

Financial Aspects of Global Payment Systems

Abstract

This dissertation summarizes findings on Digital Asset's development, which would fit under the era of Blockchain 1.0. We analyzed and synthesized available resources focusing on the following areas: (i) historic aspects of Digital Assets, (ii) technical solutions of Digital Assets, (iii) actual use of Digital Assets, (iv) abuse of Digital Assets, (v) Digital Assets' legal integration, (vi) Digital Assets as a global payment system.

Analyzing history of Digital Assets, we summarize that Digital Assets were developed with the intent to liberate payment systems from existing financial supervision. Once such system became functional it was immediately abused. In connection with technical solutions, we find that as technical complexity of Digital Assets (especially the lack of the trusted third party) diminishes protection of Digital Assets users, it incentivizes criminal activity. Consequently, Digital Assets are vastly abused for different criminal purposes, including development of services dedicated to criminal activity, such as Dark Web Marketplaces or Digital Assets Mixer. Further, Digital Assets are used for payments on minimal scale, and the retail use is practically nonexistent. Currently, Digital Assets' legal integration is slow and fractional; however, we predict its positive developments in respect of the upcoming European regulation on Markets in Crypto Asset.

We conclude that Digital Assets such as Bitcoin do not represent a truly functional global payment system. We show that no one uses them as a medium of exchange, and that Digital Assets are used rather as investments. Despite its presence we find the crime wave associated with Digital Assets transitory. Finally, we expect that in future, once proper regulation is in place, Stablecoins will be a functional global payment system.

Key Words

Digital Asset, Distributed Ledger Technology, MiCA