

DANMARKS NATIONALBANK

ADVANTAGES AND DISADVANTAGES FROM THE PERSPECTIVE OF THE DANISH CENTRAL BANK

Governor Hugo Frey Jensen, Bestyrelsesforeningen, April 3rd, 2018



DANMARKS
NATIONALBANK

Kryptovaluta for milliarder stjålet fra japansk børs

Berlingske 28. januar 2018

Investor fik 2300 pct i
afkast på valutasats –
men så blev han hacket

Børsen 22. august 2017

Snart kan
du betale med
kryptovaluta
i tusindvis
af netbutikker

Børsen 16. december 2017

Hemmeligheden
bag den succes-
fulde bitcoin kan
revolutionere
andre brancher

Jyllands-Posten 27. maj 2017

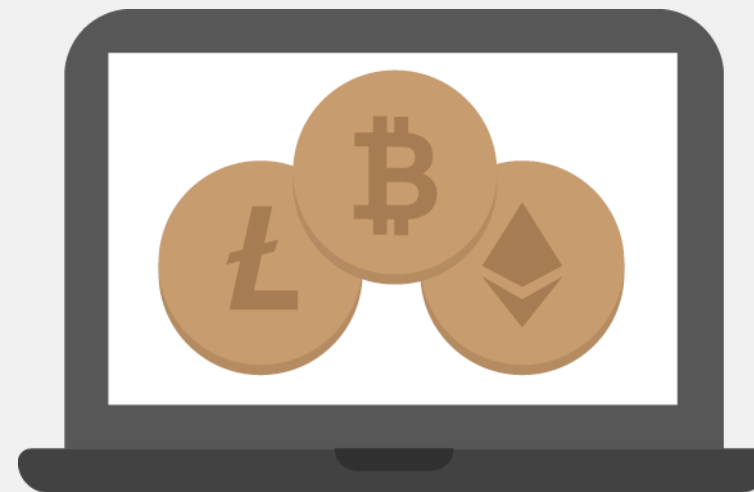


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Where is the advantage?

