

VC Funds and Regulation D's Rule 506(c):
Did Permitting General Solicitation Open the Door for Emerging and
Underrepresented Managers?

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Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

Conceptual Motivation

- Information asymmetry in capital markets forces reliance on imperfect signals of quality
 1. Soft info: Via personal and often local relationship networks
 2. Track records: Represent hard info that can be projected across space to strangers
- Perception: These do not fully overcome info asymmetry, especially in private markets with limited disclosure
- → **Tension in securities regulation: Protecting investors while enabling broad and inclusive capital formation**

Key policy context

- To avoid registering securities, issuers use Regulation D Rule 506(b) exemption
 - ▶ Accounts for much more fundraising than all public U.S. equity and debt offerings combined (Bauguess et al., 2018)
- Bars issuers from publicly advertising, enforcing reliance on personal networks
- 2013: To open up private markets, Congress created new exemption, 506(c)
 - ▶ Broader capital formation
 - ★ Permits general solicitation
 - ▶ Protect investors
 - ★ All investors must be accredited (35 may be unaccredited in 506(b))
 - ★ Require issuer to take reasonable steps to ensure accreditation (can take investors at their word in 506(b))

Findings: Low but More Inclusive Take-up

- Take-up of 506(c) relatively low (8.4% of VC funds since 2013)
- Higher take-up rates (and no worse performance) among underrepresented (UR) managers
- Personal, local networks matter
 - ▶ Confirm in survey that personal networks matter for all groups in 506(b), while 506(c) more often used because lack or seek to build personal networks
 - ▶ General solicitation shifts the geography of fundraising from local to national

Findings: Mechanisms

- Yet overall “needle” of manager diversity has not moved much
 - ▶ 506(c) take-up low and URs far below population benchmarks even within 506(c)
- Why?
 - ▶ **Track record paradox:**
 - ★ 506(c) relies on hard info → Need track record
 - ★ But track record and personal networks co-develop
 - ★ → Few have track record & no personal network
 - ▶ Regulatory barriers to accessing the crowd
 - ▶ Investor verification costs → Negative signaling

Takeaways

Two insights broadly relevant to securities regulation and to financial intermediation:

1. Efforts to protect investors from fraud (e.g. capping investors or installing verification requirements) can come at the expense of higher barriers to entry for issuers
2. Track record matters at arms' length, strong networks matter in relationship financing
 - ▶ So public advertising on its own is only helpful to the small fraction of prospective issuers with a strong track record but weak personal networks

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

U.S. Securities Laws: Quick Primer

- Balance protecting retail investors & supporting capital formation, inclusive access
- Securities regulation in U.S. primarily via mandating disclosure of material information
 - ▶ But creates burdensome costs for issuers
 - ▶ Securities Act of 1933 compromise:
 - ★ Register with SEC (lots of disclosure)
 - ★ Rely on exemption (no disclosure)
- 1982: SEC addresses regulatory uncertainty in law with Regulation D Rule 506(b)
 - ▶ “Safe harbor” with no limit on the offering amount or the number of investors
 - ▶ Today (2023) is basis for PE, VC, real estate, and hedge funds (>\$1.3 trillion) as well as many large companies, startups, and small businesses (>\$50 billion)
 - ▶ With some conditions...

Four Conditions of 506(b)

- Securities resale restricted
- Must notify SEC with Form D within 2 weeks of the offering
- No general solicitation (i.e., public advertising)
 - ▶ E.g. posting on a public website, making statement at an event where strangers are present, reaching out to someone with whom no personal relationship
 - ▶ Requires pre-existing, substantive relationship with prospective investor
→ May entrench well-networked incumbents, creating barriers to entry
- Limits on who may invest
 - ▶ Supreme Court: Can “fend for themselves” (don’t need mandated disclosure)
 - ▶ Accredited= \geq \$200K (or \$300K joint marital) income for 3 yrs or \geq \$1M non-housing wealth
→ In 2023 about 15% of Americans eligible (20 million people)

506(c): Allow General Solicitation

- Goal: Reduce incumbency benefit, expand capital formation to support small business (SEC, 2013; Zeidel, 2016)
- Part of 2012 JOBS Act, effective 9/2013
- Same as 506(b) except for two restrictions:
 - ▶ Issuers could only raise from accredited investors, while 506(b) permits a maximum of 35 unaccredited investors
 - ▶ Issuers using 506(c) would need to “take reasonable steps to verify that purchasers of the securities are accredited investors”
 - ★ Issuer need not represent that the investor is *actually* accredited
 - ★ Large range of acceptable steps
 - e.g. verifying tax records
 - e.g. email from another accredited investor
 - ★ Seemingly not especially onerous

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

Setting: Why Study VC fundraising?

Relative to direct issuers:

- Far larger volume of capital
- Gatekeepers determining which innovations progress and are commercialized in the economy
(Kortum and Lerner, 2000; Gornall and Strebulaev, 2021)
- Even less diverse managers
(Wang et al., 2023)
- Relatively understudied

Data

- Essentially all VC funds use Regulation D
 - ▶ Form D data gives exemption type and basic info
- Novel dataset of U.S. VC funds: Link Pitchbook to Form D data [Match Statistics](#)
 - ▶ Focus on funds in Pitchbook: Closest proxy to universe of legitimate, economically relevant VC funds that raised meaningful capital
- Supplement with:
 - ▶ Information collected from managers' LinkedIn pages
 - ▶ Surveys of VCs and lawyers who provide counsel to VC funds

Personal Networks and Demographics

- Personal networks reduce information asymmetry
 - ▶ But have “taste-based” dimension, driven by homophily and biases
 - ▶ → Barrier to prospective managers from underrepresented backgrounds
- VCs are overwhelmingly White, male, and graduates of elite schools
 - ▶ → Affects which innovations get funded
(Ewens and Townsend, 2020; Calder-Wang and Gompers, 2021; Garfinkel et al., 2021; Cassel et al., 2022)
- Managers with weaker networks (validated in LinkedIn data): [LinkedIn Networks](#)
(Ibarra, 1993; Howell and Nanda, 2019; Cullen and Perez-Truglia, 2023, Lagaras et al., 2022; Han et al., 2021; Lu et al., 2022)
 - ▶ Demographic characteristics: Female or Black/Hispanic
 - ▶ Background characteristics: Non-Elite school or First time

