

CRYPTO FINANCE

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Crypto Finance

- \$340 Billion Market Capitalization
 - 60% not Bitcoin
- 3500 Initial Coin Offerings to date
 - Over 50% have already failed
- 200 Crypto Exchanges



Public Policy Framework

- Guarding Against Illicit Activity



- Financial Stability

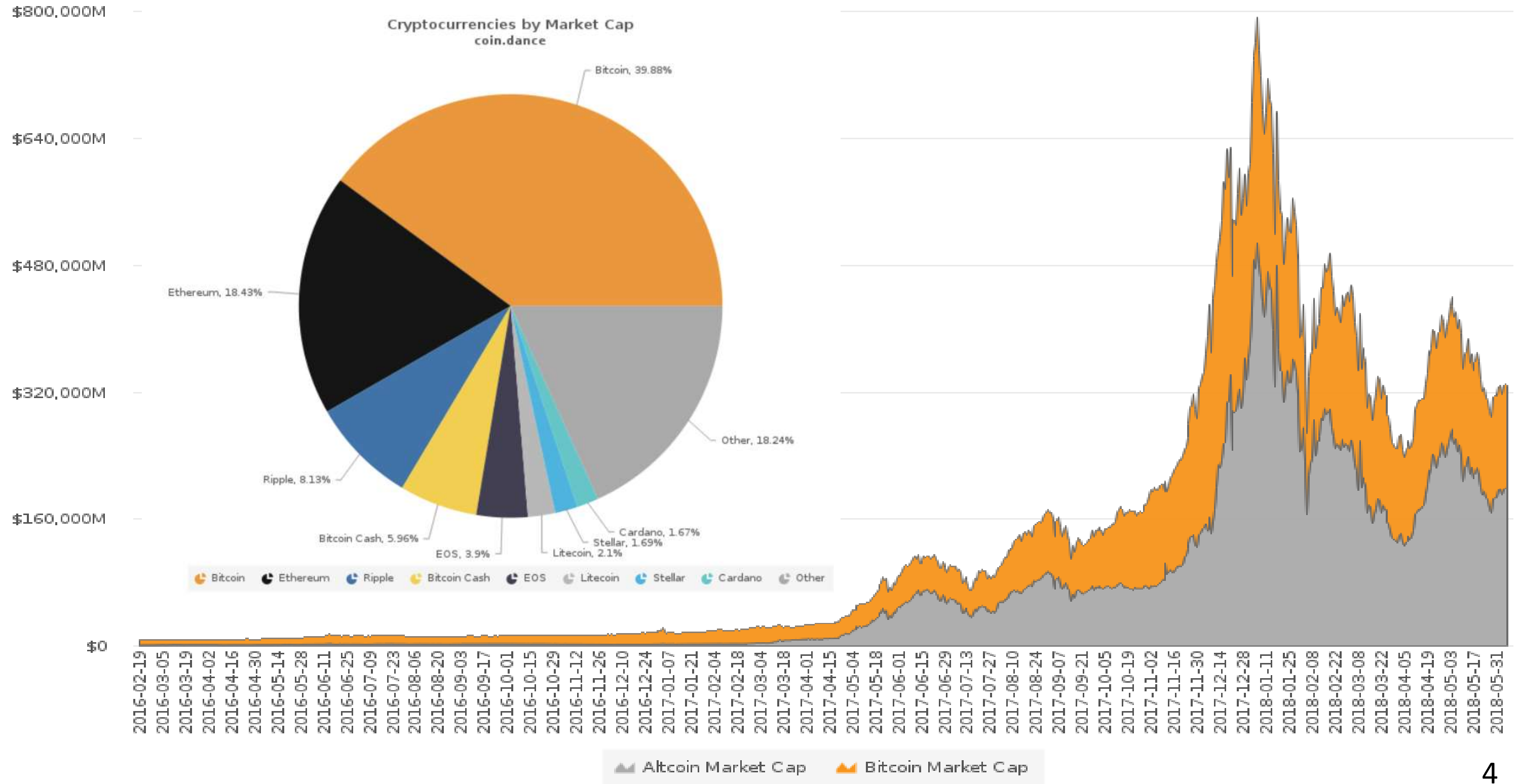


- Protecting the Investing Public



Cryptocurrency Market Caps (historical)

