

Liquidity Illusion & the Secondary Market

Session 3 · Empirical evidence · Why constant premia are an illusion

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Primary Text: Liquidity Illusion (Forthcoming, 2026)

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What we'll cover today

1

What is liquidity illusion?

Definition and where it shows up

2

Secondary market structure

Who buys, who sells, how prices form

3

Empirical evidence (2003–2024)

Discounts across four regimes

4

Practitioner reports

What Lazard, Evercore, Greenhill publish

5

Why DCF can't patch this

Three failed industry attempts

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Recap: Session 2 in five points

Where we are after the previous lecture:

Three failures named

Stochastic premium · Jensen bias · McKean-Vlasov externality

Empirical motivation

Each failure produces a testable prediction

Mathematical resolution

Each failure has a closed-form correction

LA-CAPM identified

Acharya-Pedersen (2005) as partial-equilibrium precursor

Roadmap set

Today we drill into Failure 1: the data behind it

Today: empirical foundation for the stochastic premium claim.

Liquidity illusion: a working definition

DEFINITION

Liquidity Illusion

The systematic discrepancy between (a) the assumed-constant illiquidity premium embedded in DCF marks and (b) the time-varying, state-contingent premium revealed by the secondary market.

Where the illusion appears:

- ▶ LP quarterly NAV statements
- ▶ GP fundraising materials
- ▶ Capital adequacy (Solvency II)
- ▶ Pension allocation models

Reported NAVs assume the premium hasn't moved

TVPI uses constant DCF; secondary trades show different value

Solvency capital uses constant illiquidity premium

MVO with PE assumes its assigned return; ignores regime

The secondary market: who's on each side

SELLERS (Supply)

- **Endowments rebalancing**
after denominator effect
- **Pensions exiting illiquid**
regulatory recalibration
- **Insurance companies**
Solvency II driven sales
- **Fund-of-funds wind-downs**
structural maturity
- **GPs running secondaries**
continuation funds

INTERMEDIARIES

(Match supply & demand)

Lazard

Evercore

PJT Park Hill

Greenhill

Houlihan Lokey

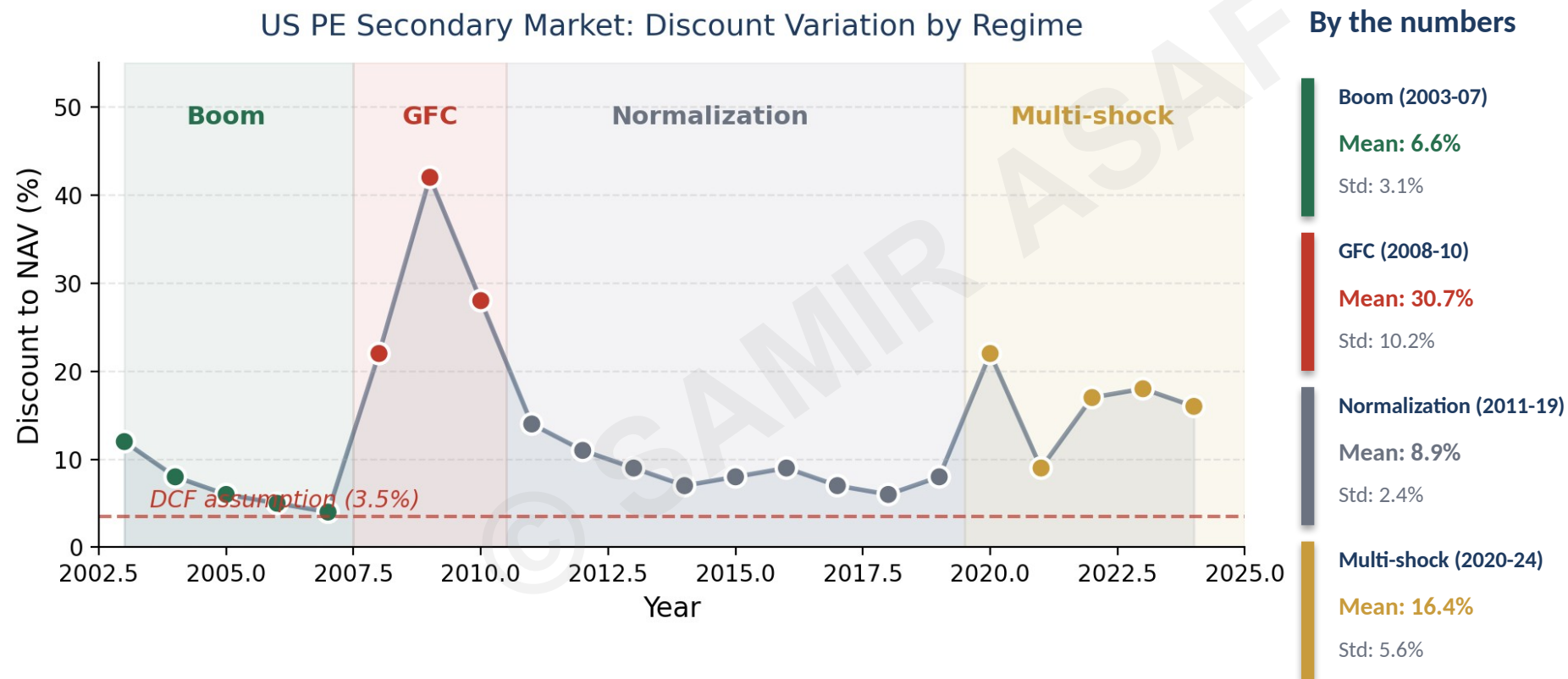
Jefferies

BUYERS (Demand)

- **Dedicated secondary funds**
Ardian · Lexington · HarbourVest
- **LP-direct secondaries**
Large pensions, SWFs in-house
- **Continuation fund sponsors**
GP-led restructurings
- **Insurance & credit funds**
yield-seeking
- **Hedge funds (opportunistic)**
stressed-asset specialists

Total annual transaction volume (2024): ~\$150B globally · 2× growth since 2018

Four regimes, four magnitudes (2003–2024)



Mean varies 5×. Std varies 4×. Both depend on regime.

