

Harald Uhlig

Bruce Allen and Barbara Ritzenthaler Professor of Economics

Curriculum Vitae

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Personal data:

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Citizenship : German

Major fields of concentration:

Main: Macroeconomics

Topics of Interest:

Applied quantitative theory and applied dynamic, stochastic general equilibrium theory:

- Business Cycles
- Growth
- Dynamic Contracts
- Psychological Foundations of Dynamic Decision Theory
- Economic Policy

The Intersection of Macroeconomics and Financial Economics:

- Monetary Economics
- Asset Pricing
- Financial Crises

Methods:

- Vector Autoregressions
- (Bayesian) time series econometrics

- Numerical Methods

Education:

Ph.D. in economics, University of Minnesota, 1990
Diplom in mathematics, Technische Universität Berlin, 1985
Vordiplom in economics, Technische Universität Berlin, 1983
Vordiplom in mathematics, Technische Universität Berlin, 1982
Abitur (high school diploma), Walddoberschule Berlin, 1979

Positions held

- **2018-07-01:** Bruce Allen and Barbara Ritzenthaler Professor of Economics
- **2013-2018 :** consultant at the European Central Bank
- **2007-2020 :** consultant at the Federal Reserve Bank of Chicago
- **2009-2012:** Chairperson of the Department of Economics at the University of Chicago
- **2007-... :** Professor of Economics at the University of Chicago, Department of Economics
- **2004-... :** „Forschungsprofessor“ (Guest Researcher) at the Bundesbank
- **2002 - 2004 :** „Forschungsprofessor“ (Guest Researcher) at DIW Berlin
- **2000 - 2007 :** Professor of Economics at Humboldt University, Berlin.
- **2000 - 2012 :** Part-time Professor (“10%”) at CentER for Economic Research, Tilburg University (the Netherlands).
- **1999 - 2000:** Visiting Professor at the Department of Economics, Stanford University (sabbatical from Tilburg University)
- **1994 - 2000:** Research Professor for Macroeconomics, CentER for Economic Research, Tilburg University (the Netherlands).
- **1993, 1994 :** Guest Lecturer ("Lehrstuhlvertretung"), University of Bonn, Germany.
- **1992 - 1993 :** Sabbatical from Princeton, visiting CES (Munich), Bonn and Chicago (Visiting Assistant Professor).
- **1990 - 1994 :** Assistant Professor, Department of Economics, Princeton University.
- **1986 - 1989 :** Research Assistant for Professor Christopher A. Sims at the Federal Reserve Bank of Minneapolis and at the Institute for Empirical Macroeconomics.
- **1987 :** Teaching Assistant, University of Minnesota. Full responsibility for Econ 3102, "intermediate macroeconomics," summer school.
- **1982 - 1985 :** Student Teaching Assistant ("Tutor") for mathematics at the Technical University of Berlin.

Honors, awards and fellowships:

- **2021-07-01:** Fellow of the Society for Economic Measurement (SEM)
- **2018-07-01:** Bruce Allen and Barbara Ritzenthaler Professor of Economics
- **2017:** Named Honorary Professor at Henan University, China
- **2013 (stays: February, August):** Duisenberg Fellow at the European Central Bank.
- **June 2012:** Nottingham University, Granger Lecture.
- **December 2005:** Frank P. Ramsey Prize for the best paper in "Macroeconomic Dynamics" during the second four years of publication, 2001-2004, for the article "The Sharpe Ratio and Preferences: A Parametric Approach," MD, vol. 6, no. 2 (April 2002), 202-241, with Martin Lettau.
- **December 2003:** Elected [Fellow of the Econometric Society](#)
- **October 2003:** [Gossen-Preis](#) of the Verein für Socialpolitik

- **May 1990** : Participant of the [Review of Economic Studies European Meetings](#) of seven recent Ph.Ds in economics to present their paper in London, Barcelona and Tel Aviv.
- **1989 - 1990** : Alfred P. Sloan Doctoral Dissertation Fellowship, [Alfred P. Sloan Foundation](#), New York.
- **1989 - 1990** : Dissertation Support Award, National Bureau of Economic Research's Committee on Dissertation Support Awards, NBER, Cambridge, MA.
- **1986 - 1987** : Graduate School Fellowship, Department of Economics, University of Minnesota.
- **1985 - 1986** : [Fulbright Scholarship](#).
- **1981 - 1985** : Stipendiat der [Studienstiftung des deutschen Volkes](#) (member of the German Scholarship Foundation).

Grants:

- **1998 - 2003**: NASEF (New Approaches to the Study of Business Fluctuations), a TMR network grant, joint with ECARE, Carlos III, Humboldt U., IMOP, Modena, EUI, UCL (London), CEPR.
- **2000 - ...** : A "Teilprojekt" in the "Sonderforschungsbereich 373" of the Department of Economics, Humboldt University Berlin
- **2001 - ...** : Involved in raising the funds for the Deutsche Bank Visiting Professorship for International Research in Economics at the Department of Economics, Humboldt University.
- **2002 – 2003**: Coordinator for the Guest Professorship for International Research in Economics at Humboldt University, financed by a grant of Deutsche Bank.
- **2002 - 2006**: MAPMU (Macroeconomic Policy Design for Monetary Unions), a RTN network grant, joint with CREI (Gali, Barcelona), CEPR (Mihov, London), EPRU (Jensen, Copenhagen), EUI (Perotti, Florence), LBS (Ravn, London), GIIS (Wyplosz, Geneva) and UvA (Beetsma, Amsterdam), see <http://www.cepr.org/research/networks/mapmu/>
- **2005-2007**: Sonderforschungsbereich ("collaborative research center", a block grant to a number of scientists working together) SFB 649 "Ökonomisches Risiko". <http://sfb649.wiwi.hu-berlin.de/>. Was elected "Sprecher" (coordinator) in 2005. Resigned in June 2007, due to job change to the University of Chicago.
- **2009-2011**: NSF grant SES-0922550 on "Aggregate risks and aggregate allocations".
- **2011-2014**: INET grant 2866, "Understanding Macroeconomic Fragility"
- **2012-2015**: NSF grant SES-1227280 on "Understanding Macro Risks".
- **2017**: MFM grant (co-PI, with Dirk Krueger, U Penn), "Neoclassical growth with one-sided commitment contracts"
- **2017**: BFI-MFRI data acquisition grant "Mortgage-Backed Securities and the Financial Crisis of 2008: a Post Mortem"
- **2018-2021**: NSF grant SES-1757084 (co-PI, with Dirk Krueger, U Penn) on "Neoclassical Growth with Long-Term One-Sided Commitment Contracts."
- **2020-2021**: Banque de France Grant, "Cryptocurrencies, Currency Competition and Monetary Policy," joint with Pierpaolo Benigno and Linda Schilling.

Memberships, Editorships, Offices Held:

- President of the International Atlantic Economic Society, 2022-23.
- Elected to the Council of the Senate of the University of Chicago, 2021
- Member of the Academic Freedom Alliance, since 2021
- Member of the National Association of Scholars, since 2021

- Advisory Board of Journal of Risk and Financial Management since July 2020
- Member of the Council of the Econometric Society 2006-2008 and 2018-2020
- Elected voting member of the Regional Standing Committee of the Econometric Society (2015)
- Member of several nominating committees of the Econometric Society, e.g. 2019.
- Member of the ASSA Session Allocation and Participant Committee (2015–2020)
- Co-Editor of *Econometrica*, July 2006-June 2010
- Head Editor, *Journal of Political Economy* (2013–2022)
- Co-Editor, *Journal of Political Economy* (2012–2022)
- National Bureau of Economic Research (NBER) Research Associate (EFG) (2008–present)
- Center for Economic and Policy Research (CEPR) Research Fellow (Asset Pricing, Banking and Corporate Finance, Monetary Economics and Fluctuations)
- Research Policy Network (RPN) Member, Fintech and Digital Currencies, CEPR, since 2019.
- Member of the Advisory Board of the UBS International Center of Economics in Society at the University of Zurich (2015–present)
- Scientific Board Member, Mannheim Graduate School in Economics and Social Sciences (2008 –2015)
- Rotary “Berlin-Brandenburger Tor”, 2005-2008.
- Chair of the CEPR European Business Cycle Dating Committee, 2005-2012
- Member of the CEPR European Business Cycle Dating Committee, 2003-2012
- Regional Consultant (Austria, Germany) for the European Winter Meetings of the Econometric Society, 2003-2007
- Mitglied des makro-ökonomischen Ausschusses des Vereins für Socialpolitik, since 2003
- Mitglied des wissenschaftlichen Beirates des RWI (Essen), 2003
- Member of the scientific advisory board of CREI (Barcelona), since 2003
- Vertrauensdozent der Studienstiftung des deutschen Volkes, 2002-2007
- Mitglied des theoretischen Ausschusses des Vereins für Socialpolitik
- Mitglied des ökonomischen Ausschusses des Vereins für Socialpolitik
- Associate editor for the *Journal of Economic Dynamics and Control*, 1995 - 1998
- Associate editor for the *Review of Economic Studies*, 1996-2006
- Associate editor for *Macroeconomic Dynamics* 1997 - 2002
- Co-Editor of the *European Economic Review*, 1997 - 2001.
- Associate editor of *Computational Economics* 1998 - ca. 2002
- Associate editor of *Econometric Theory* 2000
- Associate editor of the *Bepress Journal of Macroeconomics* 2000
- Associate editor of the *Journal of Financial Econometrics* 2001 - ca. 2004
- "Monitoring the European Central Bank" (MECB) group, a CEPR initiative, 1998-2007.
- CEPR Research Fellow (Financial Economics, International Macroeconomics).
- Econometric Society, American Economic Association, European Economic Association.

