Impact Investing and Worker Outcomes

Josh Lerner
Harvard Business School

Markus Lithell
Virginia Tech

Gordon Phillips
Tuck School of Business at Dartmouth

4th Sir Oliver Hart Conference on How to Make Impact Investing Work

November 13th, 2026

DISCLAIMER: Any views expressed are those of the authors and not those of the U.S. Census Bureau. The Census Bureau's Disclosure Review Board and Disclosure Avoidance Officers have reviewed this information product for unauthorized disclosure of confidential information and have approved the disclosure avoidance practices applied to this release (CBDRB-FY23-CED006-0019, CBDRB-FY24-0444). This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 7514232.

Impact investing in private markets

- Impact investors = Private investors with ESG goals:
  - Resemble VC or growth equity firms.
  - Interesting for several reasons:
    - Fewer concerns about ”crowding out” others.
    - Greater commitment on part of investors (much harder to ”exit”).
    - Ability to effectuate change:
      - Board seats, preferred stock, follow-on financings.
  - Rapid growth, though uncertain size:
    - Estimates in 2022 between $40 billion and $1.1 trillion!



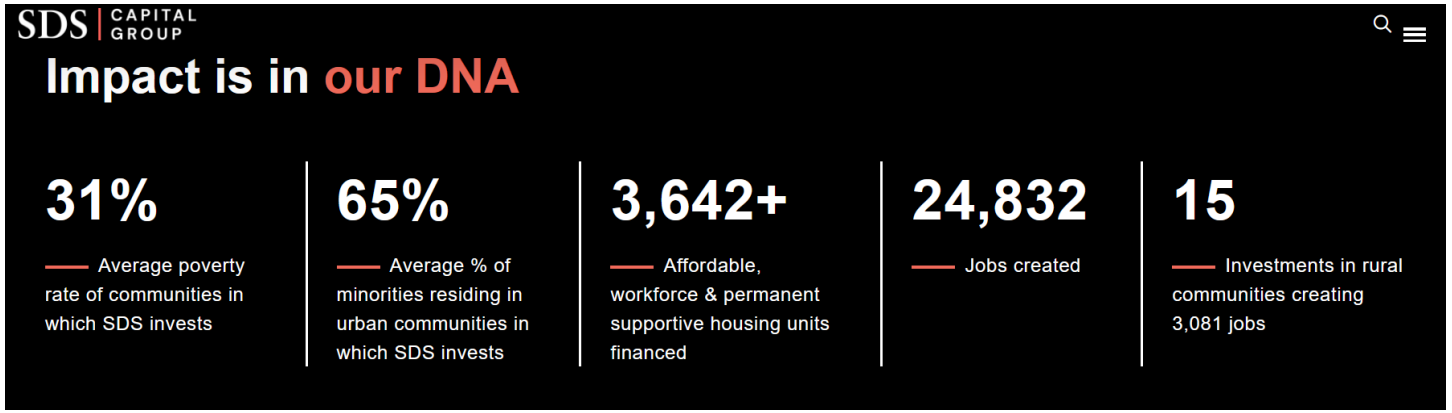
- Financial return goals differ:
  - ~1/3 of impact investors explicitly concessionary.

