

Editorial

Preface

On 4 and 5 May 2018, Lyon Catholic University, the University of Florida and the University of Turin jointly organized a two-day conference in Lyon on the ‘Impact of Technology on International Contract Law’, within the framework of the French and Italian Hubs of the European Law Institute. The speakers, coming from a variety of jurisdictions (among others China, EU, Singapore, and the USA) focused their contributions, consistently, on smart contracts and blockchain technologies. The articles of this special issue of the *European Review of Private Law* are based on a number of the said contributions.

In the past eighteen to twenty-four months, there has been a significant surge in the number of articles, books, conferences dedicated to blockchains, artificial intelligence, digital platforms, robots, personal data, etc. and the impact of these technologies on the legal landscape. Traditionally, few legal scholars were involved in the analysis of the connections between law and technology. The legal community seems now to grasp the phenomenon, with a sense of social responsibility. There is indeed a need to understand and make understand what is happening and what is likely to happen when and if the technology shapes more and more our legal reality. We must also be in a position to say what is not desirable, in terms of use of technological tools, from a legal perspective.

In order to have a better understanding of the current trends in this area, the Lyon conference’s speakers investigated the intersection between contract law and technology. With the valuable contribution of experts in this area, this special issue is aimed at proposing an overview of the issues raised by the application of blockchain technology to contracts. More precisely, the articles take an international and comparative perspective on a number of areas that are still being debated as they relate to the law of contracts: contract formation and drafting, performance and interpretation, remedies, role of digital platforms, property and warranty law related issues, privacy and consumer protection concerns.

An analysis of the ‘legal meaning of smart contracts’ (by Riccardo De Caria) is the introduction to this journey into the blockchain world, where he suggests the introduction of new legal categories to deal with new ways of making legally binding agreements. It is followed by a presentation on formation of contracts, by Mateja Durovic and André Janssen (‘The formation of blockchain-based smart contracts in the light of contract law’) in which our two colleagues try to answer the crucial question of whether the traditional common law concept of contract formation is seriously challenged by the rise of smart contracts. Regarding performance, Cristina Poncibò and Larry DiMatteo (‘Quandary of smart contracts and

remedies: The role of contract law and self-help remedies') wonder whether the current technological trends, and the possibility to incorporate a complete set of remedies into a smart contract, eliminate the need for courts or arbitral tribunals to apply contract law to disputes. They tend to challenge this assumption and also the assumption of major clarity and simplicity of smart contracts, considering that the parties will continue to have the ability to seek redress before courts and arbitral tribunals.

In connection with the issue of performance and remedies, Eric Tjong Tjin Tai ('Force majeure and excuses in smart contracts') focuses on the situation where a smart contract does not fare well (going therefore beyond the simplistic assumption that smart contracts cannot fail) and proposes answers to the question of whether smart contracts allow for excuses for breach of contract. Michel Cannarsa ('Interpretation of contracts and smart contracts: smart interpretation or interpretation of smart contracts?') addresses the difference between natural language and computer code and its consequences on contract interpretation. He subsequently wonders whether the accuracy with which smart contract have to be coded does not lead to an elimination of the need for contract interpretation. Louis-Daniel Muka Tshibende ('Contract law and smart contracts: property and security rights') takes a view on the application of mandatory (public order) rules to smart contracts and consequently wonders what shall happen in case in defective title, information defects and viruses.

Moving a bit away from traditional contract law, various articles are dedicated to parallel but nonetheless crucial issues relating to the use of smart contracts. Oscar Borgogno ('Smart contracts as the (new) power of the powerless? The stakes for consumers') sees in smart contracts a good way to enforce consumer contracts and enforce consumer protection rules through standardization of smart contracts, suitable according to him for specific industries, such as the transport sector. Piotr Tereszkievicz ('Digital platforms: regulation and liability in EU law') pursues some lines of thought on the liability of intermediaries (digital platforms) on the basis of current EU rules, raising the question of the application of the said rules to blockchain based platforms. Lokke Morel ('Blockchain & data protection ... and why they are not on a collision course') offers a deep analysis of the compatibility between blockchains and data protection (especially from the perspective of the EU GDPR) and concludes with a confident view that the issues of data protection are unlikely to pose issues for blockchain applications and that the GDPR is well able to regulate this new technology. Elisa Mik ('Electronic platforms: openness, transparency and privacy issues') is confident as well that the legal infrastructure is still needed and that technology cannot exist without the said supporting infrastructure while she provides an overview of the different types of blockchains and presents their practical shortcomings. Jia Wang and Chen Lei ('Will innovative technology result in innovative legal frameworks? Smart contracts in China'), basing their analysis on China from where more than half of the world's approximately 400 blockchain-related patent applications in 2017 originated, take

the same view and assume that, for most parts, the current legal framework can accommodate or mitigate the legal risks brought about by smart contracts.

The various articles raise many questions and cannot provide answers to all of them. Indeed, the complexity of the technological landscape suggests to lawyers to be cautious in providing definitive answers to the legal problems arising from the current evolution. However, the following articles are a quite comprehensive and fair contribution to the current debates on technology and the law. The authors, far from ‘chasing’ technology, took their share of the duty to understand and make understand.

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