

Fabian Schär

Curriculum Vitae

Peter Merian-Weg 6
Basel, Switzerland
✉ f.schaer@unibas.ch
in [@fabian-schaer](#)
🐦 [@fschaer](#)
🌐 [@fschaer-unibas](#)

Summary

Fabian Schär is a Professor of Distributed Ledger Technology (Blockchain) and Fintech at the Faculty of Business and Economics at the University of Basel. In addition, he serves as the Managing Director of the University's *Center for Innovative Finance*, a board member of the research network *Responsible Digital Society* and a Swiss Finance Institute Affiliate Professor. He has co-authored the bestselling book *Bitcoin, Blockchain, and Cryptoassets*, published by MIT Press and has also published several well-cited articles in reputable scientific journals. Professor Schär's research lies at the intersection of economics and computer science, with a particular focus on public blockchains, blockchain-based financial infrastructure, decentralized finance (DeFi) protocols, and financial privacy. His work has been featured in *The Economist*, the *Financial Times*, and *Forbes*, and he has been listed in the NZZ ranking of the most influential economists in Switzerland. He serves as a technical advisor to the Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI), a visiting scholar at the International Monetary Fund (IMF), and has worked as a visiting lecturer at several central banks. In addition, he has been a member of World Economic Forum working groups and an invited expert to hearings by numerous central banks, the Financial Stability Board (FSB), the Organisation for Economic Co-operation and Development (OECD), and the International Organization of Securities Commissions (IOSCO). He has spoken at over 200 events, including various G20, BIS, and IMF conferences.

Education

- 2015–2017 **PhD in Economics**, *University of Basel*, Basel, Switzerland, *summa cum laude*
Research focus on Bitcoin, Blockchain and Cryptoassets.
- 2013–2014 **MSc in Business and Economics**, *University of Basel*, Basel, *insigni cum laude*
Thesis on Bitcoin Mining Efficiency, security and miner heterogeneity.
- 2010–2012 **BA in Business and Economics**, *University of Basel*, Basel, *insigni cum laude*
Thesis on competition theory.

Positions

Academic Positions

Since 2018 **Professor of DLT (Blockchain) and FinTech**, University of Basel
Research focus on public blockchain protocols and decentralized finance (DeFi).

Visiting Scholar and Advisory Positions

Since 2024 Visiting Scholar, *International Monetary Fund*.
Since 2023 Technical Advisor, *Bank for International Settlements (Committee on Payments and Market Infrastructures)*.
2023–2024 Research Contractor, *European Commission (Directorate-General for Financial Stability, Financial Services and Capital Markets Union)*.
2023 Visiting Lecturer, *Swiss National Bank*.
2022–2023 Visiting Lecturer, *Banco de Portugal (Portuguese Central Bank)*.
2017–2022 Member of the Advisory Board, Fondation CH2048

Board Memberships

Since 2021 Member of the Board, Research Network *Responsible Digital Society*, University of Basel.
Since 2017 Managing Director and Member of the Board, *Center for Innovative Finance*, University of Basel.
2018–2020 Member of the Board and Head of Banking Task Force, *Swiss Blockchain Federation*.

Non-Academic Positions

2018–2023 Board of Directors, Crypto Finance (Asset Management) AG.
2016–2017 Digital Banking Consultant, *Synpulse Management Consulting*.
2013–2015 Teaching and Research Assistant, *University of Basel*
2009–2012 ARP and Client Advisor, *UBS AG*.

