

ALT



Why private market fail informationally: Institutions, Information & Incentives

Markets only approach efficiency when information is reliable, shared, and governed with discipline.

Preface

The Myth of Efficient Prices: Information Limits in Modern Asset Pricing

In reality, **information is asymmetric, costly to produce, and often non-verifiable**. Markets are thus **endogenously incomplete**: we cannot contract on hidden effort, unverifiable signals, or tacit knowledge. Even when disclosure rules exist, **who learns what, when, and at what cost** determines how prices and beliefs move together; In practice, “time-to-reason” is scarce and uneven. When macro news hits, information arrives in correlated bursts, ricochets through mandates and models, and meets real computational limits:

When the Fed raises or cuts rates by only a few basis points, market indexes can swing 2% in a single day. That movement reflects signals being converted into provisional beliefs long before the general-equilibrium effect can be computed. If market indexes are a measure of an economy's aggregate performance and capital efficiency, are we saying investors collectively rewrote their economic outlook in just one trading session—a 2% shift in the perceived value of the future economy in a single day. Early price moves are heuristics—quick marks—because no one can immediately total up the full, general-equilibrium effects across funding costs, credit spreads, earnings forecasts, and discount rates. With similar priors embedded in the same algorithms, models, and mandates, the same signal hits at once, concentrating flows.

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Our Sources and Foundations

We at ALT lead with sources to curb narrative drift, giving you the coverage map and method before any conclusions

Core theory & information economics

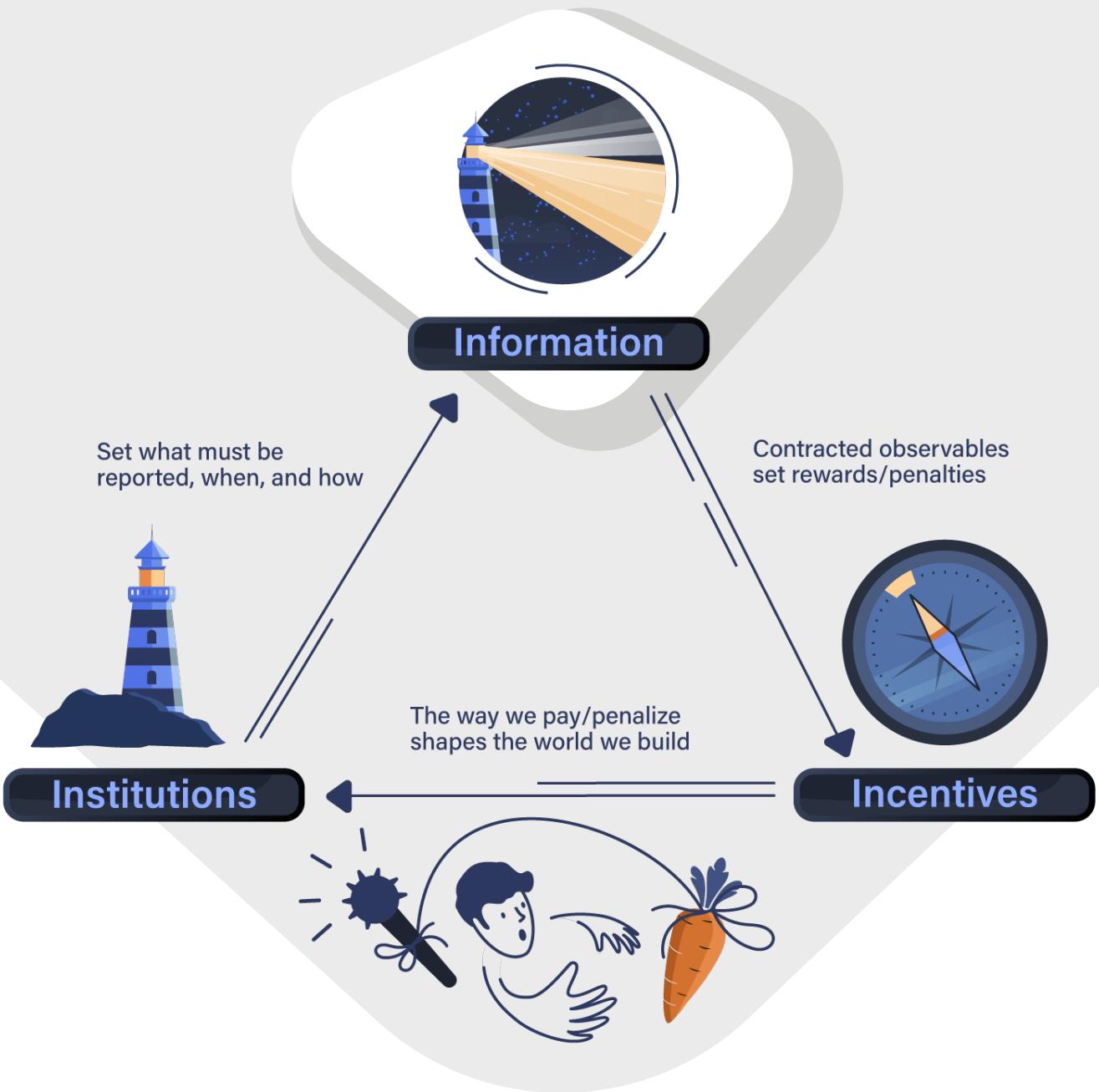
- Hayek (1945) — The Use of Knowledge in Society [*distributed info*]
- Fama (1970) — Efficient Capital Markets [*prices & information*]
- Hirshleifer (1971) — The Private and Social Value of Information [*incentives to produce info*]
- Basu (2014) — The Power and Influence of Rating Agencies [*information intermediaries*]
- Rajan (2005) — Has Financial Development Made the World Riskier? [*systemic risk*]

Private-market performance, fees, scale

- Phalippou & Gottschalg (2009) — The Performance of Private Equity Funds [*overstatement; fee mix*]
- Harris & Stucke (2012) — Are Too Many Private Equity Funds Top Quartile? [*benchmark shopping; dispersion*]
- López-de-Silanes, Phalippou & Gottschalg (2015) — Giants at the Gate [*diseconomies of scale*]
- Gornall & Strebulaev (2021) — Squaring Venture Capital Valuations with Reality [*marking vs reality*]

