journal Activities Editorial Board Member, Journal of Pension Economics & Finance (since May 2013)

Editorial Board Member, Journal of Demographic Economics (since November 2013)

Teaching Introduction to Economics (Bachelor); Economic Policy (Bachelor); Portfolio Choice and Asset Pricing (Master); Heterogeneous Agent Models (Master / Ph.D.); Aggregate Dynamic Macroeconomic Models: Methods and Applications (Master / Ph.D.); Computational Economics (Master / Ph.D.)

Ph.D. Supervision Main advisor:
Fabian Becker (University of Cologne, 2019): "Essays on the Optimal Interplay of Early and Late Education Subsidies and Taxation", Affiliation: tennisfarm.de
Nils Grevenbrock (Goethe University Frankfurt, 2018): "Interactions of Social Insurance Systems", Placement: European University Institute, Florence
Christopher Busch (University of Cologne, 2017): "Essays on Individual Labor Income Dynamics", Placement: Universitat Autònoma, Barcelona
Matthias Schoen (University of Cologne, 2015): "Life Cycle Economics, Health, and Inequality", Placement: Deutsche Bundesbank
Christian Geppert (University of Frankfurt, 2015): "Macroeconomic Effects of Demographic Change: The Role of Human Capital", Placement: OECD, Paris.
Second advisor:
Leonhard Czerny (Goethe University Frankfurt, 2019): "Essays on Migration, Public Spending and Local Fiscal Multipliers", Placement: Federal Ministry of Finance (Bundesministerium der Finanzen)
Marco Weissler (Goethe University Frankfurt, 2019): "Essays in Labor Economics", Placement: European Central Bank
Klaus Härtl (TU München, 2019): "Fostering Sustainability in Times of Aging: Pension Policies and Household Behavior in a Macroeconomic Setting", Placement: Deutsche Pfandbriefbank AG
Ingo Saur (Goethe University Frankfurt, 2018): "The Influence of the Central Bank's Assets on the Exchange Rate and the Price Level: Essays and Empirical Analyses", Placement: Goethe University Frankfurt
Bettina Brüggemann (University of Frankfurt, 2016): "Quantitative and Empirical Analyses of Macroeconomic Questions on Taxation and Labor Supply", Placement: McMaster, Hamilton, Canada.
Wolfgang Kuhle (University of Mannheim, 2010): "Intertemporal Allocation with Incomplete Markets", Placement: Max Planck Institute for Research on Collective Goods, Bonn.
Edgar Vogel (University of Mannheim, 2010): "Human Capital Investment and Population Dynamics", Placement: European Central Bank, Frankfurt
Member of committee / external referee (w. written reports):
Giacomo Caracciolo (Universitat Pompeu Fabra, 2019); Hayk Kamalyan (Goethe University Frankfurt, 2019); Andrea Papetti (Stockholm School of Economics, 2019); Peter Schober (Goethe University Frankfurt, 2019); Vu Nguyen (BI Norwegian Business School, 2017); Bo Zhao (University of Oslo, 2012); Aylit Romm (University of Capetown, 2011); Oliver Arentz (University of Cologne, 2010); Tomi Kortela (University of Turku, 2010); Moritz Kuhn (University of Mannheim, 2010)

Current supervision:

Raphael Abiry (GU Frankfurt), Zhao Jin (GU Frankfurt), Osman Küçükşen (GU Frankfurt), Irina Popova (GU Frankfurt), Jorge Quintana (GU Frankfurt), Nicolas Syrighas (GU Frankfurt, starting 01/2020)

Conference talks

Conference series: Society for Economic Dynamics (SED) (2004, 2006, 2009, 2010, 2011, 2015, 2016, 2017); NBER Summer Institute (2013, 2018); European Economic Association (2004, 2006, 2015, 2018); European Econometric Society (2006, 2018); Society for Computational Economics (2002, 2003, 2005, 2006); The Royal Economic Society (2005); Verein für Socialpolitik (Annual Conference and Groups on Macro/Population Economics/Public Finance 2008,2011,2012, 2015, 2018); REDg Workshop (Barcelona 2015 Madrid 2018); Carnegie Rochester-NYU Conference on Public Policy (2006, 2015, 2019); SPP Workshop „Financial Frictions and the Real Economy” (Frankfurt 2015, Konstanz 2017, Mannheim 2018); SAET Conference on Current Trends in Economics (2009)

