

swiss economics

cryptecon
center for cryptoeconomics

Be your own bank?

The role of financial institutions in a decentralized economy

Christian Jaag, PhD

Euro Finance Week
November 18, 2019

(Financial) institutions are the backbone of our economy

Institutions keep and maintain centralized private or public registers

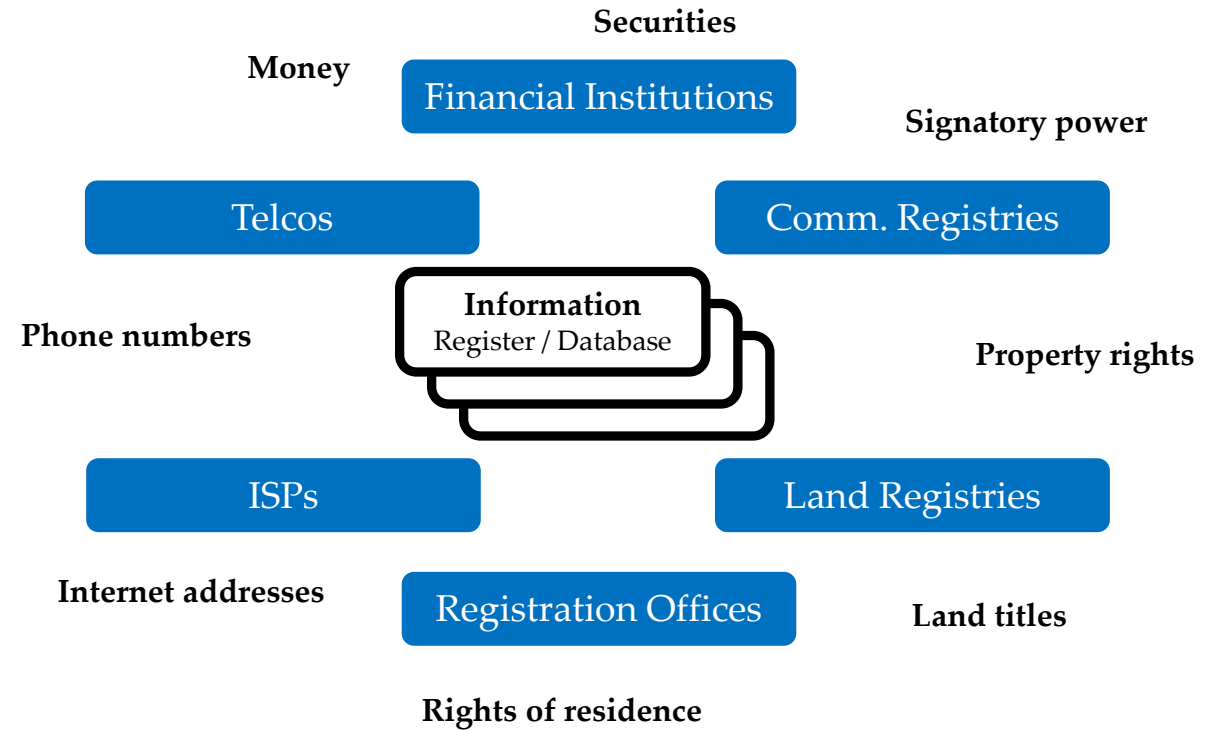
Consensus by authority

Intermediation

Need for trust

Single points of failure (fraud, censorship)

