Internet Appendix to
"Is a VC Partnership Greater Than the Sum of its Partners?"

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Abstract

This document provides additional tests characterizing the partners that move in the main article's sample. Additional regressions are provided to demonstrate the robustness of the persistence regressions, while the AKM regressions are repeated for alternative subsamples. Finally, we provide simulation evidence for the assortative matching in the data.

Table IA.I Title Changes for First VC Partner Move

This table tabulates the title transitions from VC partners' first move. The left-most titles correspond to a partner's first job, while the top-most titles are the titles at the second job. "Managing *" captures top-ranking titles such as "Managing Partner" or "Managing Director." Titles are ranked as best as possible by perceived rank. "Other" captures a host of one-off titles and includes "Associate" or "Analyst."

	Title at new firm					
	Managing *	Gen. Partner, Partner	Venture Partner/Principal	Vice Pres.	Other	%
Managing *	37	26	7	1	15	14%
General Partner, Partner	118	102	20	4	47	45%
Venture Partner, Principal	14	21	10	1	8	8%
Vice President	9	16	1	0	3	5%
Other	57	85	10	0	30	28%
%	37%	39%	7%	1%	5%	

Table IA.II Partner Performance Persistence: Publicly Known Exit Rates

The table reports regressions where the dependent variable is one if the investment that the VC had a board seat on at time t exited via IPO by the end of the sample. All specifications are probit. Each column includes only one observation per partner, who was observed only at one VC firm, so that all control variables are defined. The dependent variable IPO–t is equal to one if the entrepreneurial firm that was the VC partner's t'th investment eventually went public. "Fraction IPO exit $< t$" is the fraction of a partners portfolio as of time t that exited by time t. Table I in the main article defines all the other variables. Standard errors are clustered at the investment year level. Significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

	IPO–2 (1)	IPO–3 (2)	IPO–5 (3)	IPO–7 (4)
Frac. IPO $t-1$	0.249*	0.965***	0.643**	1.311***
	(0.139)	(0.279)	(0.296)	(0.327)
Fraction IPO exit $< t$	-0.531	-0.222	0.279	0.0983
	(0.413)	(0.422)	(0.368)	(0.298)
Fraction IPO exit $< t$ x % IPO $t-1$	1.259*	-0.799	-0.178	-0.600
	(0.710)	(1.157)	(0.915)	(0.646)
Partner experience yrs. (log)	-0.00907	-0.141	0.0329	-0.0297
	(0.0426)	(0.106)	(0.107)	(0.0940)
VC total deals (log)	0.0414**	0.105**	0.00885	0.0440
	(0.0205)	(0.0411)	(0.0383)	(0.0883)
Log round #	0.283***	0.297	0.232**	0.206
	(0.0665)	(0.199)	(0.0949)	(0.129)
$ raised	0.00628***	0.0149***	0.0202***	0.0130***
	(0.00243)	(0.00448)	(0.00279)	(0.00253)
Years since previous board	-0.00316	-0.0116	-0.0940	0.00322
	(0.0304)	(0.145)	(0.125)	(0.124)
Constant	-2.927***	-2.529***	-2.220***	-2.272***
	(0.189)	(0.294)	(0.283)	(0.404)
Observations	2632	1169	1057	867
Pseudo R^2	0.196	0.239	0.271	0.192
Year FE?	Y	Y	Y	Y
Industry FE?	Y	Y	Y	Y
Round # FE?	Y	Y	Y	Y
Estimation	Probit	Probit	Probit	Probit

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Table IA.III Partner Performance Persistence: Additional Lagged Success Rates

This table reports regression estimates where the dependent variable is one for columns if the investment that the VC had a board seat on at time t on exited via IPO by the end of the sample. Each column includes only one observation per partner, who was observed at only one VC firm so that all control variables are defined. The dependent variable IPO-t is equal to one if the entrepreneurial firm that was the VC partner's t^{th} investment eventually went public. Table I in the main article provide variable definitions. Standard errors are clustered at the investment year level. Significance: $^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$.

