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WWZnewsflash

Smart Contracts as Legal Innovation
Old Wine in New Bottles?



20th Anniversary
of the Summer School in Law, Business and Economic Policy

On Innovation



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20th Anniversary of the Summer School in Law, Business and Economic Policy - A Review

Photos: Stefan Holenstein, Rahel Fritz

“Smart Contracts as Legal Innovation – Old Wine in New Bottles?”

July 7, 2022, WWZ Auditorium, Faculty of Business and Economics, University of Basel

This year's Public Event of the Summer School in Law, Business and Economic Policy was at the same time the opening ceremony of its 20th anniversary celebrations. Prof. Rolf Weder introduced the event by honoring the innovators who made the ongoing success of the Summer School possible, starting with Prof. Silvio Borner who, together with the sponsors Dr. Hans-Heiner Zaeslin and Mrs. Claudine Zaeslin-Bustany as well as Dr. Rudolf Maag, created the idea and the financial means 20 years ago. He travelled to the U.S. and met, among others, Prof. John Mayo at the Business School of Georgetown University who was fascinated and very supportive and Prof. Geoffrey P. Miller at the Law School of New York University, a pioneer and expert in the area of Law and Economics.



The program has expanded throughout the years in Washington D.C., New York and Basel by increasing the number of courses. About 4'000 students have enrolled in the courses over the 20 years and 250 students had the privilege to be part of the U.S. Seminar which has become a highlight in the Summer School as well as in the Master of Science of Business and Economics of the University of Basel. The combination of law, business, and economics remains at the heart of the program, with a focus on Switzerland and the U.S. This was also true for the topic of the day on smart contracts as legal innovation. As Prof. Weder pointed out, contracts are both a topic inherent to the field of law and established in contract theory in economics. Prof. Miller, Professor of Law from the New York University and currently teaching the course “Fundamentals of Law and Economics” in the Summer Program, was invited as the main speaker. Prof. Aleksander Berentsen and Prof. Fabian Schär, members of the Faculty of Business and Economics of the University of Basel, and well-known experts in the field of blockchain and cryptoassets were invited as panelists. A lively discussion could be expected with this scientific composition.

Prof. Miller introduced the audience to the recent phenomenon of “smart contracts”. In general, those contracts have terms who are completely specified in advance and whose enforcement occurs automatically without a trusted human agent. Technological innovation tends to grow from past developments and impact the future and is thus both “old wine in new bottles” as well as something truly new. The same is true for the combination of law and economics. Prof. Miller distinguishes between law and economics and the economic analysis of law. The former takes an interdisciplinary view on research phenomena, whereas the latter entails the application of economic concepts and methods to legal cases. From a law and economics perspective, Prof. Miller introduced a model of economic history to explain why innovations -- for example in the current development of finance and banking -- happen. In this model, four domains consisting of politics, markets, technology, and law are in a constant and dynamic interplay. He argued that many phenomena in innovation can be captured by this model. Innovation represents a significant change in any of the four domains he presented. Through the rise of cryptocurrencies and the consequent spread of blockchain-based applications in finance and monetary policy, we are witnessing economic history in real time.

Prof. Miller's line of argumentation was as follows: Bitcoin started as a technological innovation and benefitted from a shock in the domain of "markets", the 2008 financial crisis. This resulted in increased mistrust towards banks and insufficient government regulations and gave rise to the new and alternative payment system. Proponents of Bitcoin quickly fuelled the promise of the cryptocurrency to replace fiat and central bank money in the near future to withstand financial crises and bank runs. Hence, a technical innovation benefitted from market disruptions according to the economic history model. Prof. Miller is convinced that the impact of Bitcoin will be more far-reaching than most innovations in the last decades, due to the complete, transparent, unhackable, self-enforcing, and trustless nature of those smart contracts. These features make, to some extent at least, judges and lawyers redundant. Bitcoin has induced cascades of other innovations, ranging from stablecoins, Ethereum, non-fungible tokens, or CBDCs (Central Bank Digital Currencies). The impact of Bitcoin on financial markets and ultimately Facebook's announcement to introduce Libra finally led politics to start paying attention. Libra, a potential stablecoin, would be able to disrupt central bank's power and global financial flows. In addition, most central banks around the world are increasingly interested in introducing CBDCs. Miller's hypothesis is that these digital currencies have far-reaching implications. Hence, changes in technology led to changes in markets, which led to changes in politics, which ultimately led to changes in law. Miller's model was complete.

The model and the claims stated by Prof. Miller provided a fruitful ground for comments by Prof. Berentsen and Prof. Schär in the subsequent panel discussion. Prof. Berentsen pointed out that smart contracts are not "smart" in a literal sense, they simply execute a piece of code their creator provided. Hence, the term "immutable" would be better than "smart", as the unchangeable nature makes these contracts a true innovation. Prof. Miller agreed that the immutability is a central feature of smart contracts and that this concept goes back thousands of years. "An old bottle then", Prof. Weder added. Prof. Schär argued that the decentralized nature of Bitcoins and the absence of a legal system to intervene make smart contracts innovative. He was also concerned with the rather stark expectations of the potential impact of CBDCs. As to date, they are not based on blockchains but rather heavily centralized digital currencies. He added that one can even question whether the so-called "smart contracts" are contracts at all as they are really pieces of code. Prof. Berentsen added that CBDCs are unlikely to replace Bitcoins, they would co-exist. Currency competitions have existed for a long time and there is a benefit to it.