Delayed settlement



Distributed ledgers are a new kind of institution

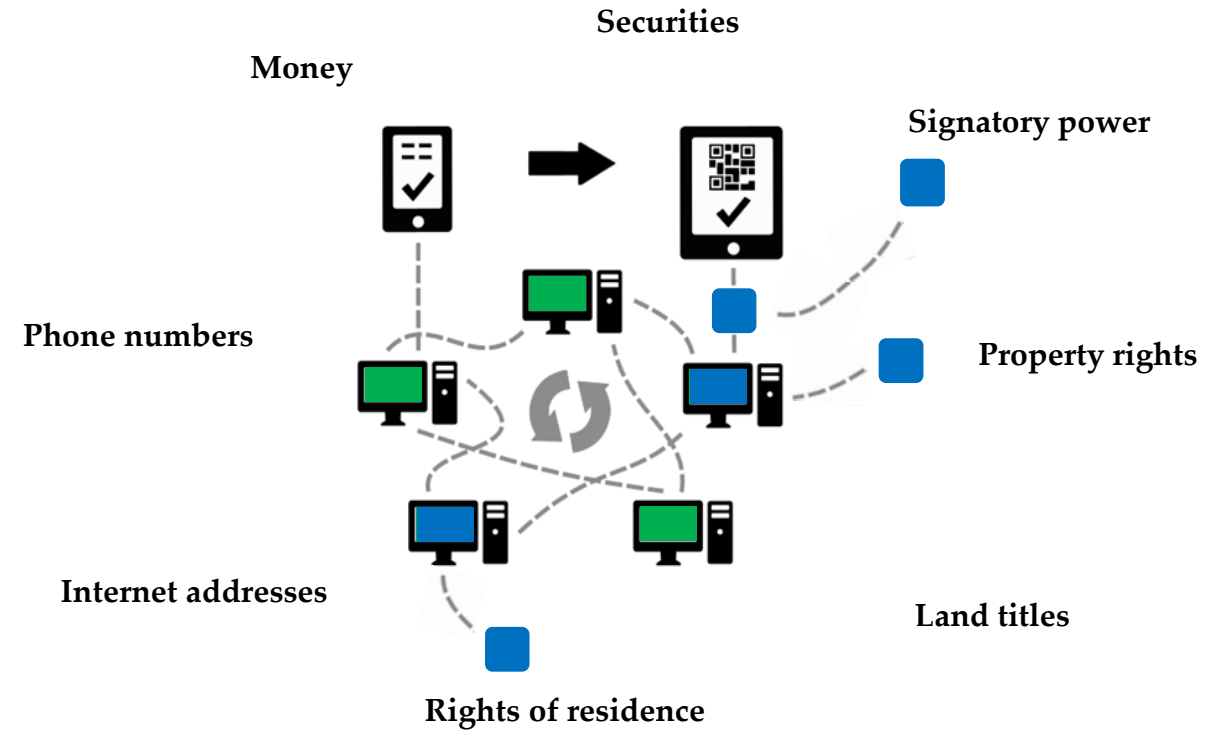
Distributed consensus mechanisms

Secured by cryptography

Potentially open to users without intermediaries

No need for trust

No single point of failure



Applications of distributed ledgers

Level 3: Smart contracts

Decentralized execution of applications and contracts

Level 2: Smart property / Tokenized goods

Documentation und transfer of tokens that represent (real) goods or rights

Level 1: Native tokens / Cryptocurrencies

Documentation und transfer of digital goods (tokens)

