

New Institutions for Innovation Finance: Global Angels and Crowdfunding

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World Bank Innovation Policy Course
April 17th, 2014



Agenda

1. Introduction
2. Some Simple Economics of Crowdfunding
3. Crowdfunding versus Regular Sources of Finance
4. The US Equity Crowdfunding Debate
5. Crowdfunding and Entrepreneurial Ecosystems
6. Democratizing Access to Capital
7. The Young, Restless and Creative
8. Measurement
9. A \$96B Opportunity
10. Policy Tools







WhatsApp

2009

- Founded in 2009 by Jan Koum and Brian Acton (both Yahoo! employees)
- \$250K in seed funding

2011

- \$8M Series A lead by Sequoia Capital

2013

- \$50M Series C lead by Sequoia Capital
- 400M monthly active users
- 10 billion messages per day

2014

- Acquired in February 2014 by Facebook for \$19B

"Palmer Luckey, the founder of Oculus, earned a reputation for having the largest personal collection of head-mounted displays in the world, and is a longtime moderator in Meant to be Seen (MTBS) 3D's discussion forums."

Oculus "Rift" : An open-source HMD for Kickstarter

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Oculus "Rift" : An open-source HMD for Kickstarter

Author	Message
PalmerTech Golden Eyed Wiseman! (or woman!) Joined: Fri Aug 21, 2009 9:06 pm Posts: 1643	<p>@ Oculus "Rift" : An open-source HMD for Kickstarter</p> <p>Hey guys,</p> <p>I am making great progress on my HMD kit! All of the hardest stuff (Optics, display panels, and interface hardware) is done, right now I am working on how it actually fits together, and figuring out the best way to make a head mount. It is going to be out of laser cut sheets of plastic that slide together and fasten with nuts and bolts. The display module is going to be detachable from the optics module, so you will be able to modify, replace, or upgrade your lenses in the future!</p> <p>The goal is to start a Kickstarter project on June 1st that will end on July 1st, shipping afterwards as soon as possible. I won't make a penny of profit off this project, the goal is to pay for the costs of parts, manufacturing, shipping, and credit card/Kickstarter fees with about \$10 left over for a celebratory pizza and beer. 😊</p> <p>I need help, though!</p> <ol style="list-style-type: none">1) I need something that illustrates the difference between low field of view HMDs and high FOV HMDs, probably some kind of graphic illustrating the difference in apparent screen size. Would probably want to compare theрап 1200VR, the HMZ-T1, and the ST1080. Maybe throw in a few professional HMDs like the SX111 for good measure.2) Logo/s. I am listing the organization as "Oculus", I plan on using that name on my VR projects from here on out. The HMD itself is tentatively titled "Rift", if you have better ideas, let me know. I based it on the idea that the HMD creates a rift between the real world and the virtual world, though I have to admit that it is pretty silly. 😊3) Ideas for what I should show off in the Kickstarter video.4) Ideas for Kickstarter rewards. The obvious one would be a full HMD kit, but I want to have some lesser monetary options for people who just want to show support. Laser cut badges? Some kind of software? On the other end, it seems like it would be a good idea to have some more expensive options that net you stuff like a wireless battery/video pack, or a motion tracker.5) Anything else I am forgetting! <p>The help is appreciated! Really excited about this, I think it could be the kind of thing that jumpstarts a bigger VR community, and hopefully shows that there is a big demand for wide FOV, truly immersive displays.</p>



Oculus VR

2012

- In August, Palmer Luckey, a designer at the University of Southern California Institute for Creative Technologies, launches a Kickstarter campaign
- In 36 hours the campaign raises more \$1M
- September 1st, closes at \$2.4M

2013

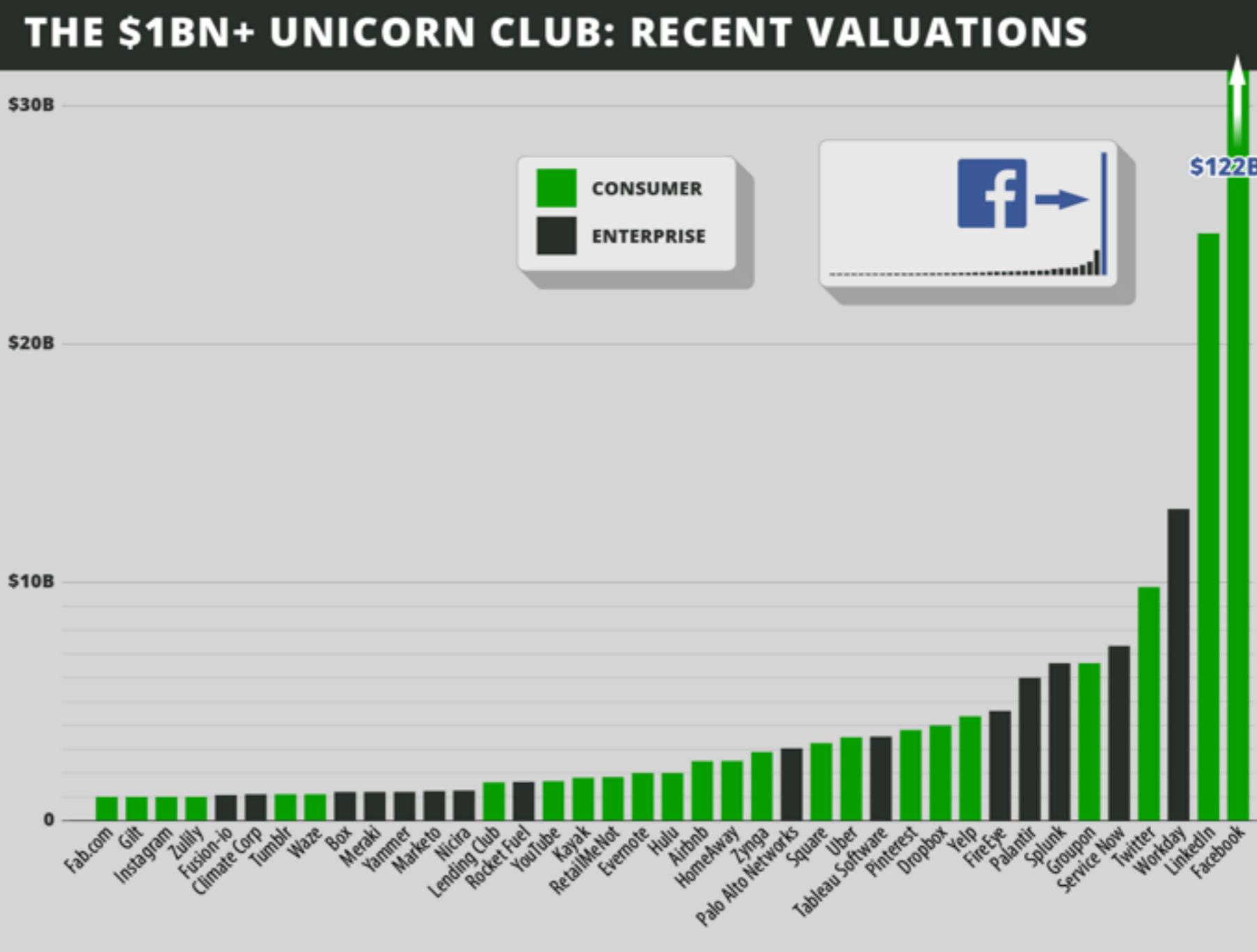
- Series A round for \$16M
- Series B round for \$75M lead by Andreessen Horowitz

2014

- Acquired in April 2014 by Facebook for \$2.3B

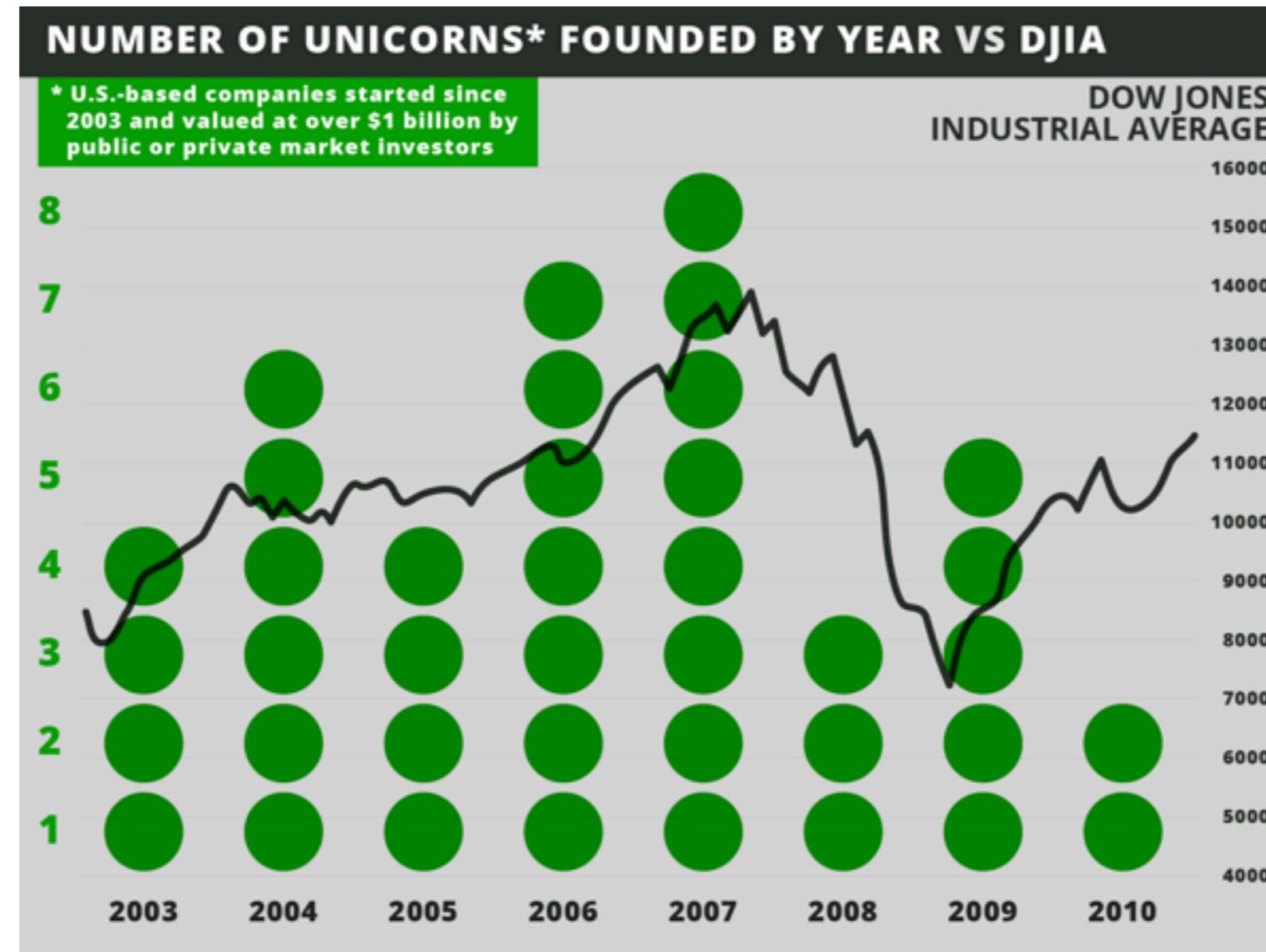


THE \$1BN+ UNICORN CLUB: RECENT VALUATIONS



- Only 39 companies in 10 years (~4 year)
- .07% of venture-backed consumer and enterprise software startups
- It takes >7 years to a liquidity event

Aileen Lee (2013) "Welcome To The Unicorn Club: Learning From Billion-Dollar Startups", TechCrunch



- “Twentysomething” founders were an outlier
- Enterprise unicorns raised less capital, worth more on average
- “Super-Unicorns” follow technology waves: 1960s semiconductors (Intel); 1970s personal computers (Microsoft, Apple); 1980s (Cisco); 2000s (Facebook, Twitter)

An Anti-Portfolio



BVP had the opportunity to invest in pre-IPO secondary stock in Apple at a \$60M valuation. BVP's Neill Brownstein called it "outrageously expensive".



"Stamps? Coins? Comic books? You've GOT to be kidding. No-brainer pass."
David Cowan



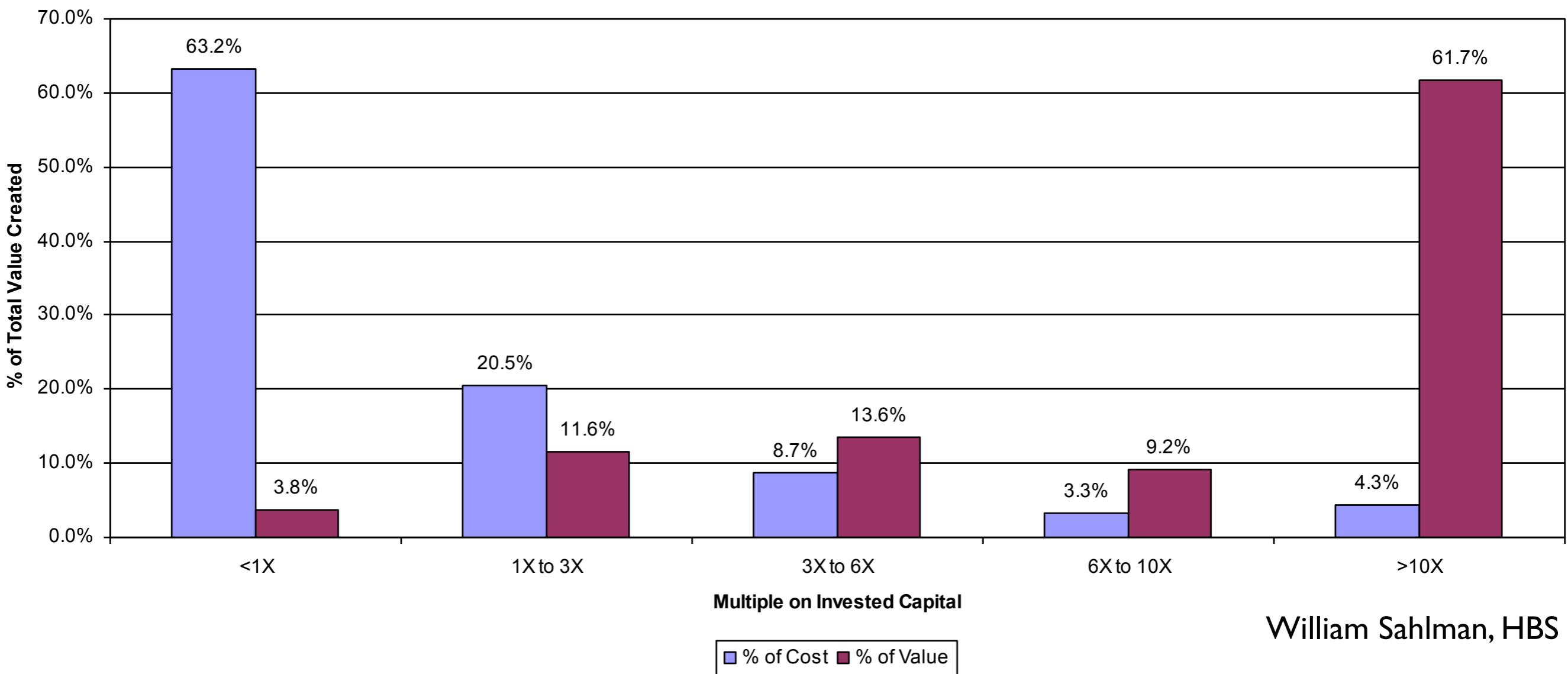
Cowan's college friend rented her garage to Sergey and Larry for their first year. In 1999 and 2000 she tried to introduce Cowan to "these two really smart Stanford students writing a search engine". Students? A new search engine? In the most important moment ever for Bessemer's anti-portfolio. Cowan asked her, "How can I get out of this house without going anywhere near your garage?"

BVP passed on FedEx 7 times.



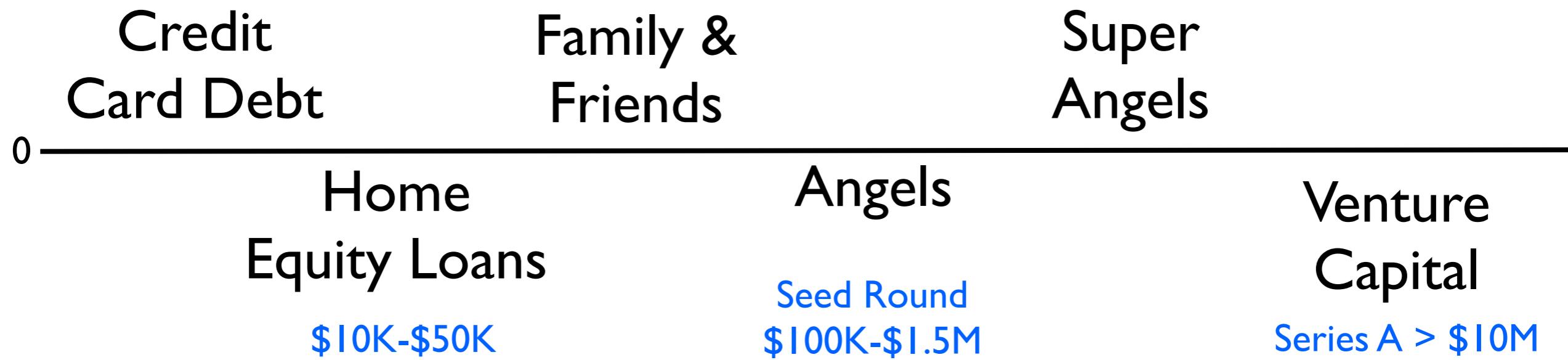
Skew

VC Return Profile 1990 - 2006
468 Investments
\$1,305 MM Cost / \$3,338 MM Value - 2.56X