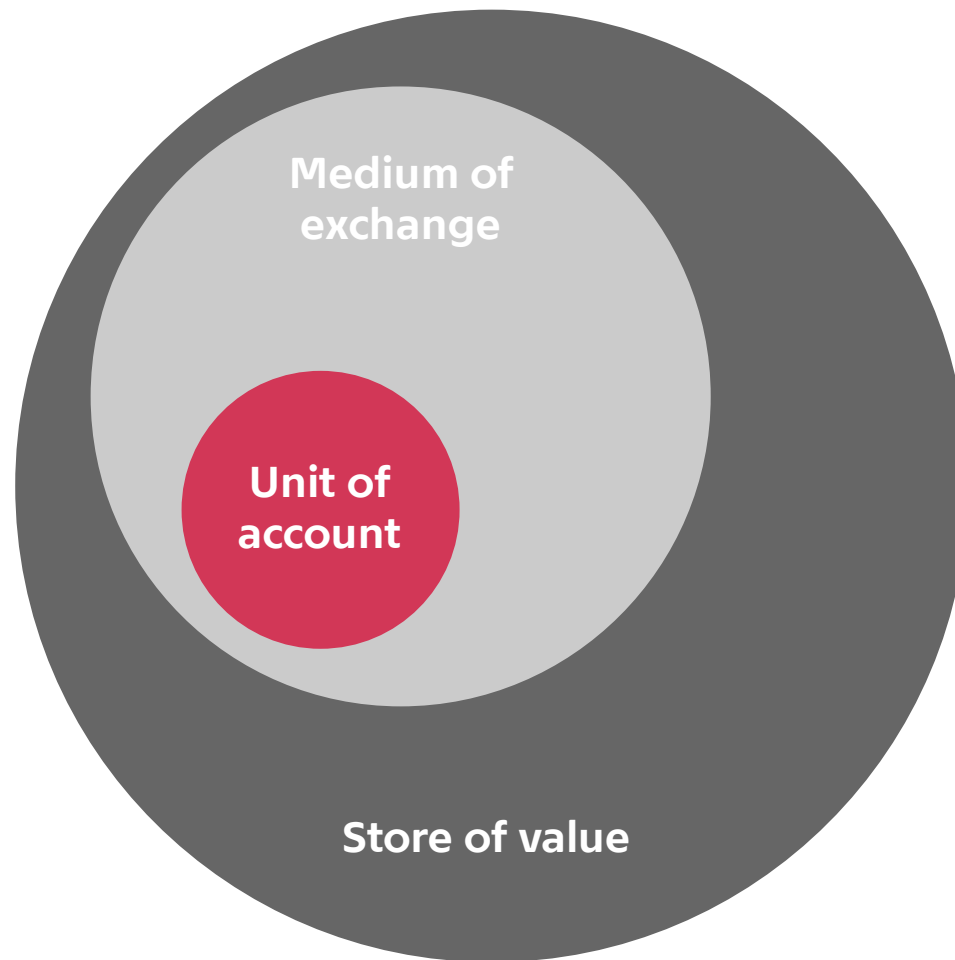


**BLOCKCHAIN
TECHNOLOGY**















CRYPTOCURRENCIES

What are the functions of money?

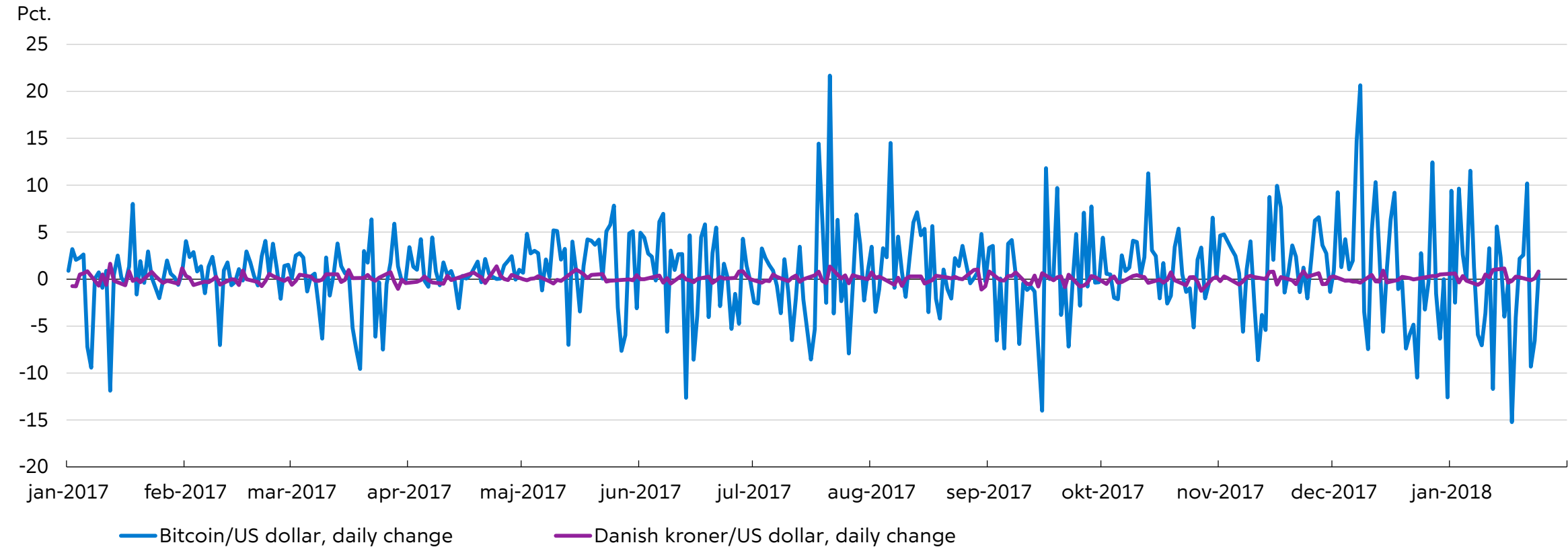


Types of money

– what's apples and what's oranges?

	 CASH	 BANK DEPOSITS	 CRYPTOCURRENCY
ISSUER	 Danmarks Nationalbank	 Commercial bank	 Decentralised issuance with no official issuer
INTERMEDIARY	 No intermediary	 Commercial bank	 No intermediary
VALUE	 Stable value	 Stable value	 Significant fluctuations

Cryptocurrencies are far from stable



Note: The rate is daily observations: The number of transactions is a monthly moving average. Last observation is 24th of January 2018
Source: Blockchain.info

What is a good medium of exchange?



STABLE



BROAD ACCEPTANCE

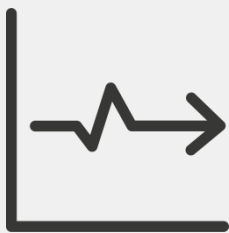


EFFICIENT



SECURE

Cryptocurrencies is challenged



STABLE



BROAD ACCEPTANCE



EFFICIENT



SECURE

Potential for blockchain and its sister technologies?



