

SOME EMPIRICAL DATA ON ICOs

Dirk A. Zetsche and Emilija Pashoska

ADA Chair in Financial Law (inclusive finance), University of Luxembourg

The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators,
Prof. Dirk A. Zetsche, Prof. Ross P. Buckley, Prof. Douglas W. Arner, Linus Föhr
(https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3072298)

ICO RESEARCH PROJECT AT ADA CHAIR

- ✓ ADA CHAIR ICO DATABASE: 1000 ICOs per October 2018 (20-25% of all ICOs worldwide)
- ✓ Use of ICOs for developed and less developed countries
- ✓ Analysis of White Papers, additional information from 30 websites on ICOs
- ✓ Objective: understand the ICO market, increase transparency
- ✓ Focus today: investor protection; size? Importance?
- ✓ Future: correlations etc.

For details see
Zetzsche/Buckley/Arner/Föhr, The ICO Gold Rush,
Harvard Int. Law Journal (in press), online <https://ssrn.com/abstract=3072298>

Agenda

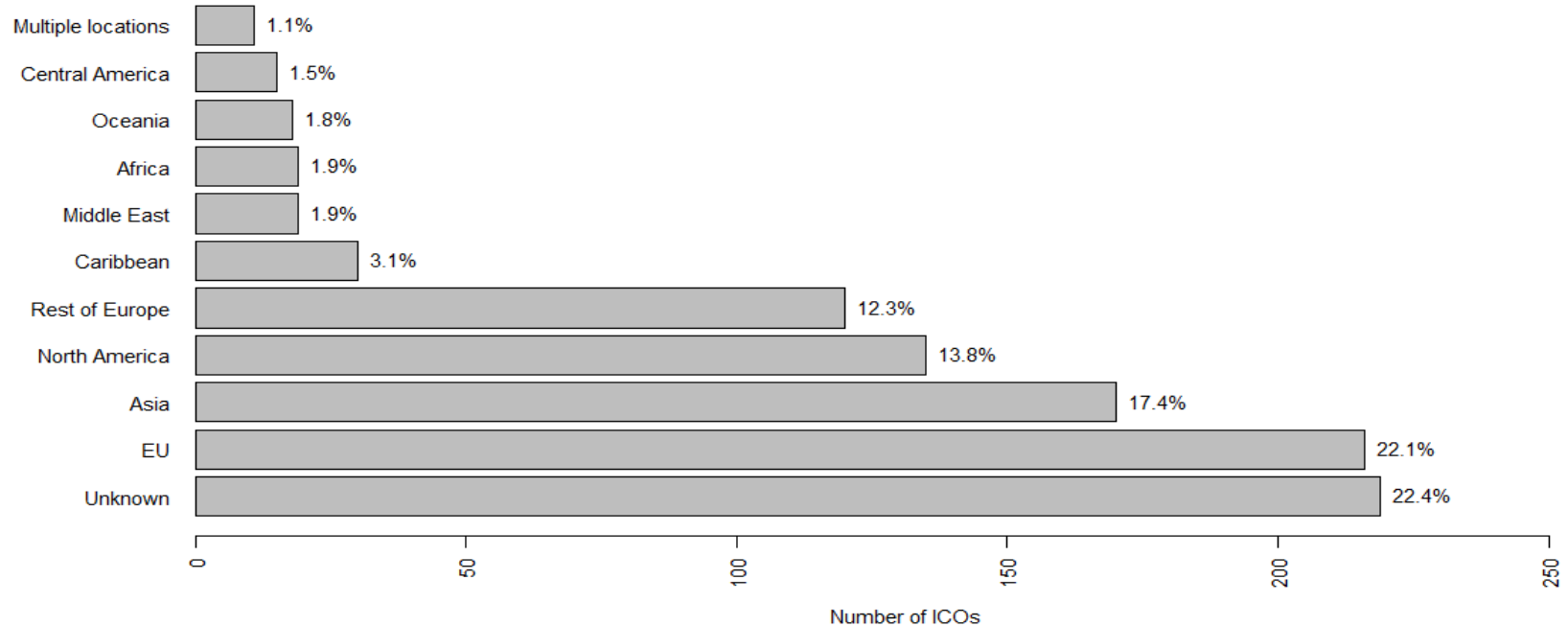
- Some impressions on size
- What ICOs finance
- Types of ICOs?
- Quality of White Papers
- A new approach to data gathering

A.

