

## ***Digital Currencies, Digital Finance and the Constitution of a New Financial Order: Challenges for the Legal System***

The exploratory conference “Digital Currencies, Digital Finance and the Constitution of a New Financial Order: Challenges for the Legal System” was successfully held in Athens on July 27, 2016. The event was co-organized by the CLES@UCL, Humboldt University, the EPLO and IMEDIPA and was supported by the Fritz Thyssen Endowment.

The conference attracted more than 100 international and local participants and attendants. Its purpose and significance was further recognized by HE the President of the Hellenic Republic, Prokopis Pavlopoulos, in the form of a reception after the final conference panel, which was held at the Presidential Mansion in Athens. Professor Ioannis Lianos (Chair of Global Competition Law and Public Policy at University College London, UCL and Director of the CLES) had the opportunity to present the results of the conference to HE the President of the Hellenic Republic.

Ioannis Lianos opened the conference by welcoming the participants and setting out the broader research agenda motivating the conference. The first panel (“Actors: New Players in the Financial Game”) then set the scene by introducing four practical perspectives on the challenges and opportunities of digital financialization and financial technology (“FinTech”). Robert Kilian, General Counsel at N26, provided a first overview of some of the routine and not-so-routine “regulatory challenges” confronted by technology startups offering banking services. This was followed by David Roszkamp, General Partner & Founder at SR fund, who offered an investor-perspective onto the emerging FinTech scene, arguing that most value may not be created at the headline-grabbing frontier of decentralization but rather in more traditional companies providing the infrastructure for FinTech and blockchain technologies. This first assessment from the vantage point of private sector participants was then followed by two considerations from the perspective of regulatory authorities and central banks. Michael G. Jacobides, Sir Donald Gordon Associate Professor of Entrepreneurship and Innovation at the London Business School and Visiting Scholar at the New York Federal Reserve Bank, gave a tour-de-force survey of the way in which commercial banking has been transformed over the past two decades through industry consolidation and the rise of so-called shadow banking. Having raised the puzzle of why banks expanded as rapidly as they did Jacobides argued that expansion was strongly correlated with an absolute change in relative ranking, suggesting that financial innovation and expansion arise at least to some extent from banks engaging in a casino-style mean-defeating, variance-increasing bet that has profound regulatory implications. After this overview of recent developments in banking and its associated regulatory challenges, Paolo Siciliani, Bank of England, turned to central banks explicitly and explored the possibility of central-bank issued digital currencies (CBDC). While access to central bank money is currently achieved through the supply of banknotes and banks’ privileged access to central bank reserves, the introduction of CBDC could entail a radical shift towards “narrow” banking whereby CBDC are likely to crowd out private bank deposits. Following up on the latter scenario,

Siciliani raised some of the associated regulatory and competition policy questions that would arise from such a substitution of commercial bank deposits by central bank deposits directly held by consumers and corporations.

In the second part of the morning discussion, the conversation moved from practical challenges to broader normative and political questions thrown up by these developments. Hermann Elendner, Elvaston Juniorprofessor for Private Equity at Humboldt University of Berlin, offered an optimistic assessment of cryptocurrencies' price volatility by arguing that bitcoin exhibits in fact more resiliency than standard financial markets while functioning as a medium of exchange that avoids the need for a party that is trusted. While it is not clear whether cryptocurrencies' can mature from assets to decentralized media of exchange, Elendner suggested that as they mature their resiliency is likely to improve further. Stefan Eich, Princeton Society of Fellows and Princeton Department of Politics, subsequently placed cryptocurrencies in a more political and historical frame by arguing that the rise of cryptocurrencies reflects the Financial Crisis-induced collapse of the politics of monetary depoliticization that had been instituted under the Great Moderation. While blockchain technology itself is politically neutral, currently existing cryptocurrencies tend to resemble Hayekian attempts during the 1970s of privatizing money. Jedediah Purdy, Robinson O. Everett Professor of Law at Duke University School of Law, responded to these political underpinnings of monetary depoliticization by elaborated on the libertarian anti-statist vision of money as a spontaneous product of pre-political interaction that underwrites bitcoin. Rather than taking such visions at face value Purdy pointed to the frequent discrepancy between this political vision and its actual deployment. In his presentation Alexandros Seretakis, University of Luxembourg, finally turned to some of the ways in which the employment of blockchain technology is likely to alter the way securities are traded and what this implies for corporate governance and the tracking of ownership.

The morning was concluded by a keynote speech by Angeliki Mitsolidou, Bank of Greece, who provided a detailed overview of cryptocurrency technology and sketched some of the possible implications for central banks. While digital currency schemes already pose risks as potential vehicles for money laundering, terrorist financing, tax evasion and fraud, their risks to financial stability and the conduct of monetary policy are still negligible given the comparatively small scale of payments processed through cryptocurrencies, though these may eventually emerge as the new technologies become more widely used. Christos Gortsos, Professor of International Economic Law at Panteion University of Athens and General Secretary of the Hellenic Bank Association, offered some comments in response and opened the discussion.