Benchmarks, governance & policy

- IOSCO (2013, 2019) — Principles for Financial Benchmarks [*governance; methodology; oversight*]
- World Economic Forum (2014) — Measurement, Governance & Long-Term Investing [*measurement discipline*]
- SEBI (2020) — Disclosure and Benchmarking of AIF Performance [*pooled IRR/TVPI; PME intent*]
- SEC (2022) — Private Fund Reforms, PR 2022-19 [*quarterly statements; audits; fee transparency*]
- SEC AMAC (2021) — Final Recommendations on Private Investments [*retail access; investor protection*]



Practitioner & market structure

- Marks (2017) — Lines in the Sand [*subscription lines; IRR optics*]
- Fang, Ivashina & Lerner (2015) — Direct Investing in Private Equity [*co-investment selection*]
- El-Erian (2022) — Private equity cannot avoid reckoning in markets [*cycle discipline*]

Design notes: metrics & bias

- IRR optics (time-zero, timing): Phalippou & Gottschalg (2009); Marks (2017)
- Dispersion-first reporting & benchmark shopping: Harris & Stucke (2012); IOSCO (2013/2019)

Introduction

Private markets—venture capital, buyouts, private credit, real assets—now intermediate vast pools of long-horizon capital, yet they operate with opaque, heterogeneous, and weakly governed information. Unlike public markets with regulated, investable benchmarks and standardized disclosures, private markets rely on self-reported performance, fragmented datasets, and idiosyncratic methodologies. This creates fertile ground for incentive misalignment (fee structures that reward scale over skill), metric distortions (IRR sensitivity to timing, “time-zero” assumptions, subscription-line effects), and narrative drift (benchmark shopping, selective peer sets). The result is a system where claims of outperformance are hard to verify, dispersion is under-communicated, and capital can be misallocated.

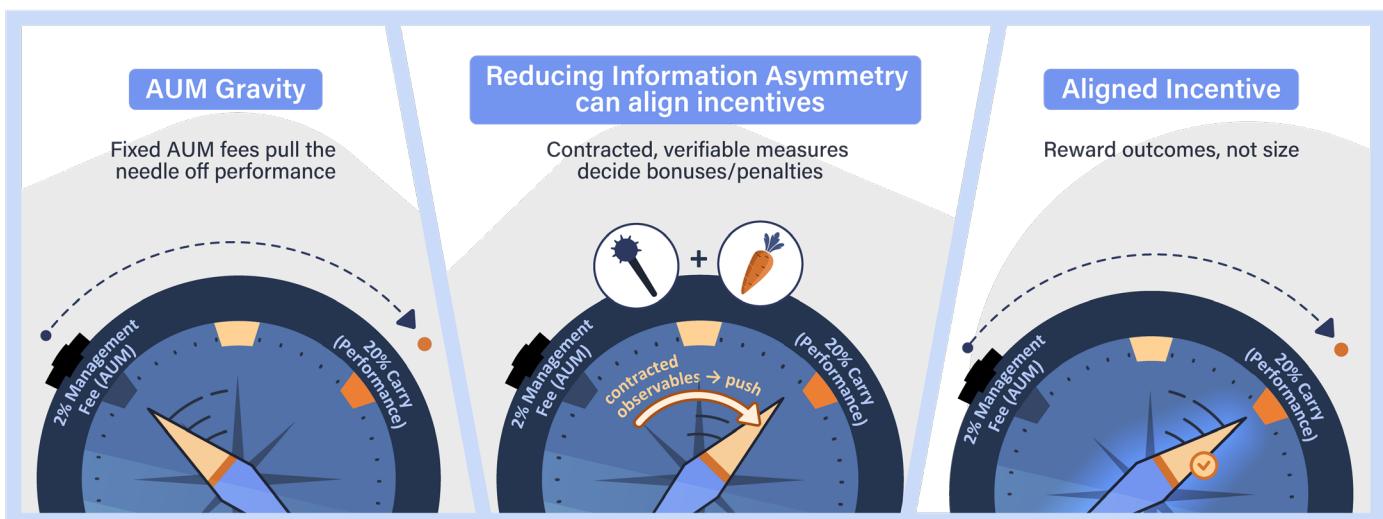
Compounding the information deficit are behavioral frictions. Anchoring on outlier IRRs and framing via favorable yardsticks can reset reference points and bias decisions away from risk-adjusted reasoning.

The paper proceeds as follows:

- 1. The Information Problem in Private Markets** — diagnoses opacity, methodological variability, and incentive conflicts.
- 2. Behavioral Biases in Benchmarking** — shows how outliers and selective yardsticks distort peer comparisons, shifting decisions away from base-rate, risk-adjusted evaluation.
- 3. Rational Choice Under Uncertainty & Information Agencies** — sets the normative objective (best risk-adjusted outcome), explains endogenous incompleteness, and motivates contracting on observables.
- 4. Conclusion** — connects the framework to focal-point and feedback-loop dynamics (Basu) and summarizing how credible, comparable information restores efficient capital allocation.

1. The Information Problem in Private Markets

Despite their growing importance, private markets today suffer from a fundamental information problem. **Unlike public markets, which rely on well-defined indices (S&P 500, etc.) and mandated disclosures, private markets lack standardized, regulated yardsticks** – a gap that **allows for exaggerated performance claims**. In practice, each private fund's performance is self-reported to its own investors, with **no common framework for reporting or oversight by financial regulators**. Current private benchmarks (often produced by commercial data providers or consultants) are not subject to the governance mechanisms seen in public markets; notably, they are **not published in compliance with IOSCO's global Principles for Financial Benchmarks**, which promote transparency and conflict-of-interest avoidance. This vacuum of standards and oversight has made private market performance metrics **highly susceptible to manipulation and bias**.



Incentive misalignment aggravates the problem. Benchmark providers for private assets are often intertwined with the industry's intermediaries (general partners and consultants), creating conflicts reminiscent of the credit rating agencies before the 2008 crisis. At the fund level, the classic **“Two and Twenty”** fee model (2% management fee and 20% carry) skews manager behavior: as private markets swelled with capital,

a significant portion of fund manager incentives came from fixed fees on assets under management rather than performance. This can reduce the natural incentive to outperform, since simply growing assets yields revenue. Furthermore, the industry's heavy reliance on **Internal Rate of Return (IRR)** as the headline performance metric introduces its own distortions. IRR, a time-weighted rate, can be **highly sensitive to timing of cash flows and is relatively easy to manipulate.** For example, using the "time zero" assumption – treating all investments as if made on day one of the fund – can artificially boost a fund's IRR without improving its actual money-multiple outcome. In short, both the **structure of fees and the choice of performance metrics** in private investing can create narratives that diverge from economic reality.