Size

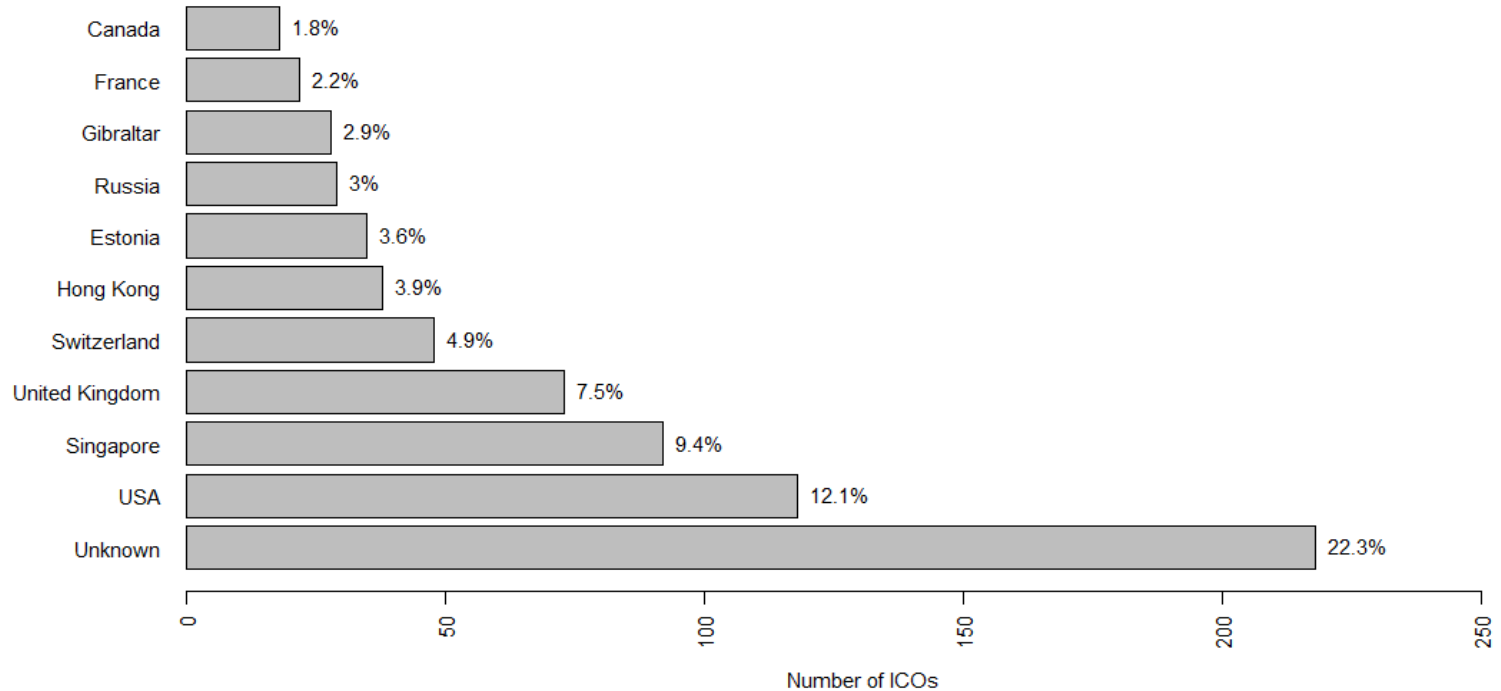
BREAKDOWN BY NUMBER OF ICOs: REGIONS

Regions by number of ICOs



BREAKDOWN BY NUMBER OF ICOs: COUNTRIES

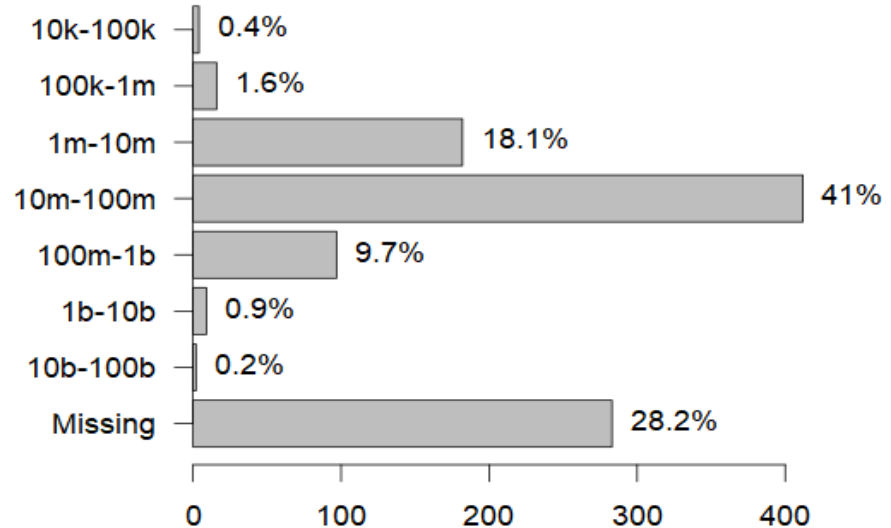
Jurisdictions by number of ICOs



WHAT ICO PROMOTERS WANT

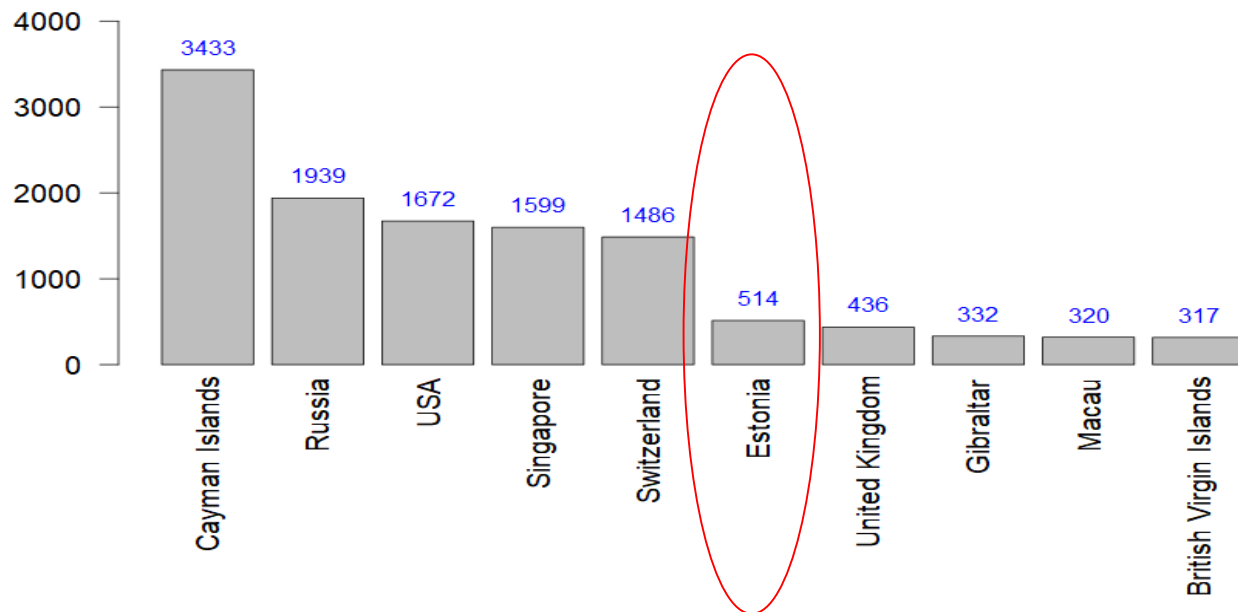
- Market Cap = Maximum amount ICO promoters ask for
- In total more than 1 Trn. USD