Confirmation of relevant facts

Guarantee for
represented goods

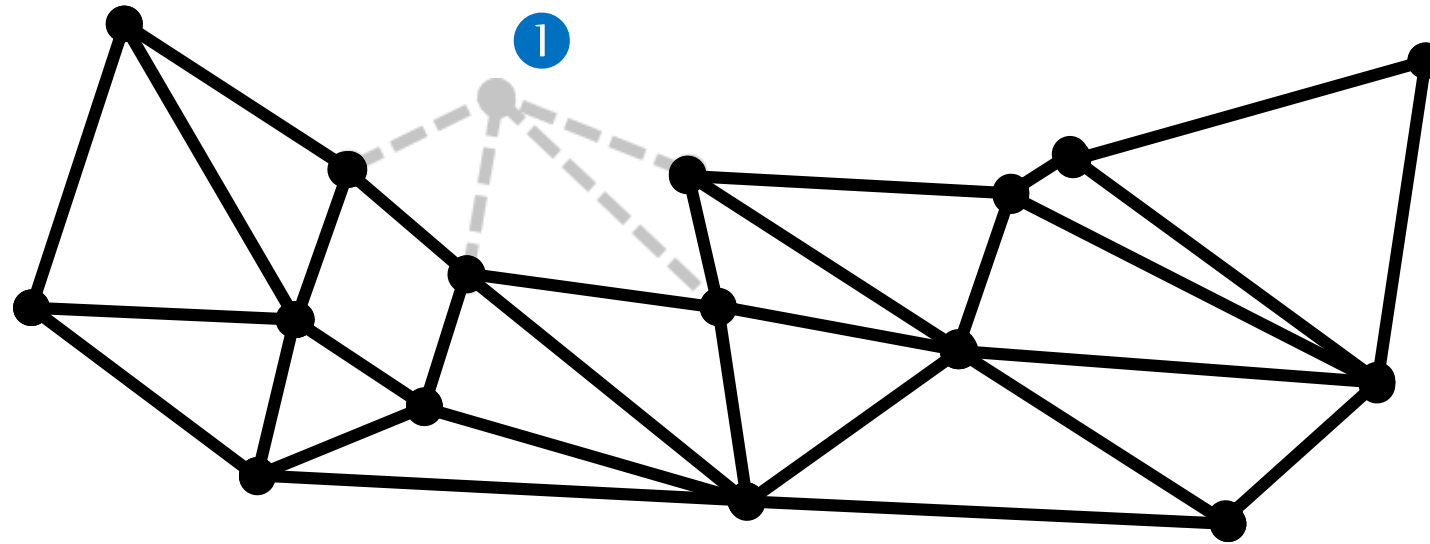
Secure storage of
cryptographic keys

Roles for financial institutions

NEWS
by Kai Sedgwick

Oct 17, 2019

Smart Contract Blockchains Are Struggling to Scale



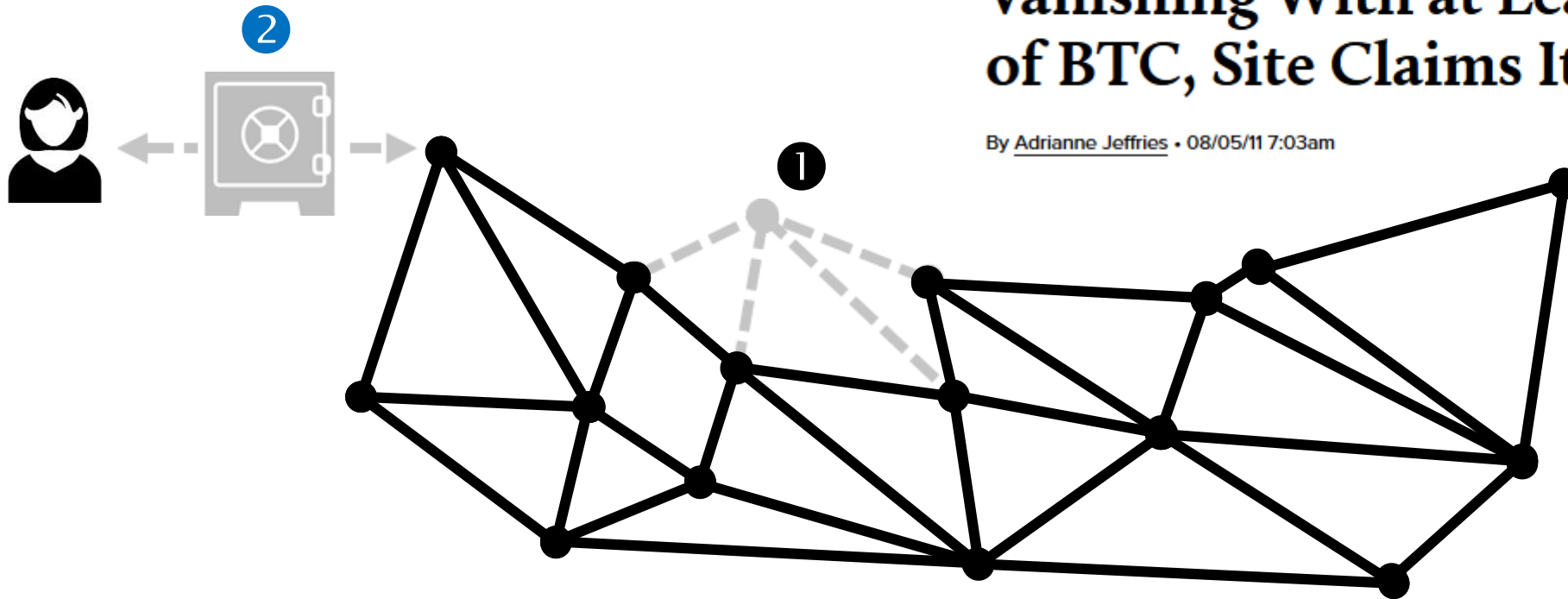
1 Co-operator of a distributed ledger infrastructure