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

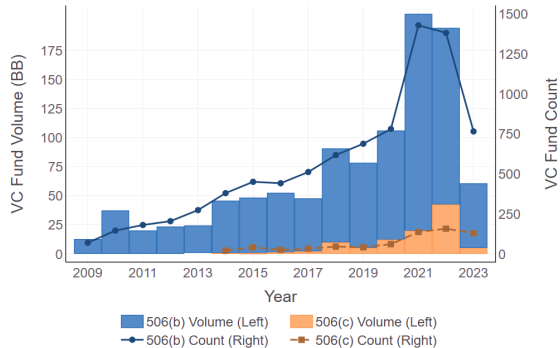
Appendix

Take-up of 506(c) Relatively Low

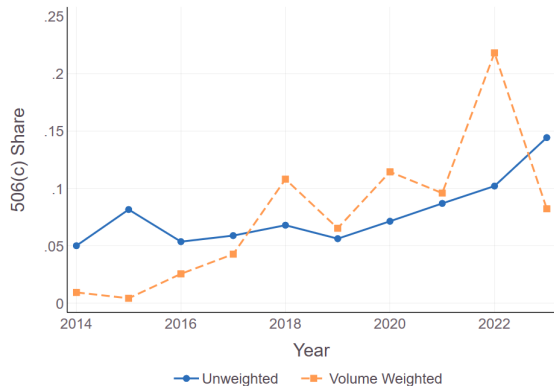
- 506(c) averaged 8.4% of VC funds over 10 years since introduced
 - ▶ Share among companies in Reg D matched to VC-backed startups even lower, 6%
 - ▶ Share in raw, complete Reg D data is 10%

	506(b)	506(c)	506(c) %
Count of Filings	7440	685	8%
Offering Amount (Bill \$)	574	45	7%
Amount Sold, Initial (Bill \$)	257	23	8%
Amount Sold, with Amendments (Bill \$)	377	54	13%
Fund Volume (Pitchbook, Bill \$)	833	98	11%

VC Funds by Vintage Year and Exemption



(a) Fund Count and Volume



(b) Share of Funds using General Solicitation

- In the early years of the policy, take-up de minimis, but recently accelerated

Summary Statistics

Fund	506(b)	506(c)	506(c) - 506(b)	N
Mean Fund Size (Mill \$)	120.486	158.788	38.302	7530
Median Fund Size (Mill \$)	29.697	8.659	-21.038***	7530
Non-Top 10 City Fund	0.312	0.469	0.157***	8125
Non-Top 3 City Fund	0.500	0.658	0.158***	8125
First Fund of VC Firm	0.256	0.289	0.033*	8125
Commission & Broker	0.004	0.142	0.137***	8125
DEI Target	0.014	0.029	0.015**	8125
ESG Target	0.013	0.034	0.021***	8125
Mean Number Prior Funds	5.252	30.482	25.229***	8125
Mean Number Prior Large Exits	3.826	7.053	3.226**	8120
Fund LP				
Non-Pension Share	0.671	0.739	0.068**	2248
Individual Share	0.092	0.168	0.076***	2248
Fund Return				
Mean IRR	15.961	21.949	5.988	880
Mean TVPI	1.720	1.580	-0.140	946
Fund Manager				
Female Share	0.144	0.169	0.024	4155
Black/Hispanic Share	0.058	0.088	0.031**	4156
Black Share (Picture)	0.015	0.039	0.024**	4155
Hispanic Share (Name)	0.043	0.053	0.010	4155
Elite School Share	0.466	0.470	0.004	3987
First Time Share	0.395	0.417	0.021	4156
Finance Experience Share	0.176	0.458	0.282***	4155
Portfolio Company				
Non-Top 5 Industry Share	0.355	0.384	0.029**	4889
Same City as Fund Share	0.135	0.087	-0.048***	4890
Same State as Fund Share	0.356	0.248	-0.108***	4890
Company Filed 506(c) Share	0.011	0.013	0.003	4817
Portfolio Company Leadership				
Has First Time CEO Share	0.831	0.854	0.023**	4755
Has Female CEO Share	0.143	0.170	0.027**	4755
Has Elite School CEO Share	0.317	0.298	-0.019	4465

Fund Characteristics

Dependent Variable:	Fund	Fund Indicator						% LPs	
	Ln(Size)	Non-Top 10 City	Non-Top 3 City	First Fund	Commission & Broker	DEI Target	ESG Target	Non-Pension	Individual
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 (506(c))	-0.680*** (0.086)	0.153*** (0.021)	0.154*** (0.016)	0.094*** (0.020)	0.060* (0.035)	0.024*** (0.006)	0.026*** (0.006)	0.095** (0.043)	0.083** (0.034)
Year FE	No	Yes	Yes	No	No	No	No	No	No
State × Year FE	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
N	7445	8125	8125	8041	8041	8041	8041	2176	2176
R ²	0.145	0.011	0.009	0.062	0.409	0.063	0.046	0.113	0.094
Outcome Mean	3.138	0.325	0.513	0.258	0.016	0.015	0.015	0.669	0.094

- Regression permits controls for 506(c) trends over time and to non-hub states
- 506(c) funds are:
 - ▶ 49% smaller
 - ▶ 47% more likely to be outside a top-10 city
 - ▶ 36% more likely to be a VC firm's first fund
 - ▶ 3x more likely to use intermediary
 - ▶ 14% more non-pension LPs, 88% more individual LPs

506(b) vs 506(c): Fund Returns

Dependent Variable:	Continuous		Above 75th Percentile	
	IRR (1)	TVPI (2)	IRR (3)	TVPI (4)
$\mathbb{1}(506(c))$	9.910 (6.267)	0.259 (0.156)	0.259*** (0.050)	0.240*** (0.063)
State \times Year FE	Yes	Yes	Yes	Yes
N	807	876	807	876
R^2	0.265	0.310	0.135	0.119
Outcome Mean	16.694	1.726	0.238	0.243

- 506(c) funds significantly more likely to be top-quartile
 - Points away from adverse selection story

Fund Manager Characteristics

Dependent Variable:	Share of Fund Team					
	Female (1)	Black/Hispanic (2)	Black (3)	Hispanic (4)	Elite School (5)	First Time (6)
1 (506(c))	0.057* (0.031)	0.058*** (0.018)	0.034*** (0.005)	0.029 (0.018)	-0.038* (0.023)	0.108*** (0.040)
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	4067	4068	4067	4067	3897	4068
R ²	0.068	0.068	0.074	0.057	0.122	0.098
Outcome Mean	0.146	0.061	0.017	0.044	0.471	0.396

- 506(c) funds have:
 - ▶ 5.7 p.p. higher share of female managers (39% mean)
 - ▶ 5.8 p.p. higher Black or Hispanic managers (95% mean)
 - ▶ 8% lower share elite schools
 - ▶ 27% higher share first-time manager

Majority Indicator

Individual

RegD Female Share

Differences Extend to Portfolio Companies

Dependent Variable:	% not in top	% in same		% filed	% Has CEO that is		
	5 Industry (1)	City (2)	State (3)	506(c) (4)	First time (5)	Female (6)	Elite School (7)
1 (506(c))	0.041*** (0.010)	-0.021** (0.009)	-0.023* (0.013)	0.006** (0.003)	0.026** (0.009)	0.023* (0.012)	-0.013 (0.009)
State \times Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4802	4803	4803	4731	4667	4667	4374
R ²	0.081	0.116	0.256	0.073	0.066	0.081	0.080
Outcome Mean	0.357	0.132	0.349	0.011	0.832	0.145	0.318