Distribution of ICOs by MarketCap



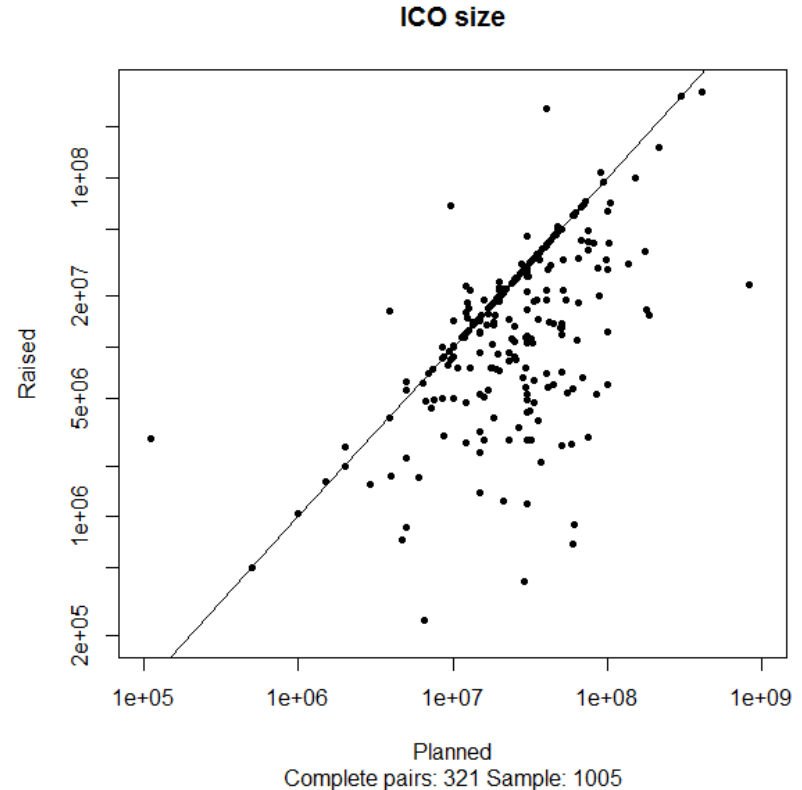
REGIONAL BREAKDOWN BY AMOUNT ASKED FOR

Jurisdictions by Volume (in mil. USD)



WHAT ICO PROMOTERS GET

- Subscriptions (money paid on ICOs) much lower
- In sample of 321 ICOs where have full data:
 - av. subscription: 28.8 Mio. USD per ICO
 - total subscriptions: 15.5 Billion USD
- Assuming there are >4000 ICOs:
ICOs likely to have raised 60-100 Billion USD globally



CAPITAL MISALLOCATION?

Asymmetry of expectations

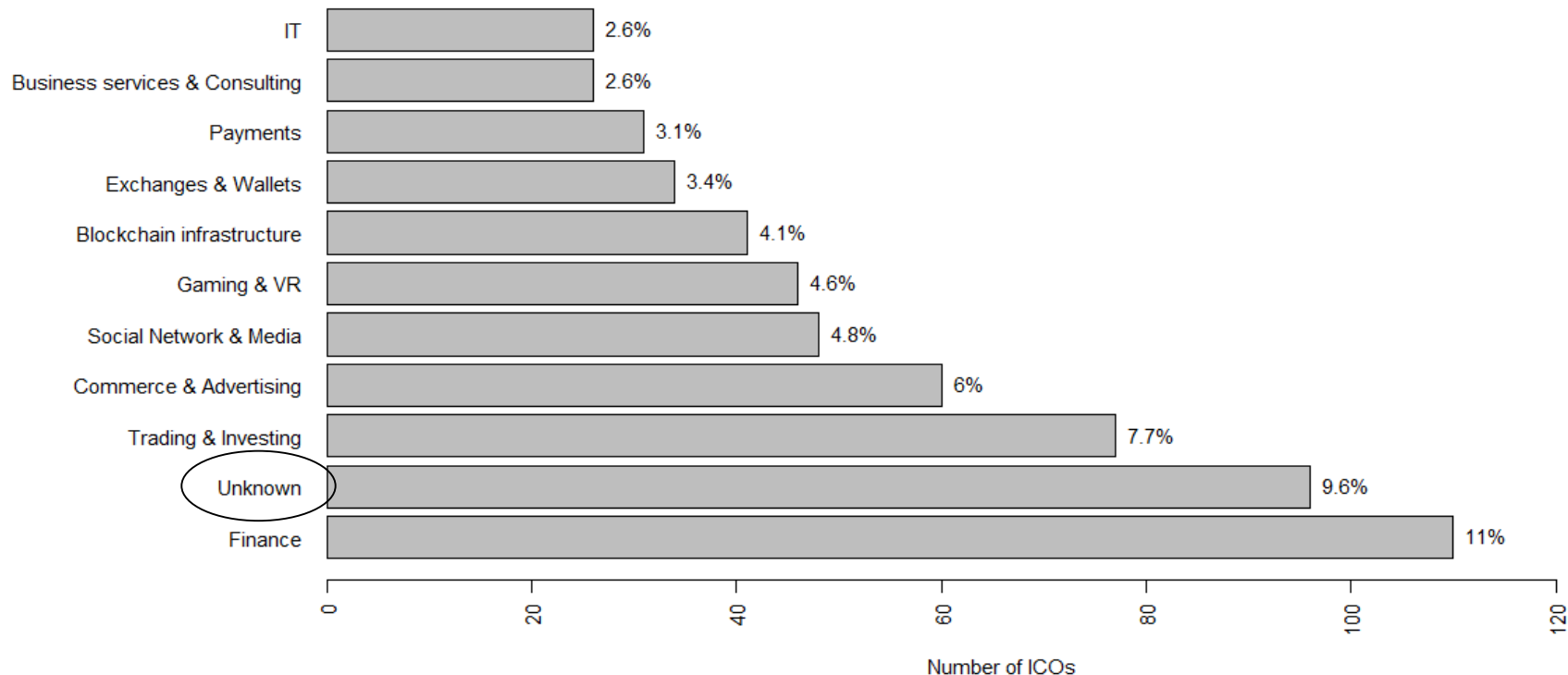
- Most ICOs achieve some significant funding
(av. 28.18 million USD)
- Only 18% do not reach self-set minimum cap
- Very few reach amount asked for (Market Cap), significant difference
- What does it tell us?

B.

Business / services financed

BUSINESS/UTILITY FINANCED THROUGH ICOs

ICOs by Industry



C.

