



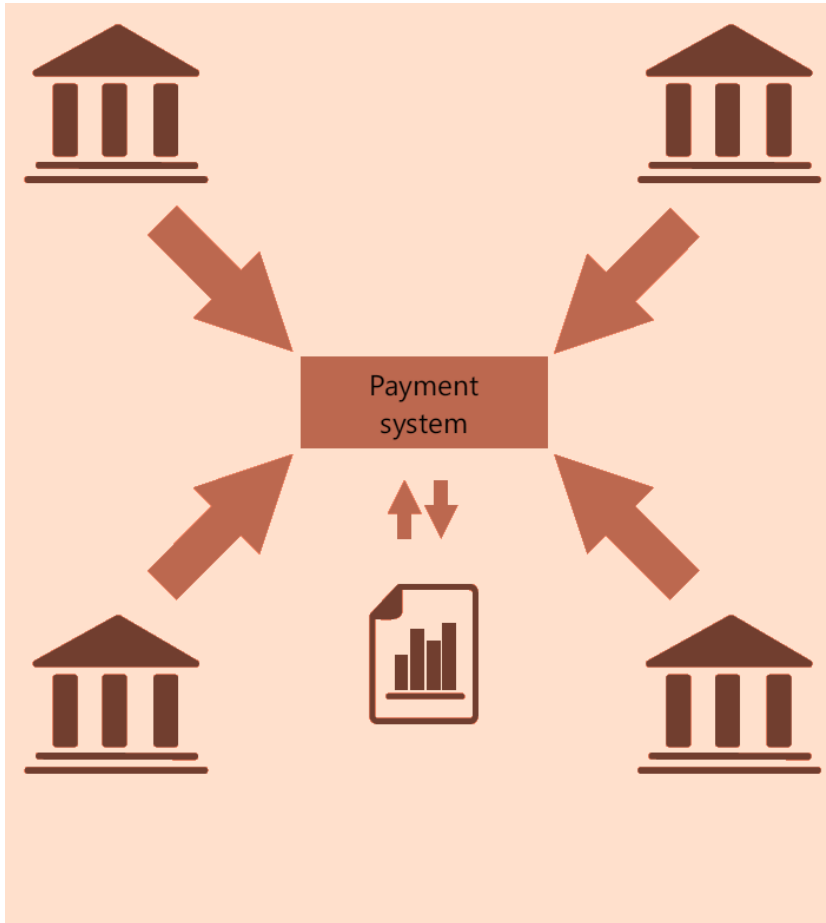
Cryptocurrency & blockchain: voorbij de hype