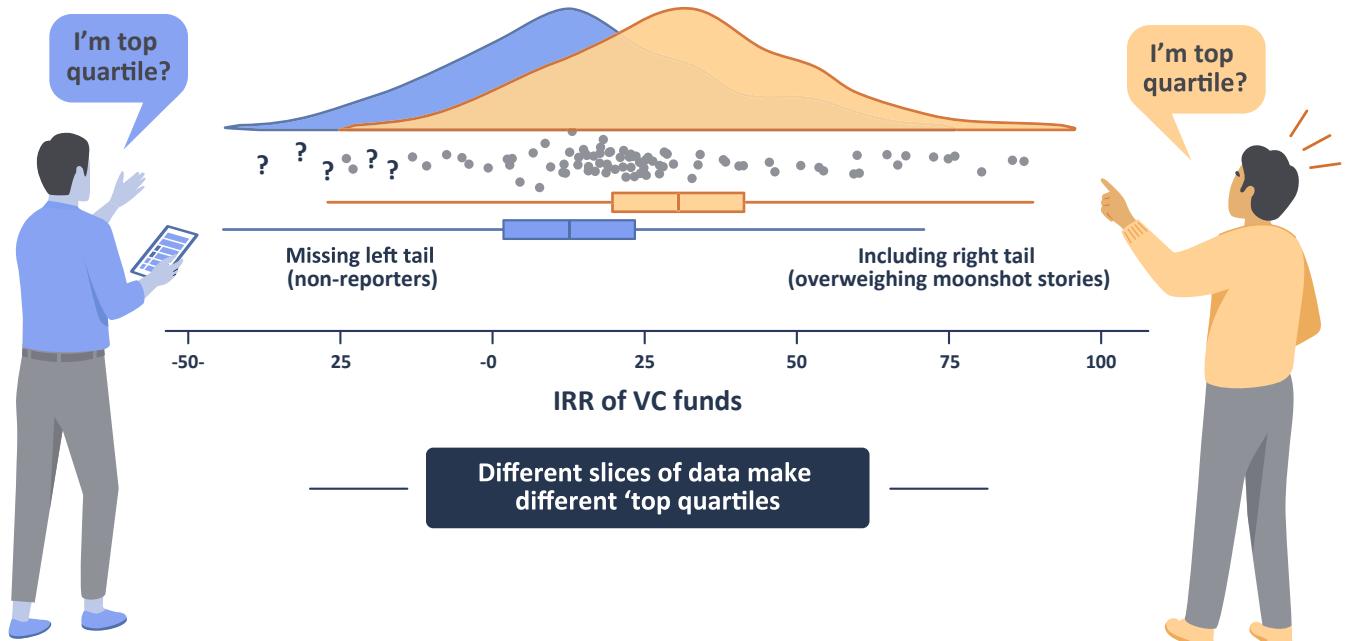
Empirical evidence underscores the severity of the information problem. **A study using three major private equity databases found that even modest differences in methodology allowed fully half of all funds to present themselves as "top quartile" performers,** an arithmetically impossible outcome. **Multiple analyses have also found an upward bias in reported private equity returns,** suggesting that self-reporting and selective data inclusion skew the aggregate benchmarks. This bias can arise from voluntary reporting (poor performers are less likely to report), as well as methodological choices that inflate results. For instance, one industry study noted that **two-thirds of the total fees in private equity go to fixed management fees rather than performance carry,** reflecting how investors have paid dearly even when alpha is elusive. Yet investors often lacked the data to challenge these fees. David Swensen warned early on that unless compensation were tied squarely to long-term performance, **manager incentives could drift and pressure would build to "reach for deals" outside a firm's expertise.** Subsequent research validated these fears: one study found that as certain institutions increased the complexity and scope of their portfolios, their **returns suffered – a diseconomy of scale in private equity.** In other words, bigger wasn't better, partly because complexity and opaque reporting masked underperformance.

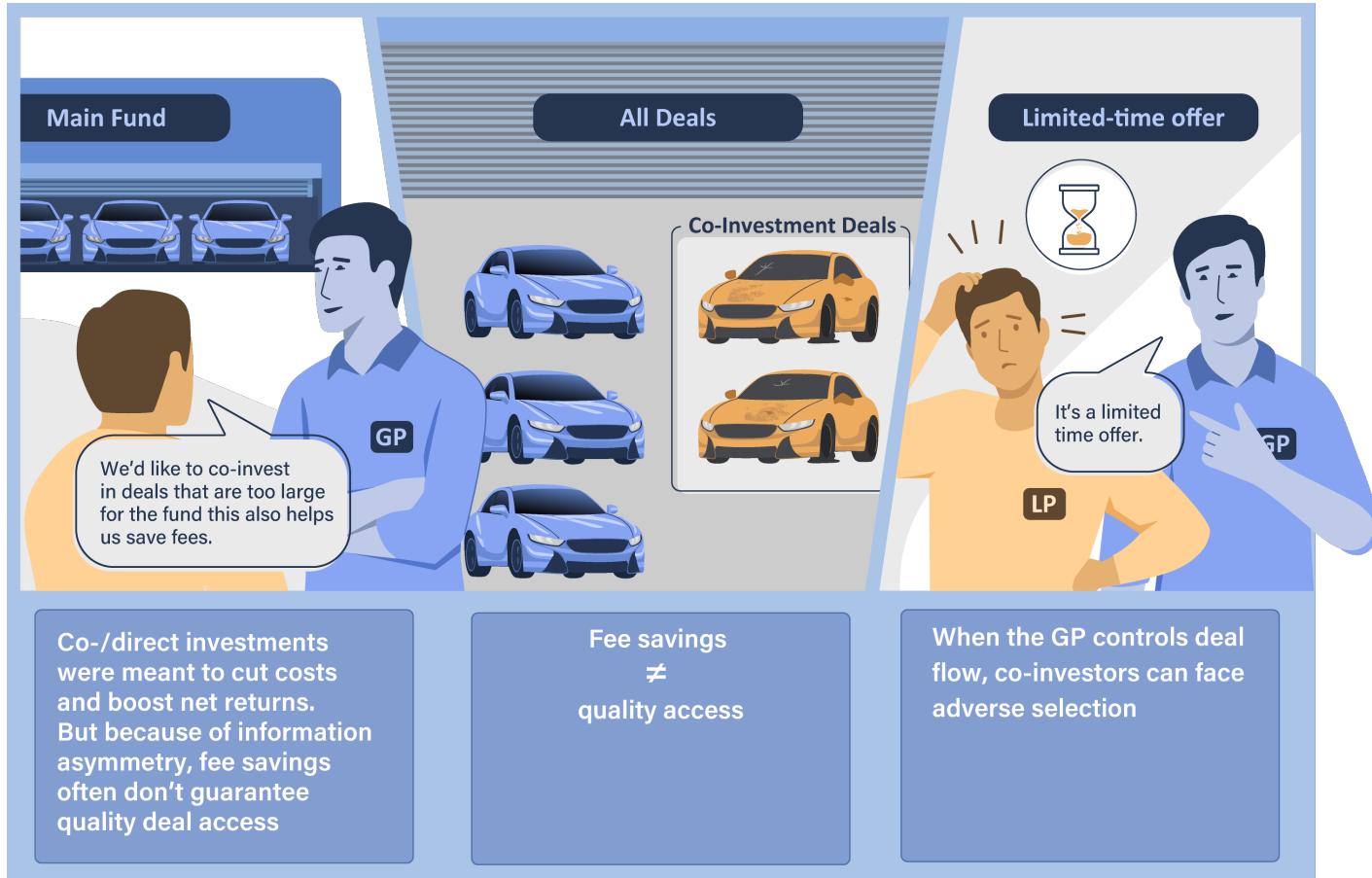
Information issues also plague the data sets used by researchers and investors. **Different limited partner (LP) surveys and databases yield markedly inconsistent results on core questions like performance persistence** – some studies find persistence of top-performing managers, others do not – largely because each data source is biased and incomplete in different ways. As one expert lamented, when attempting to publish research on private fund returns using a proprietary 15-year LP dataset, the first critique from academics is "How representative is your sample?". **No single data set covers the whole private market,** and non-random omissions (e.g.

