



Unpacking Private Equity Performance

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Most of the results discussed in this presentation are discussed in more detail in our paper “Unpacking Private Equity Performance” published in the *Journal of Portfolio Management* (March 2024). Also available [here](#).

- Motivation
- Subscription Lines of Credit
- Accounting Method for Recycled Capital
- Pacing of Capital Deployment

- Performance measurement matters for a variety of reasons that we all are aware of.
- Performance measurement is especially important for evaluating GPs when deciding on new commitments – and this often means evaluating a GP's most recent funds that are 2-7 years old. (Whether this is a good idea or not is another topic worth considering).
- Growing evidence that GP actions can affect performance metrics and have strong incentives to do so during fundraising periods:
 - Returns (for example, Brown, Gredil and Kaplan (JFE, 2019))
 - Risk (for example, Brown and Borysoff (wp, 2024))

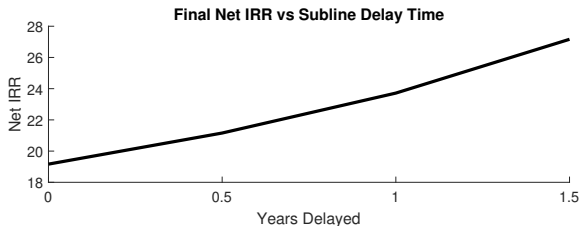
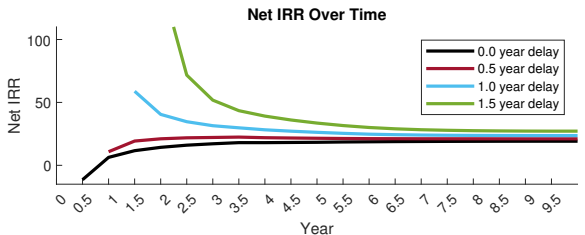
- Consider a fund with \$100 in committed capital with \$85 deployed (\$15 paid in fees) in the following investment timing:

Table: Deployment Sequence

Year	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5
	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5

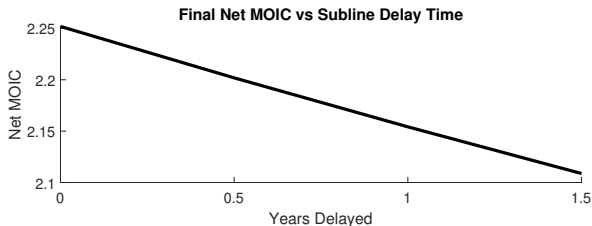
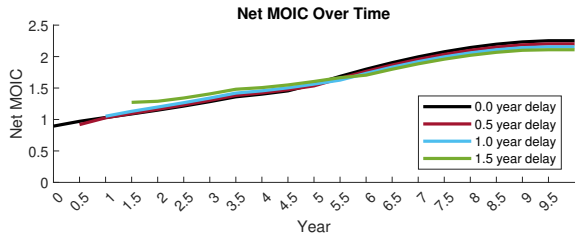
- All MOIC = $3\times$.
- Initial deal held 3.5 years. Other deals held 5 years. Otherwise deals are identical.
- Subscription lines allow capital call delays of 0, 0.5, 1, and 1.5 years.
- Subscription loans have an annual interest rate of 5 percent.

Extreme difference during investment period because MOIC has already manifested to a large extent by the time first capital call is made with longer delay.

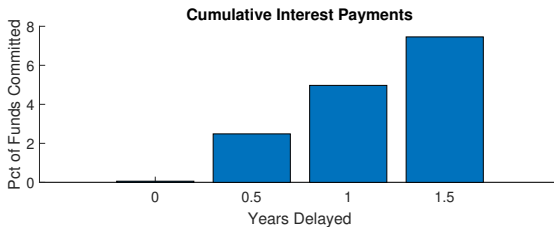
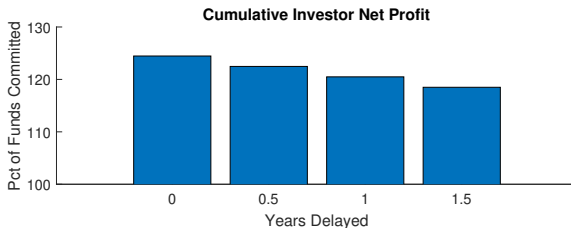


*1.5-year delay net IRR starts at $\approx 148\%$.