19 januari 2018

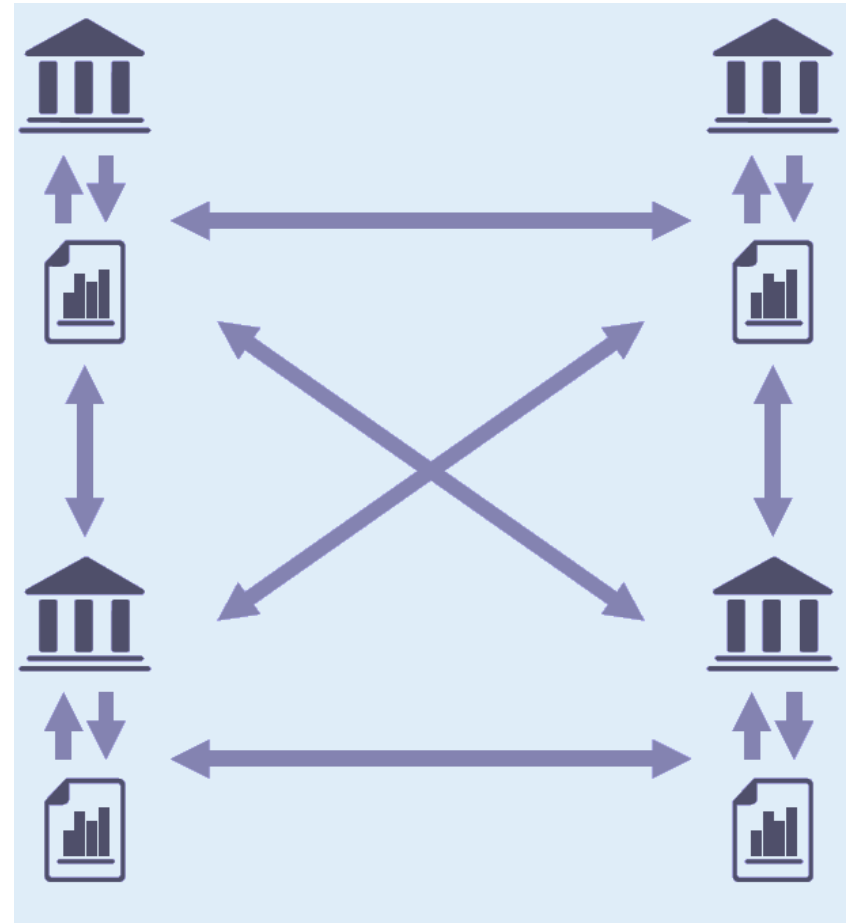
Teunis Brosens
Global Markets Research


Blockchain's belofte: weg met de tussenpersoon

Bestaande transactie-registratiediensten zijn gecentraliseerd...



...maar blockchain is "gedistribueerd": alle deelnemers hebben kopie van grootboek



- 
- Is deze persoon wel wie hij zegt dat hij is?
 - En is het geld dat hij me wil geven, wel echt?

De oplossing van Satoshi Nakamoto...

- Cryptografie -> authenticiteit
- Openbare transactie-historie -> geen fraude

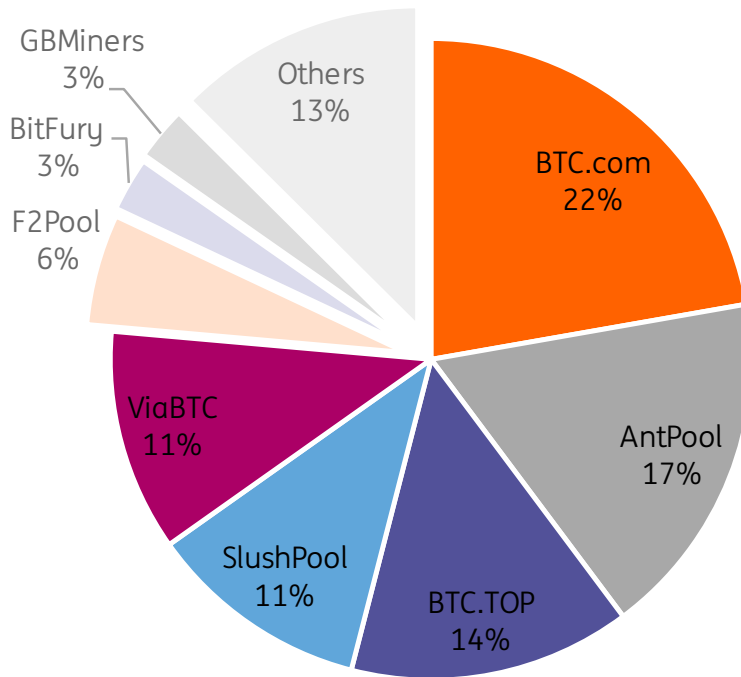
“Miners” verzorgen de openbare historische database

- Genereren van nieuwe blokken kost moeite. Dat maakt fraude moeilijk
- Beloning met *block reward* én betaalde transactiekosten

Programmacode is openbaar, iedereen kan bijdragen en controleren

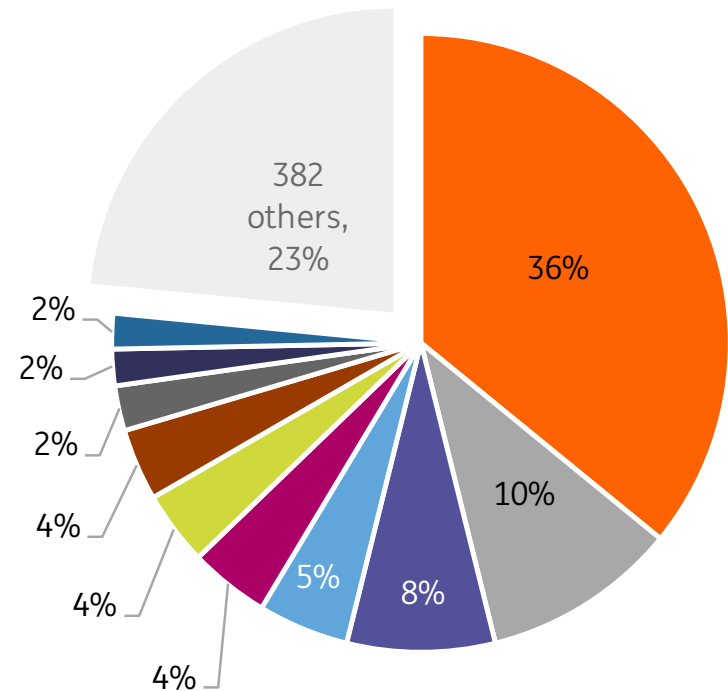
Crypto-governance: toch niet zo decentraal

