The Business of Venture Capital

By Jeff Weinstein November 5th, 2020

What is Venture Capital?

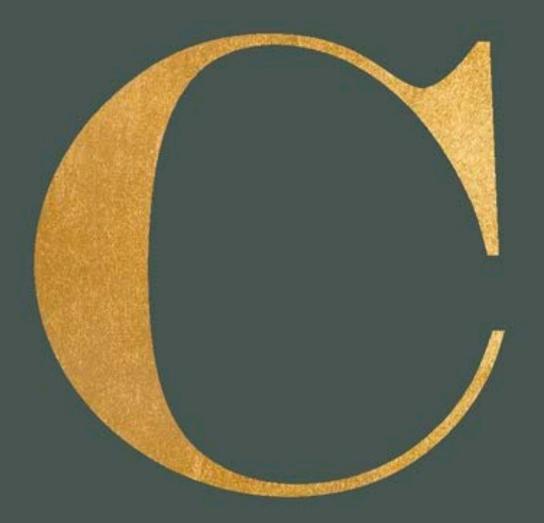
- A subset of private equity (investing in private companies for a piece of ownership) financing.
- Typically (but not exclusively) focused on early-stage high risk, young technology companies since those companies often have the highest growth potential.
- Unlike PE, typically take minority stakes in companies and do not exert control.
- Many of the most important companies in the U.S. (and *virtually all its important tech companies*) were venture-funded.

History of Venture Capital

- Business model began with whaling in the mid 1800s.
 - Unpredictable, high-risk, high-reward venture.
 - Returns follow a power-law distribution. Most ships would lose money, but a few were VERY profitable, making it a profitable endeavor on the whole.
 - Investors would collect large pots of money and diversify across multiple whaling ships to generate massive returns.
 - Average whaling vessel spent 3 years at sea!
 - Captains would be compensated by keeping a percentage of the profits. Origin of carried interest!



