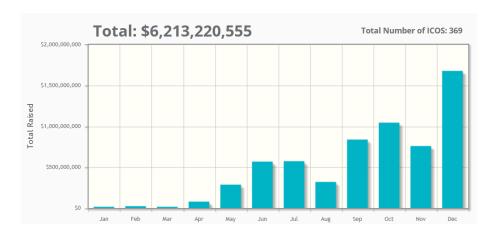
## Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales

Sabrina Howell, NYU
Marina Niessner, Yale
David Yermack, NYU, ECGI & NBER

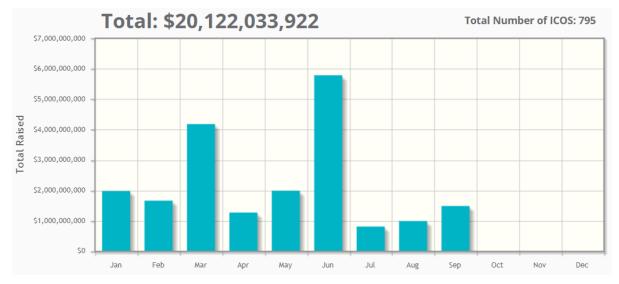


#### ICOs in 2017 and 2018 (9 months)

2017



2018



Source: www.coinschedule.com

### Largest ICOs by amount raised

• Block.one	(EOS)
-------------	-------

- Telegram Open Network
- Dragon Coin
- Huobi
- Hdac
- Filecoin
- Tezos
- Sirin Labs
- Bancor
- TheDAO

\$4.1 billion

\$1.7 billion

\$320 million

\$300 million

\$258 million

\$257 million

\$232 million

\$158 million

\$153 million

\$152 million

# **Precursors of tokens:** Social media



QQ: China's New Coin of the Realm?

Officials Try to Crack Down As Fake Online Currency Is Traded for Real Money

By Geoffrey A. Fowler and Juying Qin Updated March 30, 2007 12:01 a.m. ET

HONG KONG -- China's fastest-rising currency isn't the yuan. It's the QQ coin -- online play money created by marketers to sell such things as virtual flowers for instantmessage buddies, cellphone ringtones and magical swords for online games.

In recent weeks, the QQ coin's real-world value has risen as much as 70% .

It's the most extreme case of a so-called virtual currency blurring the boundaries between the online and real worlds -- and challenging legal limits. A Chinese Internet company called Tencent Holdings Ltd. designed the payment system in 2002 to allow its 233 million regular registered users to shop for treats in its virtual world. Virtual currencies are in use in many countries -- but nowhere have they taken root more deeply than in China.

### **Precursors of tokens:** Online gaming





4Story Gold

(US)

Currencies Powerleveling Game Time Cards | Shops | Articles News Register (Shop) Login **MMORPG Gold Prices and Reviews** Top Rated Sellers 9Dragons Gold InGameDelivery Hate buying gold, just to find out that you could have gotten it at half the 9.9/10 price somewhere else? Can't stand getting ripped off by fraudulent gold Age of Conan Gold (EU) sellers? Then MMOBUX can help. MMOBUX compares prices and provides Avatarbank Age of Conan Gold (US) reviews for more than 406 online shops that sell currencies like World of 9.0/10 Warcraft Gold, Eve Online ISK or Lord of the Rings Online Gold. On our site Age of Wushu Liang you can find the cheapest and most reliable sellers in a matter of seconds. Koala Credits 8.5/10 Aion Kinah (EU) **Quick Compare** Aion Kinah (US) Guy4Game 7.7/10 Albion Online Gold Please select a game, server, and faction to show available shops and All Points Bulletin Cash prices. 7.4/10 Select game **IGXE** Allods Online 7.3/10 ---Select game---Game: Anarchy Online Credits Goldah Arcane Legends Gold 7.2/10 ArcheAge Gold (EU) **Latest News** Bank of WoW ArcheAge Gold (US) Monthly RMT Roundup: November and December Atlantica Online Gold MmoGah

