Winning Parachain Auctions:
Which impact has marketing on acquiring funds from crowdlenders?

Stefan Kluge
(University of Mannheim, stefan.kluge@uni-mannheim.de)
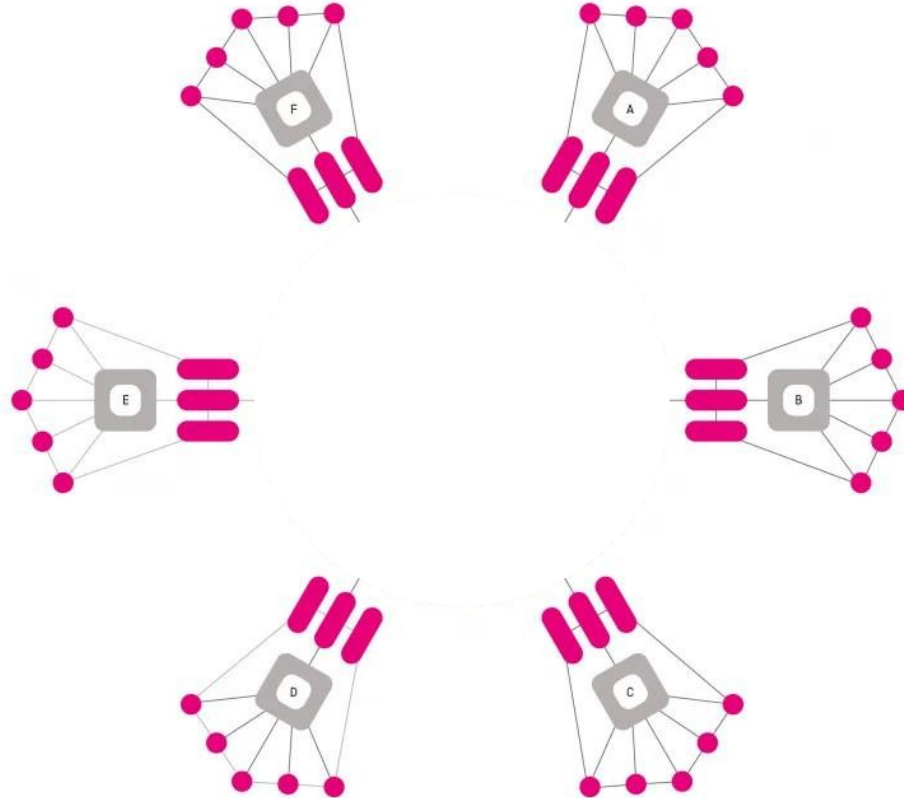
José Parra-Moyano
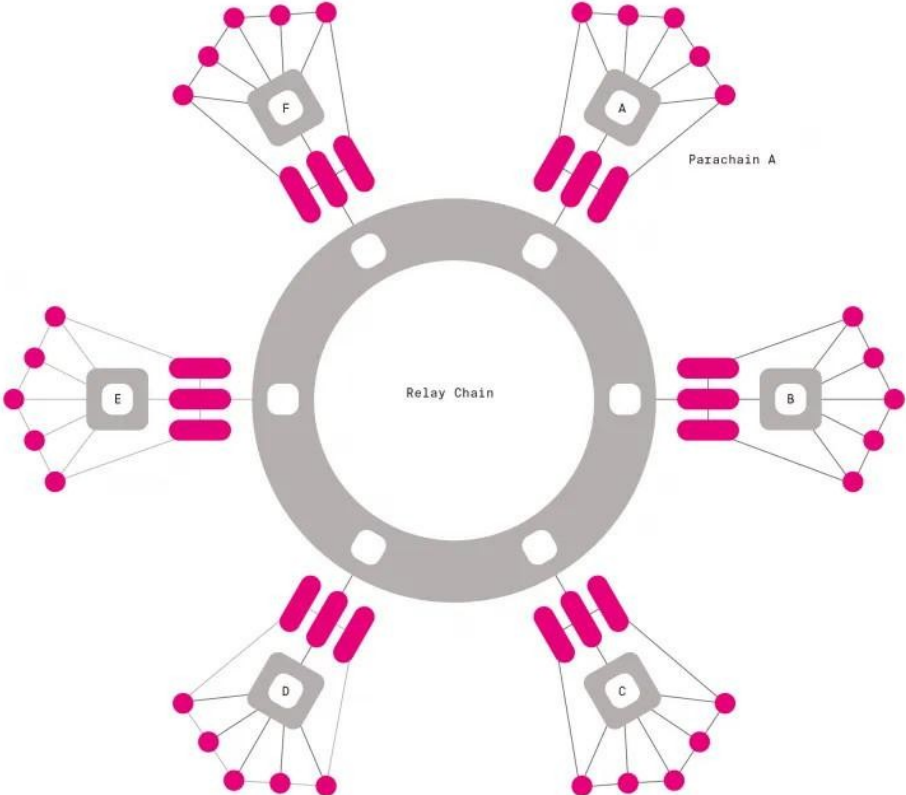(Copenhagen Business School, jpm.digi@cbs.dk)