PhD students:

- Erik Canton (Tilburg, ca 1995)
- Francis Kumah (Tilburg, ca 1996)
- Jan Fidrmuc (Tilburg, ca 1997)
- Almuth Scholl (HU Berlin, 2005)

- Emanuel Mönch (HU Berlin, 2006)
- Matthias Trabandt (HU Berlin, 2007)
- Georg Man (HU Berlin, 2008)
- Christian Stoltenberg (HU Berlin, 2008)
- Alexander Kriwoluzky (HU Berlin, 2008)
- Martin Kliem (HU Berlin, 2008)
- Stefan Ried (HU Berlin, 2008)
- Pooyan Amir Ahmadi (HU Berlin, 2008)
- Alejo Costa (University of Chicago, 2010)
- Sergio Salas Landeau (University of Chicago, 2010)
- Gideon Magnus (University of Chicago, 2011)
- Hiroatsu Tanaka (University of Chicago, 2011)
- Francisco Roch (University of Chicago, 2012)
- Thorsten Drautzburg (University of Chicago, 2013)
- Lorenzo Ernesto Bernal Verdugo (University of Chicago, 2013)
- Aditya Bhawe (University of Chicago, 2014)
- Bong Geun Choi (University of Chicago 2016)
- Daniel Xie (University of Chicago 2017)
- Nicolas Castro Cienfuegos (University of Chicago 2019)
- Ilja Boelaars (University of Chicago 2020)
- Piotr Zoch (University of Chicago 2020)
- Luis Simon (University of Chicago 2020)
- Hongcen Wei (University of Chicago 2021)
- Mikayel Sukyasian (University of Chicago 2021)
- Kai-Wei Hsu (University of Chicago 2021)
- Jeremy Bejarano (University of Chicago 2021)
- Suleyman Gozen (University of Chicago 2022)
- Ricardo Qineche (University of Chicago 2022)
- Yusheng Fei (University of Chicago 2023)

Organizing committees:

- EEA 94 (European Economic Association): member of the programme committee.
- ESEM 94 (Econometric Society European Meeting): member of the programme committee.
- EEA 96: member of the programme committee.
- ESEM 96: member of the programme committee (both for theory and econometrics).
- NAKEDAY, November 1997.
- ES (Econometric Society) American Winter Meetings, New Orleans, 1997: member of the programme committee.
- ESEM 98: member of the programme committee
- ESEM 99: member of the programme committee
- Eight World Congress of the Econometric Society 2000: member of the programme committee
- Winter Meetings of the Econometric Society 2003-2005: member of the programme committee
- Co-organized the “Phillips Curve Revisited” Conference, together with Gustav Horn (DIW, Berlin) and Dennis Snower (IZA, Bonn), May 2003.

- Organized the Berlin leg of the Review of Economic Studies European Meetings May 2004.
- Co-organized the April 2005 Barcelona conference on "Macroeconomics and Reality: 25 years later", in honour of the work of Christopher A. Sims.
- Co-organized the Bundesbank spring conference / first SFB 649 conference on "Macroeconomic risk and policy responses", May 2005, in Berlin.
- Part of the scientific organization committee of the first Prague-Budapest Spring Workshop in Macroeconomic Theory, Prague, June 2005.
- Scientific organizer (together with Alan Mountfort) of the joint Bundesbank-Banque-de-France conference in Paris, June 2009.
- Winter Meetings of the Econometric Society 2010: member of the programme committee
- NBER Economic Fluctuations and Growth conference, San Francisco, February 5th: co-organizer (together with Andrew Atkeson).
- 2010 World Congress, Econometric Society, Shanghai: member of the programme committee.
- 2012 BFI-INET conference, "Macroeconomic Fragility", Chicago, May 2012
- 2013 BFI-INET conference, "Macroeconomic Fragility", Boston, October 2013
- 2014 BFI-INET conference, "Macroeconomic Fragility", Chicago, May 2014
- "Handbook of Macroeconomics: presentation of draft chapters", in Stanford and Chicago, both April 2015.
- "BFI-MFRE Conference on Cryptocurrencies and Blockchain," with Eric Budish, Zihuo He and Jacob Leshno, Chicago, November 2018.
- "BFI-MFRE Cryptocurrencies and Blockchains Conference," with Eric Budish, Zihuo He and Jacob Leshno, Chicago, November 2019.
- "2020 Annual Meeting of the Central Bank Research Association (CEBRA), Session Session 32: (Central Bank) Digital Currencies: Macroeconomic and Financial Markets Consequences," joint with Linda Schilling, September 2020.

Books:

1. Handbook of Macroeconomics, Vol. 2A/B, edited by John Taylor and Harald Uhlig, Elsevier, North Holland (2016).

Articles in refereed journals:

1. "The Eigenfunctions of a Compact, Weighted Endomorphism," Proceedings American Mathematical Society, Vol. 98, No. 1, 1986, pp. 89-93.
2. "Reasonable Extreme Bounds Analysis," Journal of Econometrics, Vol. 44, No. 1/2, 1990, pp. 159- 170, with Clive W.J. Granger.
3. "Solving Nonlinear Stochastic Growth Models: A Comparison of Alternative Solution Methods," Journal of Business and Economic Statistics, Vol. 8, No. 1, 1990, pp. 1-17, with John B. Taylor.
4. "Understanding Unit Rooters: A Helicopter Tour," Econometrica, Vol. 59, No. 6, 1991, pp. 1591- 1599, with Christopher A. Sims.
5. "The Timing of Information in a General Equilibrium Framework," Journal of Economic Theory, Vol. 59, No. 2, 1993, pp. 275-287, with Jonathan Berk.
6. "The Impact of Large Portfolio Insurers on Asset Prices," Journal of Finance, Vol. 48, No. 5, 1993, pp. 1943-1956, with Glenn Donaldson.
7. "On Jeffrey's Prior When Using the Exact Likelihood Function," Econometric Theory, Vol. 10, Nos. 3/4, 1994, pp. 633-644.

8. "What Macroeconomists Should Know About Unit Roots: A Bayesian Perspective," presented at the Yale-NSF Conference "Bayes Methods and Unit Roots", *Econometric Theory*, Vol. 10, Nos. 3/4, 1994, pp. 645-671.
9. "On Singular Wishart and Singular Multivariate Beta Distributions," *Annals of Statistics*, Vol. 22, No. 1, 1994, pp. 395-405.
10. "A Law of Large Numbers for a Large Economy," *Economic Theory*, vol. 8, 1996, pp. 41-50.
11. "Increasing the Capital Income Tax May Lead to Faster Growth," with Noriyuki Yanagawa, *European Economic Review*, 40 (1996), 1521-1540.
12. "Bayesian Vector Autoregressions with Stochastic Volatility," *Econometrica*, vol. 65, no. 1 (January, 1997), 59-73
13. "Rules of Thumb versus Dynamic Programming," with Martin Lettau, *American Economic Review*, vol. 89, no. 1 (March, 1999), 148-174.
14. "Growth and the Cycle: Creative Destruction versus Entrenchment," with Erik Canton, *Journal of Economics*, vol. 69 (1999), no. 3, 239-266.
15. "Fickle Investors: An Impediment to Growth?," with Andrew Scott, *European Economic Review* 43 (1999), 1345-1370.
16. "Can Habit Formation be Reconciled with Business Cycle Facts?" with Martin Lettau, *Review of Economic Dynamics*, vol. 3, 79-99 (2000).
17. "An Analysis of the Stability Pact," with Roel Beetsma, *The Economic Journal*, October 1999, 546-571.
18. "Tax Policy and Aggregate Demand Management under Catching Up with the Joneses," with Lars Ljungqvist, *American Economic Review*, June 2000, vol. 90, no. 3, 356-366
19. "What is the real story for interest rate volatility," with Andreas Hornstein, *German Economic Review*, inaugural issue vol. 1, issue 1, February 2000, 43-67.
20. "Should we be Afraid of Friedman's Rule?," *Journal for Japanese and International Economics*, 14, 261-303 (2000).
21. "The Sharpe Ratio and Preferences: A Parametric Approach," with Martin Lettau, *Macroeconomic Dynamics*, 6(2), April 2002, 242-65.
22. "On Adjusting the HP-Filter for the Frequency of Observations," with Morten Ravn, *Review of Economics and Statistics*, 84(2), May 2002, 371-76
23. "What are the effects of monetary policy on output? Results from an agnostic identification procedure.", *Journal of Monetary Economics* 52 (2005), 381-419.
24. "Towards a Monthly Business Cycle Chronology for the Euro Area," with Emanuel Mönch, *Journal of Business Cycle Measurement and Analysis*, vol. 2, no. 1 (2005), 43-69.
25. "Employment duration and resistance to wage reductions," with M. Burda, W. Güth and G. Kirchsteiger, *Homo Oeconomicus*, 22 (2005), 169-189.
26. "Competitive Risk Sharing Contracts with One-Sided Commitment.", with Dirk Krüger, *Journal of Monetary Economics* 53 (2006), 1661-1691.
27. "Debt Contracts and Collapse as Equilibrium Phenomena," with Hans Gersbach, *Journal of Financial Intermediation*, 15 (2006), 556-574.
28. "Should smart investors buy funds with high past returns?," with Frederic Palomino, *Review of Finance*, vol. 11, no. 1 (2007), 51-70.
29. "On the Coexistence of Banks and Markets", with Hans Gersbach, *Scandinavian Journal of Economics*, 109(2) (2007), 225-243.
30. "New Evidence on the Puzzles: Results from Agnostic Identification on Monetary Policy and Exchange Rates", with Almuth Scholl, *Journal of International Economics*, vol. 76, no. 1, September 2008, 1-13.

