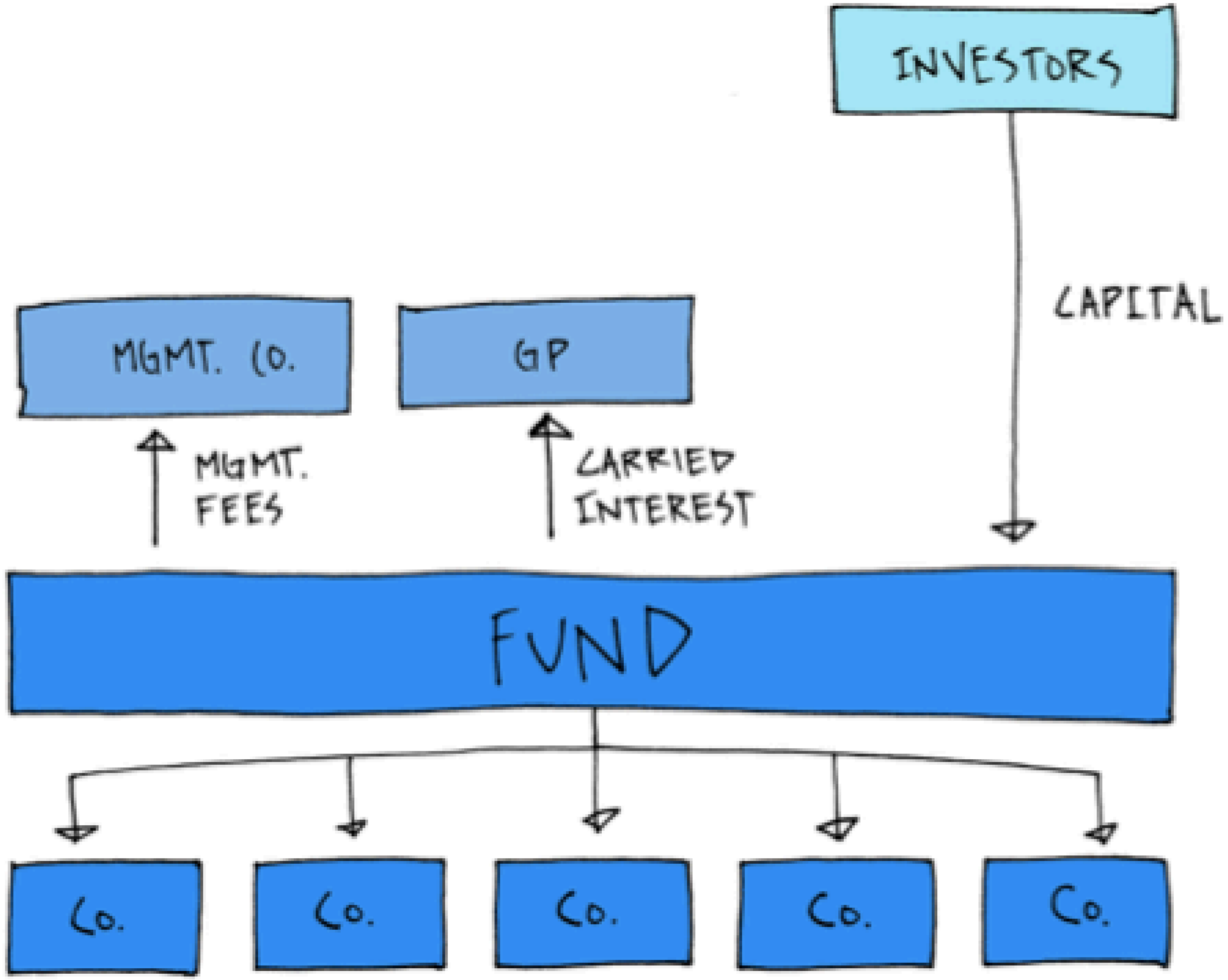
Understanding how VCs think

(The Math behind Venture Capital)

Typical VC Firm structure



Role: Investors

- Investors (also called Limited Partners or LPs) are typically large family offices, or pension funds that have significant capital to deploy.
- Typically, they park their available capital across different asset classes (bonds, listed equity, real estate, and venture capital)
- VC component is the riskiest, but offers highest potential return
- Typically 2-5% of the overall available capital.