coin.dance



Initial Coin Offerings – Crowdfunding Facilitating both Investment & Consumption



- Purchasers Anticipate Profits through Appreciation
- Developers use Proceeds to Build Network
- Promoters Allocate Themselves Premined Tokens
- Tokens are Fungible & Transferable
- Tokens Issued Prior to a Functioning Network
- Scarcity Fostered with Preset 'Monetary Policy'
- Development, while Open Source, is Largely Centralized

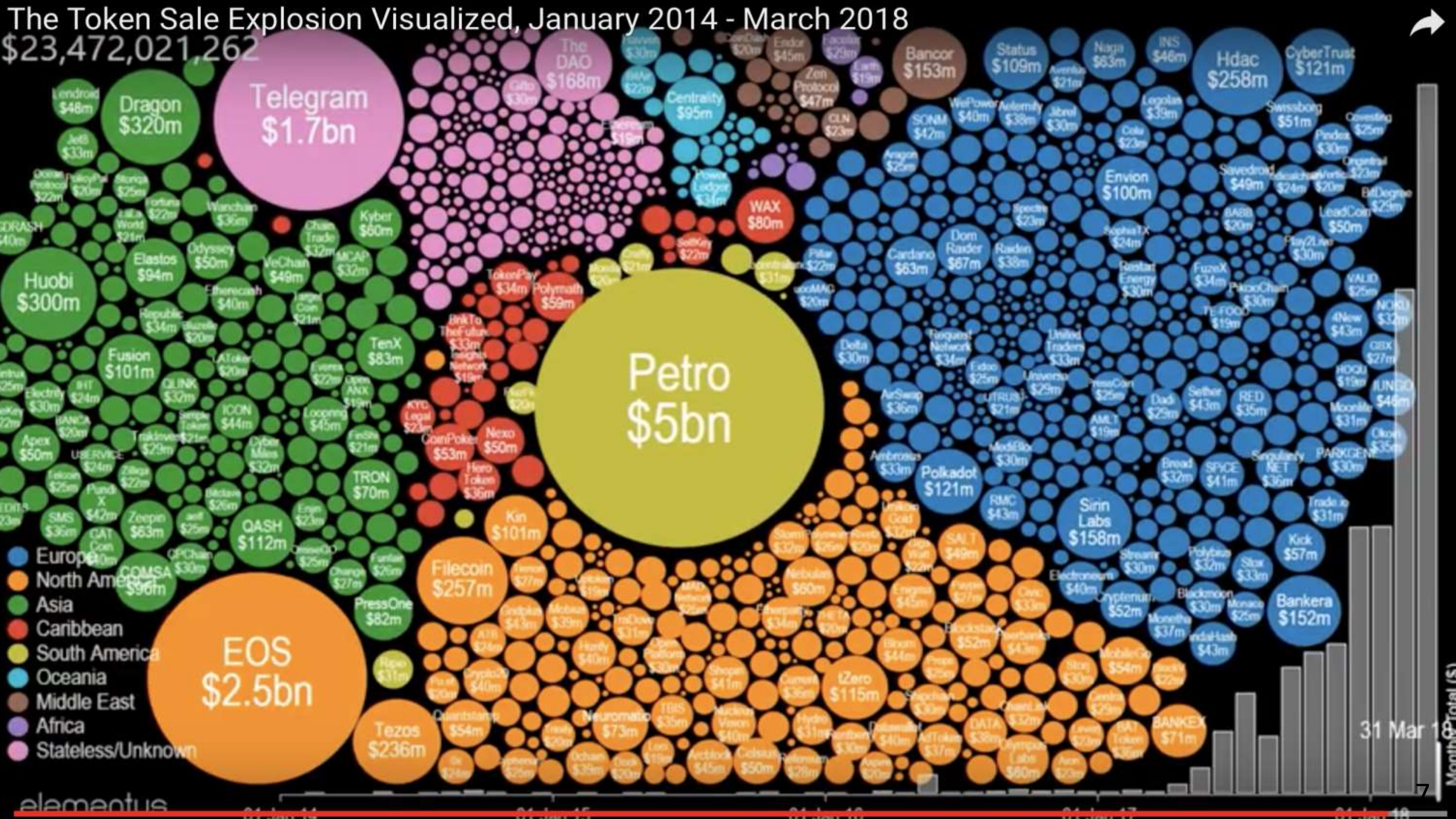
Initial Coin Offerings - Investment Schemes that Warrant Investor Protection