missing the worst funds, or certain geographies) can lead to conflicting conclusions. This deepens what has been called the “private equity performance puzzle” – without a trusted baseline, even fundamental questions remain unsettled.

Several emerging trends in private markets further **heighten the need for reliable, unbiased benchmarks**. New segments such as private credit, infrastructure, and search funds are growing, and **publishing relevant & transparent performance benchmarks is paramount for sustaining dynamism across these niches**. Investors must be able to assess risk/return in, say, private debt vs. buyouts, and weigh the opportunity cost against other asset classes. Similarly, new financial innovations can distort traditional metrics: the recent proliferation of **subscription lines of credit** (temporary loan facilities that fund managers use to delay capital calls) is a prime example. These facilities smooth cash flows and can boost a fund’s IRR by front-loading investments with borrowed money, even though no additional value is created. **One consequence of using such bridge financing is a upward bias in IRR – yet current performance reporting often fails to adjust for this distortion**. Thus, an ostensibly high IRR may owe more to clever cash management than to superior investment skill.

Broken Raincloud — “Top Quartile (Depending on Where You Look)”



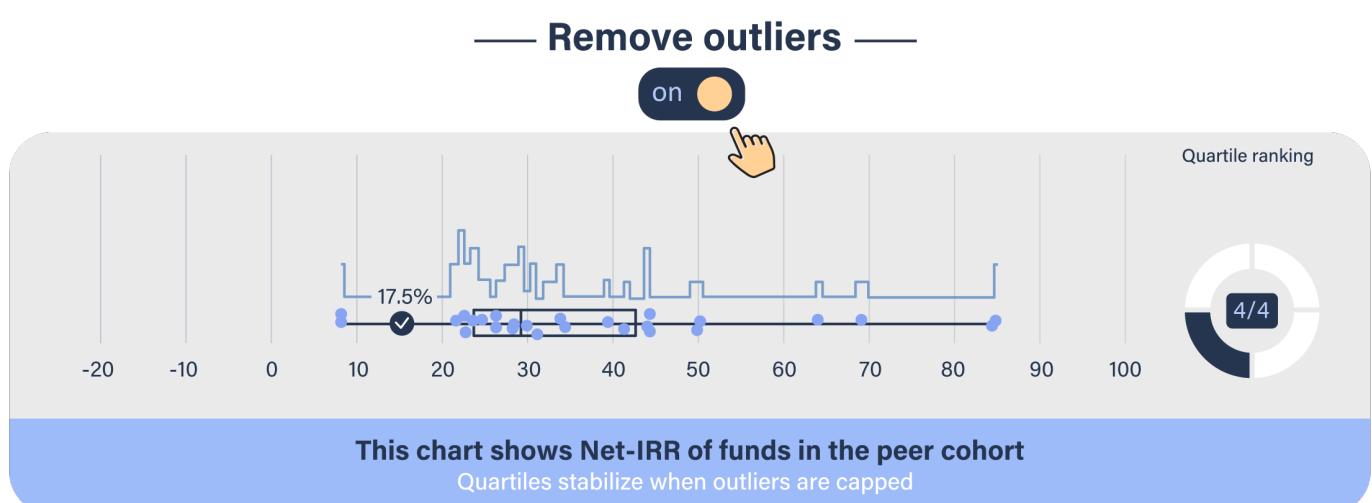
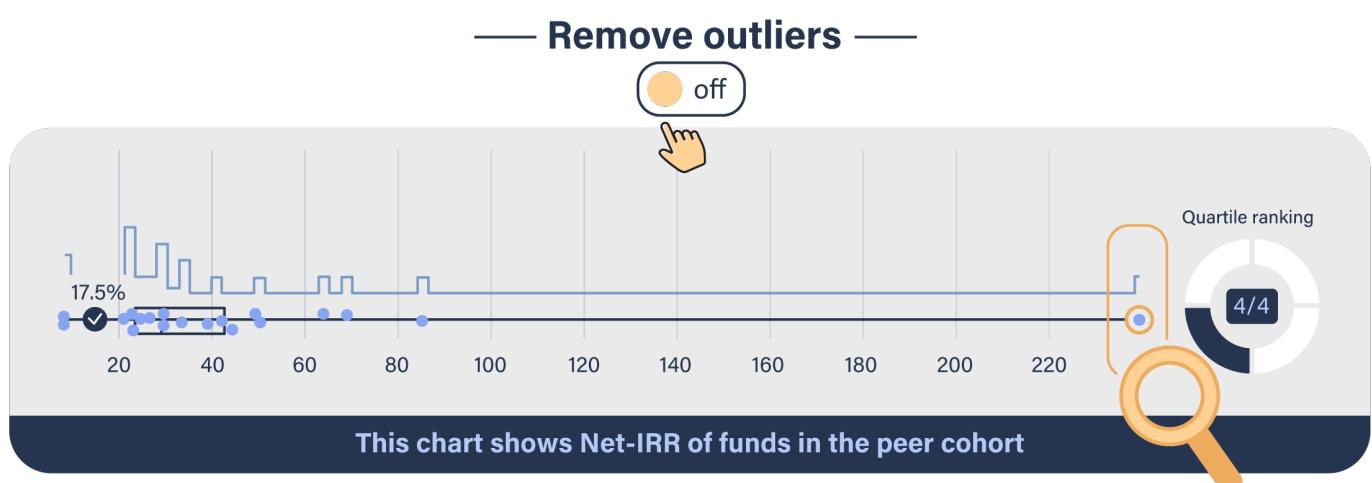


