



Topic description

Algorithmic Stablecoins

History hardly ever repeats, but it rhymes: While the initial goal of crypto currencies was supposedly to create a system better than available at the time, often criticizing the global reserve banking system, several projects aim to recreate similar systems built on top of crypto currencies. These projects implement protocols managing a treasury, liquidity pools, bond mechanisms and participation schemes imitating real world reserve banking systems. For example, Wonderland (<https://www.wonderland.money/>), a suspected Ponzi scheme claims to have 700 million USD in its treasury and is currently paying depositors an APY of 82.000 %.

1. Computer Science Task

Describe the technical components of a stablecoin:

- Describe the parties involved and the functions of the relevant smart contracts
- Investigate features of at least five algorithmic stablecoins, like Maker's DAI, TerraUSD UST (and its relation to LUNA), or Synthetix SNX
- Provide a comparison between these stablecoins, their technical underpinnings, the relevant smart contracts, and their governance
- Differentiate them from other stablecoins
- What are potential vulnerabilities and economic-technical risks of algorithmic stablecoins? How can they be attacked?

2. Law Task

Dissect the mechanism of these projects and relate them to the currently existing reserve banking system:

- Classify algorithmic stablecoins under Swiss private law
- What are the core components/actors? What are the overlaps with existing entities (BIS, central banks, commercial banks etc.), what is different?
- How are tokens used to participate? Explain the processes of minting and staking and compare them to "traditional" legal concepts
- Using above example (or find your own), assess the role of different actors and their responsibility. Who is liable for price stability? Which legal claims exist if such a scheme collapses?

- How do used tokens fit into Swiss property law?

Materials/Literature

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