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# Introduction to Venture Funding

April 14, 2022

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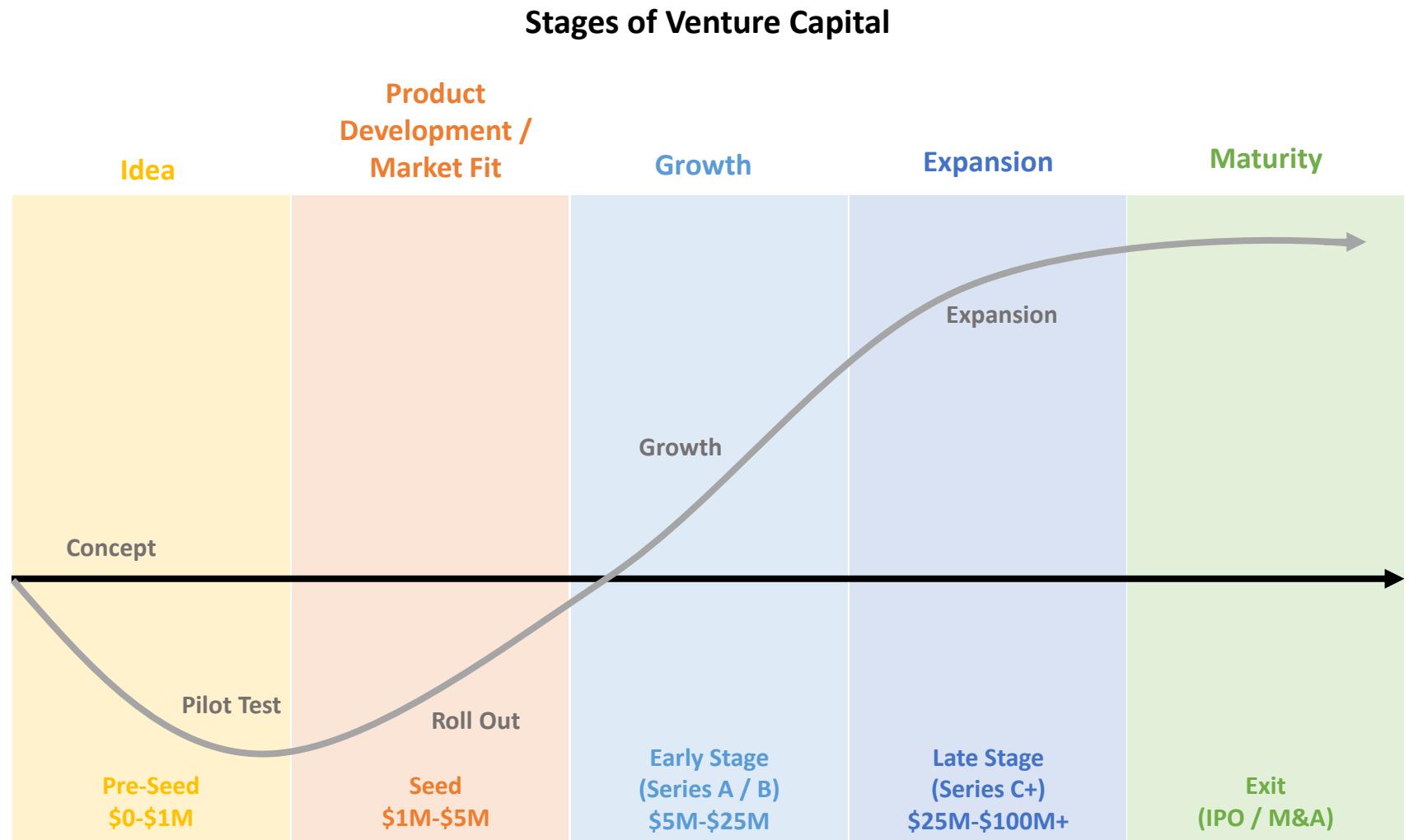
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# The Spectrum of Capital

	Financial-only	Responsible	Sustainable	Impact		Impact-only	
Focus:	Limited or no regard for environmental, social or governance (ESG) practices	Mitigate risky ESG practices in order to protect value	Adopt progressive ESG practices that may enhance value	Address societal challenges that generate competitive financial returns for investors	Address societal challenges where returns are as yet unproven	Address societal challenges that require a below-market financial return for investors	Address societal challenges that cannot generate a financial return for investors
Examples:		<ul style="list-style-type: none"> <li>• PE firm integrating ESG risks into investment analysis</li> <li>• Ethically-screened investment fund</li> </ul>	<ul style="list-style-type: none"> <li>• "Best-in-class" SRI fund</li> <li>• Long-only public equity fund using deep integration of ESG to create additional value</li> </ul>	<ul style="list-style-type: none"> <li>• Publicly-listed fund dedicated to renewable energy projects (e.g. a wind farm)</li> <li>• Microfinance structured debt fund (e.g. loans to microfinance banks)</li> </ul>	<ul style="list-style-type: none"> <li>• Social Impact Bonds / Development Impact Bonds</li> </ul>	<ul style="list-style-type: none"> <li>• Fund providing quasi equity or unsecured debt to social enterprises or charities</li> </ul>	