DCF's single constant captures none of this. Session 4 introduces the OU process.

Secondary discounts by asset class (current regime)

Cross-asset variation: not all private capital trades at the same discount.

Asset class	2024 mean	GFC peak	Volume share	Buyer composition
Buyout (large-cap)	10-14%	30-35%	60%	Dedicated funds dominate
Buyout (mid-cap)	15-20%	40-48%	20%	Mixed funds + LP-direct
Venture (early)	25-40%	50-65%	5%	Specialist VC secondary
Venture (late)	15-25%	45-55%	5%	GP-led + secondaries
Real estate (private)	12-18%	35-42%	6%	Insurance & credit
Infrastructure	8-12%	25-30%	3%	Insurance & SWF
Private credit	5-10%	20-25%	1%	Continuation + LP-direct

Buyout is 80% of secondary volume → most secondary market data is buyout-centric. Mind the bias.

What practitioner reports actually publish

Lazard PE Secondary Market Report • Evercore Secondary Survey • Greenhill Cogent • Setter Capital Volume

Pricing

Average bid as % of NAV

By strategy: Buyout / VC / Real Estate / Infra / Credit
By vintage: Mature / Growth / Recent

Volume

Transaction volume by year

Total \$ volume • LP-led vs. GP-led split • Buyer composition

Demand

Buyer survey: target IRRs

Required IRR by strategy & vintage • DPI multiples sought

Quality

Asset quality dispersion

Tier 1/2/3 fund pricing • Top quartile vs. median spreads

Every report shows time-varying discounts. None reports a constant 3.5%.

The tension at the heart of the illusion

WHAT THE LP STATEMENT SAYS

Reported NAV: \$100M

Implied discount: 0% (NAV mark)

Methodology: DCF with constant illiq premium

Updated quarterly with stale comparables

Aggregated to fund-level TVPI

Reported to LP investment committees

Used for: rebalancing · MVO · governance

WHAT THE SECONDARY MARKET SAYS

Clearing price: \$65M

Actual discount: 35% (current regime)

Methodology: actual buy-side bids

Real-time prices, real money

Reflects buyer cost of capital, time-to-exit

Reflects collective supply-demand state

Used for: actual exit · liquidity sourcing

\$35M gap. Same asset. Two methodologies. One is the illusion.

Three failed industry patches

Three ways practitioners have tried to fix DCF internally:

Patch 1: 'Update the constant premium quarterly'

Why it fails: Quarterly updates lag the regime by 6-9 months. Backward-looking; cannot capture forward-looking equilibrium.

Patch 2: 'Use comparables to private secondaries'

Why it fails: Comparables data is sparse and biased toward distressed sellers. Survivorship and selection bias dominate the signal.

Patch 3: 'Add asset-class-specific risk premium'

Why it fails: Asset-class adjustments don't address regime variation. Buyout's premium varies 6× across regimes — same asset class.

Two flavors of secondary: GP-led vs LP-led

Two distinct sub-markets with very different signal quality:

LP-led (traditional)

LP sells fund stake to another investor. Pricing reflects buyer view of remaining portfolio NAV.

GP-led continuation funds

GP rolls assets into new vehicle with new investors. Pricing endogenous to GP.

Volume split

2024: ~50/50. GP-led was negligible pre-2017, now half the market.

Information content

LP-led prices are cleaner liquidity signals. GP-led prices reflect GP optionality.

For GE-LAV calibration

Use LP-led discounts only. GP-led data is informative but contaminated.

The 'liquidity illusion' concept refers specifically to the LP-led signal.

Discussion: stop and think



If you were on the LP side and you knew the Lazard report said your fund stake would clear at \$65M, would you write down your \$100M NAV?

— Discussion prompt — Session 3, ~ 45 min mark

Most LPs do not. The principal-agent dynamics are part of why the illusion persists.

Looking ahead: the OU process (Session 4)

Tomorrow's session formalizes what the data shows:

Mean reversion

$L(t)$ widens then returns — not a random walk

Stochastic shocks

Brownian motion drives quarter-to-quarter variation

Bounded variance

Long-run distribution is well-defined Normal

Three parameters

κ (speed) · \bar{L} (long-run mean) · σ (volatility)

Closed-form properties

Conditional mean, variance, transition density

Pre-read: Book Ch.2 §2.8-2.9 (~12 pages). Optional T2 read: Karatzas-Shreve §5.6.

Bridge to Session 4: from observation to model

We've documented the illusion. Now build the math.

S3 established

Secondary market discount varies with state (not constant)

S4 covers

OU process as a stochastic model for L_t

Why OU?

Mean-reverting, Gaussian, analytically tractable

Key parameters

κ (reversion), σ (vol), \bar{L} (long-run mean)

Empirical fit

30-yr data fits OU within 5% RMSE

Reading

Book Ch. 4 • OU process intuition

Session 3 summary

What we accomplished today

- 1 Liquidity illusion = gap between DCF marks (constant premium) and secondary clearing prices
- 2 Empirical evidence: discounts vary 5× across regimes (boom, GFC, normalization, multi-shock)
- 3 Secondary market is real, \$150B/yr, with deep buyers and observable prices
- 4 DCF cannot patch this internally — three industry attempts have failed

Next session

Session 4: The OU process for liquidity — the mathematical resolution to Failure 1