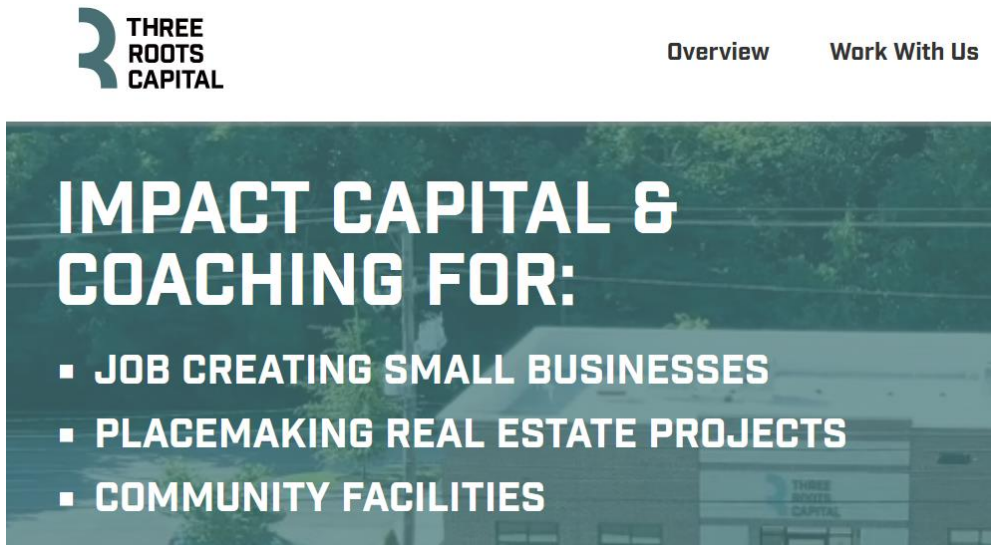
Growth of impact investment

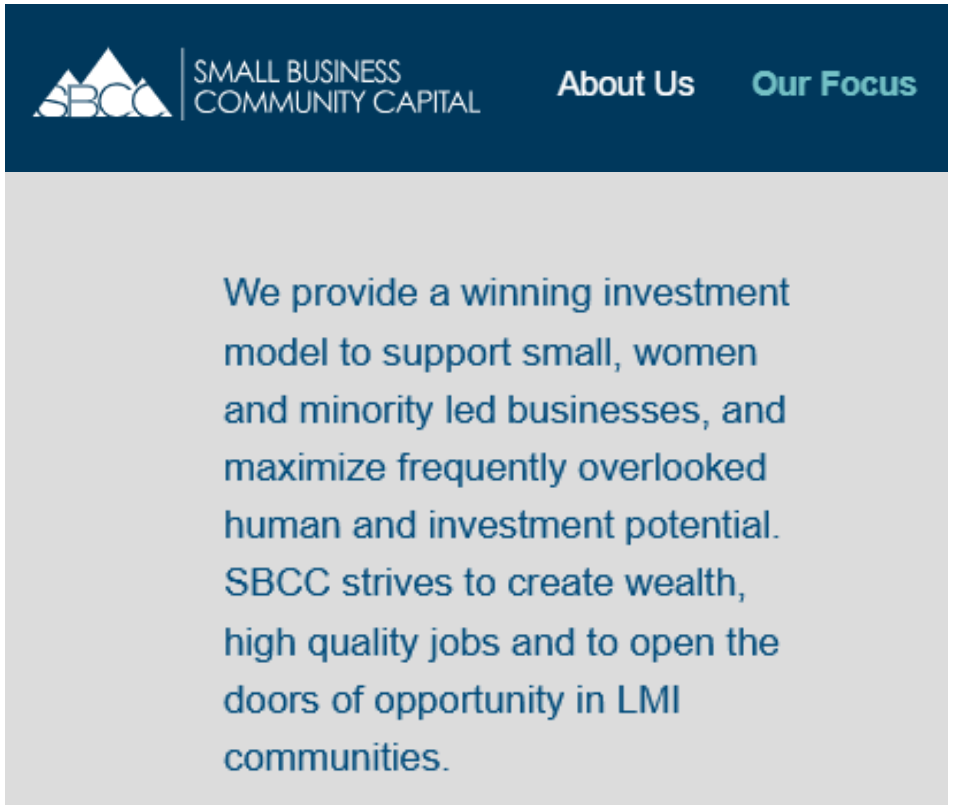


- Seeking to generate financial and social returns:
  - Established alternative investment groups, such as Bain Capital, KKR, and TPG, have raised substantial funds.
  - Dedicated impact-focused groups have proliferated.
- Controversial, at least in U.S.:
  - Florida's state pension fund announced in August 2022 its intention to eliminate from consideration any ESG funds, including private ones:
    - Targeting social goals may lead to lower returns and limited societal benefits (Ramaswamy 2021).
  - Liberal critiques:
    - Can these funds can achieve desirable social goals in the absence of government regulations (Fancy 2021)?
    - Will their presence actually slow social progress (Giridharadas 2019)?

Impact investors: What they say…







… but do they walk the talk?

- H_0 → Impact washing: Impact firms not different from VC firms
  - Public market ESG funds: Negligible real impact
    - Berk & van Binsbergen (2025); Cohen et al. (2024); Farroukh et al. (2024); Hartzmark & Shue (2026)
  - ESG-labeling to attract investors/startups?

… but do they walk the talk?

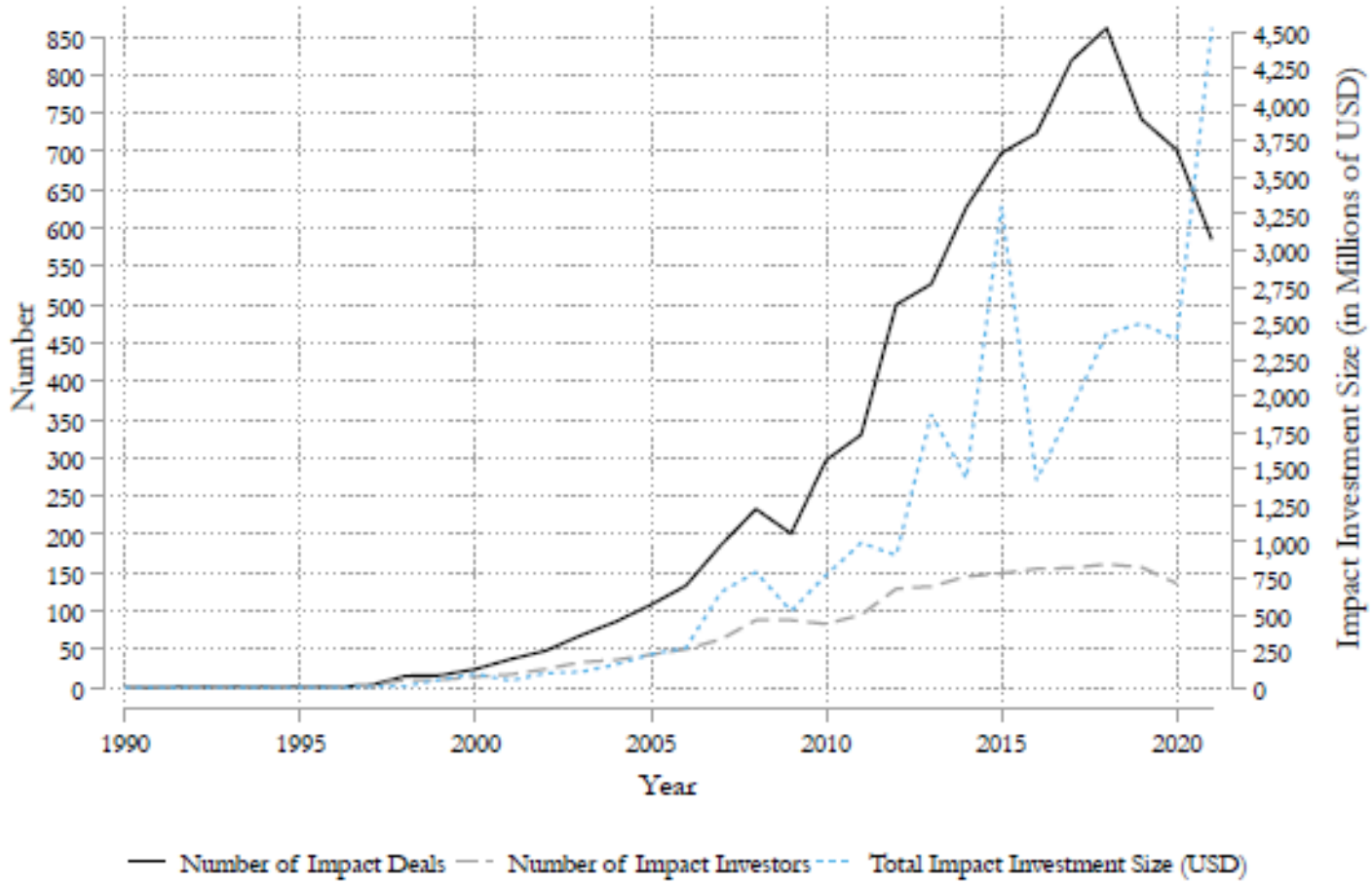
- H_0 → Impact washing: Impact firms not different from VC firms
  - Public market ESG funds: Negligible real impact
    - Berk & van Binsbergen (2025); Cohen et al. (2024); Farroukh et al. (2024); Hartzmark & Shue (2026)
  - ESG-labeling to attract investors/startups?

