Discussion of Baik and Hillenbrand (2026)

"Markets versus Managers: Valuation Informativeness in Public and Private Equity"

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Burton Conference 2026

Recap

Question: Are market prices or manager marks more informative about value?

Methodology:
- 2,727 MSCI buyout holdings, vintages 1998–2016, exited by 2022Q4
- Cash-flow-matched levered value stocks
- Squared correlation between interim and exit performance

Main Findings:
- PE marks are as informative as public market prices
- Public returns mean-revert (VR < 1); PE returns are persistent (VR > 1)

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- Big questions, answered with one simple measurement
- Strong, clear claims that the evidence is built to support

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Plan for Discussion
1. Implicit Assumptions in Empirical Exercise
2. Framing and Structure of the Paper

Comment #1: Implicit Assumptions in Empirical Exercise

Stylized Benchmark (1/2)

Notation

- i: PE holding; j: public holding (matched proxy)
- t: age at valuation; T: exit; $s = 1, \ldots, T$: period
- $C_{i,0}$: entry cost; $F_{i,t}$: value given all information at t
- $u_{i,s}$: news in period s, with variance $\sigma^2_{\mathrm{PE}}(s)$

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Valuations

- $\log F_{i,s} = \log F_{i,s-1} + u_{i,s}$
- $\log M_{i,t} = \log F_{i,t} + e^M_{i,t}$: manager mark (observed)
- $\log P_{i,t} = \log F_{i,t} + e^P_{i,t}$: market price (unobserved)
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Exit

- $\log D_{i,T} = \log F_{i,T} + \eta_i$: sale price
- $\log D_{j,T} = \log F_{j,T} + \eta_j$, with $D_{j,T} = P_{j,T}$

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Interim Return

- $r^M_{i,t} = \log\left(M_{i,t}/C_{i,0}\right) = \sum_{s \le t} u_{i,s} + e^M_{i,t}$ and $r^P_{i,t} = \log\left(P_{i,t}/C_{i,0}\right) = \sum_{s \le t} u_{i,s} + e^P_{i,t}$

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Exit Return

- $r_{i,T} = \log\left(D_{i,T}/C_{i,0}\right) = \sum_{s \le t} u_{i,s} + \sum_{s > t} u_{i,s} + \eta_i$
- $r^F_{i,T} = \log\left(F_{i,T}/C_{i,0}\right) = \sum_{s \le T} u_{i,s}$

Stylized Benchmark (2/2)

Squared correlation across holdings at the same age t

$$\mathrm{Corr}^2(r_{i,t}^M, r_{i,T}) = \underbrace{\mathrm{Corr}^2(r_{i,t}^M, r_{i,t}^F)}_{I_{\mathrm{PE}}^M} \cdot \underbrace{\frac{\mathrm{Var}(r_{i,t}^F)}{\mathrm{Var}(r_{i,T}^F)}}_{\lambda_{\mathrm{PE}}} \cdot \underbrace{\frac{\mathrm{Var}(r_{i,T}^F)}{\mathrm{Var}(r_{i,T})}}_{\psi_{\mathrm{PE}}}$$

- I_{PE}^M: valuation informativeness (the goal of the paper)
- $\lambda_{\mathrm{PE}} = \sum_{s \le t} \sigma_{\mathrm{PE}}^2(s) / \sum_{s \le T} \sigma_{\mathrm{PE}}^2(s)$: share of news resolved by t
- ψ_{PE}: share of exit variance that is not noise

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Ideal: same asset i, same exit

$$\frac{\mathrm{Corr}^2(r^M_{i,t}, r_{i,T})}{\mathrm{Corr}^2(r^P_{i,t}, r_{i,T})} = \frac{I^M_{\mathrm{PE}}}{I^P_{\mathrm{PE}}}$$

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Paper: proxy j in the denominator

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The Interim Proxy

if the PE firms traded on the stock market,
would the market price them as well as it prices the matched public firms?

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Interpretation

- I^P_{PE}: how informative a market price would be for the PE assets, had they been listed (never observed)
- I^P_{pub}: how informative market prices are for the matched public holdings
- Asks whether the market prices PE-type firms as well as it prices levered value stocks

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Supporting Evidence

- **Same type of firm**
  - Cheap, cash-rich firms: top quintile of EBITDA/EV
  - Similar GICS sector shares
- **Same investment profile**
  - Holding period: mean 6.08 vs. 6.17 years
  - Cash-flow duration: mean 3.95 vs. 4.17 years
  - Exit IRR and TVPI

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Why it may not be equal to 1

(1) Listed PE-type firms may attract less information production than the proxies

- Listed firms have analyst coverage, quarterly disclosure, and short sellers
- Matching on cash flows may not match on what drives information production

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- GPs may buy companies precisely because the market misprices them

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Suggestion #1a: How do the correlations vary with information production?
- Split the proxies by analyst coverage (I/B/E/S), share turnover, and size
- Alternatively, match the proxies on predictors of coverage that are observable for PE holdings: entry size, sector, and leverage

Timing of News

By time t, has the same share of the eventual outcome been revealed for both samples?