Last update: May 23, 2017 21:07

### Precursors of tokens: Sports arena seat licenses

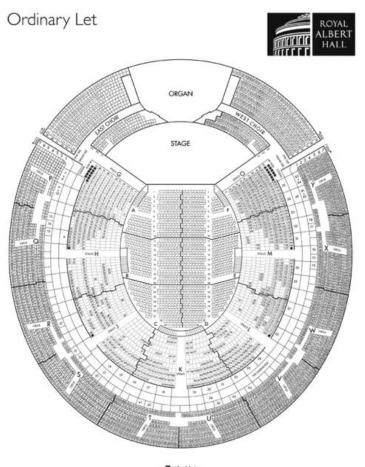






#### Royal Albert Hall

#### **Constructed 1867-1871**



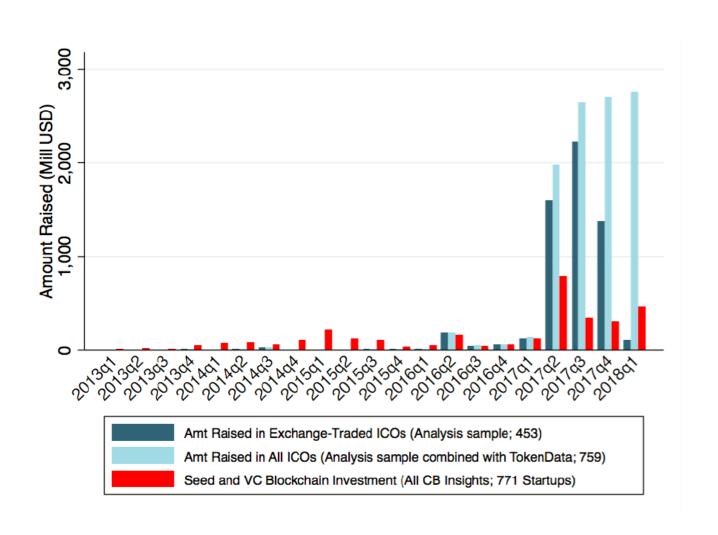
"Known as Members of the Corporation (or Seatholders), these original founders acquired seats. . .

These arrangements continue to this day – currently the Members own 1,270 seats out of the Hall's 5,272. . .

By acquiring permanent seats at the Hall the Seatholders have private property rights (personal estate, not real estate) which can be given or sold by one party to another. . . The charity exists subject to these permanent private property rights."

- www.royalalberthall.com

#### Sample coverage



#### Method of distribution

•	Had a	pre-s	sale	45%

- Dynamic pricing 34%
- Auction pricing 5%
- Accepted ETH 66%
- Accepted BTC 41%
- Accepted LTC 9%
- Accepted USD 10%
- Accepted EUR 3%

### **Bonding and disclosure**

•	Twitter page	97%
•	Website	92%
•	Telegram group	83%
•	White paper	81%
	<ul> <li>Budget for use of proceeds</li> </ul>	57%
•	Source code posted on Github	66%
•	Lock-up period for founder	36%
•	VC-backed	11%

### **Bonding and disclosure**

7 3	
(1)	(2)
Liquidity	Volume
2.3***	1.7***
(.49)	(.37)
.13	.1
(.75)	(.48)
.86*	.81**
(.48)	(.36)
.73*	.58**
(.35)	(.24)
2.4***	1.8***
(.45)	(.47)
1***	1***
(.31)	(.21)
35	47
(.62)	(.75)
1.6**	1.4**
(.58)	(.54)
	Liquidity 2.3*** (.49) .13 (.75) .86* (.48) .73* (.35) 2.4*** (.45) 1*** (.31)35 (.62) 1.6**

### Founder background

	(1)	(2)
	Liquidity	Volume
Male	18	22
	(1.4)	(.9)
Crypto exper.	41	52**
	(.34)	(.21)
Finance exper.	.28	.00091
	(.51)	(.41)
Comp. sci. exper.	.71	.42
	(.42)	(.32)
Entrep. exper.	1.3***	1.2***
	(.31)	(.23)

### Token purpose and blockchain

(1) iquidity	(2)	(3)	(4)
anidity		\ /	(*)
quidity	Volume	Liquidity	Volume
1.5***	1.4***		
(.31)	(.31)		
1.4**	1.2**		
(.56)	(.44)		
-1	61		
(.96)	(.65)		
		3.1**	1.7**
		(1.1)	(.7)
		.17	.76
		(1)	(.98)
	1.5*** (.31) 1.4** (.56)	1.5*** 1.4*** (.31) (.31) 1.4** 1.2** (.56) (.44) -161	1.5*** 1.4*** (.31) (.31) 1.4** 1.2** (.56) (.44) -161 (.96) (.65)  3.1** (1.1) .17

#### **Conclusions**

- Investors clearly respond to aspects of ICO design
  - Utility features
  - Reduction of asymmetric information
  - Background of founder

 ICO market is growing quickly and developing more liquidity