- False Distinction between ‘Investment’ & ‘Utility’ Tokens
- Most ICOs, Currently Issued Outside of Investor Protection Laws
- Significant ICO Fraud and Scams – Est. of 25% or as high as 81%
- Investor Protection Frameworks go beyond Consumer Protection Laws
- Economic Growth & Issuers benefit from Investor Confidence

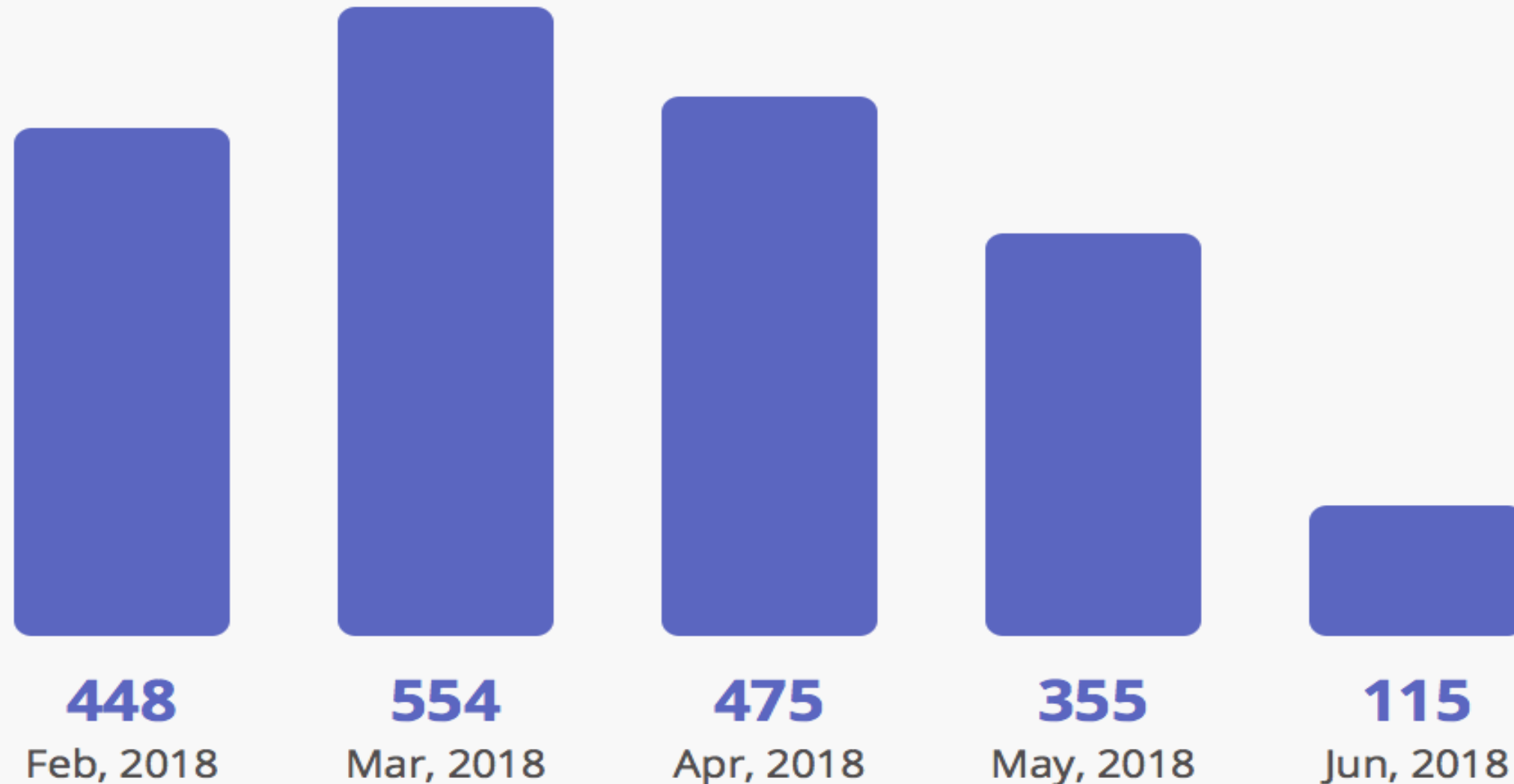
The Token Sale Explosion Visualized, January 2014 - March 2018