Others in 2019: Norface Workshop TRISP, IFS, London

Others in 2018: Norface Workshop TRISP, GU Frankfurt; Conference on Financing Human Capital, Paris; 40. Symposium des Instituts für Bank- und Finanzgeschichte e.V.: Asset Management und Asset Renditen in der Langfristperspektive, Frankfurt

Others in earlier years: Conference on Human Capital and Financial Frictions, Washington, D.C. (2017); Bank of Canada and ECB Conference, Frankfurt (2017); BGSE Summer School, Barcelona (2016); International Conference on Structural Reforms in Advanced Economies, Berlin (2016); CES-Ifo Conference on Macroeconomics and Survey Data, Munich (2015); Agents-Workshop, Barcelona (2015); 40 Years of Economic Science and Public Policy, Munich (2015); Optimal Control and Dynamic Games, Vienna (2015); SPP Workshop „Financial Frictions and the Real Economy”, Mannheim (2013); Rhineland-Workshop (2012); 32. Universitätsseminar „Dialog Wissenschaft und Praxis“ (2010, 2015); Overlapping Generations Days (2010, 2011); Workshop on Heterogeneous-Agent Models in Macroeconomics, Mannheim (2009); Workshop on Subjective Probabilities and Expectations, Jackson Hole, WY (2007); Workshop on Stochastic General Equilibrium Models and Pension Policies, Tilburg (2007); NBER Conference on Social Security Research, Woodstock, VT (October 2006); 12th Dubrovnik Economic Conference, Dubrovnik (June 2006); KDI 34th Anniversary International Conference: Population Aging in Korea: Economic Impacts and Policy Issues, Seoul (2005); ENTER Jamboree-Conference (2002, 2003, 2004); Modeller’s Forum, Helsinki (June 2001)

Seminar talks

2020: UAB, Barcelona; UB, Barcelona; Pompeu Fabra, Barcelona; University of Alicante

2019: EUI, Florence; University of Pretoria; Narodowy Bank Polski, Warsaw; Universitat Autònoma de Barcelona

2018: Universitat Autònoma de Barcelona (UAB); Humboldt University Berlin; University of Groningen; Uppsala University; University of Cologne; LMU Munich

2017: CERGEI, Prague; Tilburg University; EIEF, Rome; Centre for European Economic Research (ZEW), Mannheim; Sveriges Riksbank

Earlier years: St. Louis FED (2); TU Berlin; BI Norwegian Business School, Oslo; DIW, Berlin; University of Mannheim; University of Pretoria; University of Luxembourg; UC Louvain; Queen Mary London; Humboldt University Berlin; Stockholm School of Economics (2); University of Amsterdam and Tinbergen Institute (2); University of California at Berkeley (2); MIT, Boston; MEA, LMU, Munich; Royal Holloway, London; ETH, Zürich (2); University of St. Gallen; CESifo, Munich; University of Zürich (2); University of Mainz; University of Wits, Johannesburg; University of Bielefeld (3); University of Frankfurt (3); University of Konstanz; University of Augsburg; University of Bonn (2); University of Heidelberg (2); University of Oslo; Deutsche Bundesbank; University of California at Santa Barbara (2); University of Cologne (2); Institute for Advanced Studies and University of Vienna (3); University of Heidelberg (2); University of Würzburg; LMU, Munich (2); UPF, Barcelona (2); Vienna Institute of Demography, VID; CEPREMAP, Paris; Brookings Institution, Washington, D.C.; International Monetary Fund, Washington, D.C. (3); Pontificia Universidad Católica de Chile (2)