Net MOIC can start higher because subscription line delays fee collections, but ultimately leads to higher costs and lower MOIC.



Investor net profit lower with sub-lines because of interest payments & higher fees.



- Consider a fund with \$100 in committed capital with \$85 deployed (\$15 paid in fees) in the following investment timing:

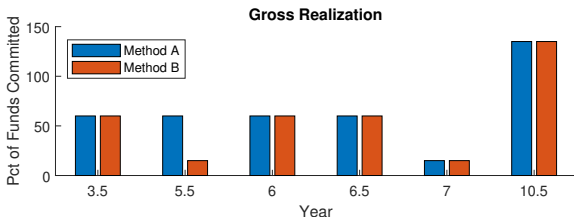
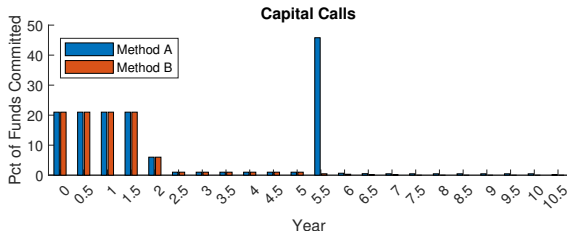
Table: Deployment Sequence

Year	0	0.5	1	1.5	2
	\$20	\$20	\$20	\$20	\$5

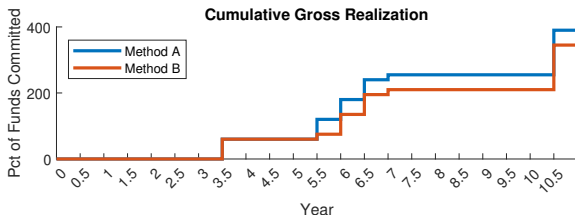
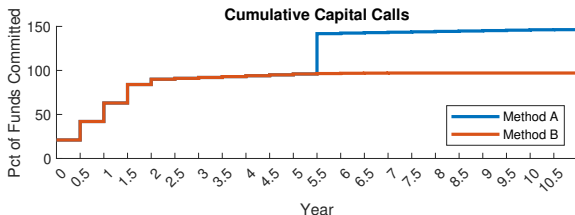
- All MOIC = $3\times$.
- Initial deal held 3.5 years. Other deals held 5 years. Otherwise deals are identical.
- A fraction of \$60 exit is recycled at end of the investment period (year 5.5):
 - none (\$0), low (\$15), high (\$30), max (\$45).

- Accounting Method A treats the recycle deal like a new investment, as if realization distributions left the fund and are called back from investors.
- Accounting Method B treats recycle deal like the incoming funds used in recycle aren't yet a realization and never left the fund.
- Example: past \$20 investment gives \$60 today, \$45 recycled.
 - Method A: gross realization = \$60, new investment = \$45.
 - Method B: gross realization = \$15, new investment = \$0.
- Key difference: Method A has a capital call of \$45 for the recycled investment, Method B has no capital call.

Recycle deal of \$45 made in year 5.5 logs a “capital call” with Accounting Method A. But with Accounting Method B it is taken out of the gross realization.

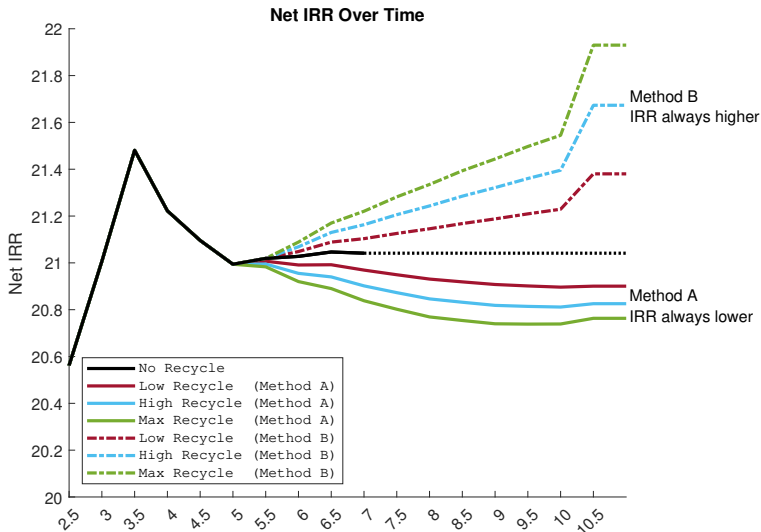


Method B realizations and capital calls both lower by around \$45 (give or take fees). But \$45 a bigger proportion of capital calls.