31. "The slow decline of East Germany", *Journal of Comparative Economics*, vol 36, issue 4 (December 2008), 517-541.
32. "What are the Effects of Fiscal Policy Shocks?", with Andrew Mountford, *Journal of Applied Econometrics*, vol. 24 (April 2009), 960-992
33. "A Model of a Systemic Bank Run", *Journal of Monetary Economics* 57 (2010), 78-96.
34. "The Laffer curve revisited," with Mathias Trabandt, *Journal of Monetary Economics* 58 (2011), 305-327.
35. "Bank Finance versus Bond Finance," with Fiorella de Fiore, *Journal of Money, Credit and Banking* (2011), Blackwell Publishing, vol. 43(7), pages 1399-1421, October.
36. "Transitions in the German labor market: Structure and crisis," with Michael U. Krause, *Journal of Monetary Economics* 59 (2012), 64-79.
37. "Unit Roots in White Noise", with Alexei Onatski, *Econometric Theory* 28, 2012, 485-508.
38. "Sovereign Default Risk and Banks in a Monetary Union," *German Economic Review* (2013), vol. 15(1), 23-41.
39. "Fiscal Stimulus and Distortionary Taxation", with Thorsten Drautzburg, *Review of Economic Dynamics*, October 2015, vol. 18, no. 4, 894-920.
40. "Comment on the Campbell-Cochrane Habit Model," with Lars Ljungqvist, *Journal of Political Economy*, October 2015, vol. 123, no. 5, 1201-1213.
41. "Corporate Debt Structure and the Financial Crisis," with Fiorella de Fiore, *Journal of Money, Credit and Banking*, December 2015, vol. 47, no. 8, 1571-1598.
42. "Financial Health Economics", with Ralph Koijen and Tomas Philipson, *Econometrica*, January 2016, vol. 84, no. 1, 195-242.
43. "Is Quantity Theory Still Alive?", with Pedro Teles and João Valle e Azevedo, *The Economic Journal*, vol 126, March 2016, 442-464.
44. "Bayesian Estimation of a Dynamic Stochastic General Equilibrium Model with Asset Prices," with Martin Kliem, *Quantitative Economics*, vol. 7, no. 1, March 2016, 257-287.
45. "The dynamics of sovereign debt crises and bailouts", with Francisco Roch, *Journal of International Economics*, vol. 114, September 2018, 1-13.
46. "A theory of pruning," with Giovanni Lombardo, *International Economic Review*, vol. 59, no. 4, November 2018, 1825-1836.
47. "Some Simple Bitcoin Economics," joint with Linda Schilling, *Journal of Monetary Economics*, vol. 106, 2019, 16-26.
48. 'Accounting for Post-Crisis Inflation: a Retro Analysis,' joint with Chiara Fratto, *Review of Economic Dynamics*, vol. 35, 2020, pp. 133-53.
49. "Macroeconomic Models for Monetary Policy: A Critical Review from a Finance Perspective," joint with Winston W. Dou, Andrew W. Lou and Ameya Muley, *Annual Review of Financial Economics*, vol. 12, 2020.
50. "Central Bank Digital Currency: Central Banking For All?" joint with Jesús Fernández-Villaverde, Daniel Sanches and Linda Schilling, *Review of Economic Dynamics*, vol. 41 (2021), 225-242, <https://doi.org/10.1016/j.red.2020.12.004> .
51. "The lasting influence of Robert E. Lucas on Chicago economics," *Journal of Economic Methodology*, vol. 29, no. 1, 2022, 48-65. <https://doi.org/10.1080/1350178X.2022.2032272>
52. "Macroeconomic dynamics and reallocation in an epidemic: evaluating the 'Swedish solution' ," joint with Dirk Krüger and Taojun Xie, *Economic Policy* (April 2022), pp. 343-398.

53. "Cryptocurrencies, Currency Competition, and the Impossible Trinity," joint with Pierpaolo Benigno and Linda Schilling, *Journal of International Economics* (2022), vol. 136, <https://doi.org/10.1016/j.jinteco.2022.103601>
54. "Privacy in Digital Payments—Escaping the Panopticon," (with Mike Alonso and Jon Frost), *Georgetown Journal of International Affairs*, Volume 24, Number 2, Fall 2023, pp. 174-180.
55. "Central bank digital currency: when price and bank stability collide," (with Linda Schilling and Jesús Fernández-Villaverde), *Journal of Monetary Economics*, in print.

Published articles and other publications (not refereed:)

1. "Erratum: Reasonable Extreme-Bounds Analysis," *Journal of Econometrics*, Vol. 51, Nos. 1/2 1992, pp. 285-286, with Clive W.J. Granger.
2. "Increasing the Capital Income Tax Leads to Faster Growth," extended abstract, Conference Volume, GMÖOR (Gesellschaft für Mathematik, Ökonomie und Operations Research), September 1992, published 1993.
3. "Comments on 'Bayesian Analysis of Stochastic Volatility', by E. Jacquier, Polson and P. Rossi", *Journal of Business and Economic Statistics*, Vol. 12, No. 4, 1994, pp. 410-412.
4. "Effort and the Cycle: A Short Summary," with Yexiao Xu, in P. Kleinschmidt, A. Bachem, U. Derigs, D. Fisher, U. Leopold-Wildburger, R. Moehring (eds.), *Operations Research Proceedings 1995*, Conference Volume, Springer Verlag, Berlin (1996), 235-240.
5. "Comment on 'Uncertainty, instrument choice, and the uniqueness of Nash equilibrium: microeconomic and macroeconomic examples' " by Dale W. Henderson and Ning S. Zhu, in: Sylvester C.W. Eijffinger and Harry P. Huizinga (Eds.), *Positive Political Economy: Theory and Evidence*, Cambridge University Press, Cambridge, 1998, pp. 154-161.
6. "Capital Income Taxation and the Sustainability of Permanent Primary Deficits," in Steven Brakman, Hans van Ees and Simon K. Kuipers, eds., *Market Behaviour and Macroeconomic Modelling*, Macmillan Press LTD, 1998, 309-337.
7. The ECB: Safe at Any Speed? Monitoring the European Central Bank 1. A CEPR report. Authors: David Begg, Paul de Grauwe, Francesco Giavazzi, Harald Uhlig, Charles Wyplosz. CEPR, 1998.
8. "The robustness of identified VAR conclusions about money: A Comment", *Carnegie-Rochester conference series*, vol. 49, December 1998, pp. 245-263.
9. "A toolkit for analysing nonlinear dynamic stochastic models easily," in Ramon Marimon and Andrew Scott, eds, *Computational Methods for the Study of Dynamic Economies*, Oxford University Press, Oxford (1999), 30-61.
10. MECB Update. A CEPR report, authors: David Begg, Paul de Grauwe, Francesco Giavazzi, Harald Uhlig, Charles Wyplosz, 1999.
11. "Discussion" of a paper by McCallum, conference volume, Bundesbank, forthcoming.
12. "The Role of National Central Banks and of Different Policy Cultures", in Charles Wyplosz, ed., *The Impact of EMU on Europe and the Developing Countries*, WIDER Studies in Development Economics, Oxford University Press, 2001, pp. 76-110.
13. "A review of Kenneth L. Judd's 'Numerical Methods in Economics', Cambridge, MA: MIT Press 1998", book review, *Journal of Economic Methodology* (2001), vol. 8., no. 3, 434-443.
14. Defining a Macroeconomic Framework for the Euro Area. Monitoring the European Central Bank 3. A CEPR report. Authors: Alberto F. Alesina, Olivier J. Blanchard, Jordi Gali, Francesco Giavazzi Harald Uhlig. CEPR, March 2001.

15. "How well do we understand business cycles and growth? Examining the data with a real business cycle model", in Franz, Wolfgang; Ramser, H.-J.; Stadler, M. (eds), *Empirische Wirtschaftsforschung: Methoden und Anwendungen*, vol 32, Wirtschaftswissenschaftliches Seminar Ottobeuren 2002, Ottobeuren, 09.2002. Mohr Siebeck, Tübingen, 2003, pp. 295-319.
16. "One money, but many fiscal policies in Europe: what are the consequences?", in M. Buti, *Monetary and Fiscal Policies in EMU*, Cambridge Univ. Press, 2003, pp. 29-56.
17. *The Monetary Policy Strategy of the ECB Reconsidered. Monitoring the European Central Bank 5*. A CEPR report, Authors: Jordi Galí, Stefan Gerlach, Julio Rotemberg, Harald Uhlig, Michael Woodford. CEPR, 2004.
18. "Discussion - Comments on 'Optimal fiscal and monetary policy under imperfect competition' ", *Journal of Macroeconomics* 26 (2004), 211-217.
19. "Do Technology Shocks Lead to a Fall in Total Hours Worked?", *Journal of the European Economic Association*, April-May 2004, 2(2-3): 361-371.
20. "Comment" on "The Macroeconomic Effects of Inflation Targeting" by Andrew T. Levin, Fabio M. Natalucci, and Jeremy Piger, in *The Federal Reserve Bank of St. Louis Review*, July/August 2004, vol. 86, no. 4
21. "Kydland und Prescott: Die dynamische Makro", *WISU - Das Wirtschaftsstudium*, December 2004, 1455-1457.
22. "Comment" on "Monetary Policy in Real Time" by Domenico Giannone, Lucrezia Reichlin and Luca Sala, in *NBER Macroeconomics Annual 2004*, MIT Press, Cambridge MA, 2005, pp. 201-215.
23. "Comment" on "The Source of Historical Economic Fluctuations: An Analysis Using Long-Run Restrictions," by Neville Francis & Valerie A. Ramey, in *NBER Macroeconomics Annual 2005*, MIT Press, Cambridge MA, 2006, pp. 50-69.
24. "Regional Labor Markets, Network Externalities and Migration: The Case of German Reunification", *American Economic Review, Papers and Proceedings*, vol. 96 (2006), no 2 (May), 383-387
25. "Explaining Asset Prices with External Habits and Wage Rigidities in a DSGE Model", *American Economic Review, Papers and Proceedings*, vol. 97 (2007), no 2 (May), 239-243
26. "Approximate Solutions to Dynamic Models (Linear Methods)", entry in the *New Palgrave Dictionary of Economics*, Steven N. Durlauf and Lawrence E. Blume eds., Palgrave Macmillan (2008).
27. "Pension Systems and the Allocation of Macroeconomic Risk", with Lans Bovenberg, in 'NBER International Seminar on Macroeconomics 2006', L. Reichlin and K. West, eds., NBER, University of Chicago Press (2008), 241-323.
28. "Monetary policy in Europe vs the US: what explains the difference?" in Jordi Galí and Mark J. Gertler, *International Dimensions of Monetary Policy*, NBER Books, NBER, May 2010, 489-533.
29. "Comment" on "How has the Euro Changed the Monetary Transmission" by Jean Boivin, Marc P. Giannoni, Benoît Mojon, in *NBER Macroeconomics Annual 2008*, vol. 23, MIT Press, Cambridge MA, 2009, pp. 141-152.'
30. "Some Fiscal Calculus," *American Economic Review, Papers and Proceedings* 2010, vol. 100(2), pp. 30-34.
31. "Economics and Reality", *Journal of Macroeconomics* 34 (2012), 29-41.
32. "How Do Laffer Curves Differ Across Countries?," with Mathias Trabandt, NBER Chapters, in: *Fiscal Policy after the Financial Crisis* National Bureau of Economic Research, Inc. (2012).