Role: GP (Or General Partners)

- Manage the fund management company (typically an LLP) as well as the fund
- Obtain “commits” from the LPs, in exchange for a promised return
- Assisted by analysts, EIRs and other “mentors”; salaried
- Manage the operations of the fund through a “fund management fee” which is meant to meet ALL operating expenses (salaries, rent, electricity, travel, entertainment ….)
- GPs also earn a “carry” when the exit in an investment happens.

The 2 - 20 "Rule"

- A VC firm takes 2% as management fee per year. Thus, for a $100 Million, 10 year fund, they use up to $2M per year for operations (overall $20M).
- This leaves a total "investible" capital of $80M.
- They can earn a "carry" of 20% if, and ONLY if, they exceed the returns demanded by the LPs.
- A typical return demanded by LPs? About 12% PA.

Now for the Math

$$\underbrace{1.12}_{\text{annual return}}{}^{\overbrace{10}^{\text{fund length}}} = \text{x}\underbrace{3.10}_{\text{total return}}$$

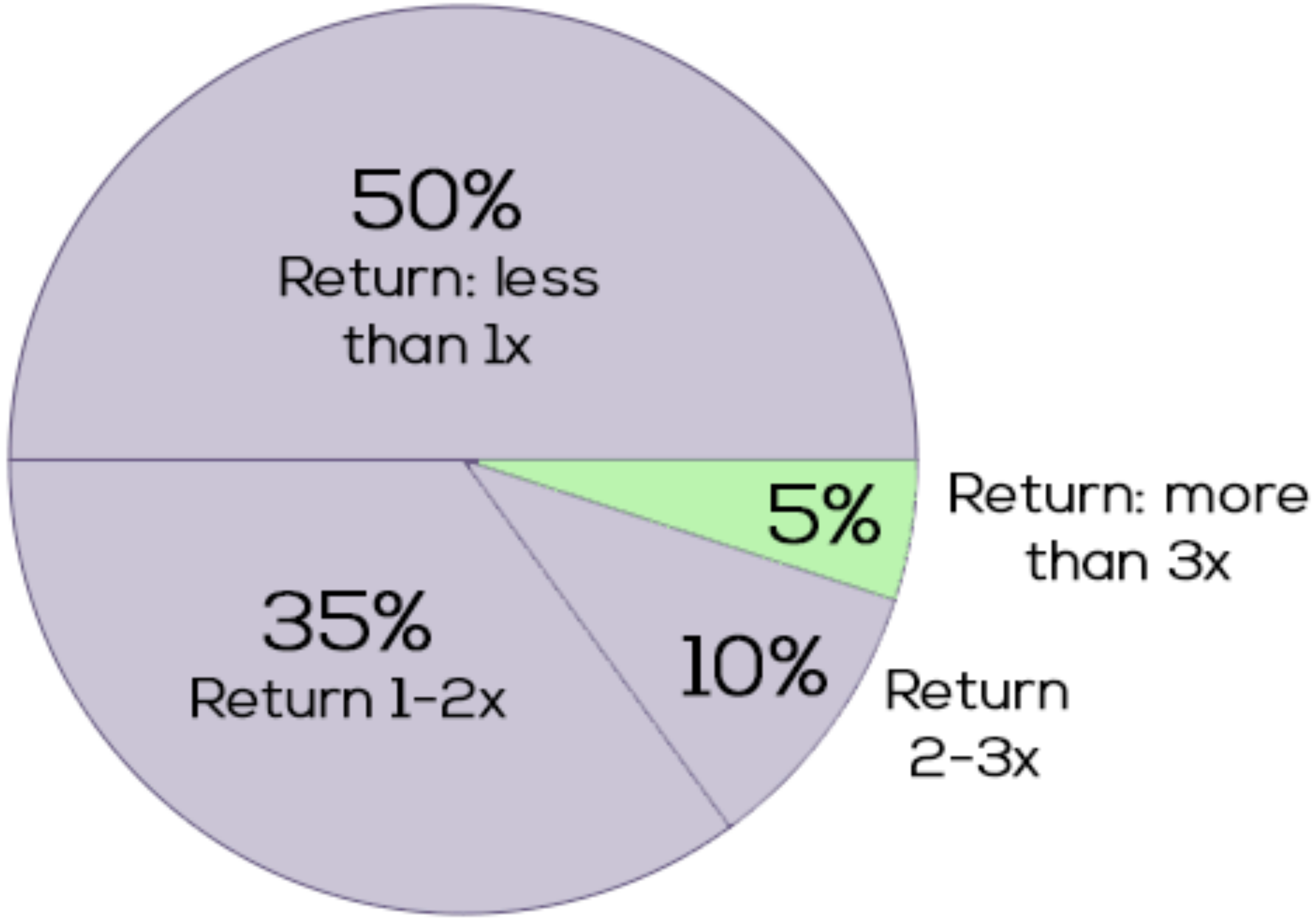
Assumptions:

- 10 year period for fund
- Annual return of 12% for LPs
- Fund size: $100M

Remember Pareto (80:20)?