- 506(c) portcos:
 - ▶ 11% more likely to be outside the top industries
 - ▶ 16% more likely to be far from manager
 - ▶ More likely to have first-time or female entrepreneur

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

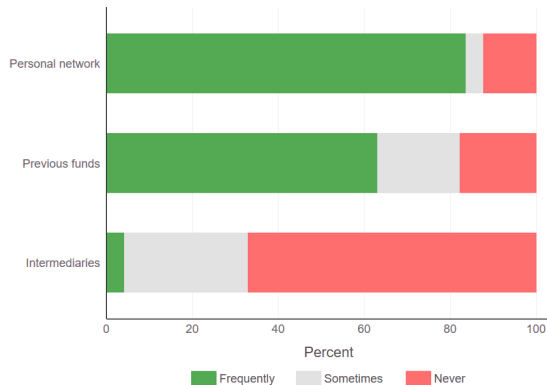
Local Networks

- To sum up, 506(c) funds:
 - ▶ tend to be smaller than their 506(b) counterparts.
 - ▶ are more often located outside of major VC “hubs” (SF, NY, LA, etc.)
 - ▶ are used by less-networked managers more on average (Female, Black, First Time, etc.)
 - ▶ portcos more likely to be in UR industries and have UR leaders
- Characteristics associated with weaker personal networks
 - More likely to use general solicitation

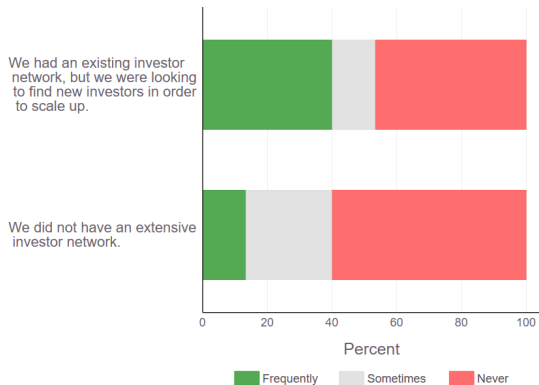
VC Fund Manager and Lawyer Surveys

- Gather direct evidence on subjective perceptions of 506(c) take-up using surveys
- VC managers who appear in our data
 - ▶ Sent 4,112 emails to VC fund managers that did not bounce
 - ▶ Responses from 103 unique funds, for a response rate of 2.5%
- Lawyers who support VCs
 - ▶ Sent 2,335 emails to lawyers that did not bounce
 - ▶ Responses from 49 lawyers, for a response rate of 2.1%
- Survey quality
 - ▶ No reminders; response rates reasonable relative to other surveys of elite execs (e.g. Graham and Harvey (2001) at 8.9% for CFOs)
 - ▶ Responders representative on key dimensions, including demographics

Survey Results: Role of Personal Network in Fundraising



(a) 506(b) Fund Manager Source of Investors



(b) 506(c) Fund Managers on Personal Networks as Reason for Using 506(c)

- 506(b): 90% report using personal network to raise funds
- 506(c): 40% report using 506(c) because lacked personal network

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

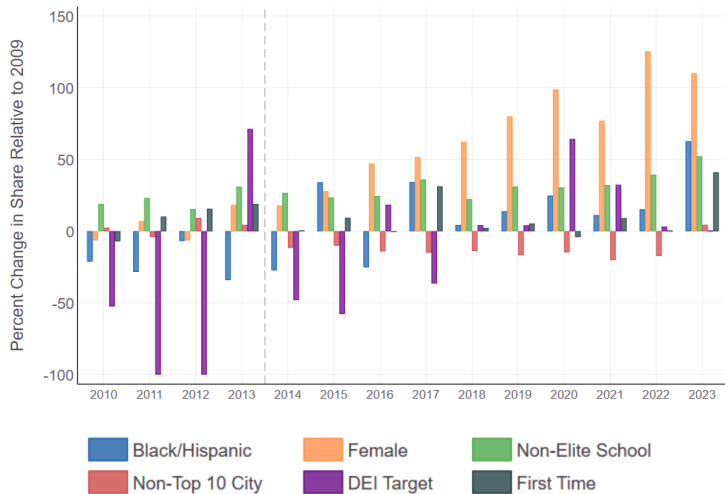
Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

Changes In Shares Relative to 2009



- Since early 2010s female, Black/Hispanic shares have increased

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Has 506(c) Moved the Needle for UR Managers?

- Underrepresented managers seem to benefit from the ability to publicly advertise
- Yet overall “needle” has not moved much
 - ▶ Because 506(c) take-up has been low as a share of all Regulation D use
 - ▶ These groups remain underrepresented even within 506(c)
 - ▶ e.g. Black/Hispanic share increased from 3% in 4 yrs before 2013 to 6% in 2018-23
→ far from 26% share among college graduates
- There may be supply-side constraints, but UR managers’ funds do not perform worse
→ **Suggests entry barriers; 506(c) take-up could be higher w/o quality decline**

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

Mechanisms for Lack of Take-Up

- Low take-up of 506(c) may seem surprising: All else equal, option to publicly solicit should be weakly better than not
- Why don't more fund managers—especially network-constrained—use 506(c)?
- We identify three non-mutually exclusive mechanisms for low take-up
 - ▶ Track record paradox
 - ▶ Regulatory barriers to accessing the crowd
 - ▶ Investor verification costs
- Note: There are other barriers facing UR managers in entrepreneurial finance ecosystem
 - ▶ Deal sourcing
 - ★ (But 506(c)'s outperformance suggests not)
 - ▶ Discrimination
 - ★ (506(c) use may imply less taste-based but more statistical discrimination)

Track Record Paradox

- Use of public advertising in 506(c) → More emphasis on manager's track record
 - ▶ In the absence of soft info via personal relationships, LPs will employ hard info
- But managers with track record typically developed personal networks along the way
 - ▶ **Network and track record are usually coincident**
- Two predictions:
 - ▶ 506(c) fundraising success more sensitive to track record than 506(b)
 - ▶ Few fund managers have ideal profile for 506(c): Weak network but strong track record

Track Record Sensitivity: Measures

- Three track record measures observed as of the time the focal fund is raised:
 - ▶ 1) firm's number of prior successful portfolio company exits
 - ▶ 2) firm's number of prior funds
 - ▶ 3) the share of the fund team with past work experience in finance
(For past VC activity, use firm level because most important vector of signaling & 506(c) managers more likely to be first-time)
- Fundraising success: Ultimate fund size
 - ▶ After controlling for initially targeted size

Track Record Sensitivity

Dependent Variable:	Ln(Fund Size)		
	(1)	(2)	(3)
Prior Exits	0.043*** (0.012)		
Prior Exits $\times \mathbb{1}(506(c))$	0.046*** (0.011)		
Prior Funds		0.045*** (0.012)	
Prior Funds $\times \mathbb{1}(506(c))$		0.059** (0.023)	
Finance Experience Share			-0.002 (0.014)
Finance Experience Share $\times \mathbb{1}(506(c))$			0.091* (0.048)
$\mathbb{1}(506(c))$	-0.530*** (0.071)	-0.532*** (0.071)	-0.304** (0.138)
Ln(Fund Target Size)	0.979*** (0.018)	0.982*** (0.017)	0.992*** (0.011)
State \times Year FE	Yes	Yes	Yes
N	5713	5713	3183
R^2	0.831	0.831	0.850
Outcome Mean	3.246	3.246	3.781

