Picking Partners: Manager Selection in Private Equity

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What we do

1 Choice. *Selection* from an opportunity set

2 Post-selection performance. Relative to the opportunity set.

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Why is choice in PE so important?

1 Allocation to alternative assets are enormous and have growth substantially.

- ② Investment committees (ICs) are "experts." Or are they?
 - Experts? Krishna and Morgan (2001), Kahneman and Klein (2009).
 - ▶ Finance skills? Andonov, Hochberg, and Rauh (2018).
 - ▶ Incentive, compensation, reputation, CYA, horizon mis-match.
- **③** ICs spend most of their time on alternative assets.
- High investment costs in PE.
- Closed structure and finite horizon of investment products.

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Data

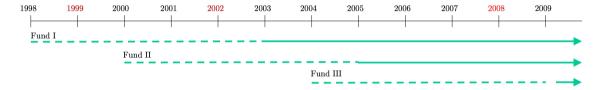
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- \bullet 100,506 capital commitments between 1990 and 2019, \$3.3 trillion.
 - ▶ 8,801 LPs from 61 countries.
 - ▶ Median commitment is \$22m.
 - Destination of capital is global.
 - Buyout, Direct Lending, Distress, Growth, Infrastructure, Mezz., Natural Resources, Real Estate, and Venture.
 - $\star\,$ No Secondaries, Co-investments, or Fund-of-Funds.
- 18,545 unique funds.

CEM Benchmarking

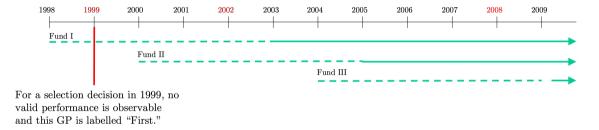
• For a subsample, target (policy) and actual weights to PE.

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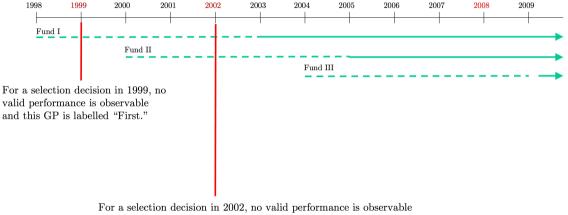


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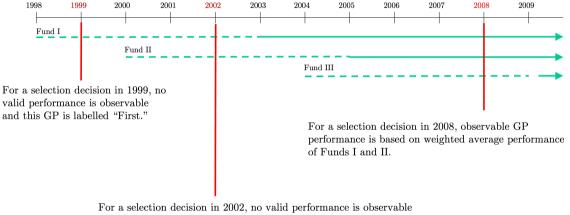
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and this GP is considered "Young."

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and this GP is considered "Young."

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Measuring excess performance

 $\operatorname{Perf:}\ \operatorname{IRR},\ \operatorname{TVPI}$

- For all funds, take performance measure (Perf) only 5 years after vintage year.
- Benchmark = median performance of all funds of the same type, vintage year, and geographic focus.
- So Excess Perf(t) = Fund Perf(t) Benchmark(t).

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Opportunity set (North America only)

Same type, geographic focus, ± 1 year of vintage year, size $\pm 50\%$ of selected fund's size.

Туре	# Commitments	# of GPs in Oppset
Buyout	$20,\!373$	45
Direct Lending	$1,\!171$	25
Distress	$4,\!253$	11
Growth	3,326	19
Infrastructure	$2,\!606$	9
Mezzanine	2,743	12
Natural Resources	$4,\!395$	12
Real Estate	$12,\!142$	71
Venture	$12,\!311$	75

On avg, 37 GPs in the opportunity set implying an unconditional selection probability of 2.6%.

Modelling choice relative to the counterfactual

 $\text{Commitment}_{\ell,f,g} = \alpha + \beta_1 \text{Rookie}_g$ $+\beta_2 \operatorname{Veteran}_a$ $+\beta_3$ Young_a + $\sum_{i=2}^{4} \beta_{4,j} \operatorname{PerfQuartile}_{j,g}$ i=2 $+\beta_5 \text{Ln}(\text{GPSize})_a$ $+ \beta_6 \operatorname{PriorInv}_{\ell,q}$ $+ \beta_7 \text{PeerInv}_{\ell,q}$ $+ \beta_8 \operatorname{Local}_{\ell,q}$ $+ FE + \epsilon$.