# What is Venture Capital

- Venture capital is a form of financing that provides equity capital to early-stage companies
- Venture capitalists take the risk of investing in startup companies, with the hope that they will earn high returns as portfolio companies achieve growth milestones and ultimately result in successful exits in the form of M&A or IPO
- Venture capital funds are designed to invest in high-risk companies in exchange for equity ownership that offer high return potential
- When choosing companies to invest in, venture capitalists consider the company's growth potential, the strength of its management team, and the intellectual property or uniqueness of a company's products or services



# The Venture Capital Food Chain

Limited Partners



Yale University



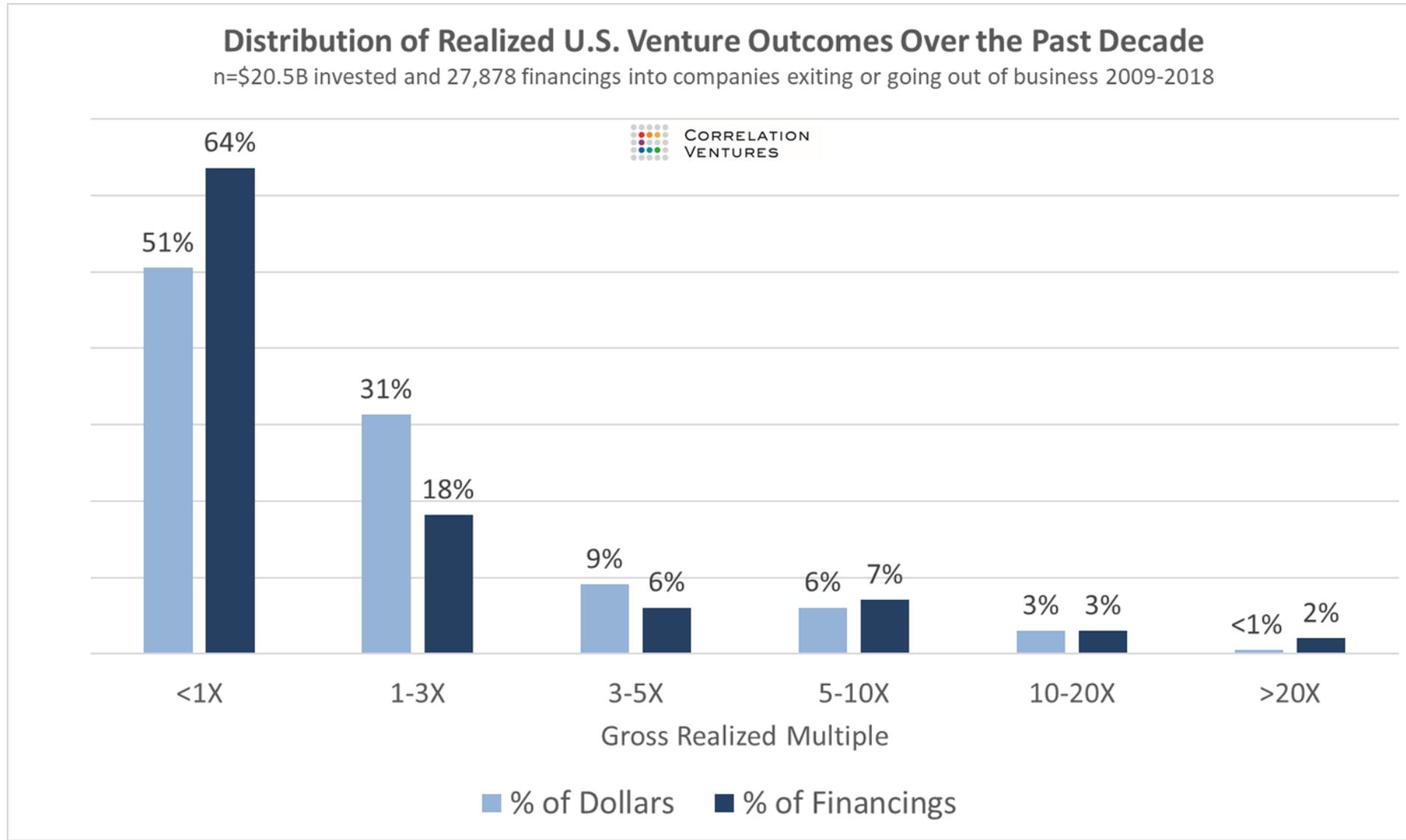
VCs



Entrepreneurs



# The Power Law of Venture Capital



# The Power Law in Practice

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## What the power law means for investors

- 10,000-20,000 companies will be funded by Angels
- 1,000-2,000 will get VC funding
- 50-100 are “OK, but not great” (exit > \$50M)
- 10 +/- 5 will be special (exit > \$500M)
- The best company in a given year will usually be more valuable than all other 9,999 companies combined