Type of ICOs

COIN CHARACTERISTICS

Equity token

- Cash-flow rights (eg dividend) + participation (eg voting rights etc.)
- Pooled ⇔ segregated funds

Currency token

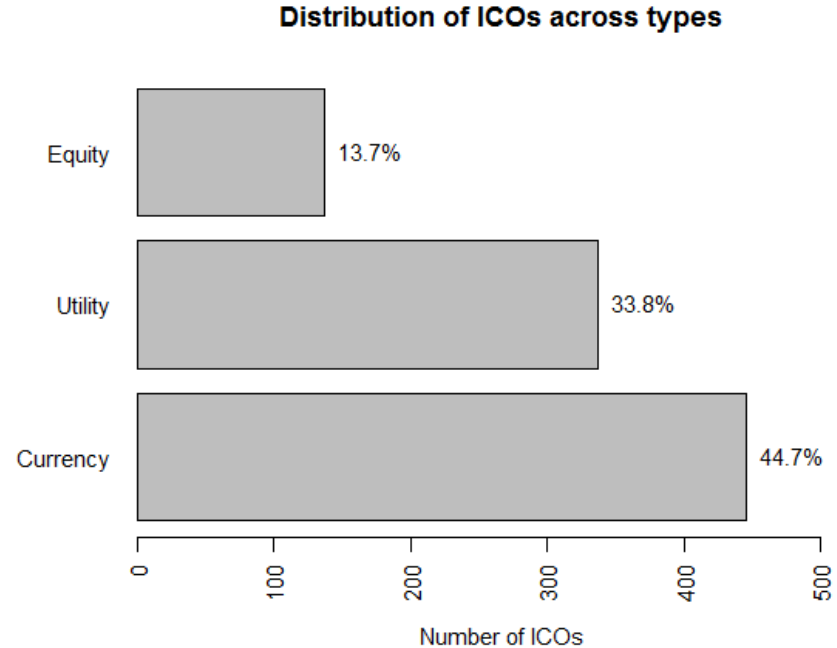
- Backed by value of an underlying currency, characterized by liquidity
(example: 1 token = 1 USD)

Utility token

- Usage rights to holder (e.g. preferential access, software license etc.)

TYPE OF ICOs

- 44.7% currency token
- 33.8% utility token
- 13.7% equity token
- 7.8% insufficient info to be qualified



FINANCIAL LAW: EQUITY TOKENS

- **“securities”** in some jurisdictions → Registration & prospectus obligation;
U.S. SEC in *Munchee Inc.*: Assessment of economic realities underlying transaction required for determining status as security;
Europe: MiFID “other participations *equivalent to shares*”?
- **Investor portfolio management:** Tokens may be financial instruments if “equivalent to shares” – cash flow + some influence
- **Collective investment:** eg Alternative Investment Fund (EU), pooled investment, CIS etc?
- **Derivative:** if coin derives value from “underlying asset” → AUS, US
- **AML/CTF**

CURRENCY TOKENS

- **Payment legislation in some countries**
- **AML/CTF in some countries**
- ...

UTILITY TOKENS

- **Consumer legislation**
- **Directive on cross-border provision of services etc.**
- **Weak pan-European enforcement**

THE DATA ISSUE

- **White papers not standardized, disclosures need to be categorized.
Some discretion.**
- **ICOs with mixed characteristics?**
- **Do the legal characteristics match the investors' perspective, or:
Do investors care at all?**

D.

Quality of White Papers

WEAK LEGAL PROTECTION

Lack of accountability of issuer

- 61% do not provide information on applicable law
- ≈ 31% no background information on sponsors
- Name of issuer ≠ author of whitepaper in 29.38%
- Contact details often not provided
- Legal means useless

E.

A new approach to data gathering

Objectives:

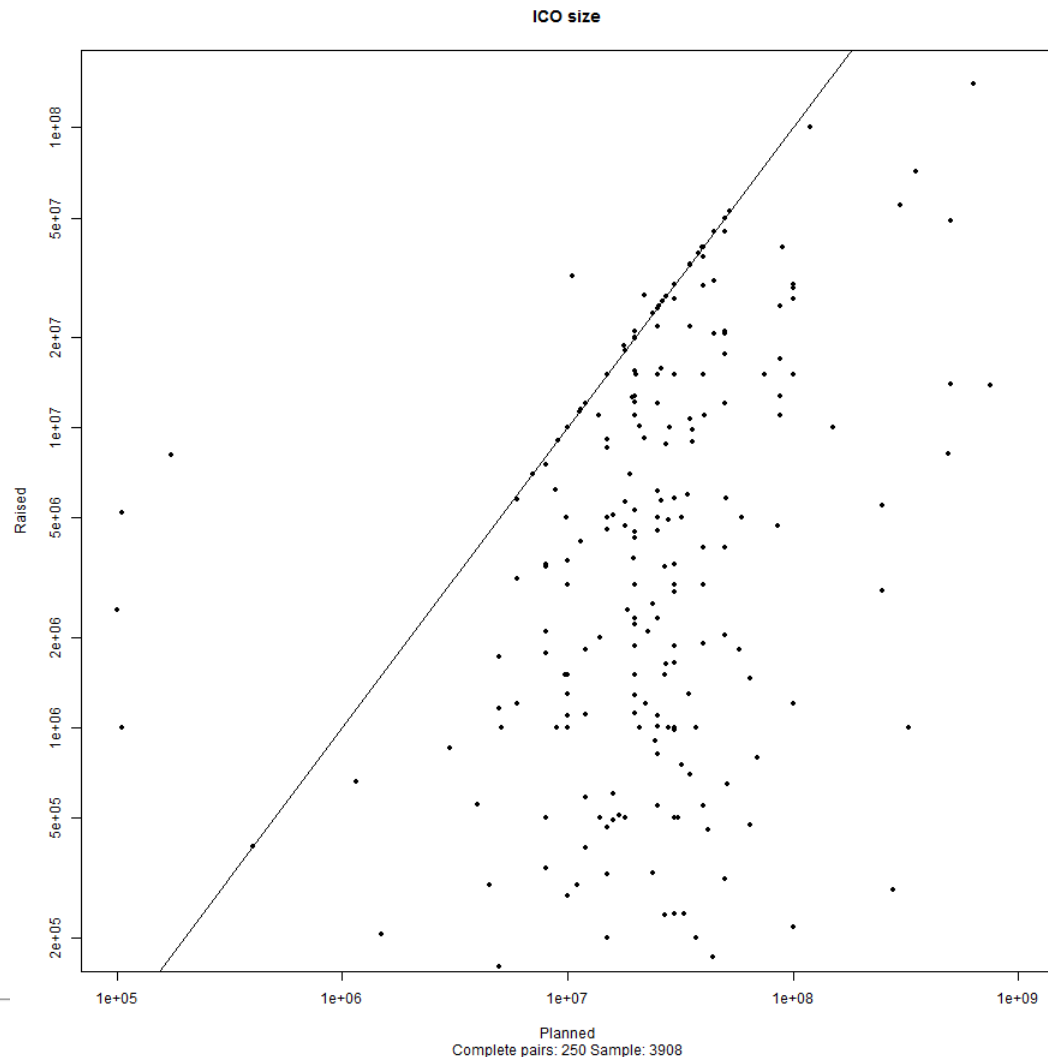
- (1) faster overview of ICO market**
- (2) check on white paper database**
- (3) Include market data**



