The Price is Right

An AI-Enabled Valuation and Benchmarking Platform


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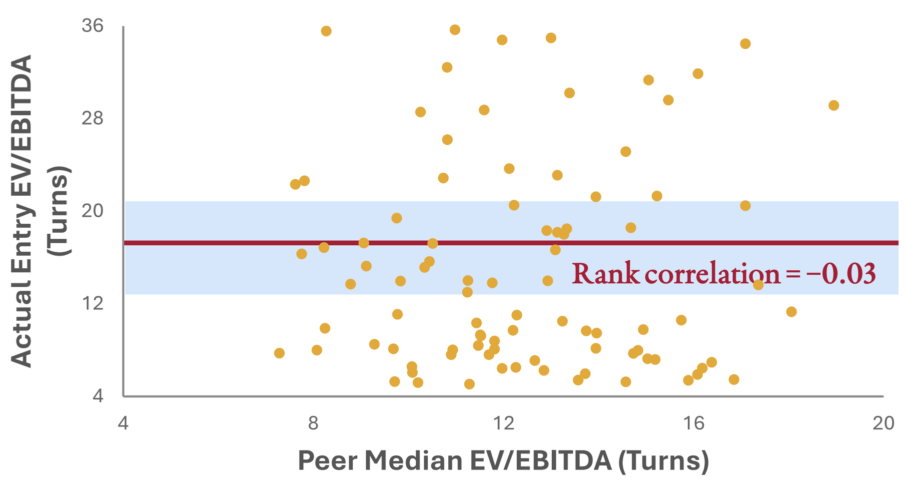
01 THE PROBLEM

The "right" multiple is among the noisiest number in finance

Current Valuation Process

Currently, deal teams use **peer medians** to estimate the valuation (multiple; EV/Revenue or EV/EBITDA) of a company they are looking to purchase. The correlation between Advent's entry multiples and these peer medians is almost 0.



Current Benchmarking Process

Manual and slow

Reviewing peers and metrics manually is **tedious and not exhaustive**.

Different every time

Every team benchmarks its own way, creating **recency and availability bias**.

No sanity check

No systematic indication that a proposed valuation or benchmark is fair given public or private data.

02 METHODOLOGY

An agentic workflow grounded in market evidence

10 AGENTS · 4 PHASES

DEAL MEMO

1 **PREPARE** — **Extracts** key facts from the deal memo

2 **GATHER** — **Pulls public data** from CapIQ and builds peer set

3 **ANALYZE** — **Benchmarks** the price, **predicts** fair value

4 **COMMUNICATE** — Turns findings into an **IC-ready report & deck**

IC REPORT

FOR THE DEAL TEAM
Widen peer net, systematically sanity-checks peers and their credibility

FOR THE IC
See if **valuation is too high or low** given public market, peers, and past

03 THE BENCHMARKING TOOL

38,000 public companies filtered to top 25 best peers

31% overlap with credible manually selected peers

+21% net-new credible peers

36,000 → *200-500* → *Top 150* → *~100* → *Top 25*

1 · All companies
Every public company in the CapIQ universe.

Target: Sports-apparel co.

2 · Industry + Geography Filter
Sells clothing in North America + Europe.

lululemon
Nike | adidas | tapestry
× Garmin — *sports tech*
× asics — *geography*

3 · Business similarity
AI embeds business descriptions, cosine similarity between target *t* & peer embeddings *p* keeps closest.

```
similarity = (t · p) / (‖t‖ × ‖p‖)
```

× Moncler, Canada Goose — *luxury outerwear*

4 · P&L profile
Scores how close each peer's financial metrics are to the deal.

```
pnl = 1 − percentile_rank
(√(Σ weight × (deal_zscore − peer_zscore)² ÷ Σ weight))
```

× tapestry — *house of brands*

5 · Re-rank
Blends both scores with weight α for final ranking.

```
score = α·similarity + (1−α)·pnl
```