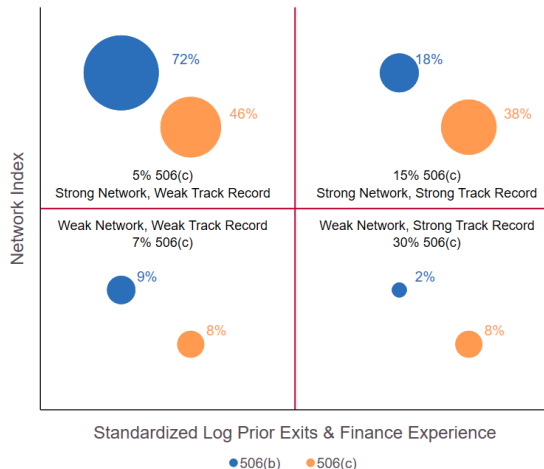
- 506(b): 1 s.d. \uparrow prior exits \rightarrow 4.3% \uparrow in \$ raised (controlling for target)
- 506(c): 8.9% \uparrow in 506(c) (2.1x more)

Track Record Sensitivity

Dependent Variable:	Ln(Fund Size)		
	(1)	(2)	(3)
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Prior Exits $\times \mathbb{1}(506(c))$	0.046*** (0.011)		
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State \times Year FE	Yes	Yes	Yes
N	5713	5713	3183
R^2	0.831	0.831	0.850
Outcome Mean	3.246	3.246	3.781

- Takeaway: Fundraising success more sensitive to track records for 506(c) than for 506(b)
- UR managers have weaker track records on average, may deter 506(c) entry

Track Record Paradox



- Red lines: Midpoint of distributions
- Orange bubble size and % represent quadrant's share of all 506(c) funds (similarly for 506(b) in blue)

Regulatory Barriers to Accessing the Crowd

- Public advertising most relevant for reaching retail investors (many small investments)
- Is investor supply constrained?
 - ▶ Rule this out using 2020 expansion to accreditation **Investor Supply**
- But most smaller VCs restricted to 100 investors
 - ▶ (Because 3(c)(1) funds under Investment Company Act of 1940)
→ **Could constrain use of 506(c)**
- May 2018: SEC raised cap to 250 for VC funds with <\$10m AUM
 - ▶ Goal: Allow small funds without access to institutional or very wealthy LPs to raise from many smaller investors
 - ▶ Cap still at 100 for >\$10m AUM
- **Hypothesis: If cap constraining, VC funds <\$10m AUM should become more likely to use 506(c) relative to larger funds**

2018 Event Study Regression

$$\mathbb{1}(506(c))_{i,y} = \alpha_{s,y} + \beta \times \mathbb{1}(\text{Fund} < \$10\text{m})_{i,t} \times \mathbb{1}(\text{Post Policy})_t + \theta \times \mathbb{1}(\text{Fund} < \$10\text{M})_{i,t} + \epsilon_{i,t}$$

Dependent Variable:	506(c)	506(c), Underrepresented		506(c), Elite School	
	All (1)	With (2)	Without (3)	Without (4)	With (5)
$\mathbb{1}(\text{Fund size} < \$10\text{m})$	-0.015 (0.012)	-0.013 (0.008)	-0.002 (0.008)	-0.014 (0.011)	0.000 (0.007)
$\mathbb{1}(\text{Fund size} < \$10\text{m}) \times \mathbb{1}(\text{PostPolicy})$	0.059*** (0.016)	0.032** (0.015)	0.026* (0.014)	0.050** (0.020)	0.021 (0.013)
State \times Event Year FE	Yes	Yes	Yes	Yes	Yes
N	2597	2597	2597	2517	2517
R^2	0.308	0.116	0.293	0.170	0.236
Outcome Mean for Size < \$10m	0.118	0.041	0.077	0.062	0.065

- After policy, smaller VC funds below the \$10m regulatory cutoff much more likely to use 506(c) relative to funds larger than \$10m
 - ▶ Cap is likely even more constraining for larger funds because they tend to have more investors

2018 Event Study Regression

$$\mathbb{1}(506(c))_{i,y} = \alpha_{s,y} + \beta \times \mathbb{1}(\text{Fund} < \$10\text{m})_{i,t} \times \mathbb{1}(\text{Post Policy})_t + \theta \times \mathbb{1}(\text{Fund} < \$10\text{M})_{i,t} + \epsilon_{i,t}$$

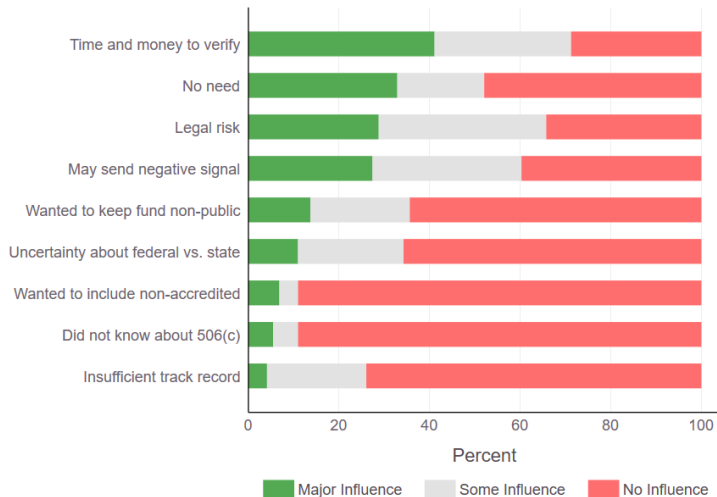
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	All (1)	With (2)	Without (3)	Without (4)	With (5)
$\mathbb{1}(\text{Fund size} < \$10\text{m})$	-0.015 (0.012)	-0.013 (0.008)	-0.002 (0.008)	-0.014 (0.011)	0.000 (0.007)
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- Cap raise disproportionately benefited UR managers
 - Expect they depend more on the crowd, as they tend to have more LPs [LP Numbers](#)

Verification Costs and Negative Signaling

- Securities law tries to protect investors in private markets (limit harm of scams and high-risk investing) by requiring investors to be wealthy or sophisticated
 - ▶ In 506(b), investors can self-certify as meeting accreditation requirements
 - ▶ In 506(c), since more arm's length retail investors, issuers must take "reasonable steps" to verify accreditation
- Available steps not especially onerous
 - ▶ But they do add some cost to 506(c)
- If high quality GPs have personal networks and need not pay verification costs
→ **Negative signaling equilibrium might emerge:**
Only those that cannot raise under 506(b) use 506(c)

506(b) Manager Reason for not using 506(c)