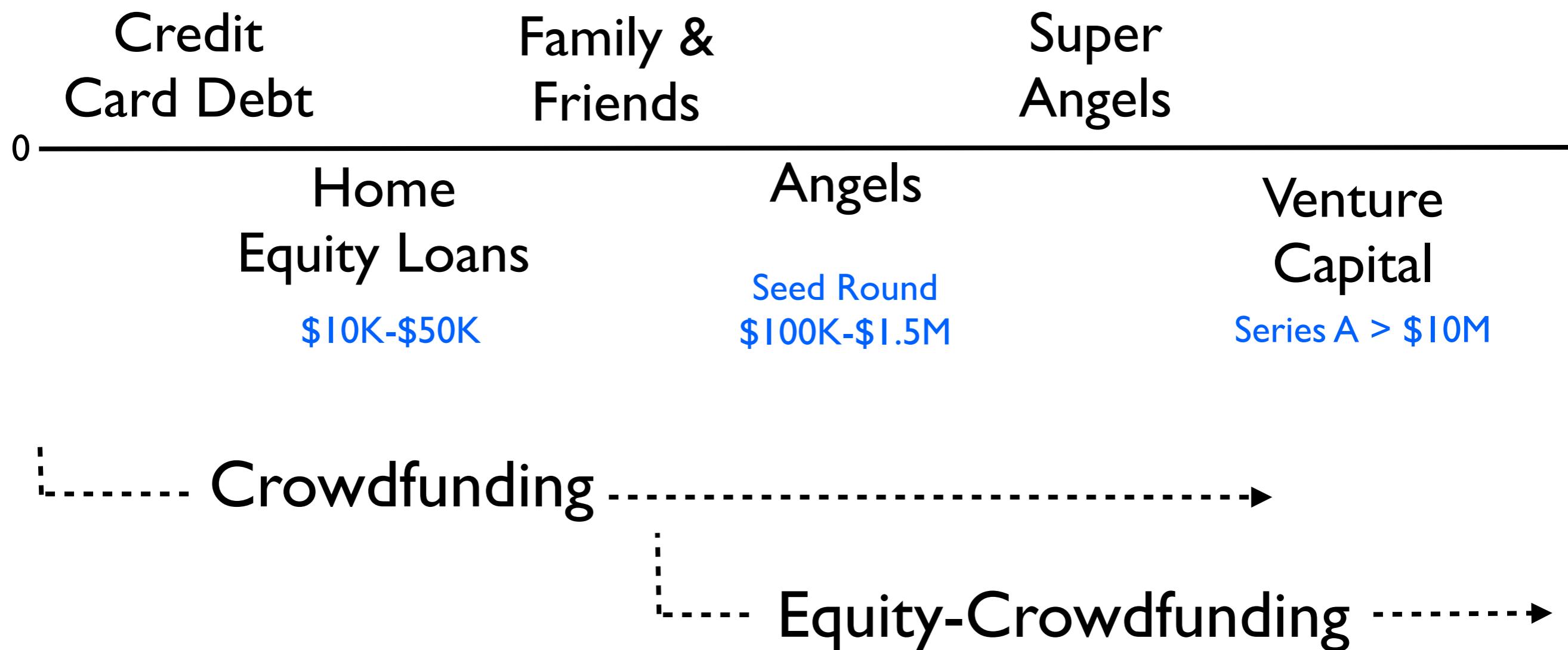


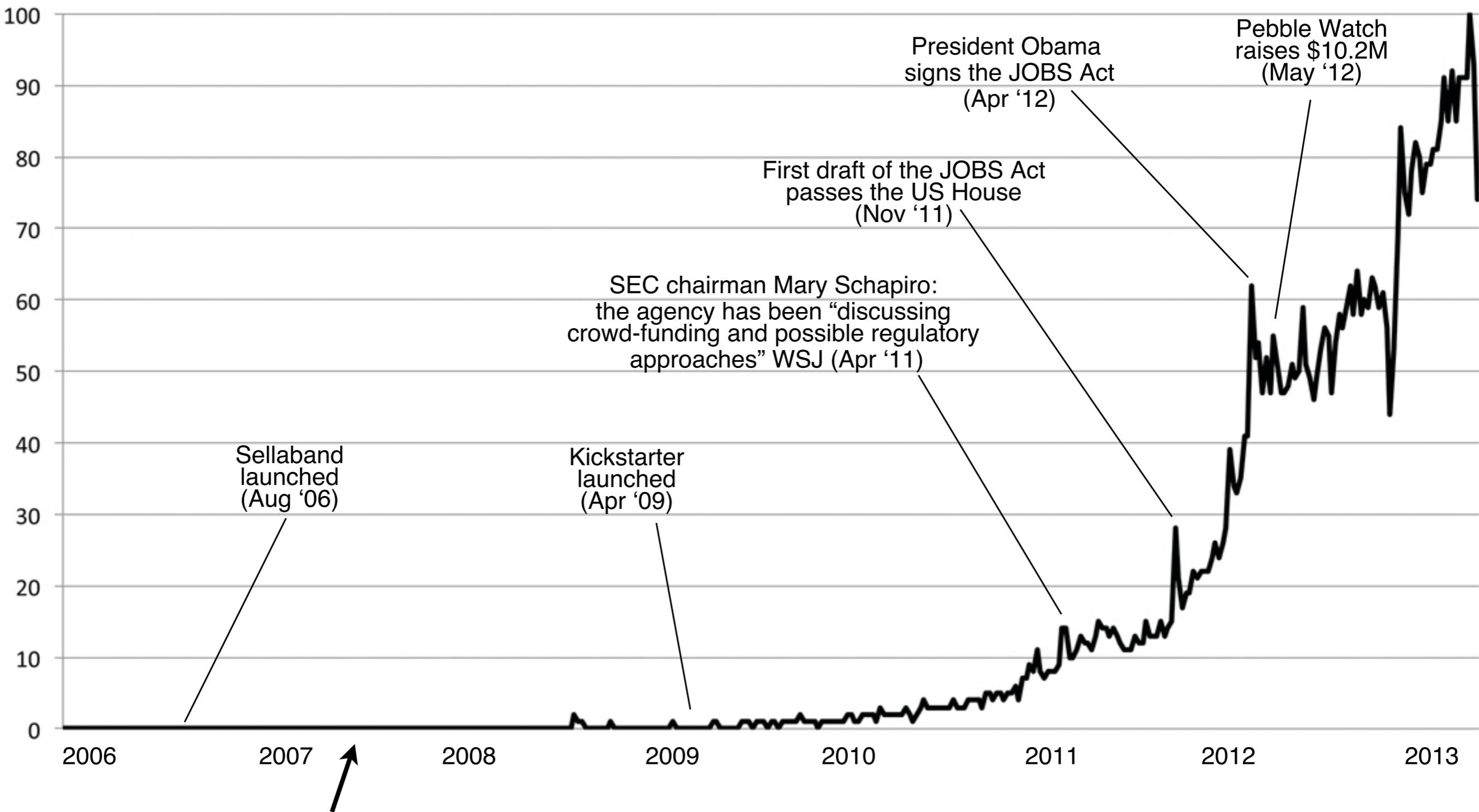
William Sahlman, HBS

Early-Stage Capital



Early-Stage Capital





Crowdfunding

“The Geography of Crowdfunding”
NBER Working Paper 16820

Utopian View

“Crowdfunding has the potential to revolutionize the financing of small business, transforming millions of users of social media such as Facebook into overnight venture capitalists, and giving life to valuable business ideas that might otherwise go unfunded.” - The Wall Street Journal⁷

THE WALL
STREET
JOURNAL.

The
New York
Times

“Besides, isn’t this the type of innovation we should be encouraging? Unlike exotic derivatives and super-fast trading algorithms, crowdfunding generates capital for job-creating small businesses.” - The New York Times⁸

“Fred Wilson, a prominent venture capitalist, calculates that if Americans used just 1% of their investable assets to crowdfund business they would release a \$300 billion surge of capital.” - The Economist⁶

The
Economist

Dystopian View

"The honeymoon period that we are experiencing around crowdfunding is beginning to come to a close, said Wil Schroter, co-founder and chief executive of FundablePeople realize there is real risk involved in investing in anything early-stage, whether it's an idea, a charity or a product, and they're starting to understand they aren't buying off of Amazon." - The New York Times¹¹

The
New York
Times



"While founders raising cash from a big pool of small amounts of money are benefiting from quick access and the boost of popular interest, they are also forgoing some of the advice and experience of more traditional angel or venture-capital investors." - The Financial Times¹²

"...crowdfunding could become an efficient, online means for defrauding the investing public." - Wired¹⁰

W I R E D

Types of Crowdfunding

Donation-Based



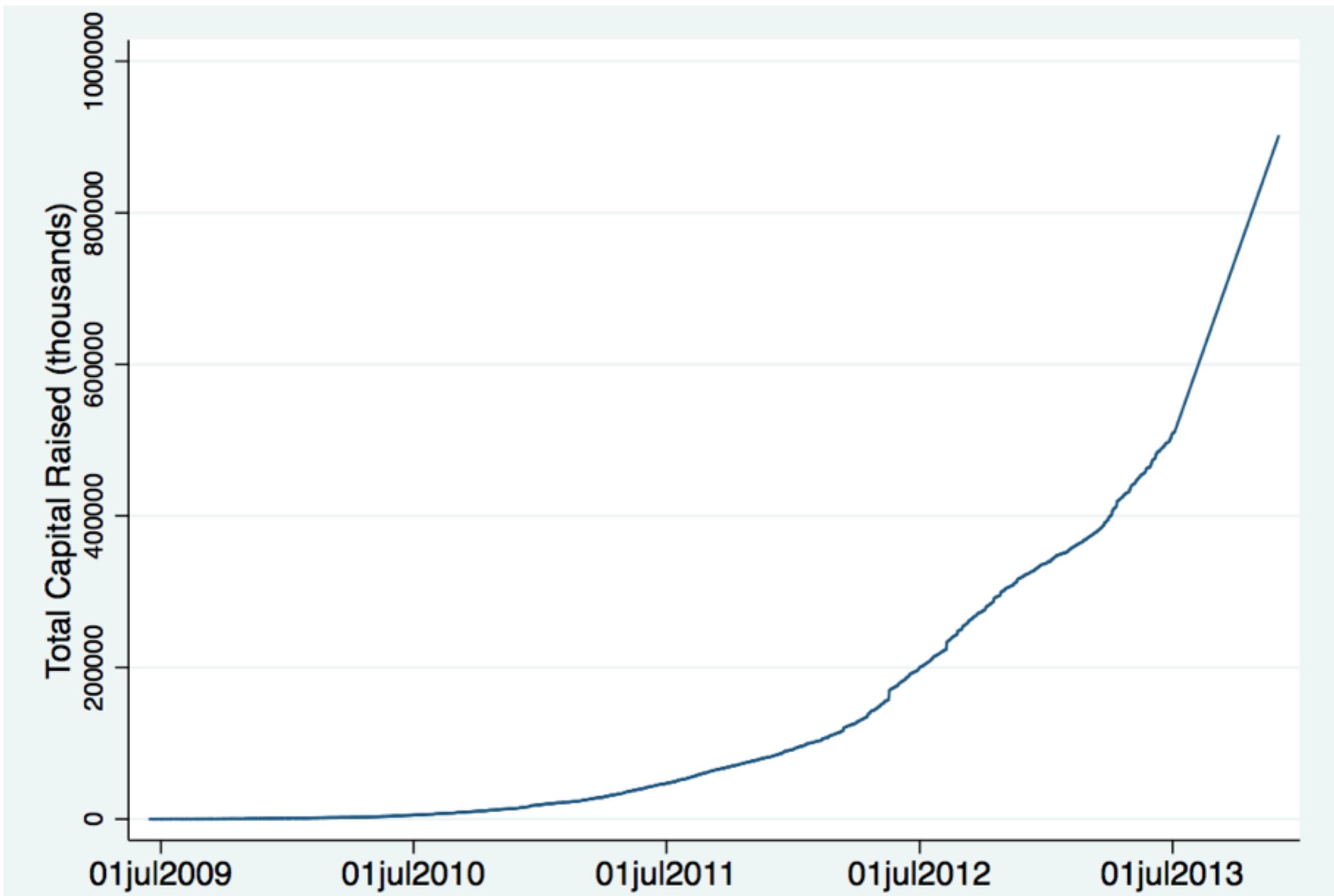
Reward-Based



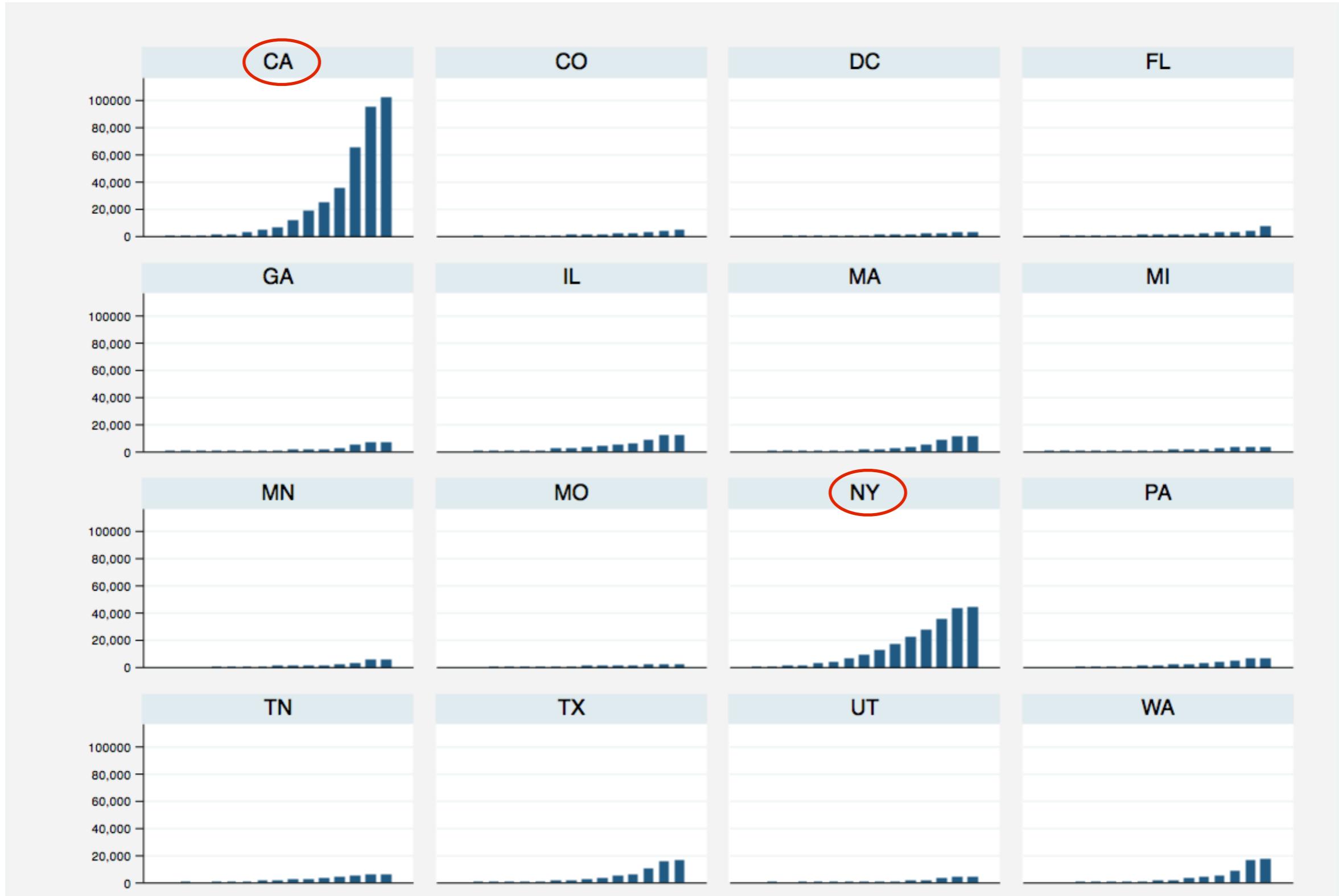
Equity-Based



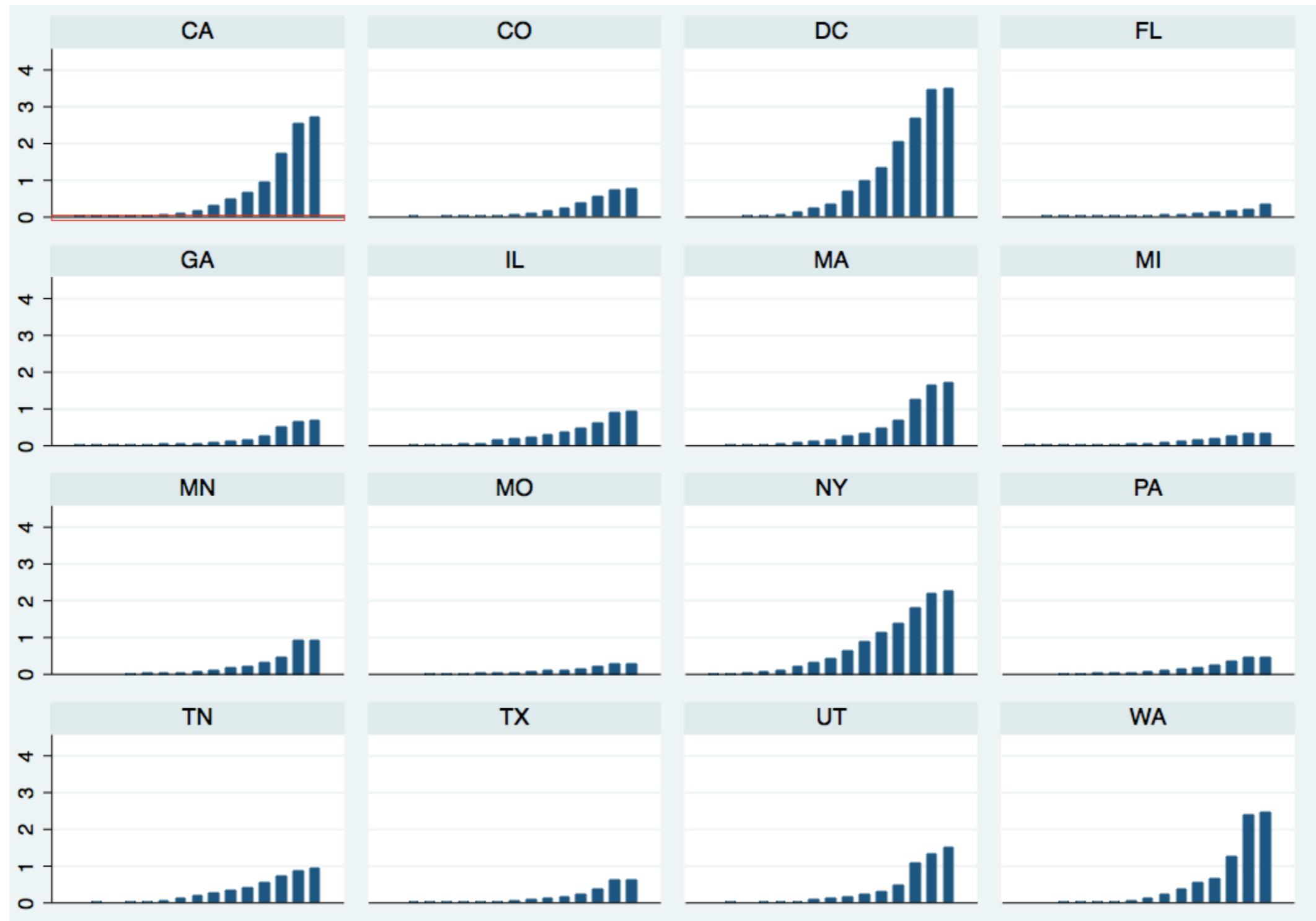
Kickstarter's Growth



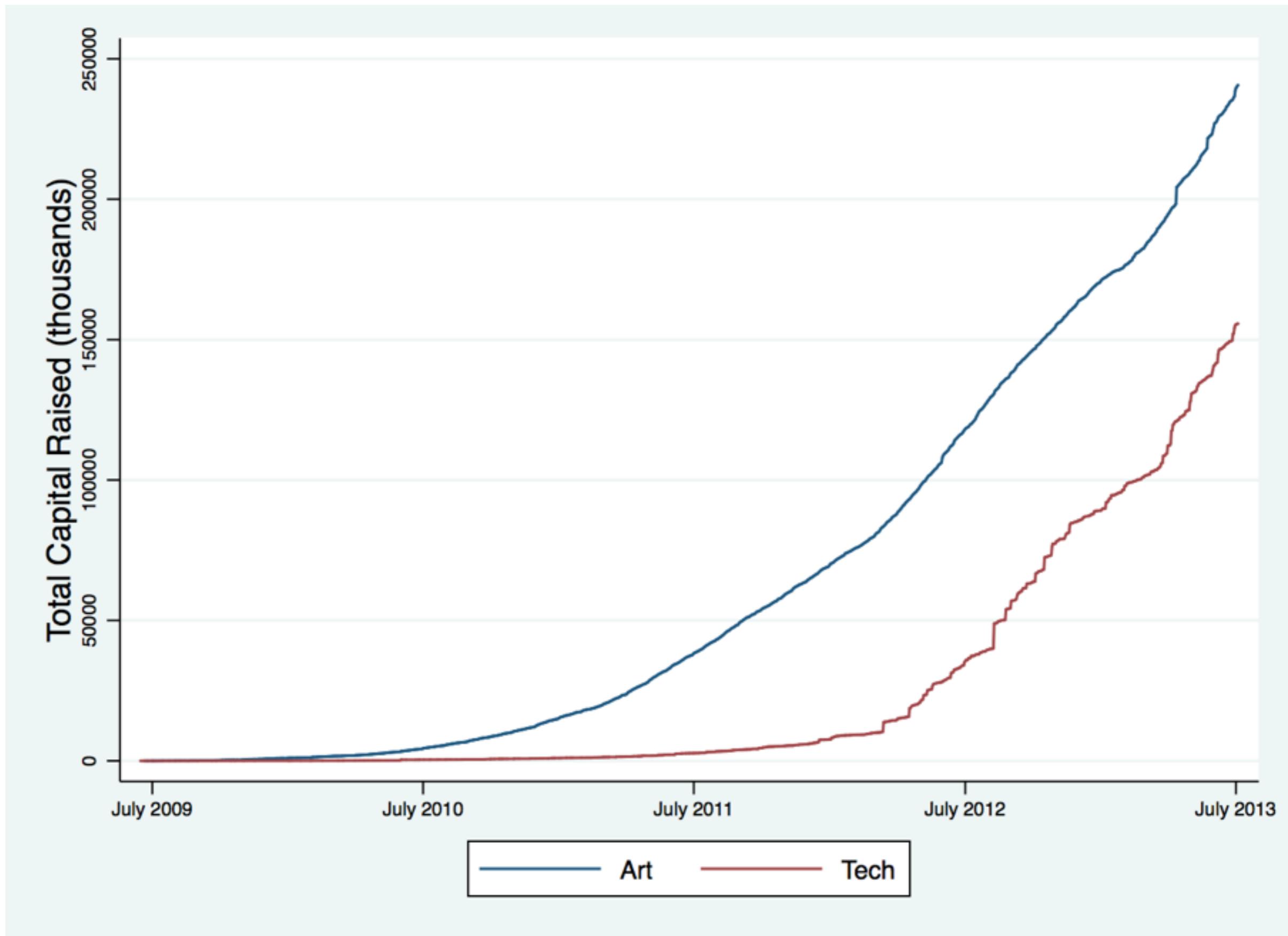
Growth by State (thousands)