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Interpretation

Asks whether news about PE and public holdings arrives on the same schedule

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Supporting Evidence

- Matched holding period, duration, and payout timing
- Same vintages and calendar years
  - Macro shocks (e.g., 2008) hit both samples at the same age

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When will this not be equal to 1?

(1) The GP creates news early

- PE firm A: the GP closes two plants and replaces the CEO in year 1; the outcome is settled by year 2
- Public stock B: same five-year return, but industry, input-cost, and competitor news arrives evenly
- At year 2, $\lambda_{\mathrm{PE}} > \lambda_{\mathrm{pub}}$: the GP mark looks informative because less news remains

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Suggestion #1b: Test whether early news creation raises the correlation

- Within the public sample, flag holdings with GP-like events in year 1: CEO turnover, activist 13D filings, large restructurings
- Are correlations higher for these holdings?

Noise in Exit Prices

is the exit outcome an equally clean read of true value in both samples?

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Asks whether PE sale prices and public exit prices are equally noisy

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Supporting Evidence

- Both exits are transaction prices: someone actually paid them
  - PE: exit value is realized cash, from distributions only
  - Public: exit value is the stock price on the exit date
- Both spread exit value over several dates through partial distributions, which averages out some noise

Noise in Exit Prices

is the exit outcome an equally clean read of true value in both samples?

$$\frac{\mathrm{Corr}^2(r_{i,t}^M, r_{i,T})}{\mathrm{Corr}^2(r_{j,t}^P, r_{j,T})} = \left(\frac{I_{\mathrm{PE}}^M}{I_{\mathrm{PE}}^P}\right)\left(\frac{I_{\mathrm{PE}}^P}{I_{\mathrm{pub}}^P}\right)\left(\frac{\lambda_{\mathrm{PE}}}{\lambda_{\mathrm{pub}}}\frac{\psi_{\mathrm{PE}}}{\psi_{\mathrm{pub}}}\right)$$

When will this not be equal to 1?

(1) Different trading mechanisms

- Public stock D exits on an index-rebalancing day; selling pressure moves the price by 8%
- PE firm E sells after a three-month auction with three bidders and due diligence
- Then $\psi_{\mathrm{pub}} < \psi_{\mathrm{PE}}$: the public exit price is noisier, so the public correlation falls
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Suggestion #1c: Sensitivity to Measurement of Terminal Price

- Public: Use the average price over the year after T
- PE: Compare the correlations across exit routes (IPO, strategic sale, sponsor-to-sponsor)

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Suggestion #1d: Match the statistic to the framework
- Lead with Pearson on log multiples rather than the rank correlations

Comment #2: Framing and Structure of the Paper

Research Question

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Much of the paper's empirical exercise focuses on Q2 rather than Q1.

Suggestion #2a: Sharpen the framing of P1

- Perhaps open with why marks matter for LP monitoring, fundraising, and secondaries

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Suggestion #2c: Explain the heterogeneity you already have

- In addition to vintage and horizon, (i) investor sentiment, (ii) liquidity, (iii) difficulty of valuations (e.g. intangible-heavy sectors)

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Suggestion #2c: Drop the model, or make it predict something new

- If dropping the model, I would suggest adding the reduced-form ingredients in the framework section of the paper
- If predicting something new, I would suggest modeling the GP's reporting incentive directly to derive cross-sectional predictions

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- Clean framework that needs only interim valuations and realized cash flows

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- **Punchline**: PE marks are as informative as public prices, once matched on cash flows

- **A few suggestions for future iterations:**
  - Compare the same asset, or bound I^P
  - Match the timing of news, and treat the exit as a valuation, too
  - Modifications to framing and structure of the paper

- **A few questions prompted by the paper for the future:**
  - If one GP matches a whole market, what is the market for?
  - If marks are as informative as prices, why do secondaries trade at discounts to NAV?
  - Would listing a PE firm make its value more or less knowable?

Looking forward to the next version!