-Mike Maples, Floodgate, Inside the Black Box of Venture Capital

**Key Conclusion:** VCs are paid to take high risk for high return to create massive outcomes that make the model work

# Overview of the Venture Funding Process

1

## Company Pitch

- The introductory meeting where the investors and founders meet for the first time
- The founders present the company pitch, which discusses the problem / opportunity, company solution, business model, GTM strategy, competitive landscape, financial projections etc.
- During this meeting both founders and investors determine whether there is a “fit” culturally

2

## Due Diligence

- Investor performs deep dive analysis on the target company and sector
- Investor “underwrites” all potential sources of risk (i.e., market risk, technology risk, IP risk, execution risk etc.) associated with the investment to ensure that return potential is commensurate with the risk profile
- Investor performs expert interviews, customer calls, supplier calls and looks into the background of the founders in order to determine whether or not the target company is a sound investment

3

## Term Sheet

- Once the VC investor determines that they would like to invest in the company, they will present a term sheet to the founders indicating their offer
- Term sheets govern the parameters of a preferred equity investment including the pre-money valuation of your business, investment size, liquidation preference and a number of other possible terms related to liquidation, pro rata rights, anti-dilution rights etc.
- In order to negotiate successfully throughout the term sheet process, founders must think like investors and know their value to strike the right balance between pre-money valuation and % dilution

# What to Include in Your Company Pitch?

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- 1) Problem / Opportunity** –is there a defined customer need that is being addressed?
- 2) Value Proposition** – How does your company/business address that problem? What is PMI...
- 3) Underlying Magic** (Special sauce, IP, uniqueness...) What is so compelling to our customers?
- 4) Business Model** – how do you monetize your business? Recurring revenue?
- 5) Go-to-Market Plan** – Direct sales / in-direct sales
- 6) Competitive Analysis** – What are other people doing about the problem (incumbents)? What are we doing differently (better, faster, cheaper)?
- 7) Management Team**
- 8) Financial Projections & KPIs**
- 9) Current Funding Status** – Fundraising ask; what we will look like post your investment

# Valuation: How to Value Your Company?

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- When VC investors think about valuation, it is often connected to some type of multiple (i.e. revenue multiple)
- Venture backed companies are almost always valued on a multiple of Revenue, so...
  - **Enterprise Value = Revenue X Multiple**
  - The **Multiple** will be informed by a company's key attributes (i.e., revenue growth, margin profile, market dynamics, business model, management team, technology / IP, capital intensity, sales cycle etc.) and how those attributes compare to publicly traded peer companies or precedent transactions
  - Industries will typically trade in a defined range on a forward revenue multiple, for example mature Enterprise Software companies trade at (6.0x – 8.0x) 2022E Revenue, whereas high growth Software companies trade at (10.0x – 15.0x) 2023E Revenue
  - **Revenue** will typically reflect a 1-2 year forward estimate depending on the maturity of the industry and/or growth profile of the companies within a given sector

# Valuation: Early Stage vs. Growth/Late Stage Companies

## Early Stage Company Characteristics

- Early stage companies with very little track record
- Can be pre-revenue; definitely pre-cash flow
- Large addressable market
- High growth market or industry
- Generally valued on Revenue multiple (EV / Revenue) based on public company peers

## Early Stage Venture Capital Investor Consideration

- What do I think the company is worth today (entry value)?
- What are my expectations for future growth (exit value) and dilution potential (subsequent funding rounds)?
- Can my \$X investment earn a 10x MOIC return?
- **Levers of Value Creation:**
  - **Team:** Quality of management team
  - **Technology:** Intellectual property (IP)
  - **TAM:** Market dynamics (Total Addressable Market)
  - **Traction:** Business model / Go-to-Market strategy

## Late Stage Company Characteristics

- Later stage companies with historical financials
- Generate revenue and cash flow
- Generally more mature market or industry
- Stable growth and attractive margin profile
- Can be valued on Revenue (EV / Revenue) or EBITDA multiple (EV / EBITDA)

## Late Stage Venture Capital / PE Investor Consideration

- What is the least amount of equity required to achieve a minimum 10x MOIC return?
- How much leverage (debt) can be put on the business to increase the chances of achieving a min 10x return?
- **Levers of Value Creation:**
  - **Revenue Growth:** organically or through acquisition
  - **Margin Expansion:** Reduce COGS or SG&A to enhance margins
  - **Cash Flow:** Reduced CapEx to grow cash flow
  - **Multiple Expansion:** Achieved by enhancing financial profile, entering new markets or eliminating risk