Even attempts to lower costs in private investing have run into information asymmetry problems. **Co-investment** and **direct investment** (where LPs invest alongside or instead of a GP to save on fees) were touted as ways to improve net returns by cutting fees. Conventional wisdom held that co-investors would enjoy the same deals at lower cost. However, empirical outcomes have been sobering: **co-investments tend to underperform the main funds with which they invest**, and research attributes this to adverse selection – essentially, a **“lemons” problem**. General partners, who control deal flow, may offer co-investors only the deals that they themselves find less attractive, keeping the best opportunities for their own fund. The result is **hidden risk for LPs**: by the time a co-investor reviews a deal in a hurried few weeks, they face an information disadvantage, often plowing through a data room under time pressure. As in Akerlof's classic Market for Lemons, when sellers know more than buyers, quality can suffer and unsuspecting buyers end up with subpar assets. The co-investment experience is a microcosm of private markets generally – transactions rife with information asymmetry, where one side's superior knowledge can systematically disadvantage the other.

Ultimately, the lack of trusted information in private markets has macro-level consequences. Capital cannot be allocated efficiently if investors cannot discern skill from luck or gauge true risk-adjusted performance. Indeed, **in the absence of credible information sources, the financial industry fails at its primary function of efficient capital allocation.** As economists have long noted, from Hayek and Dow to Fama, **price discovery and resource allocation rely on information.** Arrow, Akerlof, Stiglitz and others formally demonstrated that **imperfect and asymmetric knowledge can prevent markets from reaching a first-best, socially optimal equilibrium.** Private markets today epitomize this challenge: the information failure is two-fold – a lack of data on performance, and a lack of credible, neutral agencies to interpret that data. The next sections explore how biases further compound these issues, and how economic theory both explains these failures and points toward possible solutions.

2. Behavioral Biases in Benchmarking

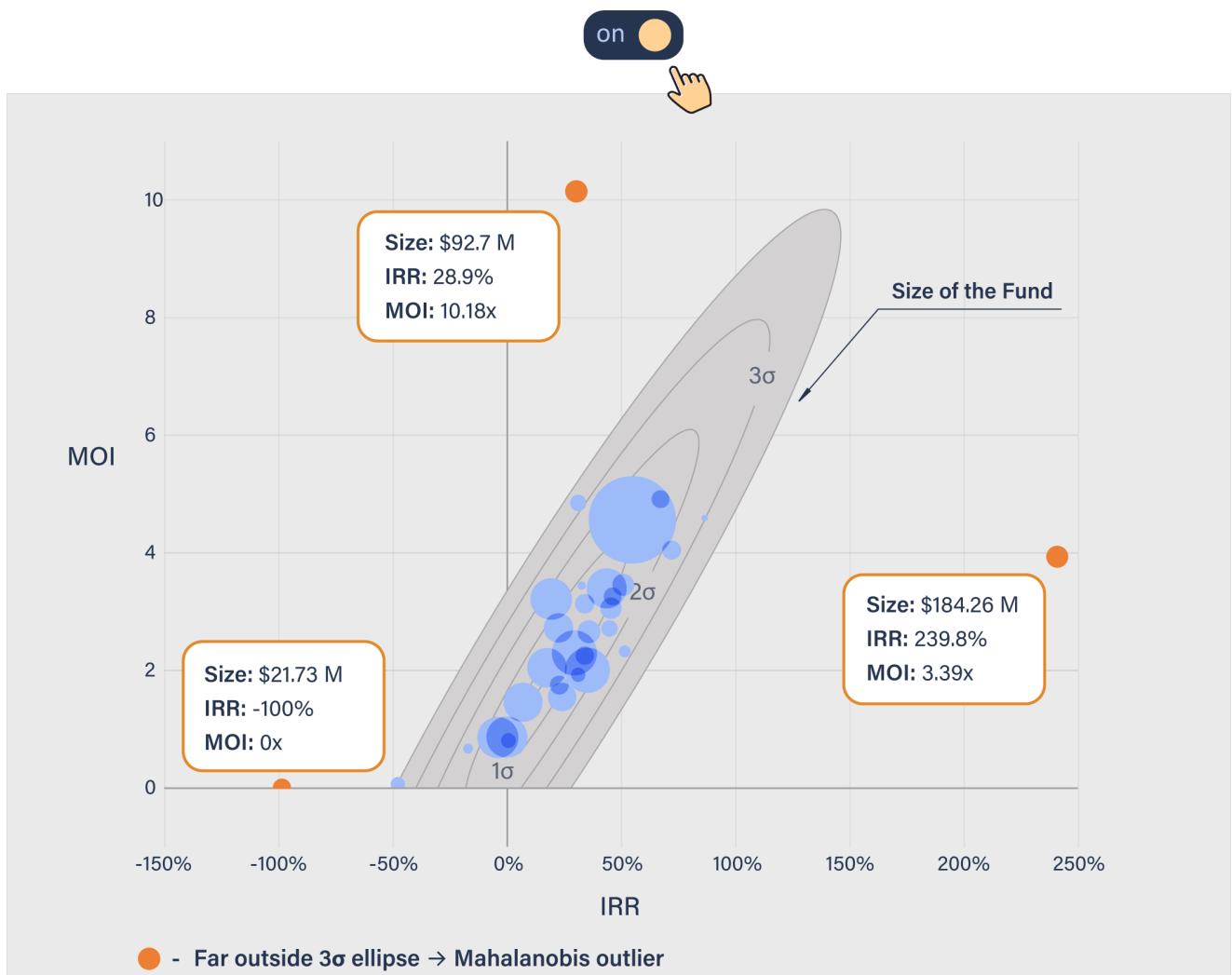
Information gaps are not the only issue – even when data is available, **cognitive biases in interpreting performance** can mislead investors and policymakers. Two pervasive biases are anchoring and framing. **Anchoring bias** occurs when people give disproportionate weight to an initial piece of information (the “anchor”) when making judgments. **Framing bias** refers to how the presentation or context of information influences decisions, even if the underlying data is the same. In private market benchmarking, these biases manifest in subtle but powerful ways.