33. "Agents as Empirical Macroeconomists: Thomas J. Sargent's Contribution to Economics," *Scandinavian Journal of Economics*, Wiley Blackwell, vol. 114(4), pages 1055-1081, December (2012).
34. "Interview with Harald Uhlig," with István Kónya and Katalin Szilágyi, *MNB Bulletin*, Magyar Nemzeti Bank (the central bank of Hungary), vol. 8(1), pages 62-67, January (2013).
35. "Outright Monetary Transactions und Target2", *Wirtschaftsdienst* 2013, vol. 7, 443-444.
36. "Remarks on the OMT Program of the ECB", in 'The ECB's Outright Monetary Transactions in the Courts,' H. Siekmann, V. Vig and V. Wieland, eds., *IMFS Interdisciplinary Studies in Monetary and Financial Stability*, 1/2015, Frankfurt.
37. "Four types of ignorance: Discussion," *Journal of Monetary Economics*, 2015, vol. 69, 114-120.
38. "Comment", in *NBER Macroeconomics Annual 2015*, Martin Eichenbaum and Jonathan Parker, eds., The University of Chicago Press 2016, pp. 257-267.
39. "Housing and Credit Markets: Booms and Busts," with Veronica Guerrieri, in *Handbook of Macroeconomics*, vol. 2B, Taylor-Uhlig, eds., Elsevier (2016), 1427-1496.
40. "Shocks, Sign Restrictions and Identification", chapter 4 in Honoré, B., Pakes, A., Piazzesi, M., & Samuelson, L. (eds.), *Advances in Economics and Econometrics: Eleventh World Congress* (Econometric Society Monographs), Cambridge University Press (2017), 95-127.
41. "The Past, Present, and Future of Economics: A Celebration of the 125-Year Anniversary of the JPE and of Chicago Economics: Introduction", with John List, *Journal of Political Economy* 2017, vol. 126, no. 6, 1723-1727.
42. "Business Cycles and International Trade", *Journal of Political Economy* 2017, vol. 126, no. 6, 1761-1766.
43. "Some simple Bitcoin economics," with Linda Schilling, chapter 4 in 'The Economics of Fintech and Digital Currencies,' Antonio Fatás, ed., CEPR Press 2019, CEPR, London, 31-38.
44. "Currency Substitution under Transaction Costs," with Linda Schilling, *AEA Papers and Proceedings* (2019), volume 109, pp. 83-87.
45. "Global (Crypto-)Currencies and Currency Competition," with Pierpaolo Benigno and Linda Schilling, *Crypto Review*, September 2019, vol., 1, pp. 01-03.
46. "Macroeconomic Dynamics and Reallocation in an Epidemic", joint with Dirk Krüger and Taojun Xie, in *Covid Economics* vol. 5, April 2020, CEPR, advertised there as "A Theory of the 'Swedish Solution'".
47. "Review Article: Eswar S. Prasad: How the Digital Revolution is Transforming Currencies and Finance", *Business Economics*, 2023, vol. 58, 201-204.
48. "On Digital Currencies," *Atlantic Economic Journal*, in print.

Courses taught:

- **1990-1994:** Princeton University. Topics in Econometrics.
- **1994-2001:** Tilburg University. Transition Economics (twice). Asset Pricing (once, 2001)
- **1999-2000:** Sabbatical visit at Stanford University. Econ 101, Seminar on Financial Crises. Econ 103, Applied Macroeconomic Analysis.
- **2000-2007:** Humboldt-Universität zu Berlin. Konjunktur- und Wachstumspolitik. Finanzkrisen-Seminar. Geldtheorie und -politik. Asset Pricing. Numerical Methods.

Introduction to Advanced Macroeconomic Analysis. Various graduate-level courses. Schumpeter Seminar.

- **2011 (IMF)**: mini-course on fiscal policy in DSGE models.
- **2011 (U Kiel), 2012 (U Mannheim), 2012 (CB Budapest), 2012, 2013, 2014, 2015 (IMF), 2015 (CB Seoul), 2016 (CB Chile)**: Mini-Courses on Financial Markets and the Macroeconomy.
- **2005 (Yale)**: mini-course on Sign Restrictions and Bayesian VARs.
- **2006 (ZEI Summer School, U. Bonn)**: mini-course on Identification with Sign Restrictions as well as Asset Prices and Macroeconomics.
- **2021 (CB Budapest)**: mini-course on Digital Currencies.
- **2007-present**: University of Chicago (years indicate academic year fall to spring next year). **Undergraduates**: Econ 233, Introduction to Quantitative Macroeconomic Models (2007, 2008). Money and Banking (since 2009). Econ 23040, Cryptocurrencies (2018). **Masters**: Introduction to Advanced Macroeconomic Analysis (since 2021). **Graduate**: Econ 311, Quantitative Methods, with emphasis on Bayesian Econometrics and Time Series Analysis (2007-2019). Econ 380, Solving and Estimating Macroeconomic Models (2007, 2008). Econ 381, Applied Macroeconomics (2009, 2010). Econ 33603, Macroeconomics and Financial Frictions (2013-2020). 49700, Third Year Research Seminar (2016), Econ 35340, Digital Currencies (2021), Econ 33502, Monetary Economics (2022, 2023).

Dissertation:

"Costly Information Acquisition, Stock Prices and Neoclassical Growth,"; supervisor: C.A. Sims, University of Minnesota, Department of Economics, 1990.

A partial list of activities:

- **1989** : Invited participant in the International Symposium on Evolutionary Dynamics and Nonlinear Economics, April 16-19, Austin, TX. Presented "Chaos and Linear Autoregressions."
- **1990** : Invited participant of the Review of Economic Studies Tour of seven recent Ph.Ds in economics to present their paper in London, Barcelona and Tel Aviv, May.
- **1990** : Invited participant in the Bonn Workshop in Mathematical Economics, July 1-14, Bonn.
- **1990** : Annual Allied Social Science Association Meetings, Washington, D.C., December 28-30.
- **1991**: NBER Universities Research Conference on "The Macroeconomic Effects of Fiscal Policy," May 10-11.
- **1991** : NBER Summer Institute, "Financial Markets and Monetary Economics," July 15-18.
- **1991**: Northwestern University Summer Workshop in Economics on "Economic Dynamics," July 23-27.
- **1991** : Econometric Society European Meeting, Cambridge (U.K.), September 2-6. Presented "Can a Government Run a Deficit Forever?"
- **1992**: Annual Allied Social Science Association Meetings, New Orleans, January 3-4. Chaired a session on Bayesian Econometrics.
- **1992** : NBER Review Conference for NBER-NSF Dissertation Support. Presented thesis.
- **1992** : NBER Macroeconomics Annual Conference, March 6-7.

- **1992** : Yale-NSF Conference on Bayes Methods and Unit Roots, April 24-25. Presented "What Macroeconomists Should Know About Unit Roots as Well: The Bayesian Perspective."
- **1992** : Society for Economic Dynamics and Control Meetings, Montreal, June 10-12. Presented "Increasing the Capital Income Tax Leads to Faster Growth."
- **1992** : GMÖOR Meetings (Gesellschaft für Mathematik, Ökonomie und Operations Research), Hamburg, August 25-28. Presented "Increasing the Capital Income Tax Leads to Faster Growth" as invited speaker.
- **1992 - 1993** : Sabbatical from Princeton, visiting CES (Munich), Bonn and Chicago.
- **1994** : Northwestern University Summer Workshop, July 24-31.
- **1994** : Econometric Society European Meeting and European Economic Association Meeting in Maastricht (The Netherlands), August 29-September 5: member of both programme committees. Presented "Transition and Financial Collapse" as well as "Rules of Thumb and Dynamic Programming."
- **1995**: Gave NAKÉ course on business cycles.
- **1995** : CEPR meetings in Bonn, Jerusalem, Perugia (Italy) and Gerzensee (Switzerland). Presented "Transition and Financial Collapse," "Can Habit Formation be Reconciled with Business Cycle Facts," and "Rules of Thumb and Dynamic Programming."
- **1995** : SEDC meeting in Barcelona. Presented "Effort and the Cycle: Cyclical Implications of Efficiency Wages," chairing the session.
- **1995** : Visitor to the Institute for Empirical Macroeconomics at the Federal Reserve Bank of Minneapolis in June.
- **1995** : Invited speaker at the GMÖOR (Gesellschaft für Mathematik, Ökonomie und Operations Research) meetings in Passau, September 13-15. Presentation of "Effort and the Cycle: What is the Story?"
- **1996**: AEA meetings in San Francisco. Presented "Can Habit Formation be Reconciled with Business Cycle Facts?"
- **1996** : CEPR meeting in Gerzensee on Finance and Macroeconomics, January. Discussant.
- **1996**: Hydra meeting on Macroeconomics. Discussant.
- **1996**: Visitor to Koc University, Turkey. May.
- **1996**: NBER meeting on Public Finance in Amsterdam, June. Discussant.
- **1996**: Conference on macroeconomics in Groningen, June. Presented: "Capital Income Taxation and the Sustainability of Permanent Primary Deficits."
- **1996**: Aarhus meeting, June. Presented: "The Welfare Effects of a Wasted Capital Income Tax Increase in the Presence of Uninsurable Idiosyncratic Risk".
- **1996**: CEPR Economic Theory Summer Workshop, Gerzensee, July. Presented "Long Term Debt and the Political Support for a Monetary Union."
- **1996**: Northwestern University Summer Workshop, July 22nd - 28th.
- **1996**: ESEM 96 in Istanbul, August. Presented: "Effort and the Cycle: Cyclical Implications of Efficiency Wages." Discussant for Danny Quah.
- **1996**: Lecturer in the EEA Summer School on Computational Economics in Florence, September.
- **1996**: Conference of the "Verein für Socialpolitik," Kassel, September. Presented "The Welfare Effects of a Wasted Capital Income Tax Increase in the Presence of Uninsurable Idiosyncratic Risk". Discussant.
- **1996**: Conference on Financial Markets in London, November. Presented "The Welfare Effects of a Wasted Capital Income Tax Increase in the Presence of Uninsurable Idiosyncratic Risk". Discussant.