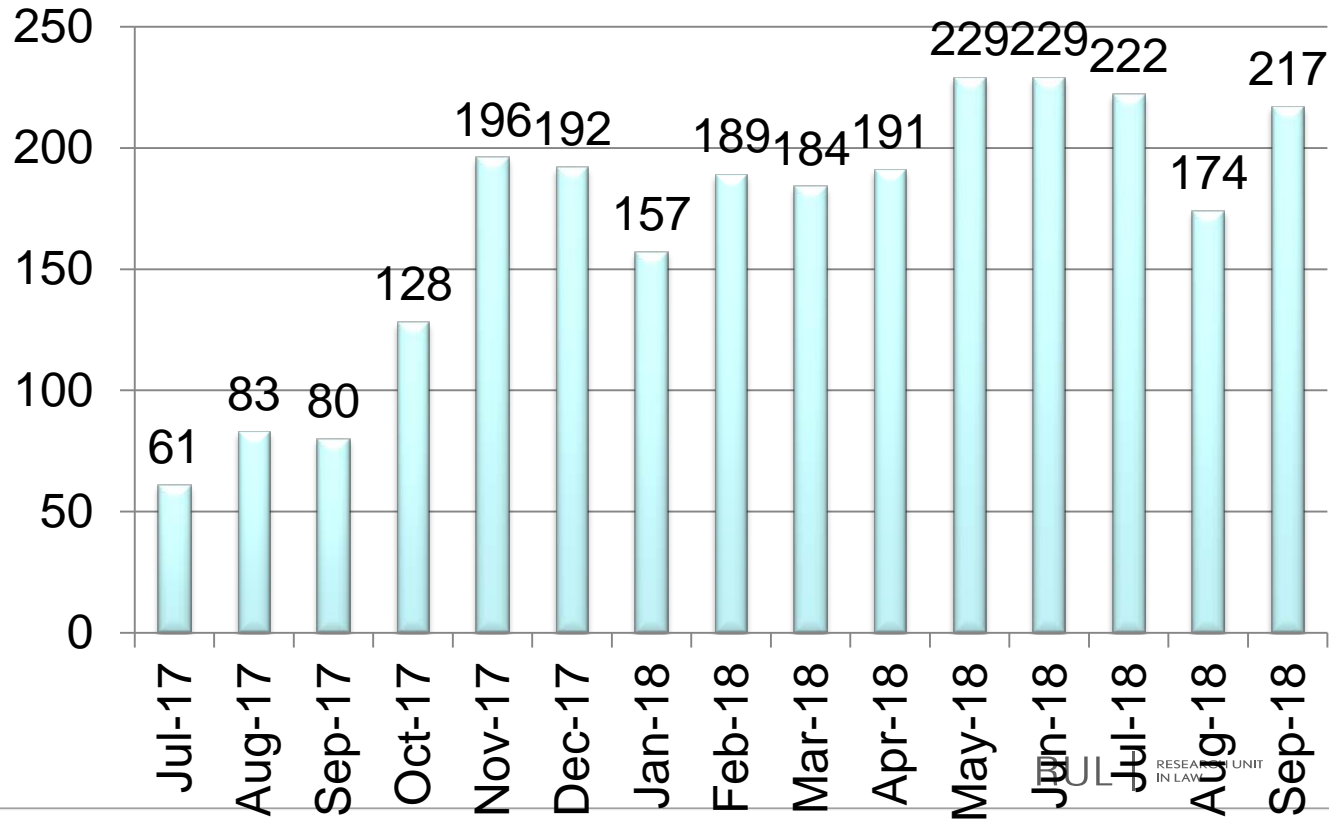
3,909 ICOs; sample size differs on variables

Category	Effective sample size	Finding
Average initial token price	1758	1.89 USD
Average pre-sale period duration	1684	40 days
Average sale period duration	2905	54 days
Longest (shortest) sale (country)	2615	Brazil (Singapore)
Average raised USD	1044	16.9 mil.
Average amount asked for (goal):	1603	124.3 mil.
Average min. amount asked for (soft cap)	1293	16 mil.
Total USD raised	1044	17.6 bn.
Longest (shortest) pre-sale	1684	3 years (1 day)
Longest (shortest) sale	2615	5 years (1 day)