- Survey suggests verification costs & accompanying signaling problems can help explain low take-up of general solicitation [Demographic Split](#) [Lawyer Opinions](#) [Manager Opinions](#)

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

Conclusion: Main Findings

- Permitting general solicitation helps level playing field for UR managers and escape limits of own geography
 - ▶ Reducing dependence of private fundraising on local conditions could mitigate geographic concentration and disparities in VC
 - Yet policy did not dramatically increase ranks of UR managers
 - 3 channels help explain why 506(c) not widely used
1. Track record paradox: Ability to publicly advertise in 506(c) reduces reliance on personal networks, but arm's length fundraising requires a track record. This creates a paradox: Few people have strong track records yet did not develop strong personal networks along the way
 2. Access to the crowd: A 100-investor cap for 3(c)(1) private funds creates a regulatory barrier to 506(c) managers' access to small-time retail investors
 3. Investor verification costs: While in principle not onerous, perceived costs and accompanying signaling problems play role in low take-up

Conclusion: Two insights broadly relevant to securities regulation

1. Efforts to protect investors from fraud (e.g. via investor caps or verification reqs) can come at expense of higher barriers to entry
2. Track record matters at arms' length while strong networks matter in relationship financing, so public advertising on its own is only helpful to the small fraction of prospective issuers with a strong track record but weak personal networks

Roadmap of Talk

Introduction

Policy Context

Data

Takeup

Role of Personal Networks

Has 506(c) Moved the Needle for UR Managers?

Mechanisms

Conclusion

Appendix

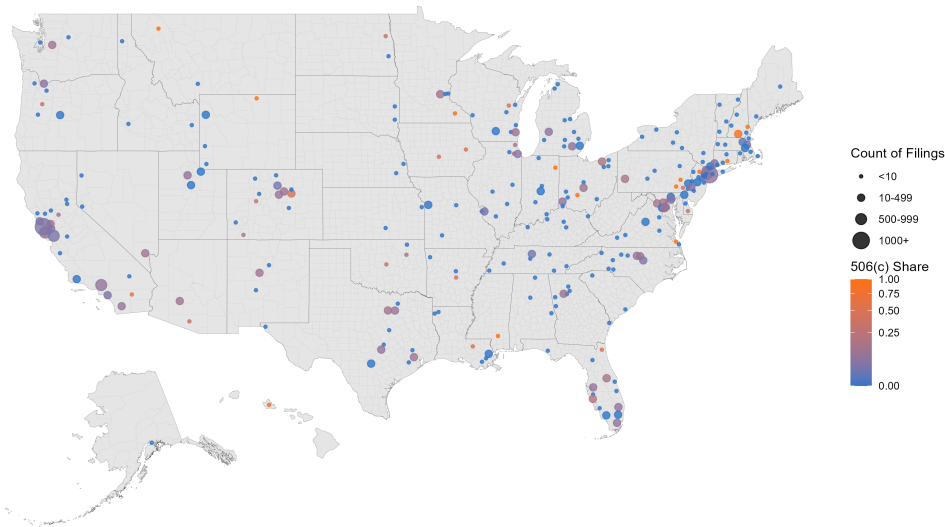
Matching Statistics

	# of Funds
Reg D 506(b)/(c) VC Funds Matched to PB	9,005
Final Unmatched Reg D 506(b)/(c) VC Funds	4,862

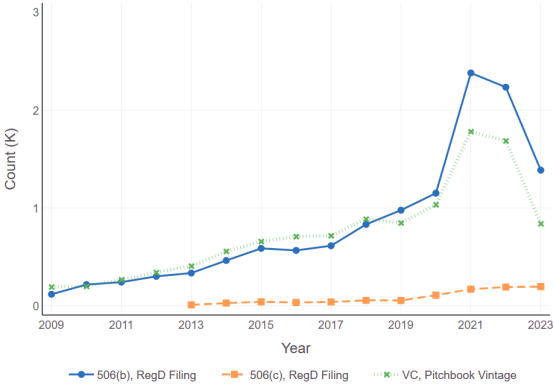
Maching Process Waterfall:

All Reg D 506(b)/(c) VC Funds	37,869
Unmatched 506(b)/(c) Filings	28,864
- Less Matched to other PB Fund Types	27,057
- Less Matched to duplicates of PB Funds	24,770
- Less Multiple Filings of Same Fund	14,981
- Less Funds with Address Outside US	14,150
- Less Funds with Cayman Islands in Name	14,140
- Less Other International Funds	14,067
- Less Parallel Funds	14,045
- Less Sidecar Funds	14,023
- Less Feeder Funds	13,997
- Less Rollup Funds	5,495
- Less REITs	5,491
- Less Blocker Funds	5,487
- Less Co-Invest Funds	5,295
- Less Microventure Funds	5,282
- Less Belltower Rollup Funds	5,095
- Less Fundersclub Funds	4,862

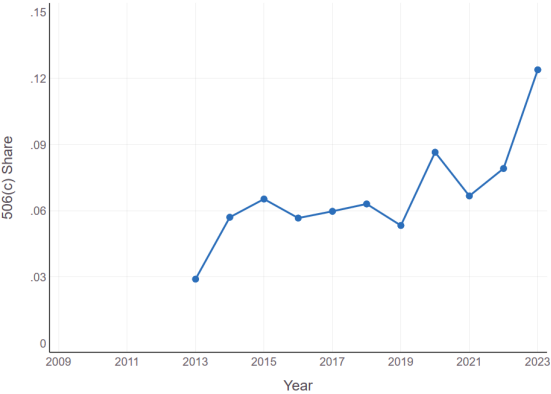
Geographic Distribution



All Regulation D Filings



(a) Filing Counts



(b) Filing Shares

Fund Manager Characteristics

Dependent Variable:	Majority of Fund Team					
	Female (1)	Black/Hispanic (2)	Black (3)	Hispanic (4)	Elite School (5)	First Time (6)
$\mathbb{1}(506(c))$	0.051** (0.022)	0.047*** (0.014)	0.031*** (0.005)	0.021* (0.012)	-0.021 (0.029)	0.107** (0.051)
State \times Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	4067	4068	4067	4067	3897	4068
R^2	0.067	0.060	0.069	0.049	0.102	0.094
Outcome Mean	0.075	0.029	0.010	0.019	0.405	0.341

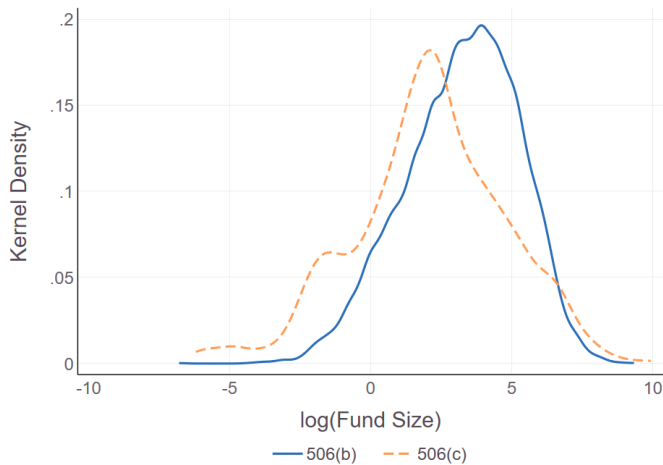
[Back](#)