# Valuation: Comparable Company Analysis

Company	Share Price (\$)	% 52 Week		Market Cap (\$M)	Enterprise Value (\$M)	Revenue (\$M)		Adj. EBITDA (\$M)		Rev. Growth		Adj. EBITDA Margin %	FCF Margin %	EV / Rev		EV / Rev / Growth	EV / EBITDA	P / FCF
		High	Avg.			CY22	CY23	CY22	CY23	CY22	CY23	CY22	CY22	CY22	CY23	CY22	CY22	
<b>Diversified Mega Cap Software</b>																		
Microsoft	\$308.31	90%	105%	\$2,342,190	\$2,273,758	\$212,946	\$242,257	\$107,037	\$123,416	16%	14%	50%	34%	10.7x	9.4x	0.67x	21.2x	31.9x
Alphabet	\$2,781.35	93%	104%	\$1,885,383	\$1,731,115	\$303,259	\$350,477	\$122,476	\$141,591	18%	16%	40%	27%	5.7x	4.9x	0.32x	14.1x	23.3x
Amazon	\$3,259.95	87%	98%	\$1,704,447	\$1,678,711	\$541,268	\$634,874	\$80,837	\$104,916	15%	17%	15%	5%	3.1x	2.6x	0.20x	20.8x	63.2x
Broadcom	\$629.68	93%	120%	\$278,210	\$307,522	\$32,353	\$34,185	\$19,744	\$21,068	15%	6%	61%	51%	9.5x	9.0x	0.65x	15.6x	17.0x
Oracle	\$82.73	80%	97%	\$238,613	\$294,122	\$43,596	\$45,940	\$22,275	\$23,495	5%	5%	51%	22%	6.7x	6.4x	1.34x	13.2x	24.5x
Cisco	\$55.76	87%	100%	\$231,734	\$214,006	\$54,047	\$56,746	\$20,065	\$20,852	6%	5%	37%	29%	4.0x	3.8x	0.68x	10.7x	15.0x
Adobe	\$455.62	66%	81%	\$219,085	\$218,509	\$18,082	\$20,717	\$8,817	\$10,144	13%	15%	49%	42%	12.1x	10.5x	0.91x	24.8x	28.7x
Salesforce	\$212.32	68%	87%	\$217,192	\$212,848	\$31,613	\$37,384	\$9,603	\$11,246	21%	18%	30%	20%	6.7x	5.7x	0.31x	22.2x	34.3x
SAP	\$112.51	78%	86%	\$142,172	\$141,882	\$32,896	\$35,060	\$9,906	\$11,008	6%	7%	30%	17%	4.3x	4.0x	0.70x	14.3x	25.9x
IBM	\$130.02	86%	99%	\$119,888	\$158,278	\$60,681	\$62,877	\$16,666	\$17,508	6%	4%	27%	19%	2.6x	2.5x	0.45x	9.5x	10.3x
VMware	\$113.87	67%	81%	\$50,611	\$59,286	\$13,675	\$14,720	\$4,775	\$5,202	7%	8%	35%	28%	4.3x	4.0x	0.60x	12.4x	13.4x
Dell	\$50.19	44%	95%	\$41,247	\$57,271	\$104,645	\$107,224	\$10,210	\$10,612	3%	2%	10%	6%	0.5x	0.5x	0.16x	5.6x	6.5x
HPE	\$16.71	95%	108%	\$22,689	\$25,017	\$28,765	\$29,562	\$5,588	\$5,837	3%	3%	19%	7%	0.9x	0.8x	0.29x	4.5x	11.9x
Citrix <sup>(1)</sup>	\$80.86	56%	69%	\$10,668	\$13,406	\$3,321	\$3,519	\$1,055	\$1,115	3%	6%	32%	23%	4.0x	3.8x	1.25x	12.7x	13.7x
Average				\$536,009	\$527,552	\$105,796	\$119,682	\$31,361	\$36,286	10%	9%	35%	24%	5.4x	4.9x	0.61x	14.4x	22.8x
Median				\$218,138	\$213,427	\$38,246	\$41,662	\$13,438	\$14,377	7%	6%	33%	23%	4.3x	4.0x	0.62x	13.7x	20.2x

# Valuation: Venture Capital Method

*How does this work in practice from the investor perspective...*

- 1 If we invest \$1M in Company A today, what do we have to believe about Company A's value at the time of exit in order to achieve a 10x return on invested capital (i.e., \$10M)?
- 2 We model out the companies potential revenue growth, via lots of analysis and assumptions, in this case assuming \$20M
- 3 ...and analyze and make assumptions about a multiple of revenue (1.5x)....
- 4 To form an opinion on a value at exit (\$30M)
- 5 And then calculate our ownership stake (33%) and the corresponding valuation (\$2M)

#1

Venture Capital Method		
Investment	\$1M	(what's needed)
Revenue (5th yr)	\$20M	(assumption)
Peer Multiple	1.5X	(pick your comp)
Company Value	\$30M	(at exit)
Required ROI	10X	(VC model)
Required Valuation	\$10M	(of our stake)
% of Company Required	33%	(to net us \$10M)
Pre-Money Valuation	\$2M	(derived from above)