An American History



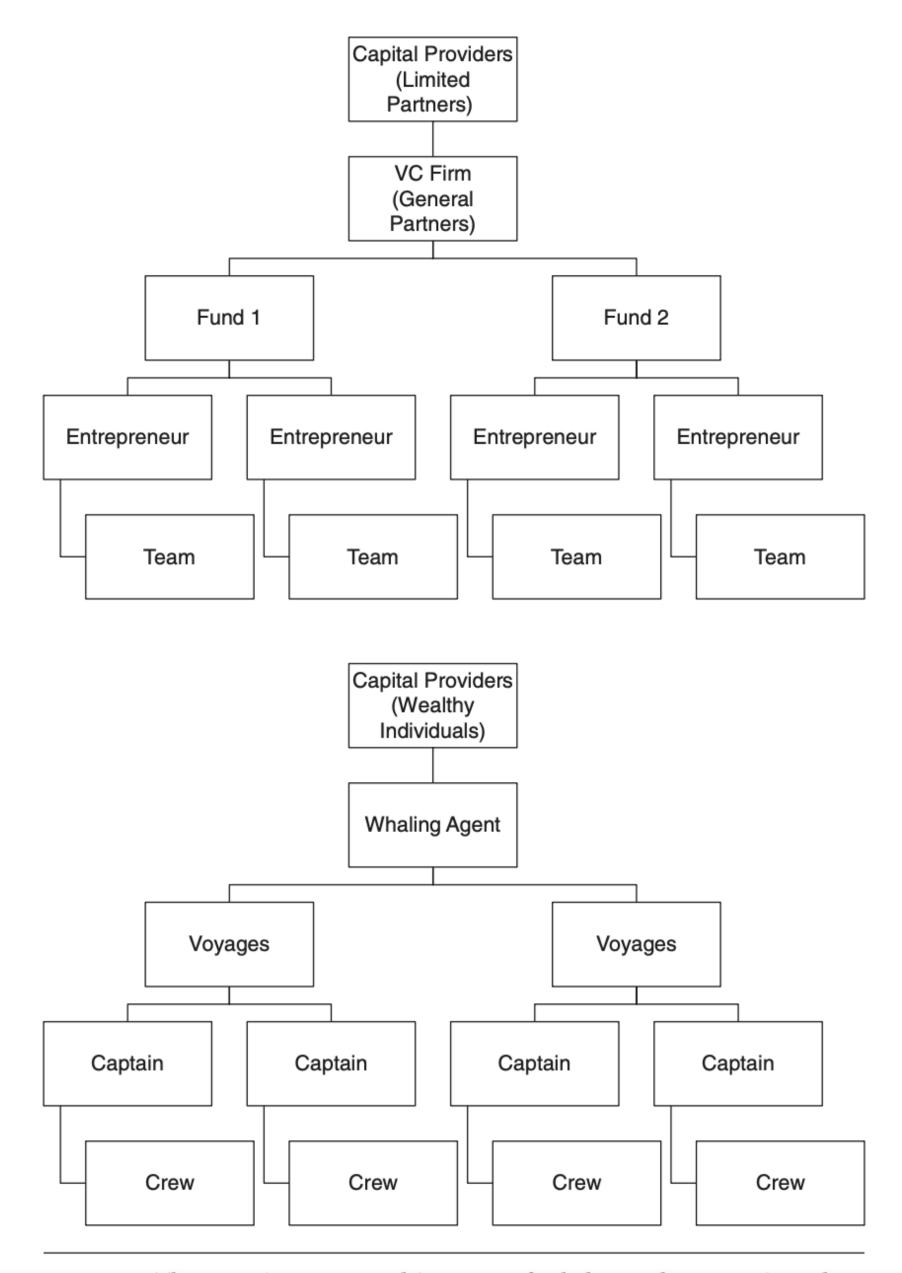


Figure 1.3 The Basic Organizational Structure of Whaling and Venture Capital.