80% of your returns will come from 20% of your companies.

A more common scenario:



Now make your investments

Assume:

- You make 10 investments (across Seed, Series A and Series B); all equal
- $8 M each (spread across Seed, A and B rounds)
- Why not $10 M? (Remember your management fee of 2%!)
- At exit stage, you hold 25% in each company

Scenario 1

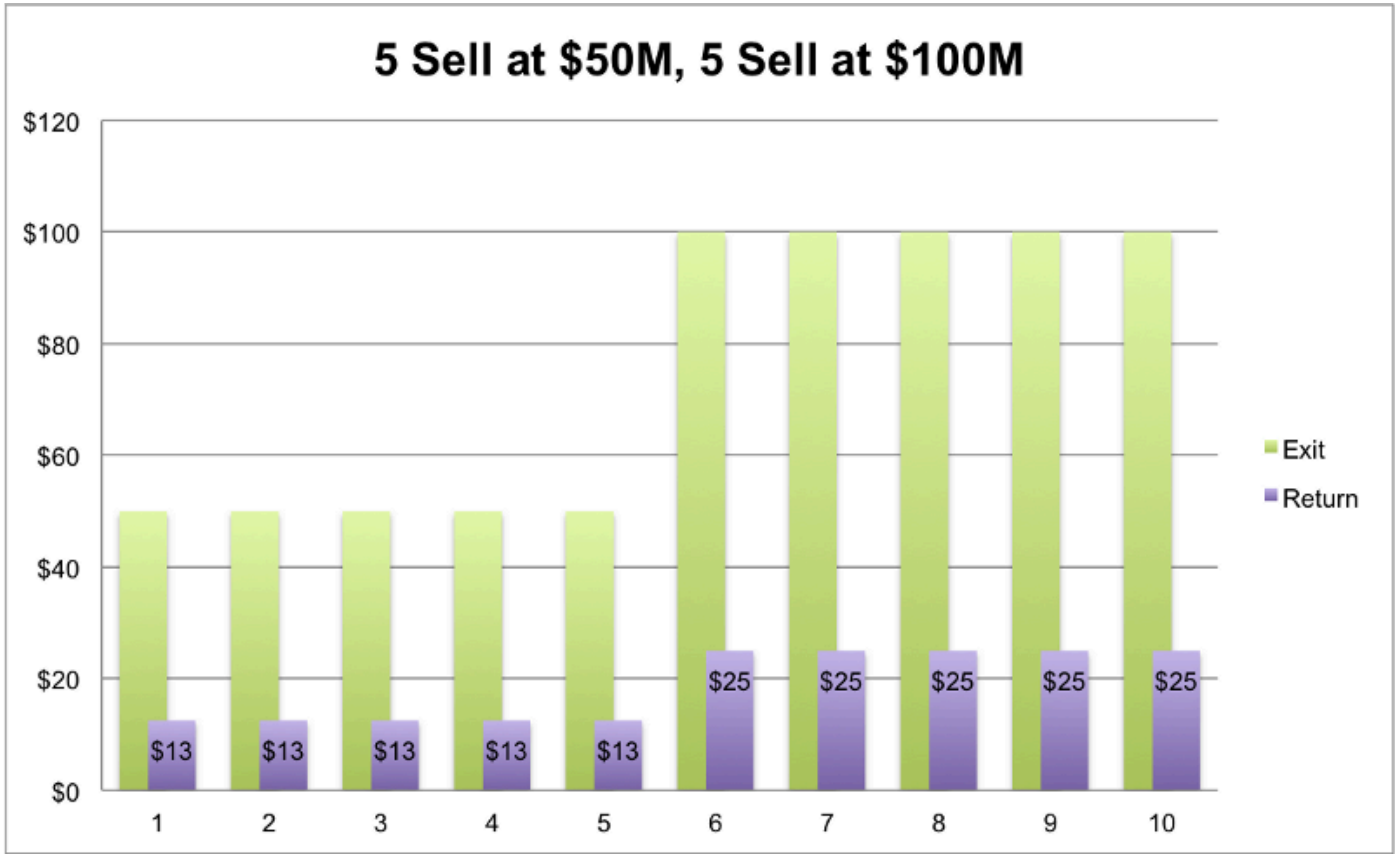
All exit at an average of $50M

Returns

- 10X12.5 = $125M
- No where near $310M

Scenario 2

5 exit at $50M, 5 at $100M