- H_1 → Impact firms pursue ESG objectives differently from VC firms
  - Contracting: Contract on ESG reporting
    - Geczy et al. (2021)
  - Performance: Lower financial returns
    - Barber et al. (2021); Cole et al. (2023); Jeffers et al. (2024); Kovner and Lerner (2015)

The data

- Seek investors with the explicit dual objective of generating social good and financial returns.
- Identify impact investors using various resources :
  - Global Impact Investing Network (GIIN) members and databases; Community Development Venture Capital Association (CDVCA); Impact Assets; Preqin (based on industry focus and “fund ethos”); Impact Capital Managers (“ICM”) members; Signatories to IFC’s Operating Principles for Impact Management; and Private Equity International “Impact Investment Firm of the Year” honorees.
- Narrow 2747 potential impact investors by:
  - Manually search their websites, for any mention of a dual aim of generating social and financial returns.
  - Eliminate development finance institutions
  - Exclude impact investors whose strategies do not focus exclusively on impact investing or groups that were launched without an impact mandate but subsequently added one.
  - Added in dedicated funds by traditional PE groups (e.g., Bain Double Impact).
- End up with 396 unique impact investors.

Figure 1: Number of Impact Deals, Number of Impact Investors, and Estimated Investment Amount by Year



First paper

- First comprehensive dataset that matches impact investors to their portfolio companies.

- Question: Do impact investors (successfully) pursue ESG objectives?

- Find that impact investors:

  a. Are more likely to invest in sectors with high social returns.
  b. Invest in poorer nations.
  c. Frequently co-invest with traditional funds.
  d. Investments are frequently complementary to those of traditional VCs:
     i. Newer industries.
     ii. More counter-cyclical manner.
  e. Does not examine extent that net societal benefits from impact investors' portfolio companies offset the lower financial returns to their LPs.

Shawn Cole, Leslie Jeng, Josh Lerner, Natalia Rigol, and Benjamin N. Roth, "What Do Impact Investors Do Differently?," *Review of Financial Studies*, forthcoming.

What we do here

- Same question: Do impact investors (successfully) pursue ESG objectives?

- Focus on employment-related social outcomes
  - Contribution: First evidence on this half of "double" bottom line
  - Language suggests 3 categories: Climate, Gender, Jobs
  - Almost US impact firms highlight the latter two:
    - 90% of GPs, 83% of AUM, 97% of deals

- Track employees of impact-backed portfolio companies ("IPCs")
  - Data: US Census Bureau microdata
    - Workers
    - Firms
  - Compare to 2 types of similar matched firms
    - VC-backed portfolio companies ("VC PCs")
    - Control firms w/o private market funding

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

Data and sample: Firms

- Start with unvierse of portfolio companies from two sets of investors
  - Impact-backed PCs ("IPCs")
    - Source: HBS Project on Impact Investments
    - Combines Capital IQ, Crunchbase, PitchBook, Preqin, VentureXpert, manual checks
  - Vevture Capital-/Growth Equity-backed PCs ("VC PCs")
    - Source: PitchBook
    - US GPs/PCs only
  - IPCs and VC PCs are non-overlapping

- Link to US Census Bureau data
  - Longitudinal Business Database (LBD): Establishment-year panel
    - Aggregate to firm-year level
    - Info on employment, payroll, revenue, industry, location

Data and sample: Matching

- To capture variation in unobservables: Create matched sample
  - Find similar (1) VC PCs and (2) control firms w/o funding
  - Nearest-neighbor matching (NMM) w/i sequentially expanding calipers
  - Flexible approach, prioritize well-rounded matches, closest possible industry

- Step 1: Filter potential matches
  - Same...
    - NAICS-2
    - Multiunit status
  - Approximate...
    - Age (+/-50%)
    - Employment (+/-50%)
  - + For VC PCs: Approximate funding round/year
  - + For control firms: Same year

Data and sample: Matching

- Step 2: Rank matches
  - Same NAICS-5
    - Highly granular industry definitions
  - Start caliper: +/5% emp/pay/rev, +/-10% growth
    - → Then expand gradually
  - Repeat for NAICS-4, NAICS-3, then NAICS-2

- Step 3: Choose (up to) 5 closest matches per IPC
  - Filter on available revenue data
  - Sample of 7,300 firms (1997-2018)
    - 700 IPCs
    - 2,000 VC PCs
    - 4,600 control firms

Data and sample: Workers

- Find individuals employed at impact, VC, control firms
  - Longitudinal Employer-Household Dynamics (LEHD): Worker-quarter panel
  - Link in age, education, sex, race, ethnicity
  - Don’t need to drop firms if missing revenue

- Incumbent workers (1 quarter before firm funding)
  - 557,500 individuals

- New hires (up to 1 year after firm funding)
  - 197,000 individuals

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

1. Which firms get impact funding?

- Focus on location + firm demographics
  - Location: Economically disadvantaged areas
    - Top 10% zip codes by: Black, no college, poverty, unemployment
  - Firm demographics: Black/Hispanic, women, individuals w/o college degrees
    - Founders: 3 highest-paid employees ("top team") in firm's first year
    - Employees

- Multinomial logit
  - Outcome categories: (1) Impact funding, (2) VC funding
  - Base category: (3) No funding
  - Other controls: Size, profitability, growth, firm age, industry, state, year

1a. Disadvantaged areas and funding likelihood

Disadvantaged area type:	Top 10% Black		Top 10% without college		Top 10% poverty		Top 10% unemployment	
Funding type outcome:	Impact	VC	Impact	VC	Impact	VC	Impact	VC
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Disadvantaged area (type varies by column)	0.434***	-0.118	-0.025	-0.584***	0.464***	-0.088	0.243*	-0.13
	[0.038**]	[-0.032]	[0.013]	[-0.102**]	[0.040***]	[-0.027]	[0.023*]	[-0.029*]
	(3.19)	(1.15)	(0.15)	(3.13)	(5.55)	(1.06)	(1.71)	(1.57)
Size	-0.024	-0.054	-0.006	-0.049	-0.03	-0.055	-0.017	-0.054
	[-0.001]	[-0.009]	[0.001]	[-0.008]	[-0.001]	[-0.009]	[-0.000]	[-0.009]
	(0.62)	(1.53)	(0.18)	(1.39)	(0.82)	(1.50)	(0.46)	(1.48)
Profitability	-0.396***	-0.494***	-0.397***	-0.490***	-0.399***	-0.494***	-0.401***	-0.493***
	[-0.020***]	[-0.077***]	[-0.020***]	[-0.076***]	[-0.020***]	[-0.077***]	[-0.020***]	[-0.077***]
	(6.76)	(10.58)	(6.82)	(10.36)	(6.85)	(10.51)	(7.05)	(10.54)
Growth	1.113***	0.976***	1.089***	0.967***	1.124***	0.976***	1.104***	0.975***
	[0.066***]	[0.144***]	[0.064***]	[0.143***]	[0.067***]	[0.144***]	[0.065***]	[0.144***]
	(3.78)	(4.52)	(3.89)	(4.46)	(3.88)	(4.48)	(3.81)	(4.49)
Firm age	0.335***	0.192***	0.343***	0.198***	0.343***	0.191***	0.340***	0.194***
	[0.022***]	[0.025**]	[0.023***]	[0.026**]	[0.023***]	[0.025**]	[0.023***]	[0.026**]
	(8.85)	(3.71)	(9.33)	(3.80)	(9.11)	(3.70)	(8.94)	(3.75)
Industry dummies	Y		Y		Y		Y	
State dummies	Y		Y		Y		Y	
Year dummies	Y		Y		Y		Y	
Observations	7,300		7,300		7,300		7,300	
Pseudo R^2	0.100		0.100		0.100		0.099	
Disadv. area, Impact=VC	***		***		***		***	

