Chapter 2

Tokens and Tokenization: Still a Gordian Knot for the Future of FinTech?

Carlos Fernandez-Herraiz
Grant Thornton, Spain

Sara Esclapes-Membrives
Grant Thornton, Spain

Antonio Javier Prado-Dominguez
Universidade da Coruña, Spain

ABSTRACT

The authors have carried out an examination of the status of tokens and tokenization in financial markets with regulatory problems, which lack proposals for solutions based on a generalized consensus. Overall, it seems to authors that cutting the Gordian knot of tokenization and tokens is the essential need to achieve a consensual and efficient protocol of unequivocal attribution of legal responsibility to obtain satisfactory levels of transparency and reliability in all transactions. In particular, tokens that claim to be money appear to have a more complicated potential development than the rest, since there is a controversy between the pressures of the sector agents and the specific restrictions indicated by Knapp and Ingham and maintained by the states and regulators with respect to its exclusive regulatory capacity over money as a means of payment of a wide and reliable acceptance.
INTRODUCTION

The emergence of communication protocols that structure information as chains of blocks of information linked in a cryptographic way represents a profound technological-instrumental innovation for the financial system. These protocols are generically referred to as blockchains. However, blockchain is only a part of a larger set, commonly known as distributed ledger technologies (DLT), whose aim is to enable a group of parties to manage a non-centralized database. Authors acknowledge the different definitions available for DLTs and blockchains however, in this document, both terms will be used interchangeably.

DLTs admit and foster the representation and transfer of previously existing goods and rights, the creation of new goods and rights and the natural experimentation and evolution on market mechanisms. Such possibilities entail the development of reward and punishment models associated with the positioning of market participants’ interests. A process that can be expected to be intense, but in some way similar to those already experienced in the past, as a consequence of other significant procedural advances in financial system.

Main, but not exclusively, DLTs are built with the aim of not depending on the role of a trusted intermediary or third party in the process of representation and transmission of value. The ability to maintain and transmit value as well as the ability to dispense with third parties could be considered as the two main aspects in the solution given by these technologies.

Regarding representation and transfer of value, blockchain makes possible to create units of account or complex financial products, digitally represent real assets or any right, and transfer them with great ease. These units of account are commonly known as “tokens”, and its transfer is simple since all the agents participating in a system fed by this technology have either the same duplicated information, or mechanisms to indirectly verify the good purpose and existence of the transactions executed in the network.

The first DLT arose to support a new means of digital payment, known as Bitcoin (considered a type of token), which was formulated as the first means of payment capable of overcoming the problem of double spending in the transfer of purchasing power by electronic means. Thus, the original Bitcoin white paper by Nakamoto (2008) allude to “digital cash”, proposing a system that supports the exchange of purchasing power with the same guarantees as a physical transaction, but dematerializing the means of payment and making remote transfer possible.

This leads to the second aspect of the solution given by distributed ledger technologies: absence of trusted third parties. The existence of the problem of double expenditure in the transmission of value is one of the main reasons that determine the role of trusted third parties in the payments function and, in general,
25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the product's webpage:

www.igi-global.com/chapter/tokens-and-tokenization/248916?camid=4v1


www.igi-global.com/e-resources/library-recommendation/?id=88

Related Content

Chinese Investment in the European Football Industry

www.igi-global.com/chapter/chinese-investment-in-the-european-football-industry/248829?camid=4v1a

Macroeconomic Sensitivity, Risk-Return Trade-Off and Volatility Dynamics Evidence From Developed and Developing Markets
Faisal Khan, Hashim Khan, Saif Ur-Rehman Khan, Muhammad Jumaa and Sharif Ullah Jan (2019). International Journal of Corporate Finance and Accounting (pp. 1-16).

www.igi-global.com/article/macroeconomic-sensitivity-risk-return-trade-off-and-volatility-dynamics-evidence-from-developed-and-developing-markets/227417?camid=4v1a
Tourism Demand Forecasting Based on a Neuro-Fuzzy Model
www.igi-global.com/article/tourism-demand-forecasting-based-on-a-neuro-fuzzy-model/107005?camid=4v1a

The Impact of Ownership Structure on Firm Performance: Evidence from Pakistan
www.igi-global.com/article/the-impact-of-ownership-structure-on-firm-performance/164986?camid=4v1a