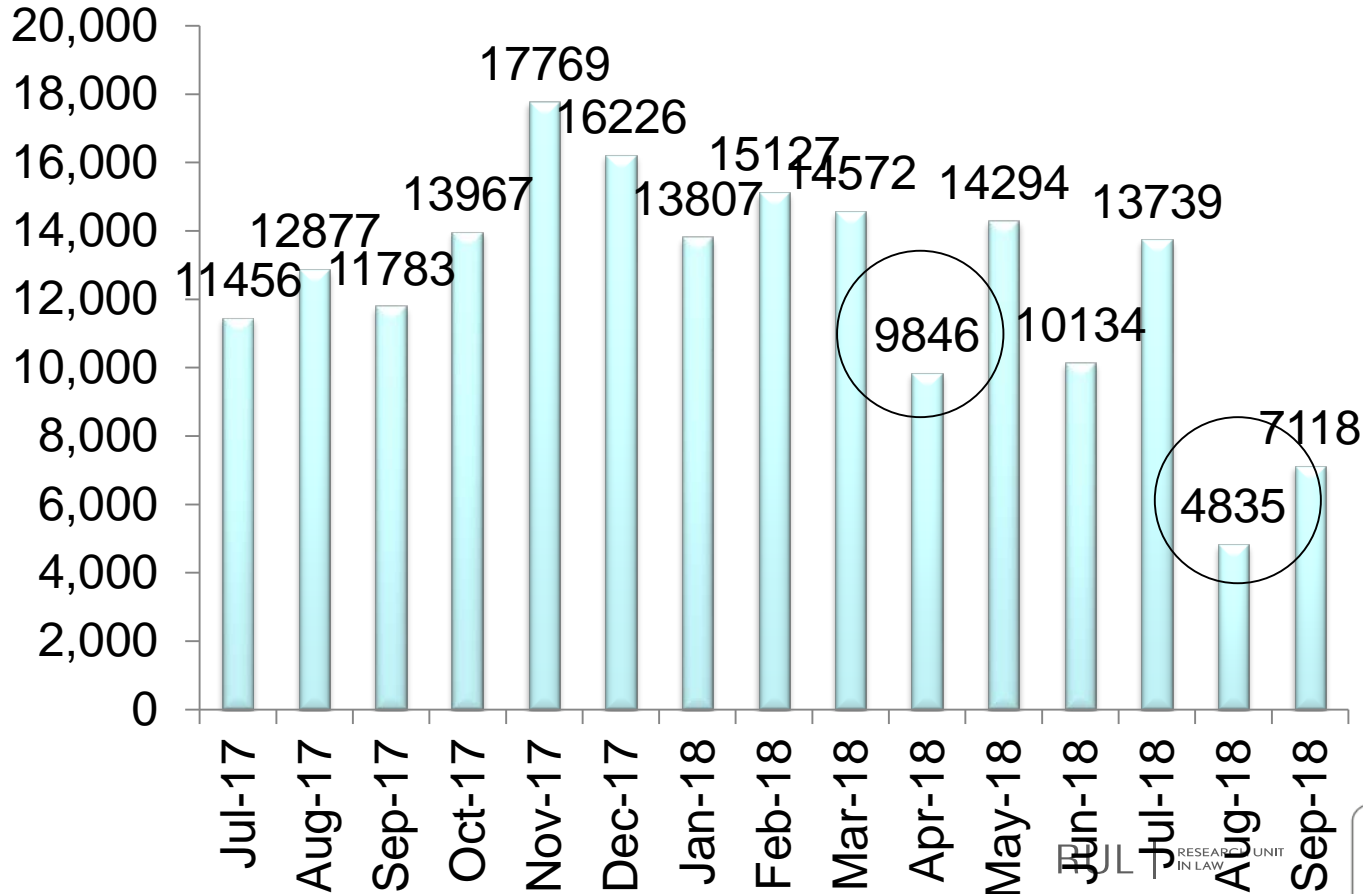
Confirmed: most
ICOs do not meet
maximum cap

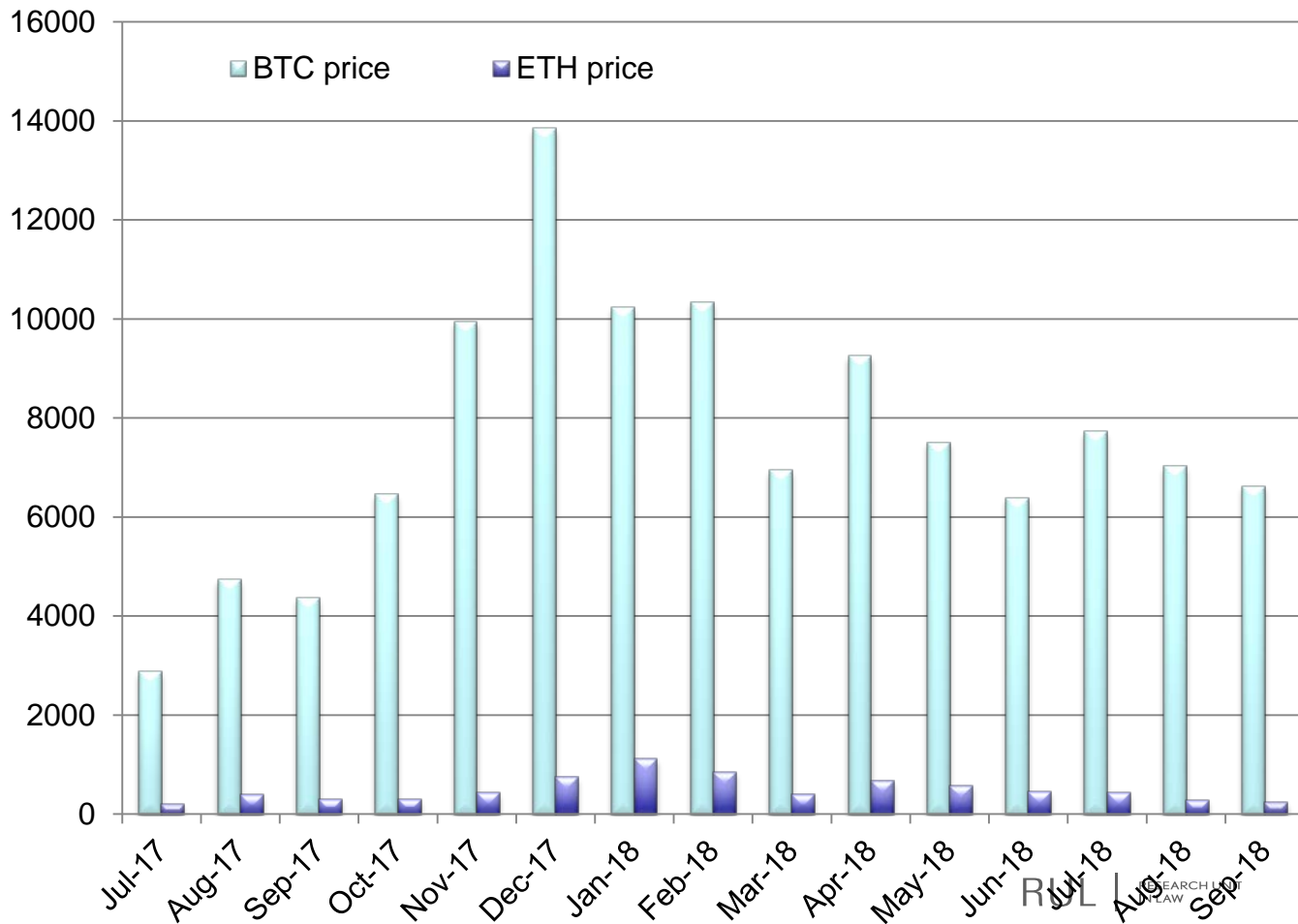


Timeline of ICOs (July 2017 – September 2018)