	IPO-3 (1)	IPO-3 (2)	IPO-5 (3)	IPO-5 (4)	IPO-5 (5)	IPO-7 (6)	IPO-7 (7)	IPO-7 (8)
% IPO $t-1$	0.224** (0.104)		0.426*** (0.143)			0.648*** (0.214)		
% IPO $t-2$		0.0860 (0.0807)		0.353*** (0.109)			0.610*** (0.196)	
% IPO $t-3$					0.211** (0.0894)			0.613*** (0.171)
Partner experience yrs. (log)	-0.0270 (0.0386)	-0.0265 (0.0392)	-0.0975* (0.0506)	-0.0981* (0.0517)	-0.0923* (0.0521)	-0.0938 (0.0576)	-0.0962* (0.0549)	-0.103* (0.0572)
VC total deals (log)	0.00882 (0.0218)	0.00878 (0.0220)	0.0822*** (0.0299)	0.0843*** (0.0295)	0.0854*** (0.0293)	0.0749** (0.0360)	0.0755** (0.0363)	0.0783** (0.0359)
Dollars invested (log)	0.281*** (0.0441)	0.287*** (0.0444)	0.277*** (0.0798)	0.278*** (0.0784)	0.283*** (0.0786)	0.285*** (0.0567)	0.289*** (0.0565)	0.291*** (0.0554)
Years since previous board	0.0210 (0.0228)	0.0225 (0.0224)	0.0310 (0.0335)	0.0302 (0.0332)	0.0342 (0.0323)	-0.00102 (0.0590)	-0.000304 (0.0593)	0.00245 (0.0588)
Constant	-2.430*** (0.154)	-2.383*** (0.155)	-2.685*** (0.274)	-2.674*** (0.270)	-2.701*** (0.271)	-2.452*** (0.352)	-2.462*** (0.354)	-2.469*** (0.359)
Observations	3653	3640	2242	2242	2242	1535	1535	1535
Pseudo R^2	0.218	0.216	0.223	0.223	0.222	0.198	0.198	0.199
Year FE?	Y	Y	Y	Y	Y	Y	Y	Y
Industry FE?	Y	Y	Y	Y	Y	Y	Y	Y
Round # FE?	Y	Y	Y	Y	Y	Y	Y	Y
Estimation	Probit	Probit	Probit	Probit	Probit	Probit	Probit	Probit

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Table IA.IV Partner and VC Firm Fixed Effects: Subsamples II

This table reports tree-way fixed effects regressions using the method detailed in Abowd, Creecy, and Kramarz (2002) and Abowd, Kramarz, and Margolis (1999) to estimate both VC firm and VC partner fixed effects. The estimation is implemented using the Stata command "felsdvreg" as described in Cornelissen (2008). The unit of observation is the VC partner, board seat, and entrepreneurial firm outcome. All regressions use the log of exit valuation. "4 ind." includes the four major industry classifications (IT, Healthcare, Consumer, and Other). The sample only includes VCs that switched industries at least once, so their fixed effects can be separated from the industry. "17 ind." includes fixed effects for a 17-category breakdown of entrepreneurial firm industries and "115 ind." includes 115 categories. "Year*4ind." introduces the interaction of the four major industries and investment year (not their levels). Robust standard errors clustered at the VC firm level are reported in parentheses. Significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

	4 ind.	17 ind.	115 ind.	Year*4 ind.
	(1)	(2)	(3)	(4)
Relative importance of estimates in R^2. %s are fraction R^2 explained by covariate.				
$\frac{cov(Y,PartnerFE)}{var(Y)}$	0.12 (46%)	0.12 (46%)	0.12 (40%)	0.12(46%)
$\frac{cov(Y,VCFE)}{var(Y)}$	0.02 (8%)	0.02 (7%)	0.03 (10%)	0.02 (8%)
F-test on FE (p-value)				
VC Partner FE	< 0.01	0.12	0.24	0.11
VC Firm FE	0.51	0.69	0.69	0.87
Round # (log)	0.367***	0.369***	0.371***	0.330***
	(0.0522)	(0.0481)	(0.0464)	(0.0474)
Dollars invested (log)	0.291***	0.246***	0.245***	0.299***
	(0.0339)	(0.0299)	(0.0288)	(0.0292)
Partner experience yrs. (log)	-0.147*	-0.123	-0.114	-0.111
	(0.0871)	(0.0776)	(0.0762)	(0.0742)
VC experience yrs. (log)	-0.0298	-0.0219	-0.0435	0.00270
	(0.0731)	(0.0664)	(0.0629)	(0.0640)
Fund sequence (log)	0.320**	0.207	0.208	0.223
	(0.152)	(0.148)	(0.140)	(0.136)
Observations	14725	18905	19563	19617
R^2	.28	.27	.30	.28
# Movers	462	580	602	602
# Stayers	972	1393	1491	1511
# VC Firms	530	610	625	623
Year FE?	Y	Y	Y	Y
Industry FE?	Y	Y	Y	Y
Industry*Year?	N	N	N	Y