A few outlier funds can anchor expectations and make perfectly strong 15–20% returns feel weak; Even though they're sensible on a risk-adjusted basis

One example of anchoring in performance evaluation is the impact of extreme outliers. If an LP hears that a peer fund achieved a spectacular **100% IRR**, that number can become a psychological anchor – redefining what is seen as a “good” return. Subsequent funds with, say, a **18% IRR may look disappointing by comparison, even if 18% is excellent on a risk-adjusted basis**. A few “moonshot” funds with eye-popping IRRs can reset the reference point for what’s considered normal. This is dangerous: those outliers may be the result of lucky timing or selective reporting, yet they anchor expectations and can spur fear of missing out (FOMO) among investors.

— Enable contour lines —



Outliers are identified with Mahalanobis distance on the joint IRR-MOI distribution. Filtering these points reduces anchoring to unlikely wins and stabilizes quartile ranks

In fact, **anchoring on extreme past winners can amplify investors' loss aversion and overweighting of low-probability outcomes** – classic distortions described by Kahneman and Tversky's Prospect Theory. An LP anchored to a 3x or 4x return story might reject a prudent investment with a 1.5x multiple because it feels underwhelming relative to the anchor, even if the latter is actually the better choice under uncertainty.

Framing bias in benchmarking often involves the selective choice of yardsticks or presentation methods to shape perceptions. For instance, consider how **performance quartiles** or rankings can be framed. An investment manager might highlight that their fund is “top quartile” relative to a narrow peer group of similar funds. But if one broadens the frame of reference to all funds of that vintage, the same performance might only be median. Indeed, some institutional investors have been caught **“shopping for benchmarks” – choosing whichever benchmark index makes their results look most favorable**. Our study of endowments found that reported 10-year benchmark returns varied widely (from ~7% to ~14% per annum) depending on whether the S&P 500, MSCI World, or other indices were used as the frame of comparison. By **switching between public market indices**, an endowment could portray its performance as stellar or mediocre – a pure framing effect. In one case, an endowment used an additional broad index in its report, which instantly **moved its performance up by 25 percentile points relative to peers**. Nothing about the fund’s actual results changed; only the context presented changed, exploiting the framing to claim superior status.

Another framing trick is the use of **adjustments or premiums**. In private equity, it became common for some reports to add an arbitrary fixed premium (e.g. +3%) to a public index return to create a “hurdle” for private assets – implicitly framing any performance above “public + 3%” as true alpha. This practice **introduces a non-market reference point that is always positive and non-volatile, thereby almost guaranteeing that the private investment looks favorable in comparison**. Such framing not only distorts reality (since that premium is not an actual investable alternative), it also **dulls investors' perception of risk** – the private investment may have considerably more volatility or downside risk than the smooth +3% frame implies. Similarly, **methodological framing** issues like the **“time-zero” IRR assumption** (all capital invested at period start) effectively reframe the timing of cash flows to flatter the result. This framing makes IRRs higher in some cases (when early investments did well), but it is an illusion from a benchmarking perspective, since no real investor deployed all money on day one.



**Context not just results shapes
“top quartile” claims’**

The consequence of these biases is that performance evaluation can become **untethered from economic fundamentals**. Anchoring on one big success can lead investors to chase the next big hit, ignoring base rates and downside risks (a phenomenon related to salience bias as well). Framing can make a middling performance look outstanding or vice versa, depending on how it's presented, thereby **swaying capital flows based on presentation rather than substance**. Over time, these distortions can feed back into manager behavior: if everyone is judged on IRR, managers will optimize IRR (via quick flips, use of leverage, etc.) at the expense of long-term value. If everyone is benchmarking to a conveniently chosen index or adding arbitrary hurdles, true risk-adjusted performance becomes obscured.

It is worth noting that **these biases persist**

even among sophisticated institutions, and can be reinforced by herd behavior. For example, if most GPs highlight IRRs and rank themselves against self-serving benchmarks, any LP who pushes back is at a disadvantage in marketing or might appear overly critical. Thus, biased framing becomes the industry norm. The lack of an authoritative, independent benchmark makes it hard to break this cycle. Investors may even be aware of the biases but feel they have no alternative reference.

In summary, anchoring and framing biases in private market reporting act as “fog” on performance signals, making good decisions harder. They complement the information gaps discussed earlier: even where data exists, its interpretation is skewed. The next section revisits the foundation of how decisions should be made under uncertainty, providing a foil to these behavioral pitfalls. By understanding rational decision-making and its requirements, we further illuminate what is missing in today's private market information landscape – and what an effective information agent must restore.

3. Rational Choice Under Uncertainty

— A Utility-Maximizing Frame for Institutional Portfolios

In institutional investing, the aim is not “highest IRR at any cost,” but the best **risk-adjusted** outcome across plausible futures. Rational choice framework formalizes this: evaluate **distributions** rather than points (shape, tails, bad-state exposure), **price states** with a stochastic discount factor (Arrow–Debreu), and select portfolios that **maximize expected utility** subject to downside constraints.

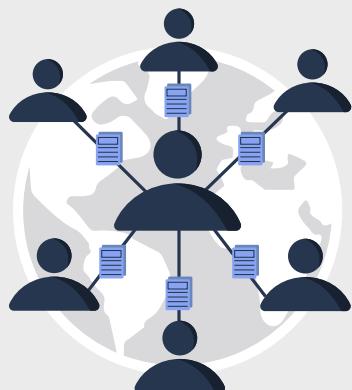
Kenneth Arrow's fundamental work explains why markets rarely deliver this ideal unaided. In the textbook world, complete markets let us write contracts for every contingency. In reality, **information is asymmetric, costly to produce, and often non-verifiable**. Markets are thus **endogenously incomplete**: we cannot contract on hidden effort, unverifiable signals, or tacit knowledge.