Publications

Peer-Reviewed Journal Articles and Conference Proceedings

- 2024 Land Valuation in the Metaverse: Location Matters. *Journal of Economic Geography* (2024). With Goldberg, Mitchell and Kugler, Peter. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3932189
- On DeFi and On-Chain CeFi: How (Not) to Regulate Decentralized Finance. *Journal of Financial Regulation* (2024). With Schuler, Katrin and Cloots, Ann Sofie. <https://doi.org/10.1093/jfr/fjad014>
 - Blockchain Privacy and Regulatory Compliance: Towards a Practical Equilibrium. *Blockchain: Research and Applications* (2024). With Buterin, Vitalik, Illum, Jacob, Nadler, Matthias and Soleimani, Ameen. <https://doi.org/10.1016/j.bcra.2023.100176>
- 2023 Contagion and loss redistribution in crypto asset markets. *Economics Letters* (2023), 231. With Schuler, Katrin and Nadler, Matthias. <https://doi.org/https://doi.org/10.1016/j.econlet.2023.111310>
- Metaverse governance: An empirical analysis of voting within Decentralized Autonomous Organizations. *Journal of Business Research* (2023), 160. With Goldberg, Mitchell. <https://doi.org/10.1016/j.jbusres.2023.113764>
 - DeFi Risk Transfer: Towards A Fully Decentralized Insurance Protocol. *IEEE International Conference on Blockchain and Cryptocurrency (ICBC) (2023)*, 1–9. With Nadler, Matthias and Bekemeier, Felix. <https://doi.org/10.1109/icbc56567.2023.10174937>
 - Decentralized Exchanges: The Profitability Frontier of Constant Product Market Makers. *IEEE International Conference on Blockchain and Cryptocurrency (ICBC), CryptoEx Workshop (2023)*. With Bitterli, Tobias. <https://doi.org/10.48550/arXiv.2302.05219>
 - Tornado Cash and Blockchain Privacy: A Primer for Economists and Policymakers. *Federal Reserve Bank of St. Louis Review* (2023), 105(Second Quarter 2023), 14. With Nadler, Matthias. <https://doi.org/10.20955/r.105.122-136>
- 2022 Decentralized Finance, Centralized Ownership? An Iterative Mapping Process to Measure Protocol Token Distribution. *Journal of Blockchain Research* (2022), 1(1), 29–36. With Nadler, Matthias. https://www.intlpress.com/site/pub/files/_fulltext/journals/jbr/2022/0001/0001/JBR-2022-0001-0001-a003.pdf
- Blockchain Vending Machine: A Smart Contract-Based Peer-to-Peer Marketplace for Physical Goods. *Proceedings of the 55th Hawaii International Conference on System Sciences* (2022), 6023–6032. With Schuler, Katrin and Wagner, Tobias. <http://hdl.handle.net/10125/80072>
- 2021 Decentralized Finance: On Blockchain and Smart Contract-based Financial Markets. *Federal Reserve Bank of St Louis Review* (2021), 103(2), 153–174. <https://doi.org/10.20955/r.103.153-74>
- Blockchain Forks: A Formal Classification Framework and Persistency Analysis. *Singapore Economic Review* (2021), 22. <https://doi.org/10.1142/s0217590820470025>

- 2020 Cryptocurrencies: Miner Heterogeneity, Botnets and Proof-of-Work Efficiency. *Frontiers in Blockchain* (2020), 3(16). <https://doi.org/10.3389/fbloc.2020.00016>
- 2019 Blockchain diplomas: Using smart contracts to secure academic credentials. *Beiträge zur Hochschulforschung* (2019), 41(3), 48–58. With Mösl, Fabian. <https://www.bzh.bayern.de/en/archive/archive/detail/beitraege-zur-hochschulforschung-ausgabe-3-2019>
- 2018 A Short Introduction to the World of Cryptocurrencies. *Federal Reserve Bank of St Louis Review* (2018), 100(1), 1–16. With Berentsen, Aleksander. <https://doi.org/10.20955/r.2018.1-16>
- The Case for Central Bank Electronic Money and the Non-case for Central Bank Cryptocurrencies. *Federal Reserve Bank of St Louis Review* (2018), 100(2), 97–106. With Berentsen, Aleksander. <https://doi.org/10.20955/r.2018.97-106>
 - Token Sales: Eine Analyse des Blockchain-basierten Unternehmensfinanzierungsinstruments. *Corporate Finance*, 05(06), 121–125. With Nyffenegger, Remo. <https://cf-fachportal.owlit.de/document.aspx?docid=CF1267606>