Table IA.V Partner and Investment Industry Fixed Effects as Firm: Subsamples III

The table reports three-way fixed effects regressions using the method detailed in Abowd et al. (2002) and Abowd et al. (1999) to estimate both VC industry fixed effects (as the "firm") and VC partner fixed effects. Column 4 repeats the main specification, excluding investment year fixed effects. The estimation is implemented using the Stata command "felsdvreg" as described in Cornelissen (2008). The unit of observation is the VC partner, board seat, and entrepreneurial firm outcome. All regressions use the log of exit valuation. "4 ind." uses the four major industry classifications (IT, Healthcare, Consumer, and Other) as the firm fixed effect. "17 ind." includes firm fixed effect as the 17-category breakdown of entrepreneurial firm industries and "115 ind." includes 115 categories. A mover is now a partner that made investments in at least two of the industry classifications in each column. Robust standard errors clustered at the industry level are reported in parentheses. Significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

	4 ind. (1)	17 ind. (2)	115 ind. (3)	No year FE (4)
Relative importance of estimates in R^2.				
%'s are fraction R^2 explained by covariate.				
$\frac{cov(Y,PartnerFE)}{var(Y)}$	0.15 (60%)	0.14 (46%)	0.14 (48%)	.17 (70%)
$\frac{cov(Y,Ind.FE)}{var(Y)}$	0.01 (4%)	0.03 (7%)	0.04 (14%)	.05 (21%)
F-test on FE (p-value)				
VC Partner FE	< 0.01	< 0.01	< 0.01	< .01
Industry FE	< 0.01	< 0.01	< 0.01	< .01
Round # (log)	0.356***	0.374***	0.368***	0.391***
	(0.0388)	(0.0385)	(0.0378)	(0.0442)
Dollars invested (log)	0.270***	0.243***	0.244***	0.172***
	(0.0243)	(0.0245)	(0.0238)	(0.0298)
Partner experience yrs. (log)	-0.132***	-0.131***	-0.133***	-0.476***
	(0.0416)	(0.0413)	(0.0412)	(0.0688)
VC experience yrs. (log)	-0.0324	-0.0223	-0.0203	-0.282***
	(0.0515)	(0.0509)	(0.0496)	(0.0606)
Fund sequence (log)	0.0203	0.0194	0.0189	-0.179
	(0.0810)	(0.0801)	(0.0783)	(0.128)
Observations	24980	24980	24980	19617
R^2	.26	.27	.29	.24
# Movers	2126	2794	2959	602
# Stayers	877	209	44	1511
# Ind.	4	17	115	4
Year FE?	Y	Y	Y	N

Table IA.VI Partner Performance Persistence by Exit Types: Pooled

The table reports probit regressions (OLS for column 4) of four different dependent variables with the same specification as in Table III of the main text. Each column includes all board seats by all partners with at least two board seats. Columns 5 to 8 include fixed effects for investment number by partner. IPO_t is one if the tth investment was an IPO. "ACQ_t" is 1 if the partner's t'th board seat investment resulted in a successful acquisition (i.e., sold for at least twice capital invested) and Fail is one if it resulted in an failure or the firm had yet to exit by the end of the sample. Exit value t" is the log of the exit value at sale of the entrepreneurial firm (zero if failure or missing). See Table I from the main text for the variable definitions. Standard errors clustered at the investment year level. Significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