Fund Manager Characteristics

Dependent Variable:	Individual Indicator					
	Female (1)	Black/Hispanic (2)	Black (3)	Hispanic (4)	Elite School (5)	First Time (6)
$\mathbb{1}(506(c))$	0.036 (0.025)	0.035** (0.014)	0.005** (0.002)	0.031* (0.016)	-0.035** (0.014)	0.045 (0.056)
State \times Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	13829	13831	13829	13829	12696	13831
R^2	0.033	0.031	0.034	0.027	0.074	0.076
Outcome Mean	0.148	0.058	0.014	0.044	0.491	0.355

[Back](#)

Fund Size Distribution



Regulation D Female Share

	Executive Officer	Director	Promoter
$\mathbb{1}(506(b))$	0.117	0.125	0.128
$\mathbb{1}(506(c))$	0.071	0.092	0.146
N	21576	12232	4265

[Back](#)

LinkedIn Networks

Dependent Variable:	# LinkedIn Connections				
	(1)	(2)	(3)	(4)	(5)
Female Share	-73.465** (37.081)				
Black/Hispanic Share		-58.587** (23.638)			
Elite School Share			147.924*** (31.628)		
First Time Share				-301.933*** (28.832)	
1(Non-Hub Fund)					0.885 (47.914)
N	577	577	530	577	577
Outcome Mean	275.25	275.25	287.79	275.25	275.25

Female vs Male Summary Statistics

Fund	Male	Female	Female - Male	N
Mean Fund Size (Mill \$)	159.970	100.344	-59.625***	4000
Median Fund Size (Mill \$)	29.697	8.659	-21.038***	4000
Non-Top 10 City Fund	0.314	0.272	-0.043	4155
Non-Top 3 City Fund	0.501	0.473	-0.028	4155
First Fund of VC Firm	0.272	0.431	0.159***	4155
Commission & Broker	0.015	0.010	-0.005	4155
DEI Target	0.011	0.163	0.152***	4155
ESG Target	0.019	0.032	0.013	4155
Mean Number Prior Funds	5.738	3.843	-1.894*	4155
Mean Number Prior Large Exits	7.434	3.355	-4.079***	4155
Fund LP				
Number of LPs	3.873	3.338	-0.535*	1654
Non-Pension Share	0.688	0.802	0.115***	1654
Individual Share	0.090	0.149	0.059**	1654
Fund Return				
Mean IRR	18.828	16.757	-2.071	707
Mean TVPI	1.844	1.638	-0.205	730
Fund Manager				
Female Share	0.083	0.928	0.845***	4155
Black/Hispanic Share	0.056	0.112	0.057***	4155
Black Share (Picture)	0.015	0.044	0.029***	4155
Hispanic Share (Name)	0.041	0.069	0.028**	4155
Elite School Share	0.463	0.518	0.056**	3987
First Time Share	0.388	0.501	0.113***	4155
Finance Experience Share	0.199	0.177	-0.022	4155
Portfolio Company				
Non-Top 5 Industry Share	0.349	0.407	0.058***	3953
Same City as Fund Share	0.131	0.138	0.007	3954
Same State as Fund Share	0.357	0.332	-0.025	3954
Company Filed 506(c) Share	0.011	0.009	-0.003	3921
Portfolio Company Leadership				
Has First Time CEO Share	0.827	0.857	0.030***	3893
Has Female CEO Share	0.130	0.343	0.213***	3893
Has Elite School CEO Share	0.312	0.324	0.012	3764

Black/Hispanic vs White Summary Statistics

Fund	White	Black/Hispanic	Black/Hispanic - White	N
Mean Fund Size (Mill \$)	157.426	88.333	-69.093*	4001
Median Fund Size (Mill \$)	29.697	8.659	-21.038***	4001
Non-Top 10 City Fund	0.311	0.311	-0	4156
Non-Top 3 City Fund	0.498	0.538	0.040	4156
First Fund of VC Firm	0.280	0.429	0.149***	4156
Commission & Broker	0.015	0.000	-0.015***	4156
DEI Target	0.020	0.109	0.089***	4156
ESG Target	0.020	0.008	-0.012	4156
Mean Number Prior Funds	5.694	2.210	-3.484***	4156
Mean Number Prior Large Exits	7.310	0.832	-6.478***	4156
Fund LP				
Number of LPs	3.832	3.676	-0.157	1654
Non-Pension Share	0.691	0.983	0.292***	1654
Individual Share	0.093	0.156	0.063	1654
Fund Return				
Mean IRR	18.771	14.543	-4.228	707
Mean TVPI	1.829	2.134	0.305	730
Fund Manager				
Female Share	0.144	0.229	0.085**	4155
Black/Hispanic Share	0.033	0.964	0.931***	4156
Black Share (Picture)	0.007	0.342	0.335***	4155
Hispanic Share (Name)	0.026	0.637	0.610***	4155
Elite School Share	0.468	0.429	-0.039	3987
First Time Share	0.391	0.613	0.222***	4156
Finance Experience Share	0.198	0.192	-0.005	4155
Portfolio Company				
Non-Top 5 Industry Share	0.351	0.426	0.075**	3953
Same City as Fund Share	0.132	0.099	-0.033**	3954
Same State as Fund Share	0.356	0.328	-0.028	3954
Company Filed 506(c) Share	0.011	0.016	0.005	3921
Portfolio Company Leadership				
Has First Time CEO Share	0.828	0.863	0.035*	3893
Has Female CEO Share	0.144	0.219	0.075***	3893
Has Elite School CEO Share	0.313	0.322	0.009	3764