Non-Peer-Reviewed and Invited Articles

- 2024 Enhancing financial services with permissionless blockchains. *European Commission Report* (2024). <https://op.europa.eu/en/publication-detail/-/publication/cab54e8e-ad3b-11ef-acb1-01aa75ed71a1/language-en>
- 2022 DeFi's Promise and Pitfalls. *Finance and Development (IMF)* (2022), 59(3), 33–35. <https://www.imf.org/en/Publications/fandd/issues/2022/09/Defi-promise-and-pitfalls-Fabian-Schar>
- Decentralized Finance (DeFi) - Hype oder Innovation? (Transcript of Keynote at Deutsche Bundesbank Zahlungsverkehr Symposium 2022) *Zeitschrift Für Das Gesamte Kreditwesen (Deutsche Bundesbank Special Issue)* (2022), 23, 38–43. <https://www.kreditwesen.de/kreditwesen/themenschwerpunkte/aufsaeetze/decentralized-finance-defi-hype-innovation-id84409.html>
 - Banking mit Blockchain. *Die Volkswirtschaft* (2022), 8-11. <https://dievolkswirtschaft.ch/de/2021/12/banking-mit-blockchain/>
- 2021 DeFi Beyond the Hype - The Emerging World of Decentralized Finance. *Wharton School (UPenn) and World Economic Forum Policy Paper* (2021). With Gogel, David, Deshmukh, Sumedha, Geest, André, Resas, Daniel, Sillaber, Christian, Werbach, Kevin, Baker-Taylor, Teana, Cloots, Ann Sofie, Forster, Brendan, Gustave, Jordan Lazaro and Sokolin, Lex. <https://wifpr.wharton.upenn.edu/wp-content/uploads/2021/05/DeFi-Beyond-the-Hype.pdf>

- Blockchain in Service Management and Service Research - Developing a Research Agenda and Managerial Implications. *SMR - Journal of Service Management Research* (2020), 5(2), 71–102. With Büttgen, Marion, Dicenta, Julia, Spohrer, Kai, Venkatesh, Viswanath, Raman, Raji, Hoehle, Hartmut, De Keyser, Arne, Verbeeck, Cédric, Zwienenberg, Thijs J., Jørgensen, Kim Peiter, Beck, Roman, Rikken, Olivier, Janssen, Marijn and Kwee, Zenlin. <https://doi.org/10.15358/2511-8676-2021-2-71>

Books

- 2020 Bitcoin, Blockchain and Cryptoassets: Eine umfassende Einführung. *MIT Press* (2020). With Berentsen, Aleksander. <https://mitpress.mit.edu/9780262539166/bitcoin-blockchain-and-cryptoassets/>
- 2017 Bitcoin, Blockchain und Kryptoassets: Eine umfassende Einführung. *Books on Demand* (2017). With Berentsen, Aleksander.

Book Chapters

- 2021 Stablecoins, Digital Currency and the Future of Money. *MIT Press*, In Pentland, Alex, Lipton, Alexander and Hardjono, Thomas (Ed.), *Building the New Economy* (2021), pp. 245–264. With Lipton, Alexander, Sardon, Aetienne and Schüpbach, Christian. <https://doi.org/10.21428/ba67f642.0499afe0>
- 2020 The Tokenization of Assets: Using Blockchains for Equity Crowdfunding. *Springer Nature*, In Wendt, Karen (Ed.), *Theories of Change* (2020), pp. 329–350. With Roth, Jakob and Schöpfer, Aljoscha. https://doi.org/10.1007/978-3-030-52275-9_19
 - Blockchain und Smart Contracts im Kontext der Prozessautomatisierung. *Springer Gabler*. In Bruhn, Manfred; Hadwich, Karsten (Ed.), *Automatisierung und Personalisierung von Dienstleistungen* (2020), pp. 297–316). With Hübner, Philipp. https://doi.org/10.1007/978-3-658-30168-2_12
- 2019 Stablecoins: The quest for a low-volatility cryptocurrency. *CEPR Press*. In Fatas, Antonio (Ed.), *The Economics of Fintech and Digital Currencies* (2019), pp. 65–71. With Berentsen, Aleksander. <https://cepr.org/publications/books-and-reports/economics-fintech-and-digital-currencies>

