GreenHills Ventures, LLC.

GreenHills Ventures – Why Valuations Matter in Start-ups and their Investors

Objective and analytical investment process combined with a risk-mitigating portfolio theory.

"Have you got two tens for a five?"

Costello failed at receiving a good valuation for his money — but micro-VCs don't have to.

Welcome back to our final post in the *Smaller, Earlier VCs Should Invest Differently* series. If you're just joining us now, you can learn about portfolio variance here or dilution here. This week I'm wrapping up by demonstrating the huge effect seemingly small changes in valuations have at earlier-stages — and why a micro-VC should be the exact opposite of "valuation insensitive."

It is not uncommon to read or hear a traditional VC mention that the valuation doesn't matter too much early-on; rather, the key is to find the best founder with a huge market opportunity. "The original valuation — and most other terms — don't matter if it's a unicorn" is the general belief. Now, these VCs say this and do this not because they don't know how to invest, but because it makes sense — and it's been proven to work — for their size and strategy. How?

- Larger, traditional VCs care only about very large exits: unicorns and slightly smaller exits (~$500M+). This is where the vast majority of their returns are earned. As there are a limited number of large tech exits per year, there is an urgency for a firm to have significant exposure to the next crop of unicorns. Much better to pay a bit more of a price than to miss out on one of the few companies that can make your fund successful.

- These funds have huge AUM and need to return bulk amounts of cash — the multiple (and IRR) are less important. But the VC model (taking a minority stake usually between 15–35% of the company) can't make use of a growing amount of capital if valuations stay low. Hence, they can deploy more cash in a company if the valuation increases, and even though they sacrifice some return multiples they were able to get more capital placed.

But us early-stage, micro-VCs are different. We *can't* afford to invest at higher valuations. We have different expectations for risk/reward, earn our returns in different ways and need to be compensated for the risk taken for investing earlier. Too often I see both novice angel investors and experienced micro- VCs lean on the foundations of large, traditional VC, paying any price to get into a hot deal. This completely disregards basic math and encourages poor practices, ultimately stunting investor returns. Let's run through a few examples using our trusty model (a slightly modified version of the same model used in prior posts).

Return differences at increasing valuations:

The first exercise I'll walk you through is to understand how unwarranted differences in valuation can affect exit multiples and ownership. In other words, all things being equal in the investment, what would happen if you invested at higher or lower valuations? In our first example we have a seed- stage investment with four different possible pre-money valuations. Perhaps a fair or "market" valuation would be $4M, but depending on negotiations you might face pre-money valuations at $2M, $4M, $6M, or $8M. Let's see how a fund investing $1M might fare in a few different successful outcomes — a solid $68M exit or an outstanding $500M exit.

Pre-money	**$2M**	**$4M**	**$6M**	**$8M**
Initial Ownership	33.0%	20.0%	14.3%	11.1%
$68M Exit	13.7x	8.2x	5.9x	4.6x
Ownership	20.1%	12.0%	8.6%	6.7%
~$500M Exit	52.6x	31.5x	22.5x	17.5x
Ownership	10.8%	6.5%	4.6%	3.6%

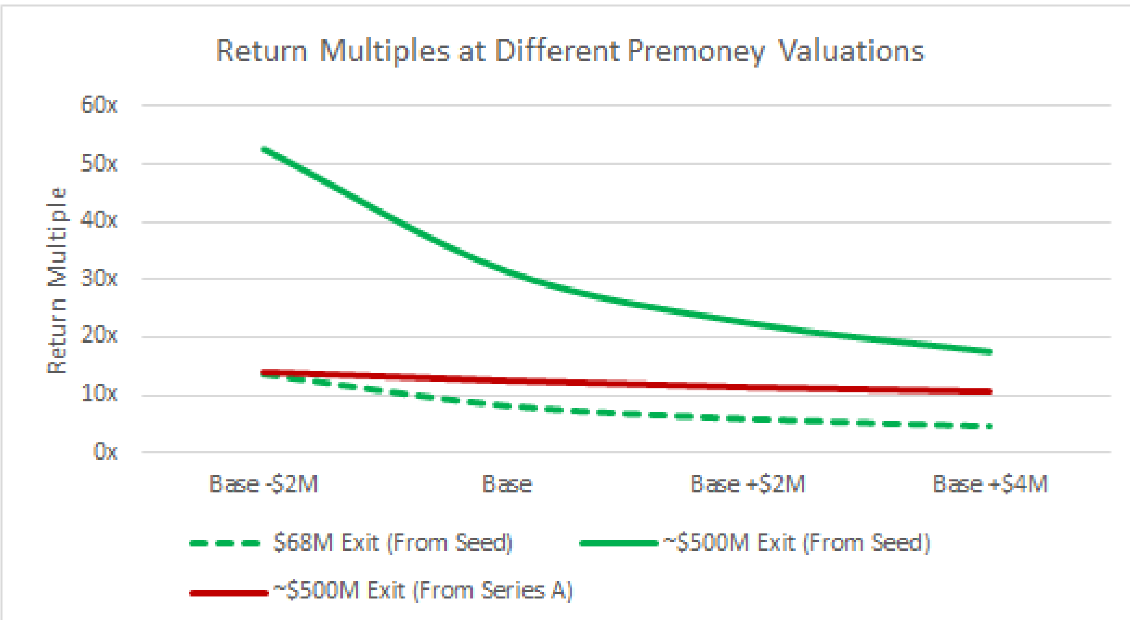
Those are large differences — while all are strong outcomes, the spread is huge. In a seed portfolio, you may only have one $500M+ exit. If you entered at $8M pre-money (or even $6M), that breakout, high-risk company won't even net you the coveted 30x. And look at the more modest outcome of $68M (an exit that is much more likely in your portfolio and way more common in the marketplace); depending on the price that could be an impressive 13.7x return or simply a commendable 4–6x.