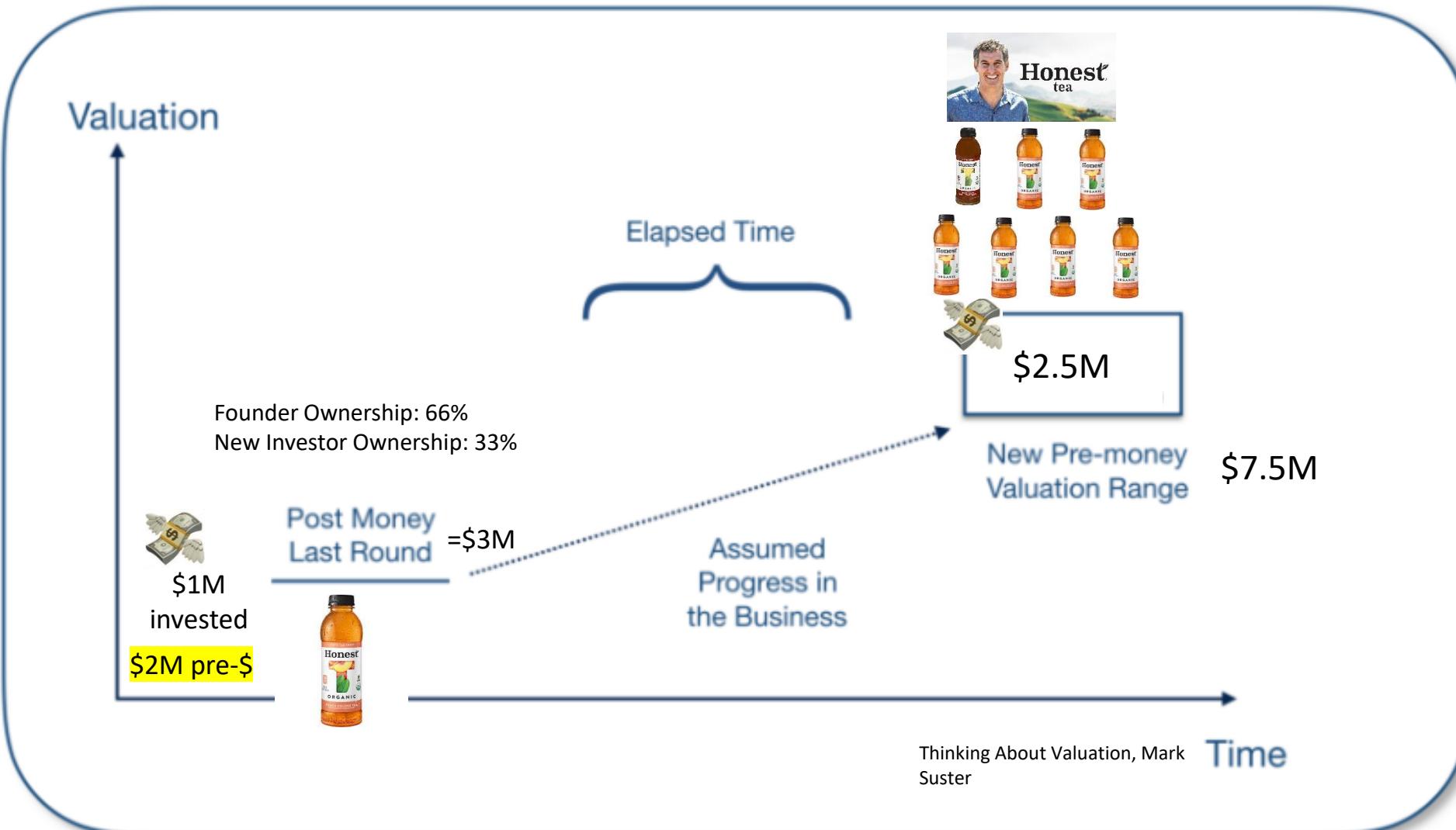
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