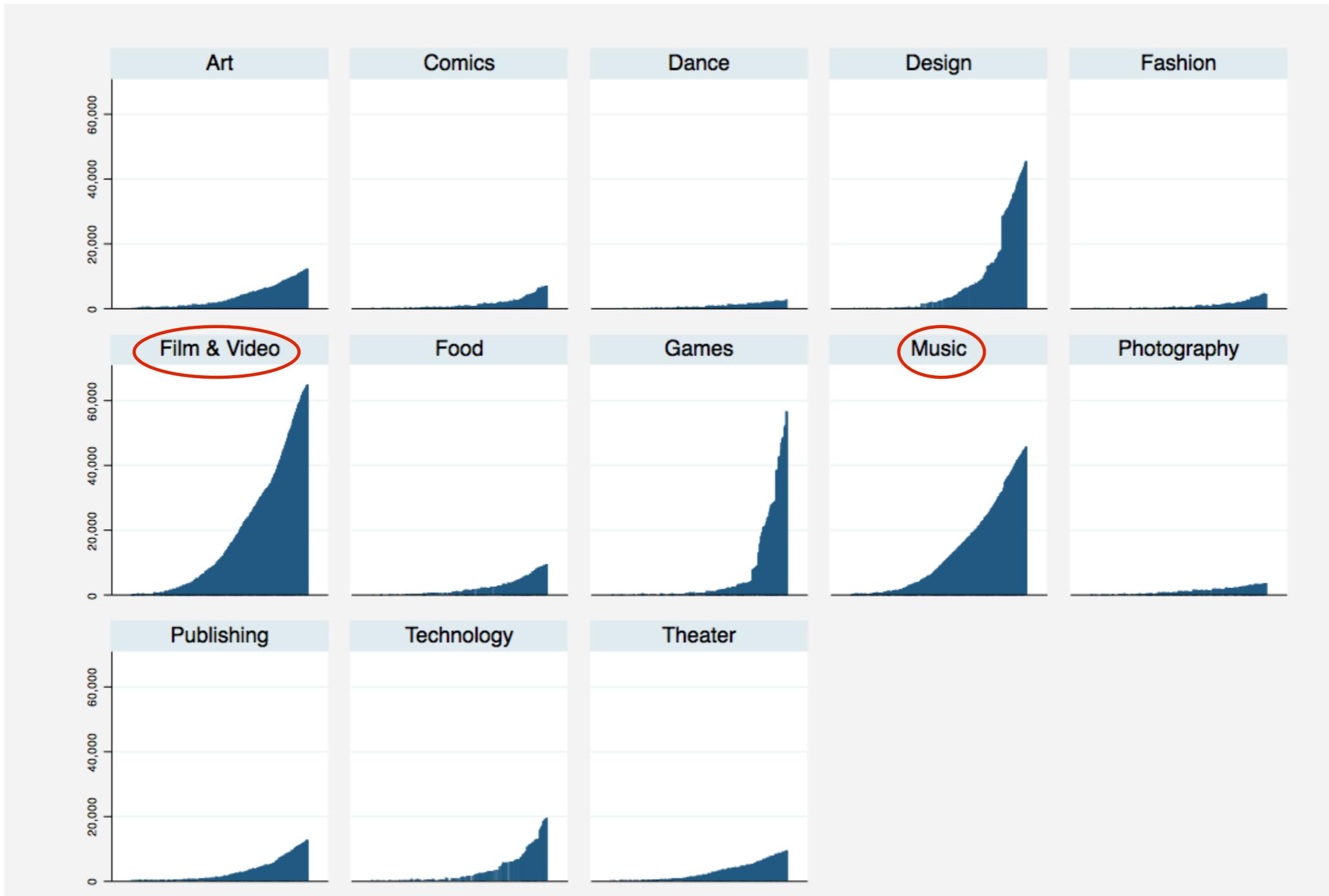
Growth by State (\$ per Capita-Quarter)



From the Arts to Tech



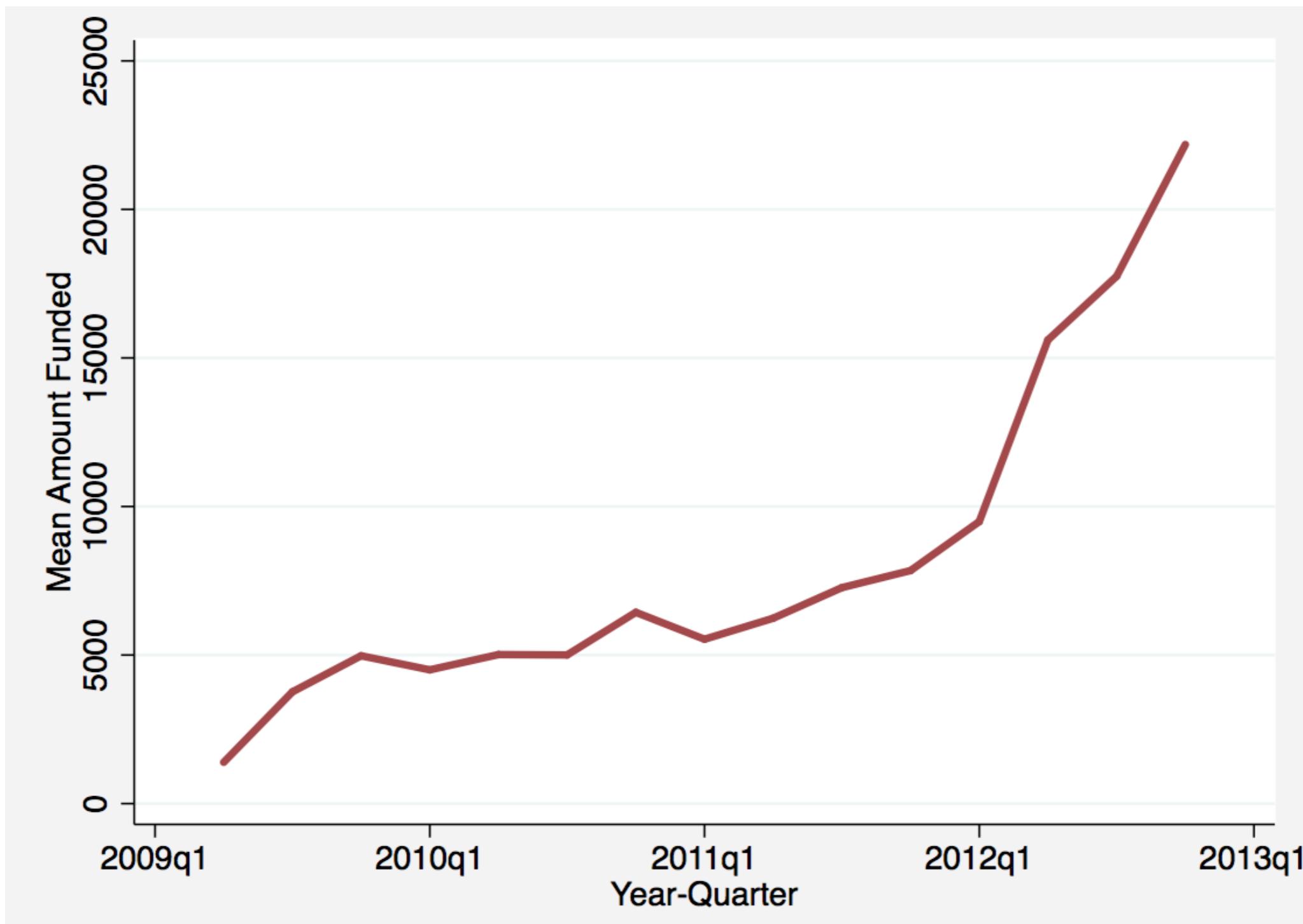
Aggregate Statistics Obfuscate Variation across Sectors



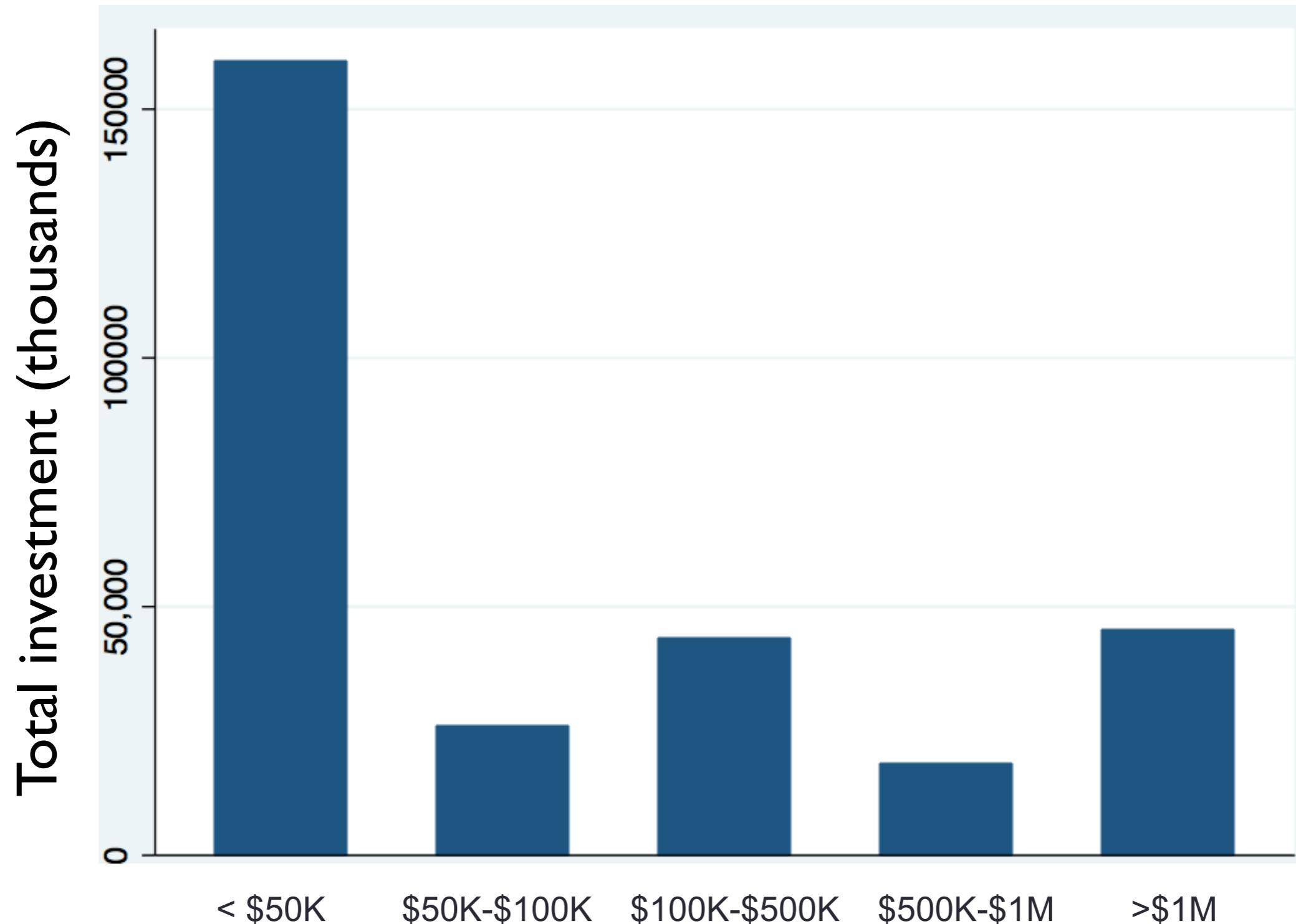
Aggregate Statistics Obfuscate Variation across Sectors



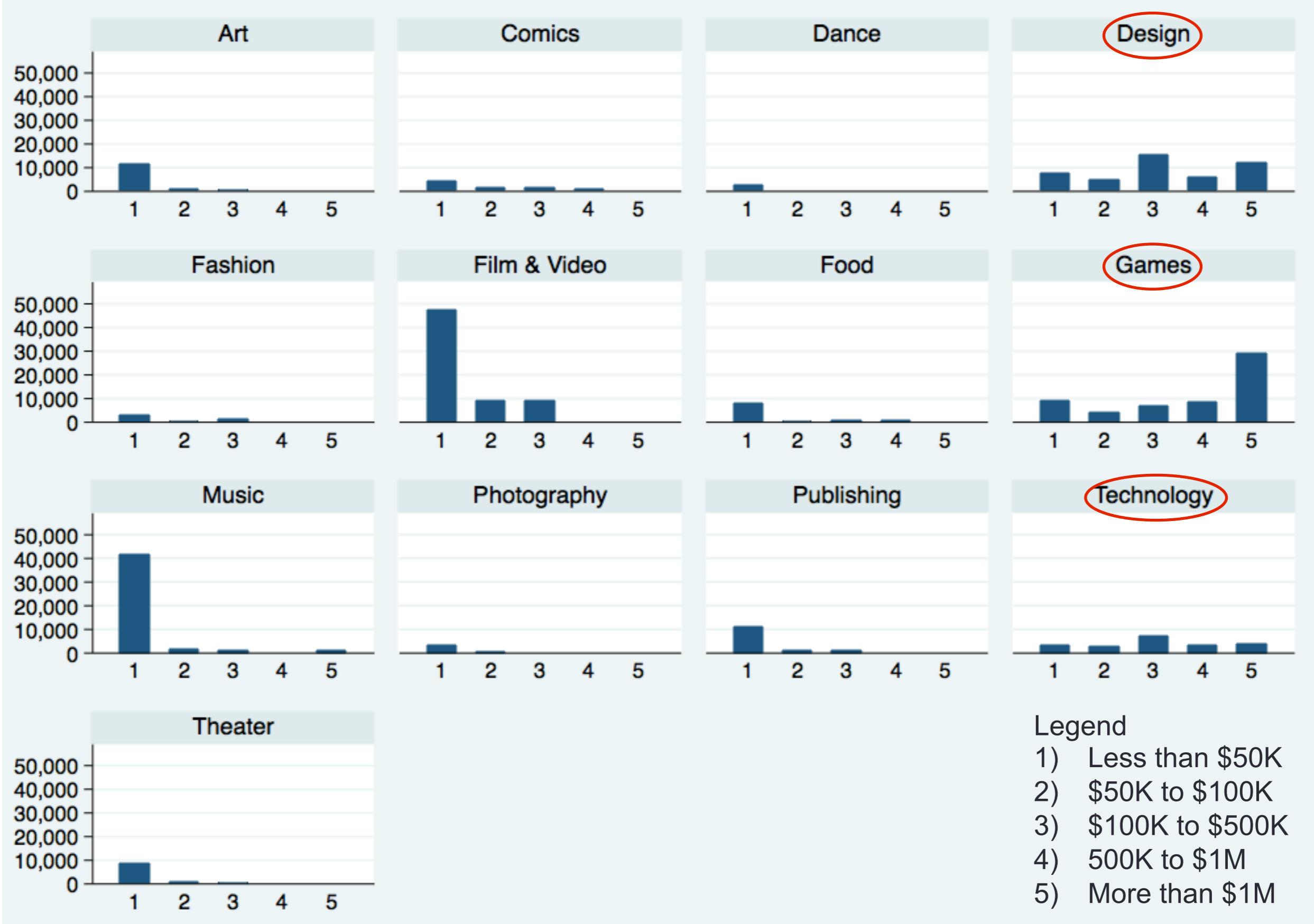
Mean Amount Funded on Kickstarter



Investment by Project Size



Total investment (thousands)



Distribution of Capital is Very Skewed

- **Sellaband** (2006-2009): 61% of all creators did not raise any money, 0.7% of them accounted for more than 73% of the funds
- **Kickstarter** (2009-2013): even conditioning the sample on successfully funded projects: 1% (10%) of projects account for 36% (63%) of funds

2. Some Simple Economics of Crowdfunding

Agrawal, A., Catalini, C., Goldfarb, A. (2013). "Some Simple Economics of Crowdfunding" In Innovation Policy and the Economy. Volume 14. NBER, University of Chicago Press.

