# Returns of Firms Founded by Serial Entrepreneurs

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Background

- A serial entrepreneur(SEN) is an entrepreneur that starts multiple firms.
- Our sample consists of firms backed by venture capital.
- A successful exit from the VC portfolio is usually in the form of an IPO or acquisition by a different firm.
- VCs invest in firms in multiple rounds over multiple years
- Firm-level return is calculated as the average of round-level returns, weighted by the round-level investment.
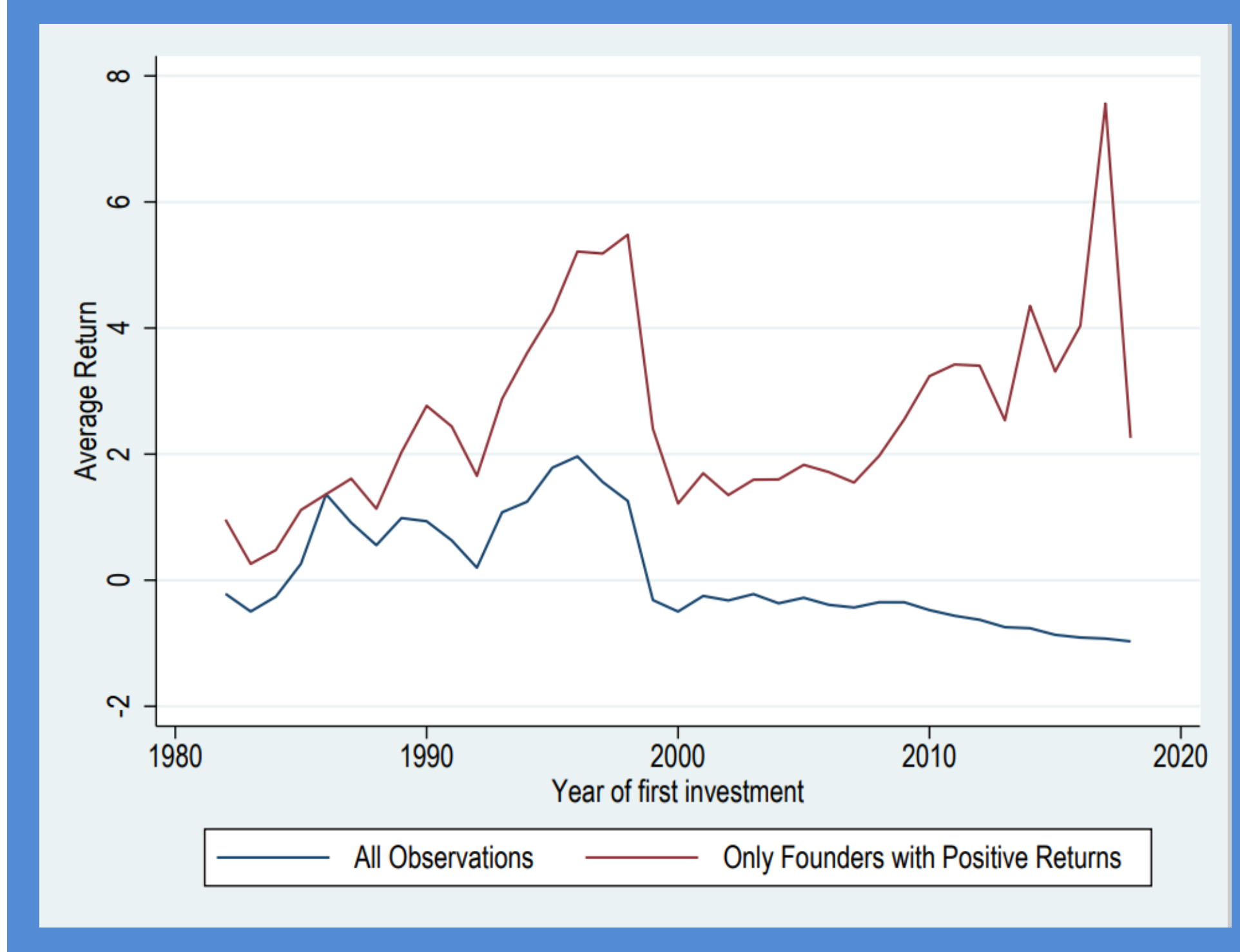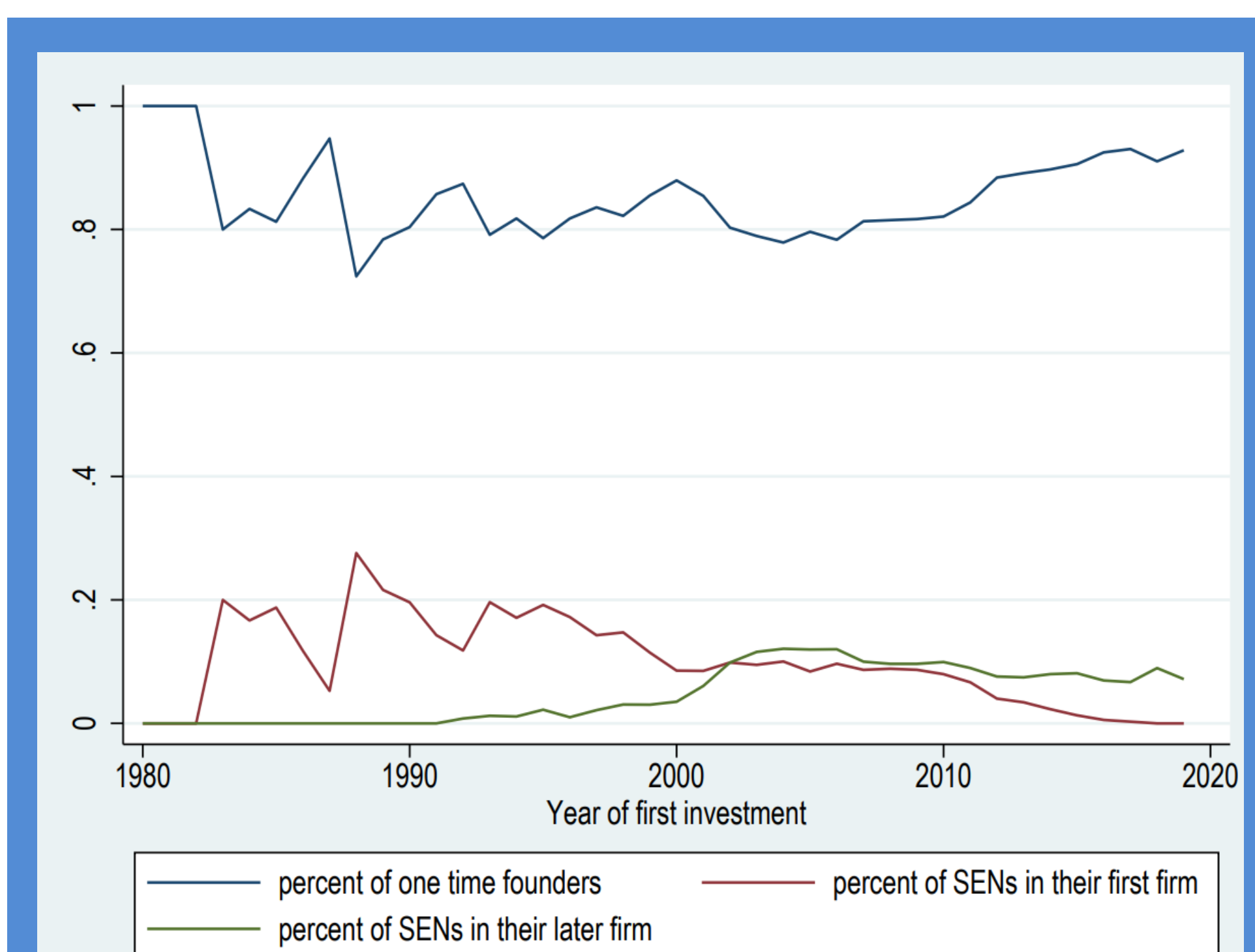
Research Questions