	IPO_t (1)	ACQ_t (2)	$Fail_t$ (3)	Exit Value$_t$ (4)	IPO_t (5)	ACQ_t (6)	$Fail_t$ (7)	Exit Value$_t$ (8)
% IPO $t-1$	0.357*** (0.0533)				0.342*** (0.0531)			
% Acq. $t-1$		0.259*** (0.0582)				0.257*** (0.0574)		
% Fail $t-1$			0.151*** (0.0312)				0.149*** (0.0316)	
Avg. exit value $t-1$				0.0840*** (0.0148)				0.0823*** (0.0150)
Partner experience yrs. (log)	0.0274*** (0.00960)	-0.0209* (0.0110)	0.0233*** (0.00860)	-0.0268* (0.0130)	-0.0115 (0.0127)	-0.0265 (0.0173)	0.0352** (0.0162)	-0.0246 (0.0158)
VC total deals (log)	0.0272** (0.0110)	0.0364*** (0.0108)	-0.0298*** (0.00540)	0.0616*** (0.0136)	0.0152 (0.0104)	0.0348*** (0.0105)	-0.0259*** (0.00541)	0.0569*** (0.0134)
Dollars invested (log)	0.250*** (0.0197)	0.0297 (0.0218)	-0.0768*** (0.0218)	0.363*** (0.0421)	0.250*** (0.0196)	0.0301 (0.0218)	-0.0764*** (0.0217)	0.362*** (0.0419)
Years since previous board	-0.0292*** (0.00879)	0.00458 (0.00783)	0.00741 (0.00716)	-0.00580 (0.0116)	-0.0128 (0.0104)	0.00719 (0.0114)	0.00260 (0.0115)	-0.00916 (0.0146)
Constant	-3.473*** (0.102)	-2.085*** (0.0833)	1.358*** (0.0807)	-1.861*** (0.147)	-2.926*** (0.406)	-1.224** (0.523)	0.601 (0.989)	-2.844*** (0.265)
Observations	26147	26025	26147	26147	26075	25962	26138	26147
R^2				0.133				0.135
Pseudo R^2	0.199	0.037	0.053		0.202	0.038	0.054	
Year FE?	Y	Y	Y	Y	Y	Y	Y	Y
Industry FE?	Y	Y	Y	Y	Y	Y	Y	Y
Round # FE?	Y	Y	Y	Y	Y	Y	Y	Y
Inv. # FE ?	N	N	N	N	Y	Y	Y	Y
Model	Probit	Probit	Probit	OLS	Probit	Probit	Probit	OLS

Table IA.VII Matching of Top Partners to VC Firms

This table compares the sorting of top VC partners to firms in the sample and sorting created through random matching. Top VC partners are defined as those with top- quartile partner fixed effects estimates from the Abowd et al. (1999) regression. The partner and VC firm must be in the largest connected group (i.e., firms connected by movement of partners). Further, we only consider VC firms with at least three active partners. "# of top quartile partners" is the number of top-quartile VC partners ever active at a VC firm. Column (1) N reports these numbers and fraction of all VC firms with top-quartile partners. Columns 3 and 4 report results for 100 random matchings of partners to firms for the known VC firm size distribution. The VC firm size distribution is fixed to match that observed in the data and the algorithm randomly re-orders partners to firms. Column 4 calculates the fraction of firms in each subgroup that has n partners. A large positive (negative) difference between the percentages reported in columns 3 and 4 suggests that firms in the sample have an over(under)-representation of top-quartile partners relative to that predicted from random matching.

	Sample		Random match	
	(1)	(2)	(3)	(4)
# top quartile partners	N	% firms	N	% firms
0	133	54.3%	58.1	23.7%
1	34	13.9%	80	32.7%
2	17	6.97%	53.7	21.9%
3	25	10.3%	26.2	10.7%
4	13	5.3%	13.7	5.6%
5	5	2%	6.6	2.7%
6+	18	7.4%	6.8	2.8%
Total VC firms	245		245	

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