Incentives

Disincentives

Entrepreneurs

- Lower cost of capital (global matches, bundling, lower information asymmetry)
- Feedback and demand estimation

Entrepreneurs

- Disclosure
- Crowding out professional investors
- Investor management

Investors

- Early-access to investment opportunities, products
- Mixed incentives: philanthropy, consumption utility etc.
- Formalization of contracts (F&F) and provision point mechanism
- Crowd due diligence

Investors

- Incompetence
- Fraud
- Low returns without diversification
- Lack of incentives for individual due diligence

Mixed Incentives (I)

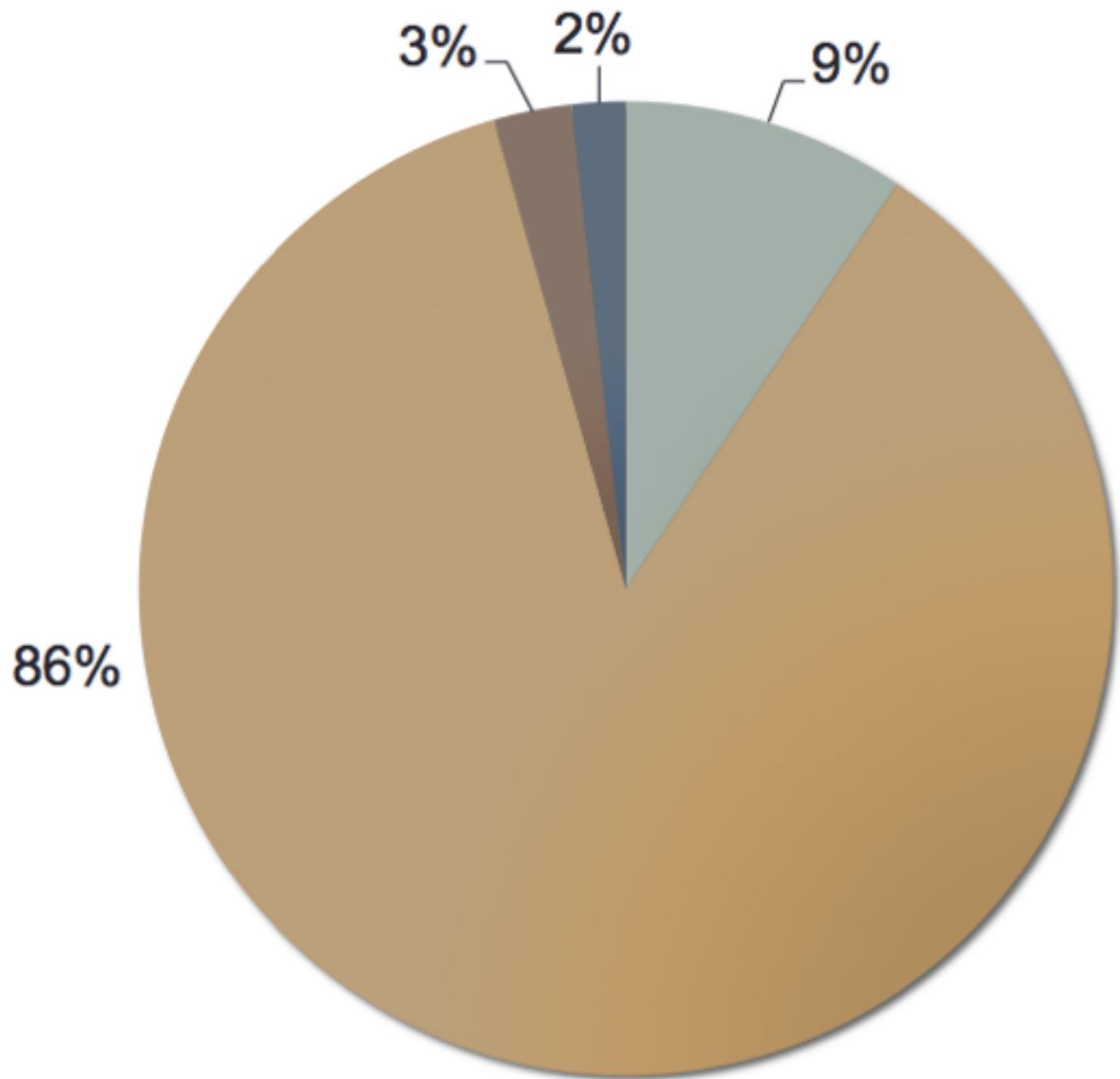
- OCULUS raised \$2,437,429 (\$250K goal) from 9,522 backers

Truly Immersive Virtual Reality



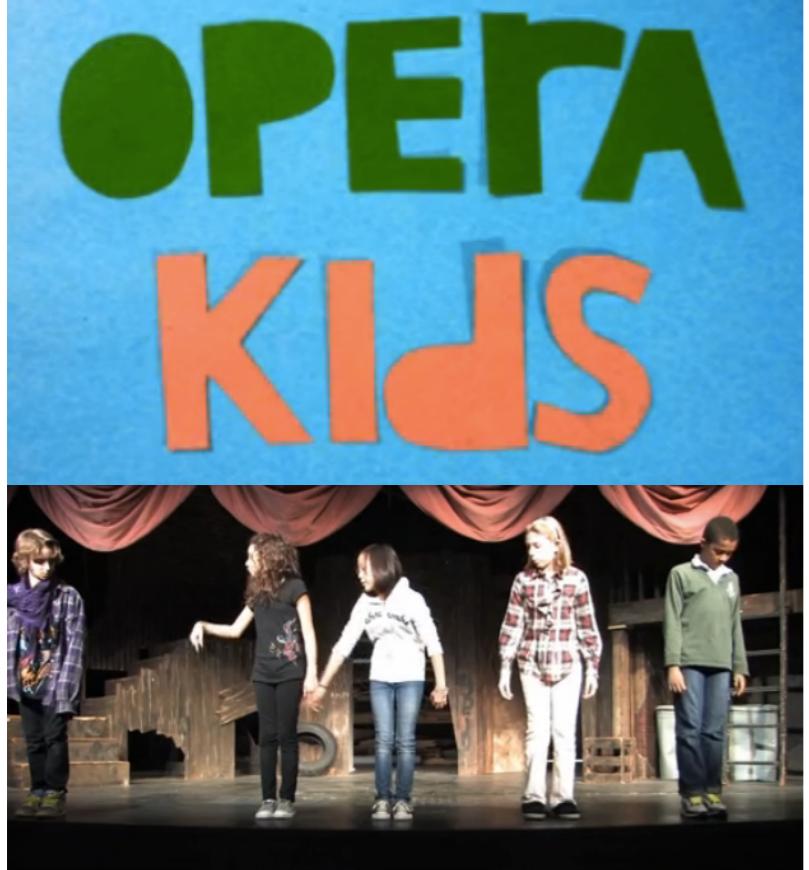
Amount	Backers	Total	Reward
\$10	1009	\$10,090	Thank You
\$15	209	\$3,135	Limited Edition Poster
\$25	434	\$10,850	T-Shirt
\$35	179	\$6,265	T-Shirt and Poster
\$75	106	\$7,950	Signed T-Shirt and Poster
\$275	100	\$27,500	Prototype, SDK
\$300	5640	\$1,692,000	Prototype, SDK, Videogame
\$335	859	\$287,765	Prototype, SDK, Videogame, T-Shirt, Poster
\$500	66	\$33,000	Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster
\$575	216	\$124,200	2 Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster
\$850	40	\$34,000	3 Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster
\$1,400	20	\$28,000	5 Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster
\$3,000	7	\$21,000	10 Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster
\$5,000	7	\$35,000	1 day visit to Oculus and 10 Prototype, SDK, Videogame, Signed T-Shirt, Signed Poster

Mixed Incentives (II)



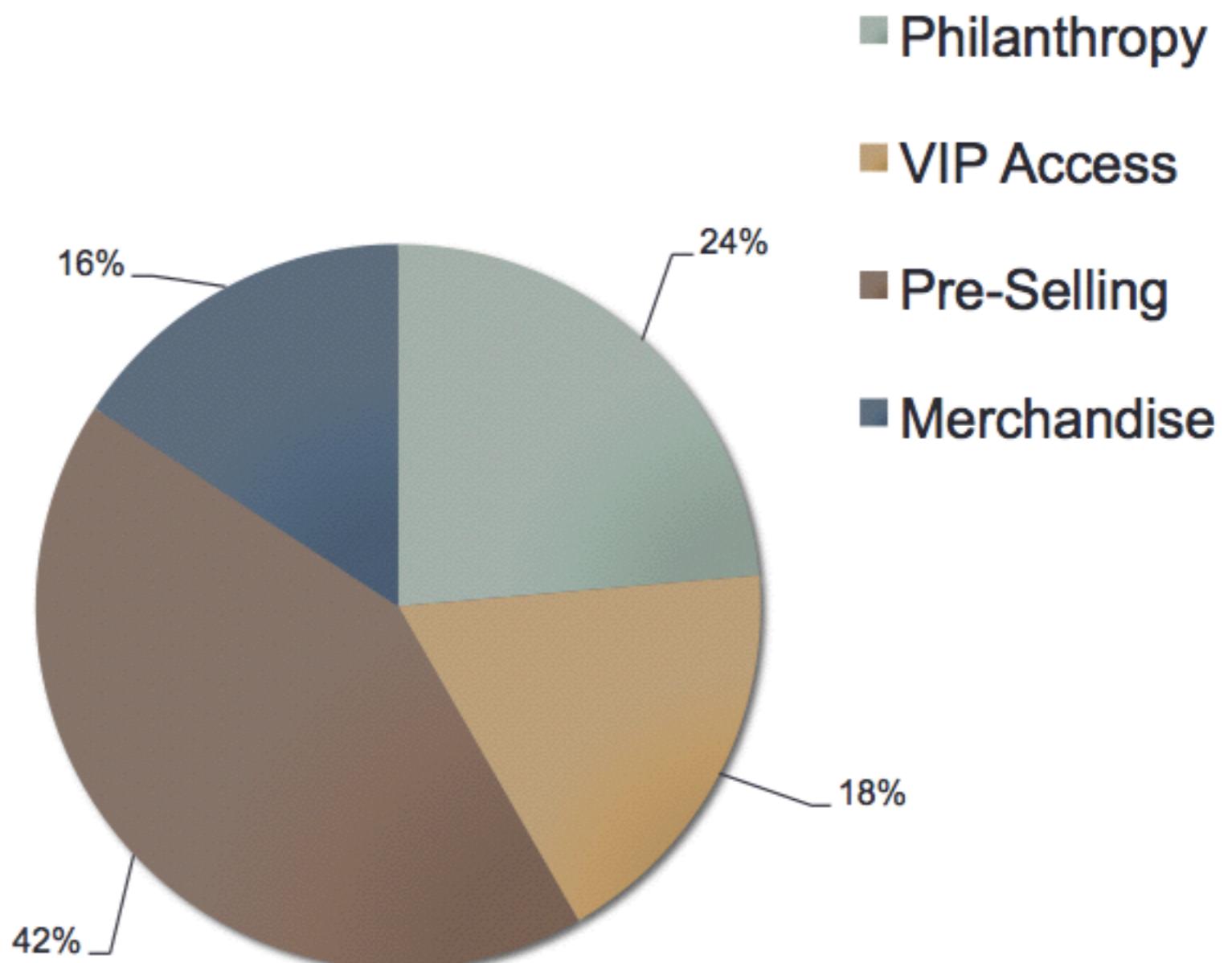
- Philanthropy
- Pre-Selling
- Merchandise
- VIP Access





OPERA KIDS
Raised \$33,412
427 backers

Mixed Incentives (III)



3. Crowdfunding versus Regular Sources of Finance



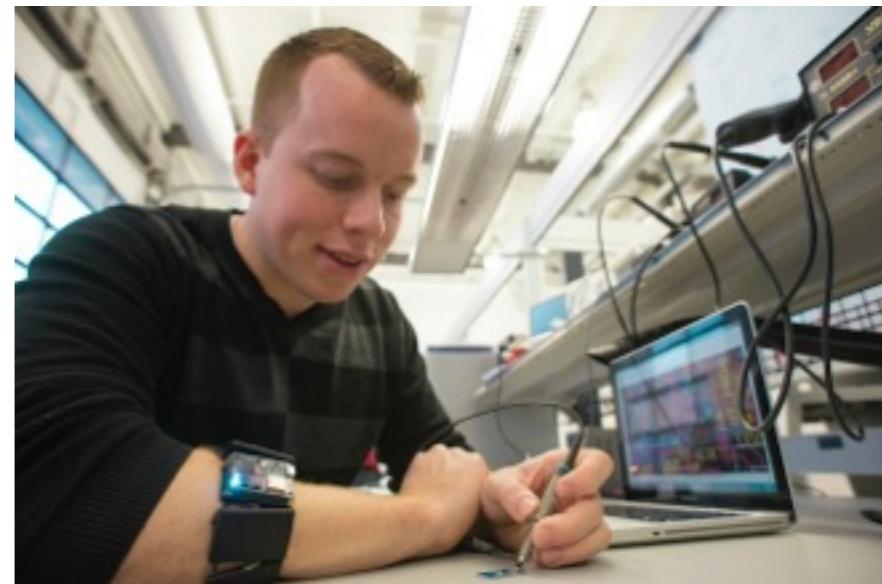
Pebble versus Thalmic



Eric Migicovsky



Stephen Lake



Waterloo engineer

Wearable computing (watch)

YC alum

Launched video, pre-sold units (\$10m), raised \$15m Series A led by Boston-based VC (Charles River)

Most successful Kickstarter campaign ever (amount raised)

Crowdfunding platform (Kickstarter)

Waterloo engineer

Wearable computing (gesture control)

YC alum

Launched video, pre-sold units (\$5m), raised \$15m Series A led by Boston-based VC (Spark Capital)

Most successful YC demo day Series A ever (amount raised, valuation)

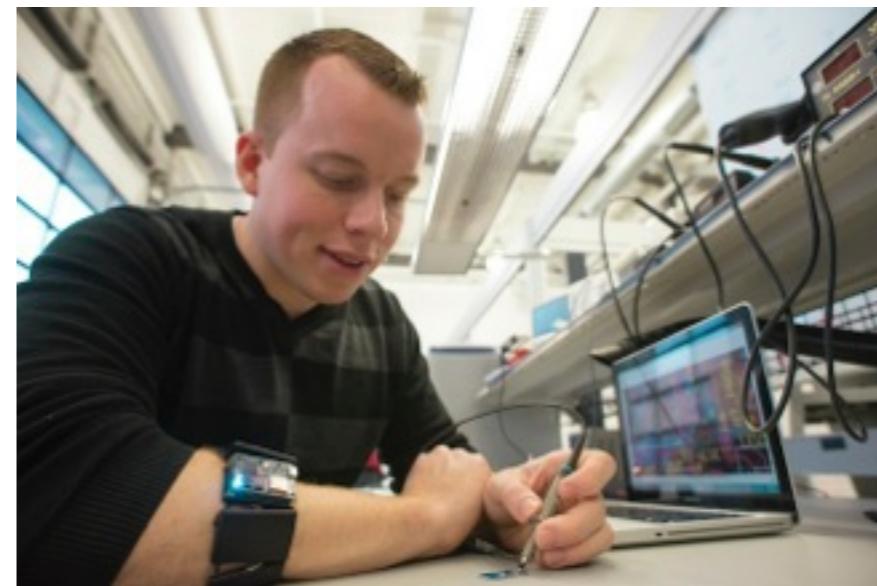
Pre-selling tool (no crowd)

Spot the Differences

Eric Migicovsky



Stephen Lake



Kickstarter
85K units (\$10M)

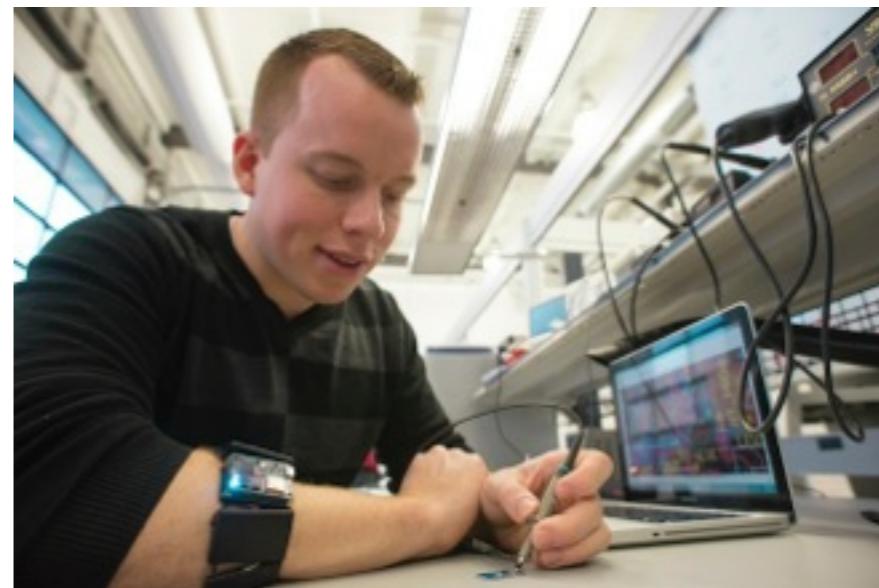
getmyo.com
30K units (\$4.5M)

Information Disclosure!

Eric Migicovsky



Stephen Lake

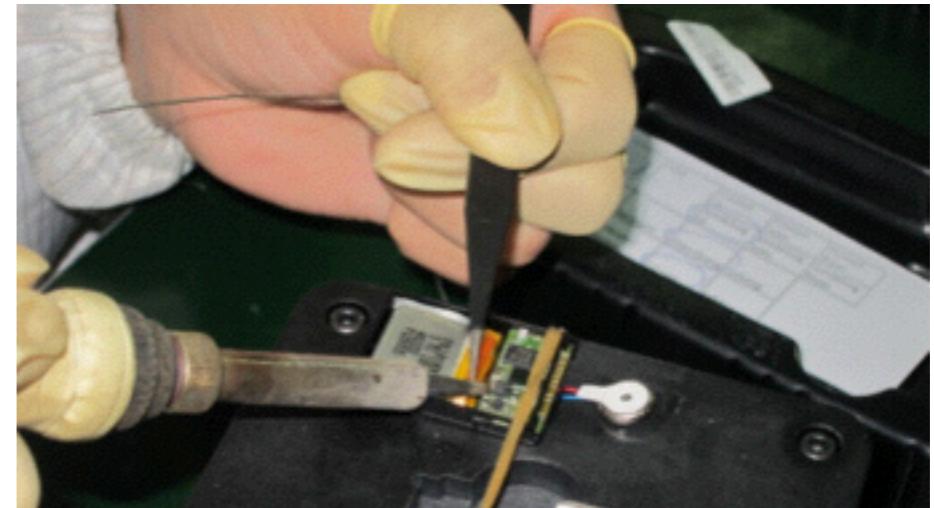


34 detailed
updates

5 simple
updates

Detailed Updates

- “We have confirmation from our primary component supplier that the vast majority of our components have departed Arizona, flying towards Hong Kong and ultimately Dongguan, China. There are more than 110 electronic components inside each Pebble. It’s been a lot of fun finding 85,000 sets of everything!” (Oct 26, 2012)
- “I’m heading to our factory in Dongguan, China on Saturday for 2 weeks of work on the Design Verification (DV) test build. After DV, we have one more test build scheduled in December called Production Verification (PV) before Pebble enters Mass Production (MP). As I mentioned in Update #17, our assembly line will be set up to manufacture 15,000 Pebbles per week. I know each one of you has a burning desire to see Pebble on their wrist, but I want to caution you that even after we begin MP it will still take us several weeks to manufacture all 85,000 Pebbles.” (Nov. 10, 2012)



Mentorship

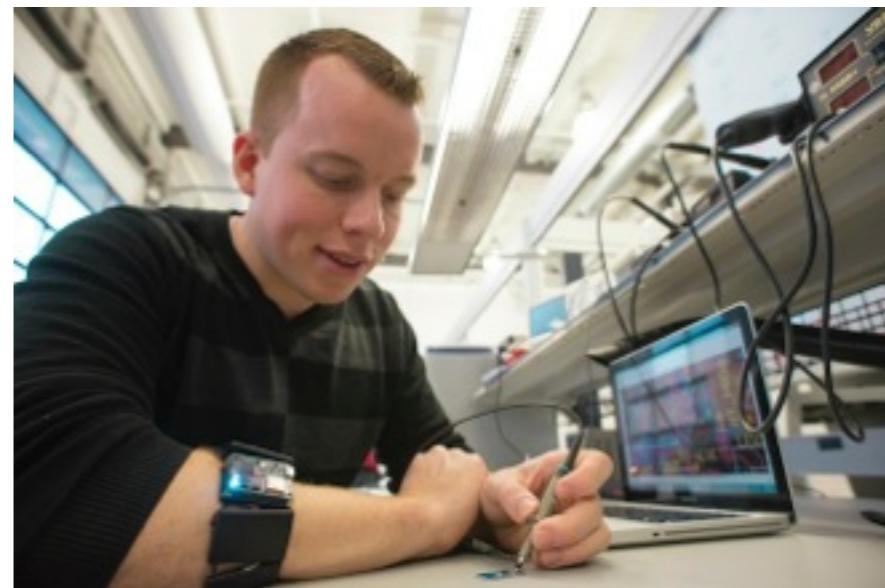
Eric Migicovsky



Dragon Innovation

"Dragon Innovation helped us take our crowdfunding success and translate it into shipping more than 100,000 Pebbles in just over a year," Eric Migicovsky - WSJ, Sept 5, 2013

Stephen Lake



Spark, Intel, Lee Lau



4. The US Equity Crowdfunding Policy Debate

JOBS Act

- **Title I:** changes to the IPO market
- **Title II:** accredited investors and general solicitation
(September 2013)
- **Title III:** unaccredited investors
(October 2013–February 2014)

General Solicited Offerings (Title II)

- 506b (quiet deals) versus 506c (public fundraising) fundraising
 - Demo days: is the general public invited? (financial projections, growth rates)
 - Interviews with the media: is fundraising mentioned?
 - Blogs, twitter etc.
- File Form D 15 days in advance
- Irreversibility, 12 months freeze period
- Verify accredited (IRS forms, third parties)

FORM D
Notice of Exempt
Offering of Securities

U.S. Securities and Exchange Commission
Washington, DC 20549

(See instructions beginning on page 5)

Intentional misstatements or omissions of fact constitute federal criminal violations. See 18 U.S.C. 1001.