\$23,472,021,262



Published ICOs

The following graph shows the number of ICOs published in the past five months.



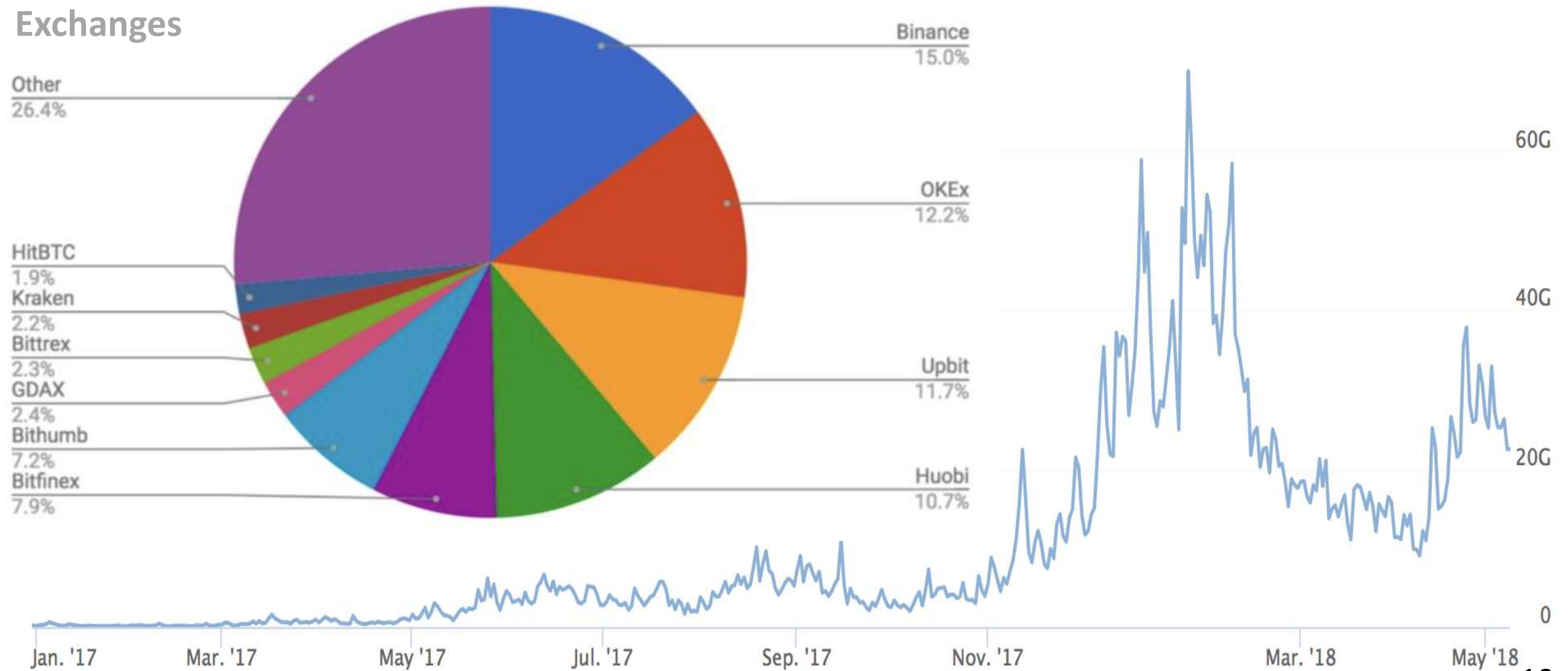
Crypto Exchanges



- Centralized - Matching Agents, Counterparties & Custodians
- Decentralized - Networks for Peer-to-peer Trading
- Have over 30 Million direct Members - Lack Intermediated Access
- Significant Losses due to Hacks
- Lack Meaningful Investor Protection or Market Integrity Rules