— Why markets don't do this alone —

Real markets are endogenously incomplete because there are intrinsic limits to information revelation

Why the textbook “complete markets” world doesn’t exist in practice

Complete markets



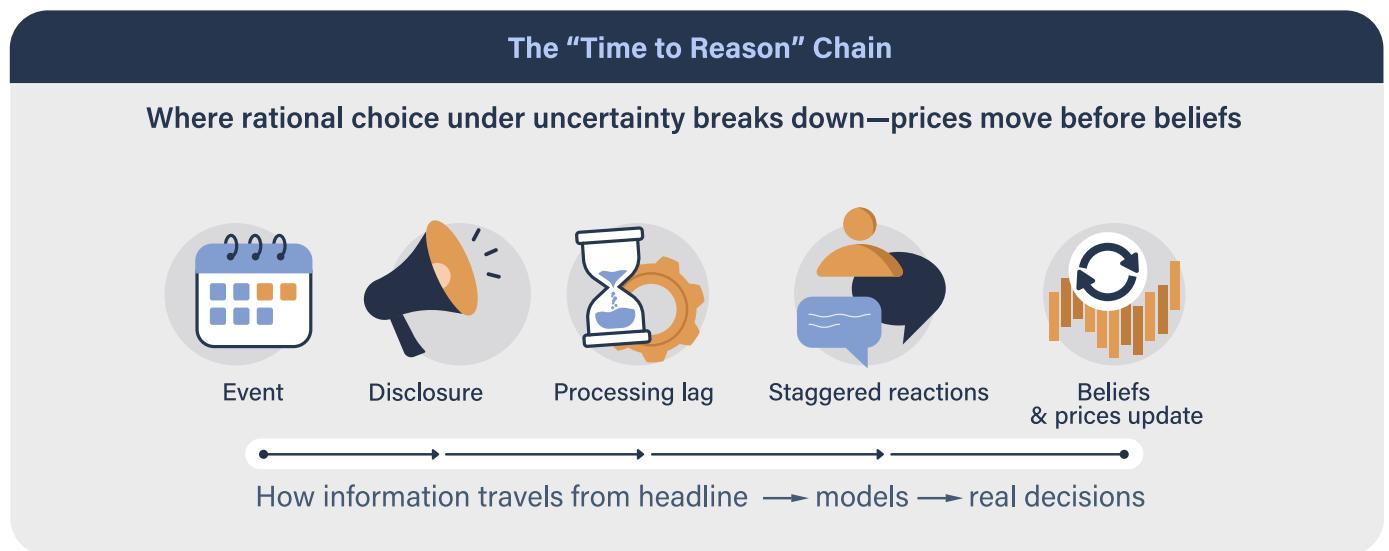
All contingencies contractible

Real markets



Information is asymmetric, costly, often non-verifiable

Even when disclosure rules exist, **who learns what, when, and at what cost** determines how prices and beliefs move together; In practice, “time-to-reason” is scarce and uneven. When macro news hits, information arrives in correlated bursts, ricochets through mandates and models, and meets real computational limits:



When the Fed raises or cuts rates by only a few basis points, market indexes can swing 2% in a single day. That movement reflects signals being converted into provisional beliefs long before the general-equilibrium effect can be computed. If market indexes are a measure of an economy's aggregate performance and capital efficiency, are we saying investors collectively rewrote their economic outlook in just one trading session—a 2% shift in the perceived value of the future economy in a single day. Early price moves are **heuristics**—quick marks—because no one can immediately total up the full, general-equilibrium effects across funding costs, credit spreads, earnings forecasts, and discount rates. With similar priors embedded in the same algorithms, models, and mandates, the same signal hits at once, concentrating flows.

Information economics helps explain why: each macro signal hits the same algorithms, models, and mandates—built on similar prior beliefs—simultaneously, bunching informational flows instead of diversifying them. No trader or supercomputer can instantaneously solve the full general-equilibrium effect of a rate change across funding, credit, and earnings chains; early responses are heuristic placeholders. Beneath the surface, financial infrastructure remains fragmented—**independent data pipes, legacy**

risk systems, misaligned incentives—so even if individual actors behave rationally, their aggregation is not. Early Price discovery thus reflects uncorrelated approximation, not collective understanding: a reminder that efficient allocation still requires institutions that slow, verify, and translate information before capital commits.

The upshot: **left alone, private markets will not spontaneously generate the comparable, unbiased information a rational allocator needs.**

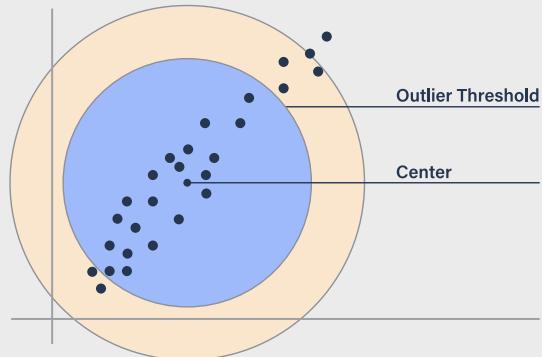
That gap is exactly where **information agencies** belong. Their economic function is to (i) **produce and verify information** at scale (overcoming per-investor learning costs), (ii) **disseminate it as a quasi-public good** (reducing asymmetry), and (iii) **design contracts and metrics around observables** when primitives are unverifiable. Concretely, that means using **parametric proxies** and auditable rules—pay on audited cash flows and peer-adjusted outcomes rather than on easily gamed IRR vintages; embed **clawbacks/malus** when later information reveals error; standardize **since-inception horizons**, inclusion criteria, and public-index references so like is truly compared with like.

Because information is produced—not given—**governance beyond boards** matters. Credible commitment devices (pre-committed dashboards, fixed disclosure windows, versioned “freeze-dates,” IOSCO-style methodology transparency) **limit narrative drift and benchmark shopping**, and turn benchmarks from marketing artefacts into decision instruments. Equally important is **distribution integrity**: density views (KDE/raincloud) to surface sample depth and dispersion; **IRR-MOIC consistency screens** (e.g., Mahalanobis checks) to flag timing artefacts; **winsorized tails** to prevent a handful of moonshots from

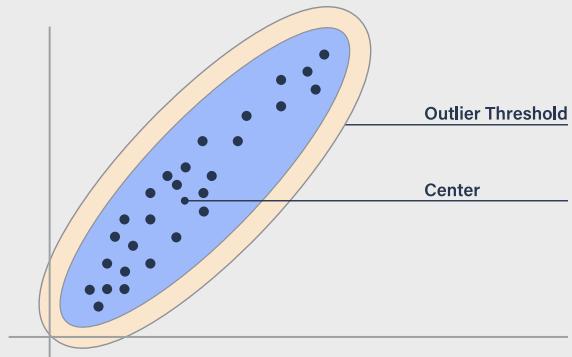
How Information Bottlenecks Skew Prices

Who learns what, when and at what cost shifts prices and beliefs





Circular threshold treats every direction the same and ignores the IRR-MOIC correlation — odd combinations can slip inside



Elliptical threshold aligns to the data's covariance, so the same outlier points fall outside and are correctly flagged

Why Mahalanobis (not Euclidean)?

re-anchoring the cohort's "normal." These steps **counter anchoring and framing biases** that otherwise derail rational evaluation.