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Lot's of talk – where is the walk?

Maersk and IBM to form joint venture applying blockchain to improve global trade and digitise supply chains

Release date: 18 Jan 2017 | Deutsche Börse

"Liquidity Alliance" builds blockchain solution for cross-border collateral transfer

Four international CSDs develop a Blockchain prototype in cooperation with Deutsche Börse / Targeted 'LA Ledger' solution to provide fast and efficient mobilisation of collateral




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CLNet

Our bilateral payment netting solution, built on a distributed ledger technology (DLT) platform, allows you to drive operational process efficiencies, such as optimizing intraday liquidity, enabling real-time awareness of currency and counterparty exposures, and reducing risk.



LIQUIDITY ALLIANCE



The global provider of secure financial messaging services

Security notice

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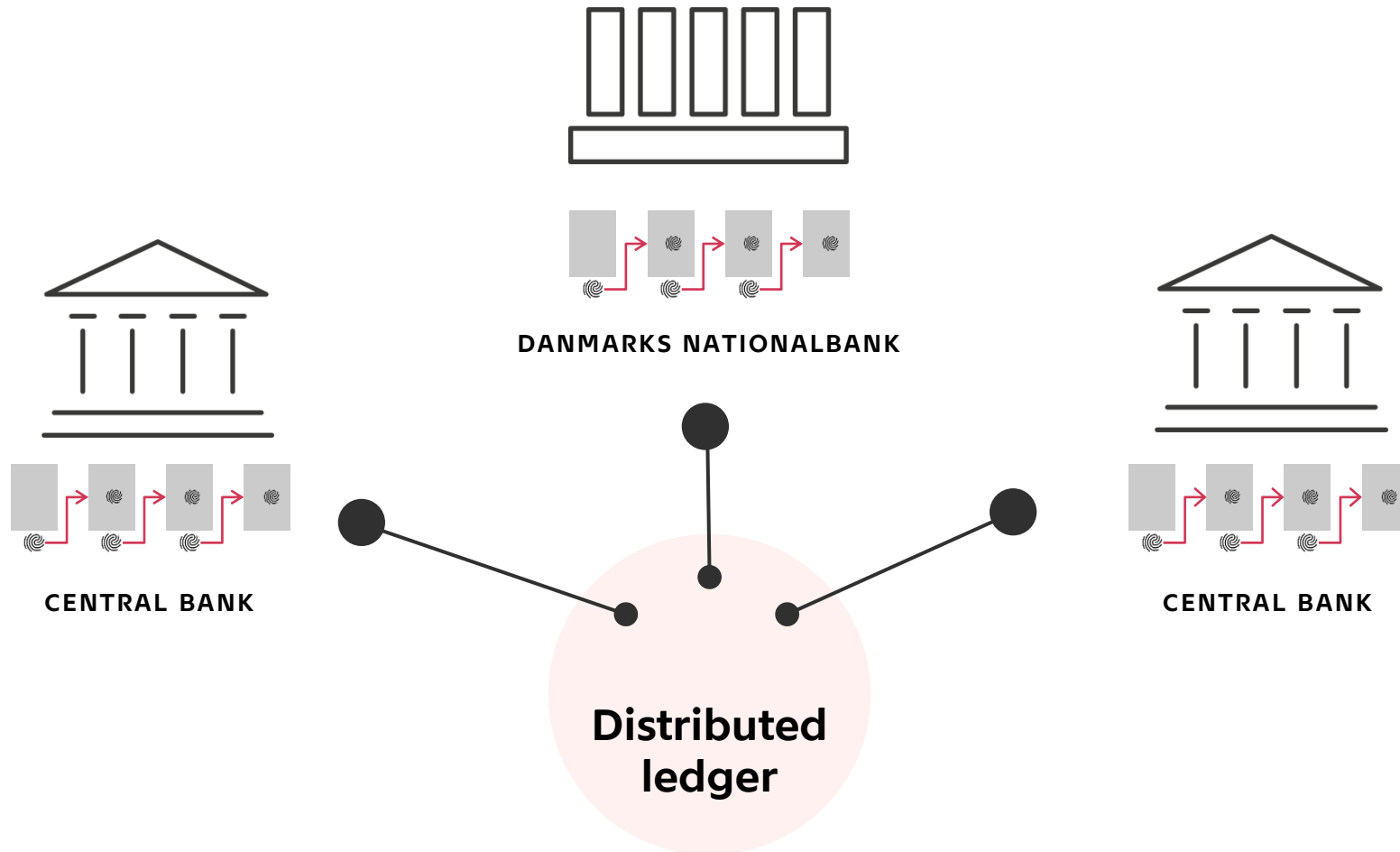
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Home > News & Events > News > SWIFT completes landmark DLT proof of concept

