



Crypto-instruments, classification and financial regulation

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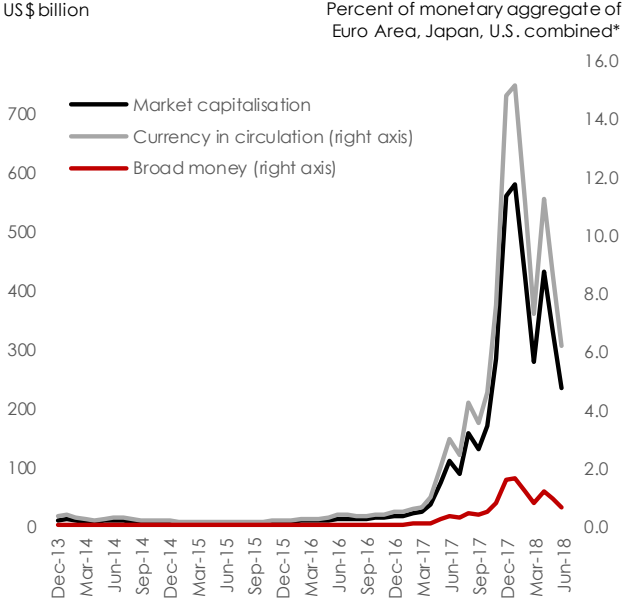
Crypto-instrument regulation

- Crypto-instruments are a very heterogenous group distinguishing vouchers, currencies, securities and collective investment schemes
- Few crypto-instrument would normally attract financial regulation
- Regulations is desirable to establish sufficient transparency and certainty towards orderly market integration
- Persistent high price volatility should not deter from existing regulatory principles

Bali Fintech Agenda

- “There are an estimated 1.7 billion adults in the world without access to financial services. Fintech can have a major social and economic impact for them and across the membership in general” (IMF, 11 October 2018)
- “Possible wide-ranging benefits [from fintech], including: increasing access to financial service and financial inclusion; deepening financial markets; and improving cross-border payments and remittance transfer systems.” (Bali Fintech Agenda)
- “Adapt regulatory framework and supervisory practices for orderly development and stability of the financial system and facilitate the safe entry of new products, activities and intermediaries; sustain trust and confidence; and respond to risks. Many fintech risks might be address by existing regulatory frameworks [...]” (Bali Fintech Agenda)

Crypto-instruments market capitalisation



Source: Bank of Japan, Coinmarketcap.com, ECB, Federal Reserve, IMF. Currency in circulation seasonally adjusted for Euro Area and Japan; weekly averages for U.S. Broad money (M2) seasonally adjusted.

Crypto-instrument types

Rank 22 July 2018	Issuer	Token	Classification	Market capitalisation (US\$ billion)	Circulation (number of coins)	Maximum supply (number of coins)	Description
				22-Jul-18	22-Jul-18		
1	Bitcoin	BTC	Currency	126.9	17,164,575	21,000,000	Electronic cash. Original crypto-instrument based on a blockchain-based application
2	Ether	ETH	Voucher	46.2	100,856,390	Unlimited	Token to be used on Ethereum's decentralised platform for blockchain applications running smart contracts on a customised built blockchain. Offers possibility to issue own crypto-currencies.
3	Ripple	XRP	Voucher	17.7	39,315,683,476	100,000,000,000	Token for processing and sending payments used by banks and other payment providers including for cross-border transactions
4	Bitcoin Cash	BCH	Currency	13.6	17,251,625	21,000,000	Electronic cash. Hard fork of Bitcoin (all Bitcoin holders as of block 478558 are also owner of Bitcoin Cash)
5	EOS	EOS	Security	7.1	896,149,492	1,000,000,000	Token for blockchain technology focused on scalability and smart contracts based on a proprietary blockchain
6	Stellar	XLM	Voucher	5.3	18,766,734,471	104,125,061,584	Token for cross-border payments with focus on low-cost money transfers using the Stellar network
7	Litecoin	LTC	Currency	4.8	57,520,357	84,000,000	Electronic cash. Based on the Bitcoin blockchain
8	Cardano	ADA	Voucher	4.4	25,927,070,538	45,000,000,000	Token for smart contract blockchain platform
9	IOTA	MIOTA	Voucher	2.7	2,779,530,283	2,779,530,283	Token for distributed ledger applications based on Tangle to build internet-of-things (connecting internet enabled devices)
10	Tether	USDT	Collective investment scheme	2.7	2,657,140,346	3,080,109,502	Electronic cash based and backed by national currencies

Regulatory history

- Crypto-instruments are the paper currencies of the twenty-first century
- Proliferation of paper currencies during the nineteenth century attracted considerable scrutiny and led to important innovations at instrument (specie backing) and institutional level (central banks)
- Regulation was guided by recognition that monetary innovation were beneficial to support commercial expansions while a new framework was seen as essential to provide for orderly financial conditions and provide adequate consumer protection.

Regulatory principles

- Regulation should aim to align crypto-instruments as much as possible within existing frameworks based on instrument properties and activities proportionate to the risks.
- Regulation at instrument level should be strictly based on functions of crypto-instruments and not the underlying technology
- Main concerns are consumer protection and money-laundering and terrorism financing
- Firms conducting investment services and activities in crypto-instruments should be subject to financial regulation and supervisions. Crypto-instruments that qualify as financial assets should similarly be subject to financial regulation.
- Regulation needs to encompass provisions for clients, financial crime and market abuse, financial markets and financial products and services in addition to other institutional and standards measures.

Regulation proposal

- Regulations should be guided by a strict classification regime of crypto-instruments
- Crypto-instruments should be subject to a transparent and verifiable classification regimes to facilitate integration with existing markets infrastructures
- Voluntary codes like the London Bullion Market Association' global precious metals code or the Bank for International Settlement's foreign exchange global code could serve as models