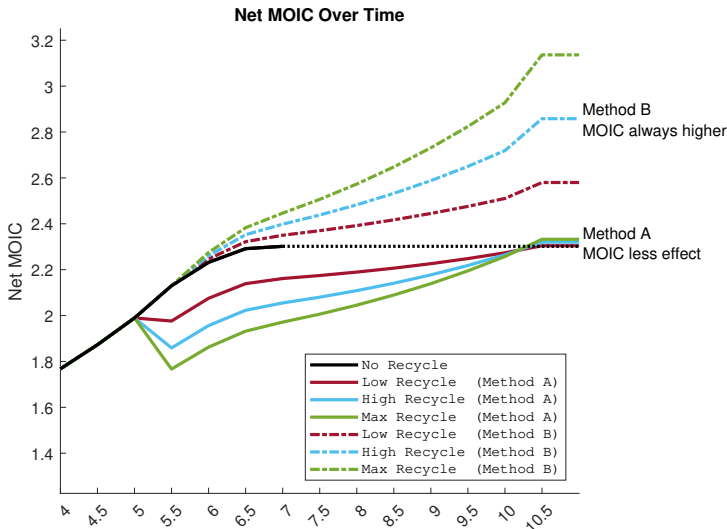
- Method B IRR point of view: investor inflows (distributions) lower by small percentage, outflows (capital calls) lower by large percentage.
- Method B MOIC point of view: numerator (distributions) lower by small percentage, denominator (capital calls) lower by large percentage.
- Would therefore expect both to be larger with Method B.

Method A lower than no-recycle because recycle increases average holding period.



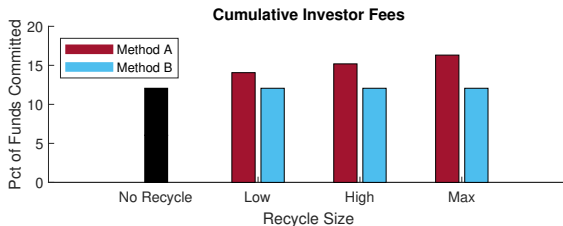
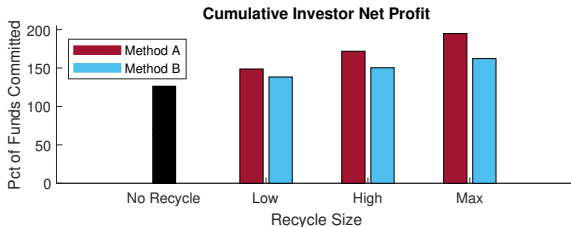
Maximum difference $\approx 1\%$. Appendix shows alternative with identical holding periods.

Method B can give net MOIC higher than MOIC of deployments.



Maximum difference ≈ 0.83 of a multiple.

Method A has higher investor profit, despite lower IRR and MOIC. Method A has higher fees (fewer Method B “new investments”), small relative to extra profit.



- Method B has lower gross realization but same investment costs.
- Method B has slightly lower fees (recycle is not a “new investment”).
- Therefore, Method B has lower “profit” (both gross and net in a pure accounting sense)

Simplify: assume zero mgmt fees, initial investment \$20, recycled at \$45.

Method A	Method B
$20 + 45 = 65$ deployed	$20 + 45 = 65$ deployed
$20 \times 3 + 45 \times 3 = 195$ realization	$(20 \times 3 - 45) + 45 \times 3 = 150$ realization
$195 - 65 = 130$ gross profit	$150 - 65 = 85$ gross profit
$130 \times .20 = 26$ carry	$85 \times .20 = 17$ carry
$130 - 26 = 104$ net profit	$85 - 17 = 68$ net profit

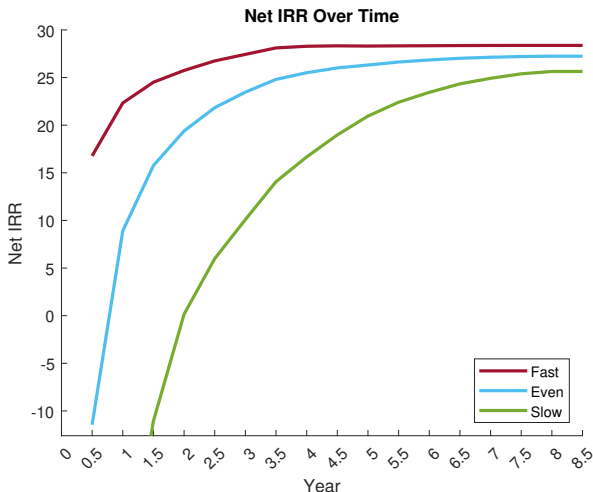
- Consider a fund with \$100 in committed capital with \$85 deployed (\$15 paid in fees)
- Compare three deployment paces: fast, even, and slow.