Policy Talks	Federal Ministry for Economic Affairs and Energy, Berlin (2); Federal Ministry of Finance, Berlin; Alte Leipziger; Deutsche Bank; TU Darmstadt; House of Finance, Frankfurt; Sparkassenakademie; Dresdner Bank Alumni; University of Cologne; Deutsche Bundesbank; KfW; R+V Versicherungen
Research Visits	St. Louis FED (4); UCL London (2); National Bureau of Economic Research, NBER; University of Pennsylvania (6); Institute for Advanced Studies (3); University of Amsterdam; Universidad Pompeu Fabra (2); University of Pretoria (2); University of Cape Town; University of Wits; London Business School; Center for Economic Research and Its Applications, CEPREMAP
Referee	American Economic Review; Econometrica; Journal of Political Economy; American Economic Journal: Economic Policy; Review of Economic Studies; American Economic Journal: Macroeconomics; European Economic Review; Economic Journal; Econometrica; Empirical Economics; Economics Letters; Economic Theory; Finanzarchiv; International Economic Review; International Tax and Public Finance; Journal of Behavioral Economics; Journal of Economic Dynamics and Control; Journal of the European Economic Association; Journal of Institutional and Theoretical Economics; Journal of International Economics; Journal of International Money and Finance; Journal of Macroeconomics; Journal of Monetary Economics; Journal of Pension Economics and Finance; Journal of Population Economics; Macroeconomic Dynamics; Review of Economic Dynamics; The B.E. Journals in Macroeconomics; Oxford Economic Papers
Conferences (Organizer)	Financial Markets and Macroeconomic Performance (with Jan Krahnert, Tom Krebs and Wouter den Haan, 2016, 2017, 2018, 2019); Cologne Workshop on Macroeconomics (2010, 2011, 2012, 2013, 2014); Overlapping Generation Models and Uncertainty - Theory, Policy Applications and Computation (with Dirk Krüger, December 2015); Workshop on Population Aging and International

Capital Markets (with Barbara Berkel, Axel Börsch-Supan and Melanie Lührmann, December 2003)

Honorary Activities Studienstiftung des deutschen Volkes (German National Merit Foundation)
Member of selection committee
Teaching: „Gesellschaftswissenschaftliches Kolleg der Studienstiftung -
Ordnungsmodelle für das 21. Jahrhundert“

Consulting Mitglied des Wissenschaftlichen Beirats, Alte Leipziger – Hallesche (Member of
the Council of Scientific Advisors, since July 2015)
Consultant of Deutsche Bundesbank (since 2017)

Offers (Rufe)

2017 ZEW and University of Mannheim (W3-Professor)
2013 Goethe University Frankfurt (W3-Professor)
2010 Ruprecht-Karls University Heidelberg (W3-Professor)
2008 University of Cologne (W2-Professor)

Grants

2018 – 2021 Project Leader, Norface, ERA-NET, Program: Dynamics of Inequality Across the
Life-Course (DIAL), Project: Trends in Inequality: Sources and Policy (TRISP)
2012 – 2018 DFG Grant, Principal Investigator, DFG Priority Program 1578: “Financial Market
Imperfections and Macroeconomic Performance”
2010 – 2011 Netspar Research Grant (with Max Groneck, CMR, University of Cologne and
Alexander Zimper, University of Pretoria)
2007 – 2008 2007 Steven H. Sandell Grant, Center for Retirement Research, Boston College
(with Alexander Zimper, University of Pretoria)
2003 – 2009 U.S. Social Security Administration (SSA), Grant #10-P-98363-1-05, National
Bureau of Economic Research (NBER), SSA Retirement Research Consortium (with
Axel Börsch-Supan)
2001 – 2003 “Auswirkungen des demographischen Wandels auf internationale
Kapitalströme”, VolkswagenStiftung (with B. Berkel, KfW, Frankfurt; A. Börsch-
Supan, and M. Lührmann, IFS, London)

Honors, Scholarships and Fellowships

2007 Publication Prize, Fontana Foundation, University of Mannheim

2004 – 2005	Marie-Curie-Scholarship, European Commission, for doctoral studies at the Universitat Pompeu Fabra, Barcelona
2001	Prize, Karin-Islinger-Stiftung, University of Mannheim: Prize for outstanding scientific work in Economics and related sciences
1999 – 2000	Scholarship, Deutscher Akademischer Austauschdienst (German Academic Exchange Association) and McKinsey&Company, Inc., Düsseldorf
1998 – 2001	Fellowship, Studienstiftung des deutschen Volkes (German National Merit Foundation)