Disadv. areas: ≈5-12pp ↑ chance of impact vs VC

Marginal effects in brackets, robust z-stats in parentheses (clustered by industry)

Bottom row: Cross-equation χ^2 tests

1b. Founders and funding likelihood

Funding type outcome:	Impact (1)	VC (2)	Impact (3)	VC (4)	Impact (5)	VC (6)	Impact (7)	VC (8)
Panel A: Founders								
Founder Black/Hispanic	0.075	-0.294***					0.112	-0.225***
	[0.014]	[-0.054***]					[0.015]	[-0.042**]
	(0.78)	(3.57)					(1.14)	(2.73)
Founder female			-0.099	-0.233***			-0.097	-0.202***
			[-0.002]	[-0.039***]			[-0.003]	[-0.033**]
			(1.23)	(3.93)			(1.23)	(3.18)
Founder without college					-0.109	-0.257***	-0.116	-0.211***
					[-0.002]	[-0.043***]	[-0.004]	[-0.034**]
					(1.00)	(3.67)	(1.05)	(2.85)
Controls, dummies	Y		Y		Y		Y	
Observations	7,300		7,300		7,300		7,300	
Pseudo R^2	0.101		0.101		0.101		0.103	
Black/Hispanic, Impact=VC	***						***	
Female, Impact=VC			.				.	
Without college, Impact=VC					.		.	

Minority founders: ≈6pp ↑ chance of impact vs VC

Marginal effects in brackets, robust z-stats in parentheses (clustered by industry)

Bottom row: Cross-equation χ^2 tests

1c. Employees and funding likelihood

Funding type outcome:	Impact (1)	VC (2)	Impact (3)	VC (4)	Impact (5)	VC (6)	Impact (7)	VC (8)
Panel C: Workforce composition								
% workforce Black/Hispanic	-0.623**	-1.303***					-0.421	-0.794***
	[-0.018]	[-0.212***]					[-0.014]	[-0.127***]
	(2.42)	(6.72)					(1.52)	(4.19)
% workforce female			-0.352**	-0.663***			-0.278	-0.482***
			[-0.012]	[-0.107***]			[-0.010]	[-0.077**]
			(2.08)	(4.02)			(1.58)	(2.82)
% workforce without college					-0.629***	-1.444***	-0.467*	-1.137***
					[-0.014]	[-0.236***]	[-0.009]	[-0.186***]
					(2.58)	(7.02)	(1.87)	(5.63)
Controls, dummies	Y		Y		Y		Y	
Observations	7,300		7,300		7,300		7,300	
Pseudo R^2	0.104		0.102		0.106		0.109	
Black/Hispanic, Impact=VC	**						.	
Female, Impact=VC			**				.	
Without college, Impact=VC					***		***	

10pp ↑ in non-college workforce: ≈1.8pp ↑ chance of impact vs VC

(≈1.1pp ↑ for minorities) (≈0.7pp ↑ for women)

Marginal effects in brackets, robust z-stats in parentheses (clustered by industry)

Bottom row: Cross-equation χ^2 tests

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

2. What happens at firms after funding?

- Dependent variables by column:
  - (1-3) Size (log)
  - (4-6) Performance (log)
  - (7-9) Workforce demographics (%)

- Diff-in-diff regressions, annual panel of firms
  - 9-year event window (+/-4 years)
  - Treatment effects associated w/ impact/VC backing vs. no funding
  - Controls: Firm age, lag growth, lag profitability, FEs

- Additional analyses:
  - Interaction effects in disadvantaged areas?
  - Survival (linear probability model)?

2. Funding and scale

Dependent variable:	Employment	Payroll	Revenue	Salary (=Pay/Emp)	Productivity (=Rev/Emp)	Profitability (=Rev/Pay)	% black or Hispanic	% female	% without college
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Impact×Post	0.194***	0.208***	0.183***	0.045***	0.056**	0.021	0.007*	0.012**	0.007
	(7.05)	(6.89)	(4.93)	(3.35)	(2.33)	(1.05)	(1.84)	(2.32)	(1.48)
VC×Post	0.256***	0.278***	0.221***	0.054***	0.039**	0.000	-0.001	0.002	0.004
	(14.22)	(13.68)	(9.13)	(5.67)	(2.44)	(0.02)	(0.31)	(0.57)	(1.35)
Post	-0.058***	-0.087***	-0.098***	-0.036***	-0.050***	-0.022***	-0.002	-0.002	-0.004*
	(7.22)	(9.63)	(8.71)	(6.79)	(5.91)	(3.20)	(1.35)	(0.92)	(1.86)
Firm age	0.709***	0.565***	0.716***	-0.060***	0.178***	0.221***	0.011***	0.031***	0.030***
	(26.69)	(19.46)	(21.14)	(4.02)	(7.82)	(11.69)	(2.66)	(5.23)	(5.29)
Lag growth	0.568***	0.511***	0.473***	0.009	0.040***	0.052***	0.008***	0.008**	0.020***
	(33.67)	(27.33)	(21.08)	(1.00)	(2.77)	(4.15)	(2.90)	(2.00)	(5.58)
Lag profitability	-0.033***	-0.029**	0.263***	0.006	0.273***	0.262***	0.000	0.006**	0.002
	(3.14)	(2.56)	(16.04)	(1.11)	(22.19)	(23.64)	(0.00)	(2.50)	(1.06)
Scaling factor control				Y	Y	Y			
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	40,000	40,000	40,000	40,000	40,000	40,000	32,000	32,000	32,000
Adjusted R-squared	0.928	0.925	0.897	0.819	0.779	0.819	0.901	0.865	0.825
Impact×Post=VC×Post	**	**	.	.	.	.	*	*	.