Most of our attention is on the role of blue.

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Estimates from choice regressions

Reference	(omitted) gro	up is Q1	
Variable	Coefficient	Percent Change (from 2.6)	
Rookie	1.6	62	$\left. \right\} 19,321 \text{ commitments}, \sim \$445\mathrm{b}$
Veteran	1.7	65	
Young	0.9	35	32, 357 commitments, ~ \$905b
Perf High	1.1	42	10,414 commitments, ~ \$411b
PriorInv	16.5	635	35,729 commitments, ~ \$1,615b
PeerInv	0.7	27	61,327 commitments, ~ $2,298b$ not additive
Local	3.4	131	} 23,006 commitments, ~ \$536b

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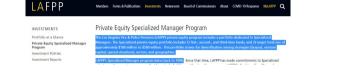
Does the source of veteran experience matter?

Predictor	Model 1	Model 2
Unconditional Probability	2.6	2.6
Veteran	1.6	1.6
PE Veteran	0.1	-0.1
Large PE Veteran		0.4

If the veteran acquired their experience at a large PE firm, then yes.

Examples of Emerging Manager Programs







MICHIGAN SMALL EMERGING MANAGER PROGRAM

The Michigan Small Emerging Manager Program is a \$300 million program that invests across small and emerging manager fund, co-investment, and secondary opportunities. The target strategies for the program include private equity buyouts, growth equity, venture capital, special situations, real estate. Infrastructure, credit, and real return opportunities.

The State of Michigan Retirement System ("SMRS") has designed the mandate to expand access to capital for emerging/small private market investment managers with a focus on generating returns and increasing the diversity of investments and the inclusion of a broader range of managers.

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Picking PE Partners

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Who invests?

	# Commitments	Value (\$B)	
	Rookie	8	
US LPs	5,606	129	
Ex-US LPs	$6,\!148$	167	
Public plans	$2,\!602$	80	
Non-public plans	$9,\!152$	216	
	Veterans		
US LPs	5,294	128	
Ex-US LPs	$2,\!273$	39	
Public plans	2,008	67	
Non-public plans	5,559	99	

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Potential explanations:

- Access: LPs do not have access to other GPs and fulfill their target weights using first-timers.
- **2** Asset classes: First-timers are all in esoteric asset classes.
- **③** Lottery: LPs have a lottery preference and are willing to gamble on first-timers.
- **(** Demand > Supply: So first-timers fill in the gap.

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Access (1): Undersubscribed funds

Focusing on a subsample of undersubscribed funds.

Predictor	Undersubscribed
Unconditional Probability	10.3
Rookie	4.5
Veteran	4.4
Young	2.3
$\operatorname{Perf}\left(\operatorname{High}\right)$	3.2

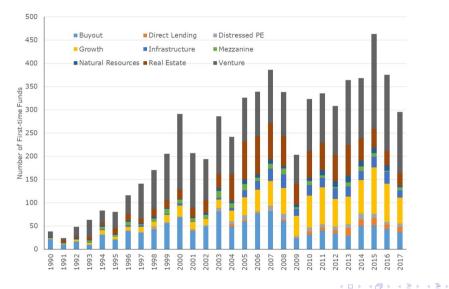
Even when funds are undersubscribed, selection probabilities for Rookies, Veterans, and Young remain high.

Access (2): Small versus large LPs

Predictor	Small LPs	Large LPs
Unconditional Probability	2.6	2.7
Rookie	1.2	1.7
Veteran	1.2	1.8
Young	0.4	1.0
Perf (High)	0.3	1.1

- Even for large LPs, that presumably do not have access issues, selection probabilities for Rookies, Veterans, and Young remain high.
- Of course, this does **not** imply that access is unimportant—just that the proclivities for first-time and young funds are not due to access issues.

Asset classes: Non-mainstream classes?



