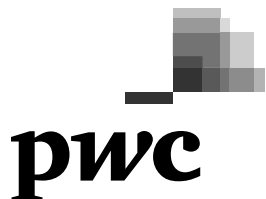

Initial Coin Offerings

&

A strategic perspective
on ICOs



Initial coin offerings (ICOs) are a relatively new phenomenon and investment volumes are growing exponentially

Definition

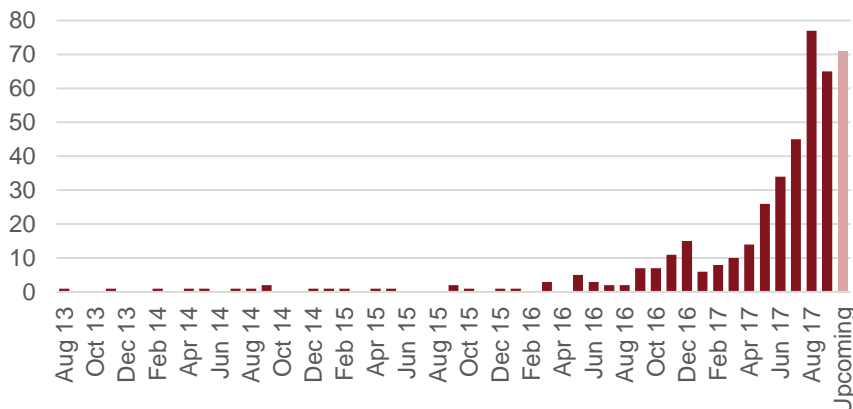
Initial coin offering (“ICO”, also token launch or token generation) is a term describing a **limited period** in which a **company** sells a predefined number of **digital tokens** (crypto coins) to the **public**, typically in exchange for major crypto-currencies (as of today, mostly Bitcoins and Ether).

IOCs are still largely unregulated to date, and it often remains unclear whether a token represents a **security, utility token or digital currency**, and how any of these can be enforced. Prospectively, ICOs can be established as an **alternative** to classic debt/ capital-funding as performed today by Venture Capital/ Private Equity firms and banks.

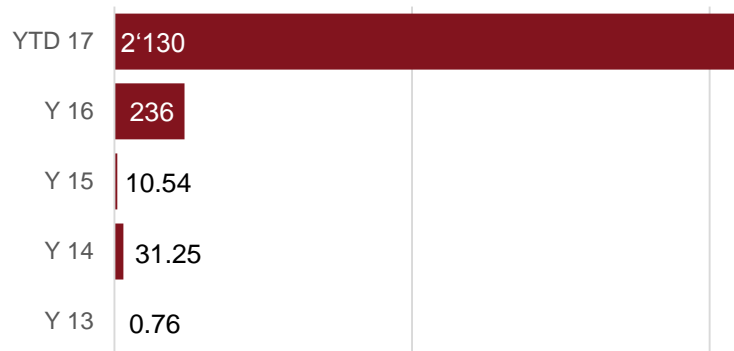
Average ICO characteristics

Year	Ø duration / ICO (days)	Ø volume / ICO (USDk)*	# ICOs
2013	41	381	2
2014	68	3'814	8
2015	30	1'101	8
2016	41	4'816	56
YTD 2017	30	7'889	356**
All	34	6'802	430**

Number of ICO globally (per month)



Global ICO volume (USDmn)*







* Calculations based on currency exchange rates on end date of ICO. As Ether and Bitcoin exchange rates are highly volatile, actual and current market capitalization of the companies today may differ significantly from figures shown in the table. ICO funding amount until 11.09.2017 considered.

Source: PwC Strategy& analysis

Largest ICOs are hitting the USD 100mn mark – of which 4 out of 6 are hosted in Switzerland