Florian Stahl
(University of Mannheim, florian.stahl@uni-mannheim.de)

2022-12-04

Relay Chain

Parachain A
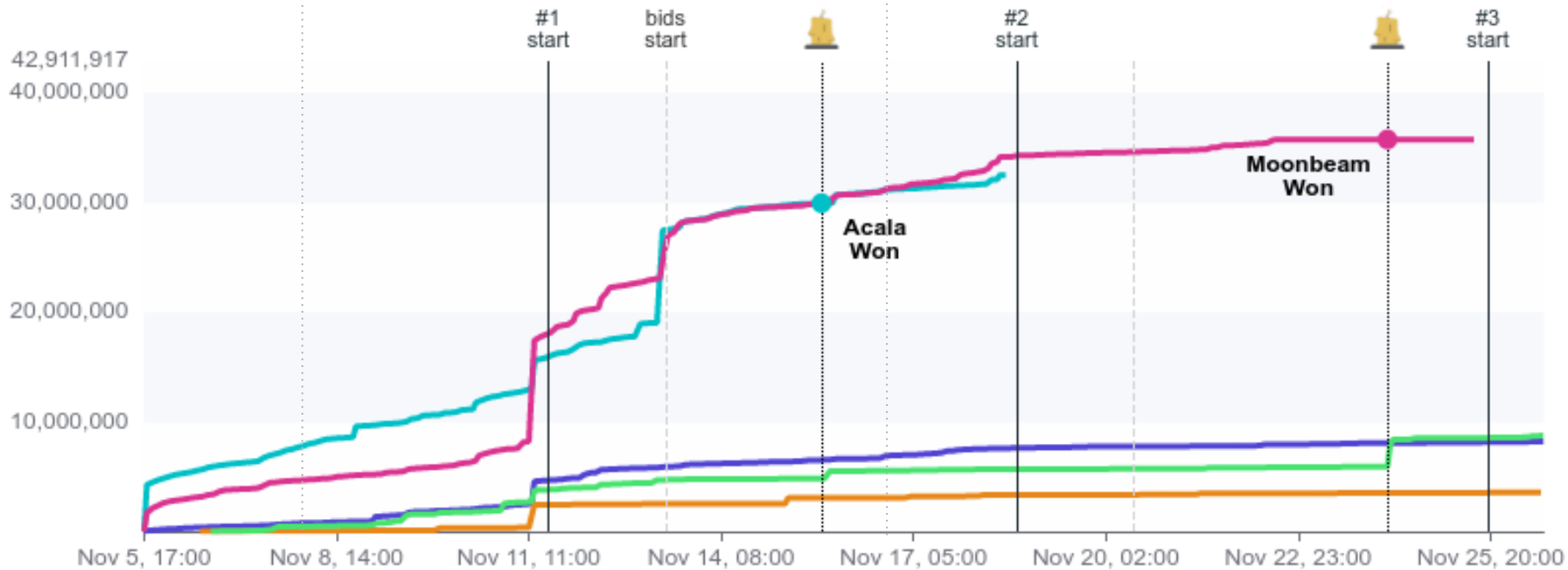
The first-ever @Polkadot parachain slot auction is underway!..