- Prior studies established that SENs tend to outperform one-time founders but haven't identified causal mechanisms.
- We are interested in seeing
  - How SENs differ in terms of demographic characteristics.
  - Is there performance persistence in entrepreneurship? In other words, do previously successful entrepreneurs also have higher and positive returns in their second firm?
- We decompose success into two factors—market timing and managerial skill—and examine whether they can explain SENs' success.
  - The quality of market timing is measured as the average return of all firms founded in the same year and industry.
  - Managerial skill is proxied by the outcome of their prior firm

Summary Statistics

Table 1: Founder characteristics by SEN status

	One-time founders	SENs in first firm	SENs, prev. success	SENs, prev. failure
	mean	mean	mean	mean
Share of founders	0.87	0.06	0.02	0.04
PhD	0.15	0.20	0.25	0.17
PhD in STEM	0.12	0.16	0.22	0.14
MBA	0.22	0.23	0.23	0.24
Elite MBA degree	0.09	0.12	0.12	0.13
Ivy or other top undergrad	0.16	0.21	0.22	0.21
Tier 2 undergrad	0.08	0.09	0.08	0.10
CEO of first founded firm	0.43	0.45	0.42	0.49
Chair of first founded firm	0.05	0.11	0.13	0.10
Observations	51387	3545	1399	2556

Table 2: Returns by SEN status

	One-time founder		SEN in first firm		SEN, prior success		SEN, prior failure	
	mean	sd	mean	sd	mean	sd	mean	sd
Exit value	12.39	36.87	27.43	51.37	21.25	46.60	13.61	40.16
Total investment	6.81	10.72	10.32	13.50	11.39	14.30	7.81	12.86
Return	-0.03	2.50	0.96	3.47	0.13	2.36	-0.11	2.22
Exit val./Investment	2.13	95.19	3.05	10.93	1.35	10.94	0.65	5.34
Observations	28753		3112		925		1391	

Table 3: Returns by SEN status, positive returns

|	One-time founder			SEN in first firm			SEN, prior success			SEN, prior failure		
	mean	sd	p90	mean	sd	p90	mean	sd	p90	mean	sd	p90
Exit value	25.36	50.24	87.20	49.02	61.38	136.75	41.78	59.47	118.67	28.03	54.75	96.67
Total investment	5.60	10.44	16.19	9.56	13.31	24.37	11.48	15.28	26.85	7.08	13.11	22.48
Return	2.92	3.89	8.93	3.51	4.16	10.23	2.24	3.20	6.61	2.51	3.36	6.67
Exit val./Investment	5.58	138.38	9.47	6.35	13.95	15.94	3.75	15.32	8.12	2.44	7.36	9.03
Observations	13600			1701			452			660		

Findings

- SENs, especially SENs who succeed in their first firm, are more likely to have elite education and STEM PhDs.
- One-time founders have a negative mean return.
  - Coupled with the fact that they account for 87% of our observations, this is evidence that success is rare in entrepreneurship.
- SENs in their first firm have the highest returns.
  - Presumably very few of those who fail the first time would go on to start a second venture, so it is unsurprising that most SENs are successful in their first venture, which helps to explain the high average return.
- In their second firm, previously successful SENs outperform one-time founders, evidence of performance persistence.
- Cohort return in the regression measures market timing skill, and we find that managerial skill contributes to SEN's success.
  - Should their success be solely explained by market timing, the SEN coefficients might become insignificant once we add in a term for their cohorts' returns.

Regression Results

	(1) Return	(2) Return	(3) Return	(4) Return
SEN in first firm	0.807***	0.791***	0.792***	0.789***
	(0.0783)	(0.0793)	(0.0793)	(0.0795)
SEN in second firm	0.250***	0.230***		
	(0.0645)	(0.0648)		
Cohort return	0.272***	0.269***	0.268***	
	(0.0645)	(0.0649)	(0.0649)	
Total investment		0.00592***	0.00586***	0.00674***
		(0.00205)	(0.00205)	(0.00207)
SEN, prior success			0.331***	0.336***
			(0.0925)	(0.0931)
SEN, no prior success			0.171**	0.164*
			(0.0850)	(0.0854)
Constant	-1.093***	-1.154***	-1.153***	-1.155***
	(0.261)	(0.255)	(0.255)	(0.0690)
Start year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	23806	23806	23806	23806