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Lottery preferences

Predictor	Median Commitment (\$M)	Skewness
Rookie	11.3	1.285
Veteran	15.1	1.710
Young	20.0	1.661
Perf. Quartile Low	20.0	2.119
Perf. Quartile 2	29.4	2.386
Perf. Quartile 3	35.4	3.258
Perf. Quartle High	35.0	2.497

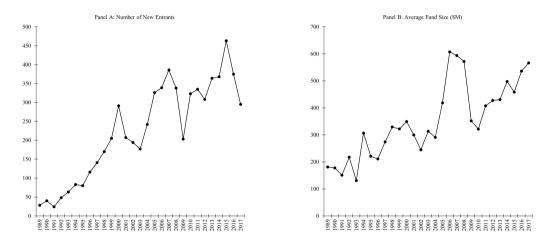
If LPs have a lottery preference and they believe that first-time funds are lottery...

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Demand > Supply: Occam's Razor



Average annual growth rates are over 10%.

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Demand and Supply: A more direct test

If an LP is underweight (distance between target and actual weight), is she more likely to allocate to first-time funds?

Predictor	Underweight (%)	Large Underweight (\$)
Unconditional Probability	2.3	2.3
Rookie and/or Veteran	1.7	1.7
Rookie and/or Veteran \times Underweight	0.4	0.5

What do these choices tell us about future performance?

- End-of-life excess performance for fund f after LP ℓ commits capital (or not) to fund f of GP g.
- Intentionally condition only on information observable at the time of the selection decision.
- Regression setup similar to choice regressions with "Hired" indicator and interactions.

The "returns" to selection criteria within a criterion

	Hired	NotHired	Diff		Hired	NotHired	Diff
		Excess IRRs				Excess TVPI	
Rookie	-4.09	-1.03	-3.06	Rookie	-0.15	-0.09	-0.06
Veteran	-0.67	1.66	-2.33	Veteran	0.03	0.11	-0.08
Young	-2.49	-1.37	-1.12	Young	-0.06	-0.05	-0.01
$\mathbf{Q4}$	1.09	2.20	-1.10	$\mathbf{Q4}$	0.18	0.15	0.04
PriorInv	0.28	1.11	-0.83	PriorInv	0.10	0.05	0.05
PeerInv	0.49	0.81	-0.32	PeerInv	0.09	0.04	0.05
Local	-0.33	0.16	-0.49	Local	0.04	0.01	0.04

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The "returns" to selection criteria across a criterion

	Excess IRR Diff.	Excess TVPI Diff.
Rookie	-6.29	-0.29
Veteran	-2.87	-0.12
Young	-4.68	-0.20
$\mathbf{Q4}$	-1.10	0.04
$\operatorname{PriorInv}$	-1.92	-0.05
PeerInv	-1.71	-0.05
Local	-2.52	-0.10

Does requiring experience help?

	Hired	NotHired	\mathbf{Diff}
		Excess IRRs	
PE Veteran	0.78	2.10	-1.42
Large PE Veteran	0.75	1.00	-0.25
		Excess TVPI	
PE Veteran	0.11	0.12	-0.01
Large PE Veteran	0.09	0.04	0.05

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Public Pension Funds

Within category differences

	Excess IRR Diff.	Excess TVPI Diff.
Rookie	-6.90	-0.26
Veteran	-5.90	-0.25
Young	-4.78	-0.21
$\mathbf{Q4}$	-5.67	-0.20
PriorInv	-5.92	-0.21
PeerInv	-4.01	-0.14
Local	-6.18	-0.26

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There is much to be learned from a realistic counterfactual.

- **0** Rookies, Veterans, and Young funds receive substantial capital commitments.
 - ▶ The most likely explanation is that demand > supply.
- Post selection performance of funds selected by LPs is largely indistinguishable from that of non-selected funds.
 - ▶ An exception is public pension systems for whom selected funds underperform non-selected funds.

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Appendix: What does "selection" mean?

Since all GPs in our sample exist, some LPs (at least one) must have selected them. Therefore, selection of a GP is our setting is to be thought of as the "how often" LPs choose this GP.

• Akin to number of votes in a popularity contest or number of likes in a Twitter post.

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Appendix: Variation across investors and investment strategies

- Performance chasing is largely a US LP phenomenon.
- Home bias ("Local") is much larger among non-US LPs.
- Generally, selection criteria are similar across various types of LPs. An interesting exception:
 - ▶ Universities are twice as likely to follow peers. Swensen's Yale model.
- Post-selection performance differences of public systems are meaningfully worse than those of other investors.
- Endowments and foundations do not appear to have particular selection ability (Lerner, Schoar, and Wongsunwai (2007) and Sensoy, Wang, and Weisbach (2014)).

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