- **1996:** CEPR meeting, Barcelona, November. Presented: "Long Term Debt and the Political Support for a Monetary Union."
- **1996:** CEPR meeting, Florence, December. Presented: "Long Term Debt and the Political Support for a Monetary Union."
- **1997:** CEPR meeting Perugia. Discussant.
- **1997:** Gave NAKÉ course on business cycles.
- **1997:** NBER "Money" meeting, April, Boston. Presented: "Long Term Debt and the Political Support for a Monetary Union."
- **1997:** Visitor to the Stockholm Institute of International Economics, April.
- **1997:** Geneva-Venice Theory workshop, June, Venice. Presented: "Rules of Thumb versus Dynamic Programming".
- **1997:** CEPR meeting Santiago, June. Co-Author Martin Lettau presented paper "Volatility Bounds and Preferences: An Analytical Approach" (new title).
- **1997:** NBER summer workshop, July, Boston. Presented: "What are the effects of monetary policy? Results from an agnostic identification procedure."
- **1997:** Visiting professor at the University of Rochester, October 1997. Taught six lectures of three hours in the graduate first-year course in macroeconomics.
- **1997:** Carnegie-Rochester Conference on Public Policy, November (Pittsburgh). Discussant of Faust.
- **1998:** Visit to UCLA, January. Gave four lectures in a graduate course on "Monetary Policy: A VAR approach."
- **1998:** CEPR meeting Madrid, January. Presented: "What are the effects of monetary policy? Results from an agnostic identification procedure."
- **1998:** CEPR meeting York, March. Presented: "An Analysis of the Stability Pact."
- **1998:** Verein für Socialpolitik, ökonomischer Ausschuss, March. Presented "What are the effects of monetary policy? Results from an agnostic identification procedure."
- **1998:** CEPR meeting, London, May. Discussant.
- **1998:** ISOM meeting, Portugal, June. Presented: "Fickle International Investors: An Impediment to Growth?" (with Andrew Scott, LBS).
- **1998:** Evaluator of three departments for the Zentrale Evaluationsagentur Niedersachsen.
- **1998:** CEPR-Gerzensee summer workshop in finance, July. Presented: "Fickle International Investors: An Impediment to Growth?" (with Andrew Scott, LBS).
- **1998:** EEA Summer School on Business Cycles, Paris, September: gave lecture on "Modelling Business Cycles".
- **1999:** Bundesbank Conference, March. Discussant of McCallum.
- **1999:** Visitor to the Stockholm Institute of International Economics, April.
- **1999:** Organizer of a CEPR-TMR conference on "New Approaches to the Study of Economic Fluctuations" on Hydra, Greece.
- **1999:** Verein für Socialpolitik, theoretischer Ausschuss, April. Presented "Rules of Thumb versus Dynamic Programming" (with Martin Lettau, Federal Reserve Bank of New York).
- **1999:** ISOM 1999, June. Discussant of Orphanides-Wieland.
- **August 1999 - June 2000:** Sabbatical, visiting the economics department at Stanford University and teaching Econ 103, Econ 101.
- **1999:** WIDER conference on EMU: The Impact on Europe and the Developing Countries, November. Presented "The Role of National Central Banks and of Different Policy Cultures".
- **1999:** Conference on Fiscal and Monetary Policy, UCLA, December. Discussant of Chari.

- **1999:** ``Trio" Conference in Japan. Presented "Should we be Afraid of Friedman's rule?"
- **2000:** Conference at the Bank of Portugal. Presented "What are the effects of monetary policy? Results from an agnostic identification procedure."
- **2000:** SED conference in Costa Rica. Presented "Should we be Afraid of Friedman's rule?"
- **2000:** Conference on "Monetary Policy under Incomplete Information", Gerzensee, Switzerland. Discussant of Bernanke-Boivin.
- **2001:** 9th Annual Texas Monetary Conference, Rice University, Houston, Texas. Presented, "Should we be Afraid of Friedman's rule?"
- **2001:** CEPR Conference on the Implementation of Monetary Policy Rules at INSEAD, Fontainebleu. Presented, "Should we be Afraid of Friedman's rule?"
- **2001:** CEPR Conference for New Approaches for the Study of Economic Fluctuations, Hydra. Co-author Andy Mountford presented "What are the effects of fiscal policy shocks?"
- **2001:** Invited Lecture at the Alicante Meeting , presenting a lecture on my current research on identifying monetary and fiscal policy shocks.
- **2002:** Invited Paper, "One Money, Many Countries: What are the Consequences?", presented at a conference of the European Commission in Brussels.
- **2002:** CEPR Conference for New Approaches for the Study of Economic Fluctuations, Hydra. Presented: "Did the Fed Surprise the Market in 2001? A Case Study for VARs with Sign Restrictions"
- **2002:** CEPR Conference on Fiscal Policy. Discussant for Roger Farmer.
- **2002:** CEPR ESSIM meeting. Presented: "What moves GNP?"
- **2002:** Madeira conference of the Bank of Portugal. Discussant for Jose Scheinkman.
- **2002:** NBER Economic Fluctuation Summer Meeting. Discussant for Valerie Ramey.
- **2002:** ESSET Gerzensee Meeting. Organized a focus session on recursive contracts. Presented "Competitive Risk-Sharing Contracts with One-Sided Commitments", co-author is Dirk Krüger (Stanford University)
- **2002:** Invited Participant to the Wirtschaftswissenschaftliche Seminar Ottobeuren. Presented: "How well do we understand business cycles and growth? Examining the data with a real business cycle model."
- **2002:** Berlin Marathon in 3:44:06.
- **2002:** Verein für Socialpolitik, Innsbruck. Presented: "What moves GNP?"
- **2003:** Konferenz at the Atlanta Federal Reserve Bank, Discussant for Frank Schorfheide.
- **2003:** Bundesbank Konferenz in Eltville. Discussant for Schmitt-Grohe and Uribe.
- **2003:** SED Konferenz Paris. Presented „What moves GNP“?
- **2003:** Participant in an invited EEA session. Presented "Do Technology Shocks lead to a Fall in Total Hours Worked?"
- **2003:** Konferenz at the St. Louis Federal Reserve Bank. Discussant for Levin, Natalucci and Piger.
- **2003:** ECB conference. Presented "What moves GNP?"
- **2003:** Berlin Marathon in 3:25:06.
- **2004:** Ökonometrischer Ausschuß. Presented "What moves GNP?"
- **2004:** NBER Macroeconomics Annual, Boston. Discussant for Giannone-Reichlin-Sala paper.
- **2004:** Portugal Conference, Discussant for Cogley-Sargent
- **2004:** Invited ESEM lecture, "Macroeconomics and Asset Markets: Some Mutual Implications."
- **2004:** Berlin Marathon in 3:20:58.

- **2004:** CEPR "Bubbles" Conference in Barcelona. Discussant for Caballero-Hammour, Jermann-Quadrini and Pastor-Veronesi
- **2005:** Participant in ESRC grant evaluation exercise
- **2005:** Visits to the Hebrew University Jerusalem, Yale, the International Institute for Economics in Stockholm, NYU, MIT. Taught three lectures on VARs with sign restrictions at Yale.
- **2005:** Discussant of Ravn - Schmitt-Grohé - Uribe, "Deep Habits" at the Northwestern University and EUI conference on "Inflation, Interest Rates and Relative Prices" at EUI, June 2005.
- **2005:** Prague. Participant of the first Prague-Budapest. Spring Workshop in Macroeconomic Theory as a member of the scientific committee.
- **2005:** Berlin Marathon in 3:21:20.
- **2005:** "Policy Relevant Modeling for Central Banks", Zürich, 4th Conference of the Bank of Canada, Federal Reserve Bank of Cleveland and the SNB Zürich. Presented "Bank finance versus bond finance: what explains the differences between US and Europe," with Fiorella de Fiore.
- **2005:** Visit of NYU and MIT.
- **2006:** Visit of Stanford and the University of Chicago. ISOM, Estonia, June, presented "Pension Systems and the Allocation of Macroeconomic Risk", with Lans Bovenberg. ZEI Summer School 2006, June, on Monetary Theory and Policy, four lectures. EC Euroa-area Economy Modelling Centre, conference on "Fiscal Stabilisation Policies in a Monetary Union: What can we learn from DSGE models?", October, presented "How far are we from the slippery slope? The Laffer curve revisited" (with M. Trabandt). Bundesbank, 2nd Kleistvilla workshop June, presented "Macroeconomics and asset markets: some mutual implications". 4th ECB Central Banking Conference, November, discussant of Michael Woodford and Lawrence Christiano.
- **2007:** American Economic Association Winter meetings, Econometric Society Winter Meetings January, Chicago. Presented "Is Quantity Theory Still Alive" (with Pedro Teles), "Explaining Asset Prices with Habit Persistence and Wage Rigidities in a DSGE Model", "Bank finance vs bond finance: implications for monetary policy" (with Fiorella de Fiore). "Wirtschaftspolitik für die rheinland-pfälzischen Regionen", Mainz workshop January 2007, presented "Regionale Arbeitsmärkte, Netzwerkexternalitäten und Migration: Der Fall Ostdeutschland". SED meetings in Prague, June, presented "Explaining Asset Prices with External Habits and Wage Rigidities in a DSGE Model", and "Measuring the Dynamic Effects of Monetary Policy Shocks: A Bayesian FAVAR Approach with Sign Restrictions" was presented by co-author Ahmadi. NBER "International Dimensions of Monetary Policy", near Barcelona, June, presented "Monetary policy in Europe vs the US: what explains the difference?". Bank of England, "Great Stability Conference", September, discussant of "How Structural are Structural Parameters" by Rubio-Ramirez and Fernandez-Villaverde. Nemmers Prize Conference for Lars Hansen, discussant of "Evolution and Intelligent Design", Sargent.
- **2008:** NBER Macro Annual 2008, April, discussant of Boivin- Giannoni- Mojon, "How has the Euro Changed the Monetary Transmission". ECB, "International Research Forum on Monetary Policy", June, discussant of Arseneau-Chugh, "Frictional Labor Markets, Bargaining Wedges and Optimal Tax Rate Volatility", 5th Banco de Portugal Conference on Monetary Economics in June and Sixth Hydra Workshop on Dynamic Macroeconomics in October: presented "How far are we from the slippery slope? The Laffer curve revisited" (with M. Trabandt). "The ECB and its Watchers", Frankfurt September and Global Insight, World Economic Outlook

Conference, October Chicago, presented “The subprime innovation and the moral hazard crisis”.