The floor was now opened to questions from the audience. Some questions were inherently technical ("Can cryptocurrencies ever finance themselves through transaction fees?"; "Yes, the big ones could."), others were political ("Can it be avoided that banks loan more money than they have as deposits using cryptocurrencies where every dollar can only be spent once?"; "Deposits will become unnecessary in this system, the demand for consulting and other bank services, however, will probably remain."). Prof. Weder then ended the lively discussion by returning to the topic of law and economics. In a certain sense, the experts agreed that the Computer Science, the Cryptography and the Economics are already here, now the Law may need to follow. The answer concerning "old vs. new bottles of wine" was given at the following and well-attended Apéro.

Smart Contracts as Legal Innovation *Old Wine in New Bottles?*

Thursday | July 7, 2022 | 18:15 - 19:45

WWZ Auditorium, Peter Merian-Weg 6, 4052 Basel and
Zoom-Livestream

Programme

18.15	Welcome and Introduction Prof. Rolf Weder
18.25	Speaker Prof. Geoffrey P. Miller
19.00	Panel Discussion Prof. Aleksander Berentsen Prof. Fabian Schär Prof. Geoffrey P. Miller including Audience
19.45	Apéro

Innovations such as cryptoassets, decentralized finance, non-fungible tokens, decentralized autonomous organizations or the metaverse have in common a degree of reliance on "smart contracts" – agreements embodied in computer code that are self-executing in important respects. The talk will consider smart contracts as examples of the role of legal innovation in economic history, and will illustrate how these arrangements address problems long handled through other means: how to embed an agreement in such a way as to protect against ex post alteration; how to provide for reliable and consistent enforcement; how to deal with the problem of abusive, incompetent, or self-interested government; how to achieve clarity of interpretation and reduce the risk of disputes over meaning; and how to provide for fair, rapid and efficient resolution of disputes.

Prof. Geoffrey Miller is a leading scholar in the area of Law and Economics and its application to banking, finance and insurance at the School of Law of New York University (NYU) and author of a dozen books and more than 200 research papers. He teaches the Bachelor course "Fundamentals of Law and Economics" from July 11 to July 21 as part of the Summer School program 2022. Prof. Aleksander Berentsen and Prof. Fabian Schär are experts in the area of Blockchain, Cryptoassets, Decentralized Finance and Monetary Policy at the Faculty of Business and Economics of the University of Basel and authors of the very successful book on Bitcoin, Blockchain, and Cryptoassets published by MIT Press in 2020.

Research Event “On Innovation” on Friday July 8 from 9:00 to 13:30 at the Faculty of Business Economics



f.l.t.r.: S. Dahiya, F. Krysiak, P. Gantenbein, and the audience

As the Summer School in Law, Business and Economic Policy is being complemented with a stronger exchange on the level of Doctoral Students, Postdocs and Faculty Members, the celebration of the 20th anniversary was continued on the next day with short presentations and discussions about a number of topics related to innovation (see special program). As the event showed, there is plenty to discuss in order to understand better the driving forces of innovation in the U.S. and in Switzerland and to derive policy implications. Prof. Weder, who chaired the event, concluded that more of such events on innovation should and will be planned in the future with a productive exchange among the U.S. Summer School professors and the members of the Faculty of Business and Economics of the University of Basel. All agreed and were looking forward to it.



f.l.t.r.: J. Macher, Ch. Rutzler, C. Sharkey, R. Weder, L. Samuelson, B. Jensen



20th Anniversary of the Summer School in Law, Business and Economic Policy	
Research Event Program	
Friday, July 8, 2022	
Room S15 Faculty of Business and Economics	
09.00–09.10	Welcome and Introduction Prof. Rolf Weder Faculty of Business and Economics, University of Basel
09.10–09.45	«Insights from a Cross Country Comparison of the Swiss Innovation Landscape» Dr. Christian Rutzler Center for International Economics and Business CIEB, University of Basel
09.45–10.20	«The IT Revolution and the Globalization of R&D» Prof. Bradford Jensen McDonough School of Business, Georgetown University
10.20–10.40	Coffee Break
10.40–11.15	«Environmental Regulation and Innovation» Prof. Frank Krysiak Faculty of Business and Economics, University of Basel
11.15–11.50	«Responding Strategically to Competitors' Failures: Evidence From Medical Device Recalls and New Product Submissions» Prof. Jeffrey Macher McDonough School of Business, Georgetown University
11.50–12.25	«Financing Startups: A Comparison of Switzerland and the U.S.» Prof. Pascal Gantenbein Faculty of Business and Economics, University of Basel
12.25–12.30	Next Steps Prof. Rolf Weder
12.30–13.30	Buffet Lunch
Note: All sessions include 10' of discussion.	

Please register here until July 4th!

Editorial

WWZnewsflashes werden von der Wirtschaftswissenschaftlichen Fakultät der Universität Basel herausgegeben. Redaktion: Yvonne Mery | Text: Riccardo Bentele, Rolf Weder, Rahel Fritz | Fotos: Stefan Holenstein, Rahel Fritz | Kontakt: Wirtschaftswissenschaftliche Fakultät | Dekanat | Peter Merian-Weg 6 | Postfach | CH 4002 | Basel | yvonne.mery@unibas.ch | <https://wwz.unibas.ch/de/studium/summer-school/>