Item 1. Issuer's Identity

Name of Issuer Previous Name(s) None

Jurisdiction of Incorporation/Organization

Year of Incorporation/Organization
(Select one)
 Over Five Years Ago Within Last Five Years
(specify year) Yet to Be Formed

(If more than one issuer is filing this notice, check this box and identify additional issuer(s) by attaching Items 1 and 2 Cont.)

Item 2. Principal Place of Business and Contact Information

Street Address 1 Street Address 2
City State/Province/Country ZIP/Postal Code Phone No.

Item 3. Related Persons

Last Name First Name Middle Name
Street Address 1 Street Address 2
City State/Province/Country ZIP/Postal Code
Relationship(s): Executive Officer Director Promoter
Clarification of Response (if necessary)

(Identify additional related persons by checking this box and attaching Item 3 Cont.)

Item 4. Industry Group (Select one)

Agriculture Business Services
Banking and Financial Services Construction
 Commercial Banking REITS & Finance
 Insurance Residential
 Investing Other Real Est.
 Investment Banking Retailing
 Insurance Agents Restaurants

Energy Construction
 Electric Utilities REITS & Finance
 Energy Conservation Residential
 Coal Mining Other Real Est.
 Environmental Services Retailing
 Apparels Restaurants

General Solicited Offerings (Title II)

- Startups should not make forecasts: e.g., “*our user base grew 10% last month*” vs “*we’re expecting to grow 10% a month*”
- Investors can use non-facts to later sue the company
- Updates to fundraising materials need to be communicated to the SEC

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(Identify additional related persons by checking this box and attaching Item 3 Cont.)

Item 4. Industry Group (Select one)

Agriculture Business Services
Banking and Financial Services Energy Construction
 Commercial Banking Electric Utilities REITS & Finance
 Insurance Energy Conservation Residential
 Investing Coal Mining Other Real Est.
 Investment Banking Environmental Services Retailing
 Restaurants

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16 Q17 Q18 Q19 Q20 Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29 Q30 Q31 Q32 Q33 Q34 Q35 Q36 Q37 Q38 Q39 Q40 Q41 Q42 Q43 Q44 Q45 Q46 Q47 Q48 Q49 Q50 Q51 Q52 Q53 Q54 Q55 Q56 Q57 Q58 Q59 Q60 Q61 Q62 Q63 Q64 Q65 Q66 Q67 Q68 Q69 Q70 Q71 Q72 Q73 Q74 Q75 Q76 Q77 Q78 Q79 Q80 Q81 Q82 Q83 Q84 Q85 Q86 Q87 Q88 Q89 Q90 Q91 Q92 Q93 Q94 Q95 Q96 Q97 Q98 Q99 Q100

General Solicited Offerings (Title II)

“It is my opinion, and that of those who we do business with, including our securities lawyers, that these proposed rules effectively make General Solicitation **a non-starter for startup companies.**

If the SEC's intention, with these proposed additional rules, is to neuter General Solicitation to the point that it is legal but nobody avails themselves of it, they will succeed”

Fred Wilson
Union Square Ventures

Unaccredited Investors (Title III)

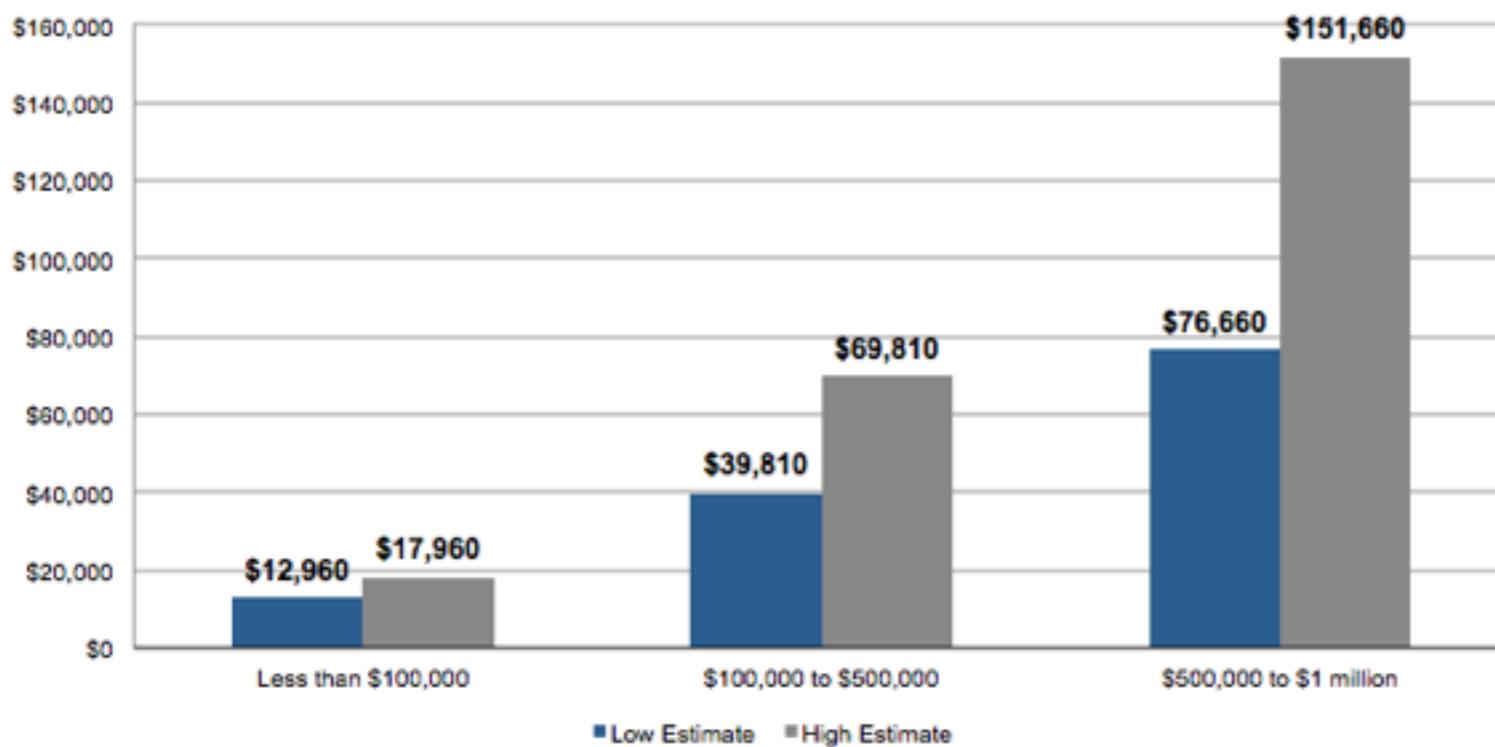
- **Investment caps** (12 months):
 - **\$1M** from unaccredited investors
 - **\$2K to \$100K** per unaccredited investor
 - 5% of annual income or assets (<\$100K)
 - 10% of annual income or assets (>\$100K)
- **Shareholders limit:** not affected (2,000)

Unaccredited Investors (Title III)

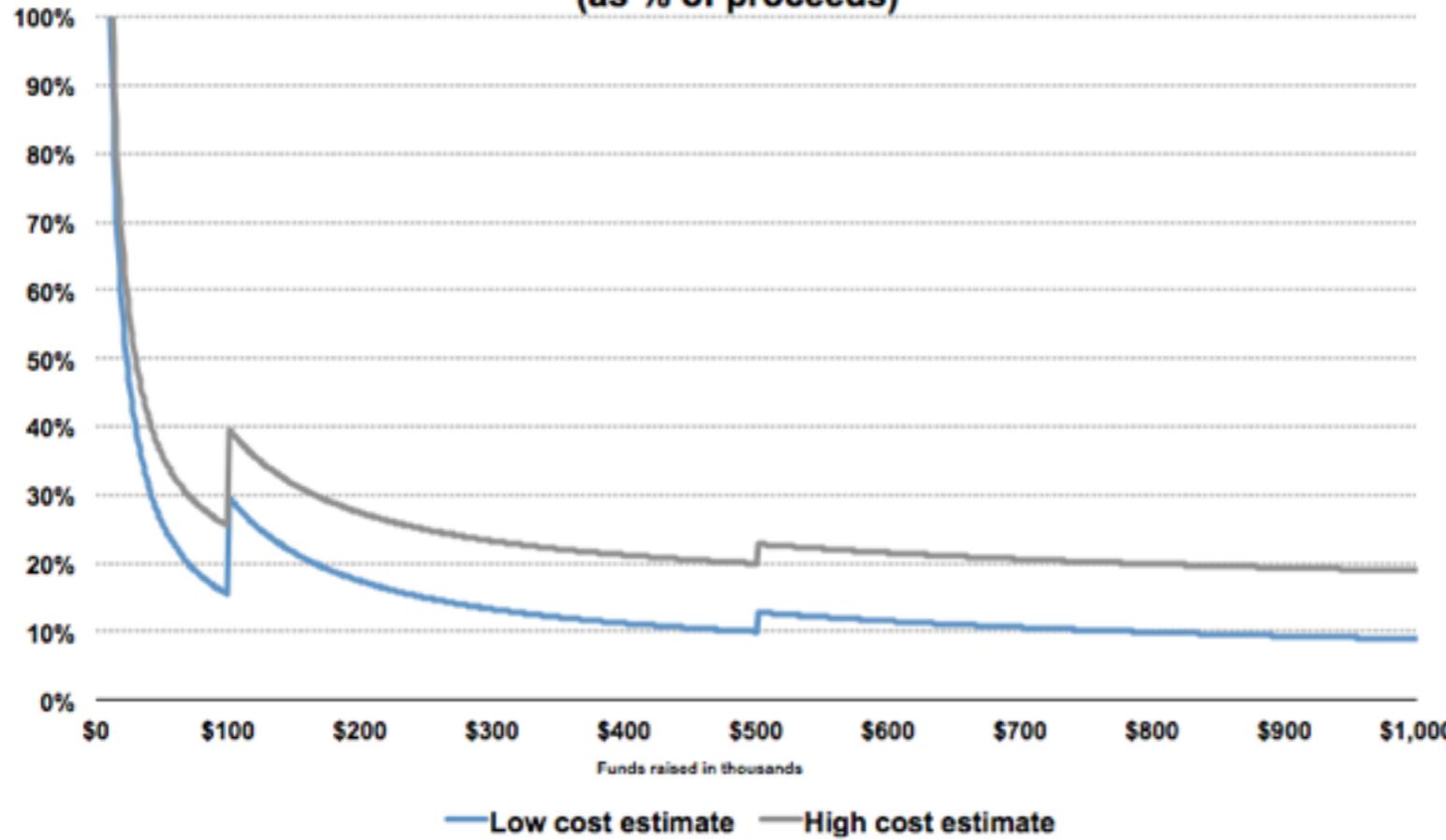
- **Minimum and maximum amount; close date**
- Resumes of company principals (last 3 years)
- High level cap table, discuss other classes of stock
- **Income tax return and financials**
 - <\$100K CEO certifies
 - \$100K-\$500K certified by Certified Public Accountant (CPA)
 - >\$500K must be audited

Accounting Requirements

SEC Low/High Dollar Estimates for Crowdfunding Raise & Compliance



Sliding Scale Costs of Raising Crowdfunds
(as % of proceeds)



Source: CrowdFund Capital Advisors

Funding Portals (Title III)

- Cannot use subjective assessment of the ventures
- Cannot take an equity stake in the company (transaction based model)
- Need to educate investors

	Kickstarter	AngelList	CrowdCube
Equity?	No	Yes	Yes
Launched	2009	2013 (online invst)	2011
Accredited only?	No	Yes	No
US\$ transactions	\$840m	\$26m	\$19m
Revenue model	5% funds raised	0% funds raised 10% carry, 5% on syndicated deals	5% funds raised
Valuation of pltfm	Est. \$350m+ Raised \$10m from Union Square etc. in 2011	Est. \$150m Raised \$24m from Google, Atlas, Kauffman in Sept 2013	\$11m Raised \$2.4m from crowd in May 2013

Issues

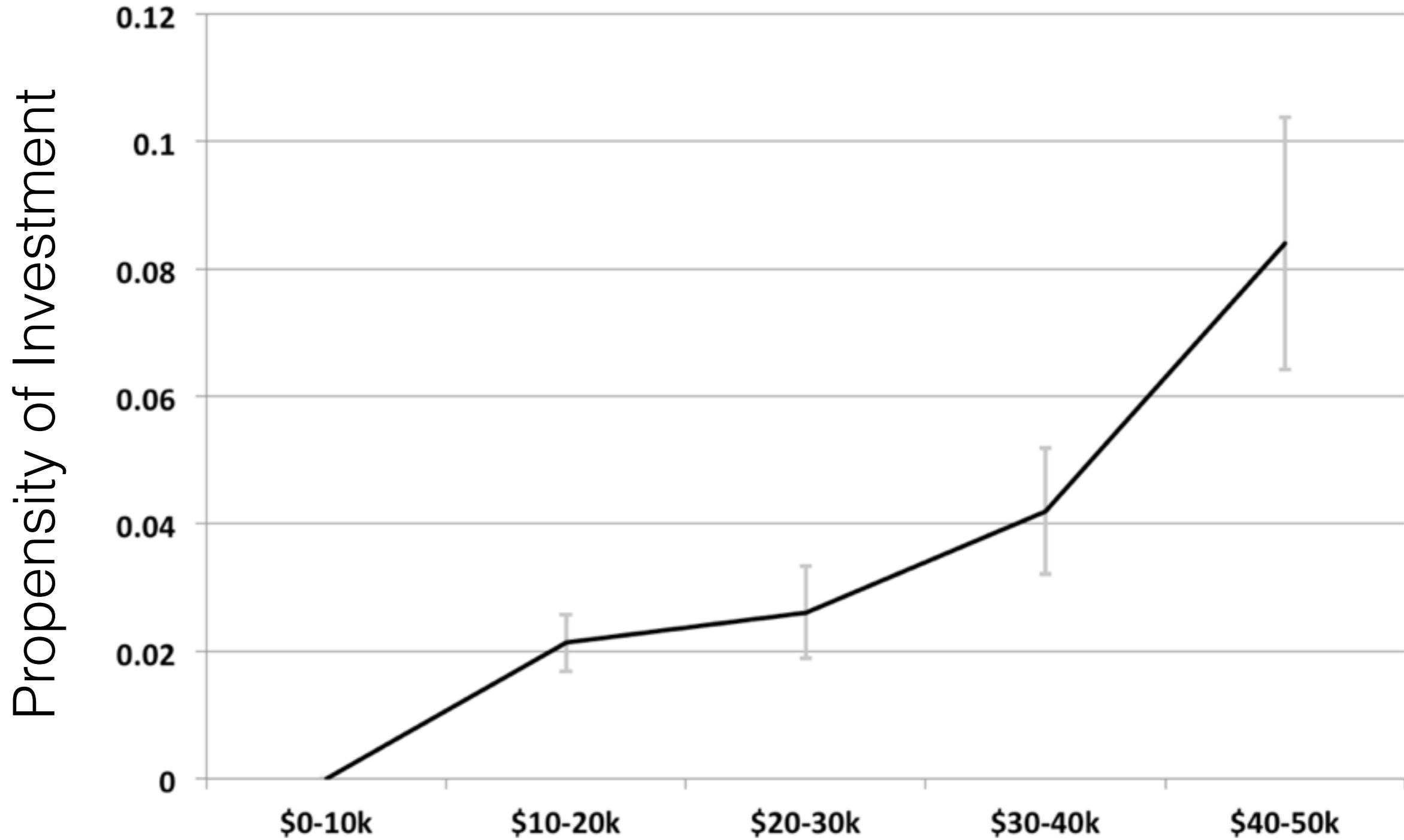
- Investment caps (per investor, per deal)
- Accounting requirements
- Inability to “test the waters”
- Inability to curate opportunities
- Liability of intermediaries
- Transaction model versus equity model
- Startup updates (all versus material changes)