- **2009:** EFG meeting San Francisco February, Discussant of Leeper-Walker-Yang, “Fiscal Foresight: Analytics and Econometrics”. March: announcement of the beginning of a recession (as of Q1 2008/January 2008) in Europe as chair of the CEPR European business cycle dating committee. Selected participant for the Carnegie-Rochester conference April 2009. Presented “A model of a systemic bank run”. Invited key note speaker for the ARGE meeting in Berlin, April, speaking about “The slow decline of East Germany” (translation). Invited key note speaker at the Midwest Macroeconomic Meeting in Indiana, May: I spoke about “Some fiscal multiplier calculus”. Participant at the Princeton Conference on “Monetary-Fiscal Policy Interactions, ...”, May. I presented my paper “Some fiscal multiplier calculus”. Scientific organizer (together with Alan Mountfort) of the joint Bundesbank-Banque-de-France conference in Paris, June 2009. I presented “A model of a systemic bank run”. Keynote speaker at the Mannheim Konferenz "Heterogeneous-Agent Models in Macroeconomics": I presented “Some fiscal multiplier calculus”. Mykonos Conference: I presented “Some fiscal multiplier calculus”. IMF, Tenth Annual Jacques Polak Research Conference on “Financial Frictions and Macroeconomic Adjustment”. Presented “A model of a systemic bank run”. Visit to the IMF, I presented “Some fiscal multiplier calculus”.
- **2010:** AEA/Econometric Society Winter Meetings: I presented “Some fiscal multiplier calculus”, “EZ Easy in DSGE” and “Fiscal Stimulus and Distortionary Taxation” (with Thorsten Drautzburg). Atlanta Federal Reserve Bank CQER Conference "New Approaches to Fiscal Policy". I presented “Fiscal Stimulus and Distortionary Taxation” (with Thorsten Drautzburg). 2010-02-25: Seminar at the European Central Bank. I presented “How far are we from the slippery slope?”. Seminar at the University of Chicago. I presented “Fiscal Stimulus and Distortionary Taxation”. Seminar at NYU. I presented “Fiscal Stimulus and Distortionary Taxation”. Seminar at Indiana University. I presented “Fiscal Stimulus and Distortionary Taxation”. Seminar at Northwestern University (Kellogg). I presented “Fiscal Stimulus and Distortionary Taxation”. Conference at the Bank of Korea. I presented “Crises in Repo Markets with Adverse Selection”. SED meetings in Montreal. I presented 'Easy EZ for DSGE'. NBER SI in Boston. I presented 'Fiscal Stimulus and Distortionary Taxation'. Econometric World Congress in Shanghai. I presented 'Fiscal Stimulus and Distortionary Taxation'. I also discussed invited papers by Fernandez-Villaverde-Rubio-Ramirez as well as Schorfheide. Richmond Federal Reserve Bank. I presented 'Fiscal Stimulus and Distortionary Taxation'. Stanford University. I presented 'How Far are we from the Slippery Slope? The Laffer Curve Revisited'. ``Hydra Conference" on Cyprus. I presented "Crises in Repo Markets with Adverse Selection". London, MONFISPOL conference. I presented 'Fiscal Stimulus and Distortionary Taxation'. ECB Conference, Frankfurt. I presented 'Fiscal Stimulus and Distortionary Taxation' and participated in a panel discussion. UCL London. I presented 'Measuring the effects of monetary shocks: A Bayesian FAVAR approach with sign restrictions.' Brussels, CEPR conf on Lessons from the Financial Crisis. I presented 'Crises in Repo Markets with Adverse Selection'.
- **2011:** ASSA meetings in Denver. I presented 'Crises in Repo Markets with Adverse Selection'. Cairo University. I presented 'Fiscal Stimulus and Distortionary Taxation'. Washington IMF. Taught a mini-course on 'Fiscal Policy in DSGE models'. Miami Liberty Fund Conference. Hamburg, Bundesbank Conference. I presented 'The dynamics of sovereign debt crises in a monetary union'. Seoul, South Korea, Conference in honor of Chris Sims. I presented 'Fiscal Stimulus and Distortionary

Taxation' and 'Bayesian Estimation of a DSGE model with asset prices' and participated in a panel discussion. Stockholm Riksbank Conf.: I presented 'The dynamics of sovereign debt crises in a monetary union'. Luzern BIS conf, discussant of Perotti. San Francisco SCE conf., plenary speaker. I presented 'Fiscal Stimulus and Distortionary Taxation'. SED conf, Gent. I presented 'Crises in Repo Markets with Adverse Selection'. Cologne Macro conf. I presented 'Crises in Repo Markets with Adverse Selection'. NBER SI, Boston. I presented 'How Do Laffer Curves Differ Across Countries?'. Kiel Institute for World Economics: mini course on "Macroeconomics and Financial Markets". Bank of Canada Conference, Keynote Speaker. I presented 'The dynamics of sovereign debt crises in a monetary union'. Sardegna ("Hydra") conference. I presented 'The dynamics of sovereign debt crises and bailouts.' St. Louis Federal Reserve Bank conference. I presented and 'Bayesian Estimation of a DSGE model with asset prices'. Boston, NBER ME. Discussant of Leeper-Traum-Walker. Madison (WI) conf on Money, Banking and Asset Pricing. I presented 'Crises in Repo Markets with Adverse Selection'. Rome, Italian Central Bank, CEPR Regulation and Macro Modelling conf. I presented 'Crises in Repo Markets with Adverse Selection'. Barcelona CREI-CEPR conf on Asset Prices and Business Cycles. I presented 'The dynamics of sovereign debt crises and bailouts.'

- **2012:** Chicago AEA conf: I presented 'Crises in Repo Markets with Adverse Selection'. Brussels conf., European Commission. I presented 'The dynamics of sovereign debt crises and bailouts,' discussed a paper by C.A.Sims and participated in a panel discussion. IMF mini course on "Macroeconomics and Financial Markets". Brussel EC Conference: I presented 'The dynamics of sovereign debt crises and bailouts'. Frankfurt ECB-IRFMP conference. I presented 'The dynamics of sovereign debt crises and bailouts,' and participated in a panel discussion. Santa Barbara LAEF conference. I presented 'The dynamics of sovereign debt crises and bailouts'. Philadelphia Federal Reserve Bank conf. I presented 'The dynamics of sovereign debt crises and bailouts.' Mini course in Bergen on "Macroeconomics and Financial Markets". Discussion on Fiscal Policy at Morning Star. Nottingham University: Granger Lecture, presenting a survey of some of my time series work. Keynote presentation at the Hangzhou (China) 2012 AFR Summer Institute of Economics and Finance. Mini course at Mannheim University on "Macroeconomics and Financial Markets". SED Cyprus conference, presented "Corporate Debt Structure and the Financial Crisis". ECB Workshop on non-standard monetary policy measures. Keynote speech on 'The dynamics of sovereign debt crises and bailouts.' Mini course at the Hungarian Central Bank on "Macroeconomics and Financial Markets". Hydra-Corsica conference, presented "Financial Health Economics". Wharton Conference, I presented 'The dynamics of sovereign debt crises and bailouts.' Princeton Conference in honor of Chris Sims, presenting a survey of some of my time series work. EUI Workshop on Fiscal Policy, I presented 'The dynamics of sovereign debt crises and bailouts.' Participant in a Fiscal Policy Panel at the San Francisco Federal Reserve Bank. Richmond Federal Reserve Bank Conference on Sovereign Debt Crisis, I presented 'The dynamics of sovereign debt crises and bailouts.'
- **2013:** San Diego AEA conf: I presented 'Debt Structure and the Financial Crisis', participated in a panel discussion on "Stimulus or Stymied? The Macroeconomics of Recessions" and discussed 'Output Spillovers from Fiscal Policy' by Auerbach and Gorodnichenko. IMF mini course on "Macroeconomics and Financial Markets". "Advantage" Conference, Milan. Visit to Columbia University. Discussant at the Banque-de-France-Bundesbank Conference in May. Expert witness at the German constitutional court (BVerfG) in June 2013 regarding the OMT programme of the

ECB. Mini course on “Macroeconomics and Financial Markets” at Freie Universität Berlin. Duisenberg Fellow at the ECB in February and in August. I gave the Otto Hirschfeld Lectures in Berlin, October 2013.

- **2014:** IMF mini course on “Macroeconomics and Financial Markets”. Harvard University, presenting ‘Sovereign Default Risk and Banks in a Monetary Union’. Gerzensee mini course on “Macroeconomics and Financial Markets”. UCSD, presented “Financial Health Economics”. UCLA, presented ‘Sovereign Default Risk and Banks in a Monetary Union’. Minneapolis Federal Reserve Bank Conference in honor of Stokey-Lucas-Prescott, presented “Financial Health Economics”, ESEM Summer meeting in Toulouse, I gave the invited “Laffont Lecture”.
- **2015:** IMF mini course on “Macroeconomics and Financial Markets”. With John Taylor, I co-organized two conferences (one in Stanford, one in Chicago) for the presentation of draft chapters for the planned Handbook of Macroeconomics (North-Holland). Keynote presentation at the Tsinghua (Beijing) Workshop in Macroeconomics. Invited to provide a to-be-published comment at the NBER Macro Annual. Keynote presentation at a CES-Ifo conference in Venice in July. Invited talk at the World Congress of the Econometric Society in Montreal. Mini-course at the Central Bank of South Korea. Invited Keynote presentation at the MMF conference in Cardiff. Invited Keynote presentation at the Dynare Conference in Brussels.
- **2016:** invited after-dinner talk at the “Mad Money” conference in Madison, Wisconsin, March. Discussion of Blanchard-Erceg-Lindé at the NBER Macroeconomics Annual Meeting in Boston, April. Taught a mini-course on macroeconomics and financial markets at the Central Bank of Chile, July. Annual NorMac Lecture at the Nordic Summer Symposium in Macroeconomics in Ebeltoft, Denmark, August. Keynote Plenary Speaker at the Midwest Macroeconomics Meeting in Kansas, November. Various visits to the European Central Bank, the Bundesbank and the Philadelphia Federal Reserve Bank to discuss research.
- **2017:** Keynote Speaker at the Henan University INFER Workshop and appointment to Honorary Professor at Henan University, China, March. Various visits to the European Central Bank and the Bundesbank to discuss research. Invited speaker at the 3rd Great Minds China Forum, Shanghai, May 2017: I presented a lecture on “Research Frontiers in Macroeconomics: The Seven Shanghai Themes”. Participant at the ECB Sintra Meeting, June 2017. Invited Speaker at the Singapore Economic Review Conference, Aug 2-4, 2017. Invited Speaker at the ECB Conference on “Credit, Banking and Monetary Policy”, October: presented “Mortgage-Backed Securities and the Financial Crisis 2008: a Post Mortem”. John Kuszczak Key Note Speaker at the Bank of Canada conference, November 2017.
- **2018:** Keynote Speaker at the 22nd International Conference on Macroeconomic Analysis and International Finance, Crete, May: presented “Neoclassical growth with one-sided competitive risk sharing” (joint with Dirk Krüger). Invited participant to the Stockholm Nobel Symposium on Money and Banking (May): presented “Money and Banking: DSGE Challenges”. DFG panel member for the Exzellenz-Initiative in Germany, evaluating several Exzellenz-Clusters in June. Keynote Speaker at the Econometric Society Australasian Meeting in Auckland, NZL, in June: presented “Neoclassical growth with one-sided competitive risk sharing” (joint with Dirk Krüger). Invited visitor at the National University of Singapore (NUS) in August as Tan Chin Tuan Professor of Banking and Finance, presenting several papers and interacting with faculty and students. I presented “Some Simple Bitcoin Economics” (joint with Linda Schilling) at the 2018 Liquidity and Financial Fragility Conference at Penn Wharton, October 2018. Invited participant at the JME-SNB Gerzensee conference in October, presenting “Some Simple Bitcoin Economics” (joint with Linda Schilling). Keynote

