UNIT 2 · WHAT'S WRONG AND WHAT TO MEASURE

PME · LA-IRR · LA-PME

Session 7 · Three alternatives to IRR — what they fix and what they don't

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Primary Text: Liquidity Illusion (Forthcoming, 2026)

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What we'll cover today

1. **Public Market Equivalent (PME)**
   Kaplan-Schoar 2005
2. **Direct Alpha**
   Refinement of PME
3. **Liquidity-Adjusted IRR (LA-IRR)**
   GE-LAV's correction
4. **Liquidity-Adjusted PME (LA-PME)**
   Combined approach
5. **Which to use when**
   Decision framework

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Public Market Equivalent (PME): Kaplan-Schoar 2005

Core question PME answers: would investing in the S&P 500 have produced the same outcome?

$$PME = \frac{\sum_t D_t / R_{m,t}}{\sum_t C_t / R_{m,t}}$$

Where: D_t = distributions, C_t = calls, R_m,t = market return from t to fund-end

Interpretation:

PME > 1.0	PE outperformed the public market alternative
PME = 1.0	PE matched the public market
PME < 1.0	PE underperformed — index investing would have been better

PME's contribution: provides public-market opportunity-cost framing — but still ignores liquidity premium structure.

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LA-IRR and LA-PME: GE-LAV's liquidity-adjusted versions

Both PME and IRR assume the public market is fully liquid. GE-LAV adjusts for the time-varying liquidity premium.

LA-IRR

Standard IRR with cash flows adjusted for the liquidity state at the time of each cash flow:

$$CF_t^{LA} = CF_t \cdot adj(L_t, T_t)$$

Where $adj(L_t, T_t)$ is the term-structure correction factor $\pi(L_t, T_t)$ from Session 5.

LA-PME

Kaplan-Schoar PME with both fund cash flows AND benchmark adjusted for liquidity state:

$$\text{LA-PME} = \Sigma D_t^{LA} / R_t \div \Sigma C_t^{LA} / R_t$$

*Captures opportunity cost relative to a *liquidity-equivalent* public market position.*

Computing both requires the L(t) path — empirically observable from secondary market data.

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When to use which metric: a decision framework

Use case	Recommended metric	Why
GP fundraising marketing	**IRR (still)**	Industry standard; LPs expect it
LP investment committee evaluation	**PME + IRR + DPI**	Balanced view; opportunity cost framing
Comparing across vintages	**LA-IRR or LA-PME**	Adjusts for regime-dependent realities
Comparing across asset classes	**LA-PME**	Standardizes for both market and liquidity
Manager skill attribution	**Direct Alpha**	Isolates alpha from timing
Risk-adjusted return (academic)	**LA-CAPM + LA-PME**	Theoretically grounded; GE-LAV consistent

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Why three alternatives, not one?

Each metric fixes a different defect of IRR.

PME (Kaplan-Schoar)

Fixes timing bias: compares to a public benchmark

LA-IRR (Asaf)

Fixes state bias: adjusts cash flows for L_t-dependent π

LA-PME (Asaf)

Combines both: state-adjusted, benchmarked

None replaces IRR

All three are complements; IRR is still the headline

Choice depends on use

LP screening (PME) · GP comparison (LA-IRR) · academic (LA-PME)

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Session 7 summary

What we accomplished today

1. PME (Kaplan-Schoar 2005) provides opportunity-cost framing vs. public markets
2. Direct Alpha is a refined PME that isolates manager skill from market timing
3. LA-IRR and LA-PME extend these with liquidity-state corrections — GE-LAV's contribution
4. No single metric does everything: use combinations depending on the question

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Next session

Session 8: What a correct theory must deliver — the test list for GE-LAV

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PME calculation: a worked example

Fund A vs S&P 500 over 2010-2017.

Date	Cash flow ($M)	S&P index	PME factor
Jan 2010	-100 (call)	1132	1.000
Jul 2012	-50 (call)	1379	0.821
Jan 2015	+30 (dist)	2058	0.550
Jul 2016	+80 (dist)	2174	0.521
Jan 2017	+150 (dist)	2278	0.497
Total PME	—	—	1.07

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PME = 1.07 means fund slightly outperformed S&P after adjusting for timing.

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LA-IRR: state-adjusting the cash flows

Adjustment formula and intuition.

Standard cash flow

Distribution D_t valued at face

State-adjusted CF

D_t × (1 - π(L_t, T_t)) where L_t is observed liquidity state

Effect on IRR

Distributions in stressed L are worth less; IRR drops

Stressed-period example

2008 fund distribution worth 65 cents on the dollar

Why this matters

IRR overstates skill when distributions concentrate in normal L

Adjustment for calls

Capital calls also state-adjusted; consistent treatment

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LA-PME for a 2007 vintage fund

How three metrics compare for the same fund.

Metric	Value	Interpretation
IRR (gross)	+14.2%	Looks strong
PME	0.96	Slightly UNDERperformed S&P after timing adjustment
LA-IRR	+8.7%	After state adjustment: lower
LA-PME	0.79	Lost real money vs benchmark after state adjustment
Interpretation	All four metrics together tell the full story	IRR misleads

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Practical implementation: data requirements

What you need to compute LA-IRR or LA-PME.

Cash flow schedule

Standard data — quarterly statements from GP

Benchmark series

Public-equity index (matched to strategy)

L_t estimates

From secondary market discount + macro indicators · book Ch. 5

π(L, T) calibration

Use book Table 5.2 as starting point

Software

Excel works; Python/R for sensitivity

Time to compute

Per fund: 1-2 hours after data assembled

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Common errors in LA-PME computation

Mistakes that show up in student work.

Wrong benchmark

Using S&P for buyout (use Russell 2000 or sector-specific)

Constant L assumption

Defeats the purpose — must use realized L_t

Stale calibration

Using 2008-era π(L,T) for 2020 calibration

Sign error in adjustment

Distribution adj: × (1-π), Call adj: × (1+π_call)

Outlier vintage

Single bad vintage drives LA-PME; report median + spread

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When to use which metric

Use PME when...

- Comparing GP to S&P / public market alternative
- Reporting to LP IC committee with public benchmark
- Doing simple performance attribution
- Sufficient data on the benchmark over fund's life

Use LA-PME when...

- Comparing across vintages with different L_t paths
- Stress-testing reported performance
- Diagnosing whether 'skill' is real vs. lucky vintage
- Academic research requiring state controls

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Industry adoption status

Where these metrics stand in 2025-26.

PME

Standard since Kaplan-Schoar (2005); on most LP fact sheets

LA-IRR

Used in book; growing among research-oriented LPs (CalPERS, OTPP)

LA-PME

Still early; some pension consultants experimenting (Cambridge Associates, StepStone)

Resistance

Consultancies sell IRR-based reports — switching costs

Forecast

5-10 year horizon for LA-PME to reach today's PME-level adoption

Practical advice

Compute all three; report IRR + at least PME publicly

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Bridge to Session 8

Three alternatives are not enough. We need a complete theory.

Limitation of fixes

PME, LA-IRR, LA-PME each fix one defect; not a coherent theory

Need

A unified framework that derives all three from first principles

Session 8 question

What must a 'correct theory' deliver, and is GE-LAV it?

Preview

An 8-element checklist that GE-LAV must pass

Reading for next class

Book Ch. 8 (Correct Theory Checklist)

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