If these drastic differences are the case, then why do larger VCs rarely quibble over a $2M increase in pre-money valuation? Because the effect is more marginal at their higher entry point.

Pre-money	**$14M**	**$16M**	**$18M**	**$20M**
Initial Ownership	26.3%	23.8%	21.7%	20.0%
~$500M Exit	13.8x	12.5x	11.4x	10.5x
Ownership	14.2%	12.8%	11.7%	10.8%

You can see the exit multiple difference on pre-money valuations for the same company from $14M to $20M are much tighter. A $500M exit drives a 10.5x — 13.8x return in that $8M spread, so it's not worth as much to fight over every $2M increase.

That's a lot of numbers — what does it look like?



Compared to the slopes for Seed investments, Series A return multiples are much tighter given the same range of possible pre-money valuations.

Relatively small changes in pre-money valuations have significant impact early on:

Micro-VCs should negotiate hard for every $500K in pre-money valuation. While the result is simply a rounding error for later-stage investments, the returns are non-negligible in Seed investments. Look at the implications for a Seed investor that has given up an additional $500K in pre-money valuation at a company that might have been invested in a $4M pre-money.

Pre-money	**$4M**	**$4.5M**
Initial Ownership	20.0%	18.2%
$68M Exit	8.2x	7.5x
Ownership	12.0%	10.9%
~$500M Exit	31.5x	28.7x
Ownership	6.5%	5.9%

The investor loses about 10% of his value, and hence, his subsequent returns. In a large exit, has foregone an additional 2.8x multiple of his original investment. But for the Series A investor, the difference is negligible.

Pre-money	$16M	$16.5M
Initial Ownership	23.8%	23.3%
~$500M Exit	12.5x	12.2x
Ownership	12.8%	12.5%

The 0.3x difference probably wouldn't have been worth the time, let alone the risk of losing the deal to the competition or coming across as stingy.

All of this math currently assumes that *all things are equal* in considering the possible array of valuations. The intention is to demonstrate the huge swings in outcomes that can take place if a company is valued outside of where it "should". Now, with our basic mathematical understanding of how significant early-stage valuations are, I want to counter some valuation conventional wisdom that early investors use to justify their pricing malleability and overall willingness to pay a premium.

Justification: *Price won't matter if the company does well, and nothing matters if the company does poorly. There are only a limited number of unicorn outcomes each year, so you want to make sure you get in those rounds early, no matter the price.*

Counter: This tenet comes from the core traditional VC philosophy that the only way to "win" in venture capital is through capturing a unicorn. As I've mentioned before, I don't think this is applicable to smaller, earlier VCs.

1. It's difficult to predict winners with much certainty — if you could, then it'd be easy to pile on capital to "guaranteed" winners, but I will still contend that you don't know what you can't know. If you believe me there, then paying too high a price for a company will seriously impact the ultimate return multiple.

2. Earlier, smaller VCs make a large part of their return on "doubles and triples" — exits between $50-$500M. Paying too high a price means an exit in this range goes from possible 30x+ breakout success to an underwhelming multiple in the teens. Furthermore, higher early valuations will mean outcomes will need to be much larger in order to be considered successful. The required exit valuation need for a breakout success in your portfolio has drastically increased. If you're aiming for a 30x "winner", a small $4M difference early on can move your exit target to $1B+ (vs $500M or less).

3. Building off the last point, this can create significant misalignment between the founders and investors. As the need for a larger exit is greater, the VCs involved in the company might dismiss earlier acquisition offers and risk pushing continued growth to a higher, unicorn-like level outcome (where there are much fewer exits...) even at the expense of what's best for the company.

Justification: *High-cap (or uncapped) notes/SAFEs are fine because we're guaranteed at least a 20% discount.*

Counter: Being compensated 20% is well below the average up-round increase for a successful company, therefore significantly hindering your upside. The risk you take (the Pitch book/CB Insights data showing roughly 40% failure out of the seed round) is much larger than your reward of 80% purchase price off the next round — feels like a bad President's Day sale. If upside protection/compensation is really the only thing that matters, then the valuation cap should be treated as the true valuation because that is the only guarantee of maximum price you will pay. So, don't pay for a higher valuation cap than you think the company is worth at the time you invest. (P.S. — The idea of an uncapped note is an actual joke between a portfolio company founder and I.)