Robust t-stats in parentheses (clustered by firm)

Bottom row: Significance from Wald tests

VC-backed firms scale up more than impact

2. Funding and performance

Dependent variable:	Employment	Payroll	Revenue	Salary (=Pay/Emp)	Productivity (=Rev/Emp)	Profitability (=Rev/Pay)	% black or Hispanic	% female	% without college
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Impact×Post	0.194***	0.208***	0.183***	0.045***	0.056**	0.021	0.007*	0.012**	0.007
	(7.05)	(6.89)	(4.93)	(3.35)	(2.33)	(1.05)	(1.84)	(2.32)	(1.48)
VC×Post	0.256***	0.278***	0.221***	0.054***	0.039**	0.000	-0.001	0.002	0.004
	(14.22)	(13.68)	(9.13)	(5.67)	(2.44)	(0.02)	(0.31)	(0.57)	(1.35)
Post	-0.058***	-0.087***	-0.098***	-0.036***	-0.050***	-0.022***	-0.002	-0.002	-0.004*
	(7.22)	(9.63)	(8.71)	(6.79)	(5.91)	(3.20)	(1.35)	(0.92)	(1.86)
Firm age	0.709***	0.565***	0.716***	-0.060***	0.178***	0.221***	0.011***	0.031***	0.030***
	(26.69)	(19.46)	(21.14)	(4.02)	(7.82)	(11.69)	(2.66)	(5.23)	(5.29)
Lag growth	0.568***	0.511***	0.473***	0.009	0.040***	0.052***	0.008***	0.008**	0.020***
	(33.67)	(27.33)	(21.08)	(1.00)	(2.77)	(4.15)	(2.90)	(2.00)	(5.58)
Lag profitability	-0.033***	-0.029**	0.263***	0.006	0.273***	0.262***	0.000	0.006**	0.002
	(3.14)	(2.56)	(16.04)	(1.11)	(22.19)	(23.64)	(0.00)	(2.50)	(1.06)
Scaling factor control				Y	Y	Y			
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	40,000	40,000	40,000	40,000	40,000	40,000	32,000	32,000	32,000
Adjusted R-squared	0.928	0.925	0.897	0.819	0.779	0.819	0.901	0.865	0.825
Impact×Post=VC×Post	**	**	.	.	.	.	*	*	.

Robust t-stats in parentheses (clustered by firm)

Bottom row: Significance from Wald tests

Similar performance increases

2. Funding and workforce composition

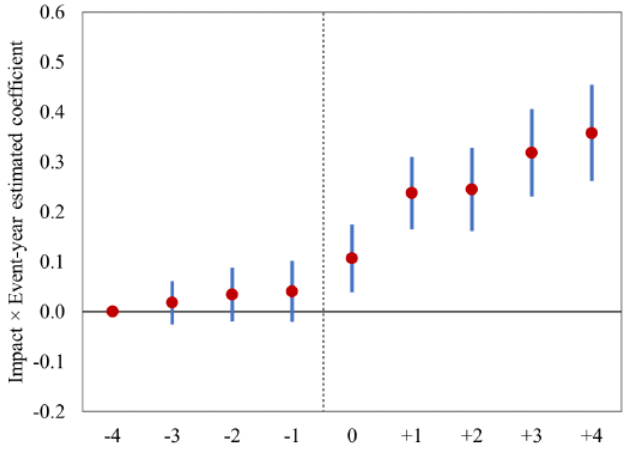
Dependent variable:	Employment	Payroll	Revenue	Salary (=Pay/Emp)	Productivity (=Rev/Emp)	Profitability (=Rev/Pay)	% black or Hispanic	% female	% without college
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Impact×Post	0.194***	0.208***	0.183***	0.045***	0.056**	0.021	0.007*	0.012**	0.007
	(7.05)	(6.89)	(4.93)	(3.35)	(2.33)	(1.05)	(1.84)	(2.32)	(1.48)
VC×Post	0.256***	0.278***	0.221***	0.054***	0.039**	0.000	-0.001	0.002	0.004
	(14.22)	(13.68)	(9.13)	(5.67)	(2.44)	(0.02)	(0.31)	(0.57)	(1.35)
Post	-0.058***	-0.087***	-0.098***	-0.036***	-0.050***	-0.022***	-0.002	-0.002	-0.004*
	(7.22)	(9.63)	(8.71)	(6.79)	(5.91)	(3.20)	(1.35)	(0.92)	(1.86)
Firm age	0.709***	0.565***	0.716***	-0.060***	0.178***	0.221***	0.011***	0.031***	0.030***
	(26.69)	(19.46)	(21.14)	(4.02)	(7.82)	(11.69)	(2.66)	(5.23)	(5.29)
Lag growth	0.568***	0.511***	0.473***	0.009	0.040***	0.052***	0.008***	0.008**	0.020***
	(33.67)	(27.33)	(21.08)	(1.00)	(2.77)	(4.15)	(2.90)	(2.00)	(5.58)
Lag profitability	-0.033***	-0.029**	0.263***	0.006	0.273***	0.262***	0.000	0.006**	0.002
	(3.14)	(2.56)	(16.04)	(1.11)	(22.19)	(23.64)	(0.00)	(2.50)	(1.06)
Scaling factor control				Y	Y	Y			
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	40,000	40,000	40,000	40,000	40,000	40,000	32,000	32,000	32,000
Adjusted R-squared	0.928	0.925	0.897	0.819	0.779	0.819	0.901	0.865	0.825
Impact×Post=VC×Post	**	**	.	.	.	.	*	*	.