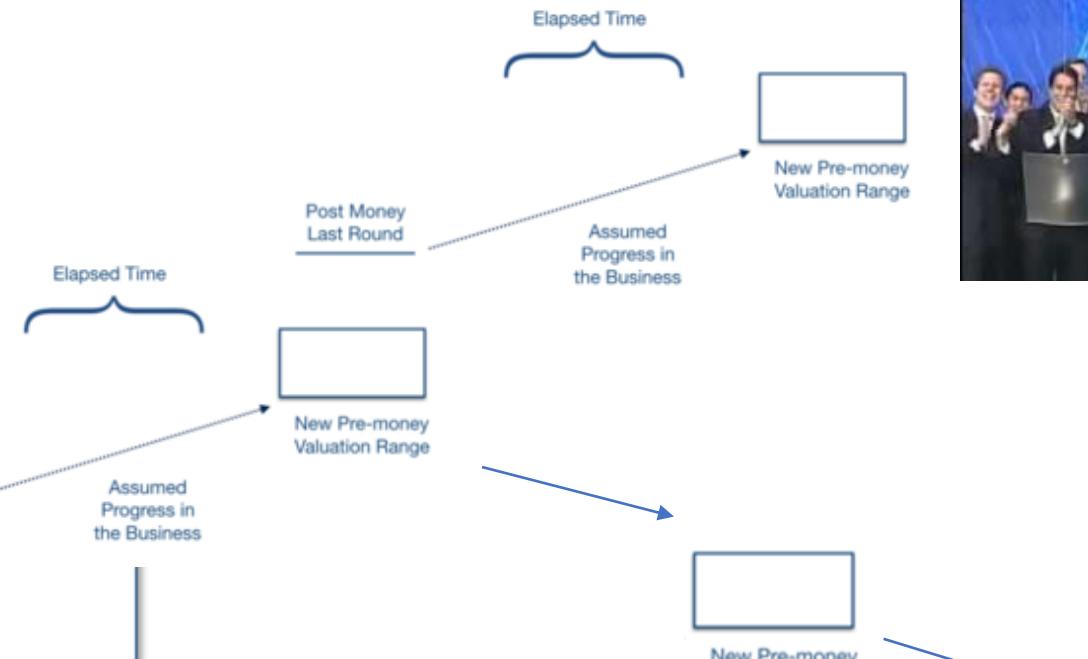
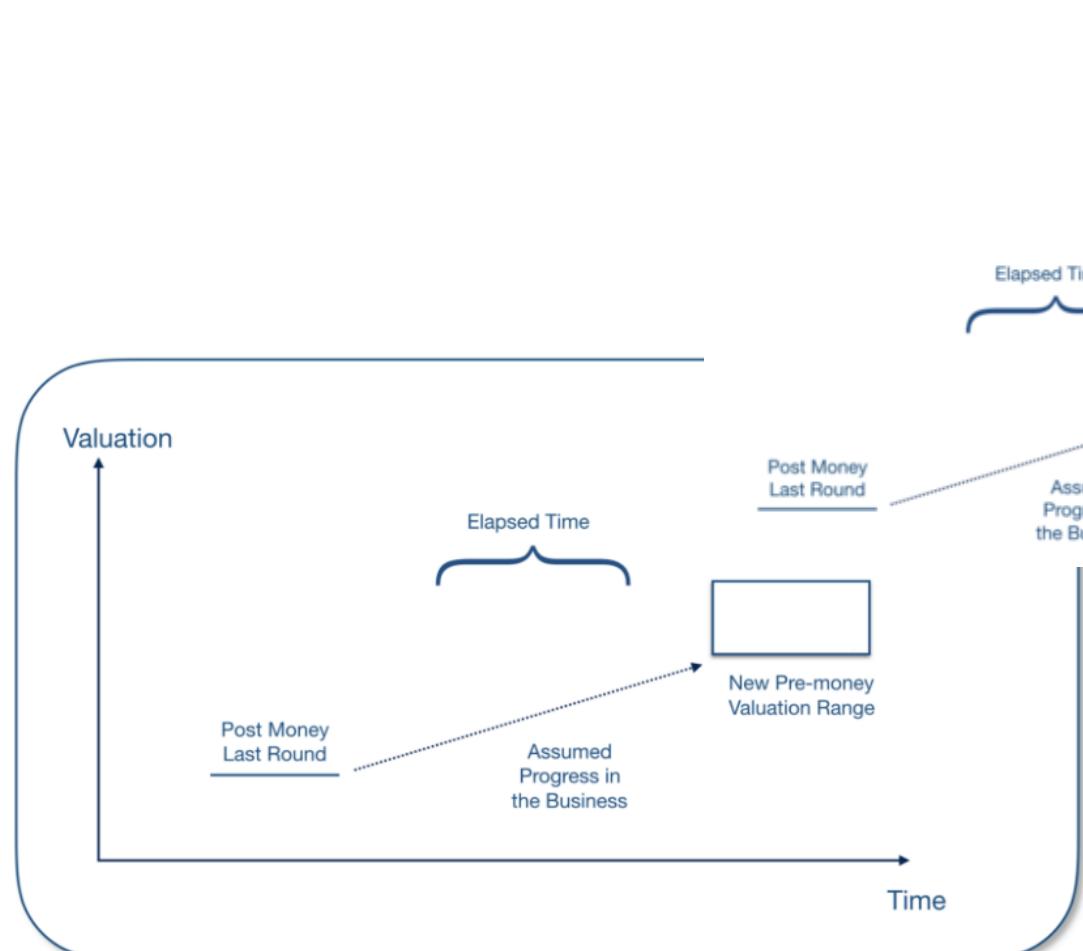
#4