Working Papers

- Blockchain Price Oracles: Accuracy and Violation Recovery. With Nadler, Matthias and Schuler, Katrin. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4700164
- Decentralized Crypto Governance? Transparency and Concentration in Ethereum Decision-Making. With Fracassi, Cesare and Khoja, Moazzam. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4691000
- Decentralized Finance Risk Transfer and Smart Contract-based Insurance: A Portfolio Choice Perspective. With Bekemeier, Felix and Schmeiser, Hato.

- Retailing and Customer Engagement in the Metaverse: An Empirical Analysis. With Goldberg, Mitchell and Thürkauf, Dario. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4547100

Teaching Experience

- Since 2019 **Master's Seminar in Blockchain and Decentralized Finance**, *University of Basel*
Seminar for students to write and present their master's theses. *Master/Graduate level.*
- Since 2018 **Smart Contracts and Decentralized Finance**, *University of Basel*
An introduction to smart contract programming, virtual machines and decentralized financial infrastructure (DeFi). *Master/Graduate level.*
- Since 2018 **Blockchain Challenge**, *University of Basel*, (with Berentsen, Aleksander)
Applied capstone course, in which students use their theoretical knowledge to design their own blockchain projects. *All levels.*
- Since 2017 **Bitcoin, Blockchain and Cryptoassets**, *University of Basel*
An interdisciplinary introduction to blockchain with a particular focus on monetary economics, game theory, networks, cryptography and consensus protocols. *Bachelor/Undergraduate level.*
- Since 2017 **Bachelor's Seminar in Blockchain and Virtual Economies**, *University of Basel*
Seminar for students to write and present their bachelor's theses. *Bachelor/Undergraduate level.*
- 2022 **Bitcoin Energy Consumption**, *University of Basel*, in Menn, Arne, Terrier, Jean and Krysiak, Frank and (ed.), Lecture Series: Digitalization and Sustainability.)
Introductory course with large number of lecturers and topics. *Master/Graduate level.*
- 2020–2022 **Law, Technology and Economics im Bereich Blockchain/DLT**, *University of Basel*, (with Seiler, Benedikt and Zellweger-Gutknecht, Corinne)
Interdisciplinary seminar at the intersection of technology, law and economics. *All levels.*
- 2020 **Blockchain Einführung**, *University of Basel*, in Lauer, Gerhard (ed.), Lecture Series: Herausforderung Digitalisierung. Perspektiven von Universität und Gesellschaft.)
Introductory course with large number of lecturers and topics. *All levels.*

In addition to the regular university curriculum, Professor Schär has extensive experience in executive education, including MBA, CAS, and Master Class lectures at the University of Basel, University of Zürich, the Swiss Finance Institute, FHNW and HWZ.

Awards

- 2024 Crypto Valley Visionary Award 2024: Education and Research (shared)
- 2023 Shortlist - Best Paper Award at IEEE ICBC 2023
- 2021 Appearance on Most Influential Swiss Economists Ranking, NZZ
- 2020 Best Lecturer Award Fall Semester 2020, Real WWZ
- 2019 Best Lecturer Award Fall Semester 2019, Real WWZ
- 2018 Best Lecturer Award Fall Semester 2018, Real WWZ
- 2014 Best Master Thesis (shared), Faculty of Business and Economics, University of Basel

Selected Talks and Panels

Professor Schär has talked at over 200 events. Below is a list of some selected talks for brevity.