5. Crowdfunding and Regional Entrepreneurial Ecosystems

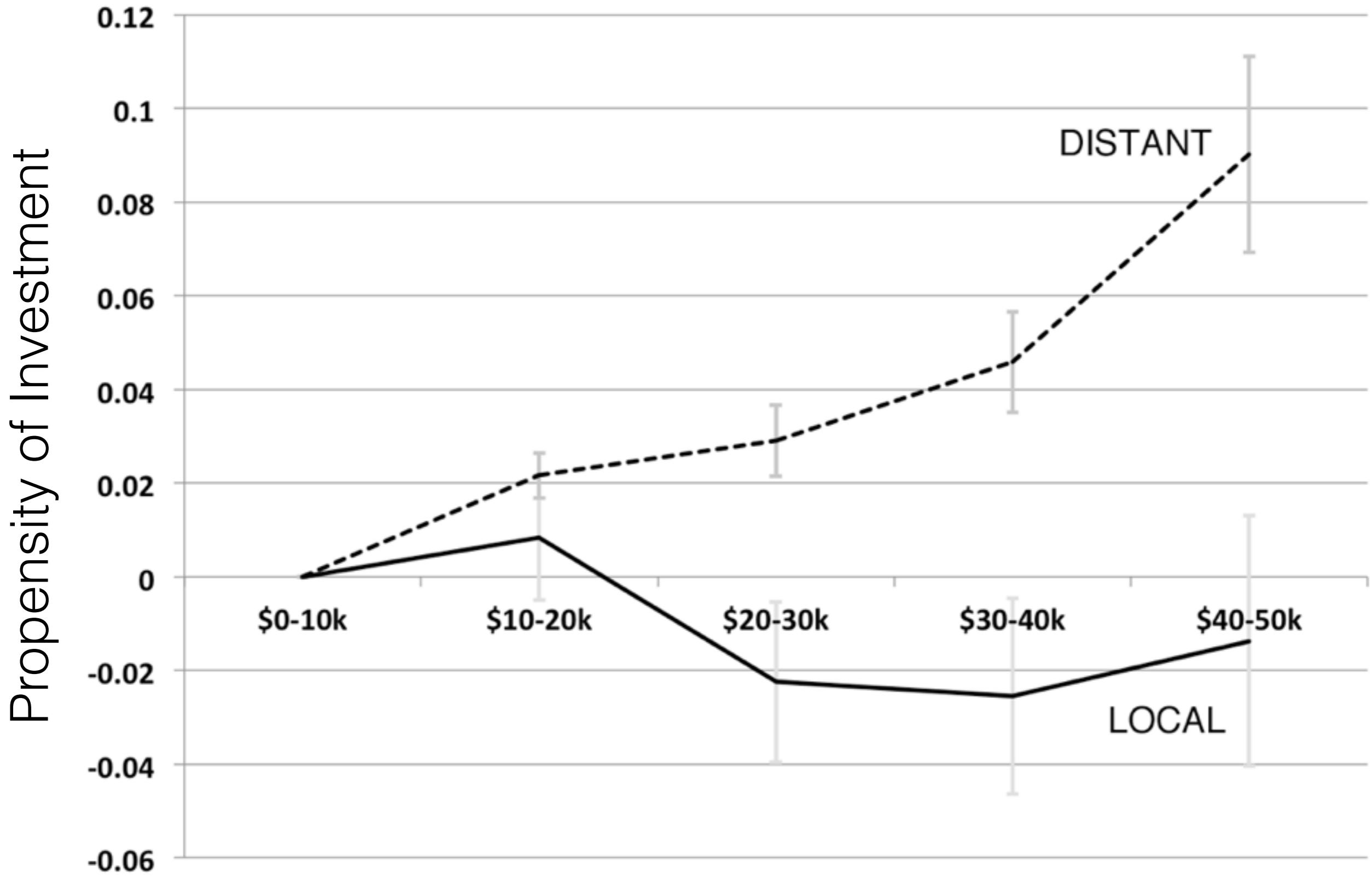
Local versus Distant Investors

	Local	Distant
Propensity to invest	2.9%	0.8%
Average investment size	\$196	\$74
% total investment	13.5%	86.5%

Investment Propensity Increases with Accumulated Capital



Local Investors Drive Early Investments



Friends & Family



Table 5c: F&F are disproportionately local

Pairs	0-25 km	25-50 km	> 50 km
F&F	65%	61%	16%
Not F&F	35%	39%	84%

Dollars	0-25 km	25-50 km	> 50 km
F&F	36%	60%	16%
Not F&F	64%	40%	84%

Friends & Family



Table 5a: F&F use the website differently

	F&F	Not F&F
Average # of emails sent to entrepreneurs	0.24	8.25
Average # of comments sent to entrepreneurs	0.44	12.74
Average # of emails received from entrepreneurs	13.19	68.97
Average # of comments received from entrepreneurs	1.14	18.77

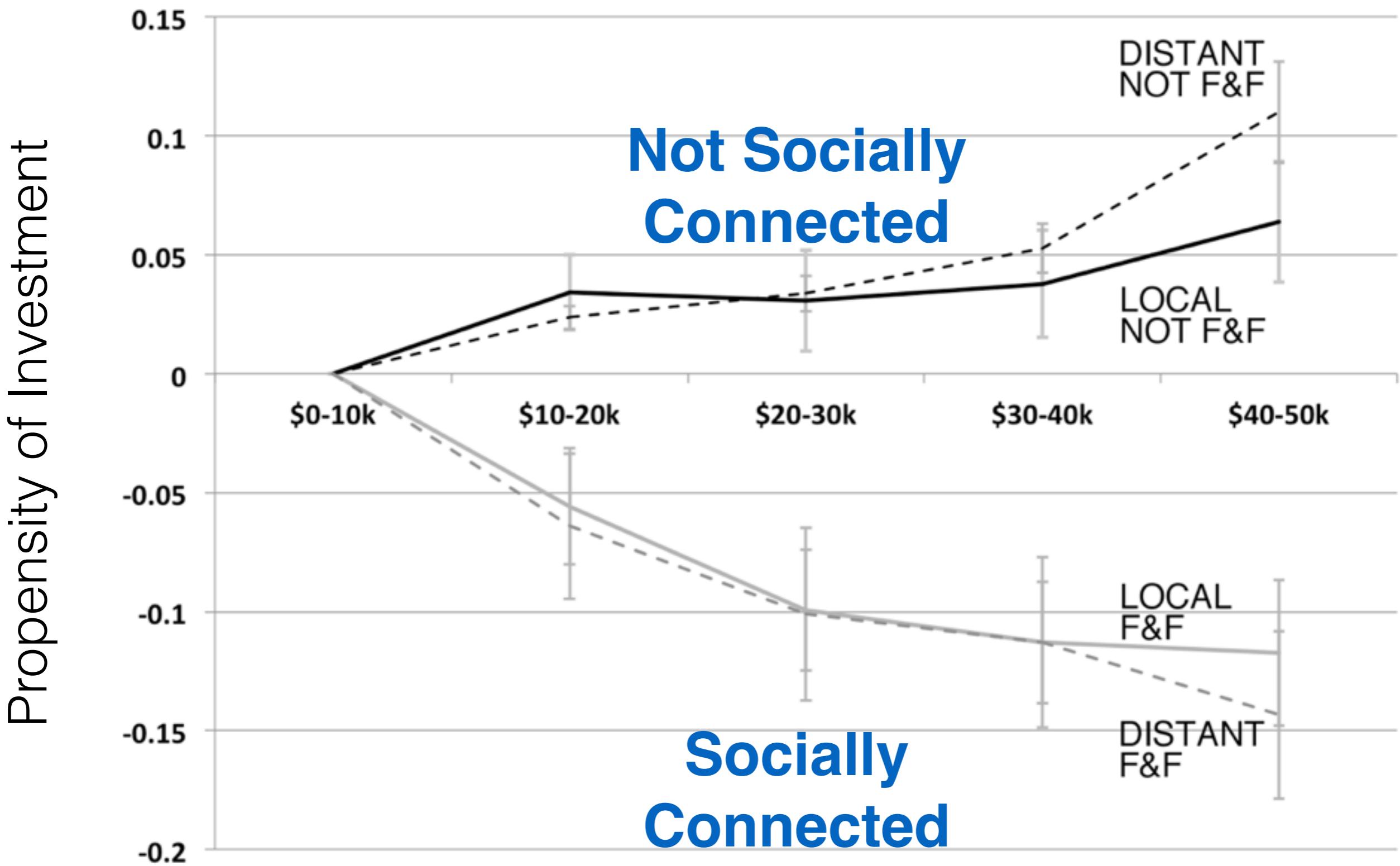
Friends & Family



Table 5b: F&F are disproportionately active at the beginning

	First \$500	First 4 weeks	Full \$50k
F&F	34%	37%	22%
Not F&F	66%	63%	78%

Socially Connected Investors Drive Early Investments



Simple Heuristics

- **Socially connected**

Form a consideration set based on offline information

- **Not socially connected**

Rely on accumulated capital

Online & Offline Investors

- Online platforms reduce many costs associated with distance, but they do not eliminate all frictions
- Distant investors (online) rely on the information revealed by connected investors (offline) when forming a consideration set
- **Social networks constrain the promise of a global online marketplace**

6. Democratizing Access to Capital?

Two Types of Information

- Early-stage capital allocation relies on:
 - **Codified information**
 - ♦ E.g., business plan, product specs, track record...
 - **Tacit information**
 - ♦ E.g. founder personalities, team dynamics...
- The cost of acquiring tacit information increases with distance
- Codified information is dramatically affected by digitization
- Search vs monitoring

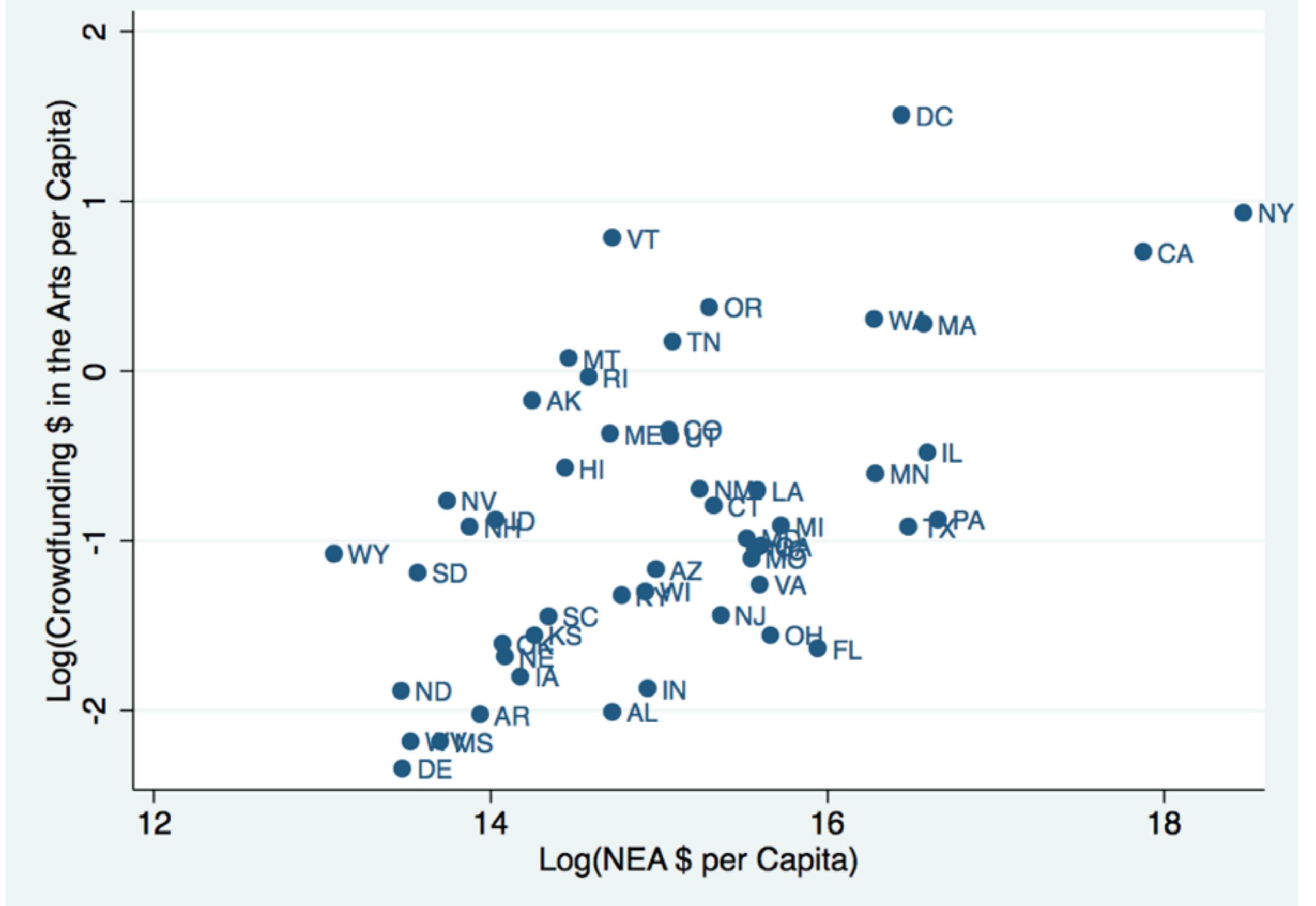
Allocation of Capital

		DIFFERENT	
		No	Yes
MORE	No	Perfect Substitute	Same amount of capital, but allocated differently
	Yes	More early-stage capital for similar projects	More capital and different projects

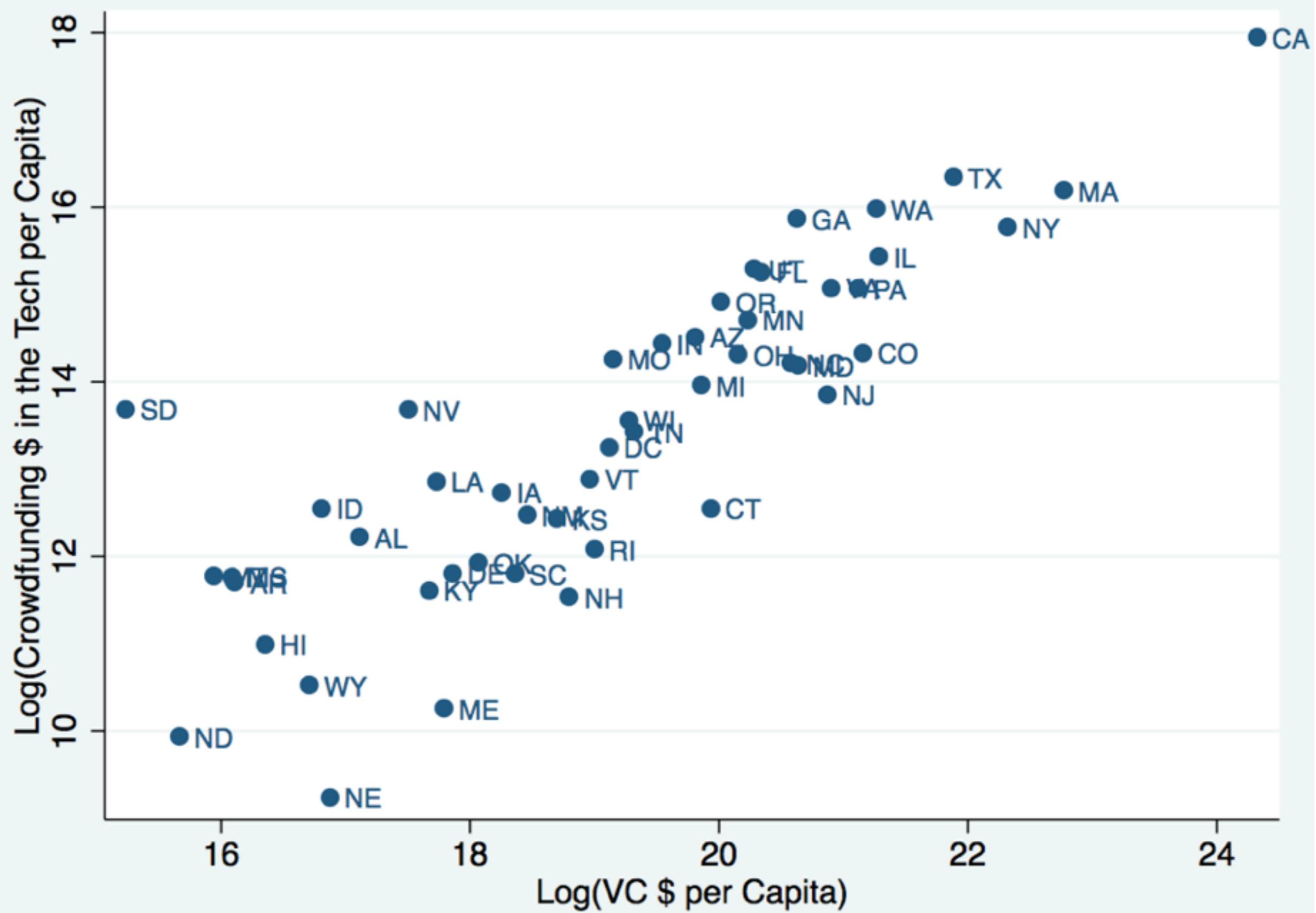
Wisdom of Crowds?

Relative to traditional sources of capital, the crowd may have:

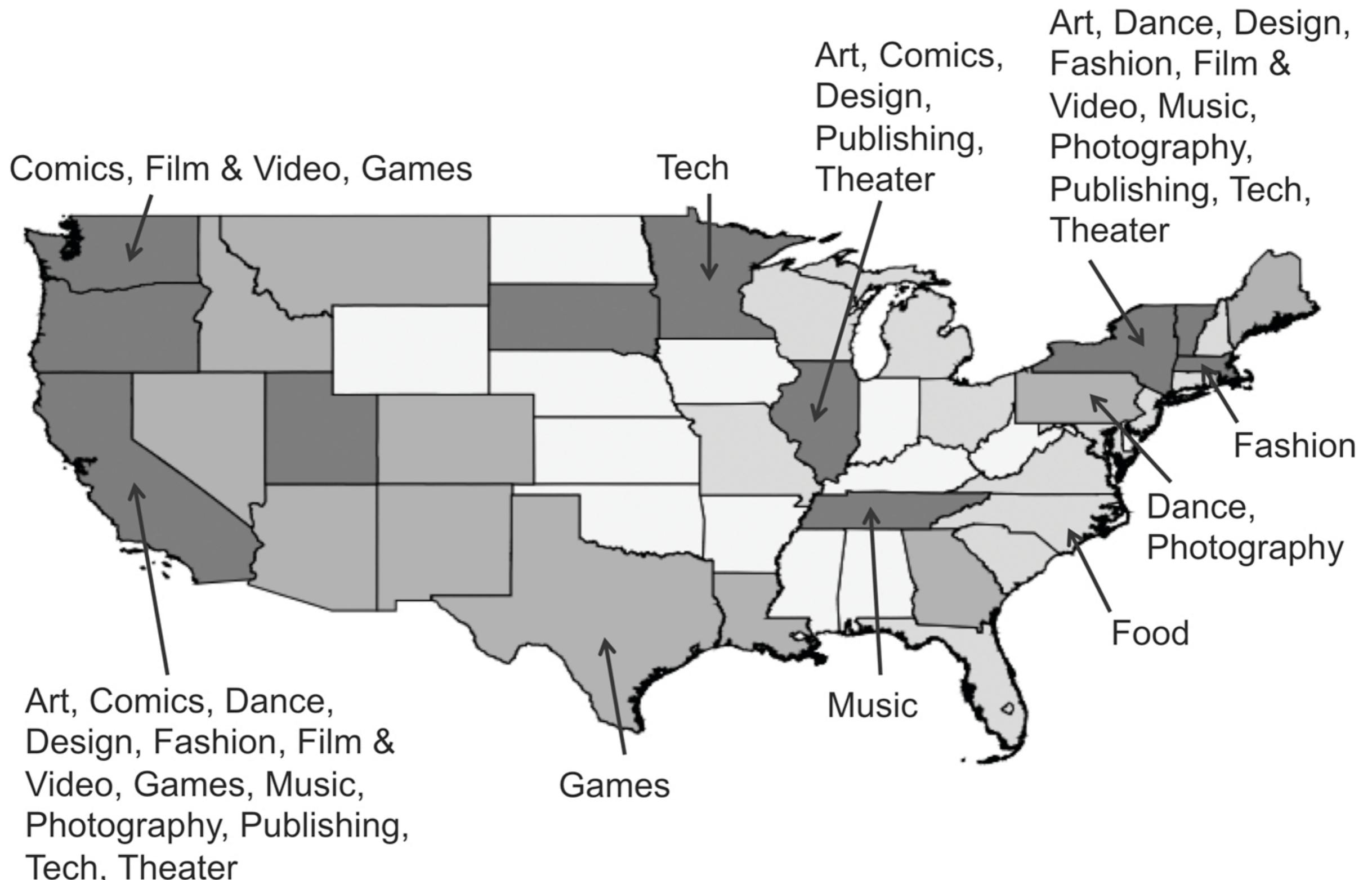
- I. Different information** (social platform, identity of investors)
- 2. Different preferences** (risk/return, motives, consumption value)
- 3. Different rules**
 - Provision point mechanism
 - Formalize family and friends
 - Small investments



Agrawal, A., Catalini, C., Goldfarb, A. (2013). "Some Simple Economics of Crowdfunding" In Innovation Policy and the Economy. Volume 14. NBER, University of Chicago Press.