Verdeling computerkracht bitcoin-netwerk
Hash rate, laatste 4 dagen



5 coöperaties controleren >75% van netwerk.
3 coöperaties controleren >50%.
Bron: blockchain.info

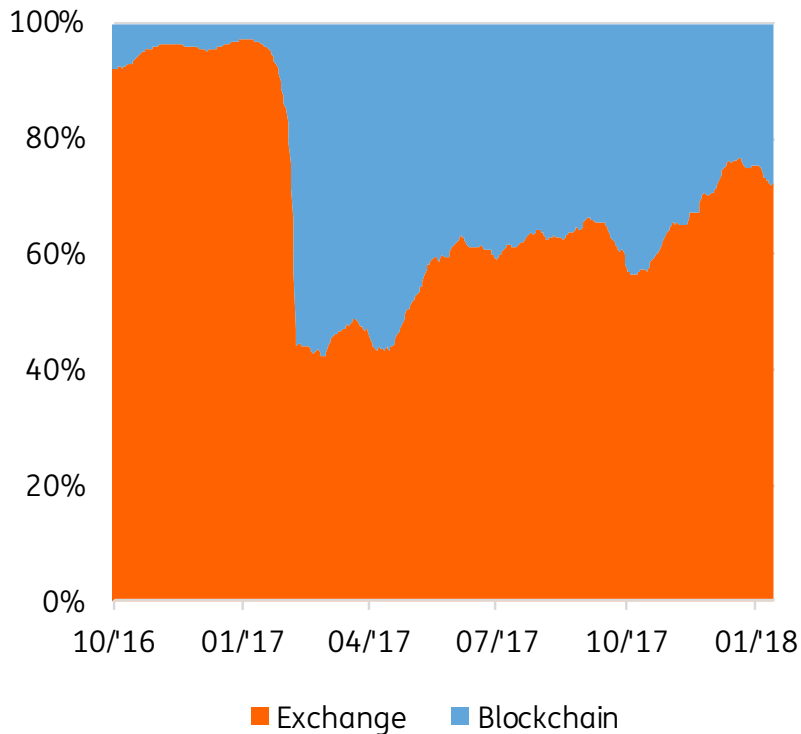
Programmeurs bitcoin broncode
% van alle updates; # updates



Iedereen kan updates voorstellen, maar alleen **drie beheerders** van "Bitcoin core" kunnen broncode wijzigen.
Bron: bitcoin.org, bitcoincore.org

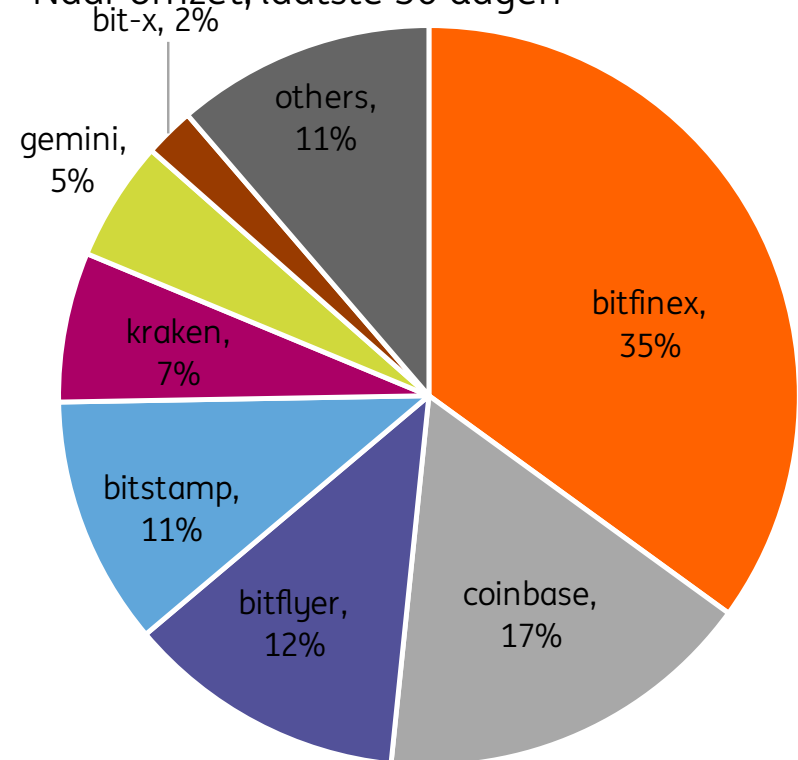
Crypto-handel: toch niet zo decentraal

Waar worden bitcoin verhandeld?



