The Columbia Institute for Tele-Information

Crypto-economics: The Macro Effects of Digital Private Moneys and Payment Systems



Columbia Institute for Tele-Information

June 7th 2018

Webinar

11:00am-1:00pm

Background

This two-hour video webinar aims to go beyond the well-covered topics of cryptocurrency technology, policy, and players. It instead deals with the potential impact of such private and central bank issued digital payment mechanisms, if they take off, on the *macro*economy of countries, as well as the tools of central banks to conduct monetary policy and engage in economic stabilization.

Are the new technologies an impediment to governmental controls – and what are the economic policy implications? Do they also provide new tools for macro policy, including governmental digital currencies?

The webinar is part of CITI's project on "The New Technologies of Money", which is supported by the Columbia School for Public Affairs (SIPA) with support from the Nasdaq Educational Foundation. More information about SIPA's project on Entrepreneurship & Policy can be found at https://sipa.columbia.edu/ideas-lab/entrepreneurship-policy-sipa

Connection Information

To connect to the call please follow the

link: https://citicolumbia.webex.com/citicolumbia/j.php?MTID=m45af94f2dbcd95 165ba93d1853e817c0

This will take you to the meeting room. Once in the meeting room you will see the video of the participants. You however will not hear any audio until you connect audio. There are two options for this. The preferred option is to "Call using computer". There is a button on the left hand side of the screen which says "Call using computer". It will open up a test where you can test your speakers and microphone. Once this is done you close the test and you will have audio. The other option is to call in using your telephone. If you click "Call using Computer" and look underneath you will see "other options" which will allow you to select call in. This will give you a phone number (1-855-244-8681 in the US and Canada), and a meeting ID (732 969 187).

Agenda

11:00am Welcome

• Eli Noam, Paul Garrett Professor of Public Policy and Business Responsibility, Prof. of Finance and Economics, and Director, Columbia Institute for Tele-Information. "Introduction and Overview."

11:10am The Macro-Impact of Private E-Currencies and Payment Systems

- Moderator: Eli Noam, Columbia University.
- Anna Loseva, Faculty of Economics, Moscow State University. "Bitcoin: A Regression Analysis of Cryptocurrency Influence on the Russian Economy."
- Diego Zuluaga, Policy Analyst, Cato Institute Center for Monetary and Financial Alternatives. "How Would the Invisible Hand Handle Money?"
- Sina Motamedi, Tanna Tuva Initiative, Canada. "Will Bitcoins Ever Become Money? A Path to Decentralized Central Banking."
- Neil Gandal, Professor and Chair, Tel Aviv University. "Competition in the Cryptocurrency Market."

12:00pm The Macro-Impact of Public E-Currencies and Payment Systems

- **Moderator**: Dr. Leon Perlman, Head, Digital Financial Services Observatory, Columbia Institute for Tele-Information, Columbia Business School. "*Introduction of Topic*."
- Ole Bjerg, Associate Professor, Copenhagen Business School. "Designing New Money: The Policy Trilemma of Central Bank Digital Currency."
- Gabriele Camera, Professor of Economics and Finance, Chapman University. "A Perspective on Electronic Alternatives to Traditional Currencies."
- Stefan Kooths, Head of Forecasting, Kiel Institute for the World Economy, Germany. "Financial Innovation and Monetary Policy: Challenges and Prospects."

12:50pm Concluding Discussion

1:00pm End of Webinar

Bios:



14).

Eli M. Noam
Director, Columbia Institute for Tele-Information
Professor of Finance and Economics
Garrett Professor of Public Policy and Business Responsibility
Columbia University Business School

Professor of Economics and Finance at the Columbia Business

School since 1976, and its Garrett Professor of Public Policy and Business Responsibility. Served for three years as a Commissioner for Public Services of New York State. Appointed by the White House to the President's IT Advisory Committee. Director of the Columbia Institute for Tele-Information, a research center focusing on management and policy issues in telecommunications, internet, and electronic mass media. He has also taught at Columbia Law School, Princeton University's Economics Department and Woodrow Wilson School, and the University of St. Gallen, and is active in the development of electronic distance education. Noam has published 29 books and over 350 articles in economics journals, law reviews, and interdisciplinary journals. His recent books include *Broadband Networks and Smart Grids (Springer, 2013); Media Ownership and Concentration in America* (Oxford, 2009); *Peer to Peer Video* (Springer, 2008); and *Ultrabroadband* (IDATE, 2008). He is completing a 4-volume series on *Media Management,* and leads a 30-country team on international media ownership. Chairman of the International Media Management Association (2012-