Congratulations to the @AcalaNetwork team for securing a parachain slot in @Polkadot 🎉
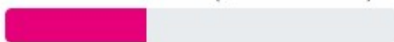
1   **Moonbeam**   35 759 931 DOT (*$198 110 020*)   48 346   4+ GLMR   **1 DOT : 4+ GLMR**   Reward Pool: 150m of 1b (15%)   Inflation: 5%   **WINNER**

Estimated Rewards GLMR per DOT

4.19
3.09
2.44
2.02
1.72
1.5

35.8m   48.6m   61.5m   74.3m   87.2m   99m

Crowdloan Cap: 100 000 000 DOT
Crowdloan Ending: Dec 17, 2021 at 22:07
DOT return date: Oct 24, 2023 ⑦
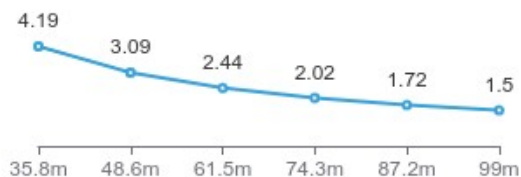
Vesting:
- 30% of rewards will be available to claim immediately (after EVM and transfers are enabled)
- The remaining 70% vesting over the course of the lease (96 weeks) linearly

GLMR Distribution

Other 21%
Founders and Early Employees 10%
Development 15%
Crowdloan 10%
Seed Funding 14%
Take Flight Event 10%

Conceptual Framework

Yellow: 1st stage analysis, with parameters already analyzed
White: parameter not relevant for analysis

Marketing

🔍 Topics and emotionality scores for aggregated tweets at time of auction start

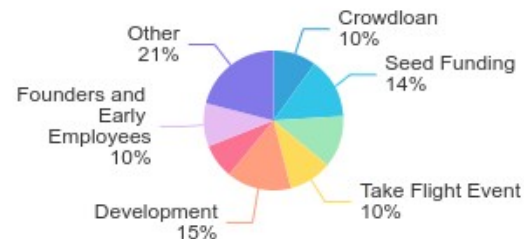🔍 Promised financial rewards and payback methods.

Auction on a Blockchain
decentralized, uncoordinated, collective

🔍 crowdloans

Crowdlenders funding decisions

Crowdloans returned to crowdlenders

Additional rewards to compensate the opportunity cost of lending

Parachain Project

🔍 Intrinsic properties that define the project, represented by ProjectID

Project wins or loses auction for slot on a parachain

Conceptual Framework

Investors

↓ funds   ↑ influenced by competition   ↓ more funds

Auction on a Blockchain
decentralized, uncoordinated, collective

Yellow: 1st stage analysis, with parameters already analyzed
White: parameter not relevant for analysis
Gray: 2nd stage analysis, with parameters we intend to include in further analysis

Marketing

🔍 Topics and emotionality scores for aggregated tweets at time of auction start and during the auction.

🔍 Promised financial rewards and payback methods.

🔍 crowdloans

influence on crowdlenders during auction:
- gains of number of crowdlenders
- gains in total funds
- relative performance of competitors

more crowdloans

2nd stage: over time analysis

Parachain Project

🔍 Intrinsic properties that define the project, represented by ProjectID

Project wins or loses auction for slot on a parachain

Crowdloans returned to crowdlenders

Additional rewards to compensate the opportunity cost of lending

Crowdlenders funding decisions

Data

 individual crowdloan contributions

 project and auction metadata

 marketing communications

Results

Dependent variable: Funds attracted by the end of the auction in USD

|		Estimate	Pr(>|t|)	
	(Intercept)	-6.83e+08	1.25e-10	***
Financial rewards ⇒ **Financial rewards and payback methods have a significant impact on crowdlenders' contributions.**	Reward: token release period, in weeks	1.04e+07	<2.2e-16	***
	Reward: token released immediately, in percent	4.17e+06	0.07317	.
	Reward: reward pool size in DOT / KSM	2.38e+00	0.03867	*
	Reward: reward pool size in percent from total token supply	9.42e+06	4.41e-07	***
Marketing communication ⇒ **Marketing communications also have a significant impact on crowdlenders' contributions.**	Twitter: entertainment topic	-1.06e+08	3.48e-05	***
	Twitter: reward and token topic	9.96e+05	0.00842	**
	Twitter: community topic	6.92e+06	0.02387	*