Speech on “Money Market Functioning and Interbank Uncertainty” at the European Central Bank (ECB) in October. Co-Organizer of the BFI conference on “Cryptocurrencies and Blockchains” at the University of Chicago in November. Keynote speaker at the 5th Workshop of the Australasian Macroeconomics Society (WAMS) in Queenstown, NZL, November, presenting “Some Simple Bitcoin Economics” (joint with Linda Schilling). Keynote on “The Dynamics of Sovereign Debt Crises and Bailouts: Theory and Implication for Policy-Making” at the Workshop on Debt Sustainability Analysis (DSA) at the European Stability Mechanism (ESM) in Luxembourg, December.

- **2019:** Participant in the invited session on “crypto-currency markets” at the ASSA-AEA meetings in Atlanta, resulting in the paper “Currency Substitution under Transaction Costs” (joint with Linda Schilling), to appear in the AEA P&P May volume 2019. I gave the PER Distinguished Lecture at Columbia University in April on “Some Simple Bitcoin Economics”. I gave an AMES (Asian Meeting of the Econometric Society) Keynote in Xiamen, China, June, on “Some Simple Bitcoin Economics”. I gave a keynote at the SERC conference in Singapore in August on “Some Simple Bitcoin Economics”. Co-Organizer of the 2nd BFI conference on “Cryptocurrencies and Blockchains” at the University of Chicago in November.
- **2020:** I gave a zoom lecture on “COVID19 und VWL: was die ökonomische Sicht beiträgt” at the IMFS, Frankfurt in April 2020. I gave a lecture “On Digital Currencies” at the IWH Halle in June. I participated in a Panel on “Central Bank Digital Currencies, Payments Systems, and the Future of the International Money and Financial System” by the Central Bank Research Association (CEBRA) in September. I gave a keynote talk at the ETH Zürich conference on “Future Money: From Design to Economics”, presenting “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” joint with Pierpaolo Benigno and Linda Schilling. I was an invited speaker at the 2020 Bank of Canada Annual Economic Conference in November, presenting “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” joint with Pierpaolo Benigno and Linda Schilling.
- **2021:** I gave a recorded zoom lecture on “Digital Currencies: What does the Future hold?” at the IMFS, Frankfurt in May 2021. I gave a keynote at the Oxford Saïd - Risk Center at ETH Zürich Macro-finance Conference in July 2021, presenting “Transitional Neoclassical Growth Dynamics with One-Sided Commitment”, joint with Dirk Krüger and Fulin Li. I taught a mini-course on “Digital Currencies” to central bankers, at the invitation of the Central Bank of Hungary. Keynote on “Digital Currencies” at the SaMFF Monetary Economics Conference, Wisconsin, in September. I gave a SEACEN-BOJ online course on Digital Currencies: Private vs CBDC in November.
- **2022:** I presented a lecture on “Cryptocurrencies and Central Bank Digital Currency” as part of the SMU (Singapore Management University) Economics Lecture Series (ELS) in March. I presented "Central Bank Digital Currency: When Price and Bank Stability Collide" (with Linda Schilling and Jesus Fernandez-Villaverde) at Georgetown University in March, at the Purdue FinTech Conference in May, at the “Future.s of Money” conference in Paris in June and at the “Central Bank Digital Currencies: Implications and Challenges for Financial Stability” conference of the Central Bank of Chile in July. I presented “Transitional Neoclassical Growth Dynamics with One-Sided Commitment”, joint with Dirk Krüger and Fulin Li at Purdue in May. I gave a presentation “On Cryptocurrencies and the Indeterminacy of Equilibrium Exchange Rates” at the conference in honor of Neil Wallace, University of Minnesota, September 23rd. I visited the Bundesbank, the Bank for International Settlements, the European Central Bank and the Bank of England. I presented my paper on “A Lunatic Stablecoin Crash” at the Hydra conference in Nice, September, at an online seminar of the

University of Santa Barbara, CA in October and the Bank of England in December. I participated in the “Academic Freedom” conference in Stanford in October, chairing a panel. I participated in the event “The SNB and its watchers 2022” in Bern, November, and participated in the panel on exchange rate policy.

- **2023:** I presented my paper on “A Lunatic Stablecoin Crash” at the St. Louis Federal Reserve in February, the CBDC online seminar in March and the Banco de Portugal in April. Keynote “A Luna-tic Stablecoin Crash: Illustrating the Method of Quantitative Interpretation,” Society for Economic Measurement Conference, Milan, Italy (July 1, 2023). Presentation at the CICC Global Institute (CGI) Forum on “CBDCs: Current Developments and Future Implications,” Beijing, China (July 2, 2023). Presentation at the Minnesota Workshop in Macroeconomic Theory (August 2-4, 2023). “On Digital Currencies,” IAES Presidential Address, Philadelphia (October 6, 2023). Keynote “On Digital Currencies” at the 2nd Bonn/Mannheim Workshop on Digital Finance (December 19, 2023).

Other presentations and activities:

- **1989 - 1995:** Queen's, University of Chicago, Northwestern University, Western Ontario, Yale, NYU (Finance Dept.), Princeton, University of Pennsylvania, Carnegie-Mellon, UCLA, UC San Diego, LSE, Autonomia (Barcelona), Tel Aviv Munich, Bonn, Rotterdam, Oxford, Basel, Bielefeld, Dortmund, Bergen, CORE, Humboldt University (Berlin), Tilburg University, UPF, Bern, Wisconsin, University of Minnesota, Federal Reserve Bank of Minneapolis, University of Illinois in Urbana-Champaign, UBC, Chicago (Bus. School),
- **1995 - 1997:** ECARE, Federal Reserve Bank of Minneapolis, Tinbergen Institute Amsterdam (Finance group), University College London, Cambridge, Lissabon (Central Bank), Koc University, Humboldt University Berlin, Alicante, Dortmund, Groningen, Southampton, Stockholm, CEMFI (Madrid), Cologne, Frankfurt, University of Rochester, London Business School, CORE.
- **1998:** FU Berlin, Antwerp, Bundesbank, IGIER (Milan), EUI (Florence), Bielefeld, ECARE (Brussels), Bonn, Saarbrücken.
- **1999:** Cyprus, INSEAD, Stockholm Institute of International Economics, Stockholm School of Economics, Vienna, Humboldt University Berlin, "The ECB and its Watchers in Frankfurt", Stanford University, UCLA, University of Tokyo, Niagata
- **2000:** USC, University of Santa Barbara, Richmond Fed, Wharton, U. of Chicago (Dept. of Econ.), UC San Diego, UC Davis, UCLA
- **2001:** University of Minnesota, Ente Einaudi (Rome), Tilburg University, Cambridge, CERGE EI (Prague), SFB Meeting in Wulkow, "The ECB and its Watchers" in Frankfurt, EEA Congress in Lausanne
- **2002:** Southampton, London Business School, European Central Bank, Tilburg University, Milan, Warwick, Cologne
- **2003:** Heidelberg, Mannheim, Tilburg University, Bonn, Alicante, Carlos III (Madrid)
- **2004:** Bielefeld, Bundesbank, LSE, Tel Aviv, Toulouse, Duke
- **2005:** Hebrew University Jerusalem, St. Andrews, Yale, NYU, MIT, Harvard, EUI, Milan, Copenhagen, Princeton, Toulouse.
- **2006:** Basel, University of Munich, Institute für Wirtschaftsforschung Halle (IWH), Oslo, Oxford, Rotary Club am Gendarmenmarkt (Berlin), Tilburg University, IHS (Vienna), Österreichische Nationalbank (Austrian Central Bank), University of Chicago, Federal Reserve Bank of Chicago
- **2007:** Brunel, ECARES, Hamburg, LSE, Mannheim, University of Chicago, Michigan, Wharton (U Penn), Columbia,