Roles for financial institutions

PAYING CRIMES

MyBitcoin.com Is Back: A Week After Vanishing With at Least \$250 K. Worth of BTC, Site Claims It Was Hacked

By [Adrienne Jeffries](#) • 08/05/11 7:03am






① Co-operator of a distributed ledger infrastructure

② Datasafe: Storing cryptographic keys

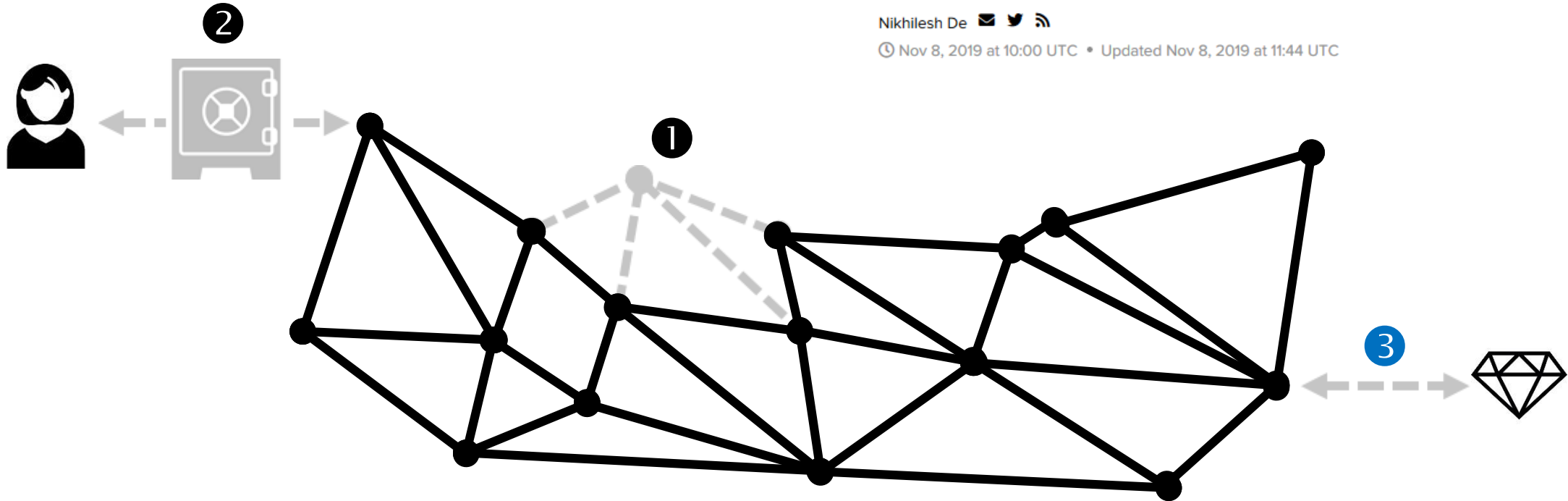
Roles for financial institutions



Nikhilesh De   

🕒 Nov 8, 2019 at 10:00 UTC • Updated Nov 8, 2019 at 11:44 UTC

NEWS

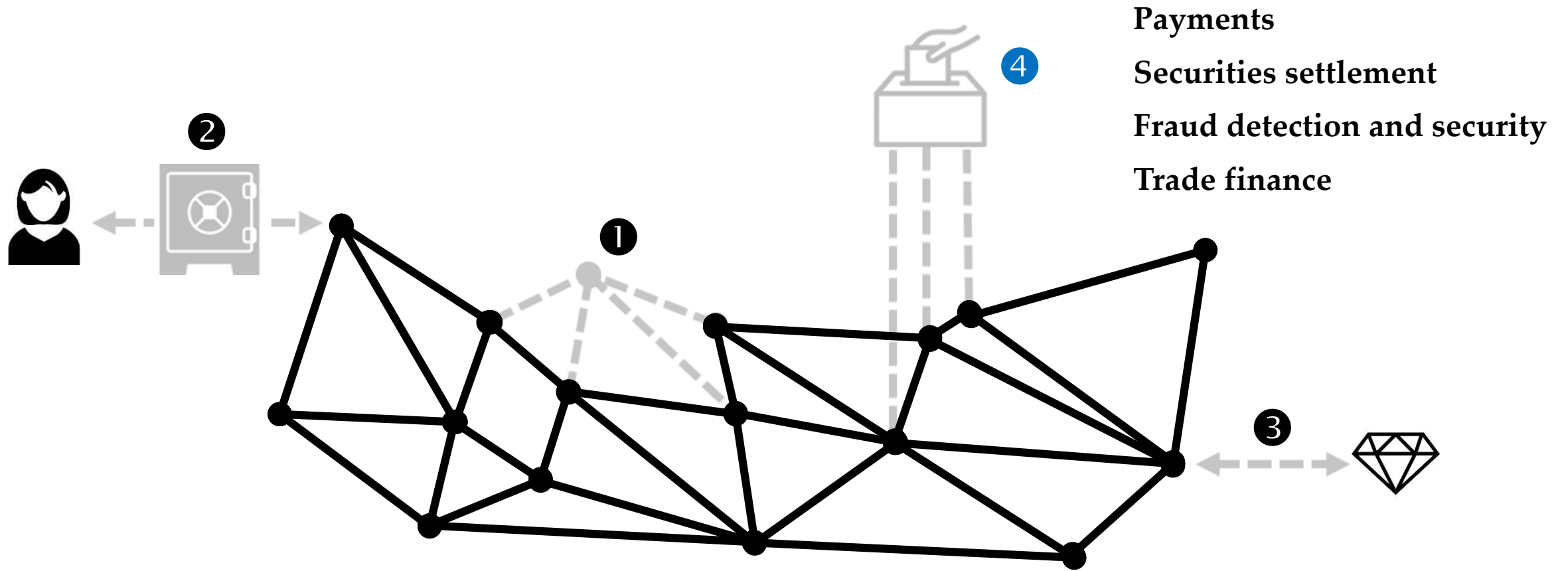


❶ Co-operator of a distributed ledger infrastructure

❷ Datasafe: Storing cryptographic keys

❸ Issuer of digital goods and identities

Roles for financial institutions



- ① Co-operator of a distributed ledger infrastructure
- ② Datasafe: Storing cryptographic keys

- ③ Issuer of digital goods and identities
- ④ Service provider (applications)

Time to move to Crypto Valley

There are important roles for financial institutions in a decentralized economy

Cooperation of old and new institutions is key to unfold the full potential of both

Well mixed ecosystems provide the optimal basis for successful cooperation

Contact

Christian Jaag, PhD
Founder and Counsel

christian.jaag@swiss-economics.ch

www.swiss-economics.ch
www.cryptecon.org