Top 10 Cities and States By Exemption Type

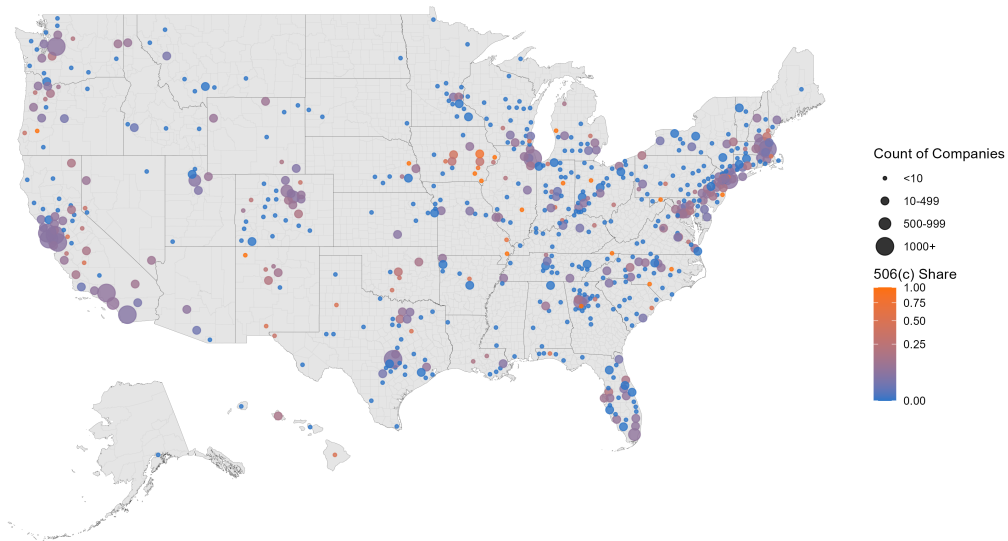
Rank	506(b)				506(c)			
	City	Percent	State	Percent	City	Percent	State	Percent
1	San Francisco	28.6	CA	42.1	Manchester	19.4	CA	30.1
2	New York	16.5	NY	17.0	San Francisco	18.3	NH	19.6
3	Los Angeles	7.2	MA	6.6	New York	13.6	NY	13.6
4	Boston	5.6	TX	4.8	Los Angeles	7.6	TX	5.1
5	Chicago	3.0	IL	3.3	Seattle	2.9	WA	3.5
6	Austin	2.6	FL	3.2	Austin	2.6	CO	2.9
7	Seattle	1.7	CO	2.2	Boston	2.6	FL	2.6
8	Denver	1.6	WA	2.0	Denver	2.5	MA	2.6
9	Washington	1.5	VA	1.6	Chicago	1.8	IL	2.3
10	Miami	1.1	UT	1.5	Washington	1.5	OH	1.8
...	Other	30.9	Other	15.7	Other	27.3	Other	15.9

Portfolio Companies: Top Cities and Industries

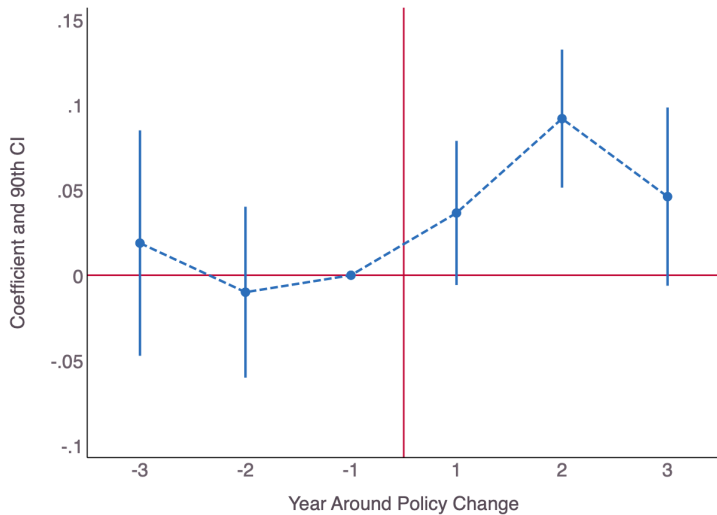
Rank	506(b)				506(c)			
	City	Percent	Industry	Percent	City	Percent	Industry	Percent
1	San Francisco	26.7	Software	37.5	San Francisco	24.4	Software	36.5
2	New York	14.2	Comm. Services	16.2	New York	14.0	Comm. Serv.	15.1
3	Los Angeles	6.2	Other Fin. Serv.	6.1	Los Angeles	6.9	Other Fin. Serv.	6.9
4	Boston	4.2	Biotech	6.0	Boston	3.6	Media	4.0
5	Austin	2.8	Health Serv.	3.6	Chicago	2.5	Biotech	3.6
6	Seattle	2.2	Media	3.5	Austin	2.4	Non-Fin. Serv.	3.5
7	Chicago	2.1	Non-Fin. Serv.	3.3	Seattle	2.2	Health Serv.	3.4
8	Denver	1.9	Health Tech.	3.2	Denver	1.7	Cons. Non-Durab.	3.0
9	San Diego	1.4	Cons. Non-Durab.	3.1	San Jose	1.4	Health Tech.	3.0
10	San Jose	1.4	Health Devices	2.3	Washington	1.4	Health Devices	3.0
...	Other	46.9	Other	15.3	Other	39.6	Other	18.1

[Back](#)

Portfolio Companies: Geographic Distribution



2018 Investor Cap



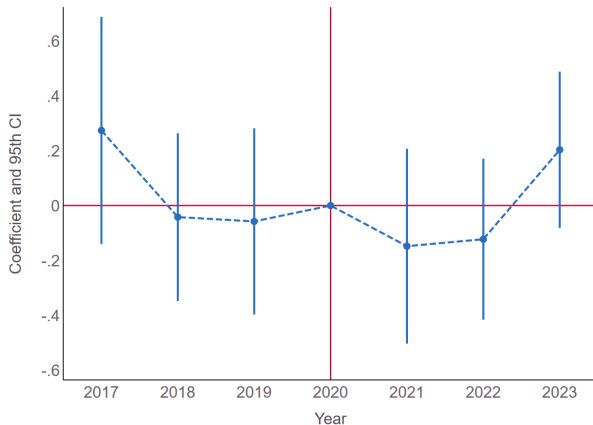
2018 Event Study Regression, Placebo

$$\mathbb{1}(506(c))_{i,y} = \alpha_{s,y} + \beta \times \mathbb{1}(\text{Fund} < \$25\text{m})_{i,t} \times \mathbb{1}(\text{Post Policy})_t + \theta \times \mathbb{1}(\text{Fund} < \$25\text{M})_{i,t} + \epsilon_{i,t}$$

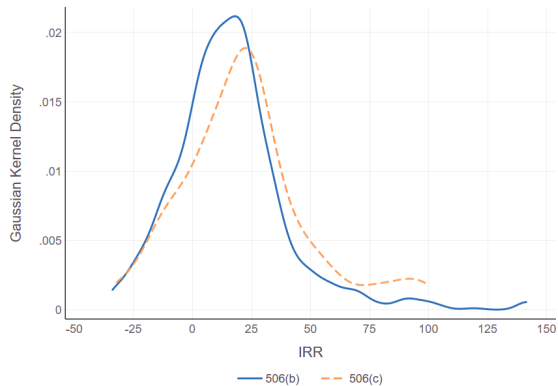
Dependent Variable:	506(c)	506(c), Underrepresented		506(c), Elite School	
	All (1)	With (2)	Without (3)	Without (4)	With (5)
$\mathbb{1}(\text{Fund size} < \$25\text{m})$	0.045*** (0.015)	0.011 (0.008)	0.034*** (0.010)	0.034** (0.014)	0.007 (0.005)
$\mathbb{1}(\text{Fund size} < \$25\text{m}) \times \mathbb{1}(\text{PostPolicy})$	-0.004 (0.032)	-0.001 (0.018)	-0.003 (0.016)	0.005 (0.018)	-0.004 (0.024)
State \times Event Year FE	Yes	Yes	Yes	Yes	Yes
N	2115	2115	2115	2067	2067
R^2	0.185	0.127	0.179	0.148	0.170
Outcome Mean for Size < \$25m	0.095	0.033	0.062	0.063	0.033