Justification: *This company has a higher valuation because it has a great, proven founder / exceptional market opportunity / limited downside because XYZ / relationship with ACME Corp / etc.*

Counter: There are certainly factors that can increase or decrease a valuation — we attempt to judge the weight of different variables and adjust valuation accordingly regularly. In the market I tend to see some behavior that I find questionable — while I do value experienced founders (they can execute faster, raise capital easier and avoid pitfalls, etc.), does an experienced founder coming off an amazing exit or two with just a pitch deck really validate a valuation 5 times that of a relatively inexperienced founder with $10K in MRR and 15 customers? Does a seemingly astronomical TAM justify an uncapped note? Or should I ask: *Do probabilities / expectations change as rapidly as the valuation increased?* Sometimes for sure — but probably not as often as you think.

In addition, I wonder if the smaller, earlier, "able-to-take-more-risk" VC should be trying to pile onto high-priced rounds with seemingly significant amounts of risk removed ("buying high") rather than attempting to find rounds that have low valuations due to an obvious market inefficiency (such as wariness of first-time founders, startups with a complicated history, headquartered in an non-coastal geography, etc.)

Justification: *A large, proven VC is investing in this round*

Counter: Larger, later VCs have different motivations and expectations than earlier, smaller VCs. They aren't as concerned as earning high multiples on their relatively early investments — rather they need to deploy large amounts of cash in order to return large amounts of cash. The initial price doesn't affect them nearly as much as it will an earlier VC that needs higher multiples. While you may be excited that you get the chance to invest alongside a legendary VC, you really should have invested in a previous round — and you likely missed your opportunity with this company.

Justification: *I don't want to ruin a relationship with a founder by appearing too greedy.*

Counter: One thing we are not advocating for is an *unfair* valuation — but simply one that makes sense. Investors pushing too hard to lower valuations will unnecessarily dilute the founders, possibly harming all shareholders down the line. But a too-high valuation could hurt the founder as well, as they will have a harder time justifying a large increase in valuation the next round. They will not just have to show the standard amount of progress to raise at an increased valuation, but they will have to demonstrate exceptional growth — which puts the founder in a tough spot. This can easily put the founder in the position of a flat or down-round, which are statistically correlated with negative results.

The rhetoric from top-tier large VCs dismisses the effects of high early-stage valuations, and they are not giving up much as a result — it often is little more than a rounding error for them. But valuations have a huge impact for micro- VCs — depending on the initial price, a "modest" exit can look like a home run, or a truly massive exit can be surprisingly weak. Thoughtfully considering the actual effects of various valuations in an investment decision, and pushing back when appropriate, should have seriously beneficial impact in a fund's performance.

This concludes the four-part series *Smaller, Earlier VCs Should Invest Differently*. The first post outlined why micro-VCs investing in early-stage startups should not follow the best practices of their larger, more traditional VC peers. In the second post, I showed how portfolio variance differs significantly in earlier-stage investments and how a large portfolio combats that increased risk. In the third post, I focused on removing the fear of dilution and the temptations to continue follow-on investing into portfolio companies, just because it's what you're "supposed" to do. The series has already spurred much productive conversation and debate, of which I've thoroughly enjoyed (and encourage!). I hope these thoughts and theories have been helpful in explaining our strategies and giving the rising, rapidly- shifting landscape of earlier-stage micro-VCs some food for thought.

General Assumptions:

- Earlier-stage have higher standard deviations (risk) and IRRs (reward)
- There is enough deal flow to maintain the high-quality of all early-stage investments even as the portfolio's size significantly increases
- Your investment decisions are not prophetic and there is a significant degree of luck/exogenous factors in the outcomes of your portfolio companies.

On the model:

- Please note that there is a round between Seed and Series A, called "Seed +" in our model, which averages $1.6M on $8M post money

- The models inputs largely come from the data published in these articles by CB Insights and Pitch book.

- The model used for this blog series is a scrubbed- down version of the model our fund uses to plan our portfolio strategy.

About the Author

Victor Gutwein, Victor is a Kauffman Fellow (Class 22) and an active member and co- chair of the Consumer group at Hyde Park Angels. Previously he has worked in corporate strategy on a variety of new businesses in retail & ecommerce. Victor has a passionate history with startups, including a vending machine business and kick scooter company, along with being on the board of the University of Chicago's first student-run venture fund.

Victor lives with his wife on the South Side of Chicago and loves staying active with backpacking, running, biking and most water sports. If he can't convince you to workout with him though, he'll usually succeed in getting you to try out a Euro-style board game (like Settlers of Catan) with his friends.

About GreenHills Ventures

GreenHills Ventures, LLC., established in 2001 as a private investment holding company and General Partners for GH Fund I and GH Fund II and GHV Wealth Management Holding, LLC. (GHVWMH), a wealth management firm focused on alternative investments for its single and multi-family offices and institutions. For more information visit www.greenhillsventures.com