Noam has been a member of advisory boards for the Federal government's telecommunications network, and of the IRS computer system, of the National Computer Systems Laboratory, the National Commission on the Status of Women in Computing, the Governor's Task Force on New Media, and of the Intek Corporation. His academic, advisory, and non-profit board and trustee memberships include the Nexus Mundi Foundation (Chairman), Jones International University (the first accredited online university), the Electronic Privacy Information Center, and several committees of the National Research Council. Noam is a Fellow of the World Economic Forum, a member of the Council on Foreign Relations, and a commercially rated pilot. He served in the Israel Air Force in the 1967 and 1973 wars, and is an active search and rescue pilot

with the Civil Air Patrol (1st Lt.). He is married to Nadine Strossen, a law professor and national president of the American Civil Liberties Union for 18 years. He received the degrees of BA, MA, Ph.D (Economics) and JD from Harvard University, and honorary doctorates from the University of Munich (2006) and the University of Marseilles (2008).



Anna Loseva
Faculty of Economics
Moscow State University

Anna started her crypto related career in Moscow State University, Russia with a simple article about a relationship between cryptocurrency usage exposure and Russia's

macroeconomic performance (Loseva, A. (2016), Bitcoin: A Regression Analysis of Cryptocurrency Influence on the Russian Economy).

Going further with another academic research regarding microeconomics and behavioral economics (Loseva, A., Morozov, V. (2016), A Simple Universal Dynamic Framework for Endogenous Preference Change; Loseva, A., Morozov, V. (2017), Dynamic Versioning with Changing Preferences), Anna made it for a diploma in cryptoeconomics (Loseva, A. (2017), Prospects of Russia's Financial System Development on the Basis of Blockchain Technology: grad. paper, Moscow, p. 74) being the first to make it at MSU. Now, she is the Head of Analytics at Tokenator and also an expert of ICOBench.



Diego Zuluaga
Policy Analyst
Cato Institute, Center for Monetary and Financial
Alternatives

Diego Zuluaga is a policy analyst at the Cato Institute's Center for Monetary and Financial Alternatives, where he covers financial technology and consumer credit. Before joining Cato, Zuluaga was Head of Financial Services and Tech Policy at the Institute of Economic Affairs in London. While at the IEA, he

authored papers on the social value of finance, the regulation of online platforms, and the taxation of capital income, among others. His work has been featured in print and broadcast media, such as the *Times*, *Newsweek*, and the *Daily Telegraph*.

Zuluaga is a prolific public speaker as well as a former lecturer in economics at the University of Buckingham.

Originally from Bilbao in northern Spain, Zuluaga holds a BA in economics and history from McGill University, and an MSc in financial economics from the University of Oxford.



Sina Motamedi Independent Analyst Tanna Tuva Initiative, Canada

Sina Motamedi is a mathematician, economist, and private investor. He has been following the crypto-currency space

since 2012 from a holistic perspective that encompasses cryptography, game theory, monetary economics, and institutions. He holds a BSc (Mathematics, Economics) from the University of Toronto and a MA (Economics, Financial Mathematics) from McMaster University.

Sina is the founder and author of Tannu Tuva Initiative (<u>tannutuva.org</u>), where he writes about economic thought, business strategy, investing, finance and other things.



Neil Gandal
Professor and Chair
Berglas School of Economics, Tel Aviv University

Neil Gandal is Professor and Chair of The Berglas School of Economics at Tel Aviv University. He received his B.A. and B.S. degrees from Miami University (Ohio) in 1979, his M.S.

degree from the University of Wisconsin in 1981, and his Ph.D. from the University of California-Berkeley in 1989.

Professor Gandal has published numerous papers in areas including: the economics of Network Security, the economics of the software & Internet

industries, and the economics of open source software.

He was an editor at the International Journal of Industrial Organization from 2005-2012, and was named the first honorary editor journal in 2013. Professor Gandal is a research fellow at the Centre for Economic Policy Research.



Dr. Leon PerlmanDirector, Digital Financial Services Observatory **Columbia Business School**

Dr. Leon Perlman is the founder and head of the Digital Financial Services Observatory, at the Columbia Institute for Tele-Information at Columbia Business School. The DFSO explores the policy, regulatory, technical, disruptive and commercial aspects of DFS, emerging payments, big

data, and blockchain technologies. It is funded by the Bill and Melinda Gates Foundation.