30daagsvoortschrijdend gemiddelde. Bron: ING o.b.v. data.bitcoinity.org. Exclusief (o.a.) Koreaanse beurzen

Marktaandeel Bitcoin-beurzen Naar omzet, laatste 30 dagen



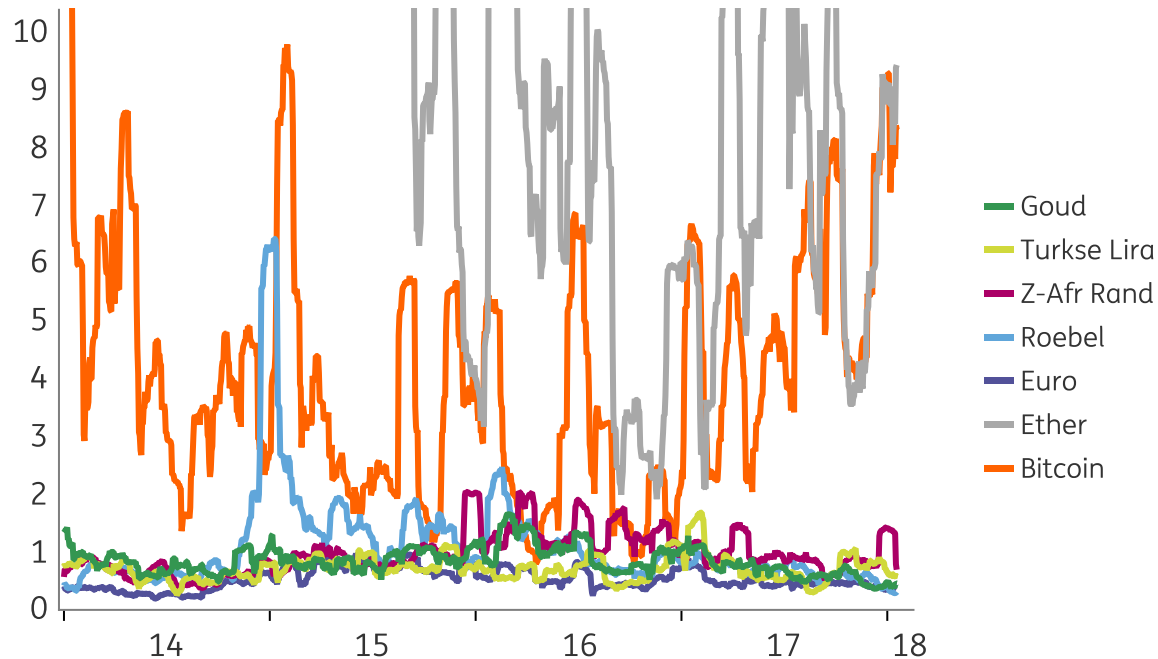
Bron: bitcoinity.org. Exclusief Koreaanse beurzen.

Is cryptogeld wel geld? 1. Rekeneenheid

Kenmerken	Bitcoin	Cryptogeld
Rekeneenheid	X	?
Ruilmiddel		
Oppotmiddel		

Volatiliteit van valuta en goud tegenover dollar

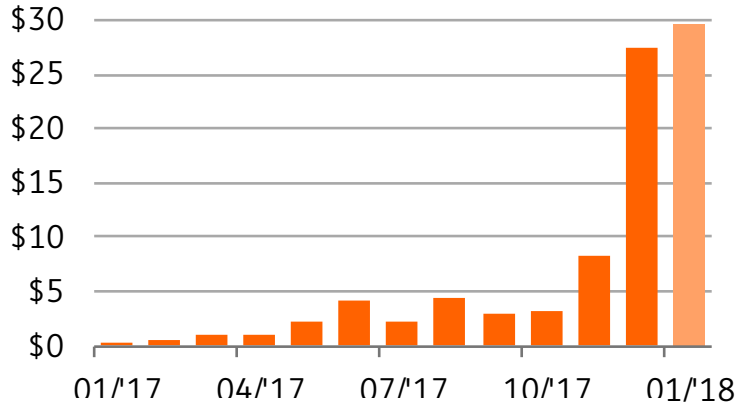
Standaarddeviatie van dagelijkse %-veranderingen, voortschrijdend 1maands gemiddelde (alleen handelsdagen)