The 15 biggest ICOs

Date: 11.09.2017

		Total raised amount (USDmn)*	Status	End of ICO	Duration (days)	Industry	Focus	Country
1	Tezos	238.1	Past	14.07.2017	14	Technology	Smart contract platform	Switzerland 
2	Filecoin	203.6	Past	07.09.2017	28	Technology	Data storage network	USA
3	EOS	159.2	Past	11.06.2018	5	Technology	IT Infrastructure	USA
4	Bancor	156.6	Past	12.06.2017	<1	Fintech	Cryptocurrency	Switzerland 
5	The DAO	142.5	Past	27.05.2016	28	Fintech	Venture capital platform	Switzerland 
6	Status	95.0	Past	20.06.2017	<1	Technology	Messaging platform	Switzerland 
7	TenX	83.1	Past	24.06.2017	<1	Fintech	Digital-only bank	Singapore
8	Press.one	82.0	Past	19.07.2017	7	Technology	Content publishing	China
9	MobileGo	47.6	Past	24.05.2017	30	Entertainment	Gaming marketplace	USA
10	SONM	41.2	Past	19.06.2017	4	Technology	IT Infrastructure	Russia
11	Basic Attention Token	36.0	Past	31.05.2017	<1	Technology	Browser	USA
12	Stox	33.3	Past	16.08.2017	15	Fintech	Prediction market platform	Canada
13	Polybius	32.4	Past	06.07.2017	36	Fintech	Digital-only bank	Estonia
14	Civic	29.4	Past	22.06.2017	2	Technology	Security/ data storage	USA
15	Storj	25.4	Past	25.05.2017	6	Technology	Cloud storage	USA

* Calculations based on currency exchange rates on end date of ICO. As Ether and Bitcoin exchange rates are highly volatile, actual and current market capitalization of the companies today may differ significantly from figures shown in the table. ICO funding amount until 11.09.2017 considered.

Source: PwC Strategy& analysis

ICOs remain a challenge from several angles: legal status, regulation, KYC/AML, tax & cybersecurity

Key challenges

<p>Legal nature of ICOs and legal status of ICO-related claims</p>	<p>Tokens (coins) can have different functions, which triggers the way how to treat them from a legal perspective. Three main forms exist to date (incl. hybrid combinations, in most cases):</p> <ul style="list-style-type: none"> • Security: Tokens with security character, e.g., debt, equity or derivatives, with an income generating component and potential rights vis-à-vis the issuer, e.g., governance, participation, ownership • Digital currency: Tokens with an attributed value for exchange/ transactions, asset/ value storage and/ or unit of account • Utility token: Tokens used for supporting services/ functionalities on blockchain-based platform <p>Open questions are predominantly around applicability of laws, legal competence and enforceability</p>
<p>Regulatory treatment in Switzerland (FINMA)</p>	<ul style="list-style-type: none"> • FINMA informally voiced support for blockchain developments and is looking also into ICOs • FINMA treats an ICO depending on functionality of tokens (i.e., lending-, utility/ supporting or donating/ charity character of tokens) • FINMA provides feedback on specific requests about ICOs on a case-by-case basis • FINMA has not yet officially announced any regulations or investor protection around ICOs
<p>Emerging global regulation of ICOs</p>	<p>Worldwide, regulators start to look into ICOs, but only few have actually taken actions (e.g. South Korea, USA, Singapore, Canada). The community, incl. leading blockchain entrepreneurs and experts, believe that the US SEC and other major regulators will soon regulate, particularly from a capital markets, tax and KYC/ AML perspective.</p>
<p>Tax treatment (incl. FATCA, AEI)</p>	<p>As ICOs are a nascent phenomena, most tax authorities do not have specific regulations in place yet. Uncertainty around national and extraterritorial treatment by US authorities (e.g., around FATCA or AEI) increase uncertainty for blockchain startups to do an ICO in the United States or offer tokens to US investors. The current trend to lock ICO proceedings in foundations may soon also get other countries to act on ICO taxation.</p>
<p>Importance of cybersecurity around ICOs</p>	<p>Many ICOs still lack proper cybersecurity which can represent a major threat for investors. As most ICOs raise money in the form of cryptocurrencies (e.g., Ether and Bitcoins), high-volume transactions provide an attractive target for criminals. In July 2017 alone, two major hacks during ICOs took place:</p> <ul style="list-style-type: none"> • Veritaseum was attacked by hackers, who got access to ca. USD 4.5mn (July 23, 2017) • Hackers stole ca. USD 7.4mn during CoinDash's ICO campaign (July 17, 2017) <p>Beside ICOs, several cryptocurrency wallets (where tokens/ coins get stored) have been hacked recently. E.g. hackers seized ca. USD 32mn benefiting from a protocol security gap in Parity wallets (July, 2017).</p>



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