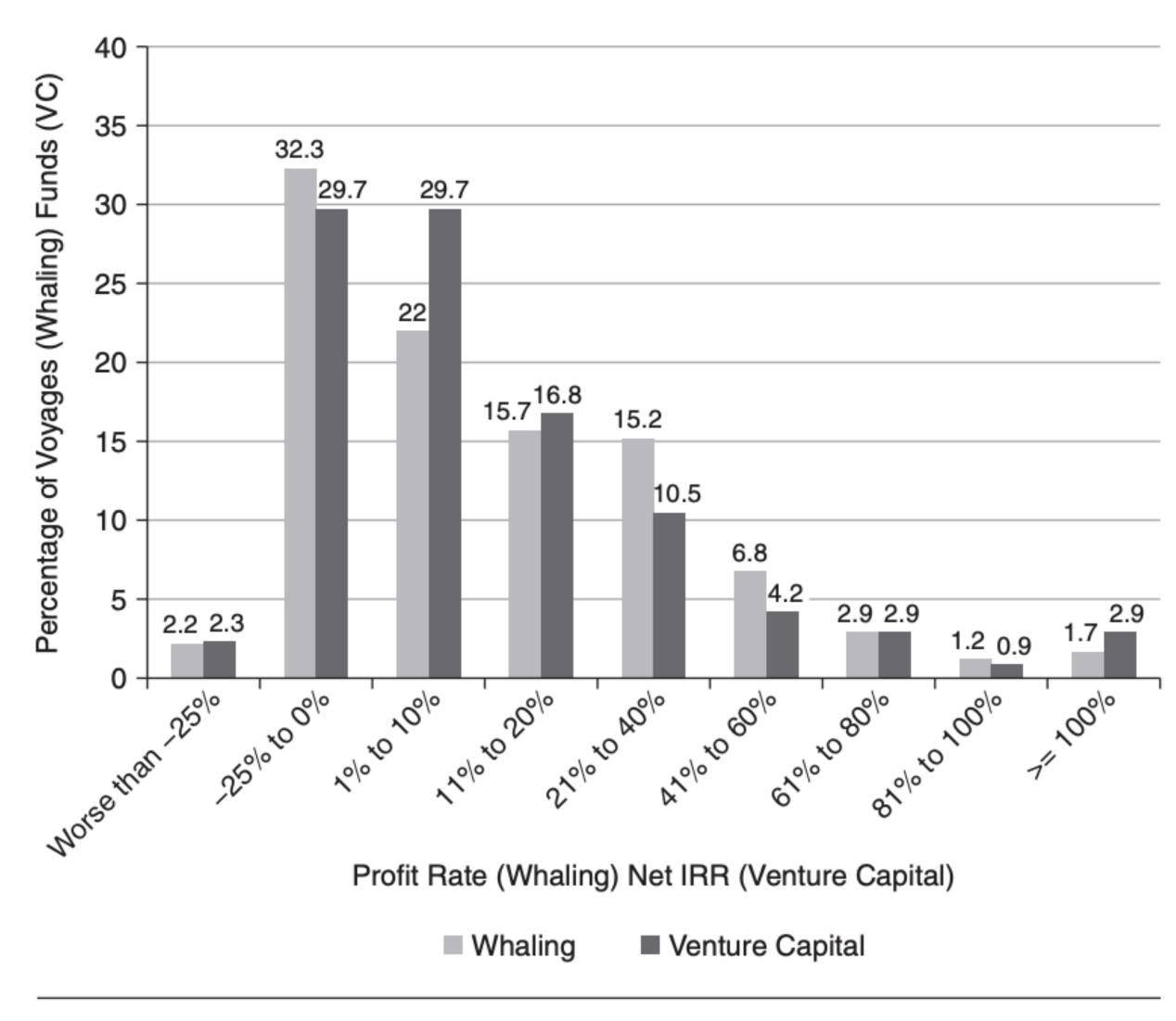


Figure 1.1 The Distribution of Returns in Whaling and Venture Capital.

Based on data in Lance E. Davis, Robert E. Gallman, and Karin Gleiter, *In Pursuit of Leviathan: Technology, Institutions, Productivity, and Profits in American Whaling,* 1816–1906 (Chicago: University of Chicago Press, 1997), 450. Venture capital estimates based on Preqin Venture Capital Database, accessed March 2016.

Modern VC Structure

- VCs are managed by General Partners "GPs".
 - GPs typically put in 2% of the total fund as GP commit.
- Typical VC fund charges "2 and 20": 2% per year Management Fee, 20% Carried Interest
- 10 year lockup + options for two 1 year extensions
- 3-5 year investment period (sometimes higher fees up front that lower during "harvest period"
- Capital is committed in entirety but only "called" in small tranches over first 3-5 years
- Both carried interest and partnership gains are taxed as long-term capital gains (lower than ordinary incomes)

History of Venture Capital

- First VC "fund" in 1946 with ARD (American Research and Development)
 Corporation and J.H. Whitney and Company
 - ARD Corporation was founded by George Doriot, founder of INSEAD and former dean of HBS. Encourage private sector investment in businesses post WW2.
- Started off the domain of American mega-wealthy: JP Morgan, Rockefellers, Warburgs, Mellons, etc.
- Bessemer and Venrock were both originally family offices!
 - Bessemer spun out of the Phipps family (Andrew Carnegie business partner)
 - Venrock = Venture *Rockefeller*. John D Rockeller Jr's son Laurence.

Modern Day VC Structure

- A loose affiliation of individual partners. Each partner has a different personality and expertise. Very important to choose the partner, not the firm.
 - A16Z: Alex Rampell or Angela Strange (fintech), Jeff Jordan (marketplaces), Andrew Chen (gaming/marketplaces)
 - Benchmark: Bill Gurley/Sarah Tavel (marketplaces), Chetan Puttaganta (SaaS)
 - ARCH: Bob Nelsen (Biotech)
 - Lux Capital: Shahin Farshchi (Robotics/Automotive)

Typical Investment Team Hierarchy

- Partner: (Managing GP then GP). Leads deals, runs little fiefdom. Substantial carried interest. Some work their way up, some are ex-operators.
- Principal: sometimes lead deals, take board seats). Grooming to become Partner. Sometimes board seats, frequently observer seats. Beginning carried interest.
- Senior Associate/Associate: apprentice under Principal/Partner. Shadow, may take observer seats. Sometimes a gap, Partner-track based on performance/ ambition
- Analyst/Associate Some firms run as a 2 year program pre-MBA. Focus on sourcing.

Old GOATs: Sand Hill

- The "Wall Street" of Silicon Valley
- Connects Palo Alto, Menlo Park and Woodside, CA
- Sequoia, A16Z, NEA, KPCB, Greylock, Battery, DFJ, etc. etc. etc. etc.
- All HQ on this one strip.
- Most expensive CRE in the U.S.!
- Over 50 VC firms on this one road.
- Recent trend: migration to SF to follow entrepreneurs. Nearly all have opened SF offices. South Park / Jackson Square area.