Robust t-stats in parentheses (clustered by firm)

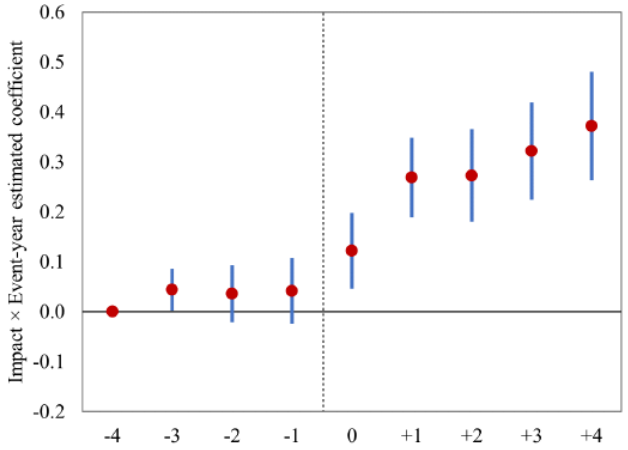
Bottom row: Significance from Wald tests

Impact: ≈0.7pp ↑ minority workers, ≈1.2pp ↑ female

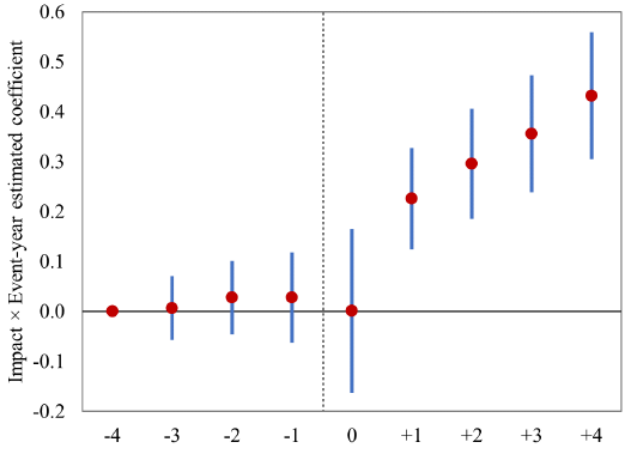
2a. Funding and scale – Event study plots



(1) Employment



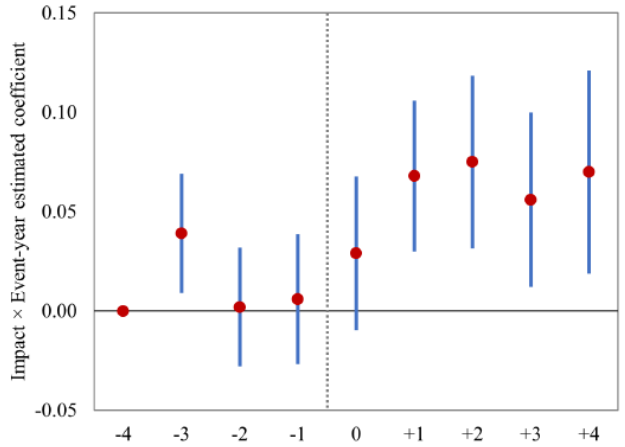
(2) Payroll



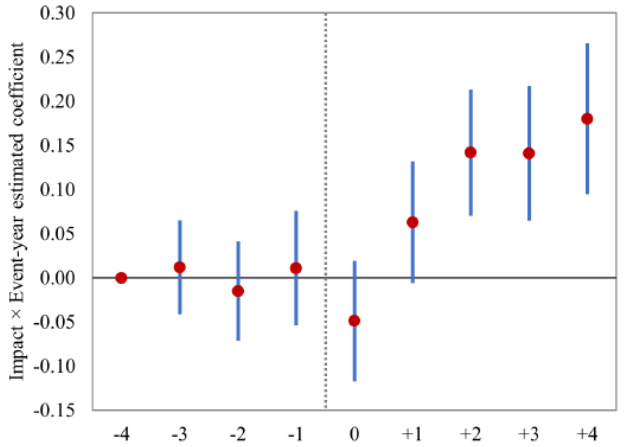
(3) Revenue

Blue lines: 90% confidence intervals

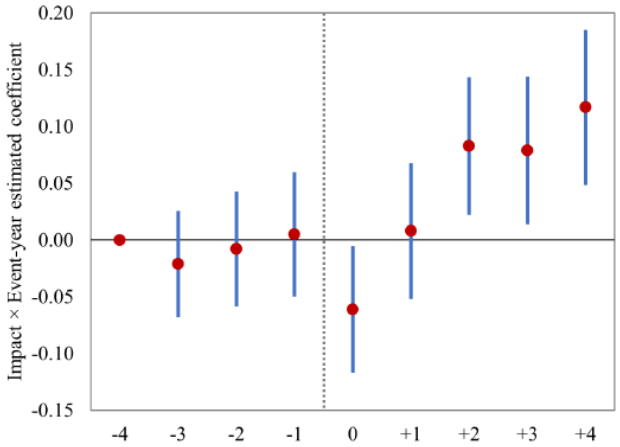
2b. Funding and performance – Event study plots



(4) Salary



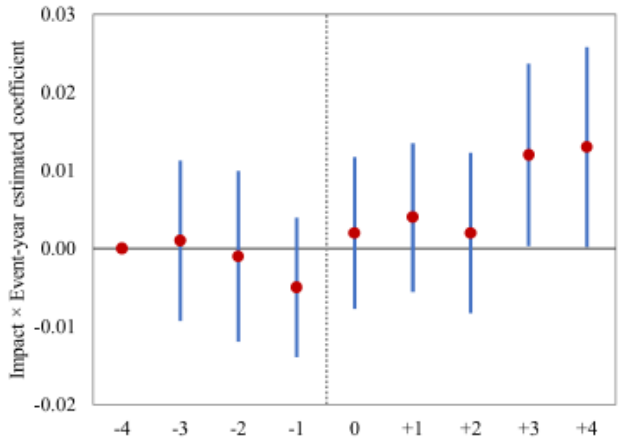
(5) Productivity



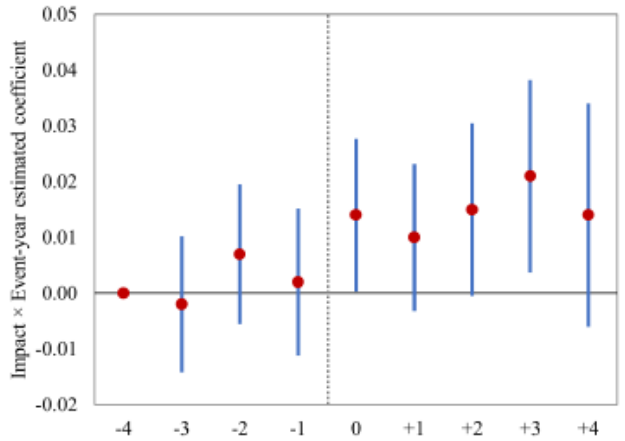
(6) Profitability

Blue lines: 90% confidence intervals

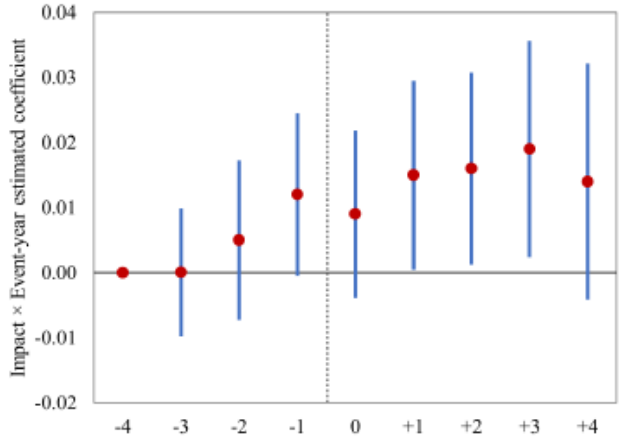
2c. Funding and workforce – Event study plots