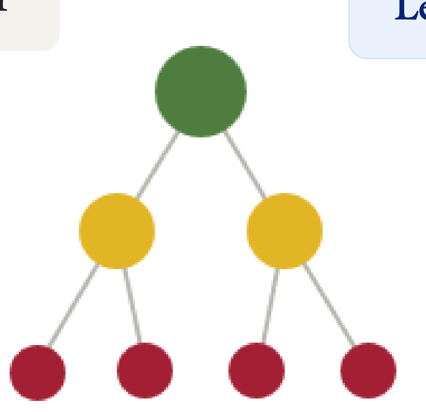
1 Nike
2 adidas
3 lululemon
…

04 SHARPER TAXONOMY

Clustering business description embeddings for better industry classification

CAPITAL IQ TAXONOMY

11	Sector
25	Industry group
74	Industry
163	Sub-industry



AFTER CLUSTERING

Level 1	17
Level 2	74
Level 3	219

A **nested K-means tree** over **Gemini-enriched business descriptions** replaces the CapIQ hierarchy so peers can be grouped more precisely by what they *actually* do.

05 THE TWO-STAGE VALUATION MODEL

P2P: Public to Private Pricing Calibration

STAGE 1 · PUBLIC MODEL

Financial Metrics — EBITDA Margin, revenue growth

Embeddings — Business description as a 32-dimensional vector

Market Mood — What public companies traded at in that quarter

Categoricals — Sector, industry, region

→ **HistGradient-Boosting** → **Public Prediction**

STAGE 2 · PRIVATE CALIBRATION

Price each deal as if public — the public model's estimate for each deal

Ridge Regression — on error between actual price and public estimate

Advent's deals

Final EV/Revenue — public estimate x error

Public data | Advent data | Output | Public data flow | Advent data flow

06 BACK CALIBRATION

Recovering the EV/EBITDA multiple from the EV/Revenue prediction

EV / Revenue (Public Prediction) ÷ **EBITDA margin** (The deal's own economics) = **Implied anchor** (Revenue-implied multiple) × **ε residual** (Ridge-CV correction) = **Final EV / EBITDA**

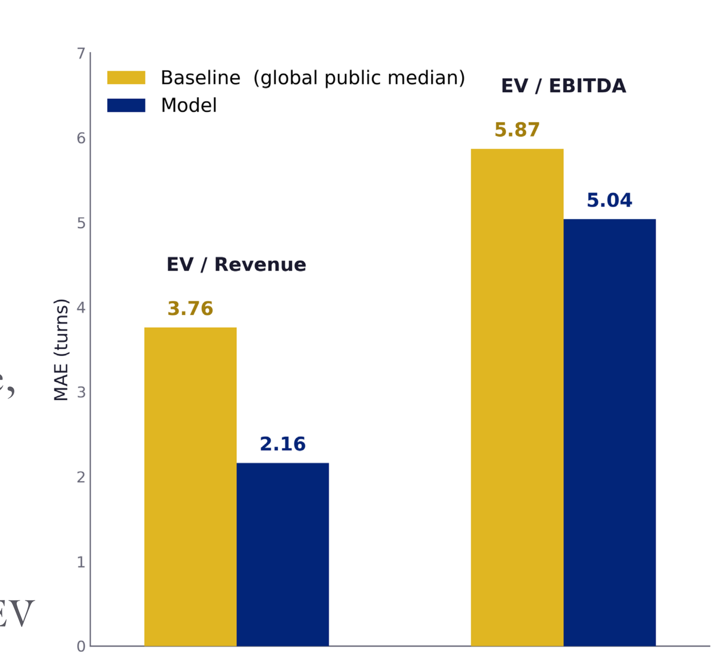
Since EV/EBITDA is **too noisy to model directly**, it's anchored to the stronger EV/Revenue model via their accounting identity and a small, interpretable correction

07 RESULTS

Improvement over baseline (MAE)

Average Improvement
+42.6% EV / Revenue, **+14.2%** EV / EBITDA

Health Care	Strongest overall, +47.5% EV / Revenue, +23.4% EV / EBITDA
IT	Second strongest, +45% EV /Revenue and +21.7% EV / EBITDA
Consumer	Most variance in performance+45.6 % EV / Revenue, +1.1% EV / EBITDA



08 BUSINESS IMPACT

How the IC workflow will transform when this scales

+$2.03B Capital deployment — through review of additional deals

$5.1B Overpayment — flagged on deals priced above fair value

+20% IRR uplift — using model's predicted purchase price

100% Specificity — all rejected deals were model-flagged