- Instabiliteit zit in cryptovaluta ingebakken. Geldaanbod ligt vast
- Endogeen geldaanbod o.b.v. algoritme is ingewikkeld, maar niet principieel onmogelijk

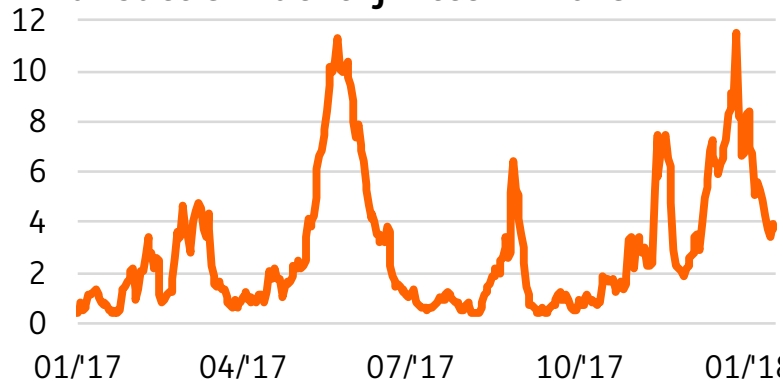
Is cryptogeld wel geld? 2. Ruilmiddel

Gemiddelde transactiekosten Bitcoin



Bron: charts.bitcoin.com

Transactie-wachtrij Bitcoin in uren



Dagelijks gemiddelde. Bron: ING o.b.v. blockchain.info

Kenmerken	Bitcoin	Cryptogeld
Rekeneenheid	X	?
Ruilmiddel	?	?
Oppotmiddel		

INTERNATIONAAL
A major bitcoin conference is no longer accepting bitcoin payments because the fees and lag have gotten so bad
 Rob Price · 11 Jan 2018 · 497

Microsoft Halts Bitcoin Transactions Because It's An "Unstable Currency"

By Catalin Cimpanu

January 7, 2018 07:20 AM 6

Steam is no longer supporting Bitcoin
 6 DECEMBER, 2017 - KURTIS

As of today, Steam will no longer support Bitcoin as a payment method on our platform due to high fees and volatility in the value of Bitcoin.

Is cryptogeld wel geld? 3. Oppotmiddel



John McAfee ✓
@officialmcafee

See this: This dip will drive sellers into fiat - because all crypto is affected. If you don't see that fiat is the walking dead, then you've missed the power of crypto. No matter where crypto settles, it's value will increase. We all know this. Don't let fear make this worse.

6:04pm · 17 Jan 2018 · Twitter for Android

1,236 REPLIES 4,031 RETWEETS 11,811 LIKES

Kenmerken	Bitcoin	Cryptogeld
Rekeneenheid	X	?
Ruilmiddel	?	?
Oppotmiddel	?	?

Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto
satoshin@gmx.com
www.bitcoin.org

Abstract. A purely peer-to-peer version of **electronic cash** would allow online **payments** to be sent directly from one party to another **without going through a financial institution**. Digital signatures provide part of the solution, but the main

Ondertussen op [https://www.reddit.com/r/Bitconnect/...](https://www.reddit.com/r/Bitconnect/)

This cant be it. I lost everything. EVERYTHING ;

Submitted 1 day ago by ProHardGamer

This is all a bad joke right? It says BCC is at 30\$ on Cc not even 8\$ worth now? If this is real, Im ruined. Like

I'm literally shaking. This can't be happening. self.Bitconnect

Submitted 1 day ago by eric_meams

Lost My Life Savings In Bitconnect self.Bitconnect

Submitted 1 day ago by litecoin

Please help, I have invested over \$500,000 into Bi

Conclusie: hype of revolutie?

De sceptische conclusies

- Huidige generatie cryptovaluta is onvolwassen (schaalbaarheid, energieverbruik, volatiliteit, governance)
- Cryptovaluta en ICOs hebben tot nu toe twee bewezen *use cases*:
 1. criminaliteit, en
 2. speculatie
- Er blijft behoefte aan tussenpersoon-dienstverlening

De positieve conclusies

- De blockchain-beloofte (in een decentrale context, zonder vertrouwen, op een veilige manier handelen) wordt waargemaakt
- De meeste problemen zijn veelal praktisch van aard. Kunnen dus worden opgelost
- Cryptovaluta en blockchain doorlopen, wat betreft innovatie, *governance* en regulering, in 20 jaar waar traditionele financiële markten 200 jaar over gedaan hebben
- ICOs kunnen nuttig aanvullend financieringsinstrument zijn

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Data from Macrobond, unless otherwise noted.

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