(7) % Black/Hispanic



(8) % Female



(9) % No college

Blue lines: 90% confidence intervals

2d. Firm outcomes in disadvantaged areas

Dependent variable:	Employment (1)	Payroll (2)	Revenue (3)	Salary (=Pay/Emp) (4)	Productivity (=Rev/Emp) (5)	Profitability (=Rev/Pay) (6)	% Black or Hispanic (7)	% female (8)	% without college (9)
Impact×Disadvantaged×Post	-0.013	-0.003	-0.08	-0.018	-0.095**	-0.086**	0.001	0.007	-0.002
	(0.25)	(0.05)	(1.18)	(0.71)	(2.02)	(2.17)	(0.14)	(0.69)	(0.15)
VC×Disadvantaged×Post	-0.033	-0.039	-0.100*	-0.02	-0.098**	-0.060*	0.005	-0.007	-0.005
	(0.78)	(0.81)	(1.68)	(0.84)	(2.31)	(1.68)	(0.77)	(0.80)	(0.62)
Impact×Disadvantaged	0.119*	0.09	0.116	0.021	0.056	0.016	0.001	-0.007	0.006
	(1.77)	(1.33)	(1.24)	(0.69)	(0.91)	(0.32)	(0.14)	(0.54)	(0.49)
Impact×Post	0.200***	0.209***	0.209***	0.050***	0.086***	0.048*	0.006	0.01	0.008
	(5.53)	(5.22)	(4.31)	(2.93)	(2.80)	(1.95)	(1.46)	(1.39)	(1.24)
VC×Disadvantaged	0.094*	0.094	0.117	0.005	0.045	0.015	-0.002	-0.012	0.017
	(1.65)	(1.44)	(1.53)	(0.16)	(0.80)	(0.36)	(0.19)	(1.07)	(1.56)
VC×Post	0.264***	0.288***	0.242***	0.059***	0.059***	0.012	-0.002	0.003	0.006
	(13.26)	(12.84)	(9.14)	(5.58)	(3.31)	(0.79)	(0.55)	(0.72)	(1.54)
Disadvantaged×Post	0.001	0.017	0.028	0.016*	0.029**	0.016	0.002	-0.001	0.001
	(0.05)	(0.95)	(1.42)	(1.82)	(2.15)	(1.48)	(0.94)	(0.28)	(0.17)
Disadvantaged	-0.03	-0.04	-0.019	-0.024**	-0.005	0.014	0.000	0.000	-0.002
	(1.33)	(1.60)	(0.63)	(2.08)	(0.28)	(0.91)	(0.07)	(0.02)	(0.50)
Post	-0.059***	-0.092***	-0.106***	-0.041***	-0.058***	-0.026***	-0.002	-0.002	-0.004*
	(6.43)	(8.88)	(8.37)	(6.78)	(6.21)	(3.47)	(1.60)	(0.67)	(1.72)
Other controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Scaling factor control				Y	Y	Y			
Observations	40,000	40,000	40,000	40,000	40,000	40,000	32,000	32,000	32,000
Adjusted R^2	0.928	0.925	0.897	0.819	0.779	0.819	0.901	0.865	0.825
Impact×Dis×Post=VC×Dis×Post	.	.	.	.	.	.	.	.	.

No evidence that impact investors are more effective in disadv areas

Robust t-stats in parentheses (clustered by firm)

Bottom row: Significance from Wald tests

2e. Firm survival

Dependent variable:	Death t+1 (1)	Death t+2 (2)	Death t+3 (3)	Death t+4 (4)
Impact	0.000	-0.003	0.003	0.012
	(0.04)	(0.34)	(0.31)	(1.27)
VC	-0.011*	0.010*	0.01	0.010*
	(1.93)	(1.97)	(1.46)	(1.67)
Size	-0.005***	0.000	0.005***	-0.004*
	(2.67)	(0.12)	(2.78)	(1.82)
Profitability	-0.012**	-0.022***	-0.021***	-0.009**
	(2.52)	(6.54)	(4.92)	(2.16)
Growth	-0.030**	-0.007	-0.013	-0.005
	(2.16)	(0.73)	(1.31)	(0.54)
Firm Age	-0.014*	-0.016***	-0.020***	-0.007**
	(1.99)	(3.44)	(4.98)	(2.11)
Industry FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	5,300	5,300	5,300	5,300
Adjusted R^2	0.016	0.009	0.012	0.004
Impact=VC	.	.	.	.

Robust t-stats in parentheses (clustered by industry)

Bottom row: Significance from Wald tests

No difference in survival rates

→ Assuages diff attrition concerns

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

3. Which employees benefit?

- After funding, how do firms allocate salary raises among workers?

- Diff-in-diff regressions, quarterly panel of workers
  - 9-year event window (+/-16 quarters)
  - Dependent variable: Log worker earnings
  - Add control/interaction terms for treated (disadvantaged/minority) workers

3. Which employees benefit?

Treated worker type:	None	Black or Hispanic	Female	No college	Rank & file
Dependent variable:	Earnings (1)	Earnings (2)	Earnings (3)	Earnings (4)	Earnings (5)
Impact×Post	0.031***	0.033***	0.031***	0.032***	0.030***
	(28.79)	(26.72)	(22.40)	(23.45)	(5.54)
VC×Post	0.034***	0.038***	0.033***	0.034***	0.067***
	(31.77)	(31.11)	(24.87)	(25.60)	(16.78)
Post	0.008***	0.012***	0.009***	0.011***	-0.014***
	(17.30)	(23.15)	(15.78)	(18.96)	(6.49)
Impact×Treat×Post		-0.010***	0.001	-0.002	0.001
		(4.00)	(0.36)	(0.78)	(0.15)
VC×Treat×Post		-0.022***	0.001	0.000	-0.035***
		(8.81)	(0.60)	(0.09)	(8.58)
Treat×Post		-0.018***	-0.003***	-0.008***	0.023***
		(17.60)	(3.29)	(8.58)	(10.57)
Age control	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y
Worker FE	Y	Y	Y	Y	Y
Year-quarter FE	Y	Y	Y	Y	Y
Observations	15,240,000	15,240,000	15,240,000	15,240,000	15,240,000
Adjusted R-squared	0.811	0.811	0.811	0.811	0.811
Impact×Post=VC×Post	***	***	.	.	***
Impact×Treat×Post=VC×Treat×Post		***	.	.	***