Future Work

- Examine relationships between founder payout structures and the decision to start a second firm. This step requires us to finish scraping regulatory filings known as S-1 documents.
- Construct measures of VC centrality using methods of network analysis. We intend to use VC centrality as an instrumental variable for SEN status.
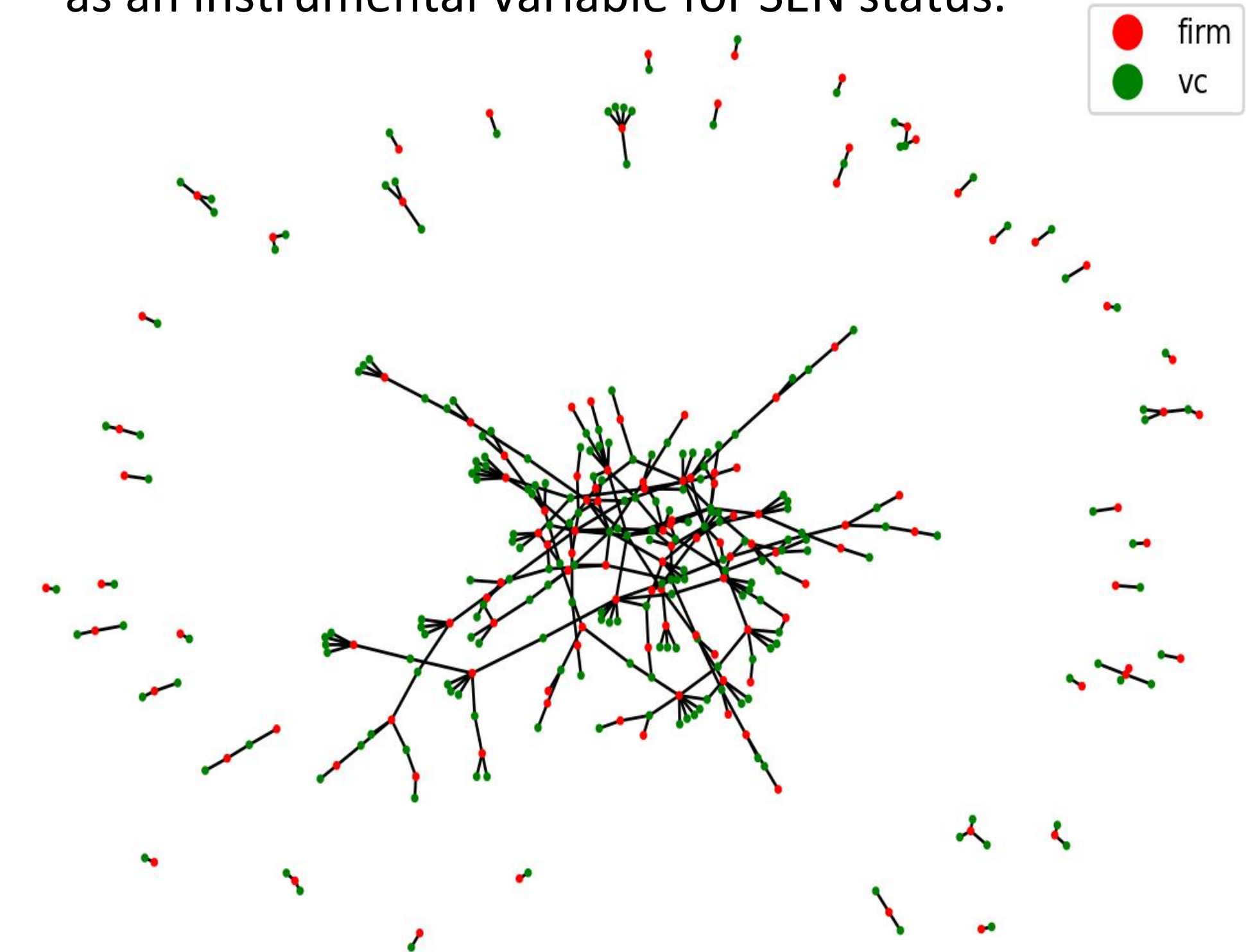
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