FJ LABS	"Love money"	Pre-seed	Seed	Series A	Series B	Series C and beyond	
When should you fundraise?	Idea	At launch	Early product-market fit	Demonstrated product- market fit	Robust LTV:CAC (>4:1) Line of sight to profitability	Clear path to IPO or exit Fund growth via proven channels	
Traction (monthly net revenue)	Negligible	Negligible	\$10-50k	\$50-250k	\$200k-1M	\$500k+	
From whom?	Fools, friends, & family	Angels Pre-seed funds (Afore, Amplify, Fika)	Seed funds (FJ Labs, Floodgate, First Round, Uncork)	Series A & B funds (FJ Labs, Benchmark, Sequoia, USV, GC, BVP, Founders Fund, KPCB, NEA, A16Z)		Late stage VC + growth funds (General Atlantic, DST, Coatue, Insight)	
To do what?	Build MVP & early team	Launch	Reach early scale with reasonable unit economics	Scale	Aggressive scale and/or profitability	Prepare for IPO	
Round size	<\$250k	\$0.75-1M	\$2-4M	\$5-10M	\$5-10M \$15-25M		
Valuation (pre-money)	\$1-3M	\$3-5M	\$6-12M	\$15-30M	\$40-80M	\$100-200M	

Some Funds Specialize By Stage. Old GOATs usually Multi-Stage

 Lines are blurring as earlier funds raise opp, late funds move earlier. Mutual and HFs starting to do later stage as well.

"Pre-Seed"

Afore, Precursor, Amplify, Bee Partners, Fika

Seed

NFX, First Round, Floodgate, IA, Primary, Homebrew, Uncork, Susa

A/B

Benchmark, USV, JSV

Multi-Stage

Sequoia, NEA, Founders Fund, Bessemer, Lightspeed, Khosla, Norwest, Battery, Coatue, Bain, A16Z, Lux, Greylock, GC, Index, Spark, Thrive, Bain

Growth/Late

Insight, Warburg, IVP, TCV, Softbank, JMI, Summit, TPG, Wellington, T. Rowe.

Some Funds Specialize By Sector

 Domain expertise may lead to higher returns. Important for conducting technical diligence. Certainly a crisper LP pitch!

Crypto	Consumer		
Polychain, Paradigm	Maveron		
Fintech	Edtech		
Ribbit, Valar	Learn Capital, Owl Ventures		
Network Effects/Marketplaces	Logistics		
Version One, NFX	Schematic Ventures		
	Polychain, Paradigm Fintech Ribbit, Valar Network Effects/Marketplaces		

Most Funds Specialize By Geo

• Traditionally important if leading to have boots on the ground. COVID may have weakened this!

LatAm	India	New York	
Kaszek, Monashees, Canary, Redpoint	Accel India, Lightspeed India, Sequoia India, Kae	Primary	
eVentures	Capital, Kalaari Capital	Bay Area	
Southeast Asia	Israel	Sand Hill VCs	
Golden Gate Ventures, Jungle Ventures	Aleph, Viola, Magma	(changing!)	
China	Europe	Canada	
Omma		Goldon iNovia	
GGV, DCM, Morningside, Sequoia China, Zhenfund	Atomico, Balderton, Cherry	Golden, iNovia	