Information agencies also play a coordination role. In environments with strategic complementarity (capital follows capital), a credible benchmark becomes a focal point: it coordinates expectations on economically meaningful targets (e.g., net value-add versus public markets at common horizons) rather than on cosmetic quartile claims. Used well, this focal power improves welfare—it guides flows toward managers who deliver risk-adjusted surplus. Used poorly, it can entrench surface metrics. Hence the imperative for neutrality, auditability, and conflict-free incentives.

Put together: **rational choice sets the objective; Arrow's information economics explains why markets miss it; information agencies supply the missing institutional technology.** By making performance **comparable, auditable, and distribution-aware**, they move private markets closer to efficient outcomes in the face of uncertainty—where capital is allocated on risk-adjusted merit, not framing, anchoring, or opacity.

4. Conclusion & Forward Linkage

Private markets are at an inflection point. Years of asset growth now face scrutiny over **whether value is real, measured consistently, and fairly shared**. The binding constraint is an **information deficit**—no reliable, standardized, unbiased performance base—fueling misaligned incentives and letting **anchoring/framing** crowd out rational, risk-adjusted choice. Until that plumbing is fixed, transparency and trust will lag well-functioning markets.

The way forward is institutional, not merely data-gathering. Drawing on Arrow, **asymmetric, costly, and non-verifiable information** leaves markets **endogenously incomplete**; the cure is **produced, verified, comparable information** with governance that resists narrative drift. A neutral information agency—Alt Indices or equivalent—can replace fragmented storytelling with **auditable & transparent benchmarks** that travel across strategies, vintages, and geographies.

Weaving together the insights from theory and practice, we conclude with several forward-looking points:

Embracing Best Practices: Alt Indices will continue to align its methodology with the IOSCO Principles for Financial Benchmarks – ensuring transparency, representativeness, and robust governance. This commitment serves as a signal to all stakeholders that the benchmarks can be trusted as neutral and free of manipulation. We encourage industry groups and regulators to formally incorporate such principles into private market oversight, perhaps even requiring that any published benchmark used for regulatory or marketing purposes meets these standards.

A New Focal Point for Private Market Performance: With credible benchmarks in hand, the private investment community can establish **new focal points for what “good” looks like**, rooted in reality. For example, instead of every fund claiming to be “top quartile” (a mathematically impossible Lake Wobegon effect), the focal conversation can shift to, say, **“Did you beat a public market equivalent after all fees, given your strategy and vintage?”** If Alt Indices provides that metric consistently, it could become a focal point in LP allocation decisions – a form of **market discipline through benchmarking**. As Basu shows, focal points can be self-fulfilling, as with rating agencies whose rankings shape investment flows and reinforce their own authority. Their power arises from coordination around signals, not secret insight, and can be



misused. By promoting transparent, reliable benchmarks, **Alt Indices can re-anchor industry expectations.**

In closing, Alt Indices presents itself as an exploratory yet authoritative response to the private market information challenge. We have **demonstrated why an independent information agency is needed**, grounded in both the lived realities of today's market and in enduring economic principles. We have also shown **how** Alt Indices is tackling the problem – through methodological rigor, bias mitigation, and adherence to high governance standards. The journey toward fully transparent and efficient private markets

will take time and cooperation. But every step – each LP that demands an IOSCO-compliant benchmark, each GP that shares data to be part of a credible peer set, each regulator that nudges toward disclosure – builds momentum.

Broaden efficiency and inclusion. As measurement converges with public-market norms, access can widen responsibly and illiquidity premia can be priced on clearer terms. Better information → better allocation → better real-world outcomes. As Akerlof, Arrow, and Basu collectively imply: **markets fail when information fails and focal points mislead; they approach efficiency when information is credible, comparable, timely—and focal power is used with governance.**

Core Empirical & Theoretical References

- Basu, K. (2014). The Power and Influence of Rating Agencies (*World Bank Policy Research Working Paper*).
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *Journal of Finance*.
- Hayek, F. A. (1945). The Use of Knowledge in Society. *American Economic Review*.
- Hirshleifer, J. (1971). The Private and Social Value of Information and the Reward to Inventive Activity. *American Economic Review*.
- Rajan, R. G. (2005). Has Financial Development Made the World Riskier? (*Jackson Hole Symposium*).

Private-Market Performance, Fees, Scale

- Harris, R. S., & Stucke, R. (2012). Are Too Many Private Equity Funds Top Quartile? *Journal of Applied Corporate Finance*, 24(4), 77–89.
- Phalippou, L., & Gottschalg, O. (2009). The Performance of Private Equity Funds (overstatement; fee composition).
- López-de-Silanes, F., Phalippou, L., & Gottschalg, O. (2015). Giants at the Gate: Investment Returns and Diseconomies of Scale in Private Equity.
- Gornall, W., & Strebulaev, I. A. (2021). Squaring Venture Capital Valuations with Reality. *Journal of Financial Economics*.

Benchmarking, Governance, and Measurement

- IOSCO (2013/2019). Principles for Financial Benchmarks.
- World Economic Forum (2014). Measurement, Governance & Long-Term Investing.
- SEBI (India) (2020). Disclosure and Benchmarking of AIF Performance (AIPAC-recommended framework; pooled IRR/ TVPI and PME intent).
- SEC (2022). SEC Proposes to Enhance Private Fund Investor Protection — quarterly statements, audits, fee and performance transparency (Press Release 2022-19).
- SEC Asset Management Advisory Committee (AMAC) — Private Investments Subcommittee (2021). Final Recommendations on Retail Access & Investor Protection.

Practitioner & Market Structure Insights

- Marks, H. (2017). Lines in the Sand (Oaktree memo on subscription credit lines and reported IRR effects).
- Fang, L., Ivashina, V., & Lerner, J. (2015). The Disintermediation of Financial Markets: Direct Investing in Private Equity (adverse selection in co-investment).
- El-Erian, M. (2022). Private equity cannot avoid reckoning in markets. *Financial Times*.

Selective Notes on Metric Design & Bias

- On IRR manipulation (e.g., “time-zero” conventions, cash-flow timing optics): Phalippou & Gottschalg (2009); Marks (2017).
- On dispersion-first reporting and benchmark shopping pitfalls: Harris & Stucke (2012); IOSCO Principles (2013/2019).

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