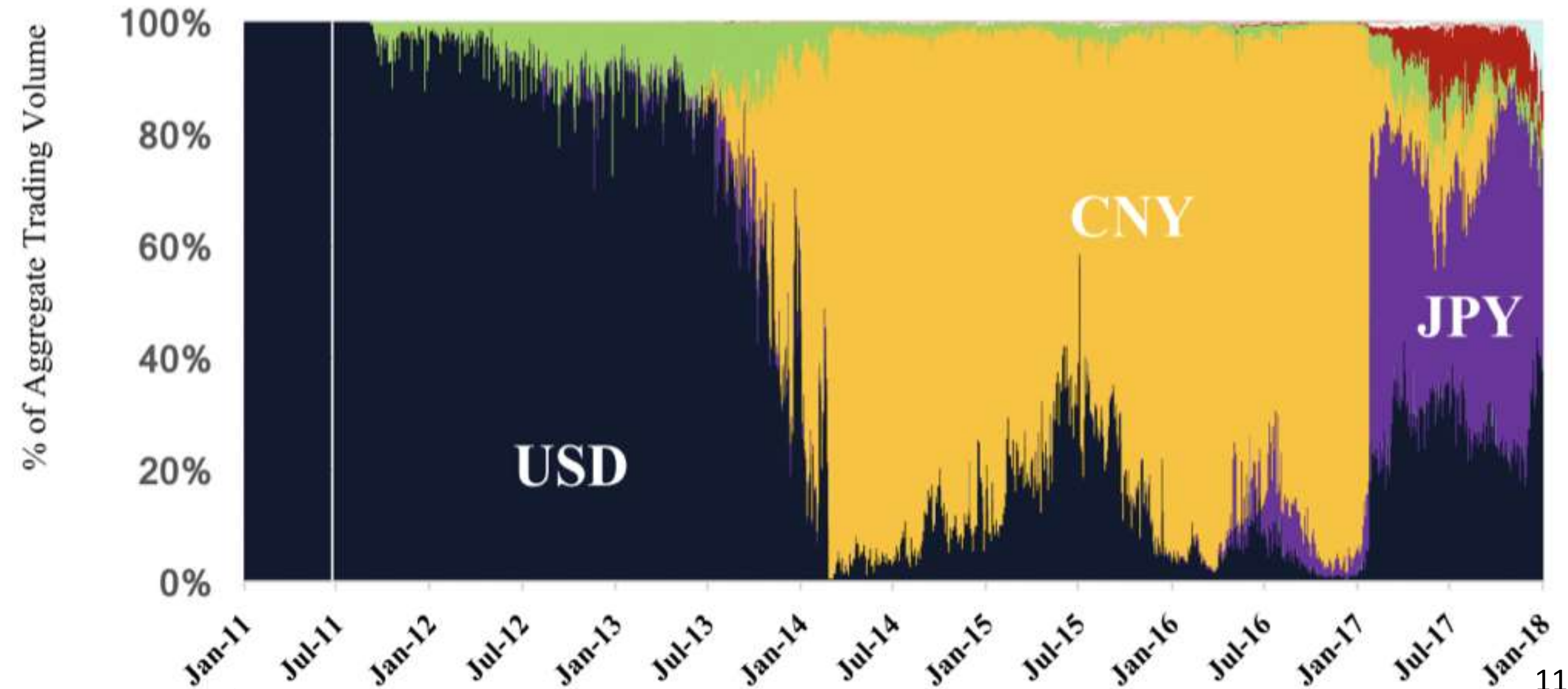
24 Hr Volume Exchanges

05/11/2017 - 05/11/2018

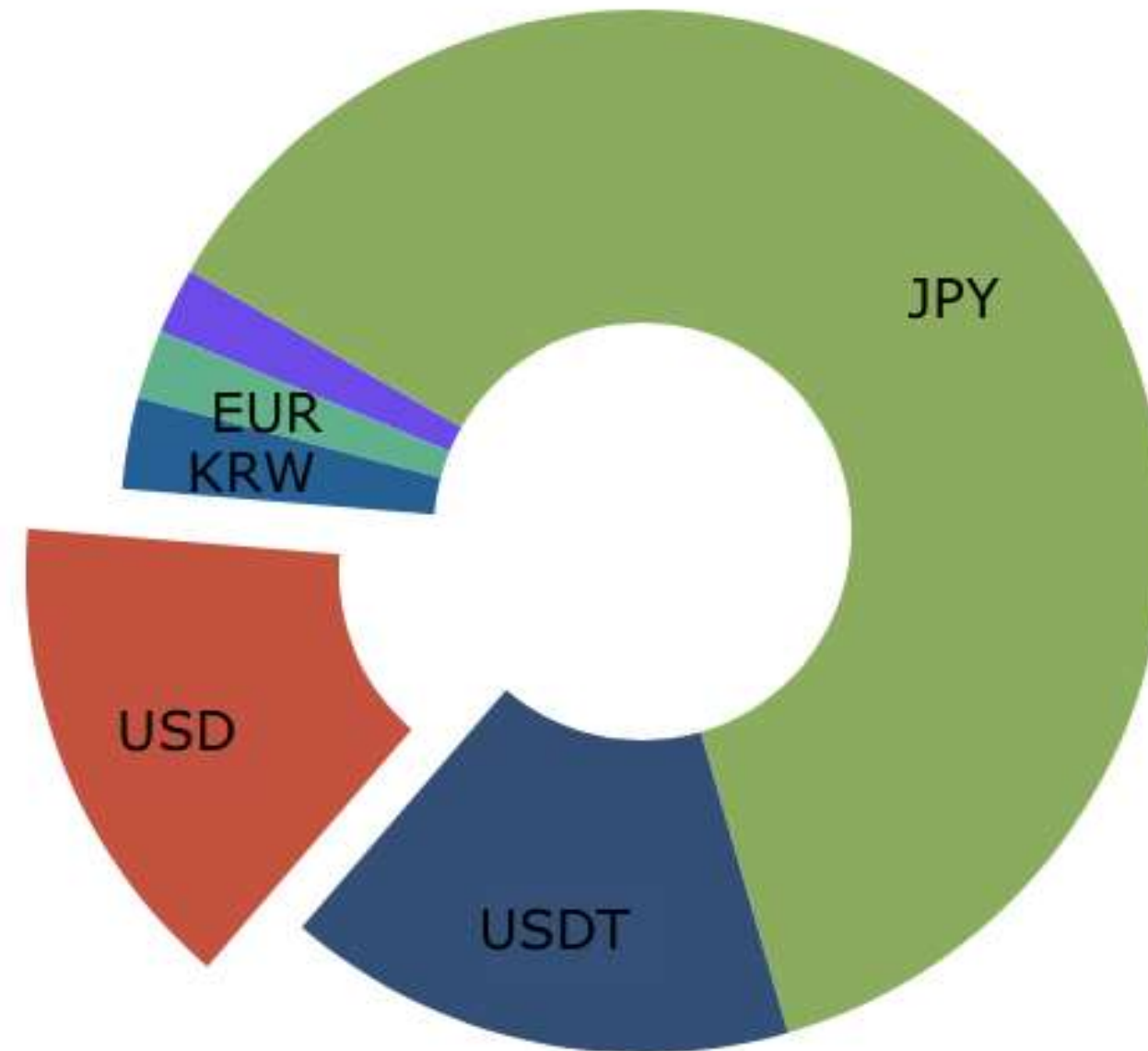


Global Daily Bitcoin Exchange Trading Volume

■ USD ■ JPY ■ CNY ■ EUR ■ KRW ■ PLN ■ HKD ■ USDT



BTC Volume by Currency



Global Approach



- Growing Consensus on
 - Guarding Against Illicit Activities
 - Monitoring for Stability
- Must do More, though, to Protect Investors
- FSB, BIS, IOSCO & OECD Debating & Making Recommendations
- At least 40 Countries Have Issued Statements on ICOs & Exchanges
- Japan, U.S., & Others Moving to Regulate Exchanges
- U.S. & Canada, in particular, seeking to bring ICOs within Securities Laws₁₃