Table: Deployment Sequences

Year	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5
Fast	\$30	\$20	\$10	\$10	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5
Even	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
Slow	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$10	\$10	\$20	\$30

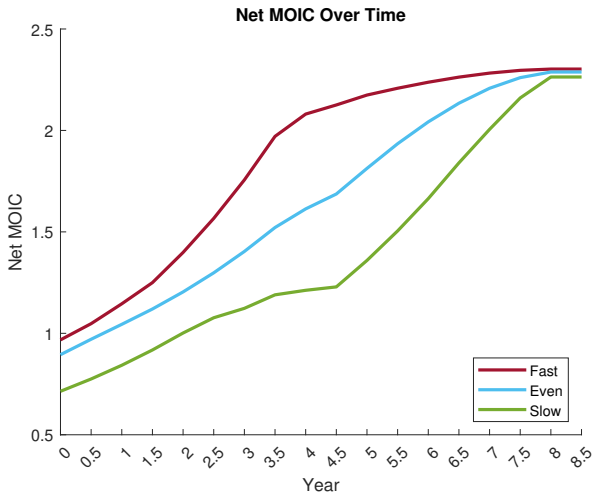
- All MOIC = 3x.
- Initial deal held 3.5 years. Other deals held 5 years. Otherwise deals are identical.

Early net IRR negative with slow deployment because NAV small relative to fees.
Final IRR lower because larger late deployments have larger post-AIC fees.



Slow deployment begins with a net IRR of -70.1%. Maximum final difference $\approx 2.7\%$.

Same logic for net IRR holds for net MOIC, but less difference at exit.



Difference in investor profit driven by difference in fees, but difference is minuscule.

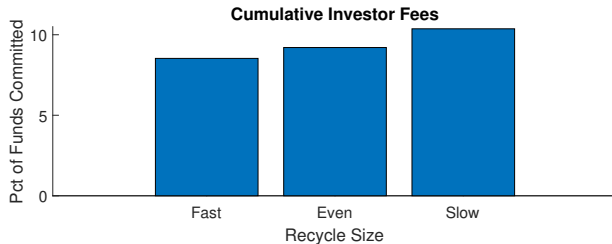
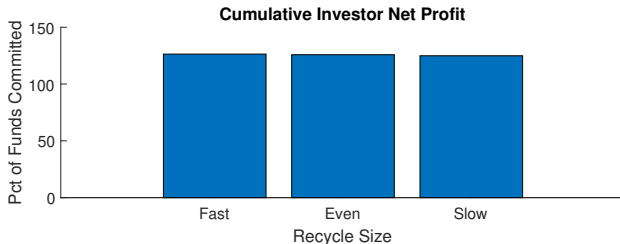


Table: Rule-of-Thumb Stability Chart

	Subscription Lines	Recycling	Pacing
Intermediate Net IRR	unstable	stable	unstable
Final Net IRR	unstable	stable	stable
Intermediate Net MOIC	stable after inv. period	unstable	unstable
Final Net MOIC	stable	Method A: stable Method B: unstable	stable
Net Profit	small differences	large differences	small differences
Fees and Interest	small differences	small differences	small differences

- Suppose \$100 committed capital.
- Reconsider with even/neutral deployment pace and identical holding periods.

Table: Deployment Sequence

Year	0	0.5	1	1.5	2	2.5	3	3.5
	\$10.6	\$10.6	\$10.6	\$10.6	\$10.6	\$10.6	\$10.6	\$10.6

- All MOIC = 3x, all deals held 3.5 years.

Table: Recycle Sequence

Year	4.5	5	5.5
Low	\$15	0	0
High	\$15	\$15	0
Max	\$15	\$15	\$15

Method A net IRR higher when pacing and holding neutral: same accretion rate, fees as proportion of capital calls lower because some collected post-AIC toggle.