Robust t-stats in parentheses (clustered by worker); Bottom: Sign f/ Wald tests

Overall wage growth: Higher at VC than impact…

3. Which employees benefit?

Treated worker type:	None	Black or Hispanic	Female	No college	Rank & file
Dependent variable:	Earnings	Earnings	Earnings	Earnings	Earnings
	(1)	(2)	(3)	(4)	(5)
Impact×Post	0.031***	0.033***	0.031***	0.032***	0.030***
	(28.79)	(26.72)	(22.40)	(23.45)	(5.54)
VC×Post	0.034***	0.038***	0.033***	0.034***	0.067***
	(31.77)	(31.11)	(24.87)	(25.60)	(16.78)
Post	0.008***	0.012***	0.009***	0.011***	-0.014***
	(17.30)	(23.15)	(15.78)	(18.96)	(6.49)
Impact×Treat×Post		-0.010***	0.001	-0.002	0.001
		(4.00)	(0.36)	(0.78)	(0.15)
VC×Treat×Post		-0.022***	0.001	0.000	-0.035***
		(8.81)	(0.60)	(0.09)	(8.58)
Treat×Post		-0.018***	-0.003***	-0.008***	0.023***
		(17.60)	(3.29)	(8.58)	(10.57)
Age control	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y
Worker FE	Y	Y	Y	Y	Y
Year-quarter FE	Y	Y	Y	Y	Y
Observations	15,240,000	15,240,000	15,240,000	15,240,000	15,240,000
Adjusted R-squared	0.811	0.811	0.811	0.811	0.811
Impact×Post=VC×Post	***	***	.	.	***
Impact×Treat×Post=VC×Treat×Post		***	.	.	***

Robust t-stats in parentheses (clustered by worker); Bottom: Sign f/ Wald tests

… but minorities, rank & file workers fare better at impact firms (relative to counterparts)

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

4. Recruitment probability for new hires

- Disadvantaged job seekers: More likely to be hired by IPC than VC PC?

- Run multinomial logit
  - Outcome categories: (1) Hired by IPC, (2) hired by VC PC
  - Base category: (3) Hired by control firm
  - Controls: Previous salary, worked in disadvantaged area, industry experience, age, hiring firm industry, state, year

4. Recruitment probability for new hires

Hiring firm type outcome:	Impact (1)	VC (2)	Impact (3)	VC (4)	Impact (5)	VC (6)	Impact (7)	VC (8)
Black/Hispanic	-0.038	-0.369***					-0.031	-0.343***
	[0.013]	[-0.066***]					[0.013]	[-0.061***]
	(0.57)	(6.83)					(0.46)	(6.42)
Female			0.02	-0.096**			0.019	-0.095**
			[0.008]	[-0.019**]			[0.007]	[-0.018**]
			(0.37)	(2.50)			(0.35)	(2.49)
Without college					-0.054*	-0.187***	-0.049*	-0.148***
					[0.002]	[-0.032***]	[0.001]	[-0.025***]
					(1.94)	(7.93)	(1.93)	(6.74)
Average prior earnings	0.132***	0.254***	0.135***	0.271***	0.130***	0.260***	0.130***	0.238***
	[0.005]	[0.040***]	[0.005]	[0.043***]	[0.005]	[0.041***]	[0.006]	[0.037***]
	(4.28)	(11.89)	(4.22)	(12.09)	(4.16)	(12.08)	(4.23)	(11.42)
Prev worked in same industry	-0.125	-0.138**	-0.127	-0.153**	-0.126	-0.151**	-0.124	-0.138**
	[-0.010]	[-0.019]	[-0.010]	[-0.022]	[-0.010]	[-0.021]	[-0.010]	[-0.019]
	(1.60)	(2.16)	(1.62)	(2.41)	(1.61)	(2.37)	(1.59)	(2.15)
Age	-0.211**	-0.551***	-0.211**	-0.551***	-0.213**	-0.561***	-0.213**	-0.554***
	[-0.001]	[-0.090***]	[-0.001]	[-0.091***]	[-0.001]	[-0.092***]	[-0.001]	[-0.091***]
	(2.23)	(7.93)	(2.23)	(7.91)	(2.26)	(8.04)	(2.26)	(7.95)
Disadvantaged area control	Y		Y		Y		Y	
Industry, year, state dummies	Y		Y		Y		Y	
Observations	197,000		197,000		197,000		197,000	
Pseudo R^2	0.099		0.097		0.098		0.099	
Black/Hispanic, Impact=VC	***						***	
Female, Impact=VC			**				**	
Without college, Impact=VC					***		***	
Prior earnings, Impact=VC	***		***		***		***	

Minorities, women, w/o college, lower income → More likely to get job at impact than VC

(≈7pp ↑ for minorities) (≈3pp ↑ for women, w/o college)

MFX in brackets, robust z-stats in parentheses (clustered by firm); Bottom: Cross-equation χ^2 tests

Agenda

- Introduction
- Data and sample
- Results
    1. Investors: Which firms get impact funding?
    2. Firms: What happens after funding?
    3. Employees: Who benefits after impact investing?
    4. Job seekers: Who gets hired by impact portfolio companies?
- Conclusion

Conclusion

- Investigate private-market impact funds → ESG ("S") outcomes
  - Employment at portfolio companies

- vs VC-backed firms: Impact investors + PCs appear to act according to non-pecuniary social goals
  - Investors: Minority-founded, -employing firms in disadvantaged areas → More likely to get impact funding
  - Firms: Impact-backed PCs → Increase employment of minorities, women
  - Workers: Minorities, rank & file at IPCs → More favorable salary raises
  - Job seekers: Minority, female, less-educated, lower-income → More likely hired by IPCs

Thank You!



Josh Lerner

Jacob H. Schiff Professor
Entrepreneurial Management Unit
Harvard Business School
Boston, MA 02163 USA

and Private Capital Research Institute

josh@hbs.edu
www.people.hbs.edu/jlerner