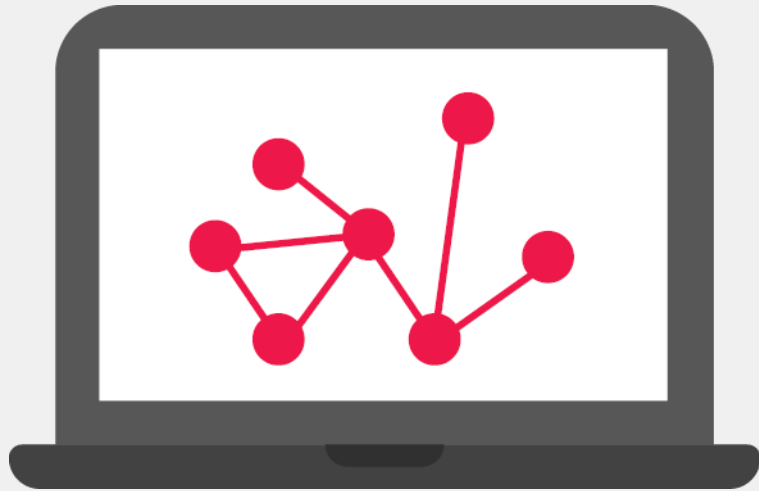
8 March 2018

SWIFT completes landmark DLT proof of concept

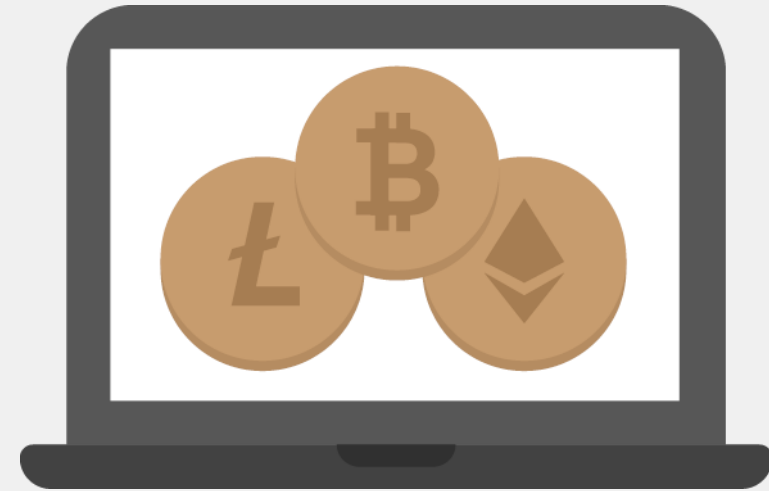
Danmarks Nationalbank participates in an European distributed ledger project



The advantages for society is found in the technology



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CRYPTOCURRENCIES



















A new role for central banks: Issuing digital central bank money to the general public?



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Types of money

– including digital central bank currency

	 CASH	 BANK DEPOSITS	 CRYPTOCURRENCY	 CENTRAL BANK DIGITAL CURRENCY
ISSUER	 Danmarks Nationalbank	 Commercial bank	 Decentralised issuance with no official issuer	 Danmarks Nationalbank
INTERMEDIARY	 No intermediary	 Commercial bank	 No intermediary	 Central bank
VALUE	 Stable value	 Stable value	 Significant fluctuations	 Stable value

What is the point?



To improve the safety and efficiency of the payment system?



To give the public unlimited access to convenient risk-free central bank money?



To improve financial stability?



To ensure that the central bank does not fall behind in the digital age?

To improve the safety and efficiency of the payment system?

In Denmark the payment system is safe and efficient

New solutions are being developed by private actors

A digital central bank currency is not an efficient contingency measure



To improve financial stability



On the contrary CBDC may pose a threat

A vehicle for instant bank runs



To give the public unlimited access to convenient risk-free central bank money?

Providing unlimited risk-free asset to the public

Cannibalizing deposits from banks
– who will finance the banks' funding gap?



To ensure that the central bank does not fall behind in the digital age?



CBDC is not a question of technology but rather one of liabilities

The central bank could start opening accounts to the public like any regular bank

Or we could issue pre-paid cards



THANK YOU!