Accredited Investor Supply

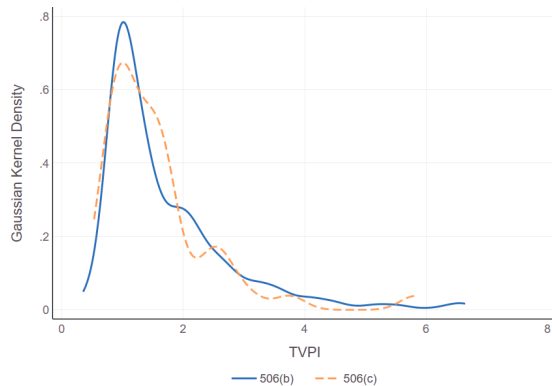
$$\text{Ln}(\text{no. of funds})_{s,y,c} = \alpha_{s,c} + \beta_{s,y} + \sum_{y=2017}^{2023} \theta_y \times \mathbb{1}(506(c))_c \times \mathbb{1}(\text{Year} = y)_y + \epsilon_{s,y,c}$$



Fund Returns

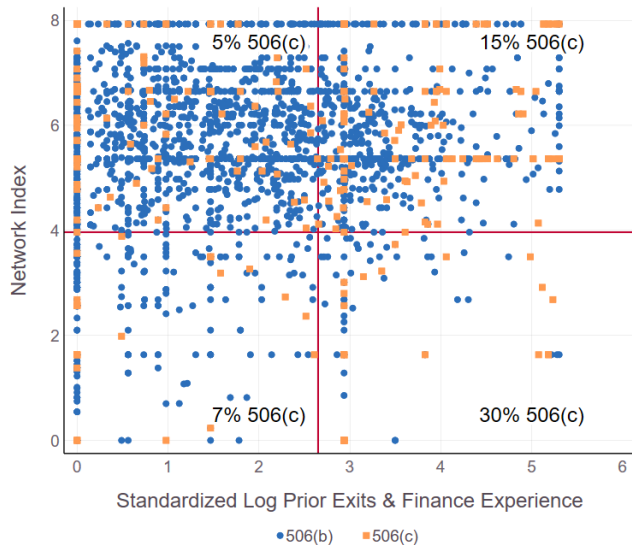


(a) Distribution of Fund IRR

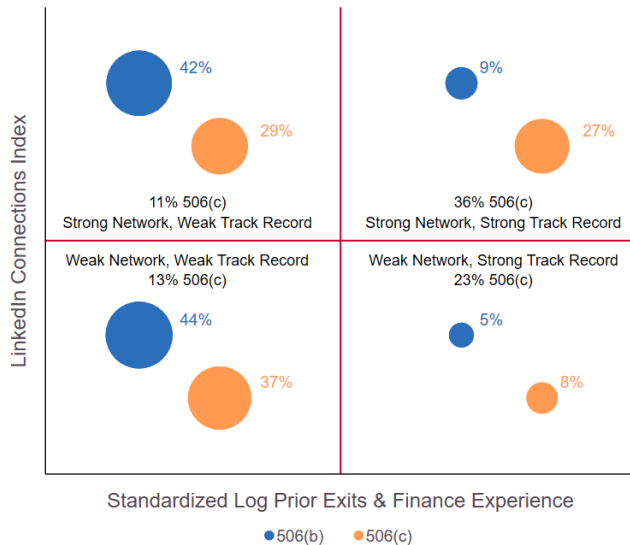


(b) Distribution of Fund TVPI

Quadrant Scatter



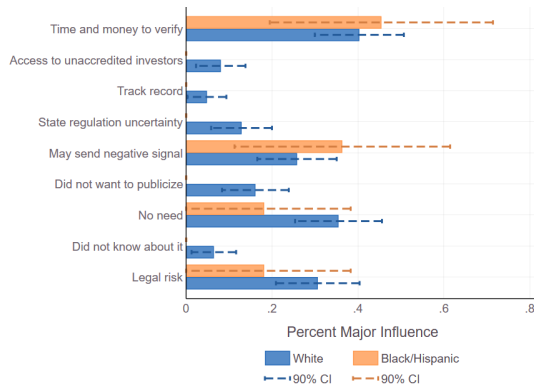
Quadrant Bubbles, LinkedIn Measure Version



506(b) Fund Manager Reasons for not using 506(c) Across Demographics



(a) Male vs. Female



(b) White vs. Black/Hispanic

Lawyer Opinions About 506(c)



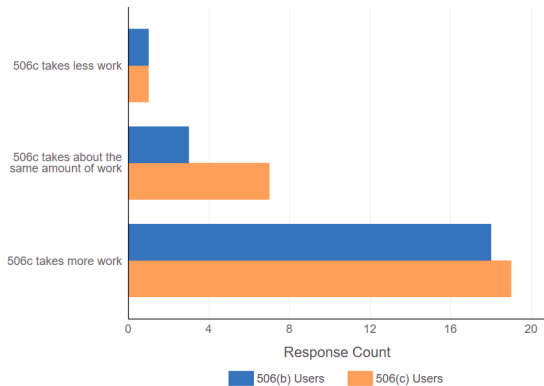
Number of LPs by Groups

Dependent Variable:	Number of LPs			
	(1)	(2)	(3)	(4)
1 (Majority Female)	0.919*** (0.229)			
1 (Majority Black/Hispanic)		2.122*** (0.293)		
1 (Majority Non-Elite School)			0.400** (0.175)	
1 (Majority First Time)				0.103 (0.241)
Log Fund Size	1.297*** (0.153)	1.299*** (0.149)	1.291*** (0.150)	1.271*** (0.144)
State \times Year FE	Yes	Yes	Yes	Yes
N	1537	1537	1508	1537
R^2	0.278	0.280	0.281	0.275
Outcome Mean	3.893	3.893	3.922	3.893

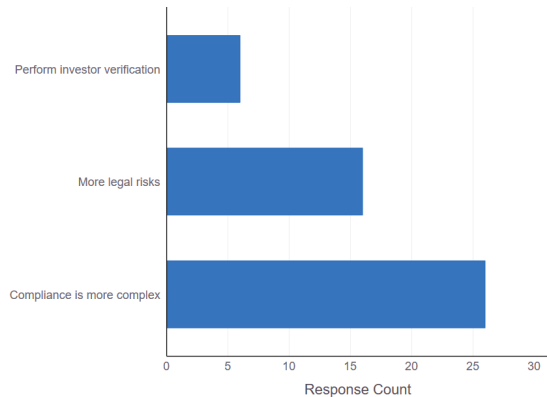
Fund Manager Opinions About 506(c)



Verification Costs According to Lawyers



(a) Lawyer Verification Effort



(b) Lawyer Verification Effort Reasons

[Back](#)