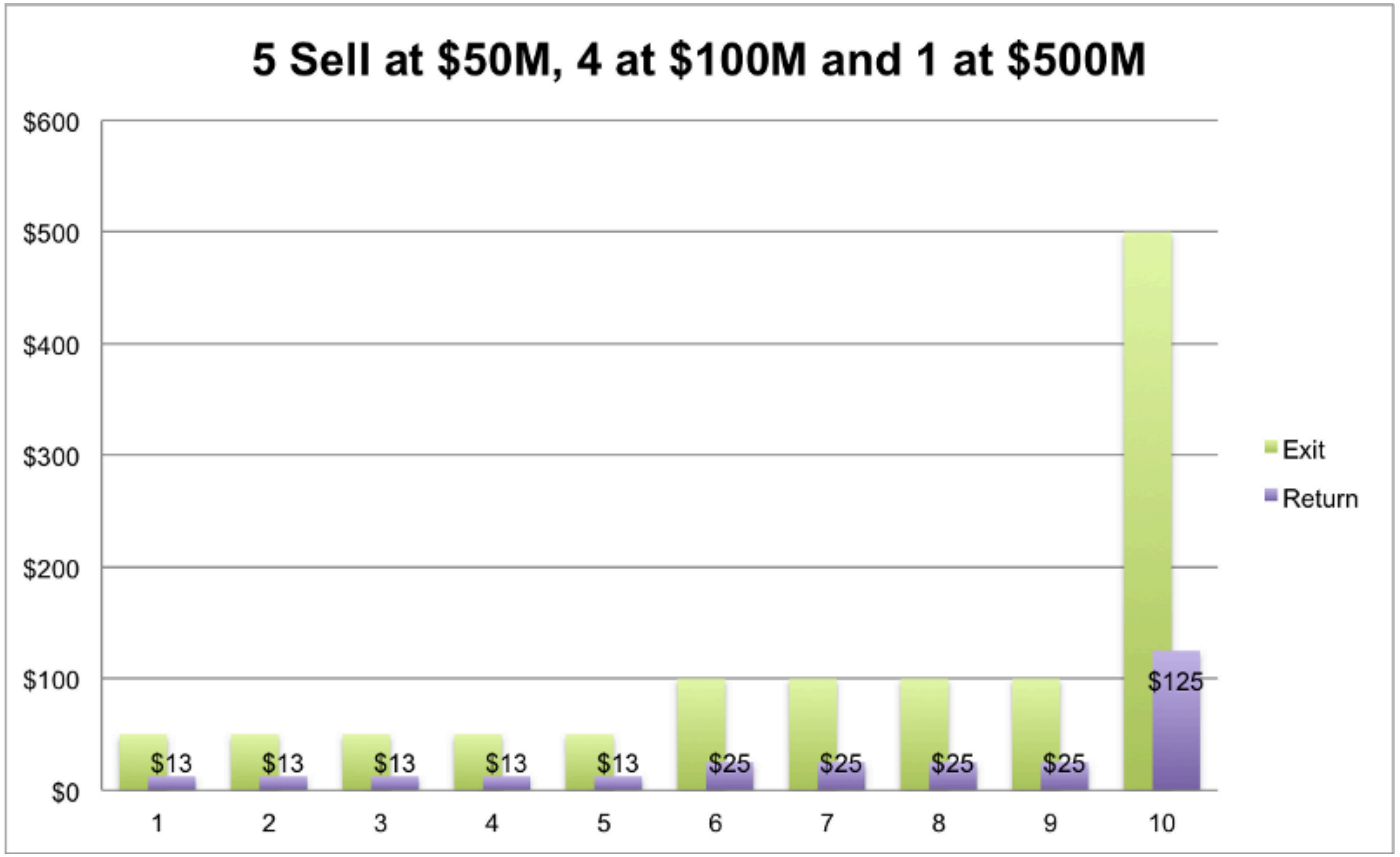


Returns

- 5*12.5M + 5*25M = $187.5M
- Still no where near $310M

Scenario 3

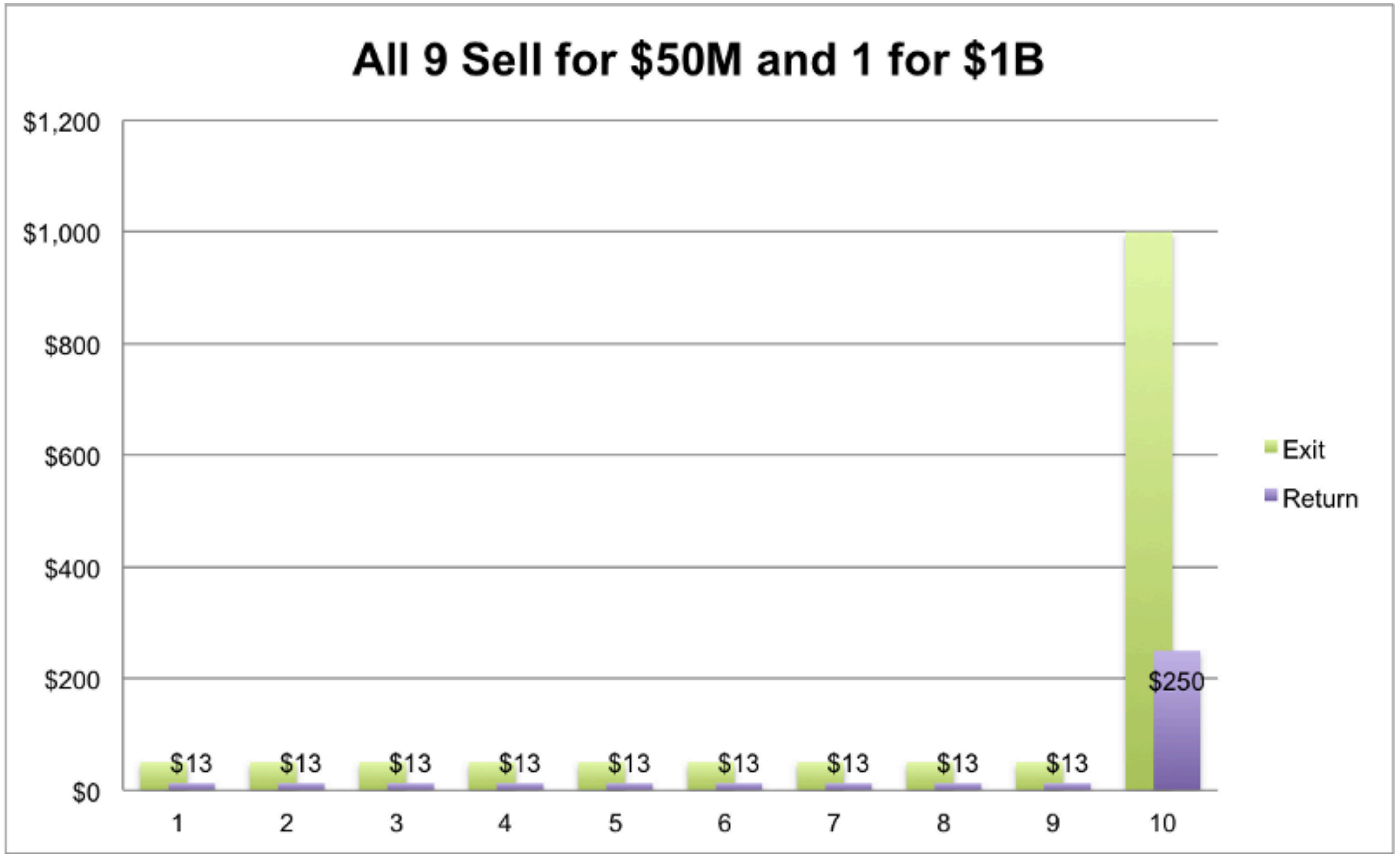
Throw in an over achiever



Returns

- Added up .. $287.5M
- Almost there!

Scenario 4
We NEED a Unicorn!