A former scientist and successful entrepreneur, he has been in the telecommunications, payments and micro-payments industry for over 25 years.

He currently heads the blockchain and infrastructure security workgroups for the new Financial Inclusion Global Initiative (FIGI). His expertise as a consultant and researcher extends to payments, anti-money laundering national payment systems, de-risking, risk frameworks, telecommunications, cyber-security, and blockchain technologies. He concentrates on commercial, technical, policy, legal and regulatory aspects of these ecosystems and issues.

He has consulted widely on financial inclusion and regulatory solutions to central banks, DFS service providers, payment service providers, MNOs, regulators, the World Bank, CGAP, GIZ, ITU, USAID, UNCDF, EIB, IFC and many philanthropic organizations. His experience spans over 30 developed and developing markets.

He also served as the chair of the ITU DFS Focus Group's Technology, Innovation and Competition working group, and was founder and served for 10 years as chairman of WASPA, the South African mobile industry association.

Dr. Perlman holds the degrees BSc, BSc (Hons), MSc, BProc, LLB (JD), and LLD (PhD), and is the recipient of numerous grants and fellowships.

His doctorate in DFS commercialization and regulation was the world's first legal and regulatory doctorate on the subject.



Ole Bjerg Associate Professor Copenhagen Business School

My research interests circle around a diagnosis of contemporary capitalism. I am currently interested in the simple question: What is money? The assumption is that

money is not a given and constant phenomenon. Money changes as the structure of capitalism changes. In my current research I am exploring how the radical transformations of banking and financial markets over the last 30-40 years is related to transformations in the very ontology of money. In order to investigate this philosophically, we need to ask, with Heidegger: How is money? Furthermore, our capacity to find ways out of the current crisis hinges on our ability to imagine new kinds of money systems and new kinds of money.



Gabriele Camera
Professor of Economics and Finance
Chapman University

Gabriele Camera is Professor of Economics at Chapman University and the University of Bologna. His research areas include monetary economics, macroeconomics, and

economic theory. He studies behavioral aspects of currency systems through an unique combination of theoretical and laboratory investigation. His work on the spontaneous emergence of money in laboratory economies has received international media coverage.



Stefan Kooths
Head of Forecasting
Kiel Institute for the World Economy, Germany

Prof. Dr. Stefan Kooths (45) is the new Head of the Forecasting Center at the Kiel Institute for the World Economy (Institut für Weltwirtschaft – IfW). He is the successor to Prof. Dr. Joachim Scheide, who has retired on 31 October.

Accordingly, Kooths takes the helm of one of the most renowned German research departments which, with its forecasts and expert opinions, has been amongst the consultants to the German federal government as well as to other national and international decision-makers.

Stefan Kooths joined the IfW four years ago. He has since represented the Institute in its Berlin office and has been working in a central position at the Forecasting Center (acting as its Deputy Head since 2012). Since last year he also teaches economics at the Business and Information Technology School (BiTS) in Berlin.

Narrow-minded thinking inside micro- and macroeconomic boxes is totally foreign to this high-profile economic researcher. Kooths perceives misdirected macroeconomic developments primarily as a symptom of disturbed coordination processes that largely permeate economic events as they unfold. Accordingly, he deals intensively with malfunctions and incorrect incentives in the monetary and banking system, on labor markets, in the tax and transfer system as well as in the context of general regulation issues. Furthermore, he is an acknowledged expert in the field of national accounts—the reference system for all economic activity analyses. In addition to specialist scientific articles, Kooths publishes contributions on a regular basis in nationwide media on current economic policy issues and on fundamental questions regarding economic governance.

Kooths developed his academic characterization with a strong economic governance influence during his studies and doctorate at the University of Münster.

After that he spent some time working as an assistant professor at the local Institute for Industry Research and as Managing Director of the Muenster Institute for Computational Economics. Scientific guest visits took him to the California State Polytechnic University, Pomona, and to the Université Panthéon-Assas (Paris II), amongst other institutions. From 2005 on, he devoted his work to applied economic research and became a member of the economics department of the German Institute for Economic Research (Deutsches Institut für

Wirtschaftsforschung – DIW), before joining the Kiel Institute for the World Economy five years later—partly on account of its focus on global economic matters.