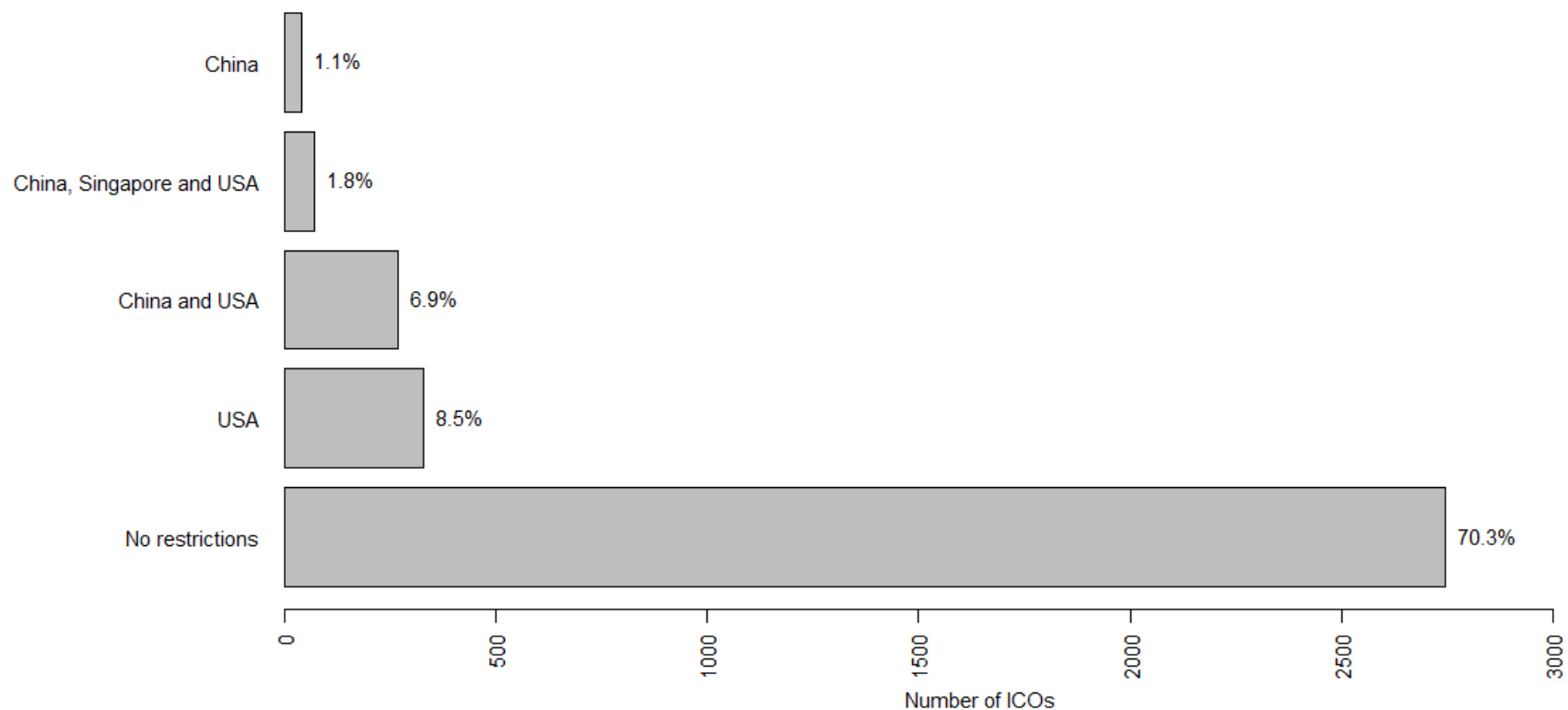


Raised capital (in mil. USD)