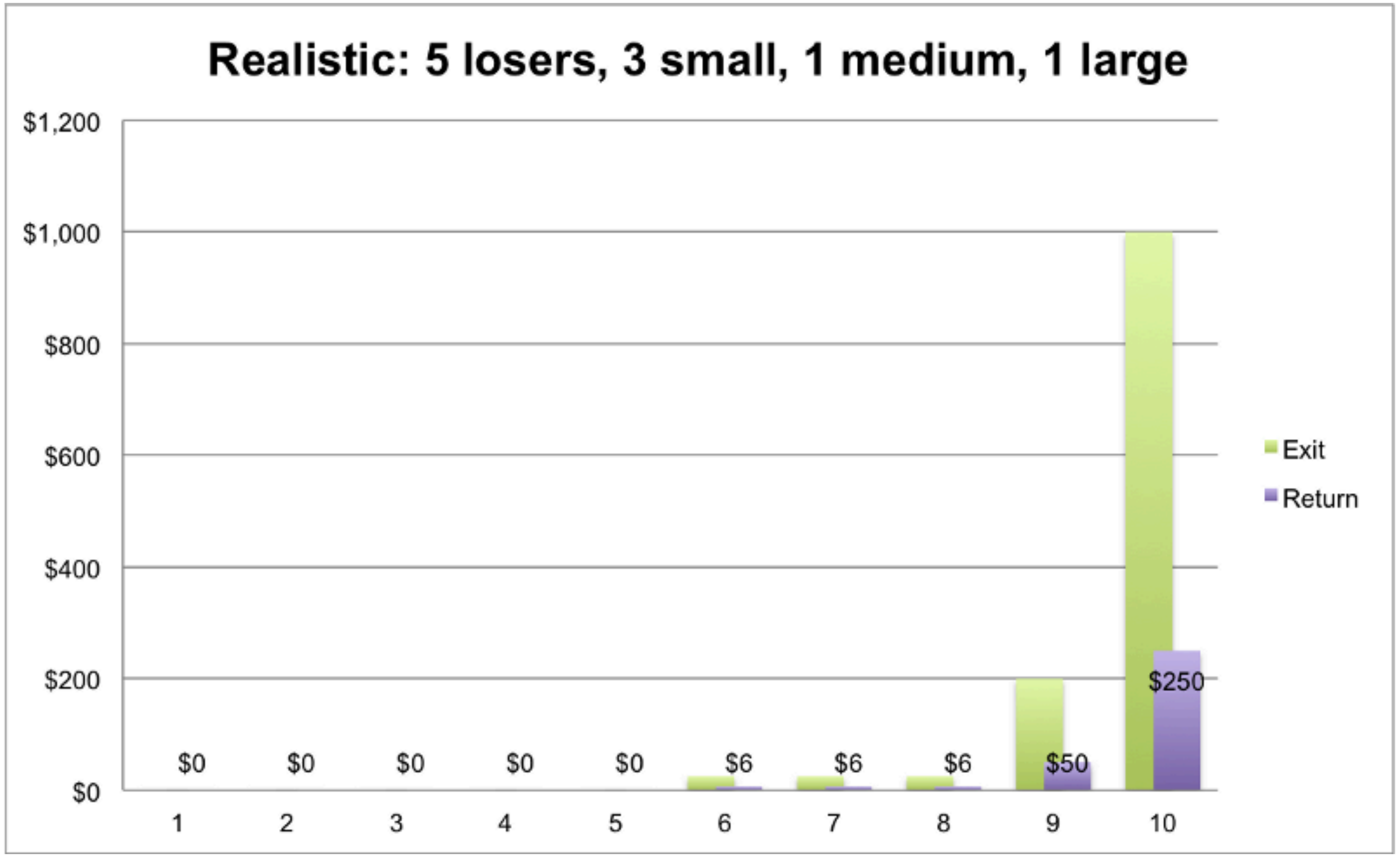


Returns

- Finally: $362.5M
- But is this REALISTIC?

The Reality

5 fail, 3 small exits, 1 medium exit and 1 large exit



Returns

- $318M
- How many funds can you think of who actually did this?

How VCs think …

What do I do to reduce the risk for my investment?

- Development Risk
- Market Risk
- Execution Risk
- Finance Risk

And hence the focus:
5 Ts you should remember

- Team: Is the team cohesive, capable of execution?
- TAM: Is the total addressable market really, really huge?
- Technology: Is this something that can be leveraged, and used to scale?
- Traction: What is the company showing now? Rapidly growing?
- Trenches: What are the defensive positions that the company has?