

# DeTech Investment Auctions with Adjustable Risks

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# DeTech Investment Auctions motivation

Historically, auctions have been about two simple things:

- price discovery
- supply shortage of auctioned goods

In fact, in the modern world the following types of auctions are in use:

- Oral ascending auction - or English auction (based on increasing price)

- Vickrey auction / or Second-highest bid (building a basis for the Ebay type)
- Simultaneous Multi-Round action (Nobel prize 2020 by Robert B. Wilson and Paul Milgrom)

However, in all above listed auction types there is no mechanism to mitigate risks of investment according to the buyer risk preferences. We, at DeTech, want to change this with DeTech Investment Auctions featuring adjustable Risks.

# Rationale of Risk Mitigation at Auctions

The main idea behind DeTech investment auctions is trading of the potential investment volume and the portion of investment which can be fully protected/refunded, whereas the competition is done on the best valuation.

We start with the following definitions:

- **Company Valuation - CV** (defined upfront as a starting value, target of the auction)
- **Investment Volume - IV** (variable)
- **Refundable Portion - RP** (variable)

Consequently, we use following formula to mitigate investment risks vs. potential investment volume (RP vs. IV, please refer to the graph on the left side):

$$IV / CV * RP = \text{constant}$$

Let's consider an example simulating an auction starting with the upfront defined company valuation of 10mUSD as a starting valuation for e.g. strategic investment segment:

**Moderate risk investment:**

$1m / 10m * 20 = 2$  --> Result: 10% in the stake with moderate

risk protection of 20%

**Less risky investment:**

$0,4m / 10m * 50 = 2$  --> Result: 4% in the stake by investing 0,4m with high risk protection of 50%

Now, we announce the next round of auctions (e.g. for public investors) with the increased starting valuation of 25mUSD ..

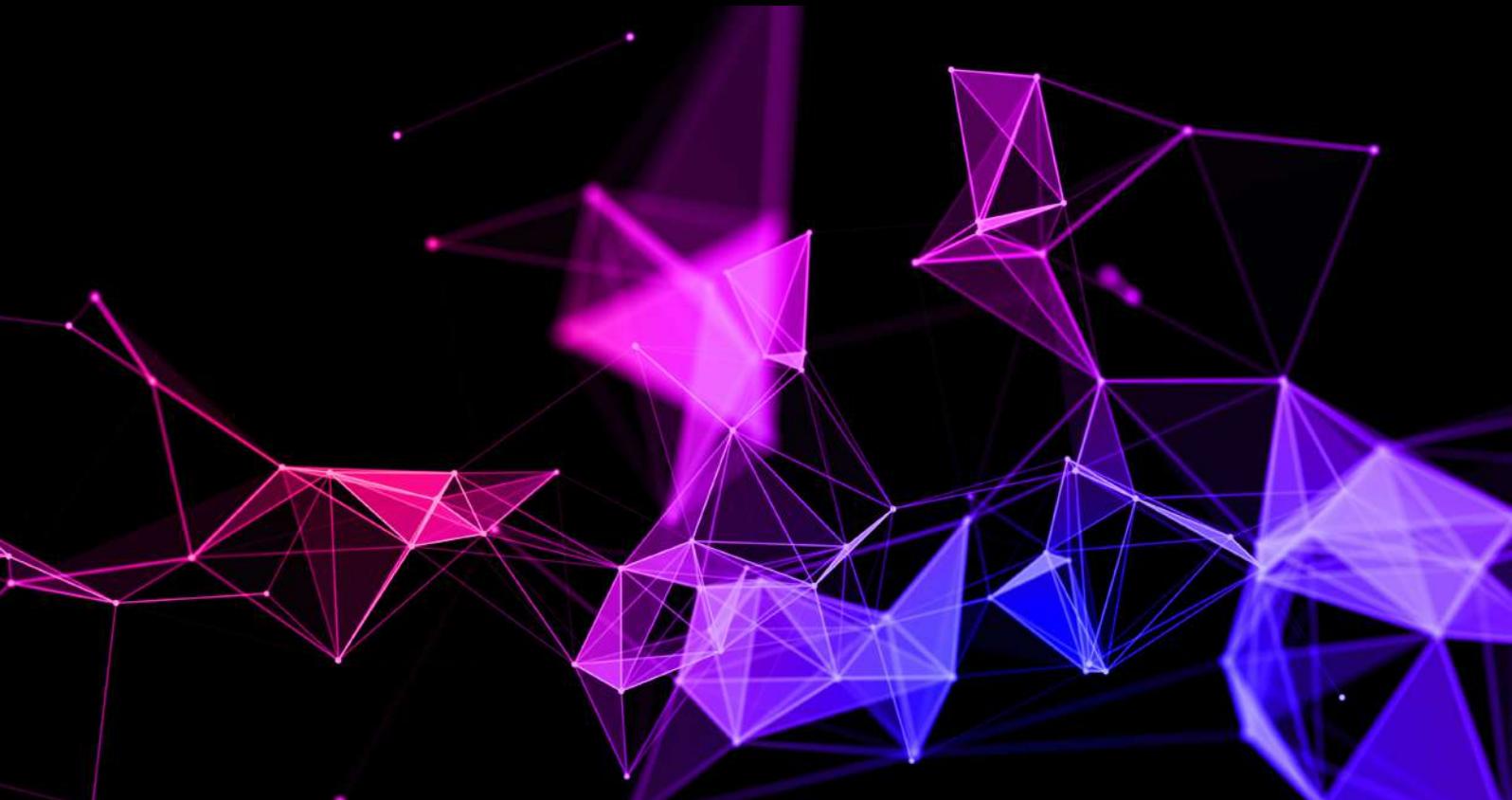
**Less risky investment:**

$1m / 25m * 50 = 2$  --> Result: 4,5% in the stake by investing 1m

with high risk protection of 50%.

**BENEFIT:** we can leverage investor's risk preferences by the volume adjustment of the potential investment.

## Investment Rules in the nutshell powered by DeTech assessment



We apply the KISS method (Keep it Simple and Straightforward) approach recognizing that each goal is unique. It focuses on creating goal-appropriate financial instruments, which then trivialize the investment problem.

**A - Authority Risk** (The company/project shouldn't do work that can be banned by government) (1 Point)

**S - Science & Tech Risk** (The company/ project shouldn't do work that harms technology and scientific factors) (1 Point)

**K - Key People Risk** (The company/project shouldn't have key-people without whom the company won't work. If they have it, it won't gain any points) (1 Point)

**F - Free Cash Flow** (The company's/ project's FCF should be more than 0 through the last 1-2 years) (1 Point)

**N - Net Margin** (It should be above 10% and increasing over time) (1 Point)

Once you get at least 3–4 points out of these 5 points, you can proceed with DEIP assessment score based on DAS (Decentralized Assessment System) for a quick decision whether to invest in that company/project or technology.

The DEIP assessment quality score will be available to each industry marketplace released within the DEIP ecosystem. This will guarantee transparency and quick decision making for your investments.

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