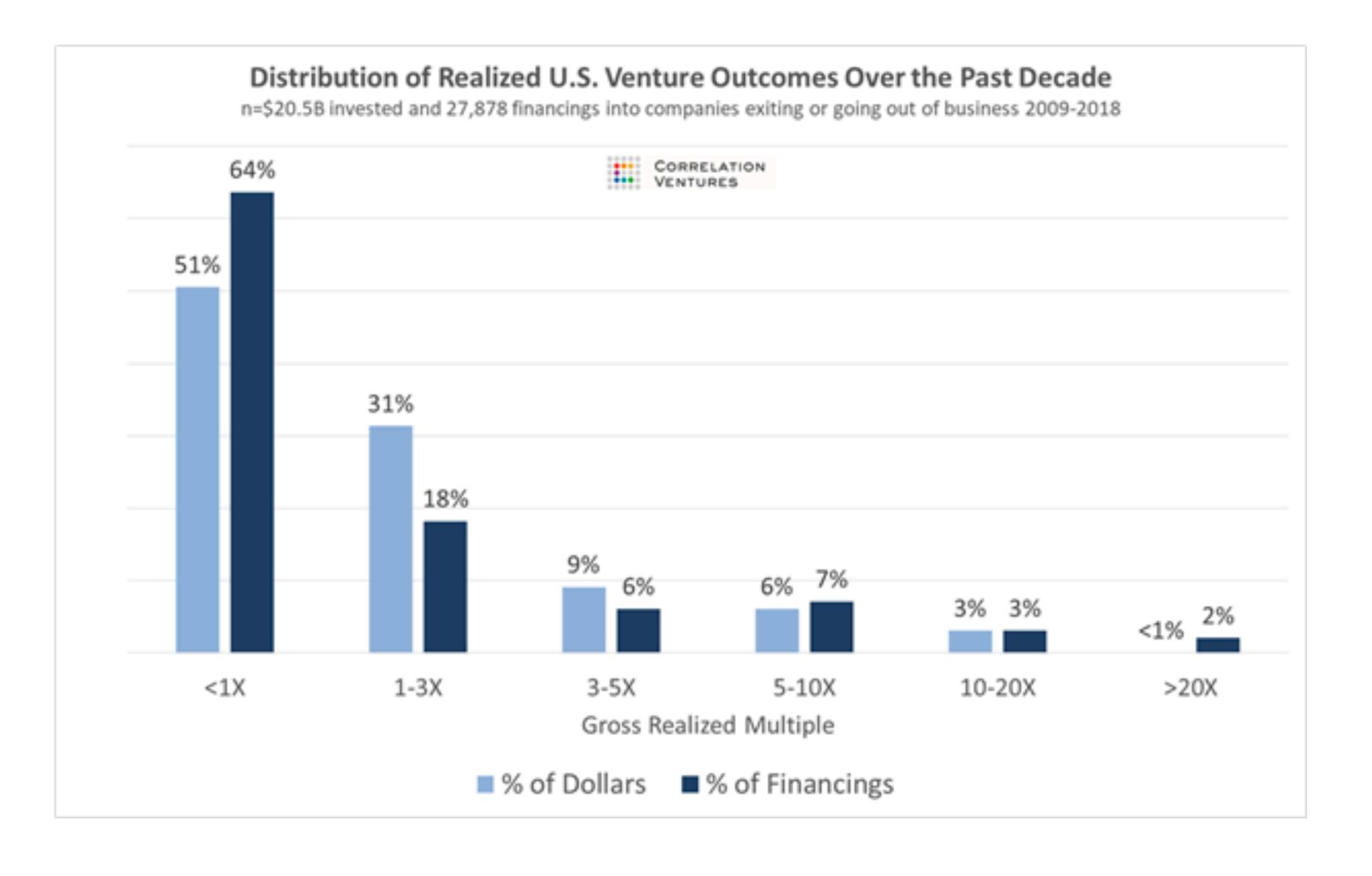
Fund Size Dictated By Stage/Strategy

- Most VCs lead deals (set terms of round, invest majority of round, draft docs, take board seats, "add value".
 - Typically lead 2-3 deals per partner per year.
- Given Seed rounds are small, can't put as much \$ to work.
- Seed Funds may invest \$1.5M of a Seed Round + \$1.5M of follow on = \$3M per company.
 - 2 deals / partner x 3 years = 6 deals per partner x 3 partners = 18
 - 3 deals / partner x 3 years = 9 deals per partner x 3 partners = 27 deals
- ~30 deals * \$2M per company (not all companies survive for follow on) = \$60M investable
 = \$75M fund

Portfolio Construction

- Traditional VC funds are hyper-focused on Fund Returning Potential.
 - Any individual investment should be able to return an entire venture fund.
 - As such, typical Seed fund tends to be 30 companies, 12-15% ownership at Seed.
- Why? Assuming you manage a \$50M fund, after dilution (and investing at Seed, there will be a LOT) you may only own <5% of a \$1B company. Given how rare these outcomes are (see next slide), you need to MAKE THEM COUNT.

