

The Economics of Distributed Ledger Technology for Securities Settlement: Open Review

Evangelos Benos,^{†‡} Rodney Garratt,[§] Pedro Gurrola-Perez^{**}

Reviewers: Reviewer A, Reviewer B

Abstract. The final version of the paper “The Economics of Distributed Ledger Technology for Securities Settlement” can be found in Ledger Vol. 4 (2019) 121-156, DOI 10.5915/LEDGER.2019.144. There were two reviewers involved in the review process, none of whom have requested to waive their anonymity at present, and are thus listed as A and B. After initial review by Reviewers A and B (1), the decision was made to conditionally accept the submission, with revisions. The Author submitted a revised manuscript and the revisions were accepted by the reviewers, thus ending the peer review process.

1. Review

Reviewer A

The paper addresses a highly relevant topic and provides additional insights to the discussion. I would recommend publication of this paper.

As I am not an economist, I cannot comment on the related aspects of the paper. My focus is on the distributed ledger technology.

Especially, Chapter 3 provides a very precise yet adequately complex explanation of DL and related technologies.

Only in chapter 6.1 "Costs in traditional blockchain systems", it does not become fully clear, that cost for transaction processing are clearly correlated to the number of pending transactions. The number of transactions to be included in one block is limited. And the

[†] 3MHMNdtjUYYYWuLKgwogzB2ADGr3hfkRQV

[‡] Evangelos Benos (evangelos.benos@bankofengland.co.uk) is a Senior Economist at the Bank of England, UK.

[§] Rodney Garratt (garratt@ucsb.edu) is Professor of Economics at the University of California Santa Barbara, USA.

^{**} Pedro Gurrola-Perez (pgurrola@world-exchanges.org) is Head of Research at the World Federation of Exchanges. He worked on this paper while he was at the Bank of England, UK.

miners are free to choose which transactions to include in the next block. Thus, they will include those transactions that come with the highest fees.

In general, to me it is not fully clear, what the paper discusses: Either, settlement of "traditional" securities with DLT, or settlement of "new" securities, which exist as some form of tokens on the DLT system itself. In my opinion this should be made more concrete, as I would assume differences between those two options, for example related to the notary function. This topic is partially discussed on page 10 in section "The depository function". But still, it could be more clear.

An stringent method to analyze potential benefits and challenges is applied, from which different potential implementation scenarios are derived and recommendations are given..

Reviewer B

The submitted article presents a view on the characteristics that a potential DLT-based securities settlement industry might take, on the grounds of on economic theory and the technical characteristics of distributed ledgers and blockchain technologies. It has a somewhat speculative character, however all arguments are well presented and the conclusions seem reasonable and not overly authoritative to me; the reader always has the opportunity to distinguish between speculation, simplifications, and facts. The few mathematical formulas and arguments that are used seem to also be correct. In addition, the manuscript provides a systematic discussion of the issues at hand, their context and relevance, the present status of the industry, the different players and their (potential) role in a DLT-based solution. All in all the article is well written, understandable and interesting. It compiles a substantial amount of information, and adds to it in a well reasoned way. I recommend the article for publication.



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