R^2: 77.5% · Heteroskedastik-consistent standard errors for p-values · All VIFs below 5 · Additional control variables for the properties of each project

Results

Conditional Average Treatment Effect: 280
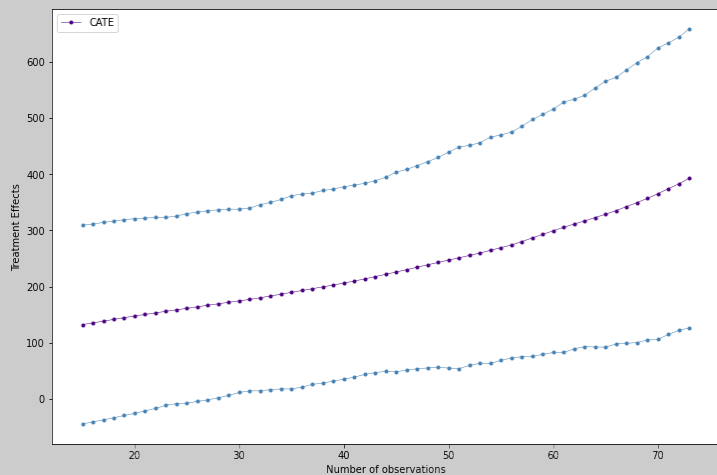
Influence of Covariates (with project category):
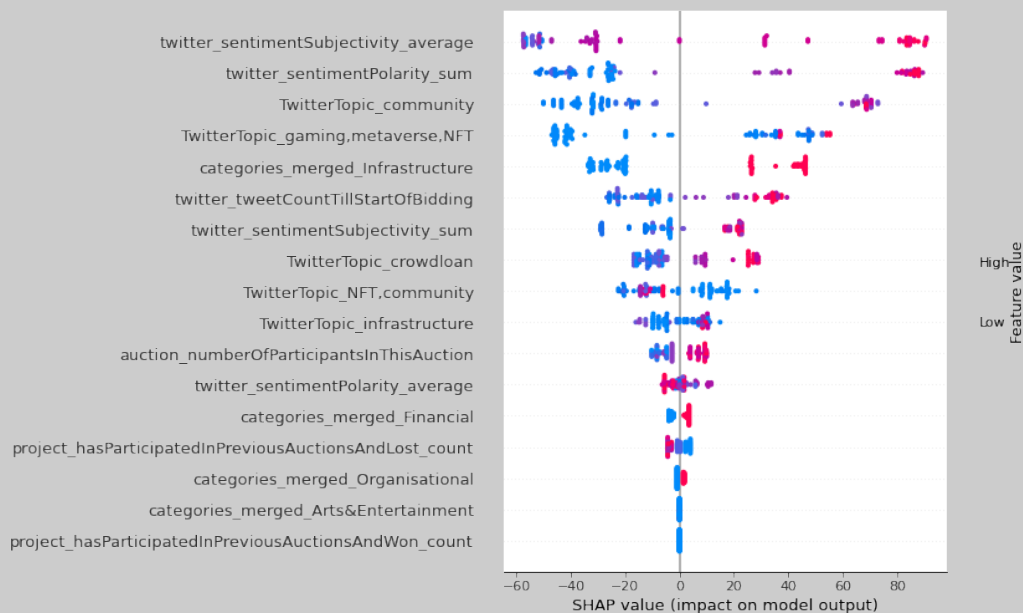
Treatment: Reward token amount in percent of total token supply
Outcome: number of crowdlenders attracted

Implications

1. **successful** crowdfunding campaigns

2. **efficient** marketing investments

3. implications for research in **marketing, auction theory, and blockchain-related research**