- **2008:** University of Missouri, New York Federal Reserve Bank, Federal Reserve Board (Washington), Southern Methodist University, Arizona State University, UC Davis, UC Berkeley, San Francisco Federal Reserve Bank.
- **2009:** University of Wisconsin, University of Chicago, ECB, Tilburg University, Notre Dame, KF-UNC North Carolina.
- **2010:** ECB, Northwestern (Kellogg), Richmond Federal Reserve Bank, Stanford (Economics)
- **2011:** Duke University (Economics and Finance). ITAM, Mexico City. University of Chicago SSD Convocation: Graduation Speech. Getúlio Fargas Foundation, Rio de Janeiro. University of Maryland.
- **2012:** Getúlio Fargas Foundation, Rio de Janeiro. Wharton (Univ. Pennsylvania), Kansas City Federal Reserve Bank, Kansas University, Central Bank of Portugal, University of Wisconsin, Ente Einaudi (Rome), Bilkent University (Turkey), Central Bank of Turkey, Catholic University of Milan, University of Bonn, Berliner Akademie der Wissenschaften.
- **2013:** UPF, Barcelona. Columbia University. SED conference Seoul. DIW Berlin, Federal Reserve Bank of Minneapolis, Federal Reserve Bank of Philadelphia, IFMS conference at the ECB Frankfurt.
- **2014:** AEA Winter Meetings, NBER Monetary Economics Conference (discussant of Del Negro – Sims), Duke Asset Pricing Conference, Queen’s University, Carnegie-Rochester conference (discussant of Hansen-Sargent), Ortigia (Sicily) conference, ECB “MaRs” conference (discussant), Capri conference, Warsaw Central Bank of Poland conference, Richmond Federal Reserve Bank, Washington Federal Reserve Board, NBER SI EFG meeting (discussant), Adelaide (Australia).
- **2015:** Boston Winter Meetings, ASU Phoenix AZ, Chicago Midwest Finance meeting (discussant), NBER Monetary Economics Conference (discussant of Del Negro – Sims), NY MFM meeting (discussant), Zurich conference (presented Roch-Uhlig), UBS Center Zurich advisory board meeting, NBER Summer Institute, Hydra conference (discussant).
- **2016:** MFM Meeting in NY (participant), NY conference on “Multiple Equilibria” (presented Guerrieri-Uhlig handbook chapter draft), Mad Money conference in Madison Wisconsin (presented Guerrieri-Uhlig handbook chapter draft). Discussed paper by Chari-Kehoe in Stanford, May. Washington U in Seattle (presented Guerrieri-Uhlig handbook chapter draft). Discussed Violante’s paper at a conference in Alghero, Italy (July). Presented “Mortgage-Backed Securities and the Financial Crisis 2008: a Post Mortem” at the NBER SI, Boston, July, at the Workshop on Dynamic Macroeconomics Hydra Conference in October, in Oxford UK in October and at the Department of Economics at the University of Pennsylvania, November. Joint Conference of the Korean Econ. Assoc. and the Social Science Korea Research Team in Seoul, October (presented Guerrieri-Uhlig handbook chapter draft).
- **2017:** Discussant of Goldberg-Paper at the “Day Ahead” conference at the Chicago Federal Reserve Bank, January. Presented “Government Risk and the Macroeconomics of Health”, joint with Ralph Koijen, at the “Restoring Prosperity Conference”, Stanford, February. Participant at the MFM New York meeting, March. Presented "Neoclassical growth with one-sided competitive risk sharing" (joint with Dirk Krüger) at the University of Minnesota and at Princeton University (April).). Presented “Mortgage-Backed Securities and the Financial Crisis 2008: a Post Mortem” at the SAFE conference in Frankfurt, Germany, in May. Paris, Banque de France (June): presented "Mortgage-Backed Securities and the Financial Crisis of 2008: a Post Mortem". Various research visits at the ECB and the Bundesbank (March, June, October). Apulia, Italy conference, “Macroeconomic Issues after the Crisis”: I presented “Neoclassical

growth with long-term one-sided commitment contracts” (joint with Dirk Krüger). USB Center Zurich Advisory Board meeting (June). Yale (November): I presented “Neoclassical growth with long-term one-sided commitment contracts” (joint with Dirk Krüger). Webinar for CEMLA, the Association of Central Banks in Latin America, on “The Dynamics of Sovereign Debt Crises and Bailouts” (based on my work with Francisco Roch). Federal Reserve Bank San Francisco “Micro Macro Labor Economics Conference” December: Discussant of Glover, “Aggregate Effects of Minimum Wage Regulation at the Zero Lower Bound”.

- **2018:** Participant at the MFM Meeting, NY (January). EFG Meeting in San Francisco (February): discussant of a paper by Maggiori-Neiman-Schreger on “International Currencies and Capital Allocation”. Research visits to the Bundesbank (February, May). Cleveland Federal Reserve Bank (April): presented “Some simple Bitcoin Economics” (joint with Linda Schilling). “Theoretischer Ausschuß” Bonn (May): presented “Some Simple Bitcoin Economics” (joint with Linda Schilling). 3rd International Conference on Financial Markets and Macroeconomic Performance, May 2018: presented “Neoclassical growth with one-sided competitive risk sharing” (joint with Dirk Krüger). Presented “Some Simple Bitcoin Economics” at the Helsinki CEPR conference “Money in the Digital Age” and at the MFM summer camp in June. Several presentations at the NBER Summer Institute in July 2018. Visit to CREST, Polytechnique (August). Indiana University, September, presenting "Neoclassical Growth with Long-Term One-Sided Commitment Contracts" (with Dirk Krueger). Discussant of Baqaee-Fahri, “Productivity and Misallocation in General Equilibrium” at the 2018 Hydra Workshop on Dynamic Macroeconomics, September. Visit of the Reserve Bank of New Zealand, presenting several papers and interacting with the economists there. Visit to CREST, Polytechnique in Paris, presenting “Neoclassical growth with one-sided competitive risk sharing” (joint with Dirk Krüger).
- **2019:** Presented “Money Markets, Collateral and Monetary Policy” (joint with Fiorella de Fiore and Marie Hoerova) at the ASSA conference in Atlanta (January). Presented “Neoclassical growth with one-sided competitive risk sharing” (joint with Dirk Krüger) at the capstone MFM conference in NY in February. Visit to the U of C center in Paris and CREST, Polytechnique in Paris, presenting “Some Simple Bitcoin Economics” (joint with Linda Schilling) at CREST. I presented “Some Simple Bitcoin Economics” at the University of Iowa (April), the Bank-of-England Finance Forum (May). I participated in an UBS Center Advisory Board Meeting in Zurich in June. I participated in the CEPR Finance workshop in Gerzensee in July. I discussed a paper by Baqaee and Farhi at the Hydra Conference on Mallorca in September. I gave a lecture on Cryptocurrencies at Kings College London (October). I presented “Cryptocurrencies, Currency Competition, and the Impossible Trinity” (joint with Pierpaolo Benigno and Linda Schilling) at the UC Irvine in October, at the Dallas Federal Reserve Bank in October, at the DIW in Berlin in October and at the Hei-Tü-To Workshop in Heidelberg in December. I participated in the Chicago Federal Reserve Bank Conference, honoring Alejandro Justiniano, in November. I visited the European Central Bank and the Bundesbank, on several occasions.
- **2020:** I discussed a paper by Ludvigson-Ma-Ng and a paper by Chiu-Koepl at the San Diego Winter Meetings of the American Economic Association in January. I virtually visited the Bundesbank in March, consulting with them on their research projects. I presented “Macroeconomic Dynamics and Reallocation in an Epidemic”, joint with Dirk Krüger and Taojun Xie, at the Department of Economics, University of Chicago, lunch time virtual workshop in April, at the Macroeconomic Modelling and Model Comparison Network (MMCN) webinar in May, at the Virtual Macroeconomics Seminar (VMACS) in May and at the UAB Seminar, Barcelona, in September. I

presented “Central Bnk Digital Currency: When Price and Bank Stability collide,” joint with Linda Schilling and Jesús Fernández-Villaverde at the Banking Workshop of the University of Chicago in May, at the Virtual Finance Theory Seminar (VFTS) in May, at the Digital Seminar on Economics in Beijing in August and at the Crypto and Blockchains Economics Research (CBER) seminar in October. I presented “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” joint with Pierpaolo Benigno and Linda Schilling, at the Hong Kong Crypto Review Seminar in June, at the World Congress of the Econometric Society in August, at the Central Bank Research Association (CEBRA) Meeting in September and at the Tokenomics 2020 conference in Toulouse in November.

- **2021:** I chaired the session 1816 on “Capital Flows” at the North American Winter Meetings January 2021 and presented “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” joint with Pierpaolo Benigno and Linda Schilling. I gave an online seminar at the Belgian Central Bank, presenting “Central Bank Digital Currency: When Price and Bank Stability Collide,” joint with Linda Schilling and Jesús Fernández-Villaverde. I presented the same paper at the Crypto and Blockchain Economics Research Conference (CBER) in April, at a seminar at the BIS in May, at the World Finance Conference in August, at the OxFit Conference in September and at the Henan University INFER Workshop on Applied Macroeconomics in November. I presented “Macroeconomic Dynamics and Reallocation in an Epidemic: Evaluating the 'Swedish' Solution” (joint with Dirk Krüger and Taojun Xie) per zoom at the University of Haifa Economics Seminar in April and at the Applications Workshop of the University of Chicago in May. I visited Goethe University Frankfurt in May and June, at the invitation of Prof. Volker Wieland. I presented “Transitional Neoclassical Growth Dynamics with One-Sided Commitment”, joint with Dirk Krüger and Fulin Li, at the Macro/International Workshop of the Booth Business School of the University of Chicago in May, at the University of Frankfurt in June, at the Hydra conference on Rhodos in October and at Wharton in November. Member of a DFG panel in June. I presented “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” joint with Pierpaolo Benigno and Linda Schilling, at the SED meetings in Minneapolis in July. I presented “Parallel Digital Currencies and Sticky Prices”, joint with Taojun Xie, online at the CD&DC seminar series in July and at the Bank of Canada in August. I gave a presentation on “Digital Currencies: What does the Future hold?” at the BIS in December.
- **2022:** I presented “Cryptocurrencies, Currency Competition, and the Impossible Trinity,” and “Means of Payments: Bitcoins, Credit Cards and Gold,” both joint with Pierpaolo Benigno and Linda Schilling, as well as “Parallel Digital Currencies and Sticky Prices”, joint with Taojun Xie at the virtual ASSA Meetings in January. Participant at the CEPR Gerzensee conference in June, and discussant of “The digital economy, privacy, and CBDC”. Meeting of the USB Advisory Board in Zurich in June. Participant at the Sintra ECB conference in June. Discussant of Cong-Mayer, “The Coming Battle of Digital Currencies” at the ME&IFM joint session of the NBER Summer Institute in July. I gave a presentation on Academic Freedom to the Chicago Thinker group in November.
- **2023:** I gave an online presentation on “Academic Freedom” at the Leipzig Colloquium in January. Presentation at the Policy Dialogue, “Blockchain and the EU Single Market: what Future?”, Florence (June 9, 2023). Participant at the ECB Sintra meetings (June 26-28, 2023). Presentation at the CICC Global Institute (CGI) in Beijing, China (July 3, 2023). Presentations at the Workshop for International Macroeconomics as well as the Finance Faculty Lunch, University of Chicago (November and 29, 2023).

Referee for:

American Economic Review, BePress, Computational Economics, Econometrica, Econometric Theory, Economic Journal, Economic Theory, European Economic Review, German Economic Review, International Economic Review, Journal of Applied Econometrics, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Economics, Journal of Economic Theory, Journal of Macroeconomics, Journal of Public Economics, Recherches Economiques de Louvain, Regional Science and Urban Economics, Review of Economic Dynamics, Review of Economic Studies, Review of Financial Studies, The Annals of Statistics, Weltwirtschaftliches Archiv, Zeitschrift für Nationalökonomie, Zeitschrift für Wirtschafts- und Sozialwissenschaften, Applicationes Mathematicae.