U.S. Securities Law:

- The Howey Test (1946):
 - Is it an investment of money or assets?
 - Is the investment in a common enterprise?
 - Is there a reasonable expectation of profits?
 - Is it reliant on the efforts of a promoter or others?



The Duck Test:



“When I see a bird that walks like a duck and swims like a duck and quacks like a duck, I call that bird a duck.”

James Whitcomb Riley, poet



Ether - ETH

- ETH sold for Bitcoin in 2014, 1 year prior to Ethereum blockchain release.
- ETH ICO funded a common enterprise - Ethereum Foundation's development, legal and other costs.
- Purchasers had a reasonable expectation of profit based upon appreciation of ETH, solely from the efforts of the promoter, the Ethereum Foundation and others such as Consensys.
- In 42-day offering period pre-defined sales prices represented a 50% increase in the retail price of ETH.
- The Ethereum Foundation also played a central role in the hard fork related to attack The DAO smart contract in 2016.
- One might say, however, regardless of whether the ETH sale in 2014 passed the Howey test, circumstances today are sufficiently different with broad use of ETH on the decentralized Ethereum network.

Ripple - XRP



- XRP, was launched in 2013 with Ripple Labs initially holding 80 percent of the total tokens.
- Ripple has subsequently sold or used XRP in operations, now owning 60 percent of the tokens.
- Purchasers invested money or gave valuable services to a common enterprise, Ripple.
- Purchasers had a reasonable expectation of profit based upon the efforts of the promoter, Ripple.
- Ripple's CEO has said, "To build XRP liquidity, we have been mindful over the years about how we distribute XRP. ... We engage in distribution strategies that we expect will result in a strengthening XRP exchange rate against other currencies."
- Ripple's web site maintains a link to buy XRP on 16 different exchanges.
- Ripple leads development of the platform and partners with firms to use the network,
- Ripple possibly influences significant control over which nodes can validate transactions, and releases new white papers for the network.
- One might say, however, that XRP has been usable in some fashion on the Ripple network since 2013 and that XRP and the Ripple network might still exist even if Ripple, the company, disappeared.

EOS



- A Cayman Islands company, Block.one, raised nearly \$4 billion through an ICO ended June 1, 2018, of the token, EOS.
- EOS tokens were purchased for ETH from a common enterprise, Block.one developing the yet to be released EOS.IO software.
- Purchasers had a reasonable expectation of profit solely based upon the efforts of Block.one, or others who might build uses for the EOS tokens.
- Block.one announced a \$1 billion venture capital initiative, EOS VC, to foster the EOS ecosystem investing in businesses using the EOS.IO software.
- Block.one reserved 10% of all tokens for their ownership.
- One might say, however, that Block.one excluded U.S. citizens, residents or entities from purchasing EOS tokens.

Path Forward: Public Policy Challenges



- Updating Laws to Cover Crypto Finance
- Adapting Existing Regulations, where appropriate
- Remediation of Existing ICOs & Exchanges for Investor Protection
- Enhancing Custodial Arrangements on Exchanges and Wallets
- Tracking Beneficial Ownership
- Ensuring Tax Reporting and Compliance
- Stopping Illicit Activity on Decentralized Exchanges
- Staying Abreast of Technological Developments
- Limiting International Regulatory Arbitrage

Conclusions



- Blockchain Technology has Potential to Transform Financial Sector
- Addressing Technical & Commercial challenges could lower Costs, Risks and Economic Rents
- Broad Adoption Requires coming within Public Policy Framework
- Public Confidence Can Only be Built on Investor Protection
 - Consumer Protection Frameworks will not be Enough.
- Public, Blockchain Technology & Finance Will Reap Benefit