Distribution of VC Returns

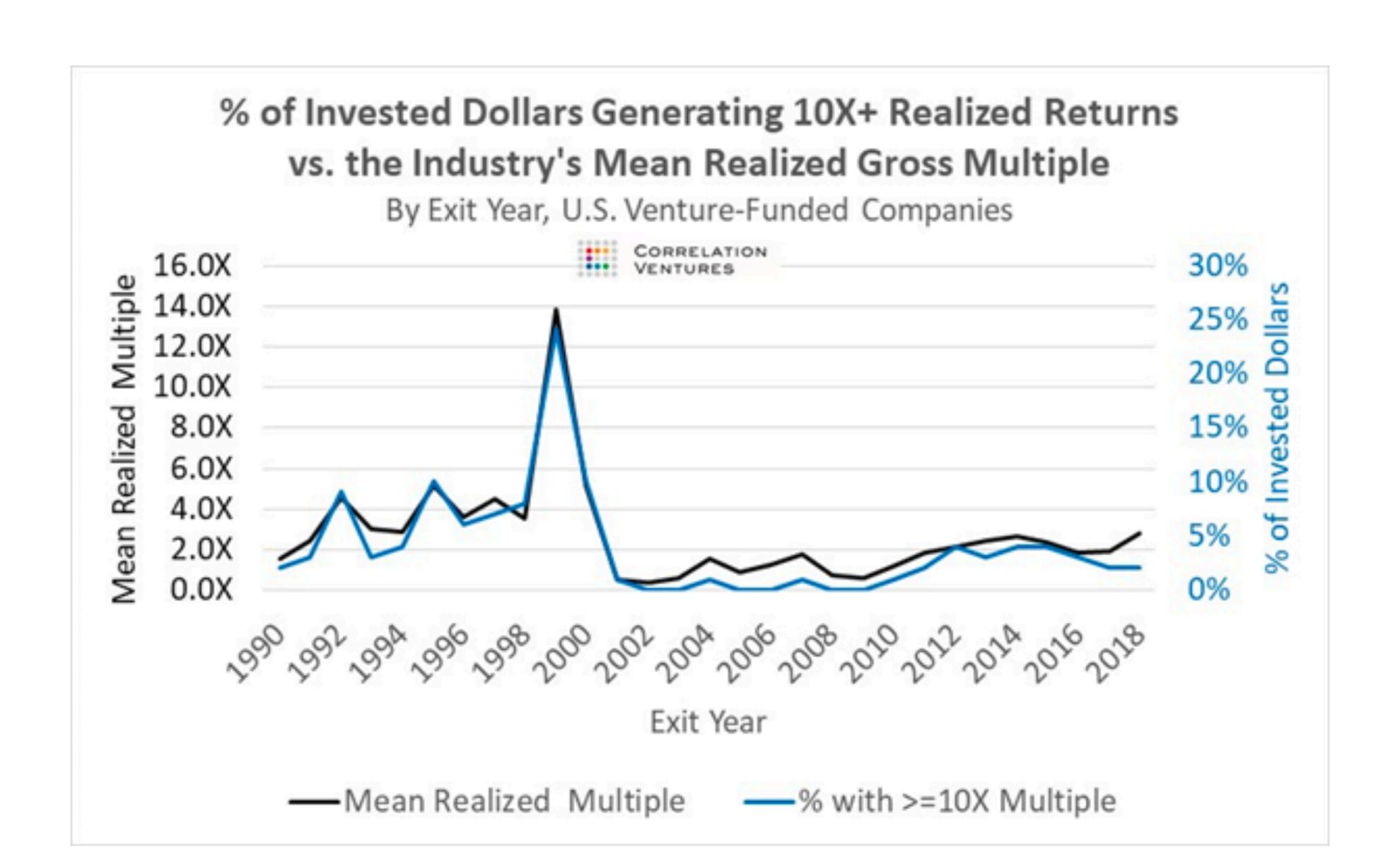


50% of VC \$ lost money.

Less than 4% were 10X or more.

Almost 2/3 of VC rounds lost money.

Macro / Vintage Matters - VC Hit Rate Over Time



Trend: Rise of the MegaFund

Average time to IPO has gone up to over the past 30 years. (JW note: SPACs changing this?)

But companies are reaching mega valuations faster than ever. Number of private unicorns and decacorns is through the roof.

Pinduoduo just reached \$100B valuation from founding in just 5 years!

= Opportunity increasingly captured by growth investors. Ability to fund and grow longer.

Rise of the MegaFund: 40+ \$1B funds investing

Source: Shai (SVB)

A16Z

Accel

Addition

Apax Digital Fund

Arch

Bain Capital Ventures

Battery

Bessemer

Blackstone

Bond

Coatue

Flagship Pioneering

Founders Fund

FTV Capital

General Atlantic

General Catalyst

GGV Capital

Global Founders Capital

Goldman Sachs Investment Partners

Greylock

GV (Google Ventures)