#5

# How Venture Funding Rounds Work



# What this looks like over time



## IPO, Acquisition, or Sale



## Asset Sale, Bankruptcy



# A Few Key Concepts Explained

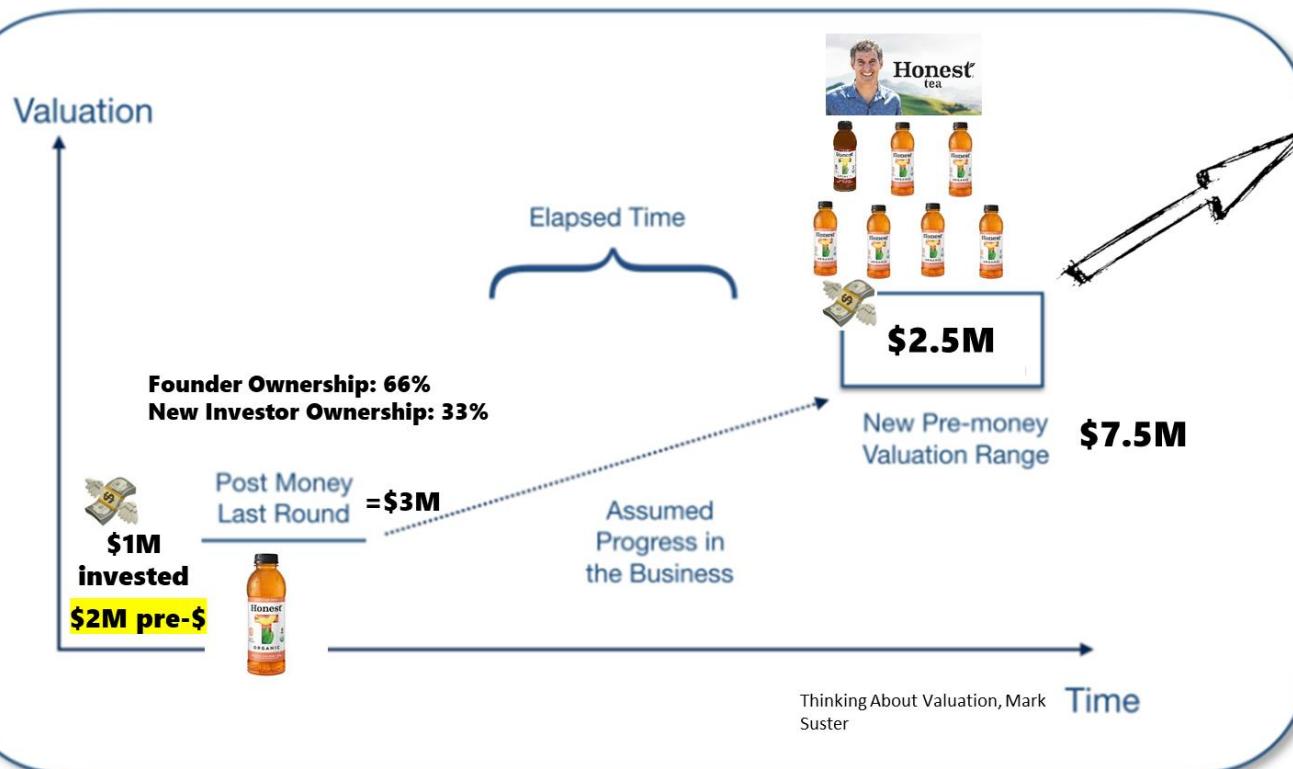
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## New post-money valuation

$$\$2.5M + \$7.5M = \$10M$$

## New Investor Ownership

$$\$2.5M / \$10M = 25\%$$



## Dilution

I owned 66% before the round, and have just been diluted by 25%.

My new ownership is:  
 $66\% * (1-25\%) = 49.5\%$

## Pro Rata

Some current investors might have rights to maintain their ownership. In this case if the current investor invested their pro rata they would invest:

$$33\% * \$2.5M = \$825k \text{ of the round}$$

## Common vs. Preferred Stock

Common Stock: security typically owned by founders and employees, does not have the same rights, preferences as preferred which is the class of stock purchased by investors

## Employee Option Pool

So far, our very simple example has not included an option pool, which is ownership for employees, this is a pool of common stock to be given to employees

# Capital Table Example #1 – No Venture Debt

**Founders must understand ownership dilution potential associated with taking on external capital...**

## Assumptions:

- Consider the scenario under which a company has no external investors
- Debt: \$0
- Preferred Equity: \$0

## Key Takeaways:

- Debt holders have the highest seniority on the capital table and are the first to get paid out in a liquidation scenario
- Preferred equity investors are junior to debt holders and senior to common equity holders, meaning that they get paid out after debt and before common equity investors
- Common equity is the last security to get paid out on the capital table
- Employee #1 maintains a 13.0% equity ownership valued at \$7.0M

## Company Valuation:

Enterprise Value	\$100,000,000	←
Total Debt	\$0	
Equity Value	\$100,000,000	←
Total Shares Outstanding	9,200,000	
Price per Share	\$10.87	
Value of Employee Stock Options	\$7,043,478	

## Company Capital Table:

	Strike Price	Common Shares	Preferred Shares	Total Shares	Invested Capital	% Ownership
<u>Debt Capital:</u>						
Senior Debt		-	-	-	\$0	0.0%
Total Debt		-	-	-	\$0	0.0%
<u>Equity Capital:</u>						
Founder		8,000,000	-	8,000,000		87.0%
Employee #1 Stock Options	\$5.00	1,200,000	-	1,200,000		13.0%
Venture Capital Investor		-	-	-	\$0	0.0%
Total Equity		9,200,000	-	9,200,000	\$0	100.0%

# Capital Table Example #2 – with Venture Debt

**Venture debt investors have highest seniority; venture equity investors are junior to debt holders and senior to common equity holders and therefore dilute founder ownership**

## Assumptions:

- Consider the scenario under which a company has chosen to take on external capital from debt and venture capital investors
- Debt: \$20M
- Preferred Equity: \$14.4M

## Key Takeaways:

- Debt holders have the highest seniority on the capital table and are the first to get paid out in a liquidation scenario
- Preferred equity investors are junior to debt holders and senior to common equity holders, meaning that they get paid out after debt and before common equity investors
- Common equity is the last security to get paid out on the capital table
- Employee #1 maintains a 10.3% equity ownership valued at \$4.3M

## Company Valuation:

Enterprise Value	\$120,000,000	←
Total Debt	\$20,000,000	←
Equity Value	\$100,000,000	←
Total Shares Outstanding	11,600,000	
Price per Share	\$8.62	