- 07/04/2024 **Conference Keynote: On Blockchain Governance**, DAWO 24, Winterthur, Switzerland
- 05/02/2024 **Research Seminar: Decentralized Crypto Governance? Transparency and Concentration in Ethereum Decision-Making**, NYU Stern School, New York, USA
- 03/08/2024 **Conference Keynote: Privacy Pools**, Financial Cryptography Conference, CoDecFi Workshop, Willemstad, Curacao
- 11/06/2023 **Panel: Tokenization**, DC FinTech Week Regulator Bootcamp, Washington DC, USA
- 11/06/2023 **Panel: Metaverse**, DC FinTech Week Regulator Bootcamp, Washington DC, USA
- 10/12/2023 **Panel: Tokenization – Mapping the Present and Charting the Path Ahead**, IMF and World Bank Annual Meeting, Marrakesh, Morocco
- 02/23/2023 **Panel: Policy Perspective: Road to Policy Consensus on Cryptoassets**, G20 Finance and Central Bank Deputies' (FCBD) meet, Bangalore, India
- 11/09/2022 **Talk and Panel: Decentralized Finance**, Financial Stability Board Regional Meeting (Europe), Lisbon, Portugal
- 10/19/2022 **Talk: DeFi aus Regulatorischer Sicht**, BAFIN (German Financial Market Regulator), Bonn, Germany
- 09/26/2022 **Talk: Decentralized Finance – Hype or Next Big Thing?**, Bundesbank Zahlungsverkehrssymposium 2022, Frankfurt, Germany
- 05/10/2022 **Panel: Tokenization and Blockchain**, SNB and IMF High-Level Conference on the International Monetary System, Zürich, Switzerland
- 04/04/2022 **Talk: What is DeFi?**, Swiss National Bank and Bank for International Settlement Conference on Decentralized Finance, Zürich, Switzerland
- 10/06/2021 **Talk: Decentralized Finance**, Luxembourg FinTech Conference, University of Luxembourg, online
- 09/07/2021 **Panel: Financial Innovation Network DeFi Panel**, Financial Stability Board, online
- 06/15/2021 **Panel: Decentralized Finance Regulation**, IOSCO, online
- 06/11/2021 **Talk: Decentralized Finance: On Blockchain and Smart Contract-based Financial Markets**, Tsinghua University, online
- 04/21/2021 **Panel: DeFi Regulation**, OECD, online
- 03/25/2021 **Talk: Decentralized Finance**, Hebrew University, online
- 12/12/2019 **Talk: Bitcoin, Blockchain und Kryptoassets**, Konferenz der Bundesanwaltschaft und Fedpol, Bern, Switzerland
- 11/21/2019 **Talk: Bitcoin, Blockchain and Cryptoassets**, Slush Event, Helsinki, Finland
- 11/06/2019 **Talk and Panel: Will Tokenization revolutionize Asset Management?**, NZZ Swiss International Finance Forum, Zürich, Switzerland.

- 10/24/2019 **Talk: Blockchain und innovative Finanztechnologien - Revolutionärer Impact oder Hype?**, *Wirtschaftsrat der CDU, Landesverband Baden-Württemberg, Offenburg, Germany.*
- 06/14/2018 **Talk: Central Bank Cryptocurrency**, *G20 Financial Stability Conference, Seoul, South Korea*
- 05/20/2016 **Talk: Blockchain – The Future of Recordkeeping**, *Swiss National Bank Research Seminar, Zürich*

Referee Tasks

Member of the Editorial Board / Conference Committee

- Ledger Journal, <https://ledgerjournal.org/ojs/ledger/about/editorialTeam>
- Digital Finance, DigitalFinance, <https://link.springer.com/journal/42521/editorial-board>
- Swiss National Bank and CIF Conference on Cryptoassets and Financial Innovation 2019 - 2025
https://www.snb.ch/de/services-events/events/scientific-conferences/other_academic_conferences/sem_2025_06_20

Referee / Reviewer Tasks

- Accounting Review
- Cambridge University Press (Book Proposal)
- CBER Conference 2025
- Electronic Markets
- Federal Reserve Bank of St. Louis Review
- FinTeAchIn'25 Conference
- Frontiers in Blockchain
- International Journal of Research in Marketin
- Journal of Financial Market Infrastructure
- Journal of Financial Stability
- Journal of Fintech
- MIT Press (Book Proposal)
- Routledge Taylor and Francis Group (Book Proposal)
- Service Science
- Singapore Economic Review
- Swiss Journal of Economics and Statistics