Index

Insight

IVP

JMI

JP Morgan Digital Growth Fund

Khosla

Lightspeed

Lux

New Enterprise Partners

Norwest

Sapphire

Sequoia

Spark Capital

Summit

TA

Technology Crossover Ventures

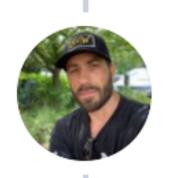
Thrive Capital

Tiger Global

TPG

Wellington Management

Small funds typically outperform large funds



Shai Goldman @shaig · Sep 10

of the 57 funds that had 5x DPI, only 10 of those were funds that were larger than \$200M in size. Smaller funds overperform and this speaks to why emerging managers are a place you had to put money as a LP, it still surprises that many LPs aren't active in this catergory

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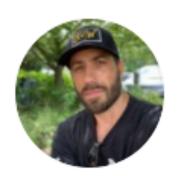
65% of the Funds that generated a 5x DPI are actually sub \$100M size funds

2:49 PM · Sep 10, 2020 · Twitter Web App

Fun: Some GOAT Funds

- Sutter Hill Ventures (Evergreen) 36% IRR from 1970 to 2005. After 36% carry. Then Snowflake Computing happened.
- Lowercase Fund I ~200X (Uber, Instagram, Optimizely, StyleSeat, Twitter)
- Benchmark Fund I ~90X (eBay)
- Emergence Fund III 50X (Zoom)
- KPCB Fund IX 32X (Google)
- Altimeter Fund I 30X (Snowflake Computing)
- Benchmark Fund VII 25X (Uber, Snap, WeWork, Discord, Duo Security, StitchFix)
- Accel Fund IX 19X (Facebook)
- First Round Capital II 15X (Uber)
- **USV** 2004: **13.9X**
- IA Ventures I: 10.7x

What Are Good VC Fund Returns?



Shai Goldman @shaig · Sep 10

Pitchbook has return data on 3,981 VC funds below \$2B

of funds (and %) who reached these DPI thresholds:

5x+ 57 (1.4%)

4x+ 88 (2.2%)

3x+ 187 (4.7%)

2x+ 532 (13.3%)

1x+ 1807 (45.4%)

If you strip out the 2010+ vintage funds

2,254 funds

5x 55. 2.4%

4x 84 3.7%

3x 175 7.8%

2x 486 21.5%

1x 1553 68.9%

What Are Good VC Fund Returns?

- Venture as an asset class as whole is bad. But high stickiness at the top best VCs get access to the best deals, get the best returns. VITAL, BUT NEAR IMPOSSIBLE TO GET INTO THE TOP FUNDS.
- LPs want to see 20% IRRs or a 2X net multiple. i.e. for every \$ they invest, they get \$2 back.
- Holding period/time to exit matters. IRR can vary greatly!
- DPI = \$ distributed. TVPI = net multiple
- "If you hit a 3x DPI fund, you can raise three subsequent funds." Shai @ SVB

FJ's Unique Strategy

- Being small = ability to sell secondary =. shorter holding period = higher IRRs
 + higher win rate
- Move crazy quickly = get into competitive deals.
- Don't lead + being small = cooperate with top-tier VCs = get into best deals
- Marketplace focus = expertise + brand = get into best deals
- Invest in global markets = less competition + relationships w/ best local VCs = get into best global deals