Agrawal, A., Catalini, C., Goldfarb, A. (2013). "Some Simple Economics of Crowdfunding" In Innovation Policy and the Economy. Volume 14. NBER, University of Chicago Press.



Agrawal, A., Catalini, C., Goldfarb, A. (2013). "Some Simple Economics of Crowdfunding" In Innovation Policy and the Economy. Volume 14. NBER, University of Chicago Press.

First \$26M Raised with Equity Crowdfunding

	Silicon Valley Startup	Non-Silicon Valley Startup
Silicon Valley Investors	58.2%	48.5%
Non-Silicon Valley Investors	41.8%	51.5%

2,602 Online Investments

1,311 Online Investors
55.7% are from Silicon Valley

127 Startups
67.8% are from Silicon Valley

First \$26M Raised with Equity Crowdfunding

Silicon Valley	86
New York City	11
Los Angeles	10
Chicago	3
Seattle	3
Atlanta	2
Arlington	1
Austin	1
Belmont	1
Cambridge	1
Chattanooga	1
Culver City	1
Nashville	1
Portland	1
Rio De Janeiro	1
Salt Lake City	1
San Juan	1

An Example



viaCycle

Zipcar for bicycles. Call or text, unlock, and ride. (YC S12)

Atlanta · Peer-to-Peer · Bridging Online and Offline · Bicycles · Collaborative Consumption



Investors



Ross Baird

Executive Director, Village Capital

Atlanta



David Recordon

Builder at @Facebook • Investor
@OnBeep, @Upverter, @Spark, @viaCycle
• Advisor @Superfeedr • Ex- @Six Apart,
@VeriSign and OAuth/OpenID

San Francisco



Sanjay Parekh

Founder of @Startup Riot, @Founder Fables, and @Bit Perform. Previously founded @Digital Envoy.

Atlanta



Todd Dipaola

Founded & bootstrapped Vantage Media (#31 on Inc 500, sold for over \$100MM),
Founded & bootstrapped inMarket (mobile platform reaching in store shoppers)

Los Angeles

An Example



viaCycle

Zipcar for bicycles. Call or text, unlock, and ride. (YC S12)

Atlanta · Peer-to-Peer · Bridging Online and Offline · Bicycles · Collaborative Consumption

Traction

Launched	November 2011	
Revenue	August 2012	150,000 yearly run rate 100% growth yr/yr
	February 2013	275,000 yearly run rate 150% growth yr/yr

Online Investors

Los Angeles	2
New York	2
N/A	2
Atlanta	1
Chicago	1
Cupertino	1
Draper	1
Dubai	1
Minneapolis	1
San Francisco	1
San Jose	1
Vilnius	1

Aligning Offline and Online

- AngelList requires an initial offline commitment by a lead investor (~\$100K)
- The online crowd invests on the same terms as the lead investor (usually a well-known individual, fund or incubator)

Syndicates and Bakers

SYNDICATE LEAD	TYPICALLY INVESTS	BACKERS	BACKED BY	
 Kevin Rose General Partner @google-ventures. Board member at Tony Hawk Foundation. Previous: Founder of @digg.	\$150,000	712	\$3,710,879	+ Back
 Tim Ferriss Advisor to Uber, Evernote, Shopify, Automattic, etc. Early investor in Twitter, FB, etc. Blog with 1M+ monthly	\$25,000	489	\$2,615,973	+ Back
 Gil Penchina \$25 BILLION IN EXITS. Angel in 60 startups: @linkedin @paypal @fatty @naly-software @angelist @indiegogo-	\$20,000	209	\$1,841,201	+ Back
 Dave Morin Founder @path • Time @facebook, @apple • Board @eventbrite, @sfmoma, @USSkTeam • Studied	\$50,000	299	\$1,214,751	+ Back
 Jason Calacanis Angel investor in 25 startups. Creator/founder: @launch, TechCrunch50, @mashable, Engadget, WeblogsInc,	\$100,000	228	\$1,054,702	+ Back
 Brock Pierce BITCOIN / CRYPTOCURRENCY SYNDICATE - Brock Pierce (33) is a 15x entrepreneur and angel investor best	\$50,000	37	\$636,250	+ Back
 Naval Ravikant Sweat: @angelist , @venture-hacks @vast @opinions ; Money: @twitter @heyzap @snaplogic	\$25,000	74	\$633,000	+ Back
 Salil Deshpande Managing Director at @bain-capital-ventures ; Investor in @springsource, @dynatrace, @buddy-media, @jambool,	\$50,000	54	\$537,500	+ Back
 Wayne Chang Founder: @crashlytics (acquired by @twitter). Early involvement with: @onswipe, @napster & @dropbox.	\$50,000	43	\$531,501	+ Back

- Market for reputation
- Incentives are aligned (carry)
- Incentives for due diligence (no management fee, larger stake than a VC)
- Scales offline relationships (online reach)
- Lowers minimum investment size for bakers
- Multiplier: 5-10x usual investment
- Cap table remains simple

Apply to Back Kevin's Syndicate

Know the risks?

Investing in startups is very risky — most of them go out of business.
Please read our investing guidelines.

[Read Guidelines](#)



Kevin Rose · 44 investments

General Partner @Google Ventures. Board member at Tony Hawk Foundation. Previous: Founder of @Digg. Co-Founder of @Revision3. Founder/CEO of @Milk.

Terms	Kevin's Personal Investment Per Deal	Fee / Carry
	\$150,000	0% / 0%

- Conditions**
- Backers invest in Kevin's deals on the same terms as Kevin
 - Backers can stop backing the syndicate at any time
 - Backers can opt out of deals under [exceptional circumstances](#)

[Learn more about Syndicates »](#)

THIS SYNDICATE IS FULL

Due to SEC restrictions, syndicates are limited to a maximum of 99 investors. Syndicate leads will still consider new backer applications.

HOW MUCH DO YOU WANT TO INVEST PER DEAL? (\$1K MIN)

Kevin plans to do 5 deals this year

\$

[Apply](#)

\$100M VC Fund

- \$150,000 per deal
- 5 deals per year
- Backed by 712 investors for \$3,710,879 (~5k/pp.)
- \$18.5M/year
- No management fee
- No carry

Apply to Back Tim's Syndicate

Know the risks?

Investing in startups is very risky — most of them go out of business.
Please read our investing guidelines.

[Read Guidelines](#)



Tim Ferriss · 30 investments

Advisor to Uber, Evernote, Shopify, Automattic, etc. Early investor in Twitter, FB, etc. Blog with 1M+ monthly readers. Author of three #1 NYT/WSJ bestsellers.

Terms	Tim's Personal Investment Per Deal	Fee / Carry
	\$25,000	0% / 15%

- Conditions**
- Backers invest in Tim's deals on the same terms as Tim
 - Backers can stop backing the syndicate at any time
 - Backers can opt out of deals under [exceptional circumstances](#)

[Learn more about Syndicates »](#)

THIS SYNDICATE IS FULL

Due to SEC restrictions, syndicates are limited to a maximum of 99 investors. Syndicate leads will still consider new backer applications.

HOW MUCH DO YOU WANT TO INVEST PER DEAL? (\$1K MIN)

Tim plans to do 5 deals this year

\$

[Apply](#)

\$70M VC Fund

- \$25,000 per deal
- 5 deals per year
- Backed by 489 investors for \$2,615,973 (~5k/pp.)
- \$13.1M/year
- No management fee
- 15% carry

Apply to Back Lee's Syndicate

Know the risks?

Investing in startups is very risky — most of them go out of business.
Please read our investing guidelines.

[Read Guidelines](#)



Lee Jacobs · 4 investments

Partner @Havoc VC (@Silicon Valley + @Earth), Founder & fmr. CEO @Colingo. Advisor @AngelList Mentor @500 Startups. Before BD @Comcast / @Plaxo. Grad @upenn.

Terms	Lee's Personal Investment Per Deal	Fee / Carry
	\$10,000	0% / 15%

- Conditions**
- Backers invest in Lee's deals on the same terms as Lee
 - Backers can stop backing the syndicate at any time
 - Backers can opt out of deals under [exceptional circumstances](#)

[Learn more about Syndicates »](#)

HOW MUCH DO YOU WANT TO INVEST PER DEAL? (\$2.5K MIN)

Lee plans to do 6 deals this year

\$

[Apply](#)

\$5M Seed Fund

- \$10,000 per deal
- 6 deals per year
- Backed by 17 investors for \$168,501 (~10k/pp.)
- \$1M/year
- No management fee
- 15% carry



Descomplica

Brazil's Largest Online Classroom

Rio De Janeiro · Video · Education · K-12 Education



Lee Jacobs

Managing Partner @Havoc VC (@Silicon Valley and @Brazil). Founder & former CEO @Colingo. Mentor @500 Startups. Previously BD @Comcast / @Plaxo. Grad @upenn. San Francisco · São Paulo · Rio De Janeiro · Entrepreneur · Investor · University of Pennsylvania

[in](#) [tw](#) [f](#) [havoc.vc](#)

Traction

Launched	March 2011	
Revenue	August 2013	150,000 monthly run rate 60% growth mon/mon
Paid Web Subscriptions	August 2013	15,000 19.5% growth mon/mon

The screenshot shows the main landing page of the Descomplica website. At the top, there's a navigation bar with the logo, a search bar, and links for 'DISCIPLINAS' and 'SERVIÇOS'. On the right, there are icons for logging in and a user profile. The main content area features a large heading 'Todas as disciplinas que você precisa' with a subtext 'Aumente suas notas estudando com nossos vídeos, aulas ao vivo e questionários'. Below this, there are eight thumbnail images, each representing a different subject: Matemática (cityscape), Biologia (blue bird), Física (airplane), Português (beach umbrella), História (map), Geografia (map), Química (chemical setup), and Redação (hand writing).

Capital
61% Silicon Valley
8% Brazil
31% other

Two Competing Forces

- **Amplify agglomeration:** capital flows from local to distant locations with most compelling innovation systems
- **Diminish agglomeration:** arbitrage opportunities to fund undercapitalized businesses in regions with weak local markets for early-stage capital

7. The Young, Restless and Creative

Top Regions for Film & Video on Kickstarter

Overall	Per Capita
Los Angeles-Long Beach-Anaheim, CA	Bennington, VT
New York-Newark-Jersey City, NY-NJ-PA	Ithaca, NY
San Diego-Carlsbad, CA	Missoula, MT
San Francisco-Oakland-Hayward, CA	Los Angeles-Long Beach-Anaheim, CA
Chicago-Naperville-Elgin, IL-IN-WI	Bozeman, MT
Seattle-Tacoma-Bellevue, WA	San Diego-Carlsbad, CA
Boston-Cambridge-Newton, MA-NH	Clarksdale, MS
Austin-Round Rock, TX	Taos, NM
Washington-Arlington-Alexandria, DC-VA-MD-WV	Chico, CA
Portland-Vancouver-Hillsboro, OR-WA	Boulder, CO/1
Dallas-Fort Worth-Arlington, TX	San Francisco-Oakland-Hayward, CA
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	New York-Newark-Jersey City, NY-NJ-PA

Agrawal, A., Catalini, C., Goldfarb, A. (2014). "Why do Regions Vary in their Response to Crowdfunding? The Young, Restless, and Creative" - Working Paper.

Top Regions for Technology on Kickstarter

Overall	Per capita
Boston-Cambridge-Newton, MA-NH	Provo-Orem, UT
San Francisco-Oakland-Hayward, CA	Santa Cruz-Watsonville, CA
Los Angeles-Long Beach-Anaheim, CA	San Jose-Sunnyvale-Santa Clara, CA
San Jose-Sunnyvale-Santa Clara, CA	Boulder, CO
Minneapolis-St. Paul-Bloomington, MN-WI	Boston-Cambridge-Newton, MA-NH
New York-Newark-Jersey City, NY-NJ-PA	San Francisco-Oakland-Hayward, CA
Provo-Orem, UT	Burlington-South Burlington, VT
Seattle-Tacoma-Bellevue, WA	Kalispell, MT
San Diego-Carlsbad, CA	Gainesville, FL
Sacramento--Roseville--Arden-Arcade, CA	Laramie, WY
Portland-Vancouver-Hillsboro, OR-WA	Traverse City, MI
Austin-Round Rock, TX	Ithaca, NY

Agrawal, A., Catalini, C., Goldfarb, A. (2014). "Why do Regions Vary in their Response to Crowdfunding? The Young, Restless, and Creative" - Working Paper.

Locations with More College Graduates Have More Activity

	(1)	(2)	(3)	(4)
Total Funding	OLS	OLS	Poisson	OLS with $\log(\text{funding})$
Total Graduates	9.5241 (1.8924)***	13.2277 (7.9769)*	0.00000585 (0.00000088)***	0.00000685 (0.00000194)**

Columns 2, 3, and 4 include controls for full set of CBSA-level demographics

	(5)	(6)	(7)	(8)
Total Projects	OLS	OLS	Poisson	OLS with $\log(\text{projects})$
Total Graduates	0.000676 (0.000120)***	0.000165 (0.000526)	0.00000548 (0.00000077)***	0.00000517 (0.00000153)***

Columns 6, 7, and 8 include controls for full set of CBSA-level demographics

Kickstarter Projects Rise During School Holidays

	(1) Failed Projects	(2) Successful Projects	(3) Failed Funding	(4) Successful Funding
Reading Week	0.2343*** (0.0637)	0.4453*** (0.1598)	546.5546** (255.6793)	7,847.7563 (4,954.7482)
Summer Break	0.2199*** (0.0560)	0.3276*** (0.1105)	701.8720*** (209.2644)	7,536.3434** (3,173.8862)
Spring Break	0.3576*** (0.1268)	0.8328** (0.3321)	1,263.8464** (500.2939)	6,646.5171 (4,539.4602)
Thanksgiving	0.1990*** (0.0604)	0.1598* (0.0926)	1,243.9236** (586.5033)	3,658.0826 (11,586.7664)
Observations	178,944	178,944	178,944	178,944
R-squared	0.033	0.031	0.012	0.006
Number of CBSAs	768	768	768	768

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Includes Week and CBSA Fixed Effects

Arts versus Technology

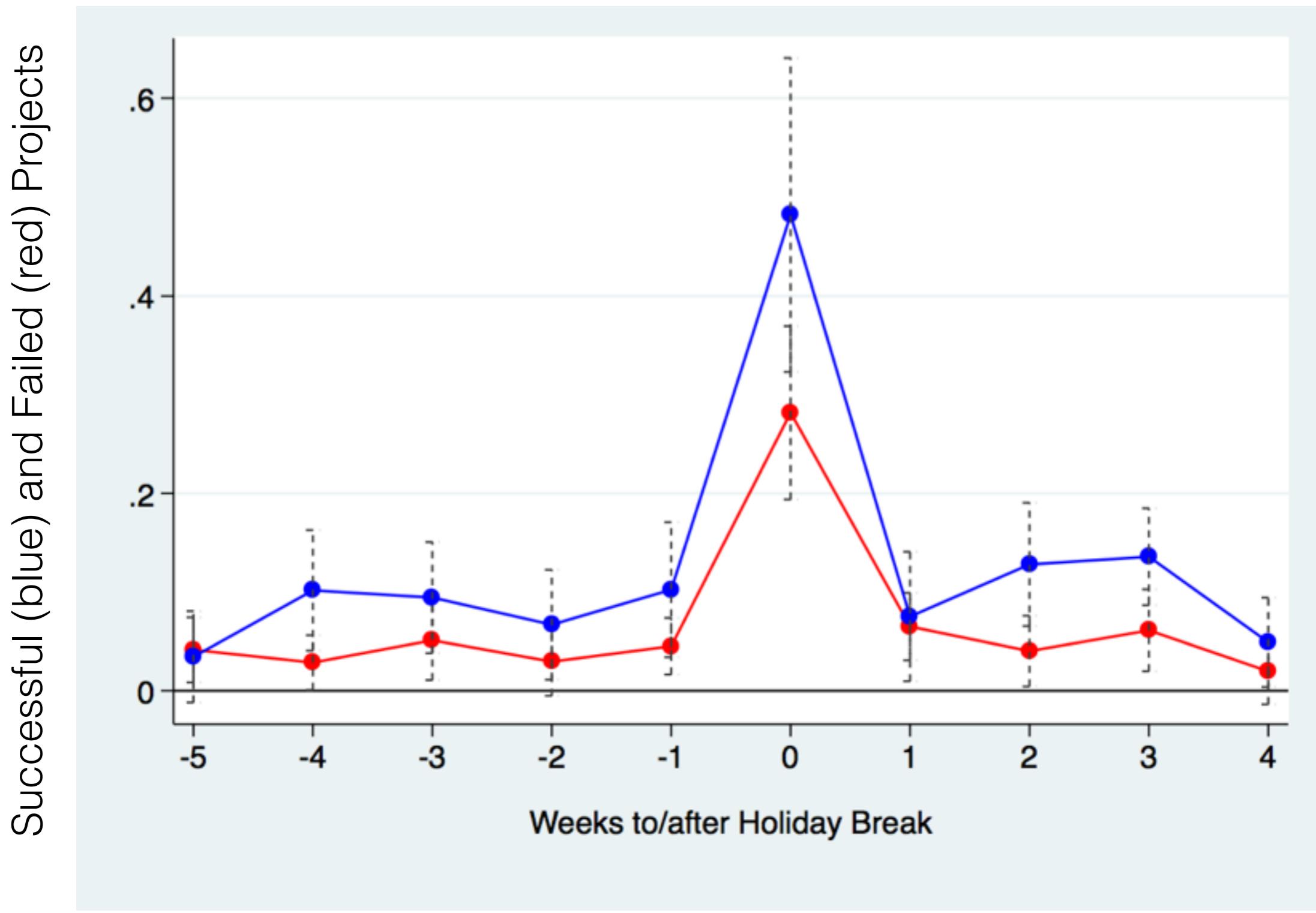
	(1) All Failed Projects	(2) Failed Projects in the Arts	(3) Failed Projects in Technology, Videogames and Design
All Holiday Breaks	0.0596** (0.0295)	0.0445** (0.0190)	0.0115 (0.0095)
Holiday at Top Arts School	0.4275 (0.4299)	0.2926 (0.2953)	0.1252 (0.1138)
Holiday at Top Design School	0.6268** (0.2914)	0.5369** (0.2171)	0.0741 (0.0643)
Holiday at Top Engineering School	0.3165 (0.2290)	0.1837 (0.1610)	0.0977* (0.0559)
Observations	178,944	178,944	178,944
R-squared	0.038	0.030	0.023
Number of CBSAs	768	768	768

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Includes Week and CBSA Fixed Effects

Human Capital and Time



Experimentation

- Regions with more college graduates, have more crowdfunding activity (even after controlling for regional economic and demographic differences)
- Effects are strongest for graduates **20-30 years old**, as well as for regions with **unemployed graduates**
- Activity increases during holiday breaks, is consistent with specialization, and only applies to student projects

8. Measurement



TABLE 1.1. THE NUMBER OF CROWDFUND INVESTING PLATFORMS IN SELECTED COUNTRIES.