Value of Employee Stock Options \$4,344,828

## Company Capital Table:

	Strike Price	Common Shares	Preferred Shares	Total Shares	Invested Capital	% Ownership
<u>Debt Capital:</u>						
Senior Debt		-	-	-	\$20,000,000	0.0%
Total Debt		-	-	-	\$20,000,000	0.0%
<u>Equity Capital:</u>						
Founder		8,000,000	-	8,000,000		69.0%
Employee #1 Stock Options	\$5.00	1,200,000	-	1,200,000		10.3%
Venture Capital Investor	\$6.00	-	2,400,000	2,400,000	\$14,400,000	20.7%
Total Equity		9,200,000	2,400,000	11,600,000	\$14,400,000	100.0%

# A Quick Note on Convertible Notes and SAFEs

1

## Priced Equity Rounds

- What we have been talking about today
- Comes with additional terms/rights typically related to the security: liquidation preference, anti-dilution, investor rights, etc.
- Sets a definitive price on the value of the company

2

## Convertible Notes

- Debt instrument that converts into the next equity round of financing
- Often carries an interest rate (~8%) and sometimes includes a cap
- Often used as a “bridge” between two rounds of equity financing

3

## SAFE

- Simple Agreement for Future Equity
- Converts into the next round, like a convertible note, but is not a debt instrument
- Most times has a valuation cap
- Common amongst early-stage companies due to limited expense, and minimal negotiations

# Class Summary & Key Takeaways

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## 1) Spectrum of Capital

- There is a spectrum of financing options available to early stage companies
- Different type of capital (equity vs. debt), size of investment, and type of investor (angel, venture capital fund, growth investor, etc.) as your company scales

## 2) What is Venture Capital?

- Venture capital represents preferred equity ownership in a company of a specific size and profile (startups)
- Venture capital investors expect to earn a 5x-10x+ returns in order to justify the early stage risk that they are taking on

## 3) Venture Funding Process

- Knowing your levers of value (TAM, Team, Technology, Traction) helps you to pitch your company and is instrumental in Term Sheet negotiations
- Understanding the tradeoffs between valuation (pre-money value) and dilution (round size) and other key negotiation points to ensure that you A) do not give up too much of your company or B) do not price your company so high that it is no longer attractive for future funding rounds

## 4) How Do I Value My Company?

- Understanding how an investor will value your business (Comps analysis, value at exit reverse engineered to today)

## 5) What Do I Need to Know About a Capital Table?

- Venture capital is inherently dilutive to a founder's equity ownership
- Key concepts (Common Equity, Preferred Equity, Employee Option Pool, Employee)

# Appendix

# Venture Capital Resources

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## General Venture

- [Investors and their Incentives](#), Aaron Harris
- [How to be an Angel Investor](#), Paul Graham
- [Elements of Enduring Companies](#), Sequoia Capital
- [Writing a Business Plan](#), Sequoia Capital
- [Startup Advice](#), Sam Altman
- [Inside the Blackbox of Venture Capital](#), Mike Maples of Floodgate
- [Think Big But Start Small](#), Jim Goetz of Sequoia Capital
- [Series Seed: Version 3.1 standard seed term sheet and deal documents](#), ([Links to an external site.](#))[Links to an external site.](#) June 2013

## Financials for VC 101

- [How to Calculate a Return on Investment \(ROI\)](#), Fred Wilson
- [Time Value of Money](#), Fred Wilson
- [Analyzing Financial Statements](#), Fred Wilson
- [Opportunity Costs](#), Fred Wilson
- [Enterprise Value & Market Value](#), Fred Wilson
- [Employee Equity: Vesting](#), Fred Wilson
- [Margins](#), Fred Wilson
- [Financing Options for Startups](#), Fred Wilson
- [EBITDA](#), Fred Wilson
- [Cap Tables](#), Fred Wilson
- [Burn Rate](#), Fred Wilson
- [Revenue Models](#), Fred Wilson
- [Revisiting The Term Sheet](#), Brad Feld
- [Convertible Debt](#), Fred Wilson

## Valuation

- [Valuation](#), Fred Wilson
- [Valuing Pre-Revenue Companies](#), Kauffman Foundation
- [Methods for Valuation of Seed Stage Startup Companies](#), Angel Capital Association [Valuations 101: The Venture Capital Method](#), Bill Payne's Blog on [Gust.com](#)

## Convertible Debt

- [Everything You Ever Wanted to Know About Convertible Note Seed Financings \(But Were Afraid To Ask\)](#), Walker Corporate Law
  - [Part 1](#) ([Links to an external site.](#))[Links to an external site.](#),
  - [Part 2](#) ([Links to an external site.](#))[Links to an external site.](#),
  - [Part 3](#) ([Links to an external site.](#))[Links to an external site.](#),

## Convertible Debt vs. Equity

- [Raising Angel Money](#), ([Links to an external site.](#))[Links to an external site.](#) Mark Suster, July 2009
- [Is Convertible Debt Preferable to Equity?](#) ([Links to an external site.](#))[Links to an external site.](#) Mark Suster, August 2010