Different Types of LPs and Pros/Cons

LP type	Check size	Sales cycle	Decision-makers	Dependencies	What do they want?	What are the main risks & concerns?	Appetite for micro VC	Appetite for emerging managers
HNWIS	\$100k-1M	2 - 8 weeks	individual	personal relationship, risk appetite	returns, prestige, co-investments, dealflow, relationship	opportunity costs, limited sophistication	high	high
Single Family Office	\$500k-5M	4 - 10 weeks	investment manager, MD/CIO, family principal	asset allocation, size of FO, specific family demands	returns, prestige, knowledge transfer, dealflow, co-investments	capacity for DD, opportunity costs, liquidity, limited sophistication	medium to high	medium
Multi Family Office	\$1-10M	6 - 16 weeks	analyst, VC manager, MD/CIO, multiple families	asset allocation, size of FO & specific family demands	capital preservation, returns, education, co-investments	capacity for DD, opportunity costs, liquidity, career risk	medium	medium to high
Fund of Funds	\$2-20M	3 - 6 months	investment manager, principal, partner	size and history of FoF, LPs, existing portfolio allocations	returns, dealflow, co-investments, long-term access	opportunity costs, career risk, risks of LP relationships	high	medium to high
Wealth Managers & Banks	\$3-30M	3 - 6 months	relationship manager, VC manager, risk manager, VP/MD	client base & needs, asset allocation, balance sheet	capital preservation, returns, prestige	staff turnover, career risk, liquidity	medium	low to medium
Corporates	\$3-30M	3 - 6 months	VP of M&A, CFO, CEO, board of directors	corporate strategy, shareholders, balance sheet, sector overlap	knowledge transfer, prestige, customer relationships, new business lines	career risk, liquidity, staff turnover, low sophistication, strategic alignment	medium to high	medium to high
Foundations & Trusts	\$4-40M	4 - 8 months	investment manager, MD/CIO, board of trustees	purpose of the entity, asset allocation, foundation size, donor requirements	capital preservation, returns, impact through allocation decision + influence	underperformance vs. return targets, career risk, liquidity, opportunity costs	medium	medium
University Endowments	\$5-50M	4 - 8 months	analyst, VC manager, MD/CIO, board of trustees	endowment spending rate, asset allocation, donor requirements, endowment size	capital preservation, returns, reserving long-term access to manager	underperformance vs. return targets, career risk & turnover, opportunity costs	low to medium	medium
Government Programs & Sovereign Wealth Funds	\$10-100M	5 - 10 months	analyst manager, VC manager, MD/CIO, government bodies	fiscal policy, asset allocation, political & economic situation	capital preservation, stimulating national economy through innovation	political alignment, career risk, staff turnover, loss of capital	low to medium	low to medium
Pension Funds & Insurances	\$20-200M	6 - 12 months	investment manager, risk manager, VP/MD	asset allocation, funding levels, demographics	capital preservation, stability, predictability of returns, large allocations	underperformance vs. return targets, loss of capital, career risk, staff turnover	low	low

- Friends and family: They're fast and they already know you! They generally can write only smaller checks, though.
- Rich individuals: You can tap accredited investors (which means that they have made more than \$200,000 a year for the last two years). These could be ultra high-net worth individuals or they could be high-income professionals, even a dentist or doctor.
- **Family offices:** Extremely wealthy individuals who have made enough sometimes hire a group of professionals to manage their investments, also known as a family office. They often operate similarly to institutional investors in terms of diligence and their level of financial conservatism.
- Wealth managers: These managers aggregate the money of category #2 people. You should try to find ones that have discretion over their client's assets or have created a blind pool to invest.
- **Fund of funds:** These are funds that invest in other funds. Fees on top of fees are not optimal, but that means they are paid to get to the best managers. Since it is hard to get into the best managers when everyone knows they are good they are more open to talking to new managers. Some have emerging manager programs like <u>Top Tie</u>r's Alpha Manager program and are willing to back first-time managers like Trusted Insight or <u>Horsley Bridge</u>.
- **Endowments**: Endowments, which manage capital for universities, foundations and other institutions, tend to be more conservative. They are unlikely to do a first time fund unless you have had a great track record from another big name fund and they have followed you for while. That said, they are more consistent. They understand that if they invest, they are making a two or three fund commitment.
- •Sovereign Wealth Funds: Owned by governments, these funds are actively making investments across all asset classes. If they are active in fund investing, they are also probably making direct investments, and therefore would like access to your later-stage direct deal flow. These groups will have requirements related to taxes, CFIUS laws, and other country-specific regulations.
- **Pension Plans**: These entities also have higher regulatory and legal requirements. For example, if you take too much pension fund money (or more than 25 percent of your fund), you could be treated as a retirement plan. Or, they may have restrictions on types of investments (such as no alcohol or tobacco). If they are U.S.-based and public, taking their investment could subject your fund's returns to public disclosure, and your fund's employees could be restricted from making certain campaign contributions. However, these pension plans often have tens of billions if not hundreds of billions under management and large investment therefore their minimum investment size might be \$50M or more.

Innovative New Models

- Angel Funds/Solo Capitalists
- Crowdfunding
- Rolling Funds
- Scout Programs
- Accelerators
- Venture Builders
- Revenue-Based Financing

VC Industry Trends

- Rise of Opportunity Funds
- Use of "Data"
- The Growth of Platform

My Predictions

- Massive COVID tailwinds = incoming liquidity bonanza
- Continued low interest rates, particularly in Europe = chase for yields = many new LPs
- Increased demand for the asset class
- Continued success for early stage. Some pain in red-hot growth stage
- Wildcard: SPACs
 - Higher DPIs, lower TVPIs?
 - Faster time to IPO = companies going pain in growth investing?
 - Perhaps SPACs increase IRRs but lower multiples?

Questions? Thank you!