After a brief lunch break, the third panel ("The Rules of the Game: Ordering Digital Currencies and Digital Financial Markets") turned more explicitly to questions of regulation and asked which actors can and should establish rules for the new financial order. Claus D. Zimmermann, Associate at Sidley Austin LLP, echoed some of the sentiments of the keynote speech in arguing that while digital money seeks to challenge state-issued fiat money as the predominant means of payment and could as such undermine the effectiveness of monetary policy its use remains too insignificant to warrant such worries. For the same reasons, Zimmermann argued, legal restrictions to

prevent the proliferation of digital money products are at present difficult to justify. Following up on this, Georgios Psaroudakis, Lecturer in Law at the University of Thessaloniki and legal the Bank of Greece, detailed the ways in which digital finance continues to fall under existing concerns with financial stability and price stability. Precisely for this reason, Psaroudakis argued, digital finance may however call for some changes in the scope or content of existing rules. Moving from digital finance to financialization more generally, David Grewal, Associate Professor at Yale Law School and the Department of Political Science at Yale University, drew on recent work co-authored with Robert Hockett, Edward Cornell Professor of Law at Cornell Law School (in absentia), that develops a new measure of financialization as meta-commodification, as for example in the securitization of commodities or the trading of shares in corporations. Christos Hadjiemmanuil, Professor of International and European Monetary and Financial Institutions at the University of Piraeus and Visiting Professor at the London School of Economics, placed discussions of financial and monetary innovation in the context of social theories of money, stressing the ways in which cryptocurrencies either fall short of their self-proclaimed status as currencies or reflect an undue nostalgia for the “barbarous relic” of the gold standard. Nikiforos Panourgias, Lecturer in Financial Market Information Systems at the University of Leicester, similarly skeptically highlighted some of the profound technological challenges likely to be associated with efforts at further decentralizing the processing of payments. Using as his case study the introduction of a new European securities trading platform Panourgias offered some general observations about the complex infrastructure underlying the new financial order. Finally, Maksim Bashkatov and Alexey Ivanov, Skolkovo Institute for Law and Development at the Higher School of Economics in Moscow, reflected on questions of sovereignty associated with blockchain technology, focusing on the Russian market. While the Russian financial sector remains heavily regulated and has been partly isolated from the global financial market due to economic sanctions, Russian authorities tend to see developments in FinTech as an opportunity for shortcutting the way to a post-industrial economy as well as overcoming the geopolitical constraints of sanctions. In this sense, Russia constitutes the unusual example of a strong regulatory agency that has nonetheless embraced the new financial technologies.

The final panel of the conference (“Normative Implications: New Regulatory Frontiers”) returned to the overarching question of how the evolution of financial technology has changed the way in which financial markets function and can thus be modeled for theoretical and regulatory purposes. Jan Kregel, Director of Research at the Levy Economics Institute at Bard College, opened by offering a stimulating set of reflections on the international financial architecture after the digital revolution. This was followed by Pietro Ortolani, Senior Research Fellow at Max Planck Institute Luxembourg, who stressed the way in which bitcoin transactions are best understood as a new form of contract making that seeks to address disputes through internal, self-enforcing dispute resolution mechanisms instead of relying on state courts. Agnieszka Janczuk-Gorywoda, Assistant Professor at Tilburg Law School, moved from cryptocurrencies to electronic payment systems more generally and emphasized the ways in which private electronic payment systems such as M-Pesa have improved financial inclusion in underdeveloped regions. This should however not lead us to lose sight of the

legal, political, and normative stakes involved when payment systems expand into shadow banking as is the case with PayPal. In his presentation, Matteo Gargantini, Senior Research Fellow at the Max Planck Institute Luxembourg for International, European and Regulatory Procedural Law, spoke about algorithmic and high frequency trading. Philipp Hacker, Postdoctoral Fellow at Humboldt University of Berlin, asked how the complex digital financial markets of the new financial order are best conceptualized for regulatory purposes and argued that complexity theory has recently emerged as a promising tool for predictive modeling. But, paradoxically, complexity theory suggests that it is precisely the self-replicating and self-confirming nature of complex systems that limits our predictive powers. Complexity theory thus primes regulators to expect unpredictable behavior by appreciating uncertainty as a constitutive element of finance. This means on the one hand granting more room for trial-and-error regulatory experimentation but placing it within a democratic framework that sets out fixed principles of financial regulation. The panel concluded with a presentation by Ioannis Lianos, Chair of Global Competition Law and Public Policy at University College London, who followed up on how to conceptualize the uncertainty of financial markets by emphasizing the way in which digital markets in particular operate on a principle of performativity, whereby, Lianos explained, market participants make the world in which they act rather than simply acting in a market that already exists prior and apart from them. But if digital finance is performative the role of regulators arguably changes from a static preservation of market rules to interactive strategies of regulatory learning and a continuous re-making of markets in the light of regulatory principles.

A follow up conference will be held at UCL in London and at the University of Cambridge in March 2017 finalizing the research with the publication of an edited volume.