Country	# of CFI Platforms	Country	# of CFI Platforms
United States	344	Brazil	17
France	53	Canada	34
Italy	15	Australia	12
United Kingdom	87	South Africa	4
Spain	27	India	10
Netherlands	34	Russian Federation	4
Germany	26	Belgium	1
		Hong Kong SAR, China	1
		China	1
		United Arab Emirates	1
		Estonia	1

Crowdfunding's Potential for the Developing World (2013)

infoDev, Finance and Private Sector Development Department. Washington, DC: World Bank.

Metrics (I)

- **Track activity on reward-based, debt-based and equity-based platforms**
 - # of successful/unsuccessful campaigns
 - Outcomes! (amount raised, startup traction, follow-on investment)
- **Compare with existing entrepreneurial activity within the region**
 - Types of projects (e.g., field, IP-based vs not etc.)
 - Types of funding teams (e.g., age, degree etc.)
 - Types of funders (e.g., local versus distant, mean investment size, experience etc.)

Metrics (II)

- **Equity-based platforms**
 - Deal terms
 - Share of convertible note versus equity deals
 - Syndication with top VCs
 - Share of international investors
- **The data is often already available online for international platforms! (e.g., Kickstarter, AngelList)**
- **Focus on volume of transactions, not number of platforms (network externalities)**

9. A \$96B Opportunity

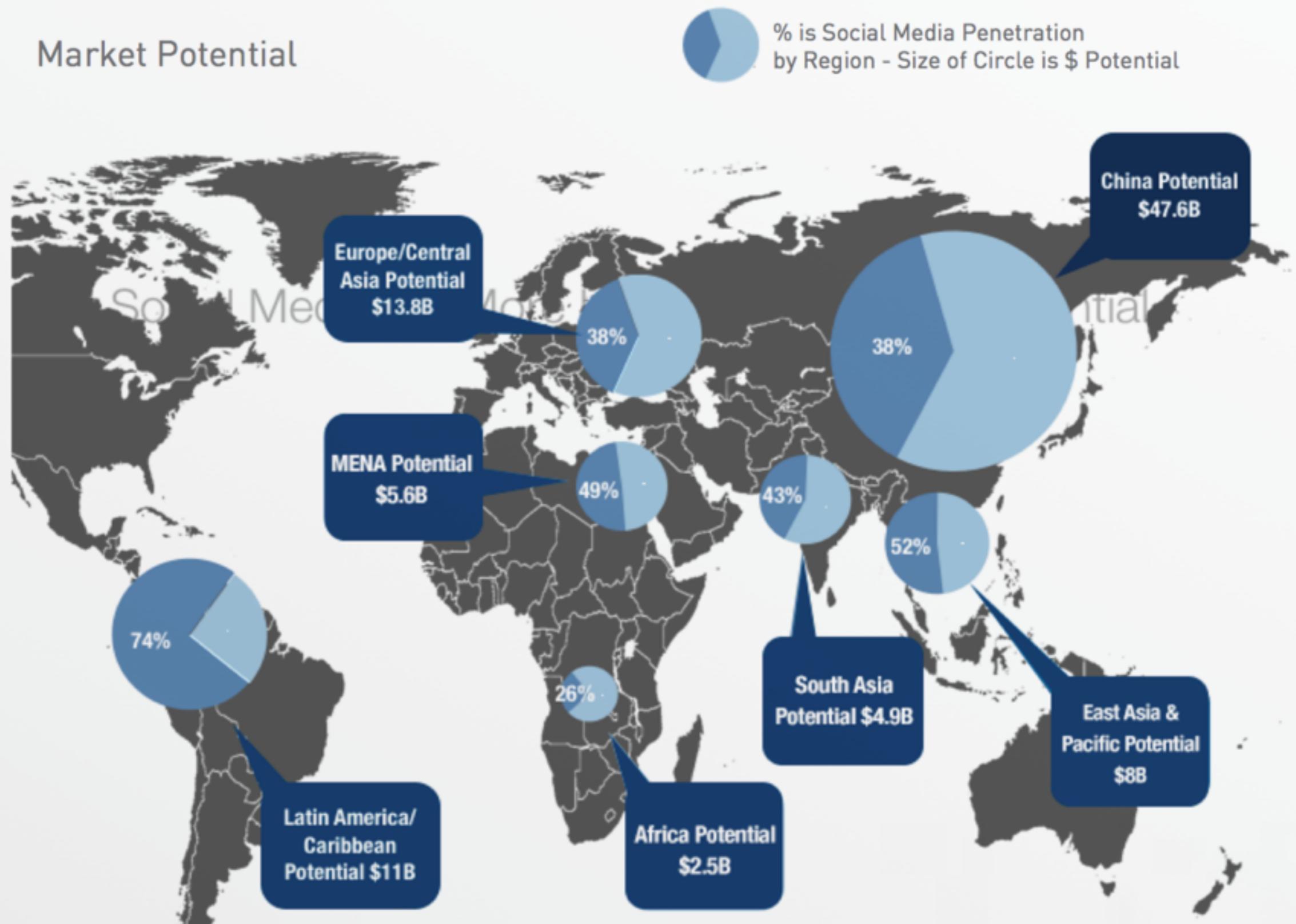


40th Southern Parallel by 2014



Google's Project Loon

FIGURE 2.3. MARKET POTENTIAL FOR CROWDFUNDING ACROSS THE REGIONS



Crowdfunding's Potential for the Developing World (2013)

infoDev, Finance and Private Sector Development Department. Washington, DC: World Bank.

Developing World

- **Encourage participation in global crowdfunding platforms such as Kickstarter and AngelList to attract:**
 - Global capital (conditional on local critical mass)
 - Global expertise
 - *“The problem we’ve run into is that it costs us ~\$250K per country; that pretty much puts only US & EU in ‘feasible’ range for us engaging the lawyers & paying them. [...] Unfortunately, costs of securities law compliance don’t vary with the size of the capital market”* - COO of a leading crowdfunding platform
- **Support crowdfunding locally to:**
 - Increase the degree of experimentation in the economy
 - Leverage mixed incentives (philanthropy, pre-buying etc)
 - Fill the financing gap for early-stage startups
(increase competition)
 - De-risk entrepreneurial ventures (market signal)

Policy as Comparative Advantage

- Support adoption by young entrepreneurs
- Do not limit access to external investors
- Allow portals to curate deals, take an equity stake in the startups
- Reduce the accounting and disclosure burden for general solicitation



10. Policy Tools



- I. Target Key Expats Abroad
- II. Local Public Goods Provision
- III. Crowdfunded Innovation Prizes
- IV. Matching Grants

I. Target Key Expats Abroad



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[in](#) [tw](#) [f](#) [havoc.vc](#)

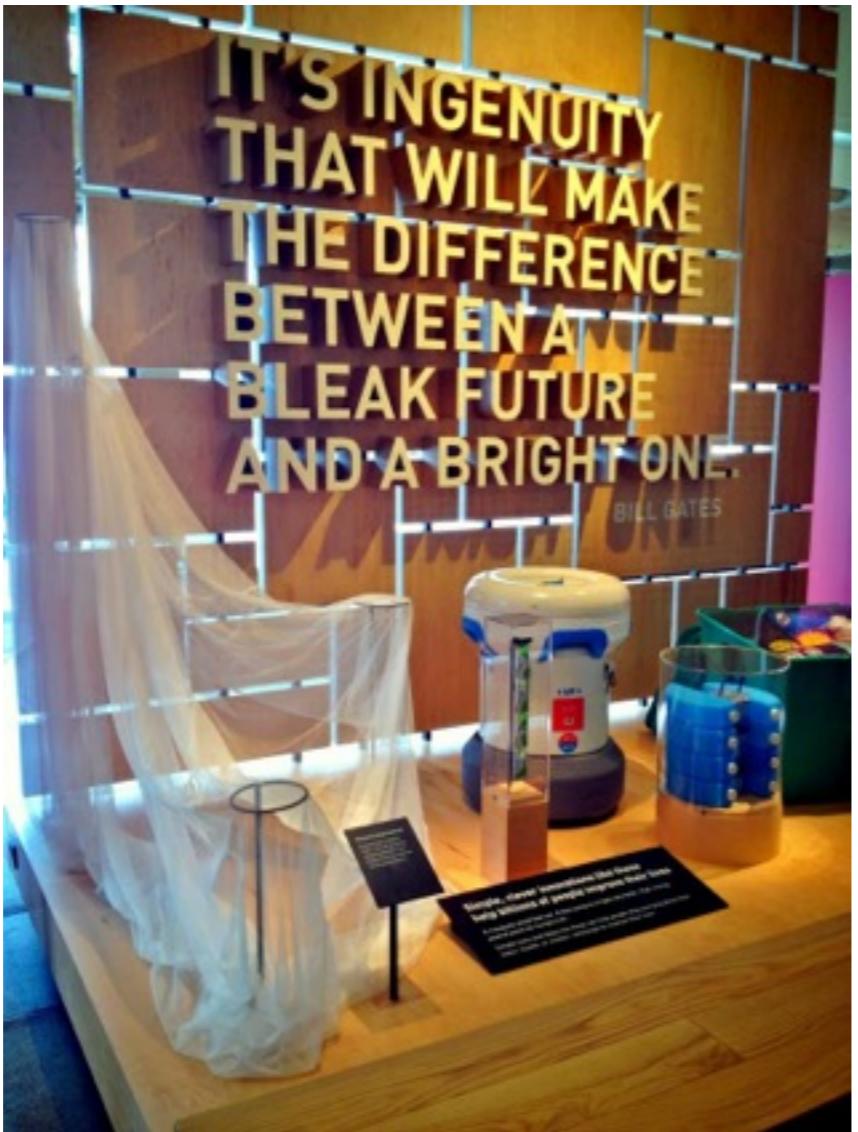
- Arbitrage opportunity (ideas, talent, capital)
- Syndicate deals with leading international investors (expertise)
- Bridge the funding gap with later stage funds

II. Local Public Goods

- Fund public goods with participation from the local community
 - Input in capital allocation
 - Sense of ownership
 - Risk sharing
- Mobile money revolution (e.g., M-PESA >70% adoption), research project with Tavneet Suri (MIT)



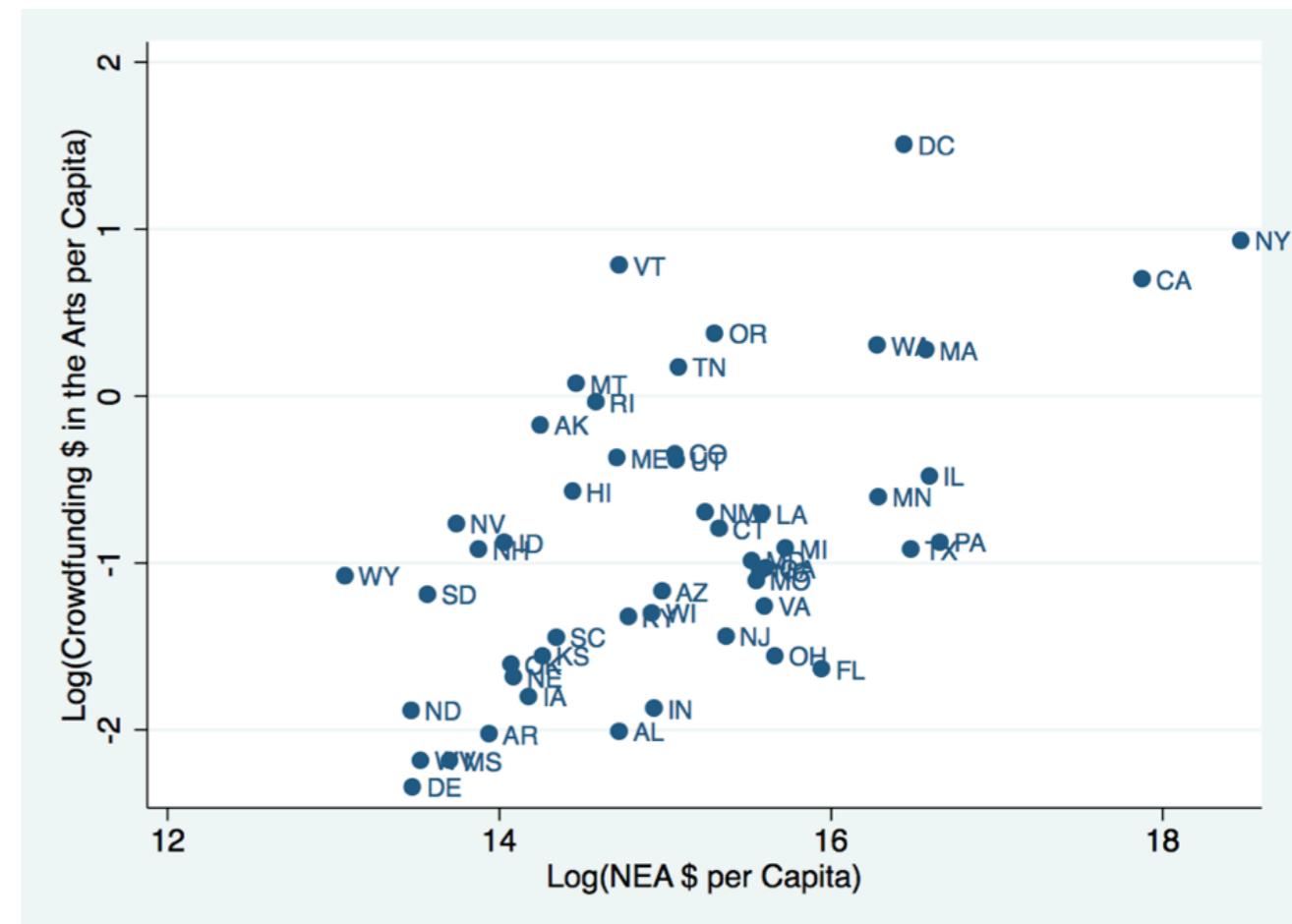
III. Crowd funded Innovation Prizes



1. Challenges are defined
2. Ideation Stage
(crowdsourced, local and global experts are engaged)
3. Solutions are selected
(crowdfunding round, matching funds)
4. Funds are used to implement the projects

IV. Matching Grants (I)

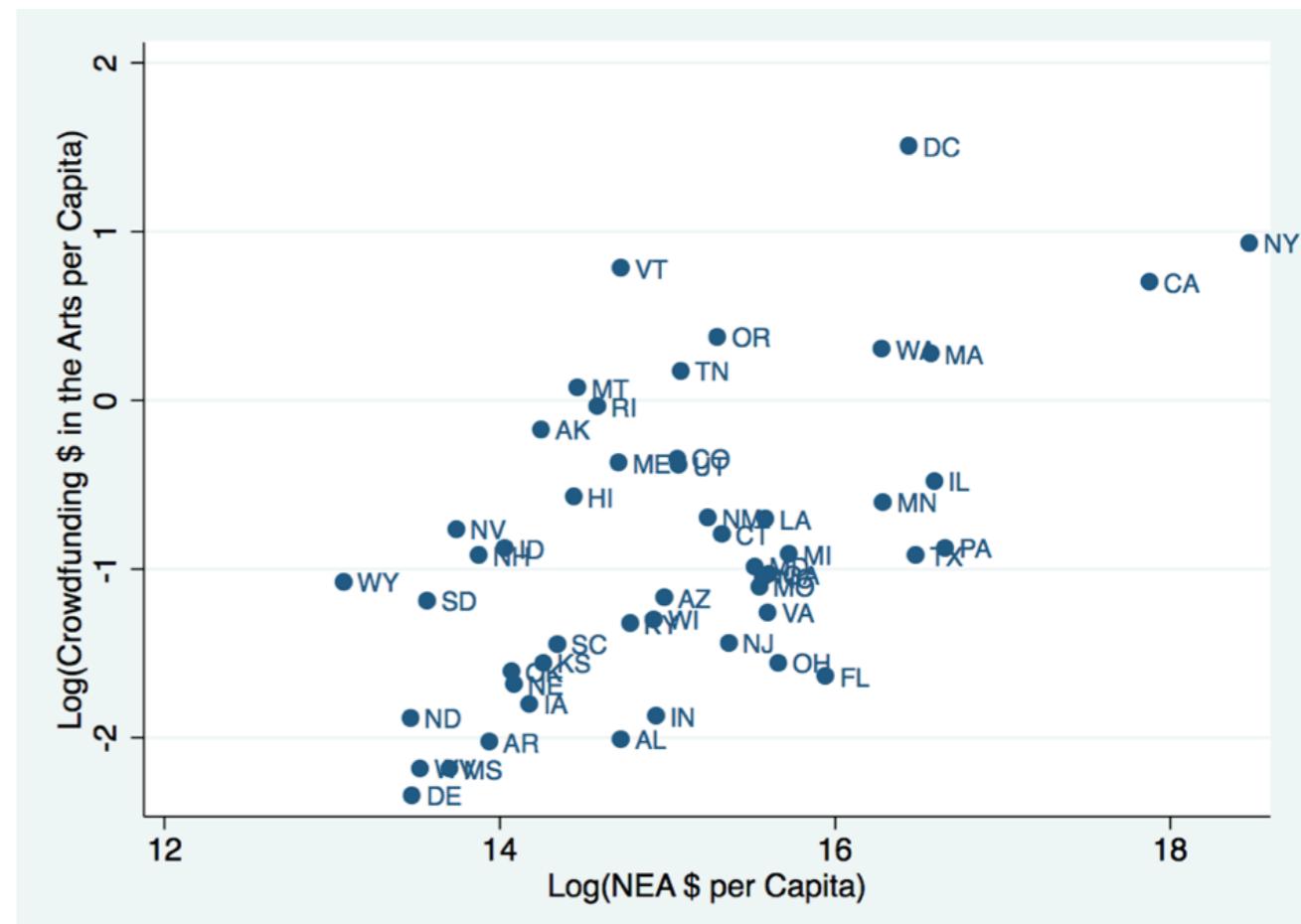
- Kickstarter allocates more dollars to the arts than the NEA (e.g., in 2012, \$320 vs. \$120M)
- Peer to peer lending experiment (UK)
 - March 2013: \$100M to Funding Circle (20% matching; 2,000 businesses; 6,500 jobs), Zopa, Boost, CAM
 - February 2014: \$ 70M to Funding Circle (10% matching)



IV. Matching Grants (II)

Crowdfunding

- Signal of market demand
- Lower cost of screening
- Wisdom of the (qualified) crowd
- Information from offline social networks (e.g., on entrepreneurial teams etc.)



Q&A

Thank You!

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@ccatalini