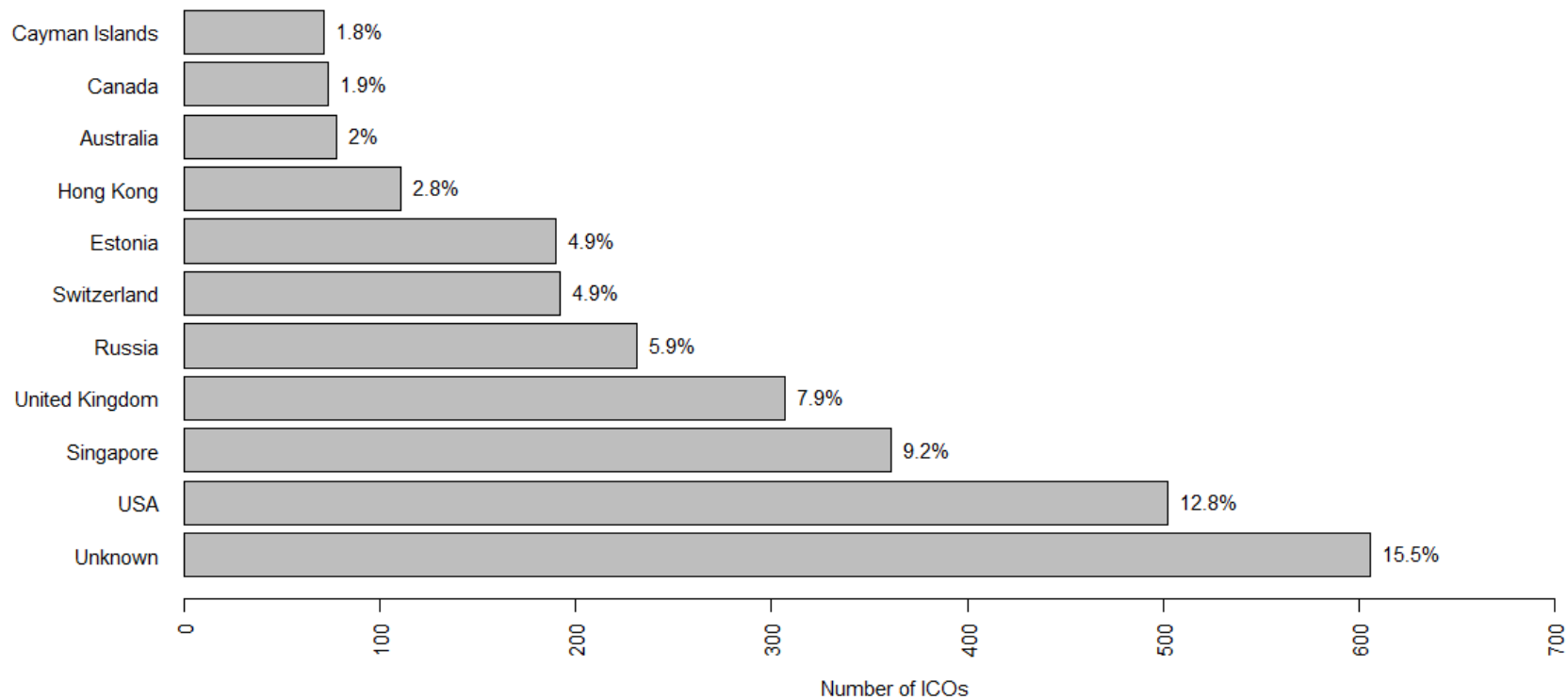




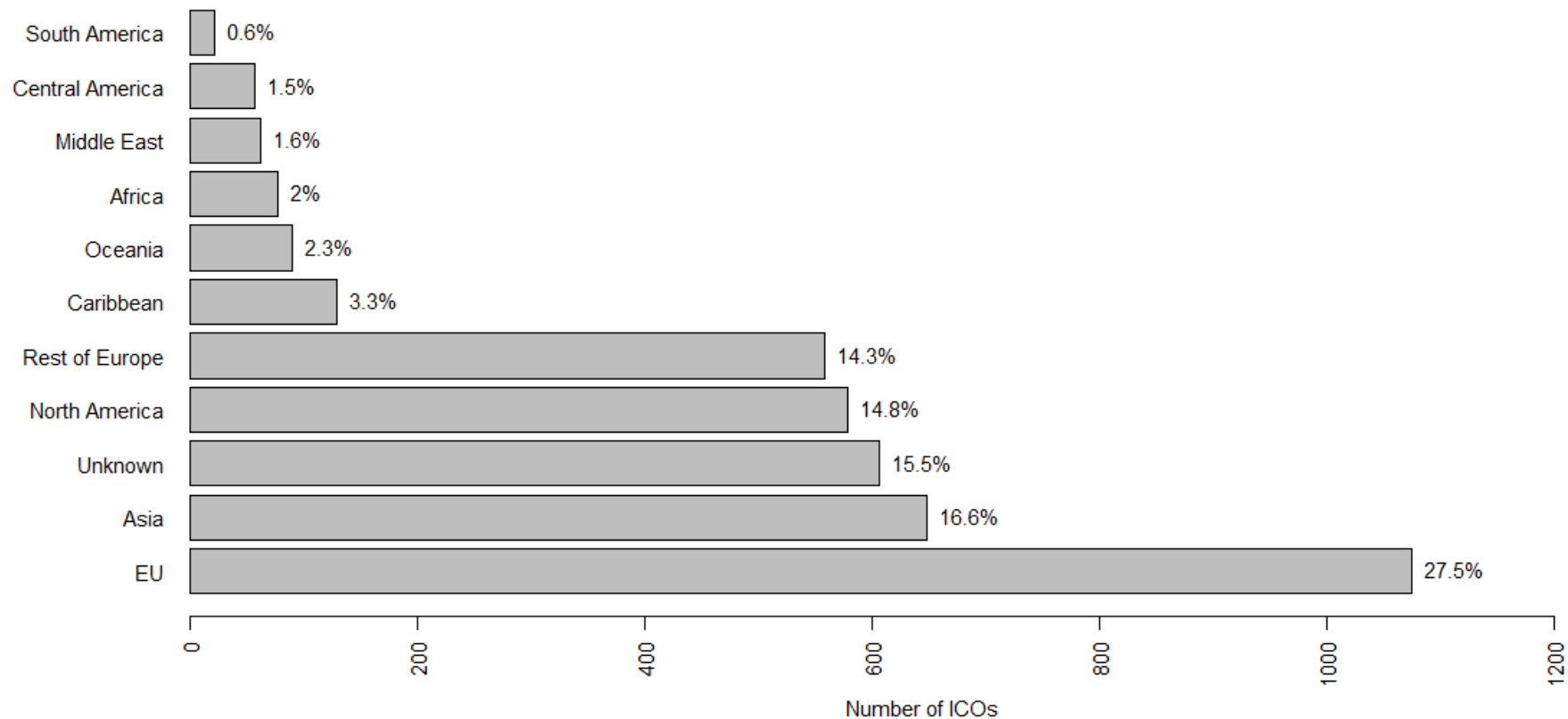
Country restrictions



Top 10 countries by number of ICOs



Reagional breakdown by number of ICOs



EU-country	Number of ICOs
United Kingdom	307
Estonia	190
Germany	66
Netherlands	57
Malta	55
France	48
Slovenia	38
Spain	28
Bulgaria	26
Cyprus	26
Czech Republic	25
Poland	24
Romania	22
Ireland	21
Austria	18
Latvia	18
Italy	17
Luxembourg	11
Sweden	8
Finland	7
Denmark	7
Croatia	6
Belgium	5
Portugal	5
Greece	3
Hungary	3
Slovakia	3

Non-EU (EEA) country	Number of ICOs
Liechtenstein	8
Norway	5
Iceland	0

1,088 ICOs
 Only **270** observations on
 amount raised complete
 Average in EU/EEA lower
 than worldwide (≈ 10 Mio.
 USD=

F.

Conclusion & Theses

1) Case for regulatory intervention

- ICOs no longer too small to care => consumer protection, systemic risk
- Cost-benefit analysis required to determine best regulatory approach

2) Consider the differences

- No one-for-all solution possible
- Application of financial law depends on token type: usage, currency, equity
- Fraud hard to detect without detailed intervention

3) Supervisory intervention necessary

- Intervention by cooperation of FSAs and CPAs advisable
- Financial law enforcement best against Equity Tokens & Exchanges
- Policy consideration: prospectus-style regulation

Thanks!

Prof. Dr. Dirk Zetsche, LL.M.
ADA Chair in Financial Law (Inclusive Finance)
Faculty of Law, Economics & Finance
University of Luxembourg
Dirk.Zetsche